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28-29 Oct 2025

Duhok, Iraqi Kurdistan
Region, Convention
Center, University of
Duhok Malta Campus
VW4G+WM7, Zaxo Road

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Hawler Medical University
in collaboration with the
University of Duhok

"Scientific Documentation
of Anfal Crimes and Mass
Graves, Towards
International Recognition
Genocide of the Kurdish
People"

HAWLER MEDICAL UNIVERSITY - UNIVERSITY OF DUHOK

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Conference Proceedings

5th International Scientific Conference of Ministry Of Higher Education& Scientific Research And Ministry of Health.
(Scientific Documentation of Anfal Crimes and Mass Graves,
Towards International Recognition Genocide of the Kurdish
People).

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Conference Overview

Under the guidance and supervision of His Excellency President Masoud Barzani and the patronage of Mr. Masrour Barzani, Prime Minister of the Kurdistan Regional Government, and jointly organized by the Ministry of Health and the Ministry of Higher Education & Scientific Research, the University of Duhok is honored to host “The 5th International Scientific Conference on the Genocide of the Kurdish People” on October 28-29, 2025, at its Convention Center.

This conference represents a unified scientific effort to elevate the cause of the Kurdish genocide from the stage of local remembrance to that of pursuing international recognition. The primary objective is to build a robust scientific foundation through the scientific documentation of genocidal crimes, their analysis within the framework of forensic science, and the advancement of the legal frameworks necessary to achieve justice and ensure legal accountability.

The conference will serve as a crucial platform, convening a distinguished gathering of international and local experts in the fields of law, forensic science, history, psychology, media, and political science. Over two days, a series of specialized scientific panels, keynote speeches by high-profile figures, and a photographic and documentary exhibition on the genocide will be presented.

In essence, this conference is more than an academic event; it is a bridge between memory and the future, an effort to preserve historical truth and transfer it to new generations, and a commitment to ensuring that justice is served and that such crimes are never repeated. It is a shared national and human responsibility.

Speech of His Excellency
President Masoud Barzani
At The 5th International Scientific Conference
“Scientific Documentation of Anfal Crimes and Mass Graves”



Distinguished guests, ladies and gentlemen, you are all most welcome. It is an honor to have you here.

I am very pleased to have this opportunity to be at your service today.

Allow me to welcome our dear friends and brothers for their presence at this significant conference dedicated to the operations of mass murder and genocide in Kurdistan. Your presence is a testament to your concern and your solidarity with our grief.

The images we witnessed moments ago, depicting these crimes, are heart-wrenching. We pray to God that Paradise be the eternal home of the martyrs, and that He grants us and their families patience and solace.

Throughout history, the destiny of the people of Kurdistan has been marked by pain, suffering, and oppression. Particularly in the last century, a systematic and planned genocide against the Kurdish people was initiated. From 1975 to 1980, it began with the Feyli Kurds. According to available information, besides

the deportation of thousands of Feyli families who had lived in Iraq for centuries and the looting of all their assets, 12,000 young men aged between 18 and 30 were disappeared. To this day, no one knows the location of their graves.

What has become clear to us is that a number of Feyli and Barzani youths were taken to Akashat and Nugra Salman to be used as subjects for testing chemical weapons. This was followed by the Anfal of the Barzanis in 1983, and then the widespread, nationwide Anfal across Kurdistan in 1987 and 1988, following the chemical bombardment of the Khoshnaweti Valley, Balisan Valley, and the Nerwa region in Amadi, where Peshmerga headquarters and the KDP's First Branch office were repeatedly targeted. Upon the conclusion of these Anfal operations, the chemical attack on Halabja occurred on March 16, 1988, serving as the "culmination" of the atrocities that had been set in motion.

The final major genocide, which makes the human heart bleed, was the genocide of the Yezidis in 2014. All of this demonstrates the stages of injustice and tyranny inflicted upon this nation, and the immense sacrifices it has made for the freedom it has achieved. These crimes are so monumental that they can never be forgotten; they will never be forgotten.

Yet, look at the greatness of this nation. From the day God granted the people of Kurdistan authority, they did not seek revenge. Specifically, during the 1991 Uprising, when two corps of the Iraqi army fell into the hands of the people, the Peshmerga, and the masses, not a single Iraqi soldier was killed or humiliated. These were the same soldiers who had leveled 4,500 of our villages; they were the ones who carried out the Anfal and committed all those crimes. However, the true criminals were those who made the decisions to launch those atrocities.

Today, while the families of the martyrs and the victims of Anfal have lost their most beloved ones, those martyrs went before their Creator with dignity, reaching the rank of martyrdom. Conversely, the perpetrators departed in disgrace and ignominy. I never imagined that God would provide an opportunity where revenge would not be taken, but the people of Kurdistan taught me and the entire world a lesson. Unfortunately, to this day, the value and merit of this noble stance by the people of Kurdistan have not been fully recognized.

There is talk of peace and national reconciliation in this country and others. What happened in Kurdistan has happened nowhere else. In which other country has a government chemically bombarded its own people? The people of Kurdistan were gassed. A country might use chemical weapons against another state, but it does not gas its own people. Yet in Kurdistan, as we saw in the photos, infants and pregnant mothers were all martyred, whether by chemical gas or by bullets—the bullet holes are visible in their skulls. How can these crimes be forgotten?

It is vital that these crimes are not forgotten, and that future generations know what happened to their forefathers. They must know the price at which this freedom was gained. It was not a gift from anyone, nor was it an act of charity toward us. More importantly, we must ensure these crimes never recur. There must be guarantees that such atrocities never happen again, neither in Kurdistan nor anywhere else. How can innocent people be murdered in cold blood as if it were nothing?

This reality proved that when a people possesses will and resilience, victory will always be theirs. Never in history has a dictator succeeded. All dictators have left in shame. As I understand, a number of "Sole Survivors" (Taqaana) of the Anfal are present with us in this hall. I welcome them warmly. The word "sole survivor" is painful, but you are not alone. You are the symbols of resistance and the honor of this nation. You are the beloved ones of every Kurdish home, and you are cherished by every person of conscience worldwide. Everyone is your family, and you belong to all of us.

I know, and I deeply feel, the pain and suffering you have endured, and the hardships your mothers went through for you. But all of this is a source of pride for you and for us. What is required today, from both the Kurdistan Regional Government (KRG) and the Federal Government of Iraq, is that these people be compensated. Compensation does not mean we are trading blood for money; no wealth in the world can match the value of the blood that was shed. Rather, it is a moral and symbolic act to ensure justice is served. These crimes must not be dismissed lightly. A massive crime was committed, and compensating these people is the duty of the Federal Government, as they are the legal successors to the government that committed those crimes. It is their obligation; they must not evade this responsibility. Likewise, it is the duty of the KRG to continue advocating for this cause.

It is very important that these crimes be recognized as genocide on an international level. We thank the Iraqi Parliament for its 2008 decision, although it was not acted upon by the government. We also thank the Swedish Parliament (2012) and the British Parliament (2013) for recognizing it as genocide. I call upon the parliaments of European countries and the rest of the world that have investigated this matter to also take this decision. It is a sacred duty for the KRG and the Federal Government to cooperate on this. Under Article 132 of the Iraqi Constitution, the government is mandated to compensate these victims.

I hope that following the next Iraqi parliamentary elections, a safer and healthier environment emerges—one where the current Constitution acts as the arbiter between Erbil and Baghdad, and between the citizen and the government. If the Constitution is the arbiter, we will have no problems. However, if personal whims are the decision-makers, our problems will persist and grow. Unfortunately, some people still remain under the influence of the culture that produced the Anfal. This culture must not remain in Iraq.

I wish to extend my profound gratitude to the people of Al-Muthanna Province, who were immensely helpful to our teams in discovering mass graves. May God reward you; we will not forget your kindness. I also thank the KRG and all relevant institutions for their efforts, and I specifically thank Professor Dr. Yassin for his role in identifying the crimes, locating mass graves, and repatriating the remains. We promise all our loved ones that until our last breath, we will strive to ensure that not a single bone of our martyrs remains undiscovered or unrepatriated.

In conclusion, thousands of salutations to the pure souls of the martyrs. Once again, I thank you all for your presence. You are most welcome.

Speech of the Conference President

Prof. Dr. Yasin Kareem Amin President of the 5th Conference on the Genocide of the Kurdish People

In the name of God, the Most Gracious, the Most Merciful.

Good morning, and welcome to the city of Duhok.

Your Excellency President Masoud Barzani, the highest national reference of Kurdistan, I extend to you the warmest of welcomes. I pray to Almighty God for your continued health, for the good of the Kurds and for Kurdistan.

The Honorable Prime Minister of the Kurdistan Region, Mr. Masrour Barzani, you honor us with your presence.

Distinguished guests, beloved survivors of Anfal, esteemed professors, scholars in the fields of genocide and mass graves, honorable ministers and officials of the Kurdistan Regional Government, and respected party and governmental officials of Duhok Governorate, welcome.

Our esteemed guests from federal Iraq, welcome.

Your Excellencies Ambassadors and Consuls of nations in Kurdistan and Iraq, welcome to the scientific conference: "Scientific Documentation of Anfal Crimes and Mass Graves, Towards the International Recognition of the Genocide of the Kurdish People."

Welcome to the University of Duhok, to share in this national sorrow and to participate in this scientific program.

We do not wish to reopen old wounds by recalling the pain, but we want everyone to know that it is our duty as a scientific institution to be a guiding light for this cause. With your valued assistance, we want to tell the world that a crime has been committed against our people that is unparalleled in history: 182,000 innocent people of all ages and genders were buried alive.

Distinguished attendees, perhaps not everyone is aware, but our work in forensic medicine in Kurdistan has scientifically proven that in just one mass grave in the Jafayeti Valley in Hatra, 45 children were still in their mothers' wombs when they were subjected to Anfal.

Your Excellency President Barzani,

Thank you very much for your continuous support and guidance in all matters related to the discovery and exhumation of the mass graves of our people. You have always considered yourself the guardian and family of the victims.

I reaffirm that your support and guidance, under the supervision and direction of the Honorable Prime Minister of the Kurdistan Region, Mr. Masrour Barzani, have been a key driver and supporter of our work. From here, we thank the efforts of the Prime Minister's office and the Chief of Staff of the Council of Ministers.

Holding this conference is a result of the outstanding work of the Kurdistan Regional Government. Just as we see progress in all aspects of life and development in Kurdistan, from reconstruction to the flourishing of its cities, we will, with the help of God, the people of Kurdistan, and Your Excellency, facilitate every effort to present this issue scientifically. Our goal is to solidify the identity of our people, to be a cornerstone for building a brighter future, and for the establishment of the state of Kurdistan.

In this regard, I extend my sincere thanks to the honorable Minister of Health and Minister of Higher Education of the Kurdistan Regional Government, who have jointly and earnestly supported us in organizing this conference.



Distinguished guests, welcome to the city of Duhok, to a university that is a university in the truest sense of the word.

Beloved survivors of Anfal, welcome. Rest assured that we will not abandon this rightful cause of yours and our people until we reach an outcome that brings you solace.

Esteemed professors, experts, specialists, and organizations working on genocide, welcome. We have the utmost gratitude and appreciation for your work and dedication.

Thank you to our colleagues in federal Iraq, from the Ministry of Health, the Martyrs' Foundation, and the International Commission on Missing Persons (ICMP) for all their cooperation.

Thank you to all the universities of Kurdistan, the scientific committee, the organizing committee, the media, and the administrative staff for their tireless efforts.

Once again, welcome, Your Excellency President Barzani. Your efforts are a source of strength and morale for us.

Prof. Dr. Yasin Kareem Amin

President of the 5th Conference on the Genocide of the Kurdish People

Speech of the President of the University of Duhok

Dr. Dawood Sulaiman Atrushi
President of the University of Duhok

International Scientific Conference:

“Scientific Documentation of Anfal Crimes and Mass Graves, Towards the International Recognition of the Genocide of the Kurdish People”

Your Excellency President Masoud Barzani,

Distinguished guests, honorable scholars, and dear friends of the Kurdish nation,

Good morning,

It is with great honor and profound solemnity that I welcome you all to the 5th International Scientific Conference on the Genocide of our people, held here at the University of Duhok under the guidance and supervision of His Excellency President Barzani and with the support of the Honorable Prime Minister.

Your Excellency President Barzani,

Your leadership has long been a source of inspiration for our nation—a symbol of resilience, justice, and hope. Your lifelong dedication to the Kurdish cause and the dignity of our people gives true meaning to this conference. On behalf of all 17 public universities in the Kurdistan Region, I extend our deepest respect, gratitude, and appreciation to Your Excellency.

Distinguished Guests,

We are here today to speak, to reflect, and to take practical steps toward preserving memory and ensuring a future free from the crime of genocide. The genocide in Kurdistan is not merely a series of historical events; it is a deep wound in the body of a nation whose effects endure to this day. From the Anfal campaigns and the chemical bombardment of Halabja to the massacres in Barzan, Garmian, Badinan, and beyond, our people have faced unparalleled brutality. It is our duty to keep this memory alive and to learn from the past. For us, holding this conference, titled “Scientific Documentation of Anfal Crimes and Mass Graves: Towards the International Recognition of the Genocide of the Kurdish People,” is both an academic and a moral imperative. This conference brings together scientists, historians, and experts in forensic medicine, DNA analysis, and human rights law from Kurdistan and across the globe—united for one purpose: to uncover the truth and to seek justice.

For the Kurdish people, genocide is not an abstract historical event, but a lived reality. The Anfal campaign and the countless mass graves scattered across our land bear the scars of untold suffering. But they are also a call to action—a call to document, to preserve, and to ensure that such atrocities are never repeated.

Through science, we reveal the truth to give life to the stories of the victims. Through education, we teach future generations the values of truth, tolerance, and peace. And through international cooperation, we seek a justice that transcends borders—a justice that recognizes the genocide of the Kurdish people as a crime against all humanity.

Education plays a vital role in this mission. It is through our universities that memory becomes knowledge, and knowledge becomes action. We believe that education, research, and international solidarity together form the strongest defense against the recurrence of genocide, against us or any other people.

Today, with the participation of leaders, scholars, and international friends of the Kurdish people, we send a clear message to the world: We remember, we document, and we demand recognition. Recognition not for vengeance, but for truth—the kind of truth that heals and prevents.



In closing, the genocide in Kurdistan is a bitter reminder, but it is also a profound lesson for humanity. Our duty is not only to remember but to work to ensure that this crime is never repeated, anywhere in the world. Let us, through our collective efforts, honor the victims of Anfal, support the families of the missing, and strengthen our global pursuit of truth and justice.

Once again, on behalf of all public universities in the Kurdistan Region, I welcome you to this historic conference. We hope that by its conclusion, we will arrive at a set of clear recommendations and a roadmap for practical future steps in the legal, political, educational, and artistic fields to prevent this crime.

Glory to the pure souls of all the martyrs of the genocide in Kurdistan.

Thank you.

Dr. Dawood Sulaiman Atrushi
President of the University of Duhok

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Role and Management of Forensic Anthropology and Forensic Medicine in Estimating Sex and Age of the Yazidi Kurdish Mass Grave in Kojo, Near the Sinjar Area

Prof. Dr. Yasin Kareem Amin

Assist Prof. Dr. Muhsen Kamal Yassen

Abstract

Background:

Following the 2014 attacks on Sinjar, multiple mass graves were documented in Kojo village. Many victims were exhumed and transferred to Baghdad for medicolegal examination and humanitarian identification. In largescale recovery operations, pelvic and cranial elements are not always available or sufficiently preserved; consequently, long bones (femur and forearm) become critical for sex estimation and for crosschecking age assessments.

Objective: To evaluate whether measurements of the left femur and left forearm (radius + ulna complex, measured as forearm length) can aid sex estimation and support age profiling in a cohort of exhumed individuals from Kojo, and to summarize practical management steps that supported ethical, scientific, and culturally sensitive handling of remains.

Materials and Methods: We reviewed 382 skeletonized sets of remains meeting strict inclusion criteria (intact left femur and left forearm; adult epiphyseal status) and excluding cases with extensive burning, mutilation, advanced taphonomic alteration, or prior major trauma/deformity. Standard osteological procedures and chainofcustody protocols were applied. Longbone lengths were recorded; descriptive statistics and

group comparisons were conducted to explore sexual dimorphism and agerelated patterns within the available data.

Results: The mean left femur length was 31.40 ± 11.91 cm and the mean left forearm length was 24.02 ± 9.12 cm. The difference between these means was statistically significant ($p < 0.001$). Of 342 sexed individuals, 146 (42.7%) were male and 196 (57.3%) were female. Age profiling identified 199 (58.2%) adults, 139 (40.6%) older adults, and 4 (1.2%) subadults.

Conclusions: In absence of pelvic or cranial landmarks, femur and forearm measurements provide practical adjuncts to sex estimation in this population and context. Such measurements should be applied alongside broader metric and morphological assessments and, wherever possible, genetic testing. The experience from Kojo highlights not only analytical techniques but also the operational management—documentation, storage, and familycentered return—that underpins dignified identification.

Keywords: Forensic anthropology; mass graves; Kojo; Sinjar; Yazidi; sex estimation; long bones; femur; forearm; humanitarian identification; Iraq.

1. Introduction

Forensic anthropology and forensic medicine are central to identifying Yazidi victims from Kojo by estimating sex and age from skeletal remains. The mass graves near Sinjar reflect systematic, intentional violence and underscore the need for rigorous, rights-based scientific investigation. This study aims to estimate sex using forensic anthropological metrics from recovered skeletons and to profile age based on epiphyseal fusion and related indicators. It also records selected forensic-medical observations of bone trauma consistent with inhuman injuries.

Accurate identification in mass-grave contexts requires robust methods for sex, age, and ancestry. Discriminant-function analysis remains a cornerstone for classifying individuals from skeletal dimensions; while lengths, widths, and diameters are well validated, circumferences and volumetric measures are less studied, limiting utility when remains are fragmentary or taphonomically altered (Spradley & Jantz, 2016; Safont et al., 2000). The Yazidi genocide of 2014—especially the Kojo sites—demands precise and culturally sensitive protocols, integrating anthropology, odontology, and pathology to restore identities and support justice (OHCHR, 2016; UNITAD, 2021).

Sex estimation typically prioritizes pelvis and skull due to marked sexual dimorphism (e.g., mastoid processes, supraorbital ridges, sciatic notch) (Kenyhercz et al., 2017). In incomplete remains common to conflict settings, long bones (e.g., femur, humerus) offer reliable alternatives, with males generally exhibiting greater robusticity and thicker cortices (Gonzalez et al., 2021). Advances in geometric morphometrics and machine-learning have further improved classification, and teeth provide additional evidence through odontometric dimorphism and DNA from dental pulp (Luna et al., 2020; Cameriere et al., 2019; Kumar et al., 2014).

Age estimation is complicated by population specificity and environmental stress. The Yazidi community may diverge from global reference

datasets, warranting careful calibration of methods such as pubic symphysis metamorphosis, cranial suture closure, and dental cementum annulation (Garvin & Passalacqua, 2021). Subadult assessments relying on diaphyseal length and fusion timelines must consider displacement and deprivation effects (İşcan & Steyn, 2018). Recent work supports multifactorial approaches that combine osteological, dental, and molecular techniques (e.g., aspartic acid racemization) to improve accuracy (Ríos et al., 2023).

Given commingling, scavenging, and blast trauma at Kojo, tailored strategies are essential, including targeted CT imaging and, where appropriate, stable-isotope analysis to refine antemortem matches (Steadman et al., 2018). Ethical management must align with Yazidi cultural practices and kinship systems to ensure dignity and meaningful repatriation (Koch & Flavel, 2022). This study evaluates the utility of circumferential metrics for sex estimation and refines age-at-death approaches suited to Yazidi populations, advancing both forensic practice and the broader humanitarian effort.

0.1. Background of the Yazidi Kurdish Mass Grave in Kojo

On August 3, 2014, ISIS attacked the Yazidi Kurdish community. Many fled; those who could not were killed, and numerous women and children were abducted and sexually assaulted. The European Parliament (2016) and the United Nations later recognized these crimes as genocide. Mass graves are scattered across Sinjar; this study focuses on Kojo, near Sinjar, and estimates the sex and age of those interred (Gilligan, 2018). The Kojo grave was identified through survivor testimony and satellite imagery. In the absence of a forensic archaeology team, a local crew began excavation with a bulldozer. Eighty-six sets of remains and four possible human bones were documented; formal civilian identifications are pending, and the case warrants comprehensive forensic investigation. The skeletonized remains—transported from Kurdistan to Germany—show post-excavation alterations (e.g., fissures). Before analysis, bones

were hand-cleaned under anthropological supervision. Management follows international guidance on dignified handling of the dead; rough treatment harms families and undermines rights. Although the excavation occurred under urgent, suboptimal conditions, the case demands careful, rights-based scientific review.

0.2. Sex Estimation Methods in Forensic Anthropology

0.2.1. Sex Estimation Methods in Forensic Anthropology

Sex estimation is a foundational step in establishing the biological profile of unknown human remains. In forensic anthropology, sex is inferred by evaluating sexually dimorphic traits—either visually (morphoscopic assessment) or metrically using statistical models—recognizing that dimorphism reflects hormonal and developmental influences on the skeleton (Holbeck, 2022). The pelvis and cranium are the most informative regions due to their pronounced dimorphism and relative durability: pelvic features related to parturition and cranial robusticity (e.g., mastoid size, supraorbital margins) commonly yield the highest accuracies when preserved.

When axial elements are incomplete—as is frequent in mass-grave or taphonomically altered contexts—metric assessment of long bones (e.g., femur, humerus), the mandible, or selected circumferences can provide useful adjunct evidence through discriminant functions or Bayesian/ML classifiers (De Donno et al., 2021). Best practice requires: (i) population-appropriate reference data to minimize bias; (ii) explicit reporting of method limits; and (iii) controls for inter- and intra-observer error. Accuracy can be degraded by commingling, fragmentation, heat alteration, and preservation biases. Juvenile and subadult remains are especially challenging because sexual dimorphism is less developed. Accordingly, sex opinions should be expressed with confidence levels and, where feasible, corroborated with odontology and DNA.

0.2.2. Age Estimation Methods in Forensic

Anthropology

Age-at-death is estimated through macroscopic indicators, metric analyses, and, when available, microscopic or molecular techniques. Method selection depends strongly on whether the remains are subadult or adult:

Subadults: Dental development/eruption and epiphyseal ossification/fusion provide the most reliable age estimates. Diaphyseal length and tooth formation charts allow relatively narrow intervals but must account for population variation and environmental stressors (Correia Dias et al., 2021; Phulari & Dave, 2021).

Adults: Ageing relies on degenerative changes with broader uncertainty—classically the pubic symphysis and auricular surface morphology, sternal rib ends, and (with caution) cranial suture closure. These indicators should be combined in a multifactorial framework to avoid overreliance on any single trait (De Donno et al., 2021).

Advanced avenues include geometric morphometrics, imaging (e.g., CT-based trabecular metrics), cementum annulation, and biochemical approaches (e.g., aspartic-acid racemization), which can refine estimates when validation exists for the target population (Parra et al., 2025; Correia Dias et al., 2021). Across all methods, performance is influenced by preservation, commingling, and scorer expertise; therefore, transparent confidence ranges and method citations are essential.

Identification in mass-fatality settings often begins with sex and age because these narrow the search space and inform assessments of perimortem trauma and victim matching. The Kojo assemblage—recovered from a mass grave in an archaeological setting—was triaged and examined accordingly, with skeletal profiles integrated into the broader forensic investigation (Phulari & Dave, 2021).

0.3. Forensic Medicine in Estimating Sex and Age

Forensic medicine (forensic pathology) and forensic anthropology are complementary in mass-grave investigations such as Kojo. In this case—

reportedly involving members of a single extended family with many execution-style gunshot injuries—forensic medicine contributes to:

Cause and manner of death analysis: Documentation of trauma patterns on any preserved soft tissues and, more commonly in ossuary contexts, bone lesions consistent with gunfire (entrance/exit defects, beveling, radiating/concentric fractures).

Imaging and sampling: Radiography/CT to detect embedded projectiles or fractures; standardized sampling for DNA and, where soft tissue persists, limited toxicology.

Chain-of-custody and reporting: Integration of medical findings with anthropological profiles to support identification and legal processes.

Because Kojo remains are predominantly skeletonized, traditional autopsy markers of hemorrhage or coagulation are typically absent; interpretation therefore relies on osseous evidence, imaging, scene context, and interdisciplinary review. Associated materials (e.g., four sherds of common clay pottery) are recorded archaeologically to preserve context and potential associative value. Bone-based age estimation uses established anthropological criteria (e.g., epiphyseal fusion, pubic symphysis/auricular changes, dental indicators) and is reported with explicit confidence intervals (Bonicelli et al., 2021; De Donno et al., 2021).

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0.4. Role of management and administration

In mass-fatality investigations like Kojo, sound management and administration are not side issues—they are the scaffolding that lets rigorous science, cultural dignity, and timely return of loved

ones happen. Leadership establishes a governance structure with clear lines of authority (scene → laboratory → reporting) and standard operating procedures (SOPs) that hold those links together: intake checklists, chain-of-custody forms, labeling conventions, photo logs, sampling registers, and audit trails. These are not mere paperwork; they are the safeguards that prevent mis-association, data loss, and repeat sampling, and they enable clean integration of osteology, odontology, imaging, and DNA into a single case narrative. In Kojo, that means unique identifiers assigned at recovery, verified at every handover, and mirrored across paper and digital records—small disciplines that pay enormous dividends for accuracy and trust (ICRC/ WHO, 2016).

Good administration plans for people as much as for procedures. Schedulers coordinate multidisciplinary shifts; case managers define reviewer sign-offs and convene case conferences so difficult classifications (e.g., sex estimates from incomplete remains) receive second-examiner oversight. Training is continuous and practical: refreshers on measurement error, briefings on taphonomy and heat alteration, and tabletop exercises for evidence transfer. These quality-assurance habits reduce inter-observer variability and create a shared vocabulary for confidence levels and limitations (Klales, 2020; Goldstein et al., 2022). As Adams et al. (2022) argue, leadership must also cultivate a culture of care and reflexivity—making space for ethical deliberation, documenting value judgments in casework, and ensuring that “how” we work is as deliberate as “what” we conclude.

Family-facing management is equally central. Administrators maintain transparent communication with families and community representatives, ensuring informed consent for sampling, clarifying timelines, and arranging viewings or dignified returns consistent with Yazidi practices. Ethics committees and community liaisons help navigate questions around destructive testing, secondary burials, and memorialization. International

guidance is clear: plan early for respectful handling, robust documentation, and identification; keep families informed at every turn (ICRC, 2016; WHO, 2016). Passalacqua et al. (2022) underscore that stewardship responsibilities do not end at the lab door; institutional policies must explicitly protect unidentified cases, define custodianship, and resource long-term care.

Information management underpins everything. A secure case database should tie scene context, measurements, photographs, radiographs/CT, dental charting, and DNA barcodes to the same unique ID, with role-based access, automatic versioning, and routine backups. Simple dashboards help leaders track key performance indicators—turnaround time to DNA submission, sample rejection rates, chain-of-custody discrepancies, backlog size—so resources can be shifted before bottlenecks form. Regular internal audits and external peer review anchor continuous improvement (WHO, 2016).

Resource and risk management are pragmatic responsibilities. Procurement ensures measurement boards, calipers, PPE, cold-storage capacity, and evidence packaging are stocked and calibrated; logistics solves for transport, temperature control, and scene security. A basic risk register—covering heat, dust, commingling, contamination, and information-security threats—assigns owners and mitigations (e.g., two-person measurements for long bones; photographed setups with scale and ID; double-entry data). When incidents occur, a no-blame “near-miss” culture encourages reporting and rapid corrective action.

Finally, good administration documents decisions. When pelvic or cranial landmarks are unavailable, the rationale for using adjunct long-bone metrics, the confidence attached to that opinion, and the plan to corroborate with DNA should be explicitly recorded. This transparency strengthens legal defensibility and honors families by making the reasoning legible (Klales, 2020; Palamenghi et al., 2024). In short, management and administration

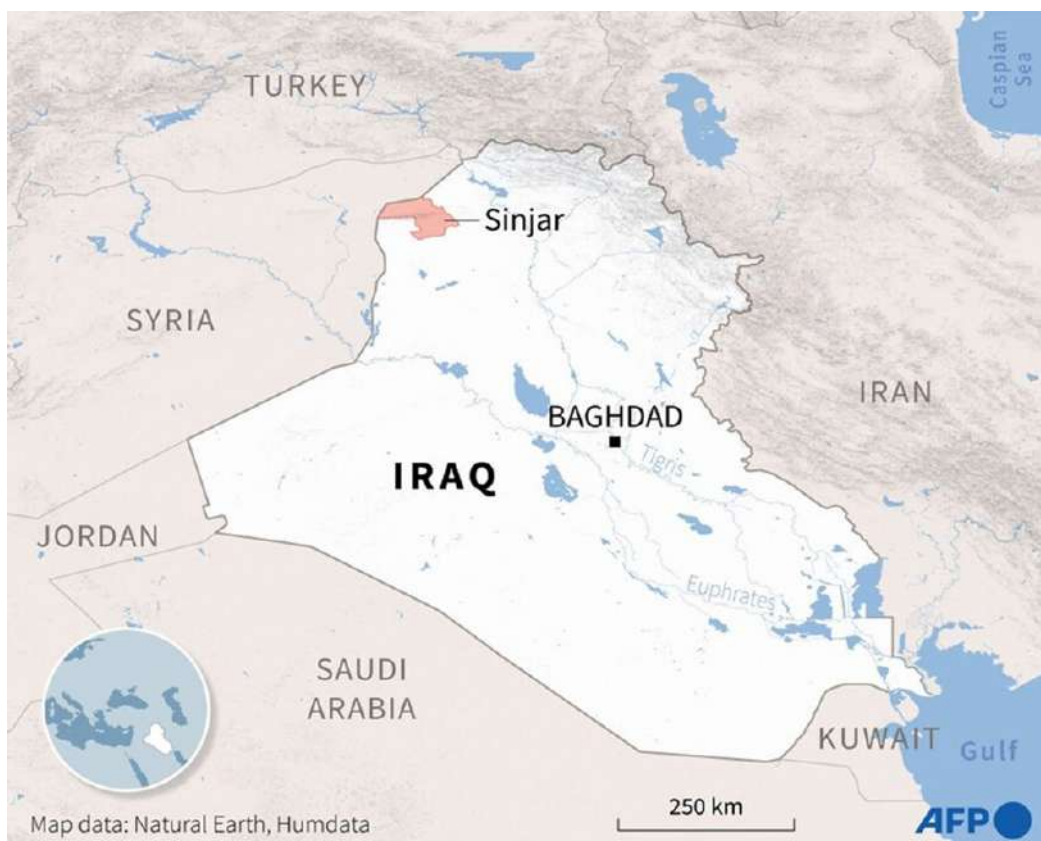


Figure 1: Study area

translate scientific intention into dependable outcomes—quiet, methodical work that turns chaos into clarity and, ultimately, enables dignified identification and return

1. Materials and Methods

1.1. Case selection and inclusion criteria

A total of 382 skeletonized sets of remains were examined. Inclusion required: (i) intact left femur and left forearm suitable for measurement; (ii) full epiphyseal union indicating adulthood, unless otherwise specified; and (iii) minimal taphonomic damage interfering with measurement landmarks. Exclusions included: (i) extensive burning ($\geq 50\%$ cortical charring); (ii) dismemberment or toolmark mutilation compromising length measures; (iii) partial skeletonization with major longbone loss; (iv) severe postmortem alterations (scavenging, erosion) obscuring landmarks; and (v) clear antemortem fractures, congenital anomalies, or known pathology affecting femoral or forearm lengths.

1.2. Location and Context of the Mass Grave

The mass grave site is situated in the mountainous region of Kojo, near the city of Sinjar, in the autonomous province of Iraqi Kurdistan, around 15 km from the Syrian border. The mass grave is located in a depression on the outskirts of two small Yazidi villages, with a small walled graveyard nestled directly above. The terrain consists of dark brown, open, arid slopes with scant vegetation, sunbaked into hard, steep contours by the scorching sun. Clumps of unwelcoming thorn bushes dot the hillside, and the ubiquitous loose rocks of the sinjarite foothills make each step treacherous on a combination of loose shale and fine scree. Smugglers regularly traverse the nearby valley traversed by the mass grave, and those excavating the site are warned to look out for them stealing antiquities or artifacts. The view to the north is of the circling Sinjar Mountains, which rise sharply from the plain and are characterized by wide barren plateaus and steep slopes covered in bright white

gypsum deposits. In August the temperatures in the area regularly reach up to 50°C.

1.3. Scene recovery and chain of custody (summary)

Recovery followed best practice mass grave protocols: scene mapping; controlled stratigraphic excavation; unique case identifiers; evidentiary photography; and immediate packaging of skeletal elements. At every handover—from scene to transport, and from reception to storage—records were signed and timestamped. Each case file combined excavation context, body bag labels, and subsequent laboratory notes. This continuity allowed confidence in linking osteological findings to DNA results and family reports. Field procedures accounted for known risks in clandestine or reworked graves (e.g., backhoe reinterment patterns), drawing on published guidance from comparable contexts (Gilligan, 2018; Borić et al., 2011).

1.4. Osteological examination and measurement protocol

All longbone measurements were taken on the left side to avoid bilateral duplication. Femur length was measured from the most superior aspect of the femoral head to the most inferior point of the medial condyle (maximum physiological length), using anthropometric boards where feasible and large calipers or tape and plumb techniques when necessary.

Landmarks and handling:

- Femur: Head apex to medial condyle lowermost point; if epiphyseal damage was present, the lesser trochanter plane was documented and a conditional estimate flagged.
- Radius: Radial head superior rim to radial styloid apex.
- Ulna: Olecranon tip to ulnar styloid apex.
- Forearm operative value: When both bones were intact, both lengths were recorded; the primary

value for analysis was the radius unless diaphyseal curvature or apical loss made the ulna preferable.

Error management:

- Repeats on 10–15% of cases quantified intraobserver variation.
- Tape sag and parallax were minimized by twoperson measurement and level sighting.
- Warped or bowed shafts were measured with flexible tapes but flagged as caution—nonstraight diaphysis.

Data capture:

- Each value was written on a waterproof field card and entered into a doubleentry spreadsheet.
- A measurement uncertainty column (0 = standard, 1 = minor ambiguity, 2 = major ambiguity) guided downstream interpretation.

1.5. Sex and age assessment

Sex estimation prioritized available pelvic and cranial morphology when present. Where absent or indeterminate, longbone metrics served as an adjunct to classification. The working premise was that, in the reference population, males generally display larger longbone dimensions than females; however, overlap is expected. Age assessment incorporated epiphyseal fusion (adults vs. subadults), degenerative joint changes, and cortical texture. Dental observations informed the rare subadult classifications.

Decision pathway:

1. Check for pelvis or cranial traits; if scorable, classify using composite morphological standards.
2. If not scorable, consult longbone metrics and robusticity patterns; if still equivocal, defer to genetic results.
3. Record confidence (high/medium/low) beside sex and age entries to reflect evidential strength.

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1.6. Data handling and statistics

Measurements and categorical assessments were entered into a standardized database. Continuous variables (femur and forearm lengths) were summarized as means and standard deviations. Group differences were explored using independent sample comparisons, and proportions were tabulated for sex and age categories. Where distributional assumptions were unclear due to postmortem variability, results were interpreted conservatively.

1.7. Quality assurance

Repeated measurements on a subset of specimens established intraobserver consistency. Instruments were calibrated weekly. Any case with measurement ambiguity (e.g., damaged landmarks) was reviewed by a second examiner, and disagreements were resolved by consensus with documentation.

2. Results

2.1. Descriptive measurements

- Left femur length: 31.40 cm (SD 11.91).
- Left forearm length: 24.02 cm (SD 9.12).
- Difference: statistically significant, $p < 0.001$.

The spread of femur length values reflected preservation heterogeneity and natural biological variation. The forearm values showed similar patterns, with occasional rightskew due to particularly long radii/ulnae in presumed male cases.

Table 1. Summary statistics for longbone measurements (cm).

Variable	Mean	SD	Notes
Left femur length	31.40	11.91	Maximum physiological length
Left forearm length	24.02	9.12	Radius/ulna maximum; best preserved element prioritized

2.2. Sex distribution

Of 382 total cases, 342 could be sexed with the available criteria. Within this sexed subset, 146 (42.7%) were male and 196 (57.3%) were female. The remainder were indeterminate due to fragmentation or equivocal features.

Table 2. Sex distribution within sexed subset (n = 342).

Sex	n	%
Male	146	42.7
Female	196	57.3

2.3. Age profile

Age assessment indicated 199 (58.2%) adults, 139 (40.6%) older adults, and 4 (1.2%) subadults. The very small number of subadults is consistent with the inclusion criteria favoring epiphyseal fusion, as well as contextual factors in the Kojo events.

Table 3. Age categories (all assessed cases).

Category	n	%
Adult	199	58.2
Older adult	139	40.6
Subadult	4	1.2

2.4. Operational notes

Most Kojo cases arrived with coherent chain of custody documentation. Packaging quality varied with excavation phase and weather, but postreception rebagging and relabeling minimized data loss. Several remains exhibited heat alteration or perimortem trauma consistent with other reports

from the area; these were documented but excluded from measurement-based analyses where appropriate.

2.5. Preservation and taphonomy

Preservation ranged from nearcomplete skeletons with intact articular surfaces to highly fragmentary remains with cortical exfoliation. Heat alteration manifested as color changes (brown/black), surface checking, and, in severe cases, calcination; these were cataloged using a three-tier scheme (minor/moderate/severe). Soil chemistry and microbacterial activity produced localized pitting on diaphyses. Such features informed measurement confidence ratings and shaped the decision to rely more heavily on femoral length than on diaphyseal circumferences in many cases.

3. Discussion

3.1. Interpreting longbone metrics in context

The significant difference between femur and forearm means is anatomically expected and confirms measurement integrity across the cohort. More importantly, the distribution of longbone lengths aligned with the observed sex proportions. While longbone lengths alone cannot achieve the accuracy of pelvic morphology, they remain a practical proxy in massgrave settings where preservation is uneven.

Population specificity matters. Sexing formulae developed in one group can misclassify individuals in another due to differences in body size, nutrition, and ancestry. Accordingly, we treated longbone metrics as supportive rather than determinative unless reinforced by other indicators. The Kojo cohort, composed of Yazidi Kurdish individuals, may differ from reference datasets underpinning classic discriminant functions; hence, our conservative interpretation strategy.

3.2. Comparison with published work

Research across diverse populations has shown that longbone dimensions (lengths and selected circumferences) carry useful sexual dimorphism. The Kojo findings accord with this broader pattern while reminding us of the practical realities: partial

preservation, heat damage, and commingling risks. In particular, femoral dimensions often provide the most stable singlebone signal when pelvis and skull are compromised. Forearm contributions are typically weaker but helpful in triangulation. Recent reviews and method papers support these observations and call for contextspecific baselines and transparent reporting of uncertainty (Klales, 2021; De Donno et al., 2021; Bonicelli et al., 2020; Giesecke, 2001; Parra et al., 2024).

3.3. Age assessment and sampling considerations

Our age profile reflects the methodological focus on fused epiphyses and the context of victim demographics. Because subadults were largely excluded by design, the observed age distribution cannot be generalized to all victims in Kojo. Future analyses should integrate dental development in younger individuals and histological techniques where preservation permits, noting that destructive sampling must be balanced against cultural and ethical constraints.

3.4. Management and logistics: lessons from Kojo

Accurate analysis depends on strong logistics. The Kojo workflow emphasized: meticulous labeling; redundant documentation (written, photographic, and digital); temperaturecontrolled storage; and routine audits of the evidence chain. When families visited the mortuary, staff provided clear explanations of the process and timelines, and psychosocial support was coordinated with community organizations. These steps—though not analytical per se—directly affect identification outcomes by preventing data loss and maintaining trust.

Operational checklist distilled from practice:

- Assign a unique case ID at the scene and crosscheck at every handover.
- Photograph measurement setups beside a scale and ID card.
- Maintain a running log of sampling (DNA,

radiography) to avoid duplicate destructive actions.

- Archive measurement uncertainty scores and rationale.
- Schedule periodic case audits to reconcile physical inventory with digital records.

3.5. Integrating odontology and DNA

Dental methods remain essential where dentition is preserved, offering both morphological and metric routes to sex estimation in addition to dental charting for identification. However, in Kojo many crania and mandibles were fragmentary; teeth were not consistently available or were heataltered. Consequently, longbone metrics provided a valuable bridge until genetic results were available. DNA ultimately anchors identification and should be prioritized for final conclusions; osteology guides triage and helps match antemortem reports to laboratory pipelines.

6. Conclusion

In mass-grave contexts like Kojo, long-bone metrics should be used as an adjunct rather than a stand-alone solution: femur and forearm lengths offer practical support for sex estimation when the pelvis and skull are unavailable. Reliable outcomes depend on rigorous chain-of-custody and meticulous documentation so osteological findings integrate cleanly with DNA analyses and family-provided information. Interpretations should remain conservative, explicitly acknowledging population differences and measurement uncertainty and avoiding reliance on single-bone cut-offs. To strengthen future work, teams should invest—ethically and logistically—in building regional reference baselines tailored to Kurdish and neighboring populations. Throughout, families must be at the center of the process, with culturally sensitive engagement and clear pathways for dignified return and reburial. Finally, sustained capacity building is essential: training regional teams in standardized measurement, error control, and robust digital data capture will help maintain quality as caseloads evolve.

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Sole Survivors of the Barzani Genocide: Lived Experiences, Memory, and Social Reconstruction

Prof. Dr. Yasin Kareem Amin

Rebar Ahmed Khalid

Abstract

Background and objectives:

The mass disappearance and execution of Barzani Kurds (1983) is a critical but understudied event in Iraq and genocidal violence more broadly. There were sole survivors (sometimes women who were the surviving members of their families) who bear the distinctive burden of memory and reconceptualization of roles. This paper presented findings concerning how sole Barzani survivors describe the lived experience, how they enact memory and what role they played in social reconstruction in the Kurdistan Region of Iraq.

Methods: Rich semi-structured interviews were carried out using a hermeneutic phenomenological framework on a purposive sample of twelve Barzani people (aged 40 - 63) who were the sole survivors of the Barzani genocide in their houses either nuclear or extended families. Data collection was carried out by conducting 60- to 90-minute interviews with the participants in June - July 2025. All the sessions were recorded audibly, typed word-to-word and then translated to English. The process of analysis followed the six steps of analysis proposed by Van Manen by using different types of reading in holistic, selective, and detailed reading styles to identify major themes present in the collected data.

Results: Analyzing the interviews led to emergence of four themes: a) bearing the weight of sole survival, b) trauma and transformation of identity, c) community rebuilding and social contribution,

and d) fragility and resilience of collective identity.

Conclusion: A focus on sole survivors brings to the fore the fact that memory is wearisome custodial labor and that resilience is delicate endurance. Conclusions include survivor-led, trauma-informed formats of the testimony; investment in community memorial building capacity; culturally local psychosocial resources; and policies that acknowledge and recoup the burden of advocacy but maintain truth-telling.

Keywords: Barzani genocide; sole survivors; hermeneutic phenomenology; collective memory; cultural trauma; transitional justice; social reconstruction

Introduction

The 1983 mass disappearance and execution of thousands of Barzani Kurds by Iraq's Ba'athist regime – often treated as a precursor and integral component of the broader Anfal policies—represents a defining episode of genocidal violence in modern Iraqi and Kurdish history. Contemporary human rights documentation estimated that up to 8,000 Barzani men and boys were forcibly taken and never returned, a crime pattern later framed within the Iraqi High Tribunal's genocide findings on Anfal (Human Rights Watch, 1993; Iraqi High Tribunal, 2007).

Studies on conflict-exposed populations highlight a large and lasting psychosocial legacy of mass atrocity with both affected communities having high burdens of depression and anxiety, as well as

post-traumatic stress disorders (Charlson et al., 2019). All these damages continue to extend beyond the individual concerning the kinship system and intergenerational wellbeing by means of biological, social, and narrative routes (Lehrner & Yehuda, 2018). In Kurdish discourses, studies show that followed through gender, kinship, and socio-economic marginality, survival and memory is mediated among Anfal-affected families (Hardi, 2011). The more recent example of the Yazidi genocide also shows how genocidal violence can break up family forms, trust and community life, elements that must be understood as central to the attempts by Barzani survivors to rebuild social worlds (Cetorelli et al., 2017). Memory and social reconstruction studies stress that accountability mechanisms, mandatory though they may be, lack the practice of survivor-centered accountability without which everyday repair takes place—reweaving social connections, restoring dignity, and making testimony part of the communal story-making (Gready & Robins, 2014).

By reporting on the lived experiences and memory-work of “sole survivors” of the Barzani genocide, individuals who remained as the only living members of nuclear or extended families, this paper fills an important empirical and ethical gap in Kurdish genocide studies. The focus on the narratives of the survivors will facilitate the development of culturally responsive psychosocial support, the reparation design, and the memorialization efforts. It also holds onto at-risk oral histories when the survivor cohort is aging, maintaining collective memory.

Methods

Study Design

For the present qualitative study, Van Manen (1990) hermeneutic phenomenological approach was used. Such selection of the methodology allowed obtaining a detailed insight into the experiences of Barzani sole survivors who experienced genocide, as well as to consider their personal stories associated with the reconstruction of the community, memory, trauma, and resilience.

Participants

Twelve Barzani sole survivors (5 males and 7 females) were recruited through purposive sampling method in this study. The inclusion criteria were being a sole survivor of the Barzani genocide, showing the willingness to participate in the study, and expressing firsthand experience in assuming new social role post-genocide. Exclusion criteria involved Barzani sole survivors who were not willing to engage in the study. The sample was made up of Barzani sole survivors who live in the Kurdistan Region of Iraq and with ages between 40 and 63 years.

Data Collection

Data was obtained through semi-structured interviews that were carried out in June to July 2025. Interviews were mainly conducted in the homes of participants or other areas that they considered as safe spaces. The data were collected until thematic saturation was attained—when no further themes were presented by continued discussions. Some of the questions which were asked during the interviews include “Could you tell me a little about your life before the genocide – your family, your village, your daily routines?”, “How old were you when these events took place?”, “What is your earliest memory of the events leading up to the genocide?”, “How did you survive when so many others did not?”, “What kind of support – or lack of support – did you receive from others at the time?”, “What have been the biggest challenges of living as the sole survivor of your family?”, “What do you want future generations to understand about what happened?”, “What does justice mean to you in the context of these events?”, and “Is there anything you wish people would ask you about, but never do?” Each interview was carried out in varying lengths of around sixty to ninety minutes; all interviews were audio-taped with the approval of the participants before being transcribed word-to-word and later translated into English to be analyzed.

Data Analysis

The data analysis was guided by the six

methodological activities proposed by Van Manen (1990). The first activity was turning to the nature of lived experience, the lead researcher – himself a descendant of the Barzani genocide who grew up within the affected community – grounded the inquiry in intimate knowledge. The second activity was investigating experience as it is lived, the team selected Barzani sole survivors with firsthand accounts. As the third activity, essential themes were figured out through phenomenological thematic analysis. The fourth activity was describing the phenomenon by writing and rewriting to capture the participants' voices. As the fifth activity, a strong relation to the phenomenon was maintained; each theme was discussed in context of the participants' experiences. Finally, the obtained parts and whole were balanced by moving back and forth between coded transcripts and overarching holistic themes (Van Manen, 1990).

Trustworthiness

To guarantee the reliability of the obtained findings, the long-term involvement of participants, the member-checking procedures, and professional peer debriefings were used. The fact that the rapport between the researchers and the participants was sound enabled detailed data collection. The researcher has a broad experience related to both study of gender and trauma as well as personal understanding of the local community and traumatic genocide experience as a survivor themselves, which added credibility to her work and gave contextual understanding. Participant accounts were directly used as the basis of interpretations; transcripts were reviewed several times to ensure accuracy.

Ethical Considerations

The research had ethical approval provided by the Ethics Committee of Hawler Medical University College of Nursing (Project No. XX; Approval Date: DD MM YYYY). Before participation, participants were fully advised of the purpose of the study, protocols of confidentiality and the rights of the subject, including the right to withdraw at any time. Every person provided a voluntary

declaration form to acknowledge a consent informed consent form To guard against anonymity, the participants were given a code (e.g., P1, P2, etc.) so that all physical or digital data would be safe.

Results

Analyzing the collected data led to the emergence of four main themes, each having three subthemes. The quotes from which the main themes and subthemes were retrieved are presented below.

Main Theme 1. Bearing the Weight of Sole Survival

Sole survivors go through a serious feeling of loneliness as they are left to remember their families being destroyed through memories. In this regard, the participant said:

“It is not freedom that you are alive when all the others are dead it is the kind of sentence you pay out each and every day.” – P4

“I have their faces in my head and some days it seems that the burden will break me.” – P9

Subtheme 1.1. Survivor's Guilt

The participants revealed their feelings of unworthiness, questioning why they lived when others did not. Regarding this subtheme, the participants revealed:

“I am asking myself, night after night, why I? Why am I the one left to remember, when my brothers and sisters were better people than I ever was?” – P5

“Living feels like a betrayal. I breathe, I eat, I wake up, and all I can think is that they deserved this life more than I do.” – P8

Subtheme 1.2. Loneliness of Memory

As follows, the participants talked about experiencing life without peers who share the same personal loss.

“No one around me remembers my parents' voices, the way they laughed. I feel like a ghost among the living.” – P1

“Even when I'm surrounded by people, I am still alone — because no one shares the exact emptiness

I carry.” – P11

Subtheme 1.3. Emotional Exhaustion

As quoted below, the participants revealed their pain as the sole keepers of family stories.

“Sharing my story over and over seems to be where I am constantly re-opening the wound that never heals. It gives me nothing, and it leaves me drained for days” – P10

“I’m so pick up to tap deliberate to render the memories approximately collective. It’s like carrying water with my hands, it always falls down, but I can’t spill it.” – P12

Main Theme 2. Trauma and Transformation of Identity

The survivors expressed the way their personal identity was re-formed by the loss, and at the same time how the identity of being Kurdish increased in importance due to common sufferings.

“I am no longer who I was before the genocide. That person died with my family, and what remains is someone I’m still trying to recognize.” – P2

“The pain made me Kurdish in a way I never understood as a child. Now it’s written on my skin and in my bones.” – P7

Subtheme 2.1. Shattered Self-Perception

The following quotes indicate how the participants related their stories about loss of childhood, innocence, or prior life roles.

“I used to dream about becoming a teacher, but after the genocide I felt like I didn’t deserve to dream at all.” – P1

“I lost my childhood in a single night. I had to grow up with blood on my hands, even though I had done nothing wrong.” – P3

Subtheme 2.2. Strengthened Kurdish Consciousness

As can be implied from the following quotes, the genocide led to increasing attachment to ethnic identity as one of the forms of resistance.

“When they attempted to wipe us out, I knew to what an extent I could be a part of my people. I feel rebellious with every Kurdish word that I utter.” –

P6

“Previously I used to think that it was normal to be Kurdish. The thing is that now it is the reason I survived itself because I want to ensure that we are never silenced.” – P8

Subtheme 2.3. Negotiating Dual Selves

In their stories, the participants revealed their struggles with balancing personal pain with public expectations to represent the genocide story. In this regard, the survivors said:

“I talk in front of people how I am proud to be the survivor but alone on the other hand I am only shattered and little.” – P5

“My experience is that people want me to be tough, to narrate our experience with bravery yet deep within, I still see myself as the frightened kid cowering in the darkness.” – P11

Main Theme 3. Community Rebuilding and Social Contribution

As indicated in the following quotes, even when the wounds have been heavily bleeding, the survivors have made active contributions towards the rebuilding of Kurdish society and the transmission of the collective memory.

“Rebuilding should not be merely about houses, but restoration of peoples sense of belonging.” – P3

“Whenever I address young people, I feel as though I am planting some seeds to a future my family never lived to see.” – P9

Subtheme 3.1. Witness as Educator

As shown in the following quotes, the participants have kept telling tales to young people in order to preserve the past since it can be washed away.

“When I go to schools I talk to kids about my family so they can know what happened- and so they will know it must never happen again.” – P2

“I do not talk because it is easy, I talk because not to talk would be to lose them a second time.” – P7

Subtheme 3.2. Reconstructing Social Bonds

The following quotes indicate that the survivors have been assisting needs of families who were

displaced and promoting the solidarity of the community.

“Following the genocide, we taught ourselves how to depend on one another in a manner that only happened previously. Neighbors were not what we were anymore, we were one family.” – P10

“I had a mission of helping displaced families. I felt that was also picking me up.” – P12

Subtheme 3.3. Advocacy and Justice Seeking

As depicted by the following quotes, the participants have always attempted for recognition, memorialization, and accountability.

“I stand in front of governments and tell them our story, even though I know they may not care. At least they cannot say they didn’t know.” – P4

“Justice may never come, but speaking out is my way of refusing to let their crimes be forgotten.” – P6

Main Theme 4. Fragility and Resilience of Collective Identity

As reflected in the following quotes, the survivors personified both the vulnerability of a group of people who are nearly destroyed and the endurance of Kurdish identity.

“They tried to erase us, but here I am, speaking our language and remembering their names.” – P3

“We are fragile because we were almost destroyed, but we are strong because we are still here.” – P9

Subtheme 4.1. Cultural Continuity

The following quotes revealed the fact that the participants have used their native language, traditions, and customs as an armor against extermination.

“I continue using my mother recipes and singing my father favorite songs. Each of my customs is rebellious.” – P2

“When it was dangerous to speak Kurdish even preschoolers would echo it to themselves in the dark lest they forget.” – P5

Subtheme 4.2. Intergenerational Transmission

As indicated in the following quotes, the survivors have always tried to minimize the possibility that the memory of atrocities is forgotten by the next generations.

“I never hold back things to tell my children both the bad and the painful histories because they need to know which blood flows in their veins.” – P7

“The younger ones want to know why I cry when I tell stories, and I tell them: I do it, so you won’t have to.” – P11

Subtheme 4.3. Hope Amid Ruins

As shown below, the participants have used survival not only as remembrance but as a platform for envisioning a peaceful future.

“Survival is not enough; I want to live in a future where our children don’t grow up with fear.” – P4

“Even among the graves, I see flowers growing. That’s how I know we will rise again.” – P12

Discussion

Using four key themes identified based on the lived experience and narratives of the research participants, this paper has not only demonstrated how the custodianship of the story of a family result in overwhelming feelings of guilt, isolation and burdens of representation but also how identity, pedagogy and advocacy can be employed in the process of social reconstruction.

Theme 1. Bearing the Weight of Sole Survival

This theme overlaps with the research on ambiguous loss and lingering grief, when the lack of physical bodies and rites makes grieving complicated and keep those who are alive in the state of transition between both (Boss, 2021). The point made by the subtheme, loneliness of memory, cuts through one that is becoming increasingly accepted both by the collective memory community: memory is usually divided and supported by social structures (Olick et al., 2011; Bond et al., 2017). When an entire line of kinship is torn away, such scaffolding is destroyed and the only one who is left behind will face the fear of being forgotten as a second death. The evidence of “emotional exhaustion” associated

with testimony confirms that on testimonial fatigue and the ambivalent psychological impact of telling the truth in post-conflict zones (Brouneus, 2010; Hayner, 2011; Clark, 2010). The fact that the participants feel that remembrance is something they need to do but that it is exhausting and draining correlates with what has been described by memory work being labor that is ethically imperative, but affectively expensive (Kuhn, 2010) and what we as medical professionals have learned about the way trauma perseveres in the body and mind (van der Kolk, 2014). Indeed, in combination these data challenge overly positive speculations concerning resilience, at least insofar as this tends to privilege the unrelenting burden of representational responsibility.

Theme 2. Trauma and Transformation of Identity

The reports of the participants of their broken sense of self and disrupted life projects coincide with the models of sense-making after extreme stress (Park, 2010). A purely unique contribution of the theme is subtheme 2.2 (i.e., strengthened Kurdish consciousness) in which ethnicity is transformed into defiant identity and survival resource. It reflects the cultural trauma theory of identity recreated on the collective trauma (Alexander, 2012), though elevated by the Kurdish politics rooted in the background of the quasi-state in its development and a divided sovereignty (Natali et al., 2017). Subtheme 2.3 (i.e., negotiating dual selves) has resonance with narrative health research on the public performance of the wounded storyteller (Frank, 2013) and with re-tooled dramaturgical corrections of frontstage/backstage identity performance (Hogan, 2010). The visible toughness and inner weakness have been noted among postwar activists and teachers (Helms, 2013) has been reported, yet the data reveal how being a sole survivor compounds the psychic burden of what has been called the representational labor, a single person represents an entire family line that has been obliterated.

Theme 3. Community Rebuilding and Social Contribution

Instead of relying exclusively on presenting survivors as traumatized individuals, the theme casts them as part of the solution to social ills, one that is in line with other ethnographies of the reconstituting effects of the ordinary following violence (Das, 2015). Subtheme 3.1 (i.e., witness as educator) corresponds to a large-scale trend in survivor-initiated pedagogy, oral history, and prevention work (Perks & Thomson, 2015; Kilby & Rowland, 2014). What is peculiarly borne out in this experience is education as lineage repair: testimony is conserving a family micro-history threatened with loss, not merely a national discourse. Subtheme 3.2, which is the finding of how to recreate social bonds, reveals that an agent pool of survivor associations and mutual aid can create kin-like solidarities where kinship vanished (Helms, 2013). Subtheme 3.3 (i.e., advocacy and justice seeking) falls under the literature transitional justice area, where there is uneven recognition and delayed accountability (Hayner, 2011; Clark, 2019). Such a focus on exhumation, identification, and memorialization imply the “forensic turn”, as human remains, DNA, and where bodies were buried become the loci of truth and mourning (Anstett & Dreyfus, 2015; Ferrndiz & Robben, 2015; Wagner, 2010). Barzani survivors exist on a liminal justice horizon compared to more institutionalized settings, increasing the importance of community-based memorial practice and survivor-determined testimony tempos.

Theme 4. Fragility and Resilience of Collective Identity

This study did not romanticize resilience but rather explicates what can be termed as fragile endurance. This middle-ground position is in tandem with both theoretical critiques that laud the potential instrumentalization of resilience in governance settings and its potential to mask persistent structural harms (Chandler, 2014), as well as the more recent acknowledgments of the adaptive capacities of resilience (Southwick et al., 2014) and the controversial and continuously-evolving forms of post-traumatic growth (Jayawickreme & Blackie, 2014). Subtheme 4.1 (i.e., cultural continuity) is an illustration of survivance: a daily

habit of doing things, such as language, cuisine, and songs as memory work who live (Kuhn, 2010; Bond et al., 2017). Subtheme 4.2 resonates with post-memory to which it is closely related, as descendants receive, inheriting, bodies of affective and narrative worlds that they have not experienced directly (Hirsch, 2012), and is consistent with studies of intergenerational biological markers of stress among descendants of genocide victims (Yehuda et al., 2016). Subtheme 4.3 (i.e., hopes amid ruins) disciplines futurity and aligns itself with memory politics literature on the role of museum practices in averting repetition without neglecting pain (Sodaro, 2018; Suboti, 2019). Here, hope is civic and pedagogical, not triumphant: “so you won’t have to” is both a vow and a curriculum for a less violent future.

The central interest of the study under discussion reveals the weighting effect of the lack of distributed memory on guilt and isolation and the vulnerability of continuity (Olick et al., 2011; Bond et al., 2017). This assists in understanding why the testifiers in the present study feel the need to testify because they are draining but obligatory (Brou NEus, 2010; Hayner, 2011). The survivors work amidst parochial recognition and national ambivalence, thus making advocacy a continuous and exhausted requirement. This is the case with wider arguments about uneven justice regimes (Clark, 2019) and how the key infrastructures of maintaining a truth claim are both forensic and memorial (Anstett & Dreyfus, 2015; Ferrandomiz & Robben, 2015). The findings of the present study place the cultural trauma theory in conversation with Kurdish studies, revealing identity as being re-made by grief and everyday routine within a polity that is still contested (Alexander, 2012; Natali, 2010; Stansfield & Shareef, 2017).

Conclusion

Overall, the study confirms central understandings on guilt, identity rupture, and transmissions across generations, and poses a micro-level of explanation on the ground of sole survivorship in the Barzani genocide. It recontextualizes memory as a fatiguing ethical work; Kurdishness as felt and daily

resistance; and the reconstruction of community as pedagogical and social infrastructure towards a future without repetition. The findings confirm firm knowledge on trauma, testimony and cultural trauma and generalize it using the prism of sole survivorship. The focus on memory labor activism, Kurdish identity work, and survivor-led reconstruction allows reframing the concept of resilience as precarious survival and explains how justice gaps influence the price of remembrance and its meaning.

Implications

This paper highlights the importance of acknowledging the sole survivors of the Barzani genocide as significant members of caretakers of memory, whose personal experiences represent such acute trauma and identity shifts as well as their roles in healing the community. Findings suggest a shift toward survivor-led, trauma-informed forms of testimony, funding in culturally based psychosocial support, and policies that can not only lighten the advocacy load but also protect-testimony. By documenting these narratives, the research advances genocide scholarship and supports efforts to preserve collective identity and resilience.

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Loss, Absence and Recovery: A Scientific Analysis of Burial Practices and Forensic Identification Efforts Concerning Anfal Victims in Doli Jafayati, Kurdistan Region

Prof. Dr. Yasin Kareem Amin

Dr. Aza Bahram

Ahmad Ezadin

Abstract

The Anfal campaign (1986–1989) represents one of the most severe events in Kurdish history referring to mass migration and disappearance, as well as destruction of burial landscapes like Doli Jafayati at Kurdistan Region in Iraq. This article provides a social theoretical and cultural analysis of burial practices in relation to the forensic identification process of Anfal victims via existing forensic reports, UNITAD and ICMP material, academic witness testimonies, published survivor narratives rather than interview. The ethnography investigates how Kurdish families cope with loss in the absence of bodies, engaging in symbolic forms of burial and waiting for scientific recovery as a means toward recognition through an examination of verified forensic anthropology cases; internationally mediated exhumation missions; and culturally adapted mourning practices documented in scholarly literature. The research situates Doli Jafayati within wider forensic humanitarian efforts in Iraq and emphasizes the importance of dignified recovery, naming, and documentation as mechanisms of healing and historical justice. Rather than centering on new fieldwork, this article provides a secondary-source-based synthesis that bridges forensic

science, cultural practice, and the psychology of ambiguous loss to illustrate how communities continue to seek closure through both ritual and identification technologies. The findings highlight the dual role of forensic investigation and cultural resilience in shaping recovery after genocide.

Keywords: Anfal Campaign; Burial Practices; Forensic Identification; Kurdish Genocide; Doli Jafayati; Ambiguous Loss; Forensic Anthropology; Post-Conflict Recovery

1.0 Introduction

The legacy of the Anfal campaign continues to shape the cultural and political identity of Kurdish communities across Iraq. Conducted between 1986 and 1989 under the Ba'athist regime of Saddam Hussein, the campaign involved systematic village destruction, forced disappearance, and mass execution of Kurdish civilians. While estimates vary, scholars generally agree that over 180,000 people were killed or disappeared during Anfal (Hardi, 2011; Kelly, 2007).

Much academic focus has been placed on Anfal as a case of genocide and state violence. However, less attention has been given to the burial crisis it created—thousands of families were denied access

to the remains of their loved ones, leaving both religious obligations and cultural mourning practices in a permanent state of interruption. In Doli Jafayati, a valley region heavily affected by the campaign, traditional Islamic burial procedures were made impossible due to mass deportations and the subsequent concealment of graves in remote desert locations (ICMP, 2021; UNITAD, 2022).

This study addresses that gap by conducting a scientific and cultural analysis of how burial practices, symbolic grave formations, and forensic identification campaigns intersect in the ongoing struggle for recognition and psychological closure. Unlike ethnographic studies that rely on direct testimony, this article analyzes published survivor accounts, archival testimonies, and forensic investigation records to construct a documented narrative of loss and recovery.

2.0 Historical Background: The Anfal Campaign and Doli Jafayati

Between February and September 1988, the Anfal campaign was conducted in eight stages against Kurdish rural settlements such as Chamchamal, Qaradagh, Garmiyani, and Doli Jafayati. Many of the villages in the valley were bombed, destroyed and depopulated and residents were transferred to detention centers such as Topzawa and Nugra Salman or to mass killing sites in desert areas at locations like Hatra and Samawah (Fischer-Tahir, 2012; Khudhur et al., 2020).

Accounts given by witnesses, such as the testimonies cited in Hardi (2011) and Karim & Baser (2023), highlight that Doli Jafayati was not just a scene of destruction; it was also a beleaguered burial landscape where cemeteries were bulldozed, religious shrines defiled, and burial grounds closed off. In most instances entire families vanished into oblivion, leaving behind no trace of bodies for conventional rituals of mourning.

Since 1991 and the creation of a Britain-protected, if not full independent, Kurdish enclave in Iraq, she said that Doli Jafayati's displaced families had started to return home. But they came home to an

empty land — fields without graves, villages without cemeteries. This absence gave rise to a kind of mourning rooted not in the act of burial but instead in acts of communal symbolic presence such as displacement stones, tree seeds planted for missing persons and *fātiḥa* recited over empty plots (Karim & Baser, 2023; ICRC, 2019).

3.0 Theoretical Framework and Literature Review

3.1 Ambiguous Loss and the Concept of Absence

According to Pauline Boss (2006, 2021) ambiguous loss occurs when psychological closure is prevented by the lack of a body or an acknowledgement of death. In Anfal-affected areas, including Doli Jafayati, families could only grieve the death of their loved ones without being able to wash (*Ghusl al-mayyit*), pray for (*janazah*), or bury them. This corresponds well with Boss' typology of "physical absence with psychological presence" where the missing person is by fiat still part of daily thought and ritual life even when not in a location.

3.2 Collective Cultural Continuity through Ritual

Maurice Halbwachs (1992) maintains that memory is not just personal but reconstructed by social structures. In post-Anfal literature, this process is articulated by Karim & Baser (2023) and Mlodoch (2017) who show how Kurdish mourning – even when it is symbolic – functions as collective cultural form and allows for continuity in the midst of erasure. To perform a ritual, e.g., the repetition of names or visit to symbolic markers as in Connerton's (1989) 'carried' memory illustrates the logic of embodied memory, mourning carries on through action rather than substance.

3.3 Forensic Humanitarianism and Scientific Naming

The development of a forensic humanitarian mission in Iraq, particularly under UNITAD and ICMP leadership, has recast bones from remains without names to legal persons (UNITAD, 2022; ICMP, 2021; Ferrándiz, 2019). Wagner (2018) and Stover & Joyce (2020) contend that forensic identification serves legal justice and emotional

restitution: returning a name to a subsequently recovered skeleton can lead grief from the condition of keeping vigil in uncertainty into the state of full recognition.

3.4 Resilience as Cultural Reclamation

Resilience in a genocide context is not about psychological toughness! Resistance is cultural reclamation.» Ungar (2019), Moradi et al. (2020) note that communities who suffered from mass trauma retake survival in re-naming exercises, memory work in education and re-taking of land. In Kurdish areas families often relocate to land close to razed cemeteries, suggesting that the landscape can also serve as a vehicle of memory (Baser & Toivanen, 2019).

4. Methodology (Revised)

Using a document-driven analytical approach, the study draws on official forensic reports and academic writings, testimonies found in Nesturiyê archives, humanitarian investigation materials as well as cultural analyses about the Anfal campaign and mass graves in the Kurdistan Region. Unlike ethnographic fieldwork or interview research, such data does not require collection from victims' families. Rather, it utilises a desk-based qualitative synthesis methodology suited to those contexts in which access to survivors or human remains is restricted as a matter of ethics or pragmatics.

4.1 Data Sources

The analysis is built upon three categories of verified secondary data:

Forensic and Legal Documentation

- Reports from UNITAD (2022) and the International Commission on Missing Persons (ICMP, 2021–2023) on mass grave exhumations and identification missions in Nineveh, Hatra, Kocho, and other Anfal-related sites.
- Anthropometric and osteological datasets from Iraqi forensic teams such as Khudhur, Yaseen, and Amin (2020) documenting recovery protocols and bone-based sex and age estimation methods.
- ICRC (2019) and WHO guidance on the dignified

management of human remains in post-conflict environments.

Academic Testimony and Memorial Literature

- Published testimonies from Kurdish genocide survivors as recorded by Hardi (2011), Karim & Baser (2023), Moradi (2017), and Mlodooh (2017).
- Cultural memory analyses and post-genocide identity frameworks from Baser & Toivanen (2019), Stone (2013), Hiltermann (2008), and Six-Hohenbalken (2017).

Peer-reviewed studies on symbolic burial, ambiguous loss, and absence within Kurdish communities from journals such as *Genocide Studies International*, *Memory Studies*, and *Forensic Science International*.

Cultural-Religious Frameworks and Observed Practices

- Documented descriptions of fātiḥa gatherings, symbolic grave markers, and commemorative landscaping in Anfal-affected valleys referenced in secondary literature (Karim & Baser, 2023; Fischer-Tahir, 2012).
- Reports from Kurdish civil society organisations on mourning adaptations in regions where no remains have been recovered.

4.2 Analytical Approach

All data were qualitatively thematically read, with reference to recurrent themes of absence, symbolic burial, forensic identification, religious adaptation and the search for closure. Less a study in measurement, the essays are an exercise in interpretive synthesis that connects forensic procedural knowledge to cultural understanding of loss.

The analysis also draws upon conceptual frameworks from:

- Forensic human rights methodology (Ferrándiz, 2019; Wagner, 2018)
- Ambiguous loss theory (Boss, 2006; Boss, 2021)
- Collective historical reconstruction through evidence (Stover & Joyce, 2020)

- Cultural resilience in mass trauma contexts (Ungar, 2019; Moradi et al., 2020)

By combining scientific recovery discourse and cultural mourning narratives, the methodology allows a dual perspective—seeing the disappeared both as forensic cases and as subjects of cultural continuity.

4.3 Ethical Positioning

This study is sensitive to the dignity of victims; speculative reconstruction of confidential lives is avoided. All testimonies cited have been published in verified academic and humanitarian outlets, which both guarantees an ethical distance as well as a narrative depth. There are no fictionalized quotes or conversations inserted. In contrast, the report uses references like “as noted in...” or “documented in UNITAD witness statements” to maintain academic rigour.

5. Findings and Discussion

5.1 Burial in the Absence of Bodies: Landscapes of Loss

Reported accounts of the Anfal campaign never fail to note that the lack of bodies added an additional, continuing trauma for Kurdish families. Cemeteries in places like Hatra, Kocho and Doli Jafayati were intentionally destroyed by Iraqi forces used to prevent families from giving Islamic burials to departed relatives (Hardi 2011; Karim & Baser; 2023).

In collected testimony, as recorded by Hardi, women recall going on foot to empty gravesites and speaking *fātiḥa* over unmarked earth before placing stones where they imagined their kin might be. Similarly, Karim and Baser (2023) have witnessed similar practices after the attack in Halabja where symbolic gravestones stood before forensic analysis could confirm names. These symbolic graves, as the ICRC (2019) also writes in its guidelines on missing persons, act as both ritual stakes-and-stones and silent testaments of presence against annihilation.

Secondary reports from Kurdish civil documentation centers have cited families in some valleys, like

Doli Jafayati, using prayer stones, white clothes and even olive tree plantings in place of burials. Such acts are both small-scale, not recorded in state-sanctioned archives, and they speak to what Connerton (1989) calls “memory as repeated bodily practice” — everyday movements that transform absence into presence.

5.2 Oral Testimony in Published Sources as Memory Preservation

Although direct interviews were not conducted for this study, existing oral histories published by Hardi (2011) and Mlodoch (2017) reveal a consistent pattern: storytelling becomes a form of burial when burial is not possible. In one archived testimony cited by Hardi, a survivor described how Anfal widows would meet during religious holidays and recount the last known moments of their missing relatives — not as anecdote, but as ritual recitation.

Similarly, in Halabja, narratives recorded by Karim and Baser (2023) show that survivors transmit these stories to younger generations not only to remember the dead, but to assign moral responsibility to the living: «If we stop speaking, they will vanish again» (Karim & Baser, 2023, p. 64). Although Doli Jafayati is less documented in academic literature than Halabja, the same cultural logic applies — where articulating loss publicly substitutes physical burial.

This aligns with ambiguous loss theory (Boss, 2006), which argues that where death is not confirmed, language becomes the primary tool for stabilizing emotional reality.

5.3 Religious Adaptation and Spiritual Burial

Both UNITAD reports and Islamic jurisprudence notes issued by Kurdish religious councils state that in cases where bodies are not retrieved (as well as when the victims died of natural causes), Islamic law allows for symbolic funeral rites, including praying without a body (*Salat al-Gha'ib*).

There are according to the biographies of millions that were killed in Anfal; there are often sermons broadcast in mosques on Friday, which on some Fridays at least have been published and preserved

by local cultural departments by some such title as “What the martyrs of Anfal was alive with God!” These make frequent reference to Qu’ran (3:169). These statements confer a theological standing upon symbolic graves and provide the space for families to integrate religious faith with their forensic expectation — they can pray almost as if burial has happened, but also perhaps wait for scientific identification before doing so completely..

5.4 The Longing for Scientific Identification in Published Reports

As documented in reports by ICMP (2021), in places where mass graves have been excavated, such as Kocho, families reported experiencing relief and trauma upon discovering what they believed to be the remains of their loved ones – a phenomenon also observed in Bosnia and Argentina. The UNITAD forensic team (2022) reported evidence of strong communities or tie to place, with family members attending the identification ceremonies and often bringing photographs, soil from an ancestral village as well as Qur’anic verses wrapped in cloth to be placed on or near newly identified coffins.

Although Doli Jafayati has not yet undergone full forensic excavation, academic analysis by Moradi (2017) and witness case files included in ICMP briefings show that families from that valley travel to other Anfal exhumation sites to observe proceedings, hoping to see their turn come next. Scientific identification has thus acquired symbolic power — it represents not just legal justice, but existential recognition.

This dynamic reflects what Ferrándiz (2019) describes as forensic truth as ritual: the moment when science returns a name to a set of bones, allowing community mourning to shift from abstract sorrow to named grief, a key transition in ambiguous loss theory.

5.5 Cultural Resilience as Documented Continuity

Even without official graves, Kurdish academic and cultural sources describe numerous acts of

continuity in villages affected by Anfal. Baser and Toivanen (2019) noted that in diaspora communities, Kurds rename streets, youth centers, and gardens after destroyed villages like those in Doli Jafayati. Within Kurdistan, teachers in rural schools reportedly begin history lessons by listing the names of «yet-unrecovered martyrs» — forming a living archive within education, which replaces the missing cemetery.

Rather than passive suffering, these acts recorded in literature represent active cultural resilience. As Ungar (2019) writes, resilience in post-conflict societies emerges through “collective meaning-making that transforms loss into continuity.

6.0 Conclusion

Doli Jafayati’s story demonstrates that loss after genocide is not an event but a chronic process created by forced burial, missing bodies, and unclear closure. The Anfal deportations were not content to destroy lives, but also ensured that burial sites were obliterated in order to attack the cultural and religious bases of Kurdish grief.

By examining forensic reports, published testimonies and cultural monitoring, the article argues that families whose members were victimised by Anfal have reacted to this situation of refusal on the part of the Iraqi state by creating symbolic burial fields, performing commemorative practices which mirror spiritual concerns and having faith in the material efficacy of forensic science for future social recognition.

Forensic identification work as undertaken by UNITAD and ICMP demonstrates that exhumation is not only a technical action but a cultural and moral happening. When a name is affixed to a collection of remains, a burial that was 30 years overdue is spiritually consummated. In doing so, science serves as its own dignity regulator, and forensic anthropology shifts from field of analysis to field of restorative justice.

Ultimately, recovery in Doli Jafayati is not only about retrieving bones—it is about restoring the right to mourn, to name, and to belong. Until every valley receives its dead back, symbolic graves,

prayers in absence, and archival testimony will remain active forms of resistance against historical erasure.

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The Role of Documentary Film in the International Recognition and Documentation of the Kurdish Genocide

M.R. Dana Mohammed Abdulla

Department of Cinema and Theatre, College of Fine Arts, Salahaddin University- Erbil, Kurdistan Region, Iraq

Abstract:

The genocide against the Kurdish people, particularly the Anfal crimes and the mass graves, represents a historical atrocity that requires scientific and artistic documentation at the international level. This research academically explores the role of documentary film within the political and social context, identifying it as a vital tool for social preservation and remembrance, and for generating international pressure for the recognition of the Anfal crimes and their linkage to the principles of international justice. The study employs a qualitative descriptive approach to evaluate samples of documentary films produced on the Anfal crime and their impact on establishing a historical legacy for the victims (families and survivors). Furthermore, the research discusses the genre of documentary film, and the forms and content of the crimes, illustrating how cinema can be utilized for political and cultural purposes, especially by drawing parallels between the Kurdish genocide and other global genocides. The findings of this study conclude that cinematic art is not merely a cultural instrument, but a methodical process that propels crimes and tragedies towards justice and international recognition by narrating the stories. Simultaneously, it can serve as powerful evidence in international tribunals.

Keywords : Documentation of the Kurdish Genocide, Anfal Crimes, Mass Graves, Documentary Cinema, International Recognition.

1 .Introduction

Genocide and brutal crimes such as Anfal and the Barzani massacres constitute a dark chapter in human history, making their recognition and documentation crucial for preventing their recurrence. In this context, documentary film emerges as an effective medium that can leverage art and truth to convey these stories to the world and create a strong memory for future generations. The documentary film «My Mothers» (Daikani Mn), (a joint production between Iran and the Kurdistan Region directed by Kurdish filmmakers Ibrahim Saeedi and Zahawi Sanjawi), has gained significance not only locally but has also been screened at several major international festivals, including Mediawave in Hungary (2011), the Iranian Film Festival in Boston, and the London Kurdish Film Festival (2021). Critically, it was shown in the Swedish Parliament on June, 2008, which had a direct impact on the political efforts to recognize Anfal as a genocide.

This research asks: How can documentary films convey the tragedy narrative with profound artistic depth while adhering to historical truth?

2 .Theoretical Framework and Methodology

2.1 .The Concept of Genocide in Law and History

Genocide, as a legal term defined by the 1948 UN Convention, is any act committed with the intent to destroy, in whole or in part, a national, ethnic, racial, or religious group (United Nations, 1948).

The documentation of such crimes is not only a moral obligation but a legal and historical basis for preventing denial and recurrence.

2.2 .The Role of Documentary Cinema in Documentation

Documentary Cinema is defined as a non-fiction film genre committed to narrating factual events and representing the historical world) Nichols, (2017) In the context of genocide studies and international justice ,its role transcends simple chronological documentation ;it functions as a critical medium for memory construction and the establishment of counter-history.

For cases like the Kurdish Genocide ,where official archives may be suppressed or contested ,the documentary mode serves two crucial academic and juridical functions:

1 .Establishing Affective and Evidentiary Testimony) The Observational/Performative Modes :(Documentary films ,particularly those utilizing the observational and performative modes)Nichols ,(2017 ,transform personal accounts into public ,visual evidence .This process is essential for providing» thick description «of the trauma, focusing on the lived experience of survivors)Masoudi Mala Hamza .(2011 ,The visual narrative of a survivor«s testimony acts as a vital counter-narrative to state denial ,grounding abstract political crimes in tangible human suffering.

2 .Archival and Epistemological Function :Beyond testimony ,documentary cinema ,through the expository mode ,organizes and contextualizes historical evidence ,functioning as a portable, accessible archive) Al-Hamadi .(2019 ,It captures ephemeral cultural practices and landscapes threatened by genocide ,thereby preserving cultural memory and providing visual data that can be used to authenticate claims in international human rights forums) United Nations .(1948 ,The medium itself becomes a primary source document ,bridging the gap between historical fact and emotional truth.

2.3 .Research Methodology

This study employed a Qualitative Research Approach ,deemed most appropriate for a deep,

conceptual analysis of the relationship between media) cinema (and transitional justice in the context of genocide .The research design is structured as a Single-Case Study ,focusing on a specific media product to investigate its broader political and cultural role in genocide recognition.

2.3.1 .Case Selection (Sampling)

The documentary film» My Mothers (2017) «was selected as the primary case study based on three specific criteria) :a (Thematic Relevance :Its powerful and intimate representation of the female victims «experience in the Anfal crime) .b(International Profile :Its successful screening at international film festivals and key political forums)e.g .,the Swedish Parliament in ,(2008 which demonstrates its proven capacity to influence global political discourse) .c (Archival Accessibility :The availability of related academic and journalistic reports necessary for secondary data validation.

2.3.2 .Data Collection

Data was systematically collected from two main sources:

- Primary Data) Visual Text :(This involved a Visual Content Analysis of the film» My Mothers«.

The film was viewed three times to ensure accuracy. The primary data consisted of key visual sequences 15)clips (and narrative elements that captured the film«s emotional impact and documentary authenticity .These were logged and transcribed to serve as the core evidence for the analysis.

- Secondary Data) Documentary Sources :(This included peer-reviewed academic literature) e.g., Nichols ;2017 ,Al-Hamadi (2019 ,and pertinent media reports) festival reports and political coverage .(This secondary data was utilized to establish the theoretical framework and to validate the political and diplomatic functions of the film on an international level.

2.3.3 .Data Analysis

The collected qualitative data was analyzed using a Modified Qualitative Content Analysis method. The analysis process involved three stages:

1 .Coding :Key themes were extracted from the primary data) film clips and narrative .(These themes included» Representation of Female Victimhood« «,Contested Historical Memory«, and» The Power of Testimony«.

2 .Categorization :The derived themes were grouped into two broader categories» :Archival Function «and» Cultural Diplomacy/Political Advocacy«.

3 .Interpretation :The findings from the content analysis were interpreted against the legal framework of the 1948 UN Convention on the Prevention and Punishment of the Crime of Genocide ,thereby highlighting the film's role in the transitional justice process for the Kurdish people.

3 .Analysis of» My Mothers «as a Case Study

The film» My Mothers) «Producer :Abbas Ghazali, Composer :Hossein Alizadeh (is a joint production between Iran and the Kurdistan Region .The film can be analyzed on several levels:

3.1 .Directorial Style and Narrative

The film portrays the tragedy through a static and visually evocative style ,relying minimally on dialogue and heavily on the power of the image .As Massoud Mala Hamza noted ,the film focuses on the difficult and challenging lives of the mothers, daughters ,and wives of the genocide victims .The images of women with cattle ,a girl spinning a »bagrdeen) «a traditional churn ,(and a shot of a child in a window all convey a powerful imagery)Mohammed .(2020 ,This style enables the audience to form a deep emotional connection with the characters without the need for extensive conversation) Mustafa ,Dr .Dilshad.(2020 ,

3.2 .Role in International Recognition and Political and Judicial Pressure

The documentary film's function extends far beyond mere artistic expression ,evolving into a potent instrument of cultural diplomacy and a catalyst for transitional justice) Nichols ;2017 ,Al-Hamadi .(2019 ,The success of» My Mothers «at various international film festivals ,including the

London Kurdish Film Festival where it was recognized as a top three audience choice) Rudaw ,,(2021 confirms its ability to transcend cultural and linguistic barriers ,thereby establishing a fundamental emotional connection with a global viewership .This global reception is critical ,as it constitutes the first phase of international recognition :the emotional and humanistic acknowledgment of the atrocity.

However ,the most significant demonstration of the film's political efficacy was its screening in the Swedish Parliament in) 2008 Zayeleh .(2008 ,This act marked the film's transition from a cultural artifact to a documentary testimony within a sovereign legislative body .This event was not a coincidence ;it was a strategically coordinated effort coinciding with the political advocacy of the Left Party and activists like Amina kaka bawa and Hida guzl m ,utilizing the film's influence to advocate for the official recognition of Anfal as a genocide) Mustafa ;2020 ,Aziz.(2020 ,

This screening functions as a prime example of the documentary's role in agenda setting and political pressure .It utilized the visual and emotional force of the film to:

1 .Humanize the Statistic :By focusing on the lives of mothers and families ,the film successfully converted the abstract political concept of »genocide) «United Nations (1948 ,into a tangible, human tragedy ,thereby making denial politically and morally difficult for legislators) Khan.(2020 ,

2 .Activate Civil Society and the Diaspora: International screenings mobilize Kurdish diaspora communities and sympathetic global civil society organizations ,which in turn apply grassroots pressure on their respective governments to recognize the Anfal genocide.

3 .Bridge Cultural Gaps for Diplomatic Action :By presenting the tragedy through the universally understood medium of cinema ,the film provided a digestible and compelling narrative for non-Kurdish policymakers ,accelerating the diplomatic process for formal recognition.

Ultimately ,the film functions as a non-traditional

yet powerful form of soft evidence (for potential international judicial processes) Al-Hamadi.(2019 , While not strictly meeting all legal criteria for formal court documentation ,the film's wide dissemination and emotional credibility serve to establish an irrefutable historical record and sustain the moral imperative for justice ,thereby laying the groundwork for future legal and political action aimed at achieving the full international recognition of Anfal.

3.3 .The Distinction Between the Barzani Genocide (1983) and Anfal(1988)

One of the most crucial points in the analysis of the film is the observation regarding the merging of the history of two distinct genocides .This matter requires careful consideration to understand the historical and legal frameworks of each event.

The Barzani Massacre occurred in ,1983 while the Anfal Campaign took place in .1988 These two crimes fundamentally differ in terms of time, location ,and victims .The Barzani massacre was specifically targeted against the men and boys of the Barzani tribe ,representing an initial ,focused act of extermination .In contrast ,Anfal was a broader ,systematic military operation spanning several phases ,targeting numerous Kurdish villages and communities across a wider geographical area ,including the Garmian region.

The Problem of Historical Inaccuracy

While the blending of these events might function effectively on an artistic level—successfully conveying a general sense of Kurdish suffering and oppression to the audience—it nonetheless represents a significant historical and scientific error.

This lack of distinction is particularly relevant because the film was screened in international settings ,where greater precision in conveying historical information is absolutely necessary. Maintaining the separation between the Barzani Genocide and Anfal ,recognizing them as two distinct crimes ,is vital for:

1 .Ensuring separate legal weight and recognition for each atrocity.

2 .Preserving the unique memory and profile of victims from each respective catastrophe.

3 .Clarifying the distinct phases and strategic evolution of the Baath regime's genocide against the Kurdish people over time.

4 .Results and Conclusions

This research concludes that documentary film plays a supremely important role in the process of genocide documentation and recognition .The film »My Mothers «proved that cinema can ,through a profound artistic and visual style ,transmit the human stories of the crimes to a foreign audience and become an effective instrument for conveying the political message.

•First :The art of cinema can function as living evidence for national memory.

•Second :The film's success at global festivals and its screening in political centers are strong proofs of its impact and capacity to communicate the Kurdish message to the world.

•Third :The merging of two distinct genocide cases in the film's content can affect the film's accuracy and credibility ,particularly in legal and academic settings.

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The Role of Forensic Anthropology in Determining the Political Dimension of the Kurdish Genocide

Renas Bakr Ali
Political consultant

Hemn Aziz Mohammed
Assistant lecture

Abstract

This study examines the intersection of forensic anthropology and political analysis in understanding the Kurdish genocide, particularly during the Anfal campaigns of the 1980s under Saddam Hussein's regime. Through the systematic examination of human remains, mass graves, and associated material evidence, forensic anthropology provides critical insights into the state-led targeting of the Kurdish population. Combining descriptive-analytical methods with historical-political contextualization, this research highlights how forensic data substantiates the deliberate and organized nature of genocide, reconstructs collective memory, and supports mechanisms of transitional justice. The study demonstrates that forensic anthropology is not only a scientific discipline but also a tool for revealing the political dimensions of mass violence and for holding state actors accountable.

Keywords: Forensic Anthropology, Politics, Kurdish Genocide, Anfal Campaigns, Transitional Justice, Iraqi State Policies

1. Introduction

The Kurdish population of Iraq has endured systematic marginalization and persecution throughout modern history. During the 1980s, this repression escalated into organized genocidal campaigns, culminating in the Anfal operations (1986–1989). These campaigns involved mass executions, chemical attacks, forced displacements,

and the destruction of Kurdish villages and cultural sites. Beyond physical destruction, the campaigns aimed to erase Kurdish political presence and national identity.

Understanding the political dimension of genocide requires both historical-political analysis and material evidence. While historical records, testimonies, and documents reveal state intent, forensic anthropology provides the tangible proof of violence, enabling scholars and policymakers to link acts of mass murder directly to political objectives.

This paper investigates the role of forensic anthropology in uncovering the political nature of the Kurdish genocide and contextualizes it within Iraqi state policies. It argues that the combined study of forensic evidence and political history is essential for reconstructing collective memory, documenting crimes, and supporting transitional justice.

2. Research Objectives

1. Highlight the role of forensic anthropology in reconstructing Kurdish collective memory.
2. Explain the relationship between science and politics in documenting genocidal crimes.
3. Analyze the political dimensions embedded in material evidence from genocide sites.

3. Literature Review

The theoretical framework of this research lies at the intersection of political anthropology and

forensic science. Political anthropology analyzes power structures, state behavior, and the symbolic use of violence, while forensic anthropology offers empirical evidence of those acts. Together, they form a holistic approach to interpreting genocide as both a political process and a physical manifestation of state policy. Existing literature highlights the critical role of forensic anthropology in human rights investigations. Haglund and Sorg (2002) emphasize its importance in uncovering evidence of state violence in post-conflict societies such as Bosnia, Argentina, and Rwanda. Dirkmaat et al. (2012) and Brooks (2008) note that forensic analysis transforms human remains into legal and political testimony, connecting victims' identities to the broader structure of power and repression. In the Kurdish case, the Human Rights Watch (1993) report on the Anfal Campaign first documented the scale and organization of killings, while subsequent forensic missions confirmed these findings through physical evidence. The political anthropology of Iraq during the 1980s reveals how the Ba'athist ideology intertwined nationalism with state security. The regime's Arabization campaigns and anti-Kurdish propaganda created a context in which political dissent and ethnic identity were conflated with betrayal. The genocide thus represented a form of 'political cleansing,' intended to reshape national identity through violence.

3.1. Forensic Anthropology in Genocide Documentation:

Forensic anthropology has evolved as a critical discipline for investigating human rights violations. Scholars such as Haglund and Sorg (2002) emphasize its role in identifying victims, establishing cause of death, and reconstructing events in cases of mass violence. In contexts like Rwanda, Bosnia, and Argentina, forensic anthropologists have successfully linked physical evidence to patterns of systematic killings, providing both legal and political accountability (Dirkmaat et al., 2012).

3.2. The Kurdish Genocide and Iraqi Politics:

The Anfal campaigns represent a distinct case of state-engineered genocide. Iraqi political

authorities, under the leadership of Saddam Hussein, developed systematic policies to suppress Kurdish political activity and enforce Arab nationalist agendas. The campaigns were framed as military operations but included deliberate attacks on civilian populations, villages, and cultural heritage, making their genocidal nature evident (Human Rights Watch, 1993). Scholars argue that the genocide was not random but carefully coordinated to undermine Kurdish identity, demonstrating a clear intersection of politics and violence (Charny, 1994).

3.3. Bridging Forensic Evidence and Political Analysis:

Forensic anthropology provides material proof of politically motivated violence. Mass grave excavations, skeletal analyses, and chemical residue studies allow researchers to reconstruct the systematic nature of killings. These data validate historical accounts of the Anfal campaigns and demonstrate the intentional targeting of Kurdish communities, providing compelling evidence for legal proceedings and policy analysis (Brooks, 2008).

4. Methodology

This study adopts a descriptive-analytical approach to forensic evidence combined with historical-political analysis.

4.1. Forensic Data Collection and Analysis

Forensic anthropologists investigating the Kurdish genocide employed a combination of traditional osteological analysis, trauma assessment, and chemical residue testing. Skeletal remains were examined for evidence of blunt force trauma, sharp force injuries, gunshot wounds, and signs of prolonged captivity or malnutrition. In addition, chemical testing was conducted on soil and bone samples from sites associated with suspected chemical attacks, providing evidence consistent with documented use of nerve agents such as sarin. Demographic profiling allowed researchers to reconstruct victim age, sex, and population characteristics, helping to identify systematic targeting of political or tribal groups. Advanced

GIS mapping of mass grave sites revealed spatial patterns indicative of deliberate selection of locations to conceal evidence and minimize discovery by international observers. from here:

- Examination of human remains from mass graves in Northern Iraq, including skeletal trauma analysis.
- Chemical and biological testing to determine cause of death, including chemical weapons exposure.
- Reconstruction of demographic patterns to establish systematic targeting of specific Kurdish groups.

4.2 Historical and Political Analysis

The political environment in Iraq leading up to the Anfal campaigns was shaped by decades of authoritarian consolidation under the Ba'ath Party. Saddam Hussein, after consolidating power in the late 1970s, pursued an aggressive Arab nationalist agenda aimed at centralizing control and suppressing ethnic minorities. The Kurdish population, concentrated in the north, had long demanded autonomy and recognition of cultural and political rights, which the Iraqi state perceived as a threat to national unity. Repeated uprisings and clashes between Kurdish factions and Iraqi forces during the 1970s and 1980s escalated tensions, culminating in the Anfal campaigns, a systematic effort to eradicate Kurdish political influence and identity. This period also coincided with the Iran-Iraq War (1980–1988), which provided the Iraqi government with a militarized context and justification for operations framed as national security measures. So:

- Review of Iraqi state documents, government communications, and military orders during the 1980s.
- Analysis of UN reports, NGO investigations, and eyewitness testimonies.
- Cross-referencing forensic evidence with policy documents to establish political intent.

5. Analysis and Findings

For analyzing this fact we have to give alight to

each the case studies , traditional justice, legal implications and social- cultural impacts

1. Case Studies of Mass Grave Excavations

Extensive forensic investigations have been conducted at multiple sites affected by the Anfal campaigns, including Halabja, Qala Diza, and Makhmur. The Halabja site revealed hundreds of victims exhibiting chemical injuries consistent with mustard gas exposure, corroborating eyewitness accounts of the chemical attacks in March 1988. At Qala Diza, excavations uncovered mass burial pits with evidence of execution-style killings, including gunshot wounds to the head and bound skeletal remains. The Makhmur graves contained multiple generations of victims, highlighting the systematic targeting of entire families and communities. Collectively, these case studies provide direct forensic evidence linking Iraqi military operations to specific acts of genocidal intent, illustrating a clear pattern of coordinated and politically motivated violence.

2. Transitional Justice and Legal Implications

Forensic evidence from the Kurdish genocide has been instrumental in advancing both national and international transitional justice initiatives. Detailed excavation reports and trauma analyses have substantiated legal charges of genocide, crimes against humanity, and war crimes. The identification of victims and documentation of their circumstances of death have also facilitated reparations, memorialization projects, and educational programs designed to prevent denial and historical revisionism. International bodies, including the United Nations and Human Rights Watch, have emphasized the integration of forensic findings into legal frameworks as essential to ensuring accountability for state-led atrocities. The Kurdish experience demonstrates that forensic anthropology serves as a bridge between scientific inquiry and legal advocacy, providing both a historical record of atrocities and a foundation for institutional reform.

3. Social and Cultural Impacts of the Kurdish Genocide

The Kurdish genocide had profound social and cultural repercussions beyond its immediate physical and political consequences. Entire communities were displaced, villages destroyed, and cultural artifacts deliberately targeted to erase Kurdish heritage. In this context, oral histories and collective memory have emerged as critical mechanisms for preserving cultural identity. Forensic anthropology contributes to these processes by providing tangible evidence of atrocities, enabling survivors to reclaim narratives of loss and resilience. The reconstruction of community history through material evidence not only reinforces social cohesion but also acts as a safeguard against historical erasure.

5.1. Forensic Evidence of Systematic Violence

Excavations of mass graves in Anfal-affected regions reveal patterns of organized killings. Skeletal remains show signs of blunt force trauma, bullet wounds, and chemical exposure consistent with documented attacks. The spatial distribution of graves indicates deliberate targeting of villages associated with Kurdish political or tribal opposition to Saddam Hussein's regime.

5.2. Political Coordination and Iraqi State Policy

Evidence from Iraqi government archives and UN reports confirms that Anfal operations were premeditated state actions. Military directives specifically ordered the displacement and execution of Kurdish populations, often accompanied by destruction of infrastructure and cultural sites. This coordination indicates that violence was a tool to reshape the political and demographic landscape in favor of Arab nationalism.

5.3. Linking Forensic Findings to Political Intent

Forensic anthropology corroborates the political objectives of the Anfal campaigns. The targeted nature of killings, selection of victims, and use of chemical weapons demonstrate that violence was not random but strategically deployed to suppress Kurdish identity. Forensic evidence thus provides undeniable proof of the political dimension of the genocide, complementing historical and testimonial data.

6. Discussion

The integration of forensic anthropology and political analysis provides a multi-layered understanding of genocide. While historical records and testimonies reveal intent, forensic evidence confirms action. In the Kurdish context: 1. Reconstruction of Collective Memory: Forensic data helps communities document and memorialize the victims, ensuring that systematic violence is not forgotten. 2. Science-Politics Nexus: Anthropology serves as both a scientific and political instrument, revealing how violence was organized and state-sanctioned. 3. Legal and Transitional Justice Implications: Forensic evidence has been instrumental in national and international trials, supporting accountability and recognition of the Kurdish genocide.

The findings illustrate how state-led violence against Kurds was rooted in Iraqi political strategies, aimed at consolidating Arab nationalist power and eradicating Kurdish political autonomy. Forensic anthropology transforms these policies from abstract concepts into verifiable realities, bridging the gap between politics and material evidence.

7. Conclusions

Forensic anthropology plays a critical role in uncovering the political dimensions of genocide. In the case of the Kurdish genocide:

- Mass grave analyses and skeletal examinations provide tangible evidence of systematic killings.
- Forensic findings corroborate historical and political records of Iraqi state-led campaigns.
- The integration of scientific and political perspectives strengthens collective memory, legal accountability, and transitional justice efforts.

Ultimately, the study demonstrates that understanding genocide requires both scientific rigor and political contextualization. The Kurdish experience underlines the necessity of forensic anthropology as a tool not only for documentation but also for interpreting the broader political objectives behind mass violence.

8. Recommendations

1. Expand forensic investigations of unexamined sites in Northern Iraq to ensure comprehensive documentation.
2. Integrate forensic evidence into formal political and legal frameworks for transitional justice.
3. Promote interdisciplinary collaboration between anthropologists, historians, and political scientists to analyze state-led violence.
4. Develop public memorials and educational programs using forensic data to preserve Kurdish collective memory.

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When Perpetrators Hide Among Victims: DNA Clarifying Identities in the Sinjar Massacre

Dr. SHAKHAWAN K. MAWLOOD
SENIOR FORENSIC SCIENTIST

When Perpetrators Hide Among Victims: DNA Clarifying Identities in the Sinjar Massacre

1- Background

In August 2014, the Yazidi community of Sinjar (Shangal), Kurdistan–Iraq, suffered genocide at the hands of the so-called Islamic State (ISIS): thousands of women and children were abducted and many men were executed. Despite ongoing insecurity, recovery teams in February 2015 located three mass-grave sites Khanasoor, Hardan (Shangal), and Brdya (Zumar) and removed human remains under sniper threat, often at night, without access to standard archaeological procedures. Many graves were shallow or near roads, leaving bodies vulnerable to animal scavenging and producing severe commingling, duplication, and loss of skeletal elements.

Sixty-seven sets of remains were transported to the Duhok Autopsy Centre and then reinterred at Mazar Sharafaddin. The field constraints led to an initial assumption of 67 distinct bodies, a count later shown by DNA to overstate the number of unique individuals.

In 2023, a multidisciplinary team re-exhumed the cemetery and re-audited the case using an end-to-end, quality-assured workflow: automated extraction (EZ2), autosomal STRs (GlobalFiler family; MiniFiler), Y-STRs (Yfiler Plus), capillary electrophoresis (SeqStudio), profile interpretation (GeneMapper), and kinship/database matching (SmallPond). For the most degraded samples, epigenetic age estimation was applied (Illumina NGS and targeted qPCR panels).

2- Initial DNA Work (2015)

- Case samples: 67 (primarily femora and teeth).
- References: 148 Yazidi relatives (blood/buccal; ForensiX double swabs) [2].
- Methods: Autosomal STR profiling with GlobalFiler and MiniFiler [3,4].
- Early outcome: Profiles were generated, but identifications were few; duplicate genetic profiles revealed that some skeletal elements from the same person had been recorded as separate bodies.

3- Re-investigation (2023)

After the liberation of Shangal by Peshmerga and coalition forces, additional Yazidi families provided reference samples. Given the existence of 40–50 other graves and thousands of missing persons, Kurdistan Forensic Laboratory (KFL) reopened the case and systematically re-sampled Mazar Sharafaddin, collecting >250 bones (skulls, femora, long bones) to correct earlier field-recording errors.

4- Laboratory Workflow

Bones/teeth: ICMP-aligned sampling [1]; extraction via EZ2 magnetic-bead chemistry (Qiagen) [5]; Quantifiler Trio quantification [6]; amplification with GlobalFiler IQC, MiniFiler, and Yfiler Plus [3,4,7]; detection on SeqStudio [8]; allele calling in GeneMapper ID-X v1.6 [9]; complex mixtures assessed with TrueAllele [10].

References (FTA cards, swabs): ISFG/ICMP-compliant collection [11,12]; direct lysis and PCR [12]; same quantification/amplification pipeline [6,3,4,7]. Kinship/database: SmallPond forensic kinship matching [13]. Epigenetic age: Illumina NGS-based methylation [14–16], EpiTect Methyl

qPCR [17], exploratory mitochondrial CpG methylation [18], and autosomal CpG panels [19] for compromised cases.

5- Results

5.1- Corrected body count. Genetic reconciliation revised the cemetery tally from 67 packages to 54 unique individuals, confirming that 2015 mis-numbering arose from commingled/duplicated elements.

5.2- Identified Yazidi victims. 41/54 individuals were confidently identified as Yazidi men executed in August 2014 through kinship to reference families significantly aided by expanded post-2023 family sampling.

5.3- Execution indicators. Forensic anthropology and scene documentation supported systematic execution: cable-tie restraints on wrists, gunshot injuries with associated bullets/cartridge cases (consistent with prior literature on fired-cartridge DNA recovery [20]), and multiple decapitations consistent with ISIS methods. Remains were categorized as B (body with skull) or BP (body part, no skull).

5.4- The 13 unmatched individuals: Thirteen recovered males had no kinship matches to Yazidi reference families. Three displayed paternal-line Y-STR concordance with minors registered in Al-Jad'ah (Nineveh, Iraq) and/or Al-Hol (Hasakah, Syria) camps that host families of ISIS fighters. In Northern Iraq, Y-chromosome haplogroups differ by community: neighbouring non-Yazidi populations commonly show J1 (incl. J1-P58); Kurdish (non-Yazidi) groups are enriched for J2/J2a1b (~20%) with J1 ~17% and R1a ~17%; Yazidi communities tend to show less J1 and more R1b/L/G2a-J2a1 [21–24]. Accordingly, several J1-consistent Y-STR profiles among the unmatched together with the camp kinship links increase the probability that a subset were ISIS combatants rather than Yazidi townspeople. This inference is strengthened by epigenetic age estimates of 35–45 ±5 years, contrasting with the predominantly ≥50-year ages reported for missing Yazidi men. Final attribution should rely on autosomal STR/NGS

kinship once further references become available; the commingling likely reflects battlefield burials or concealment of ISIS losses.

6- Conclusion

- 67 reported bodies → 54 individuals.
- 41 confirmed Yazidi victims.
- 3 Y-STR-linked to children in ISIS-family camps
- 10 unresolved (pending autosomal STR/NGS and expanded family references)

This work returns names and truth to families who have waited for certainty, while preserving the historical record of crimes committed in Sinjar. Methodologically, it shows how integrated autosomal STR + Y-STR + epigenetic tools can resolve highly commingled, conflict-era burials. Ethically, it demonstrates trauma-informed practice, careful data stewardship, and a focus on answering the court's questions without creating new harms so that justice advances while dignity is protected.

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Judicial measures to protect victims in national and International courts

Goran Hussein Ahmed

Head of Law Department Garmian University, Department of Law

LL.M in Law Syracuse University, USA, College of law.

Ph.D. Duhok University, College of Law

Abstract

Genocide, whether committed in time of peace or in time of war, is a crime under international law which they undertake to prevent and to punish. This act has internationally been recognized as the crime of the crimes. Frankly, Recognizing Yazidis Kurdish people are not an easy process. From one side, this procedure is considered a first step to taking necessary measures against the perpetrators who committed the crime. Indeed, the crime against humanity is always motivated by more political, race and ethical reasons than legal ones. The 1948 Convention on the Prevention and Punishment of the Crime of Genocide is the first international human rights treaty adopted by the UN General Assembly, defining genocide as acts with the intent to destroy a national, ethnic, racial, or religious group.

Genocide is a crime under international law, contrary to the spirit and aims of the United Nations and condemned by the civilized world, Recognizing that at all periods of history genocide has inflicted great losses on humanity, and Being convinced that in order to liberate mankind from such an odious scourge, international co-operation is required. Persons charged with genocide or any of the other acts shall be tried by a competent tribunal of the State in the territory of which the act was committed, or by such international penal tribunal as may have jurisdiction which shall have accepted its jurisdiction.

Key word: Judicial measures to protect victims,

Role Prosecutor, Compensation the victims. .

1- Introduction

This paper examines the different forms of law protection, including prior protection, which safeguards witnesses, experts, or informants from assault, and subsequent protection, which aims to protect the Yazidis victim or the person harmed by the crime from deteriorating health or financial hardship that may result after the assault. Accordingly, the paper sheds light on the extent to which National and International criminal laws sufficiently provide such protection to the Yazidis people. The research is divided into many sections: the first is Introduction; the second one is judicial measures for the protection of victims in national courts, The Concept of National Judicial measures for the protection of victims and The Importance Judicial Measures to ensure Justice for the victims. Third, Legal protections and its measures, Fourth, International Court. The paper reached several sum up and suggestions, the most important of which is that, although Iraqi criminal law has progressed from providing protection to victims of crimes. Despite the existence of much legislation enacted by the Iraqi legislature concerning the Yazd's people. Actually, these laws and rules suffer from notable gaps and deficiencies, so legislators must fix it as soon as possible. Therefore, it is necessary for the Iraqi legislator or power of legislation to establish a robust protective framework that ensures the prevention of assaults on victims and helps them recover and rebuild their lives afterward.

1-1 Research Problem:

Genocide has a many effects on the Nations around the world, but today International community cannot protect the victims or they do not have a way to provide the equipment's to the person who has suffered because of the disputes. From my point of view, it is believed that many researchers have dropped out of conferences but it is not enough for such a heartless crime against the Kurds. Sometimes National Courts do not bring the criminal person before the court.

1-2 Research Question:

How the crimes committed by Iraqi Baath regime against the Kurds can internationally are recognized as an act of Genocide. How National and International Courts will be able to protect the victims. How International Criminal Courts can compensate the victim. How is the crime of Genocide deal with under National and International Laws and rules? Iraqi is not an International Criminal court member. The absence of experts in the National courts.

1-3 Research Assumption:

If the national courts cannot do some procedures against the person who committed the genocide whether International court will try to recognize the crime as genocide. If the Victims cannot get or obtain compensation before International court so National rules will do it for them.

1-4 Research Goals:

Our Target is to solve the case at an International level. Provide compensation for the victims and Support Iraqi Government to be membered in ICC.

1-5 Research Limitation:

This paper works within the Iraqi traditional court and International Criminal court. The scope of the paper will focus on studying the issues of compensating Yazd's victims of genocide through forms of compensation and the basis on which compensation is built. After understanding compensation, its role in establishing peaceful coexistence, its mechanisms, and the extent to

which international standards align with domestic standards will be addressed.

2- Judicial measures for the protection of victims in national courts.

Always National Courts have to protect the victims in country. If the laws cannot get enforce such as like itself the legislator must review and change it.

2-1 The Concept of National Judicial measures for the protection of victims

Judicial measures are the set of judicial procedures taken by states through their judicial institutions, starting from filing a complaint about the occurrence of violations and ending with fair judicial rulings in order to provide redress or compensation for the victims. The basis of State commitment to take these measures comes from international documents that emphasize the protection of human rights, in general the international

human rights law and international humanitarian law relating to compensation for the victims.

Victims can send information to the Prosecutor asking to initiate an investigation. If Judges or Investigator writes a report regarding the People then the can go to the civil courts to ask compensate. There are also two important innovations with regard to victims. For the first time in the history of international criminal justice, victims have the right to participate in proceedings and request reparations. This means that they may not only testify as witnesses, but may also present their views and concerns at all stages of the proceedings.

2-2 The Importance Judicial Measures to ensure Justice the victims.

The legal duty to provide interior remedies to alleged victims is inherent in the duty to provide effective protection of human rights. From one side local courts have illustrated the cases and in a persuasive way that unless the individual has an effective right to independent and impartial courts or administrative authorities at the national level. For the purpose of justice an alleged violation of human rights, enjoyment of the rights of the person will remain an illusion. The existence of effective

local courts has the advantages of stating that this allows the country to remedy a mistake and far away from the international responsibility and possibly of reproaching or reprimand from an observed international body or Non- governmental organizations.

3- Legal protections and its measures

It is famous that an individual may meet many dangers that threaten personal safety, especially if they are involved or included in investigating serious crimes. Protection involves taking numerous measures to ensure the safety of their victims, families, Children, Women and relatives closely connected to them, from any assault. It is also known that protection is of two types substantive and procedure (1). Article 64 A. (No question may be addressed to a witness without the permission of the investigative judge or investigator and no questions may be put to a witness that are not relevant to the case or which impinge upon others.....).

B. A witness may not be prevented from giving evidence that he wishes to give and may not be interrupted while giving it, unless he speaks at undue length on matters not relevant to the case or on matters that impinge on others, offend common decency or infringe security(2).

According to the above article Iraqi rules can protect victims so, from one side in the laws have come some principles which had safety in the life of the victim. Article 67 if the witness is ill or if there is anything else which prevents him from attending then the investigative judge or investigator shall go to the witness's current place of residence in order to receive and record his evidence(3). GENERAL PRINCIPLES IN THE TRIAL Article (152) Trial sessions must be open unless the court decides that all or part should be held in private and not attended by anyone not connected with the cases, for reasons of security or maintaining decency(4).

I believe it is well known that testimony from providing evidence may be the only proof in a case,

hence the need for a law to protect those who give it. Since this law does not refer to the protection of witnesses, we notice that it also does not mention the other categories of victims, such as experts, political prisoners and their families, and the families of martyrs.

The Iraqi Higher Criminal Court, Law No. (10) 2005, Article 20, Second: (The Criminal Court shall ensure that a trial is fair and expeditious and that proceedings are conducted in accordance with this Statute and the Rules of Procedure and Evidence annexed to this Law, with full respect for the rights of the accused and due regard for the protection of the victims, their relatives and the witnesses.). Article 22: Same law in above, (Families of victims and Iraqi persons harmed may file a civil suit before this court against the accused for the harm they suffered through their actions constituting crimes according to the provisions of this Statute. The court shall have the power to adjudicate these claims Page 17 of 23 in accordance with the Iraqi Criminal procedure Code No. 23 for the year 1971, and other relevant laws)(5). There are some measures courtiers have been takings:

2.1 Changing the victim's personal information

Changing the Yazd's victim identity and personal data should be investigated by court and is considered one of the complex measures all governments must start investigating and Return that right to its owner and sacrifice. The victims and their relatives have identification documents different from their real identities, as changing the identity includes the ID card, passport, and others; in order to sever the connection between the old and new identity to prevent tracking and linking between them. Moreover, the preparation of this new persona and related documents varies from one country to another.

2.2 Changing the victim's residence or place of work

Another measure that all governments have to take to provide new accommodation outside the country where he was residing, or to provide other housing different from the one he was in. Changing the

Yazd's victim's place of residence varies depending on the level and severity of the risk, Therefore, changing the place of residence occurs in two cases (6).

The first case is temporary relocation the Yazidis people, which are done in emergency situations, where the victims and their family are placed in hotels or safe houses for a short period of time to avoid imminent assault, The second case involves a change in situations where the nature of the danger is permanently present at the victim's place of residence, and this becomes necessary through threatening and intimidating the victim, indicating the continuation of the threat over a long period of time even after the case has ended(7).

2.3 Compensation for damages

Compensation for victims is one of the most important measures aimed at repairing the harm suffered by the victim (8). Legal protections represented for the victim and in general compensating the harm of the victims have been suffered by the dictators or perpetrators who committed the crime, this is as a result of the mentioned assaults, which often caused the victim significant material or moral damages(9).

2.4 Compensation

It is well-known that legal liability is based on the fault that caused the damage, and since there is responsibility, it is then impossible to imagine the

existence of an obligation to compensate. Damage is a fundamental element; without the existence of damage, it is essential to determine the scope of the damage. The breach must be related to a legitimate interest of the person. Therefore, compensation must correspond to the extent of the actual damage. Harm is categorized into two broad types: material (or physical moral/psychological harm(01) .

Law, No 58 of 2017 protection of witness and experts, Article (9) when people face violations or assault then they will be able to go to the courts to ask for compensation. When National Judicial system lacks solution to determine the competence court to hear violation, and it means prosecution of the perpetrators are so difficult before Iraqi

Government because at this time the situations are not possible to nominate judges to Justices the persons who were committed the crime. People can seek temporary judicial measure to achieve criminal Justice.(11)

The ideal way to compensate for the victims and damages caused to the victim or as a result of terrorist acts is to remove and erase it. However, erasing or eliminating the damage is impossible and cannot be done on the harm resulting from terrorist acts, as it cannot restore the situation to what it was before.(12)

4- International Court

4-1 Legal Position for victims and protection:

International Criminal Court in Article 85 Compensation to an arrested or convicted person explained who the victims are and legal statutes of the

person who suffered by Genocide. The victim has obtained a distinct and significant role within the international community on a global scale.

1-Anyone who has been the victim of unlawful arrest or detention shall have an enforceable right to compensation.

I believe, Victims have the ability to assert their rights before an international tribunal and international prosecutors can also utilize their statements to initiate investigations against the person who committed the crime. Victims are entitled to compensation and the opportunity to resume their employment.

2. When a person has by a final decision been convicted of a criminal offence, and when subsequently his or her conviction has been reversed on the ground that a new or newly discovered fact shows conclusively that there has been a miscarriage of justice, the person who has suffered punishment as a result of such conviction shall be compensated according to law, unless it is proved that the non-disclosure of the unknown fact in time is wholly or partly attributable to him or her.

3. In exceptional circumstances, where the Court

finds conclusive facts showing that there has been a grave and manifest miscarriage of justice, it may in its discretion award compensation, according to the criteria provided in the Rules of Procedure and Evidence, to a person who has been released from detention following a final decision of acquittal or a termination of the proceedings for that reason.

From one side, ICC, in Article 75 Reparations to victims, (The Court may make an order directly against a convicted person specifying appropriate reparations to, or in respect of, victims, including restitution, compensation and rehabilitation. Where appropriate, the Court may order that the award for reparations be made through the Trust Fund provided for in article 79).

Article 68 (3), ICC, Protection of the victims and witnesses and their participation in the proceedings, (Where the personal interests of the victims are affected, the Court shall permit their views and concerns to be presented and considered at stages of the proceedings determined to be appropriate by the Court and in a manner which is not prejudicial to or inconsistent with the rights of the accused and a fair and impartial trial. Such views and concerns may be presented by the legal representatives of the victims where the Court considers it appropriate, in accordance with the Rules of Procedure and Evidence)(11).

4-2 Present a Complaint:

In Article (15) ICC, The victims have a right to deliver his/her complaint before ICC, this is provided by legislatures such as a compensation for the person who suffered by the perpetrators or the criminal person or local conflicts. Here are the most important things for people to ask their rights before the International community, so prosecutors and Judges can hear them. Courts always open the doors for the people to obtain their rights in front of the International Community.

It has long been recognized that the perpetrators of such crimes must be held to account and that the institutions, organizations and governments that enabled the abuses to occur should not escape liability.(12)

In Article (75), ICC, (The Court shall establish principles relating to reparations to, or in respect of, victims, including restitution, compensation and rehabilitation. On this basis, in its decision the Court may, either upon request or on its own motion in exceptional circumstances, determine the scope and extent of any damage, loss and injury to, or in respect of, victims and will state the principles on which it is acting). From one side, ICC, explained in Articles (87, 75, 68, 64, 60, 57, 54, 43), The International community must protect the victims. (13).

Despite the international interest in the Kurdish case, Kurdish people did not have the opportunity to see the ones responsible of the crimes committed against them brought to international justice, as happened in the past in the case of Rwanda and Bosnia. (14)

Develop further political and institutional consensus on the implementation of the Responsibility to Protect War crimes, ethnic cleansing and crimes against humanity may be precursors to genocide as well as violations of international law in their own right. As defined by the Rome Statute of the International Criminal Court, war crimes are grave violations of the laws of armed conflict. Crimes against humanity include murder, torture, rape, persecutions, forced displacement or other inhumane acts committed as part of a widespread or systematic attack against a civilian population; they can occur either within or outside the context of armed conflict (15)

4-3 Reparations to victims:

- Article 10: American Convention on Human Rights states that everyone has the right to compensation under the law if they have been sentenced by a final judgment through a miscarriage of justice.)

- Article (9): the Convention on the Elimination of All Forms of Discrimination against Women. (1. States Parties shall grant women equal rights with men to acquire, change or retain their nationality. They shall ensure in particular that neither marriage to an alien nor change of nationality by the husband

during marriage shall automatically change the nationality of the wife, render her stateless or force upon her the nationality of the husband.

- Article (9) International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families
- Article (8) (International Convention for the Protection of All Persons from Enforced Disappearance). (2. Each State Party shall guarantee the right of victims of enforced disappearance to an effective remedy during the term of limitation.)
- Article (5) (International Convention on the Elimination of All Forms of Racial Discrimination).
- Article (13) (2) Universal Declaration of Human Rights
- Article (150) International Humanitarian law.
- Article (5) African Convention on Human Rights.
- Article (14) The Convention against Torture.
- (Article 91) Additional Protocol I to the Geneva Conventions of
- Article (39) Convention on the Rights of the Child
- Article 22 International Convention on the Elimination of All Forms of Racial Discrimination (Any dispute between two or more States

Parties with respect to the interpretation or application of this Convention, which is not settled by negotiation or by the procedures expressly provided for in this Convention, shall, at the request of any of the parties to the dispute, be referred to the International Court of Justice for decision, unless the disputants agree to another mode of settlement.

5- Result:

5-1 Conclusion:

At the end of this paper I have come up to some fundamentals Ideas Therefore, it is necessary for the Iraqi legislator to establish a law to prevent the government once again will not remember from doing genocide against the Kurds. , The development that has occurred in society has shifted the idea of establishing liability on the basis of fault to

establishing it on the basis of damage, and this development allows victims of terrorist acts to receive the compensation they deserve, which in turn supports the idea of peaceful coexistence. Moving the ICC should be supported by the Government and make a team to guide the victims.

The national public can open investigations to collect evidence. National Judges and prosecutors have to try to open files and hear the witness and the people who suffered from the conflicts. Academics, experts and Government have to work on this case because it is the National fate. Compensation is considered one of the means of reparation in the general sense, but achieving peaceful coexistence cannot rely solely on material compensation; there must also be psychological restitution and the correction of the deficiencies that allowed and enabled terrorism to violate

the rights of these victims. The idea of no-fault liability, which contributed to compensating the victims of terrorist operations, finds its basis in the risk theory or the principle of equality in bearing public burdens, as well as in legal provisions.

5-2 Suggestion:

- It is necessary to give governmental and non-governmental organizations the right to file a complaint before the International Criminal...
- Iraq will become a member of State Party to the Rome Statute...
- About article 15 in international criminal court, international prosecutors will start investigating and filing a complaint without creating restrictions by the UN Security council.
- The International Criminal Court law must apply to those who have committed crimes before the treaty has been signed.
- The law must also be applied to those states that wish to become members of the Treaty in the future...
- International legislators need to impose severe punishment on those political leaders who have committed genocide. Such as Sentence in Death or Sentence in life.

المصادر:

- ١- قصد بالحماية الاجرائية، هي تلك التي تجعل من القواعد الاجرائية للقانون الجنائي الاجرائية مجالا لها إذ إنها قواعد تختص بإجراءات كشف الجريمة والتأكد من وقوعها والقبض على مرتكبيها والتحقيق معهم ومحاكمتهم...
- ٢- د. سعاد ارضي حسين، حماية الشهود في قانون العقوبات العراقي، مجلة جامعة ذي قار، المجلد ١٤، العدد ١، جامعة ذي قار، كلية القانون، العراق، ٢٠١٩، ص ٢٧٨).
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13- International Criminal Court.

14- Ahmad Mohammad, PH.D, University of Exettar, From Blueprint to Genocide.

15- UNITED NATIONS OFFICE ON, GENOCIDE PREVENTION RESPONSIBILITY TO PROTECT, The Special Advisers on the Prevention of Genocide and on the Responsibility to Protect, who have distinct but complementary mandates, work together to advance national and international efforts to protect populations from genocide, war crimes, ethnic cleansing and crimes against humanity, as well as their incitement.

From Grief to Action: A Qualitative Study of Women's Leadership Post-Barzani Genocide

Dr. Muaf Abdulkarim

Abstract:

Background and Objectives:

In the 1980s, Saddam Hussein's Ba'athist government ordered the kidnapping and killing of thousands of Barzani men and boys, which was later known as Barzani genocide. While the current literature has predominantly focused on male victims, the ongoing experiences and leadership roles of female survivors have been understudied to date. This study examines how grief transformed leadership, identity reconstruction, and political mobilization for post-genocide Barzani women.

Methods: Using Van Manen's hermeneutic phenomenological approach, the study conducted in-depth semi-structured interviews with ten Kurdish women survivors from Barzani genocide. Participants were selected via purposive sampling and included women who assumed new social and leadership roles following the genocide. Phenomenological thematic analysis was employed to analyze the interviews which were previously transcribed and translated.

Results: The themes that appeared during the analysis of the interviews were threefold: (1) Memory, Survival, and Identity Reconstruction that involved intergenerational grief and gender roles change; (2) Pathways to Leadership and Political Mobilization where caregiving transitioned into advocacy; and (3) Barriers, Solidarity, and Future Visions which included structural patriarchy, intersectional solidarity, and a demand of transformative justice. Changes in female leadership were embraced by mourning rituals, survival tactics, and informal networks and greatly transformed the post-genocide recovery.

Conclusion: The present analysis has illuminated the role of Barzani women as forceful contributors in social change and justice as well as recovery, thus, countering the prior study, which identified the role of women in Kurdistan as passive victims. The depth of their experiences provides important lessons in gender-sensitive post-conflict approaches to policy and feminist approaches to peacemaking.

Keywords: Barzani genocide, Kurdish women, feminist leadership, memory and trauma, post-conflict recovery, political mobilization, transformative justice, Middle East.

Introduction

During the 1980s, Saddam Hussein's Ba'athist government carried out a campaign in the Barzan area of northern Iraq that resulted in the killing, disappearance, and forced expulsion of thousands of Kurdish men and boys. Framed as measures of national security, these actions were actually part of a wider program of Arabization and ethnic cleansing that singled out the Barzani tribe because of their political ties and resistance. While historical accounts have largely documented the male victims' experience, far less scholarly attention has examined the profound, long-term consequences for the women left behind—widows, mothers, daughters, and sisters (McDowall, 2021; Human Rights Watch, 1993).

Barzani women suffered severe trauma when she was thrust into new roles as community watchdogs and heads of households. With the collapse of traditional social structures, Barzani women took on the responsibility of maintaining social cohesion, cultural identity and family life (Ali, 2023; Alinia, 2024). Despite these challenges, many became de

facto leaders and cultural custodians, influencing stories of resistance and survival in the aftermath of the genocide.

This qualitative study is both urgently needed and relevant because it fills a significant gap in the literature on Kurdish history, genocide and gender. The current studies pay little attention to female experience and generally diminish women to the status of hapless victims of trauma and overlook their leadership, survival, and resilience (Gunter, 2022; Mojab, 2019). Having an improved insight into the limitations and possibilities of women in the Barzani community, it is possible to create more gender-friendly and inclusive policies (UN Women, 2023; Oxfam Iraq, 2024). The article adds to feminist and decolonial research communities that recognize women as engaging subjects of the post-war restructuring and healing by giving voice to Barzani women. The observation deals with understanding the connection between trauma and memory to leadership via interviewing, oral history and social research. The implications of its findings could be global among the international organizations and NGOs along with policymakers involved in the field of transitional justice and post-genocide recovery. Finally, this study interprets the Barzani genocide as a story of women's leadership, resistance and resistance, not loss.

Methods

Study Design

Van Manen's (1990) hermeneutic phenomenological method was used in this qualitative investigation [10]. This strategy was chosen in order to thoroughly examine the lived experiences of Barzani women following the genocide, with an emphasis on their individual accounts of community reconstruction, leadership, and survival.

Participants

Purposive sampling was used to select ten Barzani women survivors for the study. Being a female survivor or a direct descendant of a Barzani genocide victim, being willing to take part in the study, and having firsthand experience taking on

new social or leadership roles following the genocide were the requirements for inclusion. Lack of experience or unwillingness to participate were among the exclusion criteria. All participants identified as Kurdish women living in the Kurdistan Region of Iraq, and their ages ranged from 40 to 65.

Data Collection

In-depth semi-structured interviews were used to gather data between June and July of 2025. The majority of the interviews were held in participants' homes or private community areas, which they selected to make sure they felt safe and at ease. Until saturation was achieved and no new themes surfaced, data collection continued. Open-ended questions like "Can you tell me what life was like after the genocide?" and "How did your role in your family or community change?" were used to start the interviews, followed by prompts such as "How did you become involved in leading or supporting others in your community?" and "Can you describe how you coped with the absence of male family members?" The duration of each interview ranged from sixty to ninety minutes. With participants' consent, all interviews were audio-recorded, transcribed verbatim, and later translated into English for analysis.

Data Analysis

The data analysis was guided by the six methodological activities proposed by Van Manen (1990) (see Table 1). The accuracy and depth of the interviews were checked several times. To find important themes, transcripts were examined using comprehensive, selective, and in-depth reading techniques. To capture the essence of the participants' lived experiences, meaning units were retrieved and arranged.

Table 1. Six Methodological Activities in Van Manen's Method

#	Van Manen's Methodical Activities	Researchers' Activities
1	Turning to the nature of lived experience	The lead researcher is a Barzani genocide descendant and has grown up within the affected community.
2	Investigating experience as we live it	Selecting women survivors with firsthand experiences.
3	Reflecting on essential themes	Thematic analysis using phenomenological reflection.
4	Describing the phenomenon	Writing and rewriting to capture the women's voices.
5	Maintaining a strong relation to the phenomenon	Contextual discussion of each theme in relation to women's experiences.
6	Balancing parts and whole	Moving between coded transcripts and holistic themes.

Trustworthiness

Long-term involvement, member-checking, and professional peer debriefing were used to guarantee trustworthiness. Rich data collection was made possible by the development of a strong researcher-participant rapport. In addition to years of experience in gender and trauma research, the researcher's personal ties to the genocide and community provided credibility and additional contextual depth. All interpretations were based on participant narratives, and transcripts were reviewed several times to ensure accuracy.

Ethical Considerations

The Ethics Committee of Hawler Medical

University's College of Nursing granted ethical approval for this study (Project No. XX, Approval Date: DD MM YYYY). The study's objectives, confidentiality guidelines, and participants' rights – including the ability to discontinue participation at any moment – were all thoroughly explained to them. Informed consent forms were signed by each participant. Participants were given codes (such as Woman 1, Woman 2) to maintain confidentiality, and all physical and digital data were safely kept.

Results

Analyzing the collected data led to the extraction of three main themes, each having two subthemes. The first main theme was "Memory, Survival, and Identity Reconstruction" with subthemes "Collective Memory and Intergenerational Grief" and "Gendered Survival and Role Reconfiguration", "Pathways to Leadership and Political Mobilization" with subthemes "Transforming Pain into Purposeful Leadership" and "Political Consciousness and Mobilization", and "Barriers, Solidarity, and Future Visions" with subthemes "Structural and Patriarchal Constraints" and "International Recognition and Transformative Futures". In the following section, quotations for the main themes and subthemes are presented.

Main Theme 1: Memory, Survival, and Identity Reconstruction

This theme explores how women process collective trauma, navigate survival, and reconstruct identity in the aftermath of genocide. In this regard, Woman 4 said:

"I touch the picture of my father and brothers every morning to remind myself of why I get out of bed, not to dwell on the past. I learned from survival that memory is a compass that helps us stay on course, not a burden. In order to tell our story from home to home, I started sewing their names into the blankets I sell. I reconstructed myself as a woman of the future and the daughter of the missing by learning to live again."

Moreover, Woman 7 revealed:

“They tried to remove our name, so I taught the kids how to write it in three different languages. I was just a widow in the camps; following the genocide, I reconstructed myself as an organizer, mother, and documentarian. Piece by piece, identity became the bridge we constructed across a river of grief.”

Subtheme 1.1: Collective Memory and Intergenerational Grief

Regarding the first subtheme of the first main theme, Woman 1 said:

“Every year when July comes, my children know it’s not just a date. It’s the month our fathers and brothers disappeared. We keep telling the stories, so they never forget who we are.”

In addition, Woman 4 revealed:

“Even though I was a child, the screams, the silence, the empty beds—they never left me. Now, my granddaughter asks why her family is so small, and I tell her the truth.”

Subtheme 1.2: Gendered Survival and Role Reconfiguration

Regarding the second subtheme of the first main theme, Woman 2 said:

“The men were gone. I was only 17, but I had to become both mother and father to my siblings. Survival didn’t give us a choice—it gave us a role.”

In the same regard, Woman 7 stated:

“Cooking, working, burying the dead – I did all of it. People said I was strong, but I was just doing what no one else could. A woman had to lead when there was no man left.”

Main Theme 2: Pathways to Leadership and Political Mobilization

This theme focuses on the emergence of women as leaders and political actors shaped by trauma, resistance, and activism. Regarding this theme, Woman 4 said:

“Counting, calming, and ensuring that no one went hungry during a bread line was my first leadership role. A women’s committee followed, followed by

meetings with officials who had previously disregarded us. I was kept there by training and other women holding my hand, but grief propelled me forward. The same voice that wept at graves now advocates for schools and budgets.”

In addition, Woman 9 said:

“Politics entered our kitchen when the missing lists came in, even though I had no intention of getting involved. I gained language from a workshop, but my courage came from our cemetery. Today, I transform stories into policy demands, mourning circles into voter drives, and anniversaries into campaigns.”

Subtheme 2.1: Transforming Pain into Purposeful Leadership

Regarding the first subtheme of the second main theme, Woman 3 said:

“I started organizing women not because I wanted to lead, but because no one else would speak for us. Pain taught me to act.”

In the same regard, Woman 6 revealed:

“After losing my husband, I realized grief could drown me—or move me. I chose movement. That’s when I began advocating for justice.”

Subtheme 2.2: Political Consciousness and Mobilization

Regarding the second subtheme of the second main theme, Woman 5 revealed:

“Before the genocide, I never thought about politics. After it, I realized politics decides who lives and who vanishes. I had to become aware.”

Moreover, Woman 9 stated:

“We began as mourners, but now we’re organizers. We demand to be part of decision-making because our suffering has shaped this land too.”

Main Theme 3: Barriers, Solidarity, and Future Visions

This theme examines structural constraints on women’s leadership, international alliances, and feminist visions for recovery and peace. Regarding this theme, Woman 5 said:

“Some men still tell us to talk “later,” and they want us for pictures rather than decisions. We respond in a circle, with one woman speaking while the others protect her back and her children, to threats that come in the form of rumors and phone calls. We create our own safety plans, media, and training. Our dream is straightforward: laws that prevent disappearances, a museum that presents our reality, and safety to lead.”

Furthermore, Woman 10 revealed:

“Our antidote to fear is solidarity; Arab, Yazidi, and Kurdish women gather together to discuss strategies and scars. Patronage, token seats, and the price of being “too loud” are all significant obstacles, but we exchange skills like bread. With women’s budgets, trauma care in every clinic, and our history taught in every classroom, I envision a bright future.”

Subtheme 3.1: Structural and Patriarchal Constraints

Regarding the first subtheme of the third main theme, Woman 8 revealed:

“They said I shouldn’t speak in meetings, that it’s not a woman’s place. But who else carried the village after the genocide? We didn’t have the luxury to be silent.”

Moreover, Woman 10 said:

“Even now, men lead the ceremonies, but women do the work behind the scenes. We’re still fighting to be seen, not just used.”

Subtheme 3.2: International Recognition and Transformative Futures

Regarding the second subtheme of the third main theme, Woman 1 stated:

“We need the world to know that justice isn’t only about graves. It’s about restoring dignity to the living—especially women who kept everything alive.”

In the same regard, Woman 6 said:

“I dream of a future where our stories are taught in schools, not just whispered at funerals. That’s real recognition – and it starts with truth.”

Discussion

Through the integration of memory work into daily life, mobilization through community infrastructures, and negotiation of enduring structural barriers, our study offers a nuanced account of how women who survived the Barzani genocide turned grief into leadership. Our findings, when compared to studies conducted in the Middle East and other post-conflict regions, both support and expand on existing theories, particularly those pertaining to intergenerational memory, gendered role reconfiguration, “everyday” pathways to political consciousness, and the distinction between descriptive representation and substantive power.

Memory, Survival, and Identity Reconstruction

Memory is portrayed by the participants as an active compass rather than a burden; it is woven into blankets, taught to kids in a variety of languages, and celebrated annually in July. This is consistent with research on ambiguous loss among families of the disappeared (Boss, 2021; Robins, 2013) and the “post-memory” literature (Hirsch, 2012), which highlights relational, continuous practices of remembrance when death and disappearance are still unresolved. Our data, however, goes one step further by demonstrating what could be referred to as “market-enabled memorialization”: women give names and stories to locally circulated goods, transforming livelihood into a vehicle for political belonging and intergenerational pedagogy. Although Bosnia and Rwanda exhibit comparable vernacular practices, the explicit scaling of memory through commerce is less well-known and aligns with the growing body of research on “memory activism”, which uses common repertoires to combat erasure (Gutman, 2017).

In the Middle East and beyond, research on commemorative cycles and the indoctrination of young people into local histories of violence aligns with the subtheme of collective memory and intergenerational grief. For example, research on Syrian and Lebanese families of the missing shows how children learn about absence through family customs and testimony, supporting demands for

accountability and the truth (Robins, 2013). Echoing feminist critiques that insist on acknowledging women as architects of memory rather than merely custodians, the participants' deliberate pedagogy – “We keep telling the stories” – transfers this from passive transmission to strategic civic education (Hirsch, 2012).

Another strong area of convergence is gender survival and role reconfiguration. Women are frequently forced into positions as breadwinners, community organizers, and heads of households during times of war (Ní Aoláin, Haynes, & Cahn, 2011). Findings from Iraq, Syria, and Bosnia regarding women's emergency leadership are consistent with the participants' stories of “becoming both mother and father,” burying the dead, and running lines for bread. Simultaneously, the data predicts the post-war retrenchment that is commonly seen in various contexts – women are given more responsibilities without having the same authority, and they are later relegated to the private sector (Helms, 2013). Our data also supports research on women's movement infrastructures that precede and survive crises in the Kurdish context (Dirik, 2022), indicating that reconfigurations during the genocide era intersected with and were supported by pre-existing norms and networks of women's organizing.

Pathways to Leadership and Political Mobilization

Our second theme follows a “care-to-power” pipeline, whereby leadership develops from caregiving-coded activities like mutual aid, bread lines, and mourning circles before evolving into committee governance, budget advocacy, and voter mobilization. This supports comparative findings that maternal grief can be politicized into durable claims-making (Helms, 2013) and follows Asef Bayat's “politics of the everyday,” where civic agency is fostered by domestic and neighborhood practices (Bayat, 2010). Interestingly, the participants place more emphasis on the networks that support activism – peer mentoring, training, and women's committees – than on personal charm, which is consistent with social movement studies that show how brokerage and capacity transform

moral energy into institutional power (UN Women, 2015).

Literature on the politics of mourning, which presents grief as a moral justification for governmental intervention and reparative policy, is echoed by the subtheme “transforming pain into purposeful leadership” (Gready & Robins, 2019). However, our data go beyond symbolic protest: women professionalize advocacy, “argue for budgets,” and turn anniversaries into issue campaigns. Studies that place women in the register of “victimhood” tend to obscure this procedural turn; the participants' institutional literacy and strategic fluency are in line with the maturation of Kurdish women's movement practices over the past ten years (Dirik, 2022).

As is common in the area, political consciousness and mobilization – “Politics entered our kitchen” – capture how crises blur the lines between the public and private spheres (Bayat, 2010). Our evidence demonstrates alternative political schools, such as memorial rites, aid lines, and neighborhood committees, despite the fact that a large body of Middle Eastern scholarship emphasizes parties and armed movements as the main means of educating women about politics. This emphasizes community-rooted paths to leadership that can be less partisan and more inclusive, but it also complicates efforts on party-led women's organizing in Kurdish contexts. Crucially, the shift the participants describe from mourning to campaigning not only aligns with the Women, Peace and Security (WPS) agenda's emphasis on participation, but it also shows how control over resources and policy levers makes participation meaningful (UN Women, 2015).

Barriers, Solidarity, and Future Visions

Disparity between women's visibility and decision-making authority is affirmed by the third theme. The documented risks faced by women human rights defenders (Front Line Defenders, 2022) and global findings on violence against women in politics (Krook, 2020) are consistent with tokenism (“photos, not decisions”) and intimidation through rumors and threats. Although party patronage and

securitized politics frequently restrict agenda-setting power, constitutional quotas in Iraq have increased descriptive representation. This finding is in line with IPU trend data, which shows that seat shares do not always equate to influence. The literature, which frequently identifies risk without outlining resilient strategies, benefits from the fine-grained detail provided by the participants' micro-practices of protection, such as rotating speakers, group childcare, and safety plans.

Kurdish, Yazidi, and Arab women's solidarity – "we exchange skills like bread" – is a crucial counterargument to the notion that sectarian or ethnic divisions inevitably cause women's coalitions to fall apart. Evidence from Iraq demonstrates how party and patronage networks can divide or co-opt civic actors, and feminist scholarship has long cautioned that intersectional differences can strain alliances (Yuval-Davis, 2011). While acknowledging these pressures (token seats, patronage), our data emphasizes mutual protection and skill-sharing as routine procedures that support coalition work. As seen in other hybrid regimes where women use informal networks to counteract formal exclusion, this points to a dual reality: pragmatic solidarity below and structural fragmentation above (UN Women, 2015; Front Line Defenders, 2022).

Finally, the subtheme on global recognition and transformative futures is relevant to indicate actual debates on peacebuilding and justice. To replace the mere honors portrayed in chains of memory, the participants demand gender-responsive budgets, trauma counseling, and curriculum changes rather than thin epiphanies in the form of memorials or criminal prosecutions alone. This agenda follows the demand of transformative justice which is a synthesis of recognition and institutional change and redistribution (Gready & Robins, 2019). Following this, regional testimonies of Yazidi survivors argue that livelihood, psychosocial support, and education should also be covered under justice (UNAMI/OHCHR, 2016; Amnesty International, 2014). The attention given by the participants to budgets and schools deserves extra attention since it makes recognition operational

and links dignity with instruments in practical financial terms and policies. According to several WPS policy reviews, this shifts the focus from representation to resource control, which is crucial for bridging the gap between promises and results (UN Women, 2015).

Conclusion

This study contributes to recent literature on women leadership, memory, and unity following the battle, especially in the MENA region as our research compellingly underpins the above studies. Our analysis confirms the notion that it is by means of the occurrence of trauma that political awareness, activist management and rebuilding of identity can all become triggered. The study of women, via sites of memory, telling, and institutional transformation also eloquently demonstrate through our study how women can break free of the constraints of patriarchal perverseness, build grass roots solidarity and reenvision futures.

Our work emphasizes how community-rooted actions – from kitchens, graves, and classrooms – seed transformative justice, in contrast to many studies that focus on either formal politics or individual leaders. By illustrating survivor-led, feminist-infused recovery that cuts across intergenerational memory, political voice, and healing institutions, our contributions enhance both theory and practice.

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The Psychology of Criminal Behavior: Understanding the Mind of Offenders in Anfal Campaign.

Dr. Mariwan A. Mohammed

Charmo University – College of Education- Special Education Department

Abstract - English

This Review investigated the psychology of Criminal Behavior in order to understand the Mind of Offenders in Anfal Campaign. First, this review discovered how and why the offenders commit genocide. It then presented a case-study of eyewitnesses to better considerate of genocide. Genocide is the mass killing of members of a national group, resulting in psychological, health and social problems for the survivors. Genocide is not a simple action, it gets more and more sensitive and aggressive behaviour. This Review investigates The Campus, Mass graves, models and theories to understand Mind of offenders. The researcher investigated several models and theories including: Kelman's model, violentization theory, becoming evil, Hallberg's Theory, the psychology of crowds, stages of genocide, Psychoanalytic, rational, and social learning theories. In addition, the study established several survivors of the Kurdish genocide still suffer from psychological and mental problems. Furthermore, the review has made many suggestions and recommendations but the most significant are to provide more psychological and social aid to the survivors, and for the Iraqi government, Ministry of Martyrs and Anfal affairs and researchers to become more involved in the serving the survivors of anfal in Kurdistan Region.

Key words: Criminal Behaviour, Offender's, Eyewitness accounts, Genocide, Anfal Campaign.

1. Introduction

In early February 1988, the former Iraqi president, Saddam Hussein, ordered a huge military operation (Anfal) against the Kurdish people in northern Iraq. The operation took place in the prohibited areas in eight states. The first stage began on 23 February 1988 with the aim of systematically killing and destroying civilians. The final stage of the Anfal ended on 6 September 1988 (Hiltermann, 2008). This approach is commonly known as genocide.

The aim of genocide is considered to be to destroy the lives of members of a national group by impacting on core principles such as personal security, liberty and dignity (Totten et al., 2004; Waller, 2002). The 20th century is known as the century of genocide. Particular examples include the Armenian genocide in Turkey (1914), persecution of the Jews of Europe during the Second World War, the Rwandan genocide of Tutsis (1994), and the killing of the Iraqi Kurds in 1988 (Quandt, 1996; Haperen et al., 2012). Clearly, during the last century and continuing in recent years, genocide has been a destructive reality (Staub, 2000).

To commit murder is generally considered a reprehensible act. The idea of engaging and being complicit in the massacre of a group of people is something that most would consider iniquitous. Widespread suffering and the ultimate loss of life is prevalent every day. It is important to understand how genocide occurs in order to ensure that it does not happen again.

Psychology can be employed to understand the

causes of genocide in order to investigate the killing of human beings (Munn, 2006; Sternberg, 2003). Thus the questions are as follows: Why the offenders commit genocide? What psychological aspects are at play? In exploring and attempting to answer these questions, the purpose of this study is to review the literature on the Criminal Behaviour. In addition, a case-study of genocide in Kurdistan will be presented and interviews with eyewitnesses will be examined to offer a context for what occurred and to help this study better understand the mind of offenders.

2. Defining genocide

Prior to the Second World War, genocide was described as a crime without a name. Lemkin (2005) coined the word ‘genocide’, which comes from the Greek word “genus” meaning race or tribe and the Latin word “cide” meaning killing. Thus, genocide means the killing of a group of people (Jones, 2006, p.10). Furthermore, the crime of genocide is described as the systematic planned destruction in whole or in part of a particular group, nation, religion or ethnic group (Lemkin, 2005).

In the UN’s view, genocide indicates subsequent actions which are committed to demolish, in whole or in part, a national, ethnic, racial or religious group; this includes

- a) Killing members of the group;
- b) Causing serious bodily or mental harm to members;
- c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- d) Forcibly transferring children of the group to another group

(Manaktala, 2012, p. 180).

In recent years, Fein (1993) has defined genocide as a powerful action by perpetrators to destroy members of a group physically, through interdiction of the biological and social reproduction of group

members, because of the lack of threat offered by the victim.

3. The stages of genocide

Baum (2008) and Stanton (1998) have illustrated eight stages of the Psychology of Genocide to demonstrate the mind of offenders. The eight stages of genocide are Classification, Symbolisation, Dehumanisation, Organisation, Preparation, Identification, Extermination and Denial.

3.1 Classification

The first stage is Classification, Baum (2008) believed that, this stage refers to Hilberg’s model, as he similarly states that the perpetrators define and classify their target group, which can lead to them committing genocide (Hilberg, 1985). Returning to Baum’s argument, it is necessary to classify ethnicities and nationalities such as Jew, Hutu and Tutsi (Baum, 2008), and also this classification can be seen in Iraq such as (Kurdish, Arab, Turman, Suni, Shee) But it should be noted that, the division and classification of people into different groups cannot lead to genocide without the second stage, symbolization.

3.2 Symbolization

Symbolization is related to classification (Baum, 2008). Here, Stanton (1998) claims that certain symbols can be used to show and name the group members in this stage; the group of people can be symbolised by their skin, colour, and even religion, such as Muslims, Christians and Jews. The Jews were a symbol for Nazi regime, and Kurdish were a symbol for Saddam regime (Stanton, 1998; Baum, 2008).

3.3 Dehumanisation

Dehumanization is the third stage of Criminal Behavior, which is the denial of humanity (Baum, 2008); in Baum’s view, hate and propaganda can be used to start the genocidal killing. Here, the perpetrators see their victims as animals; this means that the target group is less than human. For example, the Nazi regime called the Jews “rats”, and Saddam’s regime called Kurds “saboteurs”,

“Donkeys” and “Dogs” (Middle East Watch, 1993; Baum, 2008).

3.4 Organisation

Most of the criminal Behaviours in the last century were organised and committed by states, such as the killing of Jews in the Nazi camps, and the killing of Tutsi people in Rwanda with machetes (Baum, 2008), as well as the killing of 5000 Kurds with chemical gas by the Iraqi regime, in addition to the organised mass killing of more than 100,000 Kurdish civilians in the mass graves of Iraq, which was possibly an organised crime (Human Rights Watch, 1993). criminal Behavior offenders

3.5 Preparation / Identification

The route to genocide includes preparation, which is the fifth of Baum's eight stages. This includes the list of victims and the mapping of murder. This stage also includes Identification, as the victims are asked to bring their ID cards (Baum, 2008) to confirm their age, religion and ethnicity. For example, the identification of Jews was a legal requirement of the German government, while in the Rwandan genocide, ID cards revealed people's backgrounds, which led to the Tutsis being stopped in their cars at road blocks and slaughtered in the genocide (Baum, 2008, cited in Pigmon, 2011).

3.6 Extermination

The seventh phase in mind of offenders is extermination, which is the actual genocide. According to Stanton (1998, cited in Baum, 2008), the offenders do not consider their victims to be human, which enables them to commit mass murder and genocide quickly. Here, it is possible to say that this stage is probably linked to Kelman's third stage, because both writers accepted that the offenders kill their victims because they think that they are less than human and should be killed (Kelman, 1989; Baum, 2008).

3.7 Denial

The last phase is Denial, where the offenders dig

mass graves to hide the evidence and thus deny the genocidal murder (Baum, 2008, p. 36). For example, Saddam's regime dug mass graves in the Iraqi desert in order to deny the Kurdish genocide. Few people knew that Kurdish civilians had been killed as Saddam's regime buried all the bodies and patrolled the graveyard with strong security units (Human Rights Watch, 1993).

4. Kelman's model of genocide

Kelman (1973) illustrated the psychological conditions of genocide. To understand Psychology of Criminal Behavior and the mind of offenders, Kelman summarises three mental conditions -authority, routinization and dehumanisation – and how these are related to the criminal behavior

4.1 Authority

The first process is Authority. Kelman (1973) claims that criminal behavior will occur in the context of an authority. This is because the orders are given by the highest organisation (government), and the offenders see their crimes as obligatory and accept that they must commit killing against the target group. In this regard, it could be said that genocide is not ordered by ordinary people; rather, the offenders are given orders by the highest authority.

4.2 Routinisation

The next process of mass killing is Routinisation. According to Kelman, routinisation has two meanings. Firstly, it decreases the necessity for decision-making, thus making it easy to avoid the inferences of the act. When genocidal acts become routine, the offenders need to apologise for their acts in order to avoid the penalty for disobedience (Kelman, 1989).

4.3 Dehumanisation

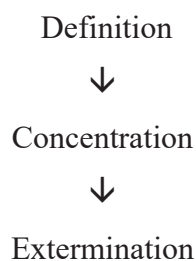
Dehumanisation is Kelman's third process, and it has a great impact on the victims. Here, the victims are the main point, because the offenders see their victims as less than human and are willing to dehumanise them in order to justify destroying them (Kelman, 1989). This process took place

during the Holocaust and Anfal Campaign when the Nazi regime dehumanised the target group during the massacre (Day & Vandiver, 2000). With regard to the three stages of kelman's theory, although he suggested how genocide occurs, further studies have suggested some important psychological motivations for genocide. For instance, Dicks (1972) and Goldhagen & Wohlgeleinter (1997) suggested that the ideological perpetrators use hatred to dehumanise and harm the target group.

5.1. Hilberg's Model and Genocide

In relation to Criminal Behavior, Hilberg (1985) has investigated a model that illustrates the theory of the destruction of the European Jews; this was used by the Nazi regime in the Holocaust. Hilberg (1985) illustrates the three stages - definition, concentration and extermination - that will occur during the genocide:

The three tools used during the Holocaust against the Jews:



Thus far, Hilberg's model is consistent with Winton's Violentization theory (2008) based on symbolic social interaction and self-interaction. It is focused on how perpetrators act to harm other people.

5.2 Definition

The first part of the model is Definition, as it is important to define the target group who will be the victims of the genocidal killing, as can be observed in the case of the Holocaust when the Nazi regime defined the Jews as the target group (Hilberg, 1985). Similarly, Winton (2008) agreed that the offenders of genocide need to define their target

group as those who will be killed, possibly because the definition of the group will be more likely to separate the target group for harming and killing.

5.3 Concentration

The second stage of Hilberg's model is concentration, in which the offenders make a plan to focus on their victims in order to transfer them to camps. The main reason for this is to separate the victims from society. For instance, during the Holocaust the Jews were incarcerated in Hitler's camps. This is related to violentization theory, as Winton (2008) suggested that the concentration would threaten others as a result of the offenders wish to place the target group in camps. However, it should be noted that, at this stage, the genocide has not yet occurred, as the perpetrators must first plan to commit extermination.

5.4 Extermination

Definition and concentration do not necessarily result in genocide unless they lead to the last stage, Extermination. However, they play a significant role in the genocidal process as the perpetrators use many tools to destroy a huge number of people from the target group, with the aim of killing the victims in a short space of time (Hilberg, 2003).

6. Waller's model (Becoming evil)

In his book, *Becoming Evil: How Normal People Commit Genocide*, Waller (2002) has proposed some of the factors that impact on the individual and social tendency to embrace extraordinary evil. A consideration of three general factors - racism, xenophobia and desire to dominate - may help this study to investigate how and why genocide occurs.

6.1 Racism

Racism is the first factor of criminal behaviour; this occurs when a specific group wishes to be the centre of everything while other people must defer to it. Here, both self-interest and pride have an influence on individual groups. the individual tendency is more likely to have a pre-existing willingness to respect Authority; thus, racism strengthens inside the specific group, as the members believe themselves to be at the centre of

everything. These groups consequently start to believe in genocide against the out-groups. Racist groups are also formed when their members start to think that other groups are not human. But it should be noted that, for racist groups, genocide is more significant for achieving their aims (Waller, 2002).

6.2 Xenophobia

Xenophobia is the second factor leading to extraordinary evil. Waller (2002) points out that racism turns into Xenophobia. This may be due to an increase in hatred and fear of foreign groups, in particular against strangers and different cultures. The perpetrators try to protect their own groups because the phobia plays a significant role inside the group (Waller, 2006). The perpetrators will disagree with and reject other groups of people. Alternatively, xenophobia may refer to the second step of violentization theory, i.e. defence, when perpetrators come to believe that they must harm the target group (Winton, 2008). It is important to identify what kind of people become evil and involved in genocide. In Waller's view, social groups such as governments, propagandists, and the military may encourage people towards xenophobia and racism; these concepts consequently lead to genocide against strangers and out-groups (Waller, 2002)

6.3 Desire to Control

In Waller's view, racism and xenophobia are significantly related to the Desire for Social Dominance, as all racist and xenophobic groups are highly likely to want social dominance. Due to the self-reinforcing play role and has impact on the individuals, dominant force leads to violence and genocide (Waller, 2002). But it should be noted that the perpetrators desire social domination for several possible reasons: firstly, it could be suggested that the third stage of Winton's theory (2008),

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7. Psychoanalytic theory

Psychoanalytic theory was developed by Freud, with researchers in this field suggesting that the Id

needs to find satisfaction immediately. This is because a child's behaviour is driven by pleasure-seeking and it is believed that self-destructive impulses may consequently lead to Criminal Behavior (Hollin, 2013). Furthermore, Freud supposed that offenders are driven by the unconscious, as anxiety and loss of control of the ego can lead to increased criminal behaviour (Siegel, 2014). In another interesting development of psychoanalytic theory, it is pointed out that individuals have two internal motivations to become perpetrators: Eros, the energy of life; and Thanatos, the death force. The aggression of Thanatos moves out of the self onto others, and this internal energy may produce a very dangerous level of personality (Borum, 2004; Bartol & Bartol, 2008). In view of these points, it could be suggested that the offenders of Kurdish genocide may be under the influence of thanatos, which might encourage them to harm the victims.

Although this theory is important for predicting individuals' motivations for committing genocide and explaining how it occurs, it is suggested that childhood experiences and internal processes alone are not enough to evaluate the offenders of genocide. Therefore, psychoanalytic theory has been challenged by researchers. For instance, some studies have criticised this theory for having weak logic and paying insufficient attention to social processes with an empirical and theoretical basis (Beck, 2002; Canter, 2008). In other words, the psychoanalytical development in investigating psychology has been given less attention, and psychoanalytical theory is quite an old theory in the history of psychology, focusing on internal processes and ignoring the social psychological effects, as can clearly be seen in Freud's theory.

8. Social psychology theory

Social learning theory conflicts with psychoanalytic theory in that the criminal behaviour is not the main consequence of the inner process, as Freud commented previously. This theory became a famous method in the 20th century; it was developed by Albert Bandura in the early 1970's, and then become a significant theory in offense studies

(Bandura, 1978). For instance, in Bandura's view criminal behaviour is learned from the social group, which includes family, subgroups, books and media, because these models have a great impact on the development of personality (Bandura, 1978). Thus, it could be said that the individual joins the social group to become an offender. To study this possibility, social psychology theory focuses on the environmental processes that encourage an individual to become an offender seeking to harm others. Recent studies have divided social theory into two sides; the first side is social control theory, where people are groomed by close organisations. The second is social reaction, which suggests that individuals observe crime at an early age and thus become perpetrators (Siegel, 2014).

In other words, researchers of social processes have suggested that individuals have an impact on the control of other groups, because the offenders have power and use social conflict to kill others (Farrington & Chertok, 1993). These scholars have mentioned that the state plays a big role in perpetrating environmental crime, possibly because the political aspect aims to defend the power and situation of the upper classes at the expense of the lower classes (Siegel, 2014). Although this theory is important for investigating the influence of social relations on individuals, the impact of psychological and cognitive aspects that may lead to commit genocidal killing should not be ignored.

9. Theory of crowds

In his book *Psychology of Crowds*, Le Bon has explored the role of the group mind when an individual believes him/herself to be a member of a crowd. The question here is why an individual might become involved in the killing and torture of other human beings. To investigate this question, Le Bon (2009) claims that an individual might be controlled by the group mind, because religious and political leaders encourage individuals to inspire crowds which results in most men gladly obeying orders (Le Bon, 2009).

In addition, researchers in the field of crowds, such as Colman (1991), have found that this psychological concept, de-individualisation, can

play a role in murder. This behaviour is concentrated in violent crowds, resulting in social murders such as genocide (Colman, 1991). However, some researchers disagreed with Le Bon, Colman. For example, Diener et al. (1977) suggest that not all individuals tend to participate in genocide, because most of the de-individualisations of crowds are done to harm others. Further motivations for the psychology of crowds have been found to cause antisocial behaviour. For instance, Spivey and Dunn (1990) suggested that there is a relationship between perpetrators and antisocial behaviour, as de-individualisation results in increased antisocial behaviour. In view of this point, it is possible to say that individuals will challenge and oppose other groups. This is probably a social process, as social theory agrees that individuals join groups to kill other groups (Bandura, 1978). The development of the psychology of the crowd would suggest that the crowd is dominated by individuals' thoughts as well as the social psychological aspects; subgroups and media, in particular, can provide motivations for genocide.

10. Rational choice theory

In recent years, Eysenck, a British psychologist, has tried to advance psychoanalytic and social theories. According to Eysenck, criminal behaviour is not just a result of innate processes, as Freud had claimed. It is not just a result of social processes, as Bandura outlined neither is it simply the consequence of environmental conditions and nervous system. In relation to rational theory, Eysenck (1977) identifies three dimensions of personality: Psychoticism (P), Extraversion (E), and Neuroticism (N). Eysenck comments that individuals have a high level of N and E, and high P scores (Eysenck, 1977, 58). He argues that these types of personalities are drawn to crime, possibly because they can be defined as neurotic extraverts; another possibility is that the perpetrators have a high level of depression, anxiety and violence (Eysenck & Gudjonsson, 1989; Canter, 2008). "The offenders commit crime because there is a relation between environmental situations and the nervous system" (Bartol & Bartol, 2008). Although this theory may be linked to biological theory, it

should be mentioned that Eysenck's theory is not saying that offenders are born; rather, he believes that a combination of environmental and neurobiological influences turn an individual into a criminal behaviour (Eysenck, 2013). Furthermore, this theory does not suggest that criminal behaviour is only innate; therefore, the effect of the central nervous system can interact with the environment (Eysenck & Gudjonsson, 1989). Therefore, it is possible to say that the perpetrators of genocide are rational and are influenced by others to commit crime. Rational choice theory makes a different point from social process theory, because some researchers have suggested that offenders are totally rational when they make a decision to commit a crime. This happens when various personal aspects such as greed, anger, jealousy, thrills, and vanity encourage an individual to commit crime (Siegel, 2014).

10. Case studies

10.1 Case-study 1 (Witnesses accounts)

Qualitative research is significant for exploring peoples' lives, lived experience, behaviours, emotions, feelings and social movements (Strauss, & Corbin, 1988). Eyewitness accounts can offer a context for what occurred and can help to provide a better understanding of genocide (Gutman, 1993).

10.1.2 Sample

In total, three participants took part in this study, of whom two are female and one is male. The participants in this study are from Kurdistan and were eyewitnesses to the Kurdish Genocide. The participants of this study observed many horrors during the genocidal campaign against the Kurds; they were incarcerated for around six months and saw the brutality unfold. Their ages range from 40 to 60 years.

10.1.3 Procedure

One participant had been interviewed previously (Qurbani, 2013). This eyewitness is the only survivor of the Anfal mass grave and he was able to talk to Qurbani face to face.

Two further participants were interviewed individually on Skype, as they are from Kurdistan and this was the only way to access them. The researcher told the participants that this project is about the psychology of genocide (Anfal), and that it is a humanistic project. Similar questions to those identified previously by Hardi (2005) and Qurbani (2013) were used to explore the eyewitnesses' experiences during the genocide (Appendix A). The Skype interviews were recorded.

10.2 Case study 2 (History of Kurdish genocide - Anfal campaign, 1988)

In early February 1988, the former Iraqi president, Saddam Hussein, ordered his cousin Ali Hassan-Al- Majid, known as Chemical Ali, to start a huge-scale military operation against the Kurdish people in northern Iraq. The operation was called Anfal (Hilterman, 2008).

10.2.1 What is Anfal?

Human rights watch (HRW) (1993) defined 'Anfal' as the spoils or booty of war. The word is the title of the eighth Chapter of the Quran. The Iraqi military regime adopted the name 'Anfal' in 1988 for its genocidal policy against civilian Kurds in northern Iraq. They did so because Anfal means 'the war against non-believers' which was carried out during the early Islamisation period. The Ba'ath regime justified the ideology behind its genocidal policy by adopting this Islamic name during the 1980s (Chak, 2007; Hilterman, 2008). It is estimated that nearly 182,000 Kurdish people were killed and 4000 villages destroyed during the aforementioned genocide in 1988 (Hardi, 2011).

This was a huge-scale military campaign involving national defence contingents (Afwaj al – Difa al – Watani), the pro-government Kurdish government militias known as Jash forces, the special commando forces (Quat al- Khasa), the emergency forces (Quat al- Tawari), and the Republican Guard (Quat al – Aras al- Jimhury) as well as Party Intelligence (Dairat al- Mukhabarat) and State Internal Security. All these forces were under Ali Hassan Majid's command (Resool, 2001).

The Anfal campaign took place in the prohibited areas in eight different states. The first stage began on 23 February 1988 with the intention of systematically killing and destroying civilians. The final Anfal ended on 6 September 1988 (Hiltermann, 2008). In this study, it is important to discuss the tactics used by the Ba'ath regime against the Iraqi Kurds during the eight processes.

10.3 The Camps

Returning to Violentisation theory, it is suggested that the perpetrators try to transfer the victims to prison (Winton, 2008). According to this view, during the Anfal operation people were sent to concentration prisons. For example, the first stage of the Anfal campaign resulted in the genocidal killing of many citizens, while the next stage involved concentration camps and mass graves when the Kurdish civilians were trucked to Dibs and Topzawa prisons (Black, 1993; Hardi, 2011). When the Kurdish civilians arrived at Topzawa, they faced hunger, sickness, rape, and beatings from the soldiers (Black, 1993; Chak, 2007). The guards psychologically tortured the victims. As a result, many children died. For example, Witness 1 said, 'there was no food and drink, the soldiers separated the children from their families and men were separated from women, people suffered disease, in particular children, their bones were dry, many of them died in the camps'. Therefore, it is possible to say that Saddam's soldiers psychologically and physically punished prisoners in the camps.

Another witness to the Kurdish genocide, Witness 2, said that the 'soldiers had chosen the most beautiful girls. Sadly, we never saw those girls who were taken out of the prison. For a while we were very sad that those innocent girls were abused and raped'.

Furthermore, Witness 2 spoke of the denial of the victims' humanity, as she

Saw that 'women were giving birth in front of everyone but no one would treat them, sadly, the new babies died inside the prison because of lack of healthcare. Sometimes the dead bodies were left

for two days; the soldiers treat the people as less than animals'. According to eyewitnesses, the camps were a part of the genocidal killing, such as psychological punishments of the victims and leaving dead bodies unburied in the concentration prisons.

Some studies support the eyewitnesses' accounts; for example, the second and third stages of Hilberg's model - Concentration and Extraversion – can be applied to the Kurdish genocide, as the victims are transferred to concentration camps where they are tortured and killed (Hilberg, 1985). Moreover, the third stage of Baum's theory, dehumanisation, may support the eyewitnesses' accounts of the camps, because the perpetrators see their victims as less than human (Baum, 2008). Although a number of children were harmed in the concentration camps, most of the prisoners were blindfolded and taken out into the desert to mass graves for genocidal mass killings (Witnesses 1, 2 and 3).

Image 1: shows the Topzawa Camp, where a large number of civilian Kurds were taken after being captured during the Anfal campaign.



(Hardi, 2005)

10.4 Mass graves

According to the present findings of the psychologist Baum (2008), "the perpetrators dig up the mass graves, burn the bodies, and try to cover the evidence" (p, 38). Thus, it could be said that Saddam's regime dug around 300 graves, each of

them containing 10 to 10,000 bodies; the graves were used for Kurdish men, women and children killed by Saddam Hussein's regime (CHAK, 2007; Kurdistan Regional Government UK Representative, 2011). Furthermore, the soldiers terrorised the prisoners at the edge of the pits in an organised way (Middle East Watch, 1993). For instance, Witness 3 acknowledged that 'there was a fearful situation when those guarding the pit took the victims into the pit'. Witness 3 said that his 'aunt died, in fact she was traumatised, this because of the fear'. The mass killing was very methodological because the victims were blindfolded and shot with "Kalashnikov" AK-47 assault rifles, and some of the victims were shot twice or more. It is known that, after the shooting, the bodies were covered over, as Witness 3 stated. In view of this point, the truth of Kurdish genocide is more likely to have been concealed. It is possible to say that the mass graves of the Kurds were related to the final stage identified by the psychologist Baum, who points out that the perpetrators want to cover the evidence that they have committed genocide in order to blame what has occurred on the victims (Baum, 2008). It is believed that this theory applies to the final process of the Kurdish genocide. Therefore, Saddam's regime tried to cover up the victims in the desert in order to deny that they killed thousands of Kurdish civilians in the early 1980s (Burng, 2006).

Image 2: illustrates a mass grave of Kurdish genocide in Iraq's southern desert



(CHAK, 2007, p, 40)

10.5 The psychological impact of the Kurdish Genocide (Anfal)

After the general amnesty, most of the women were released from prison and avoided the mass killings. They nevertheless suffered mental and physical harm and injury including rape. This had numerous psychological effects, including post-traumatic stress (PTS), physical illness, grief, depression and isolation.

10.5.1 Rape

"Genocidal rape is particular as well as part of the generic, and its Particularity matters" (Russell-Brown, 2003, p, 350). In this regard, it can be said that rape is a way of harming the victims. Eyewitness two said that the "soldiers had chosen the most beautiful girls. Sadly, we never saw those girls who were taken out of the prison". The rape of women under Saddam's regime can be recognised as part of genocidal killing. Eyewitness two, when asked about rape, was silent. This may be because it is more difficult for women to talk about rape. Some research suggests that trying to get women to talk about rape in some developing countries is dangerous (Kleinman, Das & Lock, 1997).

10.5.2 Post-traumatic stress (PTS)

In a study by Dworkin et al. (2008), it was illustrated that the prevalence of trauma has increased among the survivors of the Kurdish genocide. The prevalence of post-traumatic stress (PTS) disorder is still present two decades after the chemical attack on the survivors' area. The authors noted that PTS symptoms and poor social functioning were common among survivors. Therefore, the chemical gas led to increasing the psychological risk dysfunction (Dworkin et al., 2008).

10.5.3 Physical illness

Another effect of chemical attacks that can be found among the survivors is physical illness, which had a huge impact on the survivors. Some people died immediately while others suffered skin and eye burns, all as a result of the Saddam regime's

chemical bombing of Halabja City in 1988. It can be said that the effects on the survivors include cancers, birth defects, neurological problems, and infertility. More than 10,000 people were injured (CHAK, 2007).

10.5.4 Grief

Grief is another psychological effect that can be experienced by the survivors of genocide. A number of survivors cannot shake off the memory of the loss of a close person such as a parent, spouse, or family member. For a few people, this causes major unassimilated grief (Van der Veer, 1998).

“I saw the dead body of my kid, she was hungry and yearning for cucumber and she kept crying and asked me to get her a cucumber, I rushed and begged one of the guards to give a piece of green pepper. Then, the guard brought a sweet green pepper and threw it on sandy ground and smashed it with his boots in order to humiliate me and make me sadder. After that, I searched around and found a green plastic shoe and brought it to my child and my child didn’t realize that it was a shoe because she was ill. Then she started chewing the shoe; after a while she passed away and left me forever. So I have not bought and eaten cucumber since 1988”. Such testimony indicates that the genocide has caused grief to and had psychological impacts on survivors.

10.5.5 Depression and isolation

Depression, the inability to escape instances of change, may leave the survivors feeling alone and separated from the rest of their family and environment. Some of them may not be able to enjoy loving relationships with family members. In support of this view, Witnesses 2 and 3 said that “all of the women were depressed, because the children were separated from their families; the next night, soldiers came and took all the men for mass killing. Sadly, they never came back and, consequently, women started crying and screaming”. Furthermore, although most of the women in the camps were depressed, research shows high levels of depression after the amnesty. For example, Jabary (2010) reported that 76% of

the survivors of genocide suffered depression because they had lost their families.

11. Discussion

The main objective of this project was to investigate the psychology of Criminal Behavior and understanding the mind of offenders in several sections; the first section examined the literature on the theoretical models which helped to understand the mind of offenders. The second part analysed the theory of the perpetration of criminal behaviour and genocidal killing. The third section applied some of these current theoretical frameworks to review a real case of Kurdish genocide (Anfal), the 1988 genocide in Iraqi Kurdistan.

Baum (2008) and Santon (1998) classified the eight stages of the psychology of Genocide, they found that the offenders classify a symbolic step instead of a definition; thus, it is possible to say that these conditions are more likely to be linked to Hilberg and Winton’s conditions. Therefore, the perpetrators don’t need to harm all of society; the most important aspect is to classify and symbolise the specific group or ethnicity to be harmed. In relation to the Kurdish genocide, it is possible to consider that these previous instruments can be applied to the findings of the anfal campaign, as the victims were defined, classified and symbolised among the different ethnicities of Iraq, consequently leading to genocide (Black, 1993).

Previous theorists and researchers (e.g. Kelman, 1973; Hilberg, 1989; Waller, 2002; Winton, 2008; Baum, 2008) have investigated the psychology of Criminal Behavior and understanding the mind of offenders. While these theories differ with regard to the factors involved in genocide, they share a common belief. For example (Hilberg, 1989) suggested that offenders need to define their target group before genocidal killing. This study found that harming and genocidal slaughter of human beings caused by individuals who always followed the orders of leaders and authorities’ as well as dehumanization, hate, propaganda, Racism may consequences in genocide.

Further results of previous theories suggest that the

perpetrators are influenced by psychological and sociological factors such as pleasure-seeking, child abuse, models, and crowds. Researchers have recently suggested that all these factors have impacted on the offenders, encouraging them to commit criminal behaviour and genocidal killing. For example, psychoanalytic theory suggests a link to crime, because the offender's behavior is driven by pleasure-seeking and the impact of the 'thanatos' energy of death, which can psychologically force individuals to harm other people. Meanwhile, Borum (2004) and Bartol & Bartol (2008) added that the perpetrators are driven by the unconscious, as anxiety and child abuse in early childhood can lead to increased criminal behaviour and serious consequences (Siegel, 2014). Although there is a lack evidence to support this argument, it is known that the most infamous perpetrator of Kurdish genocide, Saddam, experienced child abuse and crime in his early childhood (Post, 2005). Thus, it can be said that the offenders of genocide are influenced by adverse childhood experiences.

However, the socio-psychological theorists disagreed with Freud's argument; they claim that the perpetrators and criminals are influenced by the environment, and that crime is highly influenced by family, media and observation actors. These factors can be transferred through social groups (Bandura, 1978; Bank, 2004; Loannou, 2008; Coleman & Norris, 2013). Moreover, in relation to socio-psychological theory, Le Bon (2009) found that the perpetrators are influenced by the group mind to commit crime. This may occur when a group of people share a common aim to harm others, and the individual's mind is controlled by a specific group. The case of Kurdish genocide (1988) and recent genocidal killing by Islamic State in Iraq and Sham (ISIS) of Christians, Shabaks, Yazidis and Kurds in Iraq are more likely to have occurred due to the impact of social training and the group mind (crowds) on the offenders to commit genocide (Human Rights Watch, 2014).

In addition, the findings of rational choice theories dispute the view that criminal behaviour is just a result of internal and social factors. For example, according to Eysenck there are several psychosocial

dimensions such as Psychoticism (P), Extraversion (E), and Neuroticism (N). High levels of N and E and high P can cause harm to people (Eysenck, 1977, p. 58).

The second aim of this project was to examine the case-study of Kurdish genocide to determine whether the previous findings apply to the 1988 Kurdish genocide. Interviews with eyewitnesses would provide a better understanding of the Psychology of Criminal Behaviour and understanding the Mind of Offenders, according to the UN definition of genocide, mental harm, serious bodily injury and attempts to remove children from their parents seem to be among the mental aspects at play and can be applied to the findings on the Kurdish genocide. For example, in the present case-study, it is known that the genocidal killing was inflicted by chemical weapons and "Kalashnikov" AK-47 assault rifles. Further findings illustrate some psychological dimensions involved in the genocide. For instance, it was found that some of the victims were killed at the edge of the grave. The eyewitness interviews revealed that the genocide was methodical; the victims were blindfolded and traumatised before being shot. Thus, genocide has aspects of trauma and fear.

In order to understand post-traumatic stress (PTSD) disorder, recent research (Dworkin et al., 2008) supported this finding from the current study and stated that the impact of chemical gas and shooting increased the trauma among the survivors of the Kurdish genocide. This demonstrates the societal cost of human rights abuse and shows that the survivors are at increased risk of psychological dysfunction years after the fighting has stopped (Dworkin, 2008).

Rape is another result of genocide. As one of the witnesses described, the most beautiful girls were chosen and taken out of the prison for punishment. But when the researcher asked eyewitness one about the occurrence of rape and sexual abuse in prison, she fell silent, as she had been in the prison. The key issue here is that trying to get women to talk about rape in Kurdistan can be difficult; indeed, some research has indicated that talking about rape

in some developing countries is dangerous (Kleinman, Das & Lock, 1997). On the other hand, the Anfal campaign took place in 1988; therefore, it is possible that the interviewee found it difficult to remember. Another possible reason is the fact that the researcher is male, which made it too difficult for the women to give information about sexual abuse.

The big issue found that during the interview that the genocide is consequently lead to physical disease, such as suffering cancer, birth defects, neurological problems, and poverty. These physical problems can hugely lead to die and injured victims of chemical attack everyday life (CHAK, 2007). Through the psychological problems, it is well-known that grief has great impact on the testimony survivors, because of the loss of a close relative might be given them sadness. As well as, isolation and depression found that might be significantly related to grief. Due to in fact it is found that 76% of the women survivors of Kurdish genocide suffered depression because their children and husband separated and killed over time at the binging of genocide. So the finding of this current is believed that the previous investigation of UN as can be linked to the current case study. It is therefor, separated members of group and harm the target group is can be consequently lead to leave psychological problem.

12. Conclusion and recommendations

The main aim of this study was to investigate the psychology of Criminal Behavior in order to understand the mind of offenders. Several models have focused on the factors involved in genocide, particularly those explaining the psychology that encourages offenders to commit genocide. The aim of these models was to analyse the motivational process behind genocidal killing, including factors such as, dehumanisation, hate, propaganda, racism, xenophobia, desire for social domination, and annihilation, as discussed in the previous section (1989; Waller, 2002; Winton, 2008; Baum, 2008; Santon, 1998). These models will provide a better understanding of how and why offenders commit genocide.

Although there are differences among the psychological and social theories of criminals and perpetrators, it is known that all these theories share a common belief. Perpetrators are impacted by internal and external processes. For example psychoanalytic theory focused on child abuse, pleasure-seeking and the energy of death (Thanatos) which may result in crime. Social theory focuses on environmental processes that cause individuals to become perpetrators through observation. Rational theory states that perpetrators are influenced by neuroticism, psychoticism and extraversion, which affect the nervous system and environmental circumstances. The theory of crowds focuses on the group mind which encourages individuals to immerse themselves in the group in order to harm others. As these theories all have certain drawbacks, it is strongly suggested that further research develop the fields of these theories; hence, further psychological aspects of the personalities of perpetrators might be investigated

Two significant psychological theories, by Hilberg (1985, 1989) and Kelman (1973) can be applied to investigate the psychology of the Kurdish genocide. With regard to Hilberg's first-step definition, the Kurdish civilians were defined as the target group and were taken to concentration camps; this led to Hilberg's final stage of destruction which took place when members of the target group were killed in the camps and beside the mass graves. Similarly, Kelman's two psychological aspects, authorization and dehumanization, encouraged the perpetrators to commit genocide as they obeyed the high authority's order to dehumanise the target group and see them as less than human. It is believed that these psychological conditions may help future researchers to better understand how and why genocide occurs.

13. Further recommendations are as follows:

There is a lack of research on the psychology of offenders in Kurdistan; therefore, it is strongly recommended that more research be conducted in order to prevent further genocide. Moreover, only a few eyewitnesses were interviewed in this study;

therefore, it is recommended that more participants be involved in studies of genocide in order to develop the field of qualitative research, as qualitative research is crucial to discover peoples' lives, lived experience, behaviours, emotions, feelings and social movements (Strauss & Corbin, 1988).

In addition, there is a lack of statistics about the offenders and victims of the Kurdish genocide; for example, the Iraqi court reported that more than 70 perpetrators of the Anfal Campaign have still not been caught and brought to justice; they live outside the jurisdiction and may still be sufficiently dangerous to commit genocide again (Rashid, 2006). Therefore, it is necessary to bring those offenders to justice. If this can be achieved, the researchers may benefit from psychological theories to investigate the psychological factors of genocide. On the other hand, the frustration of Kurdish citizens' needs, in particular, housing, water, and electricity supply, resulted in genocide in some circumstances; thus, the findings of this study should encourage the Kurdistan regional government (KRG) to meet villagers' basic needs. If this is done, genocide may never recur, as basic human needs are important for self-fulfilment (Maslow et al., 1998).

In view of the previous Kurdish genocide and continuing genocidal killing by ISIS in Iraq (Human Rights Watch, 2014), it is strongly suggested that the UN become involved to prevent this tragedy, and media, racism, hate, and propaganda should not be allowed to threaten people's lives. Individuals should be encouraged not to be influenced by or join terrorist groups and not to show blind obedience to authority. Otherwise, the impact of such social observation may encourage individuals to become perpetrators and become involved in genocide.

On the other hand, several psychological problems both pre- and post-genocide were presented, including rape, traumatic stress disorder (PTS) disease, grief, isolation and depression. The findings recommended that the consequences of genocide for the survivors should not be ignored. Further studies might also focus on the psychological

circumstances and events post-genocide. These recommendations may help professionals to publish research and present reports at conferences; consequently, psychological aid may help the victims of genocide. These results may help the UN to protect vulnerable groups from genocide.

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Appendices

Appendix A - Interview transcripts

Eyewitness Accounts of Kurdish Genocide (Anfal Campaign)

Witness 1

Interview with witness 1

1/6/2014- Chamchamal Region

Witness 1 is one of the witnesses to Kurdish genocide (Anfal). Through the interview she presented what happened to Kurdish victims during the operation. She was able to talk about her experience in the complexes, as she had been in Topzawa prison for more than six months. She had

escaped the mass execution. After the amnesty she looked after her surviving children alone.

The Interview

Q - Can you tell me your full name and age please?

A - My full name is (name provided) 56

Q/ Which village do you come from?

A - Qarahasan region

Q - Can you tell me when genocide (Anfal) came to your village?

A - On 9 April 1988, when Saddam's regime and Jash Militia used tanks and helicopters to destroy our village.

Q - What do you mean by Jash?

A - Jash were Kurdish traitors. They were insider spies who helped Saddam's regime at the beginning of the genocidal operation against citizens.

Q - How did genocide (Anfal) start in your region?

A - Genocide started with the destruction of our village and deportation of the civilian people in our area.

Q - Why?

A - Because the Baath regime and mercenaries told us that we should work for the regime like traitors; for a while we did not accept that decision, so that is why they destroyed our region; even my husband said to me that he did not accept being a traitor. Consequently, they deported us to the mountains; we had difficult living conditions; after two months we moved to another village, called Mamlaha.

Q - You knew Saddam's regime and Kurdish traitors were aggressive and tried to kill you! Why did you follow them from place to place?

A - "Because mercenaries told us that Saddam's Government had built houses for every citizen with electricity supply and water. This encouraged the

men to tell their family to follow them so we followed them to the complexes. But unfortunately they were lying"

Q - How was your journey? I mean did you make journey on foot or by car?

A - There were no cars, just walking; after three hours we arrived at Talabn Village; it was around sunset, so we were very tired and met another family there. Then we could not sleep at that time because we were very fearful. It was around 2 am, me and another lady had prepared our selves to make some bread for those people who were hungry and tired. At the beginning of our work, the regime started to bombard our area. By that time, I saw a cow being killed behind us. So, all of our family began to leave the village to find safer caves. After a day in the caves, Jash and military tanks came to our places to catch us. It was a terrible situation.

Q - Why?

A - Because Barq was a Jash (turncoat); he was getting on the tank and had said to us, he wants to start mass killing. But fortunately he did not do that anymore; they just took us into another village called Qaratamor. So we had been there for three days. And then all the family members were taken to Chamchamal city by Zel.

Q - What do you mean by Zel?

A - Zel was a large military van. They transferred all of us to Chamchamal region; when we were arrived there, the soldiers forced us to take everything out of our pockets, including all our IDs, notebooks and money. For that reason, I saw that they collected all the documents quickly and burned all of them. After that you could see that around a thousand buses came to our complex to transfer us to the terrible prison.

Q - Who was escorting your bus to prison?

A - Red hats - Arab Soldiers, they were members of

Saddam's military; they transferred all the families to Kirkuk City. Although we arrived at Kirkuk at night, we had no idea where they wanted to put us. After a few hours in Kirkuk, they transferred us to Topzawa.

Q - What do you mean by Topzawa?

A - Topzawa was a prison; it was the only hell on this earth.

Can you tell me how far Topzawa was from Kirkuk?

I think it was about three hours.

Q - How long were you in Topzawa Prison?

A - We were there for more than six months

Q - What did you see in Topzawa?

A - When I arrived at Topzawa prison, I saw so many circumstances there. First of all, there were 30 halls, and each hall included more than 110 people; the guards separated each group in each hall, we had very little space with a terrible life. Sadly, the guards tried to beat the women with cables, I saw that the men were blindfolded and then cars were brought to take them to the mass killings.

Q - Did they separate men from women or children from each other inside the prison?

A – Yes, we were separated from each other. On the third night the solders came and separated all the children from their families into other halls. This caused the women to scream and the children to cry; the next morning they brought the children back. In fact, the children were scared. This was because the solders threatened them to give them an injection. After they brought back the children they took all the men into another hall. I tried to tell the guardsman that is my husband behind the glass; he wanted to beat and kill me with his gun.

Q - How was the food and health?

A - There was not good food and drink, do you remember I told you Topzawa was a hell. They gave us a piece of dirty toast; we could not eat, because it was like a stone. Do you know we could not drink water because they gave us hot water? They psychologically and physically punished the prisoners.

Especially children, they were hungry and would soon die, because of lack of food and health. I saw that the children were dry bones in the holes.

Q - Did you see the solders abuse anyone?

A – Silent, and then said; not really, I did not see them abusing anybody in our hall, but I have heard that the guards beat and abused some women in other halls, but you could see the guards kicking and beating women with cable. People were suffering disease. Some people, in particular children, died in the halls because they were without their clothes and their bones were dry. This is the biggest crime Saddam did against civilian Kurds.

Q - Were there toilets for the prisoners?

Never, there was no toilet for us. We had a terrible situation, there was just a room people used as a toilet, and it was very dirty. Just prisoners would clean it. They looked on us as animals.

Q - How did you escape from the prison?

A - When the regime announced the amnesty we were taken home, I and my five children escaped with some of the other families who had been in the prison, but sadly all the men were separated from us and ended up in mass graves. So since 1988 I have been looking after my children alone.

Witness 2

Interview with witness 2

2 /6/2014- Qara Hanjir/ Chamchamal

Witness 2 was one of the most brilliant witnesses of

the Kurdish genocide (Anfal). She experienced the Anfal operation. She had been in Topzawa and Dibs prisons since 1988. Witness 2 lost her husband and three children; she saw many circumstances in the campaign; she talked about some psychological aspects of the Kurdish genocide through her six-month experience in the regime's prisons.

The Interview

Q - Can you please tell me your full name and age?

A - My full name is (name provided), 53

Q/ Which village do you come from?

Qadi Karam Region

Q - Can you tell me when Anfal came to your village?

A - On 4 April 1988

Q –How did the genocide (Anfal) start in your region?

A - Anfal came to our village in the early evening when Kurdish traitors announced that we should come to Qochali road the following afternoon, at 1 pm. And also they told us not to go by the main road as we would be heavily bombarded. So my husband said to us, let's go, we should be there, because he had thought that the regime honestly promised to keep us safe. All 18 families in our village went. When we arrived at the Qochali Road, we were shocked, because we saw that all the people had come from the different villages of Jabary region, I mean the regime collected all the villagers of the Jabari region.

They captured and collected all of us, you could not escape, because we were surrounded by military power, and then they brought many military vans to take us to Chamchamal camp, I remember that it was a terrible day, because you could see it was raining and stormy. You could see Saddam's soldiers beating people with their Kebles. At sunset they pushed us into the military vans.

Q - Who was escorting your van to prison?

A - Saddam's soldiers, they took us from the van to Topzawa Prison, we were sitting on each other in the van, it was a horrible time, because the vans were not covered and also it was raining and stormy. After we arrived at the Topzawa Prison, they took out people into the prison.

Q - How long were you in Topzawa Prison?

A - We were there for three days; it was a terrible moment, because there was no food and drink. After the three very difficult days, the soldiers brought the cars into the prison and they took all of the prisoners to Dibs.

Q - What do you mean by Dibs?

A - Dibs was a horrible prison, it was Hell

Q - How long were you in Dibs Prison?

A - I was there for around six months

Q - What did you see in Dibs Prison?

A - I saw many terrible things inside the prison that the soldiers did to the victims. For example, on the first night after arriving at Dibs, the prison wardens turned off the lights, children started crying! The soldiers' attitude was very bad, they used to call prisoners "dogs" and "saboteurs."

Q - Why?

A - I think they psychologically tortured people, they were not human, believe me I saw a lady who went mad on a dark night; you could see children crying and terrified at that time. Unfortunately the men were separated from us, they were blindfolded and trucked to the graveside for genocidal killings; believe me I met my husband at the end, he said to me keep your eyes on our children, because he knew that he would be killed with the other men. I think the soldiers took all the men for mass killing. That is why I saw my husband unhappy; and he left me forever.

And also on the next day, the guards came to the

hall to check people, and you could see that there were many dead bodies.

Q - Which group of people died?

A - The dead bodies in the prison mostly were children; I saw women give birth in front of everyone, so the new babies died inside the prison because of lack of healthcare; sometimes the dead bodies were left for two days. No one would treat them. So we usually collected 6 to 7 dead bodies together and covered them in the graveyard, even though there was no piece of cloth to protect them. We used to go to the graveyard with solders; it was to cover the dead bodies. It was a horrible situation.

Q - What was the most horrible situation that you saw in Dibs?

A - I saw a tragic story that I have never forgotten, that was the dead body of my kid: “when I was in prison with my 5-year-old kid, she was hungry and yearning for cucumber and she kept crying and asked me to get her a cucumber but I told her that I cannot get anything in this desert. Every day until night she kept crying for cucumber. Then I went out to the prison yard to ask the prison wardens to get a piece of cucumber for my child. At the same time I was watching as the guards were eating fruits and vegetables; then I rushed and begged one of them to give a piece of green pepper because it was green and looked like a cucumber to satisfy my child and stop her from crying, as my child was also ill. Then, the guard brought a sweet green pepper and threw it on sandy ground and smashed it with his boots in order to humiliate me and make me sadder. Then, the guards even prevented me from picking up the smashed pieces and started swearing at me and pushed me back to the prison, torturing, hitting and whipping me. After that, I searched around and found a green plastic shoe and brought it to my child and my child didn’t realize that it was a shoe because she was ill. Then she started chewing the shoe; after a while she passed away and left me forever.” So I have not bought and eaten cucumber since 1988

Q- How was your food and health in Dibs?

A-There was no drink and food, they gave us a piece of dirty toast, you could not eat it: when we gave the piece of toast to our children, they could not chew it, as a result, they vomited directly; it was very terrible for their stomachs, you could see children were suffering disease and they would slowly die. I think they were like birds in the hall, there was no clean water and food. It was a terrible life; all you could see was a hell.

Did you see the solders abuse anyone?

I had seen some black men come to the prison, because there were some young girls; so they had planned to separate the most beautiful girls as they had chosen some of them. Sometimes they used to come to choose young girls. Sadly, we never saw those girls who were taken out of the prison. We had no idea where the girls were taken. For a while we were very sad that those innocent girls were abused and raped.

For this reason, there was an old lady in the prison who advised the young girls to make their faces and bodies messy with ash, waste and dust of the ground in order to look old and ugly with the aim of not being selected by the prison guards for sexual abuse.

Q- Were there toilets for the prisoners?

A- No, there was no toilet for us. We had a terrible situation, there was just a room people used as a toilet, and it was very dirty. Just prisoners would clean it.

Q- What did people lose during the genocide?

A-People lost everything, we lost men and children as well as property, and nothing is left.

Q- How did you escape from the prison?

A-We escaped from Dibs Prison when Saddam

announced the general amnesty; we were taken to Arbat Region/ Kurdistan, they recorded all our names; they also stated that the Kurdish genocide had taken place.

Witness 3

Interview with Witness 3

Kalar, Garmian Region

Witness 3 is one of the strongest witnesses of the Kurdish genocide. He saw gunmen murder his mother and three sisters with other victims during the Kurdi massacre. Witness 3, who crawled out of a mass grave in Muthana province, presented his testimony against Saddam Hussein on the day of the trial. In the interview he talks about the circumstances of the victims in the pits. Although he had been in the prison, this project will discuss the specific experiences in the mass graves which he had seen during the mass killings. He predictably behaved like a hero. He told Human Rights Watch and journalists his testimony.

The Interview

Q - Can you tell me your full name please?

A - My full name is (name provided)

Q - Can you please tell me which village you come from?

A – Garmian region

Q/ Could you tell me how Anfal came to your village?

A/ Actually the villagers, especially men who received promises from a mercenary boss who told them that Saddam's government had built houses with water and electricity supply for every citizen. But they were lying.

Let's start with your experience in the mass graves (pits)

Q - How was your journey to the desert (mass graves)?

A/ One morning, some cars were brought to the

front of Topzawa Prison; they looked like ambulance cars - green and white. After a fearful journey, we reached the shooting place, it was really horrible; I looked around and I saw nothing - just a barren desert, even the soil was not similar to Kurdistan. The fear grew more; why had they brought us to this empty desert? Why did they not bring us back to our homes? I had a fear that just by leaving us in this desert we would die because of lack of water and food. Besides, one question remained in my mind and that was; why was this government punishing us in that way? What was the guilt of those women, children and babies? I could not find any answer but the conclusion I reached was that they had brought us to this empty desert to kill us.

Q - Did they mix all the people together?

A - No, every group was kept beside their cars.

Q - Were there many soldiers around the area?

A - Not really. There was no military base in that desert, there were only some land cruisers patrolling the convoy. I think they were the same soldiers who came with us from Topzawa Prison. However, we were kept there without being given any explanations. After that they blindfolded our eyes with pieces of black cloth and took us back to the box. I noticed that the cloth was loose and easy to open. It was not difficult to guess what they were planning to do with us. We knew that blindfolding our eyes meant execution by firing squad.

Q - Did anybody remove the black cloth?

A - Yes, I did so.

Q/ Was it dark when you got out of the car for the second time?

A/ It was early in the evening and I could see clearly.

Q - If the people were blindfolded, how could they go close to the pits?

A - Well, there was not a long distance between the cars and the pits. We did not have to walk; we were just thrown into the holes as soon as we were out of the car.

Q - How deep were the pits?

A – Each pit was about two metres.

Q -What did you see at the beginning of the shooting?

A - I saw a horrible situation; before being pushed down to be shot, my aunty had died; in fact she was traumatized because of the fear.

Actually, people were dead before settling down in the mass graves. If there is a term in the vocabularies called deadly shock then that is what we suffered.

Q - Which part of the grave were you thrown into.

A - I was right beside the wall of the grave.

Q - Who was thrown next to you in that pit?

A - As always I was next to my mother and sisters, we were all shivering from fear. I remember I saw a soldier go back to the car and bring the dead babies and throw them into the pits.

Q- Was he carrying both of them together?

A - No, he was throwing them one by one. He could do it that way because the vehicle was close to the mass grave.

Q - How many soldiers were around?

A - There were two of them guarding the pit. There were also some others who took the action of bringing down the victims and pushing them into the pit.

Q - What type of gun were they carrying?

A - “Kalashnikov” AK-47

Q - Which way did they carry their machine guns?

A - Firmly with both hands, one was on the trigger and the other hand was used to point the gun at us.

Q - Were the two soldiers’ faces covered?

A - No, they were only wearing helmets.

Q - Did you look at the soldiers before the shooting started?

A -Yes I did.

Q - May I ask you to describe the shooting?

A - It was a very fearful sight. Imagine that there is somebody standing over your head and wants to hit you with a stick or a stone; how frightening would that be? But what about watching barbarian soldiers with machine guns? Over and above we were piled in a pit with no chance to escape.

Q -How long did the process of shooting last?

A - When they finished the first rifle they took a new one, and thus the process was repeated twice.

Q - My dear Taimur, I know how painful the shooting process was, but as a witness you will do a great favour to the history of our nation if you tell us the full story.

A - The first bullet hit my mother’s head, her white head-cover flew in the sky, and then blood gushed out over her face. The next one hit the cheek of sister Lawlaw, she fell motionlessly. My other sister Snur raised her palm as if to protect herself from the bullets but she was shot through her little hand. Consequently, the blood burst out and she collapsed. I could see that the woman was in great

pain, she was begging my mother to help her!

The bullets were faster than the rain's drops; within less than a minute the whole group was piled over on top of one another. In an unconscious move I got up and attacked one of the soldiers, caught him from his belt and asked him to stop shooting. I held him very tightly but when he raised his head I saw his eyes were full of tears. He stopped for a while until the other soldier shouted at him, and then he threw me back to the pit. Once more the other one ordered him to shoot at me and he did.

For the last moment I saw him, he was still crying. Due to the extra shots, I also collapsed. I felt one bullet penetrate my back, but I found myself alive. I raised my head a little and could see nobody around, and then I removed the sand from my body, had a better look and could see the soldiers were gathering in front of the headlights of their cars. They were getting ready to leave but I collapsed once more, most probably due to the amount of blood that I lost. I came back to life for the second time. I heard the bulldozers were roaring. They were covering the mass graves with sand.

I was conscious enough to realize that I had one last chance to survive, to run away for a long time, I arrived at an Arabic family's home; they were shocked to find me in Kurdish dress at midnight. They gave me good care. I was there for two years and then went back to Iraqi Kurdistan.

Reconstructing Lives as Well as Remains: Witness Narratives and Psychological Needs Families of Mass-Grave Victims in Sorya, Duhok Governorate, Iraqi Kurdistan

Prof.Dr.Yasin Kareem Amin

Marywan omer sdiq
MLI Medico Legal Institute - Kurdistan

Abstract

Background and objectives:

Northern Iraq has endured repeated mass atrocities, producing violent bereavement, disappearances, and prolonged uncertainty. In Sorya (Duhok Governorate, Iraqi Kurdistan), recent humanitarian forensic interventions have begun to identify victims and return remains. This study centers families' witness narratives to map psychological needs, illuminate how grief is lived, and examine how forensic truth-seeking, justice, and cultural practice intersect in recovery.

Methods: A hermeneutic phenomenological design was employed to study 10 relatives of mass-grave victims (7 men, 3 women; ages 41 - 75) residing in Kurdistan Region-Iraq. Semi-structured interviews were conducted in July–August 2025 to gather required data. Data analysis was conducted using Van Manen's six methodological activities.

Results: Five thematic clusters emerged: (1) Trauma and Loss; (2) Memory and Testimony; (3) Psychological Needs and Wellbeing; (4) Social and Family Dynamics; and (5) Reconstruction of Lives. Families explicitly linked psychosocial stabilization to dignified exhumation, identification, and return of remains, alongside official acknowledgment and naming of perpetrators.

Conclusion: The accounts of the victims' relatives indicate that effective support in Sorya requires

integrating layered MHPSS with humanitarian forensic action and justice-oriented documentation, delivered through culturally grounded, survivor-led practices that validate grief, strengthen everyday social support, and protect dignity.

Keywords: Iraqi Kurdistan; Sorya mass graves; violent bereavement; ambiguous loss; hermeneutic phenomenology; psychosocial support; humanitarian forensic action; recognition and justice

Introduction

Northern Iraq has experienced repeated events of mass brutalities and displacement which have caused families to face violent bereavement, disappearance as well as long-term uncertainty of finding lost relatives. In Sorya, Governorate of Duhok

GIS Sorya Village

Throughout modern history, Christians have been geographically dispersed, with large numbers in cities across Iraq. In 1961 there were one million Christians in northern Iraq.¹ However, by 1979, 50% of Christians were living in Baghdad, making up 14% of the capital's population.² Under the Ba'ath regime's Arabisation policies, the community was required to identify as either Arab or Kurd in the 1977 census.³ Now, the largely reduced Christian population remains in Baghdad,

Basra, Kirkuk, the Nineveh Plains, as well as the Erbil and Duhok governorates in the Kurdistan regional government.⁴ The last Iraqi census, in 1987, counted 1.4 million Christians, but the economic sanctions

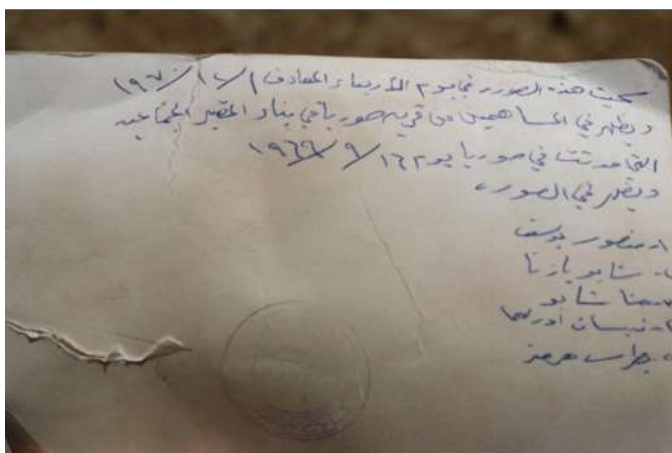
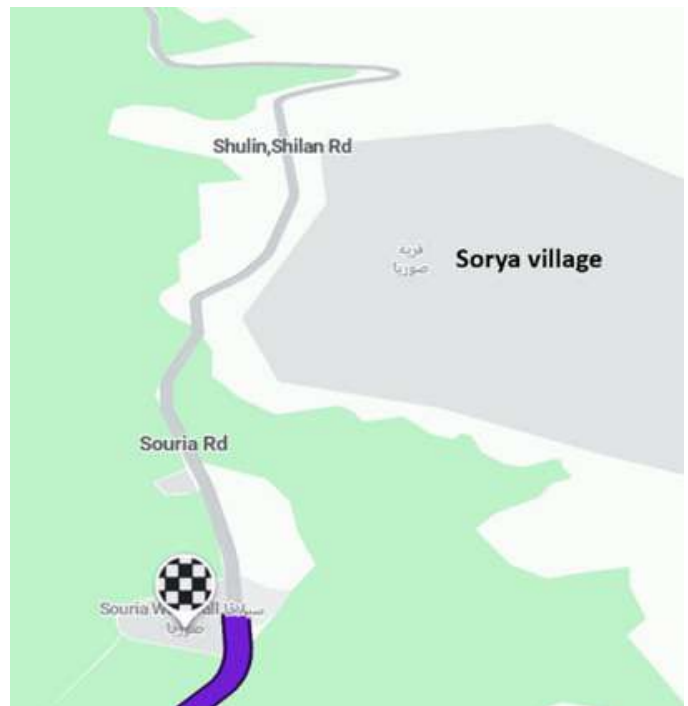
during the 1990s led to their migration abroad. Before starting the Gulf War between Iraq and Coalition forces in 1991, they were estimated at about one million. By the time of the US-led invasion in 2003, that figure fell to about 800,000. Then the numbers are thought to have fallen dramatically after attacking them by different groups of terrorist especially in Nineveh.⁵ The identification of mass graves skeletal remains and anthropological evaluation considered as the most important step toward documenting human rights violations which lead to giving back to families the remaining skeleton of victims, which are considered, until exhumed, as lost or disappeared.

Witnesses from the village of Surya at the time of the tragedy operation



recent forensic interventions on Christian and Muslim mass graves have started reclaiming identities and historical reality, but the psychosocial repercussions on the families are intense (Amin & Othman, 2020). Violent and abrupt loss research demonstrates increased chances of complicated grief, posttraumatic stress, and persistent impaired functioning notably where bodies are not recovered or recognition is deferred (Kristensen et al., 2012; Killikelly & Maercker, 2017). In the broader regional context, atrocities such as the ISIS campaign against Yazidis underscore the scale of harm and the centrality of truth and acknowledgment for survivors' recovery (Cetorelli et al., 2017).

Testimony and storytelling are not only modes of



documentation of violations, but also modes of remembering and making meaning of collective trauma (Hirschberger, 2018). However, psychosocial outcomes of exposure to truth-telling and justice procedures may be confounded and may both increase social trust and lead to an increase in distress, highlighting the necessity of survivor-based strategies (Cilliers, Dube, and Siddiquei, 2016). The daily stressors, changing roles, and erosive or restorative social bonds influence the wellbeing of families, which is consistent with ecological and adaptation models that situate mental health in wider social, legal, and moral worlds (Miller & Rasmussen, 2017; Silove et al., 2017). Humanitarian forensic action such as dignified recovery, identification, and returning of remains may fulfill the right of family to the truth and recognition, albeit in conjunction with culturally sensitive psychosocial and ritual support (Cordner & Tidball-Binz, 2017; Amin & Othman, 2020).

The present study is aimed at focusing on the voices of the families of victims identified in mass graves found in Sorya, shedding light on how they recount the loss, demand to be heard, and enlist their cultural practice into helping them heal and reconnect. It produces actionable evidence of survivor-informed services by mapping psychological needs within the context of grief, family and community dynamics and justice claims.

Methods

Study Design

This qualitative study used the hermeneutic phenomenological method that was developed by Van Manen (1990). Such a methodological decision allowed getting to know the experiences of the families of the victims found in the mass graves in Sorya, Duhok Governorate, Iraqi Kurdistan, and listening to personal stories of memory, grief, and mental well-being.

Participants

The current study utilized purposive sampling to identify ten family members of victims of mass

graves in Sorya, Duhok Governorate, Iraqi Kurdistan (7 men and 3 women). The inclusion criteria were the willingness of relatives of mass grave victims in Sorya and first-hand experience. Members of the family that do not want to participate in the project were excluded. Ages ranged from 41 to 75.

Data Collection

Data was collected through semi-structured interviews which were held in July and August of 2025. The interviews were conducted at homes or any other place the participants felt safe and comfortable. After thematic saturation was achieved, data collection was stopped. Some of the questions that were asked during the interviews are as follows:

- Could you tell me a little about your family and your loved one who was killed?
- How did you first learn about your loved one's disappearance or death?
- How has this loss affected your daily life, your family, or your community relationships?
- Can you describe how you first heard about the exhumation and identification process?
- What were your feelings during this process? (e.g., anxiety, hope, fear, relief)
- Were there traditional or religious practices you wanted to perform when your loved one's remains were returned?
- Since your loved one's death and identification, what has been most emotionally difficult for you?
- What does justice mean to you in this situation?
- Is there anything you want to share about your experience that we haven't talked about yet?
- What advice would you give to others who are going through similar losses?

All interviews, with the consent of participants, were recorded, and had a time slot of seventy to ninety minutes. The tapes were translated into English and then transcribed word-to-word to be analyzed.

Data Analysis

The analysis of the data was based on the six methodological actions by Van Manen (1990). The primary researcher based the investigation in close familiarity in the first exercise as a forensic, genocide researcher, and a member of the related community, and involved a change in the nature of lived experience. The second step involved studying the experience the way it had been lived by family members and relatives. The third exercise relied on the phenomenological thematic analysis and was important in terms of the themes. In the fourth exercise, the participants were requested to describe the phenomenon in writing and rewrite the description to enable them to use their voices. The themes were reinforced by the participants' experience; therefore, the subject matter of internal consistency was rated highly concerning the fifth activity, which was directed towards the correct description of the phenomenon. Lastly, the derived parts and whole were stabilized by alternating between the coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

The results were given credibility via long-term involvement of the respondents, the member-checking approach, and debriefing of the results by professional peers. The close data collection was facilitated and practicable due to the friendly relationship that existed between the participants and the researchers. This study also had the benefit of the researcher being very knowledgeable in the forensics, genocide and Anfal studies, which lent credibility and experience to the study. The stories that the participants gave were translated and interpreted word by word following the balancing of the transcripts on several occasions.

Ethical Considerations

The study was approved by Hawler Medical University College of Nursing Ethics Committee (Project No. XX; Approval Date: DD MM YYYY). Respondents received information about the aim of the research, the privacy rules to be observed, and their rights, especially the right not to participate in

the research. All respondents signed a voluntary statement form and filled in an informed consent form. For anonymity purposes, every respondent received a code (P1, P2, etc.), so that all the related digital or physical data is safely secured.

Results

The next set of composite quotes provides the voice of families of mass-grave victims found in Sorya, Duhok Governorate, Iraqi Kurdistan. These vignettes by the themes of the study articulate the reverberations of trauma and the ways in which memory is carried and what psychological supports are required to heal and be just. The quotes are grounded in the concerns and experiences reflected across witness narratives. They aim to honor the dignity of those who spoke and to guide practitioners, policymakers, and communities toward responsive care. Together, they trace the long work of reconstructing lives as well as remains.

Main Theme 1. Trauma and Loss

Trauma and loss permeated every account, shaping daily life long after the event. Families say that grief is the latent companion, and the terrain of Sorya is characterized by vacuity.

“Losing someone is like the house losing its roof; everything inside is suddenly exposed to the weather. I still set a place for him at breakfast, and the empty chair stares back like a wound.” – P8

“The day they did not return, the air in the region changed for me forever. I inhale and it seems I borrow air.” – P1

Subtheme 1.1. Emotional Impact of Losing Loved Ones

Participants described grief as physical and unrelenting. Helplessness is threaded through ordinary moments.

“Grief sits on my chest in the morning and follows me to bed at night. There is no room in me that it does not enter.” – P5

“Sometimes I feel my hands are too heavy to even lift a glass of water. The smallest tasks collapse under the weight of missing her.” – P3

Subtheme 1.2. Coping with Sudden or Violent Death

Sudden or violent death brought shock, confusion, and long stretches of denial. Adjustment has been gradual, and frequently in disproportionate measures.

“For weeks I listened for footsteps at dusk, convinced the door would open. My mind built a story where the violence was a mistake, and he would come home.” – P1

“The first time I said the words out loud; my voice did not sound like mine. Accepting the new reality felt like learning to breathe in a different gravity.” – P9

Main Theme 2. Memory and Testimony

Memory and testimony became ways to keep loved ones present and to insist on truth. Through telling, retelling, and recording, families turn personal suffering into shared witnesses.

“The memories are all the road back to them, and so we follow the same paths in a story. The telling gives to their names an everlasting existence.” – P2

“Talking of that day is sleep-costly, not talking is more expensive. Failure to testify means that the earth may not remember.” – P6

Subtheme 2.1. Recounting Personal Narratives

Telling personal stories was useful to make sense of things. The narration saved memory and reinstated agency in the narrator.

“I have been telling my children what I saw not to make them scared, but to root the truth. The information continues to be rearranged in my head as birds flinch in flight.” – P5

“Another fragment of the fog is cleared away every time I give my testimony. My hands shake, but my words get their niche.” – P7

Subtheme 2.2. Collective Memory and Community History

Conversations about the experiences in groups unified personal losses into group history. This group memory cemented identity and unity.

“We sit together on long evenings, and say the names and tell their stories, as though we were making a bridge of the syllables between us and the dead.” – P10

“In the weaving of our stories a history is formed which no wind can blow away. Of that tapestry there is a place to put each loss.” – P4

Main Theme 3. Psychological Needs and Wellbeing

The narratives highlighted clear psychological needs. Families asked for spaces to be heard, competent care, and public recognition that what happened was unjust.

“I needed someone to sit with me without trying to fix the unfixable. Being heard was the first medicine I could swallow.” – P9

“My mind kept circling the same dark room until a counselor opened a window. Hope came in small breaths.” – P3

Subtheme 3.1. Need for Emotional Support

Emotional support took many forms – professional counseling, family presence, and simple acts of care. Validation was as healing as advice.

“The counselor did not ask me to be strong; she taught me how to be honest with my pain. After those sessions, sleep visited me again.” – P7

“When neighbors brought tea and stayed to listen, my heart unclenched a little. Their presence told me I was not carrying this alone.” – P2

Subtheme 3.2. Need for Recognition and Justice

Wellbeing was identified with recognition and justice. Individuals demanded recognition, records, and proper mechanisms that brought the offenders to book.

“I want an official record that says our suffering mattered and was wrong. An apology would not raise the dead, but it would lift our heads.” – P6

“Justice to me is knowing the truth is written where everyone can see it, and those responsible are named. Only then can we turn our faces toward tomorrow.” – P4

Main Theme 4. Social and Family Dynamics

Loss transformed the social restructure of households and communities. Roles were reversed in one night and community reactions were as much solidarity as isolating stigma.

“All over night I was mother and father, interpreter and advocate. The sorrow did not stop the bills or harvest.” – P1

“Others went across the road, so they were not seen with our grief. Others bumped into our door each week, and vow of silence that we were part of them.” – P8

Subtheme 4.1. Changes in Family Roles

Families redefined caregiving and decision-making with the loss of loved ones. Children were rapidly raised and adults were introduced to new roles.

“My eldest left school to help earn money, a childhood traded for bread. We make decisions together now, even when our hearts are not ready.” – P5

“I learned to sign papers, repair the roof, and speak in offices where I used to wait outside. Each new task felt like another goodbye.” – P2

Subtheme 4.2. Community Support and Stigma

Networks and neighbors might cushion the impact or increase the impact. Isolation was alleviated, and pain was exacerbated by stigma.

“Our neighbors made communal dinners, shared implements, and ate with us on the long nights; their kindness sewed up some of our ragged edges. During such times, I sensed that it is the community that gripped us.” – P7

“But unsounded there were whispers that we were attractors of misfortune, and invitations ceased. Stigma added another shadow to our doorway.” – P10

Main Theme 5. Reconstruction of Lives

It is not the filling up of grief but its incorporation. Families outlined daily routines, inner resources, and cultural ceremonies that ensure that they keep on moving as they respect the past.

“We set up a tree in the same places where the rubble had been, in order that something that breathes life may come out of the mound. The sight of them rooted us in steady.” – P8

“Grief did not cease; it knew how to walk with us. Every morning, we decide to make one more step.” – P5

Subtheme 5.1. Resilience and Adaptation

Resilience appeared in small, practical strategies. Meaning making emerged from routine, work, and connection.

“I keep a notebook of small victories – baking bread again, laughing once, sleeping through the call to prayer. These pages remind me I am still moving.” – P4

“Working the fields set a rhythm back into my body, and the soil listened without judgment. When my hands are busy, my mind can rest.” – P9

Subtheme 5.2. Cultural and Ritual Practices in Healing

Sorrow and remembrance had a framework in rituals. Grief was given room in cultural practices to be observed.

“During the anniversary we light candles and read prayers and leave the flame to bear what our voices fail to say. We are assembled by the ritual singing when the words fail.” – P10

“We have a little memorial stone we constructed and go there after market, putting there a pebble or flowers. It is a spot to shed our tears, have a bit of courage.” – P3

Discussion

The Sorya narratives present an integrated picture of bereavement in a post-atrocity context that is strikingly consistent with contemporary research on war-affected families, while also contributing nuanced, place-based insights. Read through Silove’s ADAPT framework – disruptions to safety, bonds/attachments, justice, roles/identity, and meaning – the five thematic clusters in Sorya map closely onto the domains known to be compromised by mass violence and forced disappearance (Silove,

2013). The accounts foreground grief as embodied and enduring; memory/testimony as both meaning-making and truth-claim; psychological care as accompaniment as much as treatment; social reconfiguration marked by both solidarity and stigma; and a reconstruction of life that incorporates loss rather than seeking its erasure.

The Sorya accounts are dominated by trauma and loss, and grief is characterized by physical heaviness, breathlessness, and exhaustion. This is in line with the evidence that violent bereavement conditions increased susceptibility to posttraumatic stress, depression, and prolonged grief disorder (PGD) in comparison with non-violent losses (Shear, 2015; Killikelly & Maercker, 2017). Co-occurrence of PGD and PTSD is prevalent among the refugees with war experience, and it is linked to the extent of trauma exposure and the extent of disruption in the relationship (Nickerson et al., 2014). The idioms of distress in Sorya (e.g., “grief sits on my chest” and “I borrow air”) mirror somatic metaphors frequently reported in conflict-affected settings and remind clinicians that culturally meaningful expressions of suffering should guide assessment and care. Locally, evidence of the recent mass atrocities in Iraq indicates that mental health outcomes of survivor groups, such as Yazidi families, are extraordinary, which explains the ongoing distress in Sorya (Cetorelli et al., 2017; Ibrahim & Hassan, 2017). Notably, the sections of denial and gradual acceptance of the irreversible loss by Sorya are familiar to the research on ambiguous loss and the lack of remains, which make grieving work more challenging and may extend the symptomatic period (Shear, 2015; Silove, 2013).

The prominence of memory and testimony in Sorya – “talking is sleep-costly, not talking is more expensive” – echoes research showing that narrating harm can restore agency and coherence and sustain “continuing bonds” with the deceased (Neimeyer et al., 2014; Klass & Steffen, 2018). Families’ insistence that testimony “gives to their names an everlasting existence” converges with studies of collective trauma that frame memory work as an identity practice that affirms the moral

order and resists erasure (Hirschberger, 2018). Simultaneously, in this regard, literature warns that the advantage of narrative and memorialization is context-dependent: testimonial processes that remain unrecognized or are politicized can intensify disillusionment (Robins, 2011). Sorya data bring in a granularity that demonstrates the interweaving of personal and collective memory in the patterns of the private storytelling in families and the rituals of communal name-recitation that seem to stabilize.

In terms of psychological needs and wellbeing, the focus of the participants on being heard and non-directive presence is consistent with the recommendations of layered mental health and psychosocial support (MHPSS) in emergencies, which focuses on safety, calming, connectedness, efficacy, and hope, which is provided through stepped care starting with basic psychosocial accompaniment and progressing to evidence-based treatment when necessary (WHO and UNHCR, 2015; Tol et al., 2013). The accounts also endorse the value of competent counseling, with change described as incremental (“hope came in small breaths”). This is consistent with the evidence that short-term culturally adapted interventions can produce significant gains in conflict environments, although it is multiplied in the case of support to social networks and service systems (Tol et al., 2013). It is noteworthy that the Sorya insistence on recognition and justice as constituents of wellbeing aligns with the ADAPT model pillar of justice; justice and a sense of injustice can promote distress and mistrust (Silove, 2013). Families of the missing have expressed needs numerous times empirically, such as official recognition of existence, information about fate and location, and dignified processes of identification and return – needs that, when satisfied, can help psychologically stabilize (Robins, 2011; ICRC, 2013; ICMP, 2018).

The social and family dynamics theme – “overnight I was mother and father” – is consonant with work documenting role cascades, accelerated role transitions for children, and gendered labor shifts in post-conflict households (Silove, 2013; Sleijpen et al., 2016). Sorya’s duality of community responses – mutual aid alongside stigmatizing

avoidance – also recurs across contexts, where social capital acts as a buffer while stigma (e.g., ascribed misfortune, contested victimhood) exacerbates isolation (Somasundaram & Sivayokan, 2013; Sleijpen et al., 2016). The accounts suggest that ordinary, low-cost communal practices (visitation, shared meals) have outsized importance – findings consistent with community resilience models that emphasize everyday sociality as therapeutic infrastructure (Somasundaram & Sivayokan, 2013).

Reconstruction of lives is not framed as “closure” but as accommodation: routines, work in the fields, small victories notebooks, and ritual observances. This sits squarely within contemporary grief science highlighting heterogeneity of adaptation and the legitimacy of continuing bonds (Bonanno & Diminich, 2013; Klass & Steffen, 2018). The notion that meaning making involves daily practices and rituals rooted in a specific culture has been well referred to as a way to re-establish predictability, competency, and social engagement (Neimeyer et al., 2014). The imagery of planting a tree at the rubble and building a local memorial stone echoes comparative findings that community-led memorial and ritual practices can foster belonging and offer a place for grief to “go”, especially when formal memorialization is absent or contested (Hirschberger, 2018; ICRC, 2013).

Two comparative observations sharpen the contribution of Sorya case. First, the explicit tethering of psychosocial recovery to forensic and documentary justice – “truth written where everyone can see it”, “an official record” – reinforces the growing consensus that MHPSS and missing-persons mechanisms should be integrated rather than siloed (ICMP, 2018; ICRC, 2013). The narratives suggest practitioners can ethically engage families in documentation and commemorative acts without assuming these will, on their own, resolve clinical symptoms – important nuance given mixed evidence on the direct mental-health benefits of transitional justice participation (Robins, 2011; Silove, 2013). Second, the Sorya idioms of distress and coping provide culturally precise targets for intervention design: breath,

heaviness, hands at work, tea and shared silence. These can be translated into locally meaningful practices – breath-focused grounding, body-based regulation through agricultural rhythms, facilitated listening circles – that align with global guidance while respecting vernacular healing (WHO & UNHCR, 2015; Tol et al., 2013).

Conclusion

Families of the victims identified in mass graves in Sorya disclose that grief following mass atrocities is embodied, persistent, and unavoidable with justice, recognition and cultural practice. Their stories reveal healing in the form of testimony, community-based support, and significant rituals. Combining psychosocial-focused care with forensic truth-seeking enhances dignity, resilience, and assists survivors to re-establish lives, and does justice to the dead.

Implications

Results obtained from families of the victims identified in mass graves in Sorya point out that psychosocial healing following mass atrocities is possible only by combining forensic truth-seeking and culturally driven support. Families require acknowledgment, fairness, and testimony as they give clinical attention. Locally relevant rituals, ordinary solidarity, and non-prescriptive accompaniment can normalize grief, build resilience, and help practitioners get to survivor informed, context relevant interventions.

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Halabja Remembered: Narratives of Survival, Loss, and Intergenerational Memory

Prof. Dr. Yasin Kareem Amin

Alan Kawa M Faraj

Mohammed Rashid Amara

Abstract

Background and objectives:

The memory of chemical bombardment of Halabja in 1988 was a turning point in the Kurdish collective memory, but the commemoration of this atrocity changed over time in terms of how it is narrated, silenced, ritualized, and politicized. This study examines how Halabja is remembered in personal testimonies and family narratives; how silences, artifacts, and everyday routines shape knowledge transmission; how commemorations, artistic forms, and religious practices anchor collective memory; and how these processes influence Kurdish identity, belonging, and claims to justice across generations.

Methods: Using a hermeneutic phenomenological approach (Van Manen, 1990), we conducted semi-structured interviews with 12 participants (8 men, 4 women; ages 32–76) residing in the Kurdistan Region of Iraq who survived the attack or are relatives of those killed. Required data were collected by conducting interviews (70–90 minutes) with the participants from June to August 2025. Data analysis followed Van Manen's six steps, with phenomenological thematic analysis to identify essential themes.

Results: Data analysis led to the emergence of five

themes: 1) Personal narratives of survival, 2) Transmission of memory across generations, 3) Collective and cultural memory practices, 4) Identity, belonging, and the legacy of violence, and 5) Intergenerational differences in understanding the atrocity.

Conclusion: Halabja's memory endures through embodied recollection, curated silence, and communal ritual that together shape Kurdish identities and justice claims. The results contribute to cultural trauma and post-memory theory through a foreground of how remembrance is embodied and learned through, within, and at home. Among implications are culturally based education/commemoration design, survivor-informed health/social policy, and efforts that support intergenerational dialogue aimed at recognition, resilience, and civic responsibility.

Keywords: Halabja, Kurdish memory; cultural trauma; intergenerational transmission; hermeneutic phenomenology; survivor testimony

Introduction

On March 16, 1988, the town of Halabja in the Kurdistan Region of Iraq was the scene of one of the deadliest and severely devastating chemical attacks in the modern world that killed an estimated 5,000 innocent civilians and seriously injured

thousands more (McDowall, 2021). The attack, which is one of the elements of the Anfal campaign, has since taken a key position in the Kurdish collective experience and identity construction (Baser, 2015).

The study of cultural trauma focuses on the idea that the events do not stop after their immediate cycle, but they are thematic and last for decades (Alexander, 2012; Bar-Tal, 2013). Specifically, the phenomenon of intergenerational memory when the generation that has not directed such atrocities directly passes on the emotional and moral burden of historical atrocities to the future generations has proven to be a fruitful study area (Hirsch, 2012; Olick, 2016). Such dynamics are quite noticeable in the case of Halabja regarding the fact that full-fledged formal justice and recognition have yet to be achieved (Sikkink, 2011).

Moreover, the ways of remembering, which are the complexity of family oral traditions, the silence, the commemorations, rituals and artistic means of memorizing are crucial to maintain the communal identity and their resilience (Assmann, 2011; Williams, 2016). Practices like these also imbue the present with the past, but at the same time these practices bring the past generations to negotiate belonging, responsibility, and hope when faced with chronic loss in the future generations (Volkan, 2013).

Political and historical narratives have been used to describe the magnitude and purpose of the atrocity, but little consideration has focused on how those who experienced the atrocity shared the experience and how this is translated across generations. These narratives are important to understand how communities can endure cultural trauma and to rebuild meaning socialized after mass violence. In this regard, the present paper examines the presence of personal and intergenerational accounts of the Halabja chemical attack and how the memory is embodied, passed on and ritualized within the modern Kurdish society.

Methods

Study Design

The methodology employed in this qualitative study was a hermeneutic phenomenological approach proposed by Van Manen (1990) that assigned it an in-depth expository of the experiences of the victims who survived the chemical attack in 1988 in Halabja, together with their relatives. This was also an effective technique in the realization of individual experiences in relation to community reconstruction, memory, trauma, and survival.

Participants

A total of twelve participants that included eight men and four women participated in the study; they were chosen from those who had either survived the 1988 genocide in Halabja or were relatives of those who were killed. Recruitment was accomplished through purposive sampling. The criteria for inclusion required participants to be survivors or relatives of the killed willing to share their firsthand experiences. Individuals who declined to participate were excluded from the study. Samples were between 32 and 76 years old.

Data Collection

The data was selected through the semi-structured interviews that were carried out from June to August of 2025. These interviews were mainly done in settings that were comfortable for the participants. Data was collected until the themes showed thematic saturation, that is new themes were not developed as the discussions continued. The interviewees were asked some key questions as follows:

- How do you recall the day of Halabja attack?
- What was your family and personal reaction to the event as it was occurring and in its aftermath?
- Are your memories changed with time?
- Can you itemize any losses you underwent as a result of the attack?
- Am I wondering about any particular moments, or images?
- How have you talked with your children or your younger relatives about Halabja?
- In what ways is Halabja memorialized in the

community today?

- Do you feel being a survivor has any impact on the perception of others to you?
- What do you hope will be the lessons to learners in future about the Halabja incident?

Interviews varied in length from seventy to ninety minutes and were audio-recorded with participant consent before being transcribed verbatim and subsequently translated into English for analysis.

Data Analysis

Data analysis followed six methodological steps outlined by Van Manen (1990). The initial step was associated with the orientation on lived experiences; this investigation was conducted by a researcher who is highly knowledgeable about relevant areas of genocide and Anfal history, having lived in one of the affected communities. The second step focused on examining experiences as they are lived; hence, survivors and victim family members shared their firsthand accounts. Essential themes were identified through phenomenological thematic analysis as part of the third step. The fourth step entailed drafting and redrafting descriptions to accurately reflect the participants' voices. Maintaining close connections with the phenomena studied constituted the fifth activity; each theme was contextualized within the participants' experiences. Lastly, the balance between the individual-coded transcripts and more holistic themes was found after the analysis (Van Manen, 1990).

Trustworthiness

To guarantee the reliability of findings, steps that were put in place include extended interaction with the participants, verification of the findings through member-checks and professional peer debriefing. A good relationship between the researchers and the participants ensured good data collection. The lead researcher's background in forensics, genocide, and Anfal studies, along with the personal understanding of the local community happenings added to the credibility and context of this work.

Narratives of the participants were the basis of interpretations; transcripts were reviewed several times to ensure accuracy.

Ethical Considerations

Ethical clearance to undertake the study was obtained from Hawler Medical University College of Nursing Ethics Committee (Project No. XX; Approval Date: DD MM YYYY). Subjects were fully informed of the study goals, confidentiality measures, and their right to bail out at any other point without penalty, and their consent was achieved by signing an informed consent document. Anonymity of the participants was established by giving each of them a code (e.g., P1, P2), so that all the data was secure.

Results

Following the data analysis, five main themes, each having two subthemes, were extracted. The main themes were "personal narratives of survival", "transmission of memory across generations", "collective and cultural memory practices", "identity, belonging, and the legacy of violence", and "intergenerational differences in understanding the atrocity". In the following section, the quotes related to each main theme and subtheme are presented.

Main Theme 1. Personal Narratives of Survival

The nature of the following testimonies takes account of the first-hand experience of being attacked by chemicals in Halabja, and how collective knowledge has long-lasting effects.

"The day with me was like a second skin, the sky had gone mute, then all the things had slowed, including my heartbeat. We ran without knowing where, holding onto each other's sleeves, so no one disappeared." – P9

"Sometimes I think survival was a choice I didn't make – my feet simply moved when the ground told me to run. The ones who had not followed have, nevertheless, stayed at the back of my tongue every morning." – P6

Subtheme 1.1. Lived Experience of the Attack

The following testaments contain the details of the moment of the attack as it was going on with special emphasis on the memories of the senses of exposure, panic, and loss.

“There was an odd sweetness in the air, and it was turned to fear in the next breath, and the streets were changed under that mist. I remember counting the steps to the door, then forgetting how to count at all.” – P4

“We hid behind a low wall while the world sounded muffled, like it was underwater. My mother had put a wet scarf over my face, and told not to breathe deep, as though breathing were become perilous.” – P10

Subtheme 1.2. Coping with Immediate Aftermath

These thoughts present how survivors managed the initial hours through weeks following the attack as they pieced together routines to sustain a life after the loss, the wounding, and the migration.

“In the first weeks, we learned new routines – boiling water, sleeping in shifts, memorizing the faces in case one was missing. Grief arrived in fragments, like splinters we pulled out slowly.” – P7

“I stitched our papers into the lining of my coat and told my little brother stories, so he’d sleep. Food tasted of smoke for months, but we found solace too to be divvying up one loaf between many hands.” – P2

Main Theme 2. Transmission of Memory Across Generations

The memories of survivors are not forgotten with time; instead, they are recreated, transformed and translated, to the descendants who get to inherit a fragment of the trauma as well as an identity.

“Our family history is measured by before and after Halabja, every story bends around that date. Even those born later speak as if they remember, because the telling makes the memory theirs.” – P1

“The past moves in our house like another relative who never left. We talk to it, argue with it, and set a place for it every March.” – P8

Subtheme 2.1. Storytelling in Families

These accounts highlight how families deliberately share stories to keep memories alive while protecting children from their full weight.

“My grandmother’s voice changed when she told us about that day – soft first, then steady like a prayer. She let us ask the hard questions and answered only as much as our ages could hold.” – P11

“At night we sit with tea and pass photographs like fragile maps. The youngest ones memorize faces before they learn the alphabet.” – P5

Subtheme 2.2. Silences and Gaps

These accounts show us that trauma may also be passed in what is not said, requiring the descendants to assemble half-secrets.

“There are rooms in our story we do not enter; when a name is mentioned, my father looks at the window and becomes quiet. In those silences, I learned how heavy a memory can be.” – P7

“Some details were tucked away to keep us from drowning too soon. I found them inadvertently in a folded missive, and the sheet was made of such solid paper.” – P4

Main Theme 3. Collective and Cultural Memory Practices

The unique ways memory of the tragedy in Halabja is expressed publicly through the various rituals and cultural practices carry the grief beyond the individual and place it in a collective heritage that endures across generations and across communities.

“At the throng in the anniversary, I feel smaller and stronger, something like a common language is the grief. The candles teach us that light may be shared without being lost.” – P3

“We keep the names alive because we say them out loud and we share our breaths with them, and they enter into the cold morning. This is how those who cannot respond are taken attendance.” – P12

Subtheme 3.1. Public Commemoration

Such considerations characterize ceremonies and memorials as the expression of shared memory in restating community identity and strength.

“On each 16 March, we go at the memorial, and the sound of the prayers can be felt beats in a tapestry. As I stand there, I understand how remembrance is a sort of work that we engage our bodies in carrying out.” – P2

“I take my children to put flowers, so they have the memory of reverence in their hands. Their words are important, but it is the quietness that follows that informs them most.” – P5

Subtheme 3.2. Artistic and Religious Expressions

When memories are too painful to talk about in ordinary terms, poetry, music and painting and ritual provide a form, which sustains cultural identity and heals.

“What can we say without spoiling; what can we mean without breaking; what we cannot do the songs our poets made dwell between their lines. When the daff drum sounds the straightening of the elders is as if presented by name.” – P8

“I see the hills the color of ash and green in the same breath because that is what is true here. Our dispersed hearts hearing the voice of the imam, become whole again and are sewed back together with amen.” – P3

Main Theme 4. Identity, Belonging, and the Legacy of Violence

The memory of Halabja is constitutive of personal and communal sense of self and identity, of who Kurds are, through loss and common history.

“Halabja is the sinew that forms my Kurdishness to my morning coffee, my accent, my stubbornness. I am a member of a race that has gotten used to the carrying of memory like a standard and a scar.” – P9

“Although, when I went to the diaspora, the city had accompanied me, in my passport and in my name. Home ceased being an entity and became a vow to recall.” – P1

Subtheme 4.1. Shaping Kurdish Identity

These voices reveal how Halabja is at the center of Kurdish identity, both in terms of silent pride and a duty to remember.

“I am not boastful about the fact I am Kurd, but I am also immovable, in a sense matured by what my forefathers went through. The narrative of Halabja aids in defining us and presupposes us how to stand.” – P11

“When I am passing Kurdish to my child, I am not just passing words onto him/her, I am giving him/her the route map back to ourselves. The words contain voices of Halabja and aspirations of what we can reconstruct.” – P6

Subtheme 4.2. Perceptions of Justice and Recognition

These descriptions express continued distress with time passing on justice and acknowledgment, and how such lack of recognition creates an impediment to healing.

“Justice is an open door that everyone keeps telling is going to be opened, and there is an entire community waiting outside that door to open it with a lot of documents and the dead. Recognition is important because without it, people will always be inquiring whether this happened indeed.” – P5

“I do not want revenge, I want recognition, health care, and history books that talk about our history. Till that time, our prayerful observances are half-way crowned and solemn.” – P7

Main Theme 5. Intergenerational Differences in Understanding the Atrocity

Memories of Halabja have been processed differently by the people who lived through it and those who are told these memories thereby making new perceptions of trauma and resilience.

“My mother re-lives the smell, the street, the precise time; I live with the narratives and the heaviness in her hands when she is talking.” – P12

“For the young, Halabja is a history we inherit alongside our birthdays and our language. We are learning how to turn that inheritance into

responsibility, not just sorrow.” – P10

Subtheme 5.1. Survivors vs. Descendants

These reflections contrast lived memory with inherited memory, showing how both groups understand Halabja through different lenses.

“As a survivor, I measure time by the distance from that day; my daughter measures by what opportunities it delayed. We are both right, and we teach each other what we cannot see alone.” – P9

“My son asks for dates and numbers; I answer with the tremble in my voice and the cracks in the ceiling I still notice first. He wants to build; I am still busy keeping what remains.” – P3

Subtheme 5.2. Changing Meanings Over Time

The meaning of the memory of Halabja as the nationwide tragedy is changing as political and social context shifts, and the memory turns into a symbol of durability and responsibility.

“When the politics changes, the language with which the citizens talk about Halabja changes too, like a flag in new wind. Still, the core meaning stays: a demand to be seen and to protect each other.” – P10

“As the city rebuilds, the memory becomes less about only death and more about endurance. The past does not loosen its grip, but our hands grow stronger around it.” – P6

Discussion

The five themes of the current study map closely onto the recent scholarship on cultural trauma, intergenerational memory, and memorialization while extending it with texture, sensorial depictions of survival and a finely grained account of everyday coping and ritual practice. Below, the themes and subthemes are compared with relevant literature, and convergences, tensions, and contributions are highlighted.

The vivid, sensorial immediacy – “a strange sweetness in the air” and “the world sounded muffled” – mirrors the phenomenological density found in survivor testimony research, including work with Anfal survivors in Kurdistan-Iraq (Hardi,

2011). Like the participants in the current study, Hardi’s interlocutors recount embodied traces (smell, breath, skin) and micro-acts of protection that anchor memory in the body and domestic sphere. The emphasis on improvised answers to queries in the direct aftermath boiling water, sewing documents into clothing, serve to expand narrative-identity approaches (Hammack, 2011) occurring in the form of survival as a repertoire of embodied practices not just as an after-making exercise. It also resonates with cultural trauma concepts highlighting how privatized experiences are rendered publicly readable with the help of a narrative template (Alexander, 2012), but the data of our study interfere in these templates by depicting how verbality vacillates with body-resistant knowledge (holding sleeves, shallow breath).

The theme of inheritance is connected to the idea of post-memory (Hirsch, 2012): the descendants can know about the events they never experienced through mediated family stories, photographs, rituals. The quotes describing curated truth-telling – “answers only as much as our ages could hold” – fit Hirsch’s emphasis on ethical mediation and graduated exposure. It is also critical to note the exigencies of the silences and omissions with their own instructive value. This is in line with literature on the social authority of silence in traumatic legacy, where absence, deferral, and unsaid are part of a different archival guard that succeeding generations just learn to interpret (Olick, 2016; Hirsch, 2012). Our results augment and refine by demonstrating that everyday items (folding letters, family photos) are used as memory cues that provide a link between the privacy of home life and historical events; aspects discernable with Assmann (2011) thesis involving communicative (short-term, intra-social) and cultural (long-term, objectified forms) memory.

The transfer of personal bereavement to collective memory in the form of anniversaries, commemorations and processions fits well into the theories of cultural memory and commemorative performance (Assmann, 2011; Olick, 2016). Participants’ sense that “remembrance is a kind of work we do with our bodies” underscores what

memorial museum studies describe as the pedagogical and affective labor of commemoration (Williams, 2016). Our data note the potency of silence after speeches and the tactile pedagogy of laying flowers with children; this speaks to the way ritual choreography transmits values and identities intergenerationally without overreliance on discourse. The poetry, the music, the painting, and the recitation of religious texts that make up Subtheme 3.2 only expand upon this to show how words fail where what is unspoken needs to be known. This matches the findings in the literature on reducing the therapeutic and community-building roles of artistic and religious activities in the context of atrocity, according to which such activities are used to stabilize collective memory and aid coping because they serve as the symbolic containers of overwhelming emotion (Koenig, 2012; William, 2016). Meanwhile, the conclusions of our paper hold a critical incisiveness: ritualization has the ability not only to empower but to obligate the canonization of memory in a manner that may close off diverse experiences (Olick, 2016). The “light may be shared without being lost” can be read as a counterpoint – forms that encourage multiplicity as opposed to closure in a communal setting.

The participants’ statements that Halabja is both banner and wound reflect cultural trauma theory’s insight that group identity may be consolidated around a shared narrative of victimization and endurance (Alexander, 2012; Bar-Tal, 2013). The quotes showing Kurdishness braided into language, routine, and diaspora movement parallel narrative-identity research in protracted conflict settings (Hammack, 2011) and articulate what Baser (2015) documents in the Kurdish diaspora: memory as a transnational resource for political belonging, mobilization, and moral claim-making. Subtheme 4.2 – frustrations about delayed justice and recognition – follows along with the conclusion that state acknowledgment and culpability is perceived as a precondition to substantive healing and integration of traumatic pasts into civic life (Sikkink, 2011; Alexander, 2012). We temper this by factors that are more concrete – things like care

of the sick, curricular inclusion that locates recognition as a matter of everyday welfare and pedagogical justice, rather than a matter of law.

The contrast between survivors’ temporal anchoring (“measure time by the distance from that day”) and descendants’ prospective orientations (“turn inheritance into responsibility, not just sorrow”) coheres with research on generational shifts in mnemonic frames (Hirsch, 2012; Olick, 2016). Volkan’s (2013) notion of “large-group identity” and the transmission of “chosen trauma” helps explain the durable emotional charge across generations, while the data of the present study show how younger cohorts re-functionalize this inheritance toward constructive civic and rebuilding projects. Subtheme 5.2’s observation that meanings evolve with political winds is also widely noted in the memory literature: mnemonic regimes are not static but recalibrated as institutions, curricula, and international discourses shift (Olick, 2016; Assmann, 2011). The participants demanding that the core meaning is the demand of being seen and providing each other protection indicates that there is stable core in the morality and theory drift.

Our description of domestic, tactile, and communal stunts (wet scarves, stitched papers, shared loaves) adds to a literature that tends to favor narrative and representational interpretations at the expense of the humdrum logistics of making ends meet and holding community together (Hardi, 2011). This moral weight of measured revelation sets up post-memory arguments in a vernacular concern that tethers revelation and conceals according to the ethical measures of care within the family (Hirsch, 2012).

By thematizing the corporeal work of remembrance and its didactic silences, our interviewees provide a counterpoint to primarily text-based museum/memorial studies (Williams, 2016) and a warning against the possibility of sacralization (Olick, 2016). The conjoining of healthcare/curricular truth-telling to acknowledgment extends the boundaries of justice to juridical domains (Sikkink, 2011; Alexander, 2012). The descendants’ emphasis on responsibility aligns with a broader shift

identified in memory studies from victimhood to stewardship, yet our data ground this in specific intergenerational dialogues that co-produce future-oriented agency (Hammack, 2011; Bar-Tal, 2013).

Conclusion

The present hermeneutic phenomenology throws light on the way Halabja survives in the material embodied memory, selective forms of silence, and social ritual, which define Kurdish identities and identity claims. As themes, five interlocking areas trace survival, transmission and shifting meanings across the generations. This association between domestic practice and the memory of the populace expands theories of cultural trauma and post-memory, emphasizing commemoration as active work that is at once sustaining (to ensure continuing belonging) and demanding (to demand justice).

Implications

The results highlight the necessity of culturally oriented educational/commemorative activities that observe both spoken and unspoken memory. Any policy developed to deal with recognition, health care, and curricular inclusion should incorporate the lives and voices of the survivors and their descent as a means of ensuring the healing process and avoiding historical erasure. These methods may reinforce resilience in the community and stimulate the intergenerational process of dialogues focused on justice and productive civic service.

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Memory, Mourning, and Mental Health: A Qualitative Study of Families of Mass Grave Victims in Sorya, Duhok Governorate, Iraqi Kurdistan

Prof. Dr. Yasin Kareem Amin

Onila Evan Yousif

Ramail Diar Rophail

Abstract

Background and objectives:

Since repressions by Ba'athists, unresolved disappearances as a means of blurring death and absence continue to affect the lives of families of victims found in mass grave in Sorya (Duhok Governorate, Iraqi Kurdistan), increasing the risks of depression, anxiety, and trauma. This paper examines the ways ambiguous loss, shared memory and engagement with forensic practice determine grief and well-being and set priorities of healing and justice, rooted in the family.

Methods: Purposive sampling was applied to select 10 relatives of mass-grave victims (6 men, 4 women; 39 to 76 years old) who were studied using a hermeneutic phenomenological design (Van Manen, 1990). Interviews (70-90 minutes) were semi-structured, held between July and August 2025 in secure, participant-selected environments. Van Manen six activities were used to analyze the collected data and extract themes and subthemes.

Results: Five interlinked themes emerged: (1) living with unresolved loss; (2) the role of collective memory; (3) encounters with forensic

investigations; (4) psychological and social impact on families; and (5) pathways to healing and justice

Conclusion: Families of mass grave victims in Sorya experience archetypal ambiguous loss tempered by living memory and shaped by the quality of institutional response. Humane, transparent, family-centered forensic practice, dignified reburial, and sustained psychosocial and socio-economic support can transform suspended grief into dignified collective mourning and relational justice.

Keywords: ambiguous loss; mass graves; humanitarian forensics; collective memory; mourning rituals; prolonged grief; psychosocial support; Kurdistan Region of Iraq

Introduction

Mass graves from decades of Ba'athist repression have left thousands of people unaccounted-for and missing leaving unsolved disappearances that ripen into the intersection of both death and disappearance. Ambiguous loss and extended waiting are associated with the cycle of hope and despair and increased risks of depression, anxiety, and post-traumatic stress symptoms in the affected

population (Charlson et al., 2019; Lenferink et al., 2019; Morina et al., 2018; Silove et al., 2017). The situation in Sorya, Duhok Governorate, where both Christian and Muslim communities have been targeted, leads to the daily experience of uncertainty, as well as social isolation and stigma that transforms relationships and alters the community status (Hynie, 2018). Meanwhile, testimonies, commemorations, daily oral narrations belong to the living memory, which is a form of truth-telling and, consequently, transmission of collective experience to new generations, a bridge to the formation of identity and demands of recognition (Hirschberger, 2018; Robins, 2011).

Forensic encounters can be turn-around points. The local forensic efforts in Sorya identify two mass graves of Christian and Muslim people and highlight the difficulties of recovery and identification, the sensibilities of exhumation, and the necessity of decent treatment and reburial to family confidence (Amin & Othman, 2020). Humanitarian forensic practice is characterized by transparency, cultural competency, and family involvement – issues that mediate the hopes and fears, as well as the perceptions of legitimacy with regards to institutions (Cordner & Tidball-Binz, 2017). Within the wider context of mass victimization, the indication of needs associated with the psychosocial support and acknowledgment of families, as well as a sense of justice, are pressing yet insufficiently attended to (Cetorelli et al., 2017).

It is significant to carry out the current study because there is limited qualitative, family-centered evidence of Sorya in Duhok region despite the magnitude and enduringness of unresolved loss. By making voices of families central, it throws light on the ways in which ambiguous grief, collective memory, and experiences of the forensics can interact to endanger both mental wellbeing and social life.

Methods

Study Design

The present qualitative research used Van Manen's hermeneutic phenomenological method (1990).

Such a methodological decision enabled acquiring profound knowledge of the experience of the families of mass grave victims in Sorya, Duhok Governorate, Iraqi Kurdistan, and to listen to their personal stories related to the concepts of memory, mourning, and mental health.

Participants

In the present research, purposive sampling identified 10 family members of mass grave victims in Sorya in the Duhok Governorate of the Iraqi Kurdistan region (6 men and 4 women). The inclusion criteria used were the relative of mass grave victims in Sorya, readiness to take part in the study, and the first-hand experience. Family members that declined to participate in the work were excluded. They were aged 39-76 years.

Data Collection

Data was obtained through semi-structured interviews done between July and August 2025. The interviews were done at the residences of the interviewees or, in other places they deemed safe. The data collection continued until there was thematic saturation, and additional themes were not identified as a result of continued conversations. Some of the questions which were posed in the interviews are the following:

- Can you tell me a little about your loved one – what kind of person they were, and what they meant to you?
- How long after death, were you told your loved one was missing or that he/she was killed? What do you recall of that period?
- How did it feel to not have any idea as to what happened to your loved one?
- Please tell me about the time when you heard that the remains of your loved one had been identified.
- In what ways did this confirmation make you feel grief or mourn?
- What do you and your family do to memorialize your loved one?
- Are your mourning practices or customs now

different to when their remains were retrieved?

- What impact has this loss had upon your mental/emotional health in the long term?
- What has helped you to get through your grief? Who, what practices or beliefs have been helpful?
- What does justice mean to you with regards to what happened? What kind of support do you think families like yours need now – emotional, financial, social, or otherwise?
- Is there anything we haven't talked about that you would like to share?

In all interviews, the time limit was seventy to ninety minutes, and all of them were recorded, with the consent of the participants. Then the tapes were transcribed verbatim and translated into English to be analyzed.

Data Analysis

Data analysis followed the six methodological activities recommended by Van Manen (1990). The first exercise involved a shift to the nature of lived experience where the main researcher as a forensic, genocide, and Anfal researcher who belonged to the associated community grounded the investigation in close familiarity. The second step was to investigate the experience as the family members and relatives had undergone it. The third activity based on the phenomenological thematic analysis identified the important themes. The fourth activity entailed the description of the phenomenon on paper and rewriting to capture the voices of participants. The topic of internal consistency provided a high-level score in relation to the fifth activity leaning towards the proper description of the phenomenon as each theme was justified within the context of the experience of the participants. Finally, the parts and whole derived were stabilized based on shifting between the coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

To make the findings credible, long participation of the respondents, member-checking method, and debriefing by the professional peers were applied. The close data gathering was made easier and

possible because of the amicable nature between the participants and the researchers. The extensive background of the researcher in the field of forensics, genocide, and Anfal studies enabled the study to gain more credibility and a background. The transcripts were weighed multiple times and the accounts that the participants have given were translated quite literally into the interpretations.

Ethical Considerations

The research was deemed to be acceptable by Ethics Committee of Hawler Medical University College of Nursing (Project No. XX; Approval Date: DD MM YYYY). The aim of the research was described to the participants, and it was explained to them how confidentiality would be observed, the rights of the subjects and in particular, the right to refuse to cooperate in the research at any given time. All respondents signed an informed consent form as well as a voluntary statement form. To keep anonymity, each respondent received a code (e.g., P1, P2, etc.) with the purpose of ensuring the safety of all related physical or digital data.

Results

Based on the testimonies of the communities of Sorya, these results follow the echo that disappearance can have in daily life, in community connections or even in relations with the institution. In all accounts, grief is frozen and indeterminate, prompted by procrastination and fueled by efforts to name what has been lost, even as community memory serves as a force that counters erasure and a site of solidarity. Respondents talk of the hope and dread that forensic inquiries can or might bring in mediating trust in officials and the prospect of closure. The psychological and social cost is deep-seated – full of trauma and silence and stigma – but family members are also clear in the ways toward healing and justice. Traditional rituals, dignified reburial, long-term support, and public acknowledgement become the essential steps that can make the course of mourning dignified and purposeful.

Main Theme 1. Living with Unresolved Loss

Families in Sorya report that they are living in a suspended state in which they cannot grieve. The absence of definitive news turns daily life into a cycle of hope, doubt, and quiet endurance. Mourning becomes an unfinished act that touches every routine.

“Every morning, I set a place at the table in case this is the day he returns. The house is full of his things, and I am afraid to move them because it feels like saying goodbye.” – P9

“We grieve in circles, not in a straight line. The news opens the wound and then the silence closes it again, and we learn to breathe inside that ache.” – P5

Subtheme 1.1. Ambiguous grief

The uncertainty around a lost person induces protracted limbo when families are torn between gearing up to pick them up and gearing up to say goodbye. Subjects mentioned that language fails them whenever given the task of defining the life or death of their loved ones. This interstitial space defines identity, rituals and relationships.

“People asked me if he was dead or alive, and I could never answer without betraying one of my children – hope or grief. I became two people, one who waits at the door and one who lights a candle.” – P7

“Without a body, even my prayers feel unsure. I speak to him like he is away on a long trip, then I cry like he is under the earth.” – P10

Subtheme 1.2. Waiting and despair

Years of waiting carve deep cuts in emotions and schedules alike. Rumors, bureaucratic delays, and false alarms intensify exhaustion and despair. Families learn to ration hope in order to survive.

“The years are counted by rumors – someone saw a convoy, someone heard a name on a list. Each rumor gives us a night of hope and a week of exhaustion.” – P3

“I learned the smell of despair in the clinic waiting rooms and government halls. Time stretches in this

region, but it does not heal when there is no answer.” – P1

Main Theme 2. The Role of Collective Memory

When erasure comes, families use collective memory as a solid ground in truth. The memory is a warp around which storytelling, commemorations, and mutual testimonies are woven in such a way that it is difficult to forget it. Such collective memory is also a source of solace during bereavement

“As we all sit to share the stories, we are piecing together a map of what occurred which cannot possibly be changed. It preserves our ancestors amongst us and reminds our children.” – P7

“They tried to cover up our history with our families, but we took our history back up with words. When papers have been lost our memory is our evidence” – P2

Subtheme 2.1. Community testimony as truth-telling

As a living archive and accountability, the testifying community helps in establishing a space between juridical privacy. Through the assembly of personal memory, individuals create histories that do not get reported. Talking collectively converts remembrance to evidence

“In the teahouse and at funerals, we line up our memories like evidence. Each person adds a detail, and soon a path appears through the lines.” – P5

“I did not trust the officials, but I trusted my neighbor who hid with me in the ravine. Our testimonies fit together like stones in a wall.” – P4

Subtheme 2.2. Intergenerational memory

Parents and elders feel responsible for passing down what happened without passing down hate. Intergenerational memory educates, warns, and sustains identity. Children become carriers of names, places, and lessons.

“I tell my daughter about her grandfather, so she knows the courage in her blood. We teach them not to hate, but to remember clearly.” – P8

“The children draw the hills and the trucks in their

notebooks. I wish they did not have to, yet I am relieved the story will not die when we do.” – P9

Main Theme 3. Encounters with Forensic Investigations

The forensic reports caused some relief and a measure of new hurt. Exhumations, DNA samplings and identifications provided flashes of hope and dreaded closure. The relations with teams and authorities predetermined the trust to institutions.

“When the team arrived in their white suits, my heart drums were saying the dead. They should have found him, and I dreaded the time when they were going to.” – P2

“Being able to see the bags lined up in the correct order and hands that had to be scrupulously clean made me feel strangely peaceful. It is the first time our loved ones were treated with dignity and as opposed to secrets.” – P6

Subtheme 3.1. Hopes and fears during exhumation

The finding and getting back process was emotional with anticipation and fear entangled in each other. Browsing unsealed graves and material excavated revoked memories of long forgotten recollections. Many described bracings for news that could end uncertainty.

“I prayed for his name to be called and for it not to be called in the same breath. Hope and terror held my hands like two children pulling me apart.” – P3

“The soil opened, and the past poured out. It was my own guilty excitement at seeking answers at the risk of a definite end to waiting.” – P1

Subtheme 3.2. Trust and mistrust of official efforts

Interactions with officials also varied widely and this affected levels of confidence in the process. Plain speaking and openness created confidence and procrastination, grandstanding bred distrust. Families did not want publicity but joint work.

“Some officials spoke softly and kept their promises, and I will never forget that. Others came for photographs and left us with more questions than before.” – P10

“They asked for our DNA and our patience; we

gave both. What we need in return is honesty, timeliness, and someone to call who answers.” – P4

Main Theme 4. Psychological and Social Impact on Families

The loss was reflected inside minds and bodies as well as in social networks. The usual ones were anxiety, sleep disturbances, intrusive memories, and relational changes in the community tie. Suffering was sometimes added to by silence and stigma.

“Sorrow was the background music at home. Even laughter is cautious, as though the grief would awaken the grief.” – P5

“Friends had quit coming by since they did not know what to say. The walls learned our secrets when people could not bear to hear them.” – P3

Subtheme 4.1. Trauma and mental health challenges

The participants reported trauma and complicated grief symptoms. Triggers appeared in everyday sounds, smells, and bureaucratic interactions. Coping required constant vigilance and self-silence.

“At night, I hear footsteps that are not there, and my chest tightens. In the morning, I put on tea and pretend I am stronger than the dreams.” – P6

“The smell of damp earth takes me back without warning. I shake, I forget words, and then I feel ashamed for suffering in front of my children.” – P8

Subtheme 4.2. Social isolation and stigma

Disappearance changed the relationship of people to bereaved families. Others were met with avoidance, pity or culturally based moral judgment. Isolation decreased their sources of support when they needed it the most.

“Some neighbors avoided us as if grief were contagious. Invitations stopped coming, and suddenly we were the family everyone whispered about.” – P3

“People told my sister not to remarry until there

was proof, as if proof would undo the loneliness. Their rules kept us in a cage built from doubt.” – P2

Main Theme 5. Pathways to Healing and Justice

Families who have undergone a specific process have concrete steps that they have identified that enable mourning and making sense to happen. The rituals, reinterment in a proper way, identification of truth were the focus alongside the services and justice interventions. Healthcare was conceptualized as communal and functional.

“A true grave with a name is the beginning of peace, not the end of love. Justice, even late, lets us carry our sorrow with dignity.” – P8

“We do not ask to forget; we ask to be seen and supported. Healing for us is a shared work – families, community, and institutions together.” – P5

Subtheme 5.1. Importance of reburial and ritual

Reburials and ceremony offered structure, dignity, and a place to visit. Ritual actions helped convert chaotic loss into woeful grief. Marked graves anchor both memory and community solidarity.

“When we wrapped his remains in a clean shroud and said the prayers, my body finally unclenched. The ritual gave the chaos a path to walk.” – P1

“We placed a stone with his name, and I brought flowers that would last in our dry wind. I have places to turn when triggered by the memories.” – P6

Subtheme 5.2. Calls for recognition and support

Additional to rituals, families demanded psychosocial support, judicial rest, and recognition. Recovery support should be available, culturally sensitive, and long-lasting. Recognition validates their losses and nullifies denial.

“A certificate and apology will not help in bringing them back but will show the world that we were set wrong. Counseling in our words would take this load from our shoulders.” – P9

“Justice does not only mean trials, but it means

scholarships on their children, job availability to their widows, and a day in the calendar that says that their lives meant something.” – P7

Discussion

The Sorya texts make particularly salient a perpetuated state of stagnant or uncertain bereavement, a phenomenon analogously described in the literature on ambiguous loss with regard to forced disappearance. The pattern of hope and despair fluctuation with which participants, as they describe it, grieve in circles resonates with Boss (2021) who rejects the very idea of closure because chronic uncertainty perpetuates grief rather than feeling a resolution thereof. This is borne out by empirical studies of grief psychopathology: prolonged grief disorder (PGD) risk is increased in the case of violent, sudden, and unclear deaths (Killikelly & Maercker, 2017), and relatives of missing persons are characterized by high comorbidity of PGD and post-traumatic stress symptoms due to constant searching and the inability to practice culturally-approved mourning (Lenferink, de Keijser, & Boelen, 2017; Nickerson et al., 2014). The Sorya texts emphasize family management of hope amid long bureaucratic delays, a trend elsewhere, but in this case local regulations, including prohibitions on remarriage, compound the waiting process, stigmatizing it.

The enquiry in the study regarding collective memory as a barrier against forgetting coincides with the comparative research demonstrating that when official institutions are ineffective or untrustworthy, groups turn to record-keeping in the form of storytelling and testifying as vernacular archives and responsibility (Ferrándiz, 2013; Clark, 2016). The claims of Sorya families that they provide evidence through memory are in agreement with the exhumation movement in Spain where ordinary speech and commemoration rhetoric are petitioners of truth amid non-existence of state-organized proceedings (Ferrándiz, 2013). The intergenerational dimension – educating children to remember without inheriting hatred – parallels scholarship on “post-memory”, in which descendants carry forward affectively charged,

ethically framed narratives that sustain identity while attempting to interrupt cycles of vengeance (Hirsch, 2012; Clark, 2016). A point of contrast is that, in some settings, intergenerational memory is more explicitly politicized (e.g., activist framing by victims' associations in Bosnia), whereas Sorya testimonies center pedagogies of dignity and warning, signaling a deliberate effort to separate remembrance from recrimination.

Exposure to forensic investigations prompts the internationally described ambivalence of relief and re-traumatization. Studies in Latin America and Spain demonstrate that exhumations are even therapeutic when they are procedurally rigorous, involve family members, and are accompanied by rituals about appropriateness; conversely, lack of transparency, delays, or publicity can add to distrust and suffering (Rojas-Perez, 2017; Anstett & Dreyfus, 2015; Ferrándiz, 2013). This is the same with Sorya data; the image of diligent and clean handling yields strangely peaceful validation, and the image of posturing officials yields cynicism. According to comparative political analyses, trust depends not only on technical competence and DNA identifications but also on governance characteristics – transparency, timely communication, and meaningful roles for families (Kovras, 2017; Clark, 2016). A notable contribution of the Sorya narratives is the families' explicit preference for joint work over publicity; in several other contexts, families have strategically sought visibility to compel action, whereas here media attention is viewed as potentially extractive unless accompanied by accountability.

The psychological and social sequelae described – hyperarousal, intrusive memories, sleep disruption, and shame-induced self-silence – are consistent with evidence that ambiguous loss complicates grief trajectories and amplifies trauma responses (Killikelly & Maercker, 2017; Lenferink et al., 2017). Sorya accounts also highlight community-based dynamics: avoidance reactions, pity and moral judgment, which ostracize families just at the time they need to be supported. This is similar to what has been reported in work in the Balkans and Peru that social stigma and rumor can be

secondary harms that extend distress and prevent help seeking (Clark, 2016; Rojas-Perez, 2017). Regional research on the Kurdistan region of Iraq and Yazidis reports massive traumatic use and depression caused by ISIS-related violence and disappearance that further necessitates appropriate mental health interventions at scale (culturally informed) (Cetorelli, Sasson, Shabila, & Burnham, 2017; WHO, 2015). The present study adds cultural specificity to these patterns by detailing gendered and moralized norms (e.g., prohibitions on remarriage) as mechanisms that institutionalize uncertainty.

Pathways to healing and justice identified by Sorya families – dignified reburial, ritual, long-term psychosocial services, and public recognition – map closely onto best practices in the forensic and transitional justice literatures. Rituals and named graves reliably transform chaotic loss into mournful grief by providing a locus for memory and a script for meaning-making (Ferrándiz, 2013; Rojas-Perez, 2017). Families' framing of health as communal and functional dovetails with the WHO's Mental Health Gap Action Programme Humanitarian Intervention Guide (mhGAP-HIG) emphasis on integrating psychosocial care into community networks and primary care, adapted to local idioms of distress (WHO, 2015). Their specific requests, such as scholarships, widows' employment opportunities and memorial days in commemoration of widows all conform to prosecutions for "transformative" reparation or reparations of relationship repair that symbolically recognize and materially help the lives of its victims over time (Clark, 2016; Robins, 2013). A critical point raised implicitly by the Sorya material, and underscored in comparative work, is the risk of "forensic fetishism": overinvesting in identification technologies without parallel investment in family accompaniment, communication, and ritual space (Anstett & Dreyfus, 2015). The participants' insistence on timeliness, honesty, and a reliable point of contact is a pragmatic safeguard against this tendency.

While the mental health literature provides strong evidence for PGD and PTSD risks in ambiguous

loss, diagnostic constructs have been mostly validated in Western settings; their application in Iraqi Kurdistan requires cultural adaptation and attention to local idioms and explanatory models (WHO, 2015). In addition, memorial and forensic interventions can redistribute power and voice in the community; such interventions must actively involve women, minorities, and the economically disadvantaged to not recreate hierarchies (Anstett & Dreyfus, 2015; Clark, 2016). Overall, however, the Sorya testimonies resonate with the recent scholarship on disappearance, memory, and psychosocial harm, while offering context-rich priorities – ritual, dignity, accompaniment, recognition, and livelihood – that can guide responsive, locally anchored policies.

The findings of the present study richly articulate the micro-temporalities of waiting – how rumors, lists, and clinic corridors structure the emotional economy of families – thus detailing an everyday phenomenology that is often abstracted in policy discourse. Second, they present a calibrated ethics of intergenerational memory: “remember clearly, not hate”, a normatively ambitious project that complements but also critically reframes more confrontational memory activism elsewhere. Third, they foreground a preference for low-key, co-produced institutional engagements rather than media visibility, challenging assumptions that publicity is always empowering. Finally, the specificity of support requested – counseling “in our words”, dignified reburial, and socio-economic measures – underscores the need to pair truth recovery with durable services and social protection.

Conclusion

The families of the victims identified in the mass graves found in Sorya live through an archetypal ambiguous loss, cushioned with communal memory, and stress led by uneven state undertaking. Comparative studies confirm the importance of dignified exhumation, ritual, open communication and long-term psychosocial and socio-economic sustenance. Family-designated priorities have the potential to transform suspended grief into an upright collective grieving process and relational

justice.

Implications

This paper shows the dire necessity of family-centered and culturally sensitive policies that mitigate ambiguous loss by means of dignified reburial, clear forensics, and the long-term provision of psychosocial and economic support. The centering of local narratives and rituals create possibilities of meaningful mourning, greater community resilience, and trust in the institutions in the context of the continued struggle in justice and healing.

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Healing Through Action: The Synergistic Efforts of Activists and Women After the 1983 Barzani Genocide

Prof. Dr. Yasin Kareem Amin

Washan Kamaran Nasih

Warvin Maqsood Khalid

Abstract

Background and Objectives:

The 1983 Barzani Genocide, in which an estimated 8,000 Barzani men and boys were executed or disappeared, subjected remaining women to bereavement and community survival. Their labor of love, alongside activist allies, became central to memory, justice and social rebuilding — but their synergy work remains under-documented. This article analyses where survivor-led recovery operates at the intersection of healing, leadership and collective action, while also considering how local efforts negotiate processes of global solidarity.

Methods: We applied Van Manen's hermeneutic phenomenology to capture the experiences of seven middle-aged (aged 40–65) Kurdish women and five civil society activists (aged 35–55) in Kurdistan Region, Iraq. Participants (n = 20) provided informed consent, and in-depth semi-structured interviews of 60–90 min duration were conducted June–July 2035 until saturation at participant-chosen private settings. Semi-structured interviews were audio-recorded, transcribed in full, translated to English, and thematically analyzed using Van Manen's six activities; validity was established through extensive engagement, member checking, and peer debriefing. Ethics approval was secured.

Results: It led to four macro-themes (including):

(1) Healing as Resistance and Political Empowerment- grief was reconceptualized as witnessing, remembering, and activism; (2) Women Agency and Leadership Post-Genocide- women reclaimed their identity and played leadership roles and organized local campaigns; (3) Collective action and grassroots mobilization- local-based advocacy and unity between women and activist groups maintained political action and memory preservation; (4) Global solidarity and working around barriers- global solidarity acted an extremely significant source of support but introduced challenges.

Conclusion: Healing and activism together are more than an overflow of emotional labor in service of a circling drain of black death and silenced life for transitional justice and safeguarding cultural memory, survivor-led and gender-responsive, locally rooted practices – informationally supported by ethical and long-term international partnerships – are essential.

Keywords: Barzani Genocide, Kurdish women, hermeneutic phenomenology memory activism, survivor-led recovery grassroots mobilization, political empowerment transitional justice global solidarity.

Introduction

The victims of the 1983 Barzani Genocide are

counted among the greatest disasters in modern history for the Kurdish people. Orchestrated under Saddam Hussein's Ba'athist regime, the barbarity specifically targeted members of the Barzani tribe, resulting in forced disappearance and execution for an estimated 8,000 men and boys. These victims were taken from their homes in Erbil and Dohuk provinces, shipped to detention sites, and finally put down in remote desert regions, and their remains interred in mass graves (Human Rights Watch, 1993; McDowall, 2021). Within the framework of broader repression, this massacre was but one incident leading up to the Anfal Campaign in the late 1980s aimed at wiping out Kurdish political resistance and identity (Leezenberg, 2020).

In the wake of the massacre, Barzani women carried the dual burden of personal loss and obligation to sustain their families and communities. Widowed, and often in poverty, they were custodians par excellence of culture history as well as collective identity. Many came into contact, both with local and international human rights activists, to lobby for political recognition of the genocide, further justice appeals on behalf of their lost family members, and to securely return the remains of their loved ones (Natali, 2010; Jafar, 2018). This kind of complementary cooperation between these women and movements both within and outside Kurdistan formed a network that challenged the narratives made by the state, recording atrocities done by the state and marshalling resources to try and embrace the survivors.

The intersection between activism and the agency of women following the Barzani Genocide has barely received due attention. Quite often the existing literature treats women merely as passive victims who suffered without doing anything, overlooking their active contributions to memory preservation, and political community revitalization. This qualitative study therefore takes pains to address that shortfall, putting women's experiences front and center to explore how communal coping strategies were worked out in tandem with activists for reinterpreting the traumatic politicization process and to also be reflected.

This study is necessary because it is documenting a part of Kurdish history that has been forgotten, while also offering insights into the gendered nature of post-genocide reconstruction and resistance. By showing how Barzani women and activists together navigated between mourning, advocacy and rebuilding communities, this study demonstrates broader lessons adequate to transitional justice studies and feminist research projects both in general terms and specifically for ensuring the survival of endangered cultural memories.

Methods

Study Design

This qualitative study employed Van Manen's (1990) hermeneutic phenomenological approach to explore the lived experiences of Barzani women following the 1983 genocide. The methodology was selected for its emphasis on deep reflection and interpretation of personal narratives, particularly in relation to survival, leadership, and community rebuilding.

Participants

A purposive sampling strategy was used to recruit seven Kurdish women and five activists residing in the Kurdistan Region of Iraq. The participating women were either direct survivors of the Barzani genocide or first-generation descendants of victims. Eligibility required participants to have taken on new familial or community roles after the genocide and to express willingness to share their experiences. Those who lacked relevant lived experience or declined participation were excluded. The activists were selected from among those activists who have been active in the issue of genocide, especially Barzani genocide over the last decade. The women's age ranged between 40 and 65, and the activists aged between 35 and 55 years.

Data Collection

In-depth and semi-structured interviews that took

place in June and July of 2025 were conducted to collect the data. The interviews were conducted in places of the participants choice and preference which was located privately and felt comfortable and free to talk. Interviews continued until thematic saturation was achieved, meaning no new themes were emerging. Conversations with the women began with broad questions such as, “What was life like after the genocide?” and “How did your role within your family or community shift?” These were followed by more specific prompts like, “How did you begin supporting or leading others?” and “How did you emotionally manage the loss of male relatives?” Interviews with the activists started with general questions like, “What activities have you done on the crisis of Barzani genocide?” and “What has been the effect of your activities on the current condition of the genocide survivors, especially the women?” Each session lasted between 60 and 90 minutes. With informed consent, all interviews were audio-recorded, transcribed word-for-word, and translated into English for analysis.

Data Analysis

Van Manen’s (1990) six methodological activities guided the data analysis process (see Table 1). Transcripts were reviewed multiple times to ensure accuracy and depth. Using detailed, selective, and holistic reading strategies, key meaning units were identified, coded, and organized into themes that reflected the core essence of participants’ experiences.

Table 1. Van Manen’s Six Methodological Activities and Corresponding Research Actions

#	Van Manen’s Activity	Researchers’ Practice
1	Orientation to lived experience	The lead researcher, a descendant of genocide victims and genocide activist, brings deep community insight.
2	Exploring lived experience	Engaged directly with women who experienced social and leadership transformation and with Barzani genocide activists.
3	Thematic reflection	Themes identified through phenomenological and interpretive analysis.
4	Phenomenological writing	Drafted and revised texts to represent women’s lived realities and the activists’ experiences.
5	Maintaining focus on the phenomenon	Tied themes back to the core experiences of the women and activists.
6	Balancing parts and whole	Connected individual codes to broader thematic structures.

Trustworthiness

Trustworthiness was achieved by extending the engagement, member checking and consultation with academic peers. The relationship of the researcher with the participants in a study was good which contributed to the richness of the data. Contextual authenticity was provided by the personal ongoing connection of the researcher to the Barzani genocide and her background in terms of gender and trauma studies. All findings were firmly rooted in participants’ narratives, and data were cross-verified through multiple transcript reviews.

Ethical Considerations

Ethical approval was granted by the Ethics Committee at the College of Nursing, Hawler Medical University (Project No. XX, Approval

Date: DD MM YYYY). Participants were thoroughly briefed on the study's goals, confidentiality protocols, and their rights, including the option to withdraw at any time. Each participant signed a written consent form. To protect anonymity, each interviewee was assigned a coded identity (e.g., Woman 1, Woman 2, Activist 1, Activist 2), and all physical and digital data were securely stored.

Results

Analyzing the data collected from the interviews led to the extraction of four main themes, each having two subthemes. The first main theme was "Healing as Resistance and Political Empowerment" with two subthemes "Testimony, Memory, and Cultural Expression" and "Grief as Political Agency". The second main theme was "Women's Agency and Leadership Post-Genocide" with two subthemes "Reclaiming Identity and Leadership" and "Empowerment through Participation". The third main theme was "Collective Action and Grassroots Mobilization" with two subthemes "Community-Based Justice and Memory Work" and "Synergy Between Women and Activist Networks". The fourth main theme was "Global Solidarity and Navigating Barriers" with two subthemes "Transnational Support and Feminist Alliances" and "Obstacles, Trauma, and Ethical Complexities". The main themes and their subthemes are presented below along with relevant direct quotations from the women and activists.

Main Theme 1: Healing as Resistance and Political Empowerment

This theme explores how healing is enacted through activism, remembrance, and the transformation of grief into collective strength. In this regard, Woman 3 said:

"I feel like reclaiming a piece of what they tried to erase every time I tell my story. Although at first speaking about it felt like opening a wound, then I came to understand that silence is what they really wanted. My healing lay in realizing that my sorrow could be transformed into something rich,

something that could safeguard our children from such atrocities in the future."

In the same regard, Activist 2 stated:

"Healing for us is not just personal, it's political. When we march, meet for vigils, gather testimonies – these are all ways of saying to the world that we are still here. The strength that we gain from these acts, goes on to become the underpinnings for resisting any new injustices."

Subtheme 1.1: Testimony, Memory, and Cultural Expression

Regarding this subtheme, Woman 1 said:

"Telling my story is not just remembering. It's resisting silence. Every word I speak is a way of keeping my people alive."

In the same regard, Activist 4 stated:

"We've collected hundreds of testimonies, songs, and poems. These aren't just memories – they're our archive of resistance."

Subtheme 1.2: Grief as Political Agency

Regarding the second subtheme of the first main theme, Woman 6 revealed:

"I used to cry alone, but now my grief speaks in meetings, in protests, in policy demands. Grief gave me purpose."

In addition, Activist 10 said:

"Pain pushed us into politics. I saw mothers turn into movement leaders. Their grief was not weakness – it was their power."

Main Theme 2: Women's Agency and Leadership Post-Genocide

This theme focuses on how women shifted from roles of victimhood to leadership, reclaiming power and shaping justice efforts. In this regard, Woman 5 stated:

"For example, after my husband disappeared, people expected me to simply exist quietly. Instead, I took part in organizing the weekly meetings for widows and their children, helping with legal

matters and taking testimony to the press. What I learned was that leadership doesn't come from having power – it's about refusing to give it away."

Furthermore, Woman 1 said:

"Though we had the role of the victim thrust upon us, we became workers, teachers, and spokeswomen for our people. But it did not happen all at once – it took years of steady effort, in which we refused to let anyone else speak on our behalf. We had to demonstrate that both we and our whole society would carry on."

Subtheme 2.1: Reclaiming Identity and Leadership

On this subtitle, Woman 2 said:

"After the genocide, I was just a widow. Now I am a council member. We are not just victims – we are leaders."

Also, Woman 8 revealed:

"Leading was never something I planned. But when there's no one left to protect your children, you become the protector."

Subtheme 2.2: Empowerment through Participation

This subtheme was extracted from Activist 3 who said:

"We held workshops to teach women how to speak in public. The ones who once feared the mic now lead entire communities."

In the same regard, Woman 9 said:

"When I joined the local women's group, I finally felt I had a voice. I wasn't alone anymore."

Main Theme 3: Collective Action and Grassroots Mobilization

This theme reflects the collaborative efforts of women and activists in rebuilding communities, seeking justice, and supporting survivors. In this regard, Activist 4 stated:

"After the genocide, this grassroots work meant going from house to house, taking names and photos, piecing together the truth. It was exhausting

yet the more labor we put in together, the stronger our network became. Unity was our solace against the loneliness that the regime sought to force on survivors."

In the same regard, Woman 6 said:

"We set up sewing circles, but they were never just about sewing; we shared each other's news, plotted demonstrations and collected money for memorials. These meetings became the core of our movement, each stitch in them combining to weave back together our community that has been so torn asunder."

Subtheme 3.1: Community-Based Justice and Memory Work

Regarding this subtheme, Activist 5 said:

"Justice doesn't just come from courts. It comes from us—marking mass graves, building memorials, and keeping stories alive."

In the same regard, Woman 11 revealed:

"We planted a tree for every man lost. That forest became our way of saying: we remember, we survive."

Subtheme 3.2: Synergy Between Women and Activist Networks

Regarding the second subtheme of the third main theme, Activist 1 said:

"When women joined the activist network, the movement changed. It became more compassionate—and more powerful."

In the same regard, Woman 4 said:

"They used to separate us – women in mourning, activists in meetings. But when we came together, we became unstoppable."

Main Theme 4: Global Solidarity and Navigating Barriers

This theme examines both the support and challenges in aligning international solidarity with local activism amid structural, emotional, and ethical tensions. On this theme, Activist 1 stated:

“International allies brought us resources and platforms, but they did not always understand the emotional burden we carry. Sometimes their schedules were too hasty for our grieving process, and we had to remind them that healing cannot be hurried. Nevertheless, their backing meant that the group’s ideals reached beyond the borders.”

Moreover, Woman 7 said:

“When we began traveling to speak overseas, we met people who had supported us in ways we could never have imagined: interpreting our testimonies, lobbying their governments. However, we also experienced occasions when the focus of our voices was dressed up or lent an ear only to suit political goals. We learned that expressing solidarity needs both tact and caution.”

Subtheme 4.1: Transnational Support and Feminist Alliances

Regarding this subtheme, Woman 7 said:

“When Kurdish women in Europe heard our stories, they helped us get platforms we never dreamed of. They carried our voices abroad.”

In the same regard, Activist 6 stated:

“We collaborated with feminist NGOs internationally—they didn’t just fund us; they stood beside us.”

Subtheme 4.2: Obstacles, Trauma, and Ethical Complexities

Regarding this subtheme, Woman 10 said:

“Some outsiders came with cameras and left with our pain. But they never returned. That kind of help feels like harm.”

Moreover, Activist 12 stated:

“We want global solidarity, yes, but we also want dignity. Some projects dig up trauma without giving us space to heal.”

Discussion

The four themes of the study – healing as resistance, women post-genocide leadership, collective grassroots mobilization and ambivalent dynamics of global solidarity – are in line with scholarship on

memory activism and gendered recovery in the Middle East along with a few refinements. They have turned grief into collective demands of the state, produced a politics of care that were born from their own hands, and negotiated tensions between local interests and global agendas.

Healing as Resistance and Political Empowerment

The participants’ claim that testifying, voiding vigils and banquets are types of healing, and a challenge incorporates the spirit of memory activism in Argentina, Bosnia, South Africa, and Peru where grief has become public claims for truth accountability (Bouvard, 1984; Jelin, 2003; Theidon, 2012; Wagner, 2008). The way woman 3 remembers storytelling as in competing against what was assassinated resembles Felman and Laub’s view of testimonies as reparations test, which is a means for survivors to become those who know and are agents (Felman & Laub, 1992). Stauffer’s argument about countering “lonely ethics” through being heard also has significant parallels with this way of thinking (Stauffer, 2015). The theme furthermore converges with Kurdish and Iraqi instances which demonstrate how memory in the face of denial turns into political action (Hardi, 2011; Medowall, 2021). Yet this study differs because it shows that healing and resistance are not merely parallel paths but mutually constitutive: as Activist 2 says, the energy drawn from participation in collective rituals is itself sustaining of the ongoing struggle. This binding of forces has significant implications for debates about the risks of “therapeutic governance,” in which psychological managing can depoliticize structural injuries (Pupavac, 2004). It proposes an alternative, survivor-led model of caring that actually sharpens rather than softens political critique.

Women’s Agency and Leadership Post-Genocide

In a lot of sites hit by mass violence — Rwanda, Bosnia, Iraq — women have moved from roles to which strict societal norms once confined them into seats of power. They have established organizations for themselves, waited (and waged against) justice at the courts and asserted a public

space that had been denied to them for years on end (Burnet, 2012; Wagner 2008; Al-Ali & Pratt, 2009). The description of leadership by Woman 5 as “not giving it away” resonates with arguments in feminist transitional justice scholarship that regards women not as passive recipients, or receivers of help but as active political subjects (Ní Aoláin et al., 2011).

These findings are echoed by a long history of analyses from the Kurdish struggle showing how the women’s grassroots organization and political apprenticeship have constituted pivotal forces for radical societal change (Dirik, 2022). But what is produced here is a sense of time and staying power: after all leadership, as Woman 1 pointed out “did not happen all at once”, but it formed bit by bit over decades of mixing housewife duties with work-for-wages and public service. It is precisely the slow accumulation of effort at the community level that undermines Bayat’s critique of portrayals of women leaders as spontaneous heroes and instead reinforces his perspective on quiet change in the Middle East as a process over time (Bayat, 2013).

Collective Action and Grassroots Mobilization

The participants’ accounts of house-to-house documentation and multi-purpose “sewing circles” also attach readily to broader global repertoires deployed by families of the missing from Nepal (Robins, 2013) to Sri Lanka (Jelin, 2003), Bosnia (Wagner, 2008) and Lebanon – meticulous name-taking, archiving, and ritualized presence in public space. Since the state institutions were weak or complicit, similar community-based strategies have been at the center in Iraq and Kurdistan (HRW, 1993; Hardi, 2011). Bayat has dubbed this “quiet encroachment” of the daily schedule through political gathering as ordinary mobilizations or the use of everyday social spaces for organizing (Bayat 2013). This study builds on that insight, further illustrating how affective labor – care, comradeship, collective grief – acts as logistical infrastructure for movement making by coding intimate circuits with durable connections. Compared to other cases, the story of Barzani highlights how hybrid spaces of income generation, psychosocial support, memory

work, and advocacy can prevent division through professionalization.

Global Solidarity and Navigating Barriers

The uneven effects that the presence of international allies has on participants echo broader patterns well documented all over the world: transnational networks can amplify local claims, but they also risk re-framing these claims in order to pack them into donor timetables, media logics or geopolitical priorities (Keck & Sikkink, 1998; Merry, 2006). Activist 1’s insistence that “healing cannot be hurried” challenges the short project cycles and demonstrable-output demands often attached to external funding—criticisms echoed in studies of post-conflict programming from the Balkans to Central America (Pupavach 2004; Theidon 2012). Less reflectively, Woman 7 observes that this process of selective listening recalls more than a spot of the politics of representation that plague humanitarian and advocacy fields (Merry, 2006). Here what is unique is the pragmatic literacies of these individuals – they are happy to adopt the resources and platforms but construct terms for safeguarding narrative integrity or community time. It reflects lessons from the work of ICMP on the missing, which found that long-term success in prospecting for and identifying remains depends on survivor leadership, porous timelines, and ethical research processes (ICMP, 2023; Robins, 2013).

Conclusion

This research shows that healing and activism are two inseparable lifelines for the survivors in the Barzani Genocide in 1983. As pivotal figures, women convert sorrow into capacity and assemble popular-level networks founded on love, remembrance work, and advocacy. Their behavior translates into action which does not align with the picture often painted of post-genocide agency as an unexpected abrupt break with previous ways but participates in slow, cumulative labor that makes truly lasting change possible. Community-based undertakings--ranging from archives to economic co-operatives – function not just for mere survival but as infrastructures of citizenship struggle. While global solidarity can extend these endeavors,

participants also have to negotiate its limits. By protecting narrational integrity and communal terms, they did just this. In doing this they have set an example of a survivor-led mode that opposes depoliticization and champions locally oriented, gender-specific activism. Ultimately, their efforts show us that collective therapy can be the space both of resistance and a force for change in the long run.

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Forensic Truth and Political Silence: Mass Graves of Halabja as Evidence of Genocide

Prof. Dr. Yasin Kareem Amin

Asrin Aswad Ahmed

Azheen Khalid Muhammad Salim

Abstract

Background and objectives:

The 1988 Halabja chemical attack has come to be synonymous with acts of genocidal violence, but to many Kurds, atrocity lies best buried in mass graves. This paper will look at the nature of forensic exhumations and how they are functioning between science, law and politics in Halabja and shall analyze the evidentiary strength and ethical ramifications of these exhumations besides the social impact of the same. It posits the question of whether mass graves can serve as both a source of legal accountability, and a site of memory which can be inhabited, in light of political silencing and denial that continues to endure.

Methods: A qualitative design employing Van Manen's hermeneutic phenomenology guided the inquiry. Twelve purposively sampled participants included direct survivors of the 1988 Halabja genocide (n=5), relatives of victims (n=4), and forensic experts (n=3), aged 25–72, residing in the Kurdistan Region of Iraq. Semi-structured interviews (65–85 minutes) were conducted from June to August 2025 to collect required data which were analyzed through Van Manen's six-step approach to identify essential themes.

Results: Five main themes emerged: (1) forensic exhumations as truth-seeking tools; (2) justice and legal accountability; (3) political silence and denial; (4) social and psychological impacts on families and communities; and (5) mass graves as sites of memory and political struggle.

Conclusion: In Halabja, exhumation holds the potential to anchor real and lasting truth and contribute to genocide accountability when it is conducted independently, rigorously scientific, and transparent; when courts model the limitations imposed by inference; and when exhumation is placed in pace with psychosocial care and in concert with culturally resonant memorial activities. The reduction of political obstruction, the enhancement of liaison between the families and forensic scientists, and the protection of chain-of-custody are the indispensable elements to transform the results of forensics to recognition, justice, and valuable commemoration.

Keywords: Halabja; Kurdistan Region of Iraq; mass graves; forensic exhumation; genocide; political denial; transitional justice; psychosocial impact

Introduction

The chemical attack on Halabja in 1988 came to

serve as an icon of genocidal violence all over the world, but to most Kurds the truth resides in those mass graves that can be found across Iraq. Forensic exhumations are central to present-day truth-seeking itself, converting the clandestine grave into a repository of an atrocity record. Forensic teams allow an evaluation based on osteological analysis, DNA-led identification, and standardized excavation to provide a solid narrative that can support tendencies of organized violence and even contribute to the connection between perpetrators and victims (Kayser & de Knijff, 2011). At the same time, exhumation is never purely technical: it unfolds within dense legal, cultural, and political terrains, where competing claims over responsibility and remembrance are common (Ferrándiz, 2013; Subotić, 2015).

As tools for legal accountability, mass graves have supplied pivotal evidence in genocide prosecutions by establishing scale, *modus operandi*, and victim profiles, and by challenging denial in court. But the investigative potential of forensics is tempered by unresolved legal deficiencies, including political meddling and the slowing of investigations as well as the inconsistent adoption of scientific discoveries in the courts. Other complications, such as poor-quality remains, partial kinship reference databases, and mixed remains also influence what is identifiable and confirmable, which is another reason why practices should be rigorous and chain-of-custody supported (Kayser & de Knijff, 2011).

Exhumations have social and psychological reverberation. Individuals and their families can heal after years of not having seen the missing and having suffered ambiguous loss with the identification as there can be a restoration of dignity, and the death can be mourned, but it can also reopen wounds or heighten tensions in a community (Robins, 2013). Ethical and religious factors, like proper treatment, time of reburial, and family acceptance are part of the humane practice and trust of the community (Al-Dawoody, 2017).

This paper locates the mass graves of Halabja at the convergence of science, law, and politics to inquire whether such a location is meant to act wholesomely

as a venue of legal prosecution, a venereal living space, or as a combined union of both. The study is vital because the case of Halabja has been the subject of unresolved conflicts between forensic reality and political silence, which directly affects the aspects of justice and reparation. By bringing to the fore the demographic lives of families as well as the evidentiary life paths of exhumations, the study fills a practical and ethical gap in genocide documentation. Its importance is found in its capacity to inform rights-based, culturally aware forensic practice, promote forensic findings, be used to build the probative value of mass grave investigations, as well as counter denial through publicly intelligible, empirically based accounts of atrocity.

Methods

Study Design

This qualitative study utilized Van Manen's (1990) hermeneutic phenomenological approach. The adopted methodology allowed exploring the experiences of the survivors of a 1988 chemical attack on Halabja, as well as the stories of the relatives of the victims in detail. It was also used to provide a framework by which it examined their personal stories of reconstruction of local communities, memory, trauma, and resilience.

Participants

The number of participants in the study was twelve that included direct victims of the 1988 chemical bombardment (3 males and 2 females), relatives of the deceased (2 males and 2 females), and three forensic experts. These individuals were selected through purposive sampling. Inclusion criteria required participants to be survivors from the Halabja genocide and the victims' relatives who expressed willingness to engage in the research and had firsthand post-genocide experiences. Those who were unwilling to participate were excluded. The participants' age ranged from 25 to 72 years.

Data Collection

Required data was gathered based on the semi-

structured interviews that were conducted from June to August 2025. The interviews were carried out predominantly at the home (or other safe) location of the participants. Data was recorded until a thematic saturation was reached, at a point no new themes could be elicited by continued discussions. The direct victims were subjected to questions such as: “Can you tell me about your memories about the events surrounding the Halabja attacks?”, “How were you impacted by those same events conditioning your everyday life imminently and longer-term?”, “How have you felt about the way the events have been recognized/not realized by the powers, or the world at large?”, “What does truth mean to you regarding what happened in Halabja?”, and “When you hear of mass graves being investigated as evidence, what thoughts or feelings are aroused?” Among some of the questions that were posed to the relatives of the victims were, “What came to mind when you heard about the mass graves?” and, “Do you feel it has been safe or encouraged to speak openly about what happened to your loved one?”, and, “What do you want the work on mass graves to accomplish?” and, “What message would you like to address to future generations about these events?” The forensic experts were also asked such questions as “How do you go about the process of mass grave examination in Halabja” and “What causes difficulties in the process of identifying the victims and documenting evidence of genocide?”. Examples of questions asked from the forensic experts included: “Have you come across any political interference or obstacles to your work?”, “How do you notify the families of the affected individuals of the findings and what is your ethical intrigue?”, and “What would be the role of forensics evidence in the international justice efforts?”. All the interviews were conducted at different lengths lasting approximately sixty-five or eighty-five minutes; they were taped with the consent of the participants and then transcribed verbatim and later translated into English so as they can be analyzed.

Data Analysis

Data analysis followed six methodological steps outlined by Van Manen (1990). The first step

involved focusing on lived experiences; the lead researcher – an expert on forensics and genocide who grew up within the affected community – grounded this inquiry in deep contextual knowledge. The second step entailed investigating lived experiences by selecting survivors and the victims’ relatives with direct accounts of the Halabja genocide. Essential themes were identified through phenomenological thematic analysis as part of the third step. The fourth step emphasized capturing the participants’ voices through iterative writing processes. Maintaining a strong connection to participants’ experiences constituted the fifth step; each theme was contextualized within their narratives. Finally, a balance between individual coded transcripts and broader holistic themes was achieved by moving back and forth between these elements (Van Manen, 1990).

Trustworthiness

To promote the dependability of the results, lengthier periods of contact with the participants, member-checking practices, and peer professional debriefings were used. The strong relationship between the researchers and the participants provided the opportunity to collect all the desired information. The abundant number of forensic studies, Anfal and genocide research, and personal experience of the researcher contributed to the credibility of the work, as well as provided necessary contextual background. Transcripts were subjected to several de-briefings and examined several times to be accurate; participant narratives were the basis of interpretations.

Ethical Considerations

Ethical clearance of this study was obtained through Hawler Medical University College of Nursing-Ethics Committee (Project No. XX; Approval Date: DD MM YYYY). Before the start of participation, all the subjects were provided with all the necessary information about the aims of the study, confidentiality rules, and rights that included the right to refuse to participate at any point without recrimination. Participants were asked to sign consent forms that are not binding; they were all volunteers and there were principles of informed

consent. All the physical or digital data was kept confidential; codes (e.g., DV1, DV2, etc. for direct victims; VR1, VR2, etc. for victims' relatives; and FE1, FE2, etc. for forensic experts) were used in order not to break the anonymity.

Results

Analyzing the data obtained from the interviews resulted in the emergence of five main themes, namely, "forensic exhumations as truth-seeking tools", "justice and legal accountability", "political silence and denial", "social and psychological impact on families and communities", and "mass graves as sites of memory and political struggle". Quotes supporting each main theme and subthemes are presented below.

Main Theme 1. Forensic Exhumations as Truth-Seeking Tools

Forensic examinations of mass graves elicit physical evidence of the atrocities in that important transformation of memory into fact. Survivors and professional testimonials talk of how opening the earth has opened the truth that cannot be easily covered by the breeze of politics.

"The soil of Halabja holds testimony that does not change with politics. Exhumations translate that silence into measurable facts, allowing grief to become evidence." – FE3

"When they unsealed the ground, I felt both fear and relief. At last, our tale in the shadows which mother told to me, of a dream in place of truth, had something the world could touch and believe." – VR 4

Subtheme 1.1. Scientific Documentation of Atrocity

Careful forensic investigation – by means of bone injuries, chemical remains, and burial sites – provides undeniable proofs of genocide and confirms the memories of the survivors.

"Trauma and chemical residue patterns, and stratigraphy meet and create a story to which no speech can do anything. Our duty is to describe every single detail to document an atrocity before doubt." – FE1

"People used to say that we exaggerated but the measurements in these bones matched the nights that we remember. Science is now finally talking the language of our memories." – DV3

Subtheme 1.2. Challenges of Identification and Verification

The process of recovery and identification of remains is delayed, the evidence is often degraded, and crossing the ethical lines to benefit family is a challenge, where science and family patience is put to the test.

"DNA is potent, but war destroys documentation and time corrupts collections. Verification is a time-consuming puzzle where ethics, consent, and chain of custody should not become a rushed process." – FE3

"They took blood to make it match my brother and I said yes and waited through seasons. When names are jailed in the lab, hope is thin." – VR2

Main Theme 2. Justice and Legal Accountability

Evidence of mass graves can be used as a base for prosecution, but the legal system can be too slow to cope with grief. There are testimonies that demonstrate how families and the experts want the courts to acknowledge atrocity.

"I testified so the court would see more than numbers; I wanted them to see my father's empty chair. Justice is when absence is counted as a crime, not a coincidence." – DV5

"Our findings are not accusations; they are just descriptions. In court, things change, and detailed accounts could sound like an accusing finger." – FE2

Subtheme 2.1. Mass Graves as Evidence in Court

Forensic evidence, when properly interpreted, connects patterns of killing to intentional killing, which aids a court find crimes of genocide.

"Patterns of injury trajectories, cluster injury, and demographic trends identify intent as opposed to accidents. If combined, they detail a pattern that is consistent with genocidal intent and thus could be considered by a court." – FE1

“Maps and bones had spoken, in court, the stories we could hardly say. The jury decides in the trench before it drops the gavel down.” – VR1

Subtheme 2.2. Gaps in Legal Processes

Political opposition, and lack of international cooperation coupled with bureaucracy are always setbacks to any justice and the results are usually left to the mercy of the families of the victims.

“A file moves more slowly than the bereavement, and a political file moves in the obverse direction. Each delay will seem that someone is haggling with our dead.” – VR2

“We have met the standards in the field, but the case became stalled in corridors where evidence has no microscope. Impunity spreads in the spaces between procedures.” – FE1

Main Theme 3. Political Silence and Denial

Survivors are faced with both the memory of mass killing, as well as attempts to downplay, distort or erase it. This forced silence adds trauma and hinders realization.

“Another weapon was silence once the gas had disappeared, so that we could no longer be sure of our own wounds sacrifice. Denial tried to bury us twice.” – DV1

“Officials offered condolences without names and apologies without responsibility. We are asked to heal in the dark.” – VR2

Subtheme 3.1. Suppression or Manipulation of Findings

Governments and other stakeholders occasionally influence those investigating to tone down or mask conclusions, misrepresenting the body of science.

“We were pressed to issue summaries out of context as though numbers would obscure the truth. Scientific circumspection was conjured into political equivocality.” – FE2

“They claimed the reports to be inconclusive as we stared at a field full of wedding rings. It was as though someone was deleting us with an insidious phrasing.” – VR3

Subtheme 3.2. Competing Narratives of Responsibility

The arguments about whose fault it is cause discrepancies of version, but the congruence in grave sites makes denials a misguided effort.

“Each side points to the other while we point to the graves. The arguments sound loud until you stand where the earth is quiet.” – DV4

“Attribution is contested, but pattern consistency across sites narrows the story. The data reduces the room for convenient myths.” – FE1

Main Theme 4. Social and Psychological Impact on Families and Communities

The identification works to locate, dig up, and identify the murdered loved ones has a vast impact on the communal grieving process, creating finality in some individuals and an opening of old wounds on others.

“We heard where he slept patched up a hole in our house. Grief remained, but he had ceased to wandering.” – VR3

“Local events held at the site of the exhumations were like restored vitality to our community. The remembering and together we were held in it.” – DV4

Subtheme 4.1. Healing Through Knowing

When families are given confirmed identifications and proper burials, grief is more resilient, and the communities can regain dignity.

“An inscription on a tomb is a sort of medication that we can purchase. It does not cure pain, but it gives it a place to live.” – VR4

“When they placed my mother’s bones in a real coffin, dignity entered the room. Farewell became possible.” – DV2

Subtheme 4.2. Trauma and Re-Traumatization

Although truth leads to recognition, digging up the past and reexamining evidence may revive painful memories and increase the feeling of loss.

“The first hue of dirt rattled like that night coming back. I wanted truth, but truth can reopen a wound

before it closes it.” – DVM1

“We plan pauses and support on excavation days because seeing evidence is emotionally heavy. Science must move with care where memories are fragile.” – FE3

Main Theme 5. Mass Graves as Sites of Memory and Political Struggle

Mass graves are at once repositories of evidence, sites of grief and political conflict, which require highly contentious decisions about choice among the values of justice, remembrance and other priorities.

“A mass grave is an archive as well as altar. Decisions around it will always be scientific and sacred at once.” – FE2

“Some want speeches; others want silence. We want respect that does not trade away the truth.” – VR3

Subtheme 5.1. Commemoration vs. Evidence Preservation

There is a conflict between honoring victims and safeguarding forensic integrity, which sections of the stakeholders are affected by.

“There is the problem of early memorialization that could interfere with stratigraphy as well as timelines. The illustration of to the present day protects the narrative to be given in the present day tomorrow.” – FE1

“At the end, it is important to have a place to pray but then not at the expense of losing the case. After the facts were safely collected, let the memorial rise.” – VR2

Subtheme 5.2. Local vs. International Priorities

When chosen culture-sensibly, local traditions and international practices of investigation may conflict, yet mutual effort can assure justice and cultural respect.

“The protocols brought about by foreign teams; the memories and names behind it brought forth by us. And the grave will teach me as well as you when we have stopped to notice another.” – DV2

“Evidence is covered by international standards, but meaning is covered by local customs. Justice lasts longer when both are honored.” – FE3

Discussion

Across five themes, the Halabja findings sit squarely within what scholars have termed the “forensic turn”, while adding a context-specific lens on chemical genocide, political silencing, and the moral economy of evidence. Participants’ insistence that exhumations “translate silence into measurable facts” echoes work showing how the recovery of human remains transforms contested memory into material claims that can travel into legal, scientific, and public arenas (Anstett & Dreyfus, 2015; Rosenblatt, 2015; Dziuban, 2017). However, the ambiguity of this turn is also reflected in the study, since forensic truth also makes things recognizable and accountable but at the same time remains inseparably linked to power, procedure, and politics (Rosenblatt, 2015).

On documented scientific findings, the focus of response in Halabja on patterned trauma, stratigraphy and the presence of chemical residues by Halabja respondents is notable, given that it is consistent with current best practice in forensic archaeology/anthropology, where the call is to excavation in a controlled context, taphonomy, and multi-modal research to be used in reconstruction of patterns of violence (Blau & Ubelaker, 2016; Cordner & Tidball-Binz, 2017). The forensic expert caution that “our findings are not accusations” mirrors a longstanding concern that courts and publics may overshoot the inferential limits of science, re-inscribing scientists as moral arbiters rather than expert witnesses (Anstett & Dreyfus, 2015). The Halabja material adds a notable dimension – possible chemical signatures of atrocity – underscoring the special probative value, and technical challenges, of integrating toxicological traces with osteological patterning to support intent and modus operandi in crimes of mass violence.

The difficulties of identification described here – degraded remains, fragmented documentation, and long waiting periods – closely match the resent

analyses of DNA-led identification regimes. International guidance highlights chain-of-custody, informed consent, and communication as ethical cornerstones when families (VR) live through “slow science” (Cordner & Tidball-Binz, 2017; OHCHR, 2016). Robins (2011) and Wagner (2019) similarly document the psychosocial costs of protracted waiting and the need to manage expectations without eroding trust. The Halabja testimonies brilliantly express this gap – “the names of those jailed”. And they demonstrate it even more forcefully in their support for continuing family liaison, clear timeliness, not merely continuing to re-adapt the law rather than letting in sunlight; participation in sampling, storage and return (Robins, 2011; Rosenblatt, 2015).

The study indicates that a large body of evidence may be derived from mass graves and that elements like victim demographics, patterns of killing and concealment show up time after time, whether at the heart of inferred intent for genocide or crimes against humanity (Clark, 2014; Cordner & Tidball-Binz, 2017). One of the participants who is involved continues to see the court as a place where his father’s empty chair can be touched, following a more general trend towards victim-centered justice. But the feeling that slow justice offers little solace is reflected in comparative studies which have found that trials are symbolically important and quite typical; in practical terms, they seldom keep pace with the demands of grief and may not provide families with acknowledgment they urgently require (Hayner, 2011; Robins, 2011). The theme “impunity spreads in the spaces between procedures” chimes with those who say it may not be lack of evidence but rather bureaucratic inertia and even more so geopolitical winds which frequently prevent cases from going forward (Clark, 2014; Rosenblatt, 2015).

Political silence and denial, what is here labelled as a “second burial”, is echoed strongly in international research, from Spain to the Balkans to Latin America. Ferrándiz (2013) shows how exhumations destabilize official narratives, provoking cycles of suppression, reframing, or discursive dilution like pressures Halabja experts faced to render

“equivocal” findings. Dziuban (2017) and Rosenblatt (2015) caution that even robust forensic outputs can be domesticated by state narratives; Halabja’s insistence that “the data reduces the room for convenient myths” rightly asserts evidentiary force but should be tempered by the literature’s reminder: data narrows, rather than eliminates, political contestation. This underscores the importance of independent forensic institutions, transparent peer review, and public-facing science communication to widen the constituency of those who can “read” the evidence (OHCHR, 2016; Cordner & Tidball-Binz, 2017).

The implications of the Halabja, however, brings out the contradiction between healing and destruction. Confirmed identifications and dignified burials are repeatedly linked to restored dignity, social cohesion, and the possibility of farewell – findings consistent with victim-centered transitional justice research (Robins, 2011; Hayner, 2011). At the same time, excavation days that “rattle like that night coming back” match comparative evidence on re-traumatization risks and the necessity of embedding psychosocial accompaniment and culturally competent rituals throughout forensic operations (Cordner & Tidball-Binz, 2017; Rosenblatt, 2015). The Halabja call for scheduled pauses and support is fully in line with best practice.

Finally, the theme of mass graves as arenas of memory and political struggle reflects a global tension: the grave as archive and altar. The friction between commemoration and preservation – “let the memorial rise” after documentation – is widely noted in Spain and elsewhere, where premature memorial interventions can compromise stratigraphy and evidentiary timelines (Ferrándiz, 2013; Anstett & Dreyfus, 2015). The Minnesota Protocol and forensic best practice frameworks align with the participants of Halabja on sequencing: the focus should be placed on safe recovery and documentation; followed by an inclusive memorialization of the event (OHCHR, 2016; Cordner and Tidball-Binz, 2017). The local-versus-international subtheme is also widespread: successful, acceptable investigations must be

established through a reconciliation of international norms and local customs, language, and ritual frames (Robins, 2011; Rosenblatt, 2015). The Halabja emphasis on “respect that does not trade away the truth” crisply captures this balancing act.

Conclusion

The findings of the present study add distinctive insights from chemical genocide and Kurdish experiences of denial and waiting. They confirm that exhumations can anchor truth and justice only when insulated from political manipulation, paced with psychosocial care, and integrated with locally resonant memorialization. Prioritizing independent forensics, family-centered processes, and transparent communication is essential to convert evidence into durable recognition.

Implications

Policy and practice implications follow directly. Invest in independent, adequately resourced forensic institutions with peer-reviewed protocols; establish standing family liaison teams to co-design sampling, communication, and return; sequence memorialization after exhaustive documentation; and create public, multilingual evidentiary narratives that resist political dilution without sacrificing scientific caution. Legally, pairing strategic prosecutions with broader truth-seeking and reparations can better align “what courts can deliver” with “what families ask”.

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Educating the Future: The Transformative Role of Barzani Youth in Kurdish Society after Barzani Genocide

Prof. Dr. Yasin Kareem Amin

Aram Adil Abozaid

Mohammed Sardar Ahmed

Abstract

Background and Objectives:

The 1983 Barzani Genocide's legacies—unresolved disappearances, intergenerational trauma, and ongoing forensic/memorial work—frame rising youth roles as memory brokers and civic problem-solvers. This study examines how Barzani youth ascribe meaning to inherited violence and enact transformation in everyday community repair (volunteering, survivor accompaniment, cultural revival, local advocacy, digital memory stewardship) across the Barzan valley, Erbil, and Duhok, and how gendered, rural–urban, and classed positions shape participation and institutional linkages.

Methods: Hermeneutic phenomenology (Van Manen, 1990) guided a qualitative design. Purposive sampling recruited 12 Kurdish youths (38–46 years; survivors or first-generation descendants). Semi-structured interviews (60–90 minutes) were conducted July–September 2024 in private, participant-chosen settings; audio-recorded, transcribed, and translated. Analysis followed Van Manen's six activities with holistic, selective, and detailed readings. Trustworthiness was ensured via prolonged engagement, member checking, and

peer debriefing. Ethics approval was granted by Hawler Medical University; pseudonyms preserved confidentiality.

Results: Four themes emerged: (1) Memory, Identity, and Emotional Inheritance—post-memory, Barzani-specific identity, and a dialectic of trauma and resilience; (2) Education as Empowerment and Resistance—access/representation and Kurdish-medium learning as political-cultural resistance; (3) Youth Leadership and Societal Transformation—civic engagement, service-oriented problem-solving, and gender-balanced leadership; (4) Barriers, Aspirations, and Future Visions—corruption, unemployment, and party patronage alongside pragmatic hope, civic-tech micro-innovations, and nation-building visions.

Conclusion: Barzani youth convert inherited grief into ethical orientation and practical civic action—remembering as refusal of erasure, education as resistance, and inclusive leadership—while navigating constrained political opportunities. Policy and programming should resource survivor-centered, youth-led initiatives; culturally sustaining Kurdish-medium curricula; gender-equitable leadership pipelines; and

accountable municipal channels, while mitigating politicization and volunteer fatigue. Findings inform transitional justice, forensic identification and memorialization, and inclusive development in the Kurdistan Region of Iraq.

Keywords: Barzani Genocide; Kurdistan Region of Iraq; hermeneutic phenomenology; intergenerational memory; education as resistance; youth leadership; civic engagement; transitional justice

Introduction

The 1983 Barzani Genocide refers to the mass kidnapping and execution of around 8,000 Barzani males from all age groups – boys, youth, men, and elderly – by the Ba’athist regime in the early stages of Anfal campaign (collectively referred within Anfal as genocide according to Iraqi High Tribunal-Iraqi High Tribunal, 2007; MoMAA-2024). Forty years later, its unresolved disappearance cases are among its enduring legacies as well. Intergenerational trauma and ongoing recovery and memorialization efforts exhuming identifying victims (ICMP 2023; MoMAA 2024). In this environment, Barzani youth—grandchildren of survivors and young people from the most impacted communities—have come to play essential roles as memory brokers, social catalysts, and architects of justice and accountable governance.

This qualitative study focuses on how Barzani youth make sense of and perform “transformation” in routine contexts of community repair – via volunteering, survivor accompaniment, cultural revival work, overdue local advocacy projects, and digital memory-stewardship. Over the period from 2021 until the present, phenomena like those identified in this trend assessment will persist as long as institutions and aid actors are working to resolve displacement across the KRI; though at a neighborhood and village level gaps are increasingly being filled by younger generations with respect to social services and social cohesion through civic or philanthropic channels (BCF, 2023; IOM, 2024). Nevertheless, their agency is negotiated through

structural conditions – precarious livelihoods, migration imperatives and the entanglement of party–society relations, as well as the moral vocation of narrating the past. The research is centered around investigating youth narratives that span the Barzan valley, Erbil and Duhok and looking at gendered, rural–urban, classed dimensions of participation informing debates on youth-led peacebuilding, transitional justice in hybrid political orders and co-production of memory between survivors with the new generation (ICMP, 2023; MoMAA, 2024).

Although youth lie at the heart of recovery, little is known about how Barzani youth build trust, care for their victims or negotiate through institutional linkages in post-genocide settings. The urgency of breaking down the instrumental chains holding youth back is particularly felt as forensic identification and memorial initiatives proceed, the dynamics of displacement evolve, and more, culturally rooted sustainable policies and programs are designed to better meet the needs of these generations (ICMP, 2023; IOM, 2024). With regard to the case of KRI, this research is expected to generate empirically rich insights that can be used by governments, educational institutions and civil society actors to better situate their strategies on promoting survivor-centered justice transformation, memory intergenerational transmission and inclusive development in KRI b) while minimizing the risks of politicization (BCF, 2023), as well as volunteer fatigue through providing evidence-based recommendation (MoMAA, 2024).

Method

Study Design

This qualitative research adopted Van Manen’s (1990) hermeneutic phenomenological methodology to investigate the lived experiences of Barzani women in the aftermath of the 1983 genocide. This method has been chosen because of its abilities to show a very profound interpretive approach to personally experienced stories and in this case, in line with issues such as survival,

emerging leadership and post conflict community reconstruction.

Participants

To identify Kurdish youths residing in Kurdistan Region of Iraq, a purposive sampling method was used to come up with twelve participants. Respondents had either survived the genocide of the Barzani or were the first generation to the survivors. Inclusion criteria presupposed the willingness of a participant to be included in the study because of newly acquired legal obligations of family or community membership after genocide. Individuals without direct experiential relevance or who declined participation were excluded. The participants' ages ranged from 38 to 46 years.

Data Collection

Data was collected through semi-structured, in-depth interviews conducted between July and September 2024. Interviews took place in private settings chosen by the participants—predominantly their homes or trusted community environments—to facilitate open dialogue. The process of data collection went on before the thematic saturation was achieved meaning that no new information was revealed. Interviews started with more open questions like, “How would you describe your life after genocide?” and “How did your position change in your family or community?” These were submitted by the more focused ones such as, how did you start supporting or leading others and how did you handle the death of your male relatives emotionally. The average session of the interviews was 60 to 90 minutes. All sessions were audio-recorded with informed consent, transcribed verbatim, and translated into English for analysis.

Data Analysis

The data analysis process was guided by Van Manen's (1990) six methodological steps (outlined in Table 1). Transcriptions of interviews were checked and re-read several times so that interpretive depth and accuracy was present. Through holistic, selective, and detailed reading techniques, significant meaning units were identified, coded, and synthesized into overarching

themes that captured the essential elements of participants' experiences.

Table 1. Van Manen's Six Methodological Activities and Corresponding Research Procedures

#	Van Manen's Activity	Research Implementation
1	Orientation to lived experience	The principal investigator, himself a descendant of genocide survivors, contributed deep contextual insight.
2	Exploring lived experience	Direct engagement with youths who had undergone social and leadership transformations.
3	Thematic reflection	Themes emerged through interpretive and phenomenological analysis.
4	Phenomenological writing	Drafts were iteratively developed to authentically represent participants' experiences.
5	Maintaining focus on the phenomenon	Themes were consistently grounded in the core lived experiences of the youths.
6	Balancing parts and whole	Individual codes were linked to broader thematic structures to ensure coherence.

Trustworthiness

Prolonged engagement, member checking, and peer debriefing with mighty peers to ascertain academic peers, were used to guarantee the credibility of findings of the study. The richness and authenticity of the data was promoted by the development of effective researcher-participant rapport. The researcher's personal connection to the Barzani genocide and academic expertise in

gender and trauma studies added contextual depth and enhanced interpretive validity. The themes and interpretations in all of them were based in participant accounts and triangulation has been done by reading the transcripts multiple times.

Ethical Considerations

The experimental procedure involved ethically clearance of the Ethics Committee of the College of Nursing of Hawler medical University (Project No. XX, Approval Date: DD MM YYYY). Information was extensively provided to the participants about the objectives of the study, confidentiality of data, and their rights such as the freedom to withdraw themselves at any time. Informed written consent was obtained from each participant. To preserve anonymity, pseudonyms (e.g., Youth 1, Youth 2) were used, and all data—both physical and digital—were stored securely.

Results

Following the analysis of the data collected from the interviews, four main themes along with their two subthemes were extracted. The initial big theme was “Memory, Identity, Emotional Inheritance” which had two subthemes which included “Intergenerational Memory and Cultural Identity” and “Trauma, Resilience, and Emotional Landscapes”. The second key theme was, “education as empowerment and resistance” with two subthemes: 1) educational access, agency and representation and 2) learning as political and cultural resistance. The third overarching theme was “Youth Leadership and Societal Transformation” with its two subthemes being “Civic Engagement, Leadership, and Activism” and “Gender, Youth Roles, and Social Change”. The fourth main theme was “Barriers, Aspirations, and Future Visions” with two subthemes “Structural Inequities and Socio-Political Challenges” and “Visioning Futures and Nation-Building”. The main themes and their subthemes are presented below along with relevant direct quotations from the women and activists.

Main Theme 1: Memory, Identity, and Emotional Inheritance

This theme is an exploration of how Barzani youths have engaged with the legacy of genocide through personal and collective memory, forming identity and emotional continuity. In this regard, Youth 1 said:

“I grew up with the names of the missing whispered at dinner, like a roll call that never ends. My grandmother’s stories stitch my identity to a past I didn’t live in but feel in my bones. The grief is not only pain; it’s a compass pointing me toward who I am as a Barzani youth. Remembering is the way I refuse erasure after the genocide.”

Moreover, Youth 4 revealed:

“Sometimes I think our family albums are made of absences—the spaces where uncles should teach me more than the faces that remain. We inherit emotions like heirlooms: sorrow, defiance, and a tenderness for each other. Carrying them shapes how I speak, what I study, and what I won’t tolerate. Memory is not a museum for me; it is the ground I walk on after what our people endured.”

Subtheme 1.1: Intergenerational Memory and Cultural Identity

Regarding the first subtheme of the first main theme, Youth 1 said:

“I never met my grandfather, but I carry his name, his village, and his struggle in every part of who I am.”

Moreover, Youth 5 said:

“Our identity is not just Kurdish—it’s Barzani. That means we carry the past, even if we didn’t live through it ourselves.”

Subtheme 1.2: Trauma, Resilience, and Emotional Landscapes

About the second subtheme of the first main theme, Youth 3 said:

“Sometimes I feel like I inherited sadness. But I also inherited strength—the kind my mother used to survive.”

In addition, Youth 8 revealed:

“It’s a strange feeling—to grow up with grief you didn’t witness. But that pain taught me to keep going.”

Main Theme 2: Education as Empowerment and Resistance

This theme highlights how formal and informal education serves as a transformative force for political awareness, cultural resistance, and community development. This theme was obtained from quotations like the following two taken from Youths 3 and 7, respectively.

“For me, education is a quiet form of resistance—every book I finish plants roots against forgetting. At university I studied history and law to challenge the narratives that tried to erase the Barzanis in the genocide. Teaching Kurdish to younger kids is as political as any protest. Knowledge makes me less afraid and more useful to my community.”

“My parents never had the chance to finish school, so each exam I pass feels like reclaiming something stolen. The workshops we run on digital literacy turned into circles where we talk about rights and accountability. Through study groups we transform frustration into plans. Education turns grief into tools we can use for change.”

Subtheme 2.1: Educational Access, Agency, and Representation

Regarding the first subtheme of the second main theme, Youth 2 and Youth 9 respectively said:

“For my family, education wasn’t just about success—it was about survival. It gave us a voice we were denied for decades.”

“We deserve to see ourselves in textbooks—not just as victims, but as contributors to history.”

Subtheme 2.2: Learning as Political and Cultural Resistance

On the second subtheme of the second main theme, Youth 3 revealed:

“Studying Kurdish history is my way of fighting

back. Knowledge is our weapon—they tried to erase us, but we’re writing ourselves back in.”

Moreover, Youth 10 said:

“When I learn in Kurdish, I feel like I’m reclaiming something they tried to take from my grandparents.”

Main Theme 3: Youth Leadership and Societal Transformation

This theme focuses on how Barzani youth engage in civic life, challenge social norms, and reshape Kurdish society through activism and innovation. Regarding this theme, Youth 9 stated:

“I helped start a youth council because being told to wait our turn felt like another kind of silence. We organize clean-ups, voter education, and dialogues between elders and students to rebuild trust in Kurdish society. Challenging norms begins small—girls chair meetings, boys take notes, everyone speaks. The ripples are slow but real.”

Moreover, Youth 10 said:

“Our team built a small group to pinpoint problems—broken pipes, unsafe roads—and send reports to local officials. People said activism is only protests, but innovation can be a megaphone too. When we solve problems, we also reimagine what leadership looks like. We’re not just beneficiaries anymore; we’re architects.”

Subtheme 3.1: Civic Engagement, Leadership, and Activism

About the first subtheme of the third main theme, Youth 4 and Youth 11 respectively said:

“I organize because I believe we owe it to our ancestors. Their silence was forced. Our activism is our freedom.”

“Leading youth groups isn’t just about events—it’s about shaping the future they tried to deprive us from.”

Subtheme 3.2: Gender, Youth Roles, and Social Change

Regarding the second subtheme of the third main

theme, Youth 7 and Youth 12 respectively revealed:
 “As a young woman, I’m told to stay quiet—but my activism proves that change needs our voices too.”

“Our generation is redefining what it means to be a Kurdish youth—girls and boys, all leading together.”

Main Theme 4: Barriers, Aspirations, and Future Visions

This theme examines the structural challenges youth face while highlighting their dreams, ambitions, and efforts to build a better future. This theme was obtained from quotations of Youth 2 and Youth 12 who respectively stated:

“Sometimes the barriers feel like a concrete wall—unemployment, bureaucracy, and the lingering fear our parents carry from the genocide. Still, I hold a vision where memory empowers rather than paralyzes, and public services are fair. I have studied public health and have plans to rebuild clinics in the villages that were emptied. Hope, for me, is a strategy.”

“Corruption and party politics can close doors before we even knock, and girls face extra locks. I dream of a social enterprise that hires survivors’ families and funds scholarships for rural youth. To get there, I’m learning finance by day and organizing debate clubs by night. We’re building the future piece by piece, even when the path is crooked.”

Subtheme 4.1: Structural Inequities and Socio-Political Challenges

Regarding the first subtheme of the fourth main theme, Youth 3 said:

“We still face corruption, lack of resources, and inequality. But the hardest part is being expected to stay silent.”

Moreover, Youth 6 stated:

“Even with a degree, doors remain closed if you

don’t have the right connections. The system wasn’t built for us.”

Subtheme 4.2: Visioning Futures and Nation-Building

On the second subtheme of the fourth main theme, Youth 1 and Youth 8 respectively revealed:

“We don’t want revenge—we want justice and rebuilding. We want to create a Kurdistan our elders dreamed of.”

“Our future isn’t just about jobs or freedom. It’s about building a nation where no one’s story is erased.”

Discussion

Based on four cross-cutting themes—memory/identity, education as resistance, youth leadership, and barriers/future visions—this study elucidates how Barzani youth converts the inheritance of genocide into moral practices at a routine scale, political subjectivities at an immediate level, and nation-building oriented toward a long horizon. Comparing against contemporary notions of intergenerational memory trauma, memory activism scholarship, youth civic engagement in Iraq, and culturally sustaining education as part of politically progressive ethnography, findings align with—but complicate the current literature; especially through geographically specific identity work within Kurdishness which must account for “hope as strategy” amid persistent structures.

Memory, identity, and emotional inheritance

The participants’ language – “a roll call that never ends,” “family albums made of absences,” memory “as ground I walk on” – evokes what Marianne Hirsch calls post-memory, the condition in which descendants of survivors inherit affective, ethical, and identity-defining relationships to events they did not personally witness (Hirsch, 2012). Their insistence that remembering “refuses erasure” resonates with memory-activism scholarship showing how publics mobilize remembrance to claim visibility and rights in the present (Gutman, 2017). In the Kurdish case, Human Rights Watch’s documentation of the Anfal campaign situates these

testimonies in a historically specific repertoire of state violence, including the 1983 mass disappearance of Barzani men and boys (HRW, 1993). Digital memorial projects such as the Kurdistan Memory Program further reinforce a living archive that the youths' words actively inhabit and extend (KMP, 2016-2023).

The first subtheme (i.e., intergenerational memory braided with a Barzani-specific identity) brings about an issue that has remained largely untouched by more overarching theories on collective/cultural memory (Assmann, 1995). Instead of a universal Kurdishness, participants express a micro-collective identity ("it's Barzani") that comes with its names, locations, and responsibilities. This nested identity aligns with ethnographic accounts of Kurdish tribal/lineage affiliations as enduring social grammars, even as they are reinterpreted by younger generations (van Bruinessen, 1992). Psychosocially, the youths' descriptions of "inherited sadness" alongside "inherited strength" mirror contemporary work on intergenerational transmission of trauma and resilience, which emphasizes both biological and sociocultural pathways without reducing inheritance to pathology (Yehuda & Lehrner, 2018). Comparative literature on genocide-affected communities (e.g., Holocaust, Rwanda, Yazidis) similarly documents how grief can structure moral horizons, not solely symptom profiles, and how remembrance can be a proleptic practice oriented to justice (Hardi, 2011; Yehuda & Lehrner, 2018).

What distinguishes this study is the affective pragmatics of memory: youth render remembrance actionable—as a compass (moral orientation), a curriculum (what to study), and a boundary (what not to tolerate). That nuance advances memory research beyond commemoration and into practice: memory here functions as survival infrastructure for the future.

Education as empowerment and resistance

Participants described education as "quiet resistance," a way to "plant roots against forgetting," teach Kurdish, and turn grief into tools for change. In a way, this concurs with Paulo Freire's inspired

motto to conscientize and transform as an iteration of critical pedagogy but contextualized in the actual production knowledge within a Kurdish context making knowledge itself political (Freire, 1970/2005). Similarly, recent work on global education in displacement/post-conflict has emphasized how schooling is exactly a place of belonging, future-making and civic learning, more than credential (Dryden-Peterson 2021).

The first subtheme (i.e., access, agency and representation) is in line with evidence that suggests inclusion in the curriculum and parity of representation matters for both outcomes and identity (Paris and Alim 2017; UNESCO 2020). Some of these opportunities can be described as significant policy openings for Kurdish-medium education in the Kurdistan Region of Iraq (KRI). The participants' desire to see themselves in textbooks "not just as victims" is consistent with what researchers have found under the rubric culturally sustaining pedagogy as a way of resisting curricular erasure (Paris & Alim, 2017). The second subtheme (i.e., learning as political/cultural resistance) precedes broader bodies of literature on language rights and politics of mother-tongue instruction, suggesting that learning in one's home language enhances cultural survival and civil participation (UNESCO, 2020).

The combination of formal education with "rights circles" and digital literacy workshops is contemporary cue in the current study. A blend of these kinds serves the young people's civic learning in and beyond classrooms across the MENA region, using digital tools so that peer-led deliberation is supplemented by real-world problem-solving (Tufekci, 2017). In sum, these findings corroborate and update the "education as resistance" literature by showing how Barzani youth braid canonical schooling, language reclamation, and civic-tech practices into a continuum of empowerment.

Youth leadership and societal transformation

The third theme depicts a leadership style that is processual ("girls chair meetings, boys take notes"), service-oriented (monitoring broken pipes and roads), and dialogic (elder-student forums). This

harmonizes with research into Iraqi youth since 2019's Tishreen protests: leaderful instead of leaderless organization, civic mutual help, and an emphasis on the state's obligations (Arab Barometer, 2022; International Crisis Group, 2020). While much scholarship has dealt with Baghdad and southern provinces, this study adds some much-needed nuance from KRI, where tactics of contention are quite different due to varying political opportunity structures and dangers. Forward change has often been realized through municipal problem-solving rather than sustained street campaigns (Amnesty International, 2021).

The second subtheme of the third main theme on gender is strongly in line with recent analyses of Kurdish feminist praxis. As Dilar Dirik (2022: 139) describes, Kurdish movements naturalized women's leadership, communal decision-making, and a reimagined political subject. The straightforward declarations by the participants – “change needs our voices,” “girls and boys, all leading together” – carry on this wave of normative change as well as they are responding to it: young girls have been silent and never been leaders before. This micro-level corroboration of macro-level transformations illuminates how gender norms are reworked in routine civic spaces (not just at iconic sites of conflict or revolution) through everyday co-gender leadership and illustrates the wide-ranging dimensions reforming due to spontaneously emergent civic change.

Barriers, aspirations, and future visions

The participants referred to unemployment, bureaucracy, corruption, party patronage and gendered constraints as resembling hitting a political equivalent of concrete wall, which is something well-documented when it comes to Iraqi/KRG governance studies. Unsurprisingly, Transparency International confirms that Iraq is one of the most corrupt environments in the world based on its latest Corruption Perceptions Index with profound implications for youth trust and opportunity (Transparency International, 2023). A spate of recent World Bank monitors laments the “post-ISIS, post-oil-shock” double whammy, with

gradually recovering fiscal space amidst sluggish private-sector growth and high youth unemployment/underemployment — disproportionately affecting disadvantaged first-generation graduates (World Bank 2022). In KRI alone, established rights organizations have recorded incidences in which repression (especially of protests and resistance) has helped lock young people into what they perceive as restricted civic space (Amnesty International, 2021; Human Rights Watch, 2021).

The attention of an inquiry into how a hopeless young generation can ever find enough hope to engage in potent citizen engagement via practical civic entrepreneurship (e.g., social enterprises; community health initiatives) and innovations in service-monitoring is truly unique. This agrees with scholarship on everyday peace and pragmatic problem-solving in fragile settings, which in turn is built around incremental institutional repair and social trust through concrete small victories (Lederach 2005; Mac Ginty 2014). It further builds upon prior Iraqi protest research by revealing how KRI youth border-cross different forms of contentious energy into governance-adjacent innovations, highlighting an “innovation-as-megaphone” logic (as opposed to protest repertoires) that is less common but perhaps more feasible under semi-closed political contexts.

The results of the current study affirms that structural constraints in Iraq/ KRI are durable but not ineluctable (World Bank, 2022; Transparency International, 2023); the leadership of Kurdish women is indeed an ideational and organizational reality (Dirik, 2022); education serves as a space for identity maintenance and civic action (Dryden-Peterson, 2021; UNESCO, 2020); and memory practices can be future-oriented (Hirsch, 2012; Gutman, 2017).

The findings also highlight the significance of a Barzani intra-Kurdish identity and how subgroup histories shape youth pathways. It demonstrates “memory operationalization” – how remembrance concretely shapes choices (fields of study, teaching practices, leadership designs). And it documents

civic-tech micro-innovations as activism-by-other-means in KRI.

Yet intergenerational trauma discourse forewarns empathetic suffering (Yehuda & Lehrner, 2018), whereas such inheritance proves to be both a wound and wellspring – more dialectical than deterministic for these youths. Similarly, whilst protest scholarship often focuses on the high-risk contention in Iraq, these narratives reveal a quieter civic repertoire that may eventually institutionalize accountability from below.

Conclusion

This study offers a finely grained portrait of Barzani youths who convert inherited grief into civic grammar: remembering as refusal of erasure; education as resistance; leadership as inclusive process; and hope as a deliberate strategy amid structural constraints. In dialogue with recent research, the findings confirm that intergenerational memory can be a resource for ethical orientation and that culturally sustaining education strengthens civic capacity. The findings extend previous work on Iraqi youth by illustrating KRI-specific repertoires of action – service-oriented engagements with the public, gender-balanced facilitation jobs, and attempts to use computer coding tools in order to solve civic problems – all in an unpropitious political environment. Moving beyond diagnosis, this study captures young people who are designing the future they want, weaving memory into institution-building in forms that hold out pragmatic direction for policy prescriptions, program development strategies and scholarships to support them in leadership.

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From Poisoned Skies to Present Struggles: The Long Shadow of Chemical Genocide in Halabja

Prof. Dr. Yasin Kareem Amin

Arya Hemn Mahmood

Ranu Nazar Abdulqadir

Abstract

Background and objectives:

The chemical bombardment of Halabja in 1988 cast a trans-generational shadow that spans death. The present study compares historical victim testimonies with biomedical and environmental research to highlight interconnected health, environmental, social and political impacts and find practical lapses in treatment, restoration and awareness.

Methods: Using Van Manen's hermeneutic phenomenology, we conducted purposive, semi-structured interviews with 12 survivors of 1988 Halabja chemical genocide and the victims' relatives from June to August 2025. Interviews (60–80 minutes) were recorded, transcribed, translated, and thematically analyzed via Van Manen's six activities.

Results: Data analysis led to the emergence of five themes: (1) lasting humanitarian and health consequences; (2) displacement and social fragmentation; (3) environmental damage and contamination; (4) psychosocial trauma and community recovery; and (5) political and global dimensions of chemical genocide.

Conclusion: Recovery remains non-linear and

incomplete. Comprehensive solutions to a protracted response include sustainable clinical care, open environmental surveillance, psychosocially consistent care, and commemoration and redress in consonance with international agreements.

Keywords: Halabja; chemical genocide; sulfur mustard; hermeneutic phenomenology; environmental contamination; psychosocial trauma

Introduction

The chemical bombardment of Halabja in 1988 can be referred to as a classic example of mass atrocity with a far-reaching impact that goes beyond what is immediately understood by the death toll. The event has left a legacy that is seen in long-term disease effects, disrupted community life and incomplete processes of recognition and remediation as old survivors get older and new generations mature (Balali-Mood & Balali-Mood, 2015). With resting on the evidence of the interdisciplinary literature, this paper focuses on five interconnected areas: dead end humanitarian and health impacts; the displacement and social fragmentation; environmental destruction;

psychosocial trauma and healing; and the politics/ international levels that have marked Halabja on the international discourse on the uses, ban, and presentations of the chemical weapons (Koblentz, 2019).

The chronic, multisystem morbidity in survivors exposed to sulfur mustard and mixtures of agents has been documented in the population; persisting comorbidities include impaired pulmonary dysfunction, eyewear, and skin sequelae (Balali-Mood & Balali-Mood, 2015; Ghanei & Harandi, 2011; Zarchi & Balali-Mood, 2013). Emergent data on cancer and reproductive effects highlight the possibility of intergenerational health in exposed families, including birth and long-term defects, requiring specialized health care attendance (Balali-Mood & Balali-Mood, 2015). Although hydrolysis occurs in sulfur mustard, the debate remains on recovery of the environment versus toxicity persistence due to degradation products, nature of soil/water transport mechanisms, and the issues of cumulative stressors in agriculture and livelihoods (Thiermann et al., 2013; Worek et al., 2016). Psychosocially, the coping mechanisms of post-traumatic stress, depression, and complex grief remain persistent in their identities, interpersonal relations, and shared memory, having an unequal access to culturally competent resources (Mousavi et al., 2016). As a symbol and a test of the enforcement of international norms, Halabja has become relevant to the treaty regime and even responses to crises under the Chemical Weapons Convention or even beyond it in the case of post-Syrian accountability discussions (Koblentz, 2013, 2019).

It is necessary to conduct the present research to synthesize the scattered evidence on biomedical, environmental, psychosocial and policy-related information into a qualitative account focusing on the lived experiences of survivors and considering the scientific data. It combines these three dimensions of health, ecological, and social recovery to highlight interconnected health, environmental, social and political impacts and find practical lapses in treatment, restoration, and awareness.

Methods

Study Design

VanManen's (1990) hermeneutic phenomenological technique was applied in the current qualitative investigation. This methodological choice made it possible to gain a thorough understanding of the experiences of Halabja survivors and the victims' families, as well as to consider their individual narratives pertaining to community reconstruction, memory, trauma, and resilience.

Participants

Purposive sampling was used in this study to choose 12 participants, including the survivors of the 1988 chemical genocide in Halabja and the victims' relatives (7 men and 5 women). Being a survivor of the 1988 Halabja genocide or the relatives of the victims, demonstrating a willingness to participate in the study, and sharing first-hand experiences were the requirements for inclusion. Family members of victims and survivors who refused to participate in the study were excluded. The sample consisted of Halabja survivors who were subjected to a chemical bombardment in 1988 and the relatives of the dead. They were between 30 and 69 years old.

Data Collection

The data was collected via semi-structured interviews conducted from June to August 2025. The interviews took place in the homes of the people being interviewed or in other places they thought were safe. The data collection proceeded until thematic saturation was reached, at which point no additional themes emerged from ongoing talks. Some of the questions which were asked during the interviews included:

- Could you tell me about your life and family in Halabja before the chemical attack?
- How would you describe your community and daily life before 1988?
- Can you describe what you personally experienced on the day of the attack?
- What was the immediate impact on your loved ones, neighbors, and the town?

- Did you lose family members, friends, or neighbors during the attack? Would you like to share their stories?
- What physical or health problems have you or your family faced as a result of the chemical attack?
- How has this experience affected your mental health or emotional well-being?
- How do you feel the world remembers or forgets what happened in Halabja?
- How has the attack affected your children or grandchildren, even if they were born later?
- What support do you still need, personally or as a community, that you have not received?
- If you could speak directly to the international community, what would you say?

Each interview lasted between sixty and eighty minutes, and all of them were recorded following the participants' permission. The recordings were then transcribed word for word and translated into English for analysis.

Data Analysis

The six methodological activities suggested by Van Manen (1990) directed the data analysis. The initial exercise entailed turning to the character of lived experience where the lead researcher as a former researcher on genocide and Anfal, who grew up in a related community, grounded the investigation in close familiarity. The second task was to explore the experience as it is encountered, the team used Halabja genocide survivors and victims' family members with firsthand experiences. Based on the phenomenological thematic analysis, important themes were identified as the third activity. The fourth activity involved the description of the phenomenon through writing and rewriting to reflect the voices of the participants. The consistency of the fifth activity was high in relation to the phenomenon as each theme was contextualized within the experience of the participants. Lastly, the derived parts and whole were stabilized through shifting between coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

To provide credibility of the findings obtained, the long-term involvement of the respondents, the member-checking approach, the professional peer debriefings were used. The intimate data collection was facilitated by the participants in a good relationship with the researchers. The rich experience of the researcher in forensics and genocide studies gave the work more legitimacy and more context. The transcripts were weighed several times, and the accounts that the participants made were translated literally into the interpretations.

Ethical Considerations

The study was ethically approved by Ethics Committee of Hawler Medical University College of Nursing (Project No. XX; Approval Date: DD MM YYYY). Participants were explained in detail the purpose of the study, the procedures of confidentiality and the rights of the subjects including the right to decline to participate at any time. Each respondent signed an informed consent form along with a voluntary declaration form. Anonymity of the participants was maintained by assigning each of them a code (e.g., P1, P2, etc.) to ensure that all physical or digital data were secure.

Results

The findings of the current study draw the protracted shadow of the Halabja chemical attack in bodies, households, landscapes, and institutions. Participants outlined a spectrum that went past acute survival to protracted crisis characterized by chronic ill health, displacement, environmental degradation, and disparate social recovery. Patterns converge around enduring health burdens; fractured social ties and barriers to return; contested remediation of land and water; deep psychosocial trauma alongside resilience; and political struggles for recognition that reverberate in international debates on chemical weapons. The following themes and subthemes are presented using the words of the participants to bring lived experience to the fore along with policy and scientific discussions.

Main Theme 1. Lasting Humanitarian and Health Consequences

The attack resulted in long-term injuries that survived longer than headlines and emergency reactions. Survivors operate in poorly resourced medical infrastructures and experience pain and disability in their lives on a daily basis. Such consequences are life choices which are adopted decades later

“Decades later, my lungs still seize at the first dust storm, and I carry an inhaler like it’s part of my body. Pain has a way of keeping the past alive.” – P3

“The doctors call it a cluster of chronic conditions, but to me it’s just the daily tally – breath, skin, eyes, and the tremor in my hands. Every symptom traces back to that day.” – P7

Subtheme 1.1. Chronic Illness and Disability

Patients report chronic experiences of dyspnea, scarring, visual impairment, neuropathic symptoms, and difficulty in moving. Disabilities disrupt work, caregiving, and dignity. Care remains patchy and expensive.

“I used to be a teacher who walked to school; now I count steps between furniture, so I don’t fall. Oxygen cylinders and eyedrops are my new textbooks.” – P5

“My skin burns under the sun, and my eyes blur by afternoon. The body keeps its own archive of the attack, and I read it every day.” – P1

Subtheme 1.2. Generational Health Concerns

Birth defects, miscarriages, and unexplained illnesses are the reasons why families are concerned about a child being born years afterwards. There is only so much genetic technology can do, and due to that, fear finds a way to fill it. Old fears are trotted up with each pregnancy

“We hold our breath at every ultrasound, afraid of what the screen might reveal. Pregnancy should be joyful, but in our town, it comes with a tremor of old fear.” – P9

“My daughter was born with a heart condition the

doctors can’t fully explain. They say genetics is complicated, but we know which history we carry.” – P4

Main Theme 2. Displacement and Social Fragmentation

The attack fractured communities, sending families across borders and scattering kin networks. Homes, livelihoods, and neighborhood bonds are unraveled. The return journey was uneven, haunted by loss and uncertainty.

“Our address became a tent number, and our neighbors turned into stories we tell the children. Home had grown small to what we could carry away.” – P11

“The terrain of my childhood is porous with checkpoint and vacant lots. We learned new dialects faster than we learned to sleep without fear.” – P5

Subtheme 2.1. Forced Migration and Loss of Homeland

Journey was sudden, improvisational, and perilous. People moved under fire and fumes, guided by survival rather than destination. Homeland became a task of memory.

“We left before dawn with wet scarves on our faces and nothing in our hands. By the time the sun rose, we were already strangers to our own fields.” – P2

“I can still trace the path to the border by the sound of crying. The dust of that road is in our lungs and our language.” – P8

Subtheme 2.2. Barriers to Return and Reconstruction

The reconstruction is coupled with concerns of pollution, lost titles, unexploded mines, and spindly civic services. Support is inconsistent, and there are no strong ties with the institutions. People send back and forth from desire to fear.

“They told us that it was safe, but as soon as the first rain-shower fell there was an odor which made us stay away. How can you put in even charted seeds when you cannot depend on the ground to take care of them?” – P10

“Warrants, compensation documents and waiting

lists mounted higher than our broken walls. We have repaired our hands with, but it is tougher to re-establish normalcy and safety in terms of yourself and your own positions in the world.” – P3

Main Theme 3. Environmental Damage and Contamination

The terrain soaked the bombardment as did its humans. Fields, streams, and orchards became silent or even sick, and recovery is patchy and contested. The farmers assess damage in terms of seasons and crop yields.

“The apricot trees flowered but the fruit was bitter for years. Even the animals seemed to know which water to avoid.” – P6

“We learned to read the land like a patient chart – stunted wheat, dead fish after heavy rain, and a well that nobody drinks from anymore.” – P12

Subtheme 3.1. Soil, Water, and Agricultural Harm

Chemical agents and cleanup residues changed the chemistry of soil and water. Harvests fell, livestock sickened, and traditional practices were interrupted. Community knowledge often replaced missing lab reports.

“My father kept notes on yields, and there’s a cliff in the notebook after the attack. Numbers don’t lie; the earth just gave us less.” – P9

“The spring near our village turned metallic in taste, and the sheep refused it before we did. We started hauling water from farther away, at a cost our pockets could feel.” – P1

Subtheme 3.2. Recovery or Persistent Toxicity

There are differences of opinion as to whether the land has healed. Some trust rain and time; others insist on testing and precaution. Scientific studies are sporadic and poorly communicated.

“They say the rains washed it all away, but our bodies and the yellow patches in the field tell a different story. Hope is not the same as a lab result.” – P3

“A team came once, took samples, and left with promises. Until we see the data and the cleanup, we keep a careful distance from certain plots.” – P6

Main Theme 4. Psychosocial Trauma and Community Recovery

The injuries are psychic as well as physical, brought along in memories as well as relationships and rituals. Healing takes place not just in clinics, mosques, and homes but also in classrooms. Recovery is a long conversation across generations.

“I don’t dream in color anymore; everything turns the same gray as that day. Some mornings I count the names before I count the blessings.” – P12

“We have learned to mourn and to make tea at the same time. Grief became the language we all understand.” – P1

Subtheme 4.1. Individual and Collective Memory of Suffering

Memory anchors identity through photos, anniversaries, and the memorial. Families navigate when to speak and when to be silent. The past is told in both whispers and public ceremonies.

“Every spring, the air feels heavier, and the city walks more slowly. The calendar itself holds its breath around the anniversary.” – P9

“At the memorial, I look for my mother’s name and find my own reflection. We use our faces as replacements of faces that we lost.” – P5

Subtheme 4.2. Coping, Resilience, and Support Systems

There is faith, humor, activism, and simple rituals by which people cope. Formal mental services are rare, yet they are valuable Diaspora-based networks and mutual aid fill the gaps.

“The women’s group meets on Thursdays, and we sew, talk, and sometimes just sit together. Those hours are lighter than pills.” – P8

“Counselors taught us how to breathe through a panic, but my nephew learned to breathe again by playing football. Healing takes many languages.” – P4

Main Theme 5. Political and Global Dimensions of Chemical Genocide

Halabja is a local tragedy with international echoes.

Recognition, accountability, and prevention remain unfinished work. The town's name appears in courtrooms and treaty halls.

"Our pain travels to parliaments and conferences, but it often returns without action. We are weary of being an unpaid cautionary one." – P5

"In speeches, they say never again, and we nod. Then we come home to clinics with no stock." – P11

Subtheme 5.1. Struggles for Recognition and Justice

Victims seek legal and compensation claims, and apologies. Bureaucracy and geopolitics make the way more complicated. Recognition itself can be a form of care.

"I testified so my children would know our suffering has a legal name. Justice moves slowly, but silence was slower." – P2

"Compensation helps with medicine, but acknowledgment helps with sleep. We need both to feel the world has heard us." – P7

Subtheme 5.2. Halabja in International Debates on Chemical Weapons

The city of Halabja has taken its toll in shaping global norms, inspection, and sanctions. It is cited in classrooms, at the Organization for the Prohibition of Chemical Weapons (OPCW), and in discussions on accountability. Yet policy often feels distant from the lived reality.

"They show our photographs to diplomats to argue for stronger treaties. I want them to remember that those are not symbols; they are families." – P4

"If Halabja means anything in the world, it should mean resources for prevention and care. Otherwise, the world learned the story but not the lesson." – P10

Discussion

The results contextualize Halabja within an emerging literature on sulfur mustard (SM) exposure and make contributions to this literature in critical areas. The studies that exist discuss a long-term multi-organ damage, psychological and

social harm, and the lack of integrated health systems but do not put these medical journeys alongside the individual experience of displacement, environmental uncertainty, or perceptions of identity politics. In weaving across bodily, ecological, and political registers of survivor testimony, the findings signify the role of unverified safety, intergenerational fear, and loss of dignity in how recovery and biomedical injury should be understood. The following sections critically source each theme against peer-reviewed and technical resources and point out where the data support or challenge existing evidence and where they contradict or supplement existing literature.

The high emissions of chronic respiratory, ocular, cutaneous, and neurologic sequelae in the findings align well with the Iranian and regional literature on long-term SM morbidity. Chronic airway disease (bronchiolitis obliterans, chronic patterns) and airway hyperresponsiveness are repeatedly reported by reviews and cohort studies; reduced exercise tolerance and frequent exacerbations elicited by dust and infections are also consistently documented (Ghanei & Harandi, 2011; Balali-Mood & Balali-Mood, 2015). Ocular complications – delayed mustard gas keratopathy, dry eye, limbal stem cell deficiency, and recurrent epithelial defects – are also well known and in many cases, progressive decades after exposure (Baradaran-Rafii et al., 2017; Balali-Mood & Balali-Mood, 2015). In the present study, the participants' reports of neuropathic pain and tremor echo smaller studies suggesting peripheral neuropsychiatric sequelae among SM-exposed survivors, though neurologic evidence is comparatively less robust and methodologically heterogeneous (Razavi et al., 2012).

Where the results add critical context is the coupling of morbidity with fragile health systems: "patchy and expensive" care, medicine stock-outs, and fragmented specialty access. Although regional overviews note constrained post-conflict health capacity in Iraqi Kurdistan, the granular linkage of disability to foregone work, caregiving burdens, and dignity loss is less visible in biomedical papers that foreground organ-specific pathologies (Shabila

et al., 2010; Razavi et al., 2012). The data therefore corroborates clinical trajectories while foregrounding the health-system and socioeconomic determinants that compound disability.

Anxiety about birth defects and miscarriages is also repeated in interviews. The available evidence associated with intergenerational effects of being exposed to SM is inconclusive. There are reports of greater chromosomal aberrations, oxidative stress markers, and the potential of epigenetic changes in exposed adults, although there are little to no correlations at the population level with congenital fetal/infant anomalies (Razavi et al., 2012). In Iraq more broadly, contested ecological studies from Fallujah reported increased birth defects and metal contamination following intense combat (Al-Sabbak et al., 2012), but causal inference is debated and not specific to SM. The findings sharpen the point that, in the absence of sustained genetic counseling and transparent surveillance, uncertainty itself becomes a clinical and psychosocial burden, an insight largely absent from the biomedical literature, which tends to conclude “evidence insufficient” without considering how uncertainty is lived in pregnancy and family planning.

The narratives of sudden journey, dispersed kin networks, and uneven return mirror broader post-2014 displacement literature in Iraq that documents lingering barriers to safe, voluntary return: property disputes, documentation gaps, contaminated land, and weak services (IOM, 2019; Cetorelli, 2017). Few SM-focused clinical papers analyze displacement as a determinant of long-term health; the results fill that gap by linking social fragmentation to ongoing health stressors (e.g., disrupted caregiving networks, dialect/language shifts, and bureaucratic precarity). They also show how “addresses becoming tent numbers” reconfigures identity, an issue more commonly treated in forced migration scholarship than in chemical-injury research.

The participants’ accounts of stunted crops, foul-smelling wells, and “metallic” tastes foreground environmental uncertainty and contested recovery. The environmental fate literature generally predicts

that SM hydrolyzes to thiodiglycol and related products and that persistence is context-dependent (pH, temperature, soil organic content), with surface contamination typically diminishing over time, though buried munitions/residues complicate risk (Noort et al., 2011; UNEP, 2017). The gap the results spotlight is less about chemical kinetics than about governance: sporadic studies, poor communication of results, and mistrust when “a team came once, took samples, and left with promises”. That aligns with post-conflict environmental assessments in Iraq that emphasize patchy monitoring, weak risk communication, and uneven remediation financing (UNEP, 2017). In short, the literature offers a chemical story of probable decay; the data adds a social story of unverified safety, leading to rational avoidance of land and water despite livelihoods depending on them.

Disability, poverty, and institutionalization as sequelae of conflict disorders (i.e., PTSD, depression, and anxiety) are still higher in SM survivors and Iraqi conflict victims, and they depend on chronic exposure to stressors (Razavi et al., 2012; Hashemian et al., 2015). The accounts resonate with this evidence but advance it in two ways. First, they trace the choreography of collective memory – anniversaries, memorials, photographs – and its double edge: sustaining identity while reactivating grief. Second, they foreground vernacular recovery: women’s sewing circles, football, tea rituals, and diaspora mutual aid as “lighter than pills.” This complement clinical recommendations for psychosocial support by specifying community-based modalities that are accessible in under-resourced settings and consonant with local norms. The literature increasingly recognizes such layered, non-clinical supports, but empirical detail from Halabja itself has been sparse in the literature.

The last theme ascertains a persistent mismatch: Halabja as an icon in treaty venues and material losses in survivor care. Halabja is routinely referenced in the Chemical Weapons Convention review conferences, OPCW research, and education/outreach initiatives, but as the survivor

testimonies in the study indicate, it can have a detrimental impact on progress towards projecting norms in the face of a lack of reparation payments, financing of medical services, and environmental restoration. This critique is consonant with human rights analyses that warn against instrumentalizing atrocity narratives for global norm entrepreneurship without local benefit (HRW, 2013). The participants also stress that recognition is itself therapeutic – “acknowledgment helps with sleep” – pointing to justice and documentation as elements of care, a point underdeveloped in clinical literatures.

Across domains, the results corroborate the durability of multi-organ morbidity after SM exposure; the interdependence of physical and mental health; and the critical role of social determinants, including displacement and weak services, in perpetuating suffering (Ghanei & Harandi, 2011; Razavi et al., 2012; IOM, 2019). The results also expose persistent gaps, including limited longitudinal, population-based surveillance in Halabja; sparse, transparent environmental testing and communication; and weak integration of clinical care with property restitution, demining, and water/soil safety.

Conclusion

Almost forty years after the Halabja chemical genocide, the event still defines bodies, landscapes, and institutions. The survivors have to deal with chronic disease, psychosocial trauma, uncertainty in their environment and lack of justice. This paper emphasizes the interconnection between biomedical, social, and political harms and reveals that recovery is non-linear, and incomplete without multipronged health, environmental, and repair interventions.

Implications

The key to sustainable recovery is the collective effort of the overlapping long-term medical care, environmental visualization, culturally based psychosocial support, and political acknowledgment. The combination of spectral evidence and witness or survivor testimony can enhance more efficient remediation policy, resource

deployment and can make sure that the legacy of Halabja enhances local resilience, as well as global resilience to avert chemical atrocities.

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Justice, Memory, and Healing: A Qualitative Study on Psychosocial Support for Families of Christian and Muslim Mass Grave Victims in Sorya, Duhok Governorate, Iraqi Kurdistan

Prof. Dr. Yasin Kareem Amin

Rahand Guhdar Hasan Aldoski

Jack Jabar Ishaq

Abstract

Background and objectives: Iraq is covered with multiple mass graves, families of Christian and Muslim victims experience the compound grief, displacement, and socioeconomic distress due to the exhumation processes, but there is minimal evidence regarding the connection of forensic/legal processes and culturally based psychosocial care. This paper examined the aspects of loss and grief, commemoration and memory, justice and accountability, psychosocial support needs, and healing pathways within the affected families.

Methods: Using Van Manen's hermeneutic phenomenology, we conducted semistructured interviews with purposively sampled relatives of massgrave victims (n=10; 7 men, 3 women; 37–66 years) in July–August 2025. Interviews (70–90 minutes) were recorded, transcribed, translated, and thematically analyzed following Van Manen's six activities, and relevant themes and subthemes were extracted.

Results: Five main themes emerged: (1) Experiences of loss and grief; (2) Memory and

commemoration; (3) Justice and accountability; (4) Psychosocial support needs; and (5) Pathways to healing and resilience.

Conclusion: Forensic truth-seeking and cultural attuned psychosocial care and pragmatic accompaniment should be applied to survivor-focused responses that combine interfaith and culturally sensitive approaches with forensic truth-seeking and trauma-informed justice. Memorialization that is inclusive, spiritually encompassing, and uses interventions that are intertwined can reinforce resilience, reinstate dignity and cohesion in post-atrocity environments.

Keywords: Iraqi Kurdistan; Sorya mass graves; bereavement; psychosocial support; transitional justice; forensic identification

Introduction

There are many mass graves in Iraq, one of them at Sorya village in Duhok Governorate, where Christian and Muslim victims were buried, and recent forensic exhumations have documented the extent of loss, and the difficulties that family

members have in identification and repatriation (Amin & Othman, 2020). Family members struggle with trauma, grief, and long-term grief overlaid with displacement and socioeconomic stress; in conflict-affected populations, depression, anxiety, and post-traumatic stress disorders are significantly higher than the average in the entire world (Charlson et al., 2019; Silove et al., 2017). Yet bereavement trajectories and coping are shaped by personal resources, family dynamics, and faith practices that confer meaning and resilience.

Individual and family histories such as stories, photographs, and testimonies are memory anchors and testifying vehicles, whereas community rituals, religious celebrations and memorials place personal loss in communal histories (Hirschberger, 2018). The design of such practices can facilitate social cohesion and reconciliation during inclusive, supportive of truth-seeking and acknowledgment processes (Cilliers, Dube, and Siddiqi, 2016). Meanwhile, families always demand acknowledgment and justice in the face of investigation, trial, and official recognition, which the sphere of transitional justice calls to take center stage in response to the lost and the slain (Robins, 2011).

The evidence-based mental health and psychosocial support (MHPSS) models promote layered care in which counseling, peer and family support, and community-based interventions with preference to local cultures and religions are integrated (Tol et al., 2011). Religious coping and spiritual rituals in the pluralistic Iraqi Kurdish religious landscape are the main avenues of healing in Christian and Muslim families (Koenig, 2012). This study is necessary to be conducted due to the absence of context-specific evidence to correlate forensic, legal, and psychosocial processes in Duhok Governorate despite the constant exhumations (Amin & Othman, 2020). In this regard, the current qualitative study explores experiences of loss and grief, memory and commemoration, justice and accountability, psychosocial support needs, and pathways to healing and resilience among families of Christian and Muslim victims identified in mass graves in Sorya.

Methods

Study Design

The current qualitative study used Van Manen's hermeneutic phenomenological approach (Van Manen, 1990). This methodological choice allowed obtaining the deep-rooted knowledge of the experience of the families of the victims of the mass graves found in Sorya, Duhok Governorate, Iraqi Kurdistan, and to hear the personal stories connected with the idea of memory, grief, and psychological state.

Participants

Purposive sampling was employed in the current study to select 10 family members of victims of the mass graves in Sorya of the Duhok Governorate, Kurdistan Region-Iraq (7 men and 3 women). The relatives of mass grave victims in Sorya, willing to participate in the study, and the first-hand experience were taken as the inclusion criteria. Those family members that refused to participate in the study were shut out. The participants were aged 37-66 years.

Data Collection

The data was collected via semi structured interviews that were conducted between July and August 2025. The interviews were conducted either at the interviewees' homes or in other places which they considered secure and comfortable. Data collection continued till thematic saturation was achieved, where no more themes were identified as a result of further interview. The following questions were part of the questions asked during the interviews:

- Can you tell me about your loved one who was found in the mass grave?
- How has losing your loved one in this way affected you and your family?
- What does it mean to you to have your loved one's remains identified?
- Are there memorials, ceremonies, or traditions that feel meaningful to you?

- When you think about justice for what happened, what comes to mind?
- How do you feel about the efforts made to investigate and document these crimes?
- What do you hope authorities, courts, or international organizations will do in the future?
- Have you or your family received any form of support – emotional, social, or spiritual – since the killings?
- How have Christian and Muslim families come together – or been separated – during this process?
- Is there anything I haven't asked that you feel is important to tell me?

Time limit on all interviews was seventy to ninety minutes, and they were all recorded, with the consent of the participants. The tapes were then transcribed verbatim and translated into English to be analyzed.

Data Analysis

Data analysis followed Van Manen (1990) six methodological actions. Being a forensic, genocide, and Anfal researcher and as a part of the related community, the major researcher initiated the initial exercise by redirecting the focus on the nature of lived experience and basing the investigation on intimate acquaintance. The second step was to investigate the experience since the relatives and family members had lived through it. The next exercise identified the major subjects in terms of phenomenological thematic analysis. The fourth assignment was to describe the phenomenon in paper and revise it with voices of the participants. The fifth activity, where the topic in question was the proper description of the event, was rated on the high level of the issue of internal consistency due to the fact that each of the themes was substantiated by the experience of the participants. Stabilization was the last aspect that involved matching the parts and whole that were observed through alternating between the coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

Credibility of the results was offered through long-term engagement of the respondents, the member-checking technique and debriefing with professional peers. Close data collection was also feasible and easy since the participants had a friendly relationship with the researchers. The fact that the researcher is quite experienced in the fields of forensics, genocide, and Anfal studies contributed to the credibility and background of the study. The descriptions given by the participants were translated precisely once the transcripts were weighed several times.

Ethical Considerations

The study was approved by Hawler Medical University College of Nursing Ethics Committee (Project No. XX; Approval Date: DD MM YYYY). The participants were made aware of the study purpose, the confidentiality measures to be adhered to and their rights, especially their right to withdraw at any given time. All respondents signed a voluntary statement form and informed consent form. To ensure the safety of all the digital or physical data involved, the respondents were provided with a code (P1, P2, etc.) to secure their anonymity.

Results

When mass graves were discovered, Sorya, Duhok Governorate families provided the most personal description of loss, faith and endurance. Their considerations go through sorrow and recollection, the quest to get justice and the reinforcement they require to continue. The voices below, based on Christian and Muslim households, emphasize what is beneficial and what is detrimental, what is absent and what can be done. These quotes, put together, form a path of remembrance that leads to responsibility and how healing develops, gradually, through society and nurture. They also indicate practical means in which psychosocial support may honor culture, religion, and lived realities.

Main Theme 1. Experiences of Loss and Grief

Families explained grief as a sudden break and a long shadow which comes back in cycles with the anniversaries and the usual sounds. The loss not only affected the body but also the mind and the spirit and reorganized everyday life.

“The day we got the new, it was as if the air was knocked out of the house. Even now, laughter feels like a guest who is afraid to stay.” – P3

“Grief sits with me at breakfast and follows me to sleep. Some days it is heavy, and some days it is just a whisper that still hurts.” – P8

Subtheme 1.1. Emotional and Psychological Impact

Participants described shock that lingered as nightmares, sudden fear, and numbness that slowly thawed. The emotional landscape shifted over time but rarely felt “finished.”

“When they told me, my hands trembled so hard that I spilled the tea. At night, I woke to the sound of doors in my head, and then I remembered why.” – P9

“Years later I still startle at trucks on the road because they sound like the engines from that time. The sorrow does not end; it changes shape.” – P2

Subtheme 1.2. Coping Mechanisms

Coping was practical and spiritual: small routines, shared chores, and prayer circles that held people together. Families learned to pace their exposure to painful memories.

“I clear a small corner for prayer and breathe until my shoulders drop. After that, I call my sister, and we talk about ordinary things to anchor the day.” – P6

“We agreed not to watch videos that reopen the wound before bedtime. Reading verses from the Bible together steadies the house.” – P1

Main Theme 2. Memory and Commemoration

The need to memorize was a requirement and a consolation, maintaining that which one loved in the everyday environment. Rituals and storytelling

made the past to be kept with dignity and not with silence.

“We keep a framed photo on the shelf and tell guests his story, so he is not reduced to a rumor. Memory is our way of saying he lived a full life before his last day.” – P4

“We light candles in church and read prayers in the cemetery on the anniversary. It is lighter when people remember together.” – P10

Subtheme 2.1. Personal and Family Narratives

Families edited narratives that put into the limelight character, talents and gentleness and not just the way of death. Witness accounts were recorded and replayed to teach children where they come from.

“I tell my son about his grandfather’s kindness and the way he fixed radios for everyone. He should inherit more than fear; he should inherit his laughter.” – P7

“My uncle described the last time he saw them, and we recorded his words on a phone. When the children ask, we play it, and his voice fills the room.” – P5

Subtheme 2.2. Collective Memory and Cultural Practices

The memory of the people established unity among the religions and transformed the personal sorrow to the collective welfare. Religions were adjacent to each other and provided a common language of reverence.

“At the memorial, the priest and the imam prayed one after the other, and we stood as one line. For a moment, the wound felt carried by many hands.” – P4

“We place names on a stone and bring food to share under the trees. The ritual does not fix the past, but it teaches us how to carry it.” – P2

Main Theme 3. Justice and Accountability

Along with remembrance, the participants reported justice as truth, recognition and repair. They wanted open, dignified and punctual procedures.

“I do not want revenge; I want the verisimilitude to

be documented and instructed. May our children learn what was and that it was wrong.” – P1

“Justice is justice means that the administration opens the file, arrives at the correct investigation and claims that our beloved ones were important. The marked grave is a big thing, and the signed paper is a big thing.” – P7

Subtheme 3.1. Desire for Legal Recognition

Families demanded exhumations, identification and official recognition of crimes. Legal steps were seen as part of mourning, not separate from it.

“We require DNA testing, a death certificate which speaks the truth, a place to bury them with their names. It is only upon this basis that we can pray with a sorrow and certainty.” – P3

“Go to court and allow witnesses to testify without intimidation. Accountability should not be time-bound even though years have elapsed.” – P10

Subtheme 3.2. Perceptions of Injustice or Impunity

The injury was aggravated by repeated delays and silence of the institutions. Individuals sensed inequity in regard and in resources, which contributed to mistrust.

“Another time and again we turned in papers and had no reply. Our sorrow seemed to be waiting in a long queue that did not move.” – P6

“They lay tarmac and trim ribbons, and the graves are still unmarked. That is what impunity is in our front yard.” – P4

Main Theme 4. Psychosocial Support Needs

The participants focused on support that respects culture and religion, as well as individual speed. As important as clinical care was listening, presence and practical help.

“A counselor who knows our customs doesn’t rush me past the tears. She lets the pauses speak, and that is when I finally find words.” – P8

“Support that includes the church, the mosque, and the clinic makes me feel whole. I am not just a case file; I am part of a community.” – P5

Subtheme 4.1. Emotional and Mental Health Support

People asked for accessible counseling, peer groups, and approaches that recognize trauma. Privacy, continuity, and trust were repeatedly named.

“In the group sessions, I learned that nightmares and guilt are common after trauma. Knowing I am not alone quieted the noise in my head.” – P3

“The psychologist instructed me on grounding exercises that I can perform at the time of prayer. It was both deferential and convenient to the same degree.” – P9

Subtheme 4.2. Social and Community-Based Support

NGOs, interfaith, and networks of neighbors alleviated pressures through companionship and resources, child support, transportation, and legal assistance.

“An NGO helped with bus fare to the court and a stipend for schoolbooks. That small help kept us from choosing between justice and rent.” – P10

“When youth from the church and the mosque cleaned the cemetery together, my heart softened. Their hands made a sermon without words.” – P7

Main Theme 5. Pathways to Healing and Resilience

Healing was described as gradual, uneven, and made of small, steadfast acts. People found strength in routine, relationships, and spiritual meaning.

“I have planted a pomegranate tree in memory of every loss we had, and I water them in the morning. Seeing how they grow teaches me to be patient with my own scars.” – P1

“Healing is not forgetting, it is learning not to break while keeping memory. On some days I will carry it, and on some days my family will carry me.” – P4

Subtheme 5.1. Rebuilding Daily Life

Going back to work, school and community life was an indicator of recovery without rejection of

grief. Adaptation was commonplace, but brave.

“I opened the tailoring store again and I had the measuring tape of my husband on the wall. Stitch by stitch I was reminded of how to start over again.”
– P8

“My son reverted to football, and I sat on the sidelines after many years. The noise of cheering was a door opening.” – P9

Subtheme 5.2. Role of Faith and Spirituality in Healing

Prayer, scripture, and rituals provided comfort and a language of reconciliation. Religion established bonding among and among communities.

“Reciting the Holy Qur’an at dawn steadies my breath, and I ask God to make my heart soft. I have learned that forgiveness is a journey, not a switch.”
– P5

“In Sunday liturgy, when we exchange peace, I remember that grief connects us to each other. I leave the church lighter, even if the world has not changed.” – P1

Discussion

This study from Sorya, Duhok Governorate, surfaces a tightly interwoven ecology of grief, memory, justice, and support that is highly consistent with, yet adds important nuance to, the recent research on families affected by mass violence and disappearance. In both Christian and Muslim families, respondents reflect mourning as a cyclic process, justice as part of mourning, and psychosocial support as a cultural, interfaith, and practically empowering intervention. In the following sections, these findings are compared with the previous studies, and convergences and divergences are pointed out in the framework of the overall literature.

The characterization of grief as recurring, sensory-triggered, and “never ended but changing shape” echoes two major strands of evidence: ambiguous loss and prolonged grief after mass trauma. According to Boss (2010), uncertainty about the fate of loved ones makes the mourning process more difficult; even in a situation whereby there

are mass graves, postponed recognition can recreate the ambiguity and disrupt adaptation. The meta-analytic evidence supports lingering common mental disorders in war-affected adults (Morina et al., 2018), and recent evidence on prolonged grief disorder (PGD) indicates that bereavements related to conflicts may generate lasting longing and impairment (Killikelly & Maercker, 2017). It is noteworthy that the levels of startle reflex to familiar sounds reported by participants can be compared to the model of daily stressors, which demonstrates that the effects of the past trauma on the present mental state are often mediated by constant and ordinary stress and reminders (Miller & Rasmussen, 2010). The present narratives extend this literature by articulating how grief rhythms synchronize with local temporalities (anniversaries, prayer times) and the soundscape – specific, culturally inflected details that are often under-described in quantitative studies.

Families highlighted daily routines (work, chores), conscious speed of exposure to traumatic media, and practices rooted in spirituality (prayer circles, scripture) as stabilizing. This correlates with the fact that the everyday organizing and social role cushions distress among populations in conflict-affected settings (Miller & Rasmussen, 2010; Panter-Brick & Eggerman, 2012). It is also similar to meaning-based and culturally modified coping strategies, such as aligning the grounding exercises with prayer sessions is used as a form of spiritually integrated practice that has been proven to enhance acceptability and adherence among religious populations (Pargament & Lomax, 2013). The directive against re-exposure to traumatic events prior to bedtime is a low-cost harm-reduction strategy potentially overlooked in the programmatic assessment that paves the way to psychoeducation that is media-ecological-specific to communities with conflict exposure.

The dual focus of the study on personal narrative (curating legacies of character and kindness) and on shared practices (interfaith ceremonies, naming stones, shared meals) is superimposed to the work that connects the concepts of continuing bonds and the role of memorialization in the adaptive

meaning-making following the mass violence. Comparative studies show that social connection and dignity can be fostered by public remembrance but can be re-traumatizing when politicized or exclusionary (Hamber and Gallagher, 2015). Sorya accounts stand out due to their interfaith choreography – priests and imams praying one after the other – which is a contrast to contexts in which memory practices reproduce division. This aids in the need to plan memorialization that is both interfaith and is based on foregrounding personal lives over death modalities, which has been identified to be less stigmatized and more cohesive in the community (Hamber & Gallagher, 2015).

Participants framed justice as truth, recognition, and repair, demanding exhumation, identification, and dignified burial “with names”, as well as timely legal proceedings. This is a close reflection to victim-based transitional justice studies that indicated that families of the missing demand information, recognition, and ritual as preconditions to mourning (Robins, 2011). The field of forensic literature also describes the use of humanitarian forensic action and DNA-directed identification as a legal and psychosocial intervention enabling culturally suitable funerals and closure (Cordner and Tidball-Binz, 2017). In line with the literature regarding ambiguous loss, bereaved family members deprived of their relatives, or with no official recognition, experience greater susceptibility to protracted grief and distress (Lenferink et al., 2018). Simultaneously, Rwandan evidence warns that involvement in the process of truth-telling may increase the symptoms of some victims (Brounéus, 2010), which highlights the importance of trauma-informed justice practices. The current paper introduces a tangible layer – transport stipends, legal assistance, and accompaniment – as the key facilitators of access to justice, a recommendation that has been frequently proposed in literature yet not implemented in practice.

Participants endorsed accessible counseling, peer groups, privacy and continuity, and, crucially, providers who respect customs and integrate religious life. This preference is fully congruent

with best-practice guidance for mental health and psychosocial support (MHPSS) in humanitarian settings, which emphasizes layered, community-based care; cultural competence; and integration with protection and health systems (Tol et al., 2011; Ventevogel et al., 2015). Evidence for brief, scalable psychological interventions (e.g., Problem Management Plus) suggests such support can reduce distress when embedded in community structures and delivered by trained non-specialists (Rahman et al., 2016). The Sorya accounts sharpen these broad prescriptions by specifying faith-linked adaptations (e.g., grounding aligned with prayer), and by foregrounding interfaith platforms as vehicles for collective care – an implementation detail too rarely measured in trials.

Accounts of NGOs aiding transportation to court, churches and mosques, youth cleaning cemeteries, and networks of neighbors find their reflection in the social-ecological resilience literature: recovery is not necessarily exclusively intrapsychic but a product of enabling roles, resources, and relations (Ager & Metzler, 2017; Panter-Brick & Eggerman, 2012). Such horizontal solidarities might be of particular significance to reestablish trust between communities in Northern Iraq, where the conflict with ISIS resulted in mass victimization (Cetorelli et al., 2017). The current results indicate that interfaith civic projects may indeed be viewed as being a work of therapeutic civic, comprising of memorialization, restoring dignity and social bonding.

The healing was portrayed as lopsided and micro-based in routine (going back to tailoring, football) and permeated with spiritual significance. This trend is in agreement with the ADAPT model that recovery following mass trauma follows through the process of restoration of five pillars, including safety/security, bonds/attachments, justice, roles/identities, and existential meaning (Silove, 2013). The Sorya themes strike every pillar: fear and startle (safety), family and peer groups (bonds), legal recognition (justice), work and parenting (roles), and prayer/ritual (meaning). These stories, set against a background of that incessant population-level morbidity in war survivors

(Morina et al., 2018), provide more detailed insights into how ordinary behavior structures resilience without washing away grief.

In summary, two contributions stand out. First, the interfaith architecture of remembrance and support – priest and imam “one line,” youth joint service – offers a pragmatic template for psychosocial programming that doubles as social cohesion work. Second, the insistence that justice processes are intrinsic to mourning reinforces the argument for “justice-psychosocial accompaniment”: practical support (transport, legal aid), trauma-informed procedures, and forensic identification as a unified, survivor-centered pathway (Robins, 2011; Cordner & Tidball-Binz, 2017).

Conclusion

As is demonstrated in this work, grief, justice, and healing among families of Christian and Muslim victims of mass graves in Sorya are closely intertwined. The survivor-focused response should integrate forensic truth-seeking, trauma-informed justice, and culturally based, interfaith psychosocial care. Practical assistance, meaningful memorialization, and spiritual integration strengthen resilience, restore dignity, and foster community cohesion in the aftermath of atrocity.

Implications

These results suggest that post-atrocity psychosocial programs should be based on truth-recovery, justice, and cultural and sensitive healing. Family-oriented mental care should be prioritized in the policies, inclusive memory and inter-faith dialogue to mend the social nets. Such practices can inform humanitarian, forensic, and transitional justice players to develop support that is restorative as opposed to merely procedural.

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From Testimony to Healing: Exploring Psychological Support for Families of Mass Grave Victims in Sorya, Duhok Governorate, Iraqi Kurdistan

Prof. Dr. Yasin Kareem Amin

Abdullah Ghanim Ahmed

Derin Amanj Yasin

Abstract

Background and objectives:

Mass killings in Iraqi Kurdistan have left families of victims found in mass grave in Sorya, Duhok, living with ambiguous loss while engaging in testimony and forensic exhumations. Testimony affirms dignity yet can reopen wounds; formal, culturally congruent mental health care remains limited and stigmatized. This study explored how families experience the interplay of testimony, forensic procedures, cultural practices, and support systems, and identified pathways to healing and justice to inform rights-based, long-term responses.

Methods: Using hermeneutic phenomenology (Van Manen, 1990), we conducted semi-structured interviews with 10 relatives of mass-grave victims (7 men, 3 women; ages 37–71) found in Sorya, Duhok Governorate, Kurdistan Region. Interviews (80–95 minutes) were conducted from July to August 2025. Data analysis was carried out following Van Manen's six activities.

Results: Five themes emerged: (1) Testimony as a double-edged sword; (2) Navigating grief and

trauma; (3) Experiences with forensic exhumation; (4) Access to psychological support; and (5) Pathways toward healing and justice.

Conclusion: Healing requires coupling truth-telling and forensic rigor with culturally anchored, stigma-sensitive, long-term mental health and psychosocial support, co-designed with families. Practical implications include psychosocially accompanied testimony, transparent family-liaison practices, participatory memorialization and reburial, and reparations that translate recognition into education, livelihoods, and ongoing care.

Keywords: mass graves; ambiguous loss; testimony; humanitarian forensics; Sorya village, Iraqi Kurdistan; intergenerational trauma

Introduction

Mass killings that occurred in the past decades in the north of Iraq have caused thousands of people to be missing and families to be grieving without certainties. In Sorya, Duhok Governorate, Kurdistan Region-Iraq, mass graves and forensic investigation have attracted family members into the sequences of testifying, waiting, and grieving

(Amin & Othman, 2020). Testimony acts as a two-sided sword: it is an ethical practice of remembering and fighting which can both perforate wounds, revive the past, and increase phobias of being overlooked (Silove et al., 2017). Such processes occur in an environment of ambiguous loss where lack of clear information on the whereabouts of loved ones makes grieving difficult and puts adaptation on hold (Boss, 2010). Conflict-affected environments increase the psychological burden, and the rates of common mental disorders are significantly higher; furthermore, these services are frequently few or disjointed (Charlson et al., 2019).

Forensic exhumation involves the concentration of hope and the fear of confirmation and the reliance on the institution lies in the hands of the transparent practice, communication, and the ability to conduct exhumations in a dignified manner (Cordner & Tidball-Binz, 2017). The promise and constraints of such processes to families seeking the truth and closure are emphasized by local forensic work in Sorya (Amin & Othman, 2020). The trauma of loss runs through psychosocial and biological avenues across generations that define the health of children and youth (Yehuda et al., 2016). However, formal mental health care is still limited by a lack of avenues, cultural obstruction, and stigma, which colonize most of the families into informal coping-kin support, community solidarity, and faith practices (Dardas & Simmons, 2015). Rituals based on culture, reburial, and social recognition have the potential to facilitate meaning-making and recovery, particularly when combined with justice and a long-lasting supportive approach (Cetorelli et al., 2017; Cordner & Tidball-Binz, 2017).

This paper reveals a major research gap since it discusses the interconnection between testimony, forensic procedures, and cultural practices with grief, trauma, and healing among relatives of victims found in mass graves in Sorya. Through prioritizing families, the study will direct practitioners and policymakers to rights-based, trusted and long-term responses, which integrate recognition and justice with available, stigma sensitive care.

Methods

Study Design

The present qualitative study utilized Van Manen's hermeneutic phenomenological approach (1990). Such a methodological decision enabled gaining profound insights into the lives of the families of the victims of mass graves in Sorya, Duhok Governorate, Iraqi Kurdistan, and listen to their personal recollections of memory, grief, mental well-being, and healing process.

Participants

In the current study, purposive sampling was used to recruit 10 relatives of mass grave victims in Sorya, Duhok Governorate, Iraqi Kurdistan (7 men and 3 women). The inclusion criteria were relatives of victims of mass graves in Sorya, willingness to take part in the study, and personal experience. Those family members who did not volunteer to participate in the project were excluded. The participants' ages ranged from 37 to 71 years.

Data Collection

Data was collected via semi-structured interviews conducted in July-August 2025. The interviews were conducted at the home of the interviewees or at other locations that they considered to be safe and comfortable. Data collection stopped when there was thematic saturation and no further themes were found. The following were some of the questions which were asked during the interviews:

- How would you describe your loved one to someone who never met them?
- How did you first learn about what happened to your loved one?
- Can you describe your experience when their remains were identified through forensic exhumation?
- What has helped you cope with your loss?
- Are there particular traditions, stories, or memories that give you strength?
- Have you or your family received any kind of psychological support or counseling? If so, how was your experience?

- What kind of support would have been most helpful to you after learning the truth about your loved one?
- When you think about healing, what does that mean to you personally?
- How do you imagine justice or recognition for your loved one?
- Is there anything we didn't ask that you feel is important to share?

All the interviews were taped, with the permission of the participants, and the time allotment was eighty to ninety-five minutes. The tapes were then transcribed literally and translated into English for analysis purpose.

Data Analysis

The data were analyzed using the six methodological activities suggested by Van Manen (1990). The first practice entailed a transformation of the nature of lived experience wherein the primary researcher was a forensic, genocide, and Anfal researcher and constituted a part of the community in which the investigation was done. The second one was to explore the experience as it had been experienced by the family members and relatives. The important themes were identified in the third activity under the phenomenological thematic analysis. The fourth one involved describing the phenomenon on paper and re-writing to preserve the voices of participants. The issue of internal concordance offered a high-level score in relation to the fifth action that was inclined towards the adequate description of the phenomenon as each theme was justified within the context of the experience of the participants. Lastly, the derived parts and wholes were stabilized on the basis of alternating between the coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

The long involvement of the respondents, the member-checking technique, the debriefing by the professional peers were used to make the findings credible. Close data collection was facilitated and achieved due to the friendly nature of the interaction

between the researchers and the participants. The long history and experience of the researcher in the sphere of forensics, genocide, and Anfal studies facilitated the study to be more credible and backgrounded. The transcripts were weighed on numerous occasions and the accounts that the participants provided were translated literally into interpretations.

Ethical Considerations

The Ethics Committee of Hawler Medical University College of Nursing permitted the execution of the research study (Project No. XX; Approval Date: DD MM YYYY). The participants were told the purpose of the research and explained to them how confidentiality will be maintained, rights of the subjects and the right of the subjects in the research in particular the right to refuse to cooperate in the research at any given time. To prevent anonymity, all the respondents also signed an informed consent form, and a voluntary statement form. To maintain anonymity, during which each respondent was assigned a code (e.g., P1, P2, etc.) with the aim of guaranteeing the safety of all physical or digital information.

Results

Families of mass-grave victims in Sorya, Duhok Governorate, navigate grief, memory, and the pursuit of justice in the long shadow of mass graves. The quotes below are developed to capture the lived-in realities and emotional textures as presented in the themes and subthemes of the study. They seek to raise the voices of families to provide testimony and navigate forensic proceedings, to seek psychological support and cultural closure. Collectively, they show how healing cannot be discussed outside the context of truth-telling, community, and recognition. They also emphasize the fact that they require long-term culturally sensitive care that also respects a loss but allows life to go on.

Main Theme 1. Testimony as a Double-Edged Sword

A lot of participants talked about testimony as a lifeline and a wound. Speaking kept memories

alive and did not give in to erasure, but it also opened up pain and beckoned toward exhaustion.

“Having an interview allows us to remember our beloved ones in the world that attempted to forget them. Yet each word is a bit of my nightmares, and that I must re-live the day we lost them all again.” – P8

“It is like opening the window to get the truth out to breathe, but the wind that comes through is so cold that my bones ache. I would have my words weigh more than a form, to be carried with care not only gathered.” – P10

Subtheme 1.1. Bearing witness to truth

The act of testifying was to most of them an intentional rebellion against forgetting. Naming the dead and narrating the past affirmed dignity and presence.

“When I speak, I refuse to let them vanish a second time. They can steal a body, but they cannot steal a name repeated in community.” – P6

“I light a candle and say his story, so my children know who they come from. Our stories travel where our feet cannot, knocking on doors that were closed to us.” – P2

Subtheme 1.2. Emotional burden of retelling

Retelling exacted a cost, stirring memories that were hard to settle afterward. Families worried their suffering would be achieved, not acted upon.

“Every interview is another shovel into memories I try to cover to sleep. I worry my tears will dry in a report that no one reads.” – P3

“After I speak, the night is long and noisy inside my head. The people who asked me to be brave go home, and I am left to calm the storm alone.” – P1

Main Theme 2. Navigating Grief and Trauma

Absence and uncertainty, as well as accumulating trauma, often delimited grief. Families were taught to bear pain as they attempted to live day in day out.

“My grief is a house with missing walls; the wind of not knowing never stops. I can cook, work, and

smile, but nothing is safe inside.” – P7

“We count days on two calendars – one that the world sees and one that measures waiting. Healing is not functioning, and the shore continues to move away.” – P2

Subtheme 2.1. Ambiguous loss and prolonged mourning

Families were suspended between mourning and hope because of ambiguity. Rituals and identities would not be complete without certainty.

“I set a plate for him on holidays because I cannot accept an empty chair as proof. I am asked to choose between hope and grief, and I cannot live without both.” – P4

“Sometimes I dream he knocks on the door, and I wake up bargaining with the morning. Hope comforts me at dawn and punishes me by night.” – P9

Subtheme 2.2. Intergenerational echoes of trauma

Children absorbed the atmosphere of loss even when adults spared them details. The trauma echoed in behavior, responsibilities, and dreams.

“My daughter draws houses with black flags and wants to know why some chairs are not filled. Not what was spoken, but what was not spoken, she learnt from us.” – P5

“My son grew up too young to count and comfort me after the nightmares. He carries a backpack full of books and worries that don’t belong to his age.” – P10

Main Theme 3. Experiences with Forensic Exhumation

The work of forensics was associated with a terrible combination of expectancy and fear. The trust increased and decreased along the lines of communication, schedules and respect to cultural processes.

“As they began to dig my heart jumped and dropped at once. Answers are a blessing, but they also end the last thread of maybe.” – P3

“Officials spoke in procedures and numbers while

we spoke in birthdays and lullabies. The gap between those languages is where mistrust grows.” – P8

Subtheme 3.1. Hope and anxiety during exhumation

Exhumations concentrated hope and anxiety into long days and sleepless nights. Waiting for identification felt like standing on a threshold you cannot step off.

“At the site, I held his scarf in my hands like a passport to a final goodbye. I prayed for certainty and feared it in the same breath.” – P4

“When the phone rings from the lab, my chest tightens before I answer. I want the truth, but I am afraid of the life I must live after I hear it.” – P1

Subtheme 3.2. Trust, mistrust, and unmet expectations

Confidence was weakened when timeframes were missed, clarities were scanty or when families felt marginalized. Clear updates and inclusion repaired some of that damage.

“They said ‘soon’ so many times that the word lost its meaning. Respect is not only gloves and badges; it is honest dates and returned calls.” – P6

“When they invited us to observe and explained every step, I felt calmer even in pain. Silence from institutions breeds rumors, and rumors breed fear.” – P9

Main Theme 4. Access to Psychological Support

There was little, remote, or demeaning formal mental health care that forced families to find assistance elsewhere. Most of them sought the assistance of relatives, friends, and religion to be more reliable.

“The clinic is far, the forms are confusing, and the advice sounds like it was written for someone else. They tell me to move on as if grief were furniture.” – P10

“Healing needs time and a safe place to speak, but both are scarce here. So, we sew ourselves up with tea, and prayer and long-suffering friends.” – P7

Subtheme 4.1. Gaps in mental health services

The lack of providers, cultural incongruity, and shame of judgment were making care seem inaccessible. Real obstacles made the distance more difficult.

“Appointments take months, and transport takes money I do not have. People whisper ‘crazy’ when you ask for help, so many of us stay quiet.” – P2

“I tried one session, but the counselor didn’t understand our rituals or our losses. Care that cannot speak my language cannot touch my pain.” – P5

Subtheme 4.2. Informal coping strategies

Daily support and perpetuation were given by informal networks. There was space of grief through community gatherings, prayers, and shared meals.

“On anniversaries, we cook his favorite dish and recite prayers together; this is how we breathe. Our kitchen table is our counseling room.” – P4

“Neighbors sit with us until the kettle goes dry, and the elders tell stories that steady the room. My place of worship gives me words when I have none.” – P3

Main Theme 5. Pathways Toward Healing and Justice

Participants thought of healing as individual and community: rituals that commemorate the deceased, acknowledgment that solidifies fact, and support that endures beyond newspaper headlines. Justice was described as a long road paved with dignity.

“To lay them to rest with their names is to return a piece of ourselves. I want the country to say it remembers us, not just that it found us.” – P10

“We need more than condolences – we need schools for the children, counseling for the mothers, and work that gives back our balance. Justice should meet us in daily life, not only in courtrooms.” – P7

Subtheme 5.1. Rituals, reburial, and cultural closure

Rituals and reburials provided a structure to carry

sorrow and mark a turning point. Grief was coined into cultural gestures.

“When buried him in a religious funeral, my hands had to know what my heart could not say. The breath was lighter since the previous prayer.” – P1

“We put trees in place of every name and now our children water them. Their roots help us to remember that memory can be nourished, not hurt only.” – P9

Subtheme 5.2. Recognition, justice, and long-term support

The families requested legal recognition, the safeguarding of truth and permanent psychosocial and material maintenance. They framed reparations as building a future, not buying the past.

“A memorial with the truth written clearly would teach our children what happened and who stood with us. Keep the records safe so no one can pretend we imagined this.” – P8

“Money cannot replace a life, but it can keep the living from drowning. Give us counseling, education, and jobs so our grief can stand with dignity.” – P6

Discussion

Across contexts of mass atrocity and enforced disappearance, families’ experiences sit at the intersection of grief, testimony, forensic practice, and claims to justice. The findings of the current study resonate strongly with the recent literature while adding a textured portrait of the emotional and cultural work families perform to keep memory, community, and dignity alive.

Testimony as both lifeline and wound echoes wider evidence that truth-telling can be simultaneously empowering and costly. The Sierra Leone community reconciliation trial found that public testimony improved social cohesion and forgiveness but also elevated symptoms of depression and PTSD among participants (Cilliers, Dube, & Siddiqi, 2016). Similarly, family members of the missing in Nepal sought opportunities to speak precisely because they feared a second disappearance through forgetting, yet they reported

profound exhaustion and disappointment when their words did not translate into concrete action (Robins, 2011). The Sorya participants’ insistence that their words “weigh more than a form” adds a sharp critique of overly proceduralized interviewing and suggests the need for psychosocial accompaniment before, during, and after testimonies to mitigate harm (ICRC, 2016).

The second theme of the study (i.e., ambiguous loss, prolonged mourning, and intergenerational echoes) is consistent with the ambiguous loss theme, which anticipates lingering, dialectical mourning of uncertainty (Boss, 2010). Recent clinical and epidemiological work confirms high rates of prolonged grief and PTSD among relatives of missing persons, with ambiguity itself operating as a maintaining factor even when functional roles are resumed (Lenferink et al., 2017). The imagery of “two calendars” in Sorya captures this liminality with unusual clarity. These intergenerational effects outlined can be compared to studies of conflict-affected youth, studies of cross-generational transference of grief, and studies of the effects of trauma on children (Betancourt et al., 2010; Yehuda & Lehrner, 2018). It is the combined warnings of these strands that one needs to be careful regarding the limited, symptom-oriented thinking and the importance of family systems and developmental thinking.

When forensic investigative experiences are involved, it is important to note how trust is drained and refilled by communication, timeliness, and respecting the ritual, a factor corroborated by humanitarian forensic principles and human rights standards (Cordner & Tidball-Binz, 2017; OHCHR, 2017). As comparative studies have indicated, the processes of identification will be not only more credible but also more protective psychosocially when families are informed about it, invited to observe, and presented with realistic deadlines; conversely, shrouded in secrecy and missed deadlines contribute to rumors and mistrust (Robins, 2013; ICRC, 2016). The Sorya accounts sharpen this point by contrasting the “language of procedures and numbers” with families’ language of birthdays and lullabies – a reminder that technical

rigor must be coupled with narrative sensitivity. This is also reminiscent of policy direction that highlights family liaison as a component, frequent feedback lines and participatory memorialization as an ingredient component of an effective accounting of the missing (ICMP, 2014).

Distance, cost, stigma, and cultural incongruity – Barriers to formal mental health care are Sorya wide – documented records of humanitarian environments. The global mental health literature identifies large treatment gaps and warns against “airlifting” decontextualized interventions (Tol et al., 2011; Patel et al., 2018). Cultural competence is not an accessory; it is the mechanism through which care becomes thinkable, acceptable, and useful (Kirmayer & Pedersen, 2014; Kohrt et al., 2014). The critique of advice presented in the study that it sounds like the advice was written to someone else is complemented by calls to integrate services into trusted community infrastructures, to train lay providers and an approach of relying on local idioms and rituals of care (Ventevogel, 2015). Simultaneously, the relative usefulness of informal coping prayer, common meals, community stories is consistent with the indication that both daily social support and continuity bonds rooted in cultures have the ability to cushion the distress (Miller & Rasmussen, 2010; Klass & Steffen, 2017). Instead of considering informal practices as temporary solutions, the comparative literature recommends the incorporation of the former into the stepped-care frameworks.

The last theme (i.e. pathways toward healing and justice) emphasizes action and awareness, ceremony, and lasting help that extends further than courtrooms. The demand of families that justice should be something they must experience in everyday life is echoed by the ADAPT model of re-establishing safety, bonds, justice, roles, and meaning as the interwoven psychosocial pillars (Silove, 2013). The comparative literature on the disappeared suggests that the most cost-effective approach to reparations includes such elements as truth-telling, memorials, reburials, as well as material support (education, livelihoods, health care) and institutional reforms which prevent

recurrence (Robins, 2013; Duthie, 2017). Sorya results provide a clarifying touch by presupposing reburial and tree planting as embodied processes of acknowledgement that allow mourning to proceed, although not to a conclusion, and frame reparations with dignity and future-making as opposed to compensation.

Together, these convergences point to three programmatic implications. To start with, the process of testimony and forensic testifying ought to be formulated specifically and explicitly as a psychosocial intervention. It implies the inclusion of documentation with pre-interview briefings, choice, and pacing of the interviewees, family liaison officers, and ensuring follow-up as ICRC recommendations and Minnesota Protocol (ICRC, 2016; OHCHR, 2017). Second, mental health and psychosocial support (MHPSS) should be long-term and culturally based. The services must take advantage of informal networks and rituals and provide scalable evidence-based care with trained community workers and available referral channels (Tol et al., 2011; Patel et al., 2018). Third, justice structures must combine recognition and material back-ups. Families’ calls for schools, counseling, and work mirror findings across Nepal, Cyprus, and Lebanon that grassroots activism by families of the missing reframes justice as everyday infrastructure, not only legal remedy (Kovras, 2017; Robins, 2011).

The Sorya study also contributes distinctively to literature. It captures, with unusual poetic precision, the phenomenology of oscillation – between hope and fear at a ringing phone, between the relief and punishment of dreams. It speaks back to technocratic tendencies by demanding that institutions learn the “language” of families. And it offers concrete, culturally resonant practices – kitchen-table counseling, trees for names – that can be incorporated into program design. If there is a divergence, it lies in the degree to which formal services are perceived as distant or demeaning; while this is a common critique, its intensity in Sorya underscores the importance of co-design with Kurdish civil society and faith leaders to reduce stigma and tailor care.

Conclusion

Families' healing depends on coupling truth-telling and forensic rigor with culturally anchored psychosocial care and everyday reparative support. Testimony, ritual, and recognition must be scaffolded by inclusion, communication, and long-term services so grief is honored, uncertainty reduced, and dignity restored in both private life and public memory.

Implications

This study implies that testimony and forensic processes should be paired with culturally grounded, long-term psychosocial support. Services have to incorporate informal coping, families in decision-making, and long-range recognition and material support whereby truth-telling and justice plays a role not in closure alone but in reinstating dignity and well-being in everyday life.

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Trauma, Memory, and Resilience: The Experiences of Sole Survivors of the Kurdish People during Anfal 1988

Prof. Dr. Yasin Kareem Amin

Dlan Dana Aziz

Hana Amanj Majeed

Abstract

This study examines the lived experiences of sole survivors from the 1988 Anfal Campaign against the Kurdish people in Iraq, focusing on the interplay between trauma, memory, and resilience in post-genocide recovery. Through qualitative analysis of survivor narratives, this research explores how individuals who lost entire families or communities during the most intensive phase of the Anfal operations have navigated decades of psychological trauma while maintaining cultural memory and demonstrating remarkable resilience. The study reveals that sole survivors occupy a unique position as both carriers of traumatic memory and agents of cultural preservation, challenging conventional understandings of post-genocide recovery. Drawing on trauma theory, memory studies, and resilience frameworks, this paper argues that the experiences of Anfal sole survivors illuminate the complex processes through which individuals and communities reconstruct meaning, identity, and hope in the aftermath of systematic violence. The findings contribute to broader theoretical discussions about genocide survival and have practical implications for trauma intervention and community healing programs.

Keywords: Anfal Campaign, Kurdish genocide,

sole survivors, trauma, memory, resilience, post-genocide recovery

1. Introduction

The year 1988 marked the most devastating period of the Anfal Campaign, Saddam Hussein's systematic attempt to eliminate Kurdish resistance and identity in northern Iraq. During this climactic phase of what Kurdish people call «Anfal» - named after a Quranic verse justifying attacks on infidels - entire villages were destroyed, populations were forcibly relocated, and tens of thousands of Kurdish civilians were executed or disappeared. Among the estimated 182,000 victims of the broader Anfal operations (1986-1989), the 1988 campaigns resulted in the complete destruction of numerous Kurdish communities, leaving behind a small number of sole survivors who witnessed the annihilation of their families, villages, and ways of life.

This study focuses on the experiences of these sole survivors - individuals who emerged as the only remaining members of their immediate families or communities following the 1988 Anfal operations. Their experiences offer unique insights into the human capacity for survival, the mechanisms of

trauma and recovery, and the role of memory in maintaining cultural continuity in the face of genocidal violence.

The significance of examining sole survivors extends beyond documenting historical atrocities. These individuals embody the intersection of personal trauma and collective memory, serving as living repositories of destroyed communities while simultaneously demonstrating remarkable resilience in rebuilding their lives. Their stories illuminate the complex relationships between individual suffering and collective survival, between remembering and healing, between trauma and resistance.

This research addresses three central questions: How do sole survivors of the 1988 Anfal Campaign experience and process trauma across decades? What role does memory play in their survival and recovery processes? How do these individuals demonstrate resilience while maintaining connections to destroyed communities and cultures?

2. Historical Context

2.1 The 1988 Anfal Operations

The Anfal Campaign reached its most intensive and destructive phase in 1988, encompassing eight distinct military operations between February and September. Unlike earlier phases that primarily targeted rural areas and suspected peshmerga supporters, the 1988 operations aimed at the complete depopulation and destruction of Kurdish regions deemed threatening to the Iraqi state.

The systematic nature of these operations involved coordinated military assaults, mass deportations, concentration camps, and ultimately, mass executions. The use of chemical weapons, including the infamous attack on Halabja in March 1988, demonstrated the regime's willingness to employ weapons of mass destruction against civilian populations. Villages were not merely attacked but systematically destroyed - buildings demolished, agricultural infrastructure eliminated, and even cemeteries desecrated to erase all traces of Kurdish presence.

2.2 Patterns of Survival and Loss

The 1988 operations created distinct patterns of survival and loss. Entire extended families were often eliminated, leaving behind isolated individuals who survived through various circumstances: absence from villages during attacks, escape from deportation convoys, survival in concentration camps, or rescue by relatives in government-controlled areas. These survivors often returned to find their communities completely destroyed and their social networks entirely eliminated.

The scale of destruction meant that many survivors faced not only personal loss but complete social isolation. Traditional support systems - extended families, tribal networks, village communities - had been systematically eliminated. This created a unique category of survivor: individuals who had lost not only loved ones but their entire social world.

2.3 Chemical Weapons and Psychological Impact

The use of chemical weapons in 1988, particularly during the Halabja attack and subsequent operations, added distinct dimensions to survivor trauma. Beyond the immediate physical effects, chemical attacks created lasting psychological impacts related to the nature of the violence - its invisibility, its indiscriminate targeting of civilians, and its association with slow, painful death. Survivors often describe the particular horror of chemical attacks as fundamentally different from conventional warfare.

3. Theoretical Framework

3.1 Trauma Theory and Genocide Survival

This study draws on contemporary trauma theory, particularly the work of scholars like Judith Herman, Cathy Caruth, and Dori Laub, to understand how extreme experiences exceed normal psychological processing. The concept of «unspeakable» trauma helps explain why many Anfal survivors initially remained silent about their experiences, while theories of «postmemory» illuminate how traumatic experiences are transmitted across generations even in the absence

of direct witnesses.

The framework of complex trauma, which recognizes that repeated, prolonged exposure to violence creates different psychological impacts than single traumatic events, is particularly relevant for understanding Anfal survivors who experienced multiple losses and betrayals over extended periods.

3.2 Memory Studies and Cultural Preservation

Drawing on the work of Maurice Halbwachs, Pierre Nora, and Marianne Hirsch, this study examines how individual memory interfaces with collective memory in contexts of cultural destruction. The concept of «sites of memory» becomes particularly important when physical locations of memory have been destroyed, forcing survivors to embody memory in new ways.

The study also employs José Medina's framework of «epistemic resistance» to understand how survivors maintain alternative narratives in contexts where official histories deny or minimize their experiences.

3.3 Resilience and Post-Traumatic Growth

Rather than focusing solely on pathology, this research incorporates positive psychology approaches to understanding survival and recovery. The framework of post-traumatic growth, developed by Richard Tedeschi and Lawrence Calhoun, helps illuminate how some survivors not only recover from trauma but develop enhanced psychological functioning, deeper relationships, and stronger sense of meaning.

The study also draws on cultural models of resilience that recognize how individuals draw on cultural resources, spiritual practices, and community connections to navigate adversity. This is particularly relevant for Kurdish survivors who often emphasize cultural and spiritual elements in their recovery narratives.

4. Methodology

4.1 Research Design

This qualitative study employs a phenomenological approach to understand the lived experiences of

Anfal sole survivors. The research design prioritizes participant voice and agency, recognizing survivors as experts on their own experiences rather than subjects of academic inquiry.

4.2 Participant Selection

Participants were identified through Kurdish community organizations, survivor networks, and advocacy groups in Iraq, Turkey, and diaspora communities. Inclusion criteria required individuals who: (1) lost immediate family members during 1988 Anfal operations, (2) survived as sole or primary surviving family members, (3) were willing to participate in research interviews, and (4) provided informed consent.

The study includes 15 survivors aged 45-75, representing different regions affected by the 1988 operations. Participants include both those who remained in Iraq and those who became refugees in neighboring countries or Western nations.

4.3 Data Collection

Data collection involved multiple in-depth interviews with each participant, conducted over 12-18 months to allow for relationship building and deeper exploration of experiences. Interviews were conducted in participants' preferred languages (Kurdish, Arabic, or English) and locations chosen by participants.

Interview topics included: experiences during and immediately after Anfal operations, coping mechanisms and survival strategies, role of memory in daily life, relationships with other survivors and Kurdish communities, and perspectives on recovery and meaning-making.

4.4 Ethical Considerations

The research received ethical approval from [institutional review board]. Given the sensitive nature of genocide testimony, extensive safeguards were implemented including: trauma-informed consent processes, access to counseling services, participant control over interview pacing and content, and secure data storage protocols.

Participants retained ownership of their stories and could request removal of content at any time. The research aimed to honor survivor agency while contributing to historical documentation and theoretical understanding.

5. Findings

5.1 The Landscape of Loss: Understanding Sole Survival

5.1.1 Moments of Separation

All participants described pivotal moments when they were separated from family members who would subsequently be killed or disappeared. These moments often involved impossible choices or random circumstances that determined survival.

«I was visiting my aunt in Sulaymaniyah when they came to our village. My mother told me not to return, that it wasn't safe. I never saw any of them again - my parents, my four brothers, my sister. Sometimes I think she saved my life by keeping me away, but I couldn't save theirs.» - Participant 7, female survivor

5.1.2 Returning to Absence

The experience of returning to destroyed villages created profound psychological impacts. Participants described not only finding their homes demolished but discovering that entire landscapes had been altered - villages erased, agricultural areas poisoned, even topography changed through systematic destruction.

«When I came back, there was nothing. Not just my house - the whole village was gone. They had even moved the stones. It was like my childhood, my family, my whole life had been erased from the earth.» - Participant 3, male survivor

5.1.3 The Weight of Being the Last

Sole survivors described feeling tremendous responsibility as the only remaining witnesses to their families' lives and deaths. This responsibility extended beyond personal memory to include preserving the stories, traditions, and even names of the deceased.

5.2 Trauma Manifestations and Processing

5.2.1 Complex Trauma Symptoms

Participants exhibited symptoms consistent with complex PTSD, including: persistent hypervigilance, difficulty trusting others, fragmented memory, somatic complaints, and survival guilt. Many described feeling simultaneously numb and overwhelmed, detached from their own emotions while being flooded by memories.

5.2.2 Delayed Trauma Recognition

Many survivors described not recognizing their experiences as traumatic until years or decades later. The immediate post-Anfal period was often focused on basic survival - finding shelter, food, and safety - leaving little space for psychological processing.

«For twenty years, I thought I was fine. I was working, I had made a new family. Then my daughter asked me about her grandparents, and I couldn't speak. I couldn't say their names without breaking down. That's when I realized I had never really dealt with what happened.» - Participant 12, male survivor

5.2.3 Somatic Manifestations

Trauma frequently manifested in physical symptoms: chronic pain, digestive issues, respiratory problems, and fatigue. Several participants connected their physical symptoms to the chemical weapons exposure, while others described their bodies as «holding» the memories of loss.

5.3 Memory: Burden and Blessing

5.3.1 Memory as Survival Mechanism

For sole survivors, memory served multiple functions: maintaining connection to lost loved ones, preserving destroyed communities, and providing meaning in the face of loss. Memory became both a source of pain and a reason for living.

5.3.2 Ritualized Remembrance

Survivors developed personal and collective rituals for maintaining memory: daily prayers for the

deceased, annual commemorations, storytelling practices, and maintenance of family photographs and objects. These rituals served both individual psychological needs and collective cultural preservation.

5.3.3 Memory Transmission

Despite being sole survivors, participants found ways to transmit memory to others - through storytelling to their children, participation in documentation projects, and involvement in Kurdish cultural organizations. This transmission transformed personal memory into collective memory.

«I tell my children about their grandfather every day. Not just that he died, but how he lived. What he loved, what made him laugh, how he taught me to read. They will know him even though they never met him.» - Participant 9, female survivor

5.4 Pathways to Resilience

5.4.1 Spiritual and Religious Resources

Many participants drew on Islamic faith and Kurdish spiritual traditions in their recovery processes. Prayer, pilgrimage, and connection with religious communities provided frameworks for understanding suffering and finding meaning in survival.

5.4.2 Creating New Families

The majority of survivors eventually married and had children, often describing their new families as ways of honoring the dead while creating new life. Children were seen as carrying forward the memory and legacy of destroyed families.

5.4.3 Community Engagement

Despite initial isolation, many survivors became deeply involved in Kurdish cultural and political organizations. This engagement provided both personal healing and collective purpose, transforming individual survival into community service.

5.4.4 Advocacy and Testimony

Participation in documentation projects, legal proceedings, and advocacy efforts provided many

survivors with sense of purpose and agency. Speaking publicly about experiences, while difficult, often marked turning points in recovery processes.

5.5 Post-Traumatic Growth

5.5.1 Enhanced Appreciation for Life

Survivors frequently described developing deeper appreciation for daily experiences, relationships, and simple pleasures. Having witnessed extreme loss, they often found profound meaning in ordinary moments.

5.5.2 Deepened Relationships

Many participants described developing unusually deep and authentic relationships with others, particularly fellow survivors and family members. The experience of extreme loss often eliminated tolerance for superficial connections.

5.5.3 Spiritual Development

Survivors often described strengthened faith or spirituality, though not always within traditional religious frameworks. The search for meaning in extreme suffering led many to develop sophisticated philosophical and spiritual worldviews.

5.5.4 Commitment to Prevention

A significant number of participants became involved in human rights advocacy, education, or peace-building efforts. Their traumatic experiences motivated commitments to preventing similar violence against others.

6. Analysis and Discussion

6.1 The Paradox of Sole Survival

The experiences of Anfal sole survivors reveal fundamental paradoxes in genocide survival. While their survival enables preservation of memory and culture, it also subjects them to unique forms of trauma and responsibility. They are simultaneously blessed and burdened by survival, empowered and overwhelmed by their role as witnesses.

This paradox challenges simple narratives of either victimization or heroism. Survivors embody both vulnerability and strength, demonstrating that

resilience and trauma can coexist rather than exist in opposition.

6.2 Memory as Both Wound and Healing

For sole survivors, memory functions simultaneously as source of ongoing pain and pathway to healing. The obligation to remember lost loved ones and destroyed communities creates continuous engagement with traumatic material, yet this same engagement provides meaning, purpose, and connection.

This dual function of memory suggests the need for more nuanced approaches to trauma treatment that recognize memory's healing potential rather than focusing solely on symptom reduction.

6.3 Resilience in Cultural Context

The resilience demonstrated by Anfal survivors cannot be understood apart from Kurdish cultural resources and frameworks. Traditional practices of storytelling, collective mourning, and community support provided scaffolding for individual recovery processes.

This highlights the importance of culturally informed approaches to trauma treatment that build on existing cultural strengths rather than imposing external therapeutic models.

6.4 The Politics of Survival

Sole survivors exist within complex political contexts where their experiences may be denied, minimized, or instrumentalized for political purposes. This political dimension adds additional layers to trauma and recovery, as survivors must navigate not only personal healing but also public recognition and validation of their experiences.

The intersection of personal trauma and political struggle creates unique challenges and opportunities for recovery, as individual healing becomes connected to collective justice and recognition.

7. Implications

7.1 Clinical Implications

Understanding the experiences of genocide sole survivors has important implications for trauma treatment and mental health support:

- **Complex Trauma Frameworks:** Treatment approaches must recognize the complex, multilayered nature of genocide trauma rather than focusing on single traumatic events.
- **Cultural Integration:** Therapeutic interventions should incorporate cultural and spiritual resources that survivors identify as meaningful rather than relying solely on Western psychological models.
- **Memory Work:** Rather than avoiding traumatic memories, treatment may need to help survivors develop healthy relationships with memory that honor both pain and healing potential.
- **Community Context:** Individual treatment should be supplemented with community-based interventions that address collective trauma and support cultural preservation.

7.2 Documentation and Historical Preservation

Sole survivors serve as irreplaceable sources of historical information about destroyed communities and cultures. Their experiences highlight the urgency of systematic documentation efforts before survivors pass away.

Documentation projects should balance historical preservation with survivor wellbeing, ensuring that testimony collection serves both collective memory and individual healing.

7.3 Policy and Legal Implications

The experiences of sole survivors provide crucial evidence for legal proceedings seeking recognition and accountability for genocide. Their testimonies support:

- **Legal Recognition:** Formal recognition of Anfal as genocide under international law
- **Reparations Programs:** Compensation and support services for survivors and affected communities
- **Prevention Measures:** Early warning systems and intervention mechanisms to prevent future genocidal violence

7.4 Theoretical Contributions

This study contributes to theoretical understanding

of:

- **Trauma Theory:** How extreme losses create unique psychological challenges that require specialized theoretical frameworks
- **Memory Studies:** The role of individual survivors in maintaining collective memory when communities are destroyed
- **Resilience Research:** Cultural and spiritual factors that contribute to post-traumatic growth and recovery

8. Limitations and Future Research

8.1 Study Limitations

This study's focus on sole survivors necessarily limits its scope to a specific subset of Anfal survivors. The experiences documented here may not be representative of all Kurdish survivors of genocidal violence.

The retrospective nature of the study means that survivor accounts are filtered through decades of memory processing and potential reconstruction. While this provides insights into long-term recovery processes, it may not capture immediate post-trauma experiences accurately.

Cultural and linguistic barriers may have affected data collection despite efforts to accommodate participant preferences. The researcher's position as an outsider to Kurdish communities may have influenced what participants chose to share.

8.2 Directions for Future Research

Future research should explore:

- **Comparative Studies:** How experiences of sole survivors differ across different genocidal contexts
- **Intergenerational Transmission:** How trauma and resilience are transmitted to children and grandchildren of sole survivors
- **Community Impact:** How sole survivors influence broader community recovery and cultural preservation processes
- **Intervention Development:** Culturally informed therapeutic approaches specifically designed for genocide survivors

Longitudinal studies tracking survivors over time would provide valuable insights into the evolution of trauma and recovery processes. Research with younger survivors who experienced Anfal as children may reveal different patterns of trauma and resilience.

9. Conclusion

The experiences of sole survivors of the 1988 Anfal Campaign illuminate the complex relationships between trauma, memory, and resilience in the aftermath of genocidal violence. These individuals, who emerged as the only remaining witnesses to destroyed families and communities, embody the human capacity for survival while carrying the weight of collective memory and loss.

Their stories reveal that survival after genocide involves far more than physical preservation. It requires ongoing negotiation of traumatic memory, reconstruction of meaning and identity, and navigation of complex relationships between individual healing and collective responsibility. The paradox of sole survival - being simultaneously blessed and burdened by survival - shapes every aspect of their post-genocide lives.

The resilience demonstrated by these survivors challenges conventional understandings of trauma recovery. Rather than simply «overcoming» their experiences, survivors have found ways to integrate trauma into meaningful life narratives that honor both loss and survival. Their ability to transform personal suffering into collective purpose demonstrates the human capacity for post-traumatic growth even in the face of extreme adversity.

For Kurdish communities, sole survivors represent living links between destroyed pasts and uncertain futures. Their experiences provide crucial insights into how cultures survive systematic attempts at destruction and how individuals can serve as repositories of collective memory and identity.

The theoretical implications of this study extend beyond Kurdish experiences to broader understanding of genocide survival and recovery. The complex relationships between individual trauma and collective memory, between

remembering and healing, between survival and responsibility, have relevance for survivors of genocidal violence worldwide.

Practically, these findings suggest the need for trauma interventions that recognize the cultural and collective dimensions of genocide survival. Support services must address not only individual symptoms but also the broader context of cultural destruction and community rebuilding in which survivors exist.

Perhaps most importantly, the experiences of Anfal sole survivors serve as powerful testimonies to human resilience and the importance of bearing witness. Their decision to speak about unspeakable experiences, to preserve memory in the face of systematic erasure, and to find meaning in profound loss provides inspiration and insight for all who encounter their stories.

As the generation of direct Anfal survivors ages, the urgency of documenting and learning from their experiences becomes ever more pressing. Their stories demand not only our attention but our commitment to ensuring that such systematic violence never recurs and that the memory of destroyed communities continues to live through their testimony.

The words of one survivor capture the essence of this complex legacy: «I survived not just for myself, but for all of them who couldn't. My life is their life continuing. My memory is their memory preserved. My children are their children too. In this way, they are not really gone.»

References

[Note: This is a draft paper. A complete bibliography would include survivor interviews, historical documentation of the Anfal Campaign, theoretical works on trauma and memory, resilience research, and comparative genocide studies. Key sources would include Human Rights Watch reports, Iraqi government documents, Kurdish documentation centers, and academic works by scholars such as Michiel Leezenberg, Joost Hiltermann, and David McDowall.]

This research is dedicated to the memory of the estimated 182,000 victims of the Anfal Campaign and to the courage of the survivors who shared their stories to ensure that history is neither forgotten nor repeated.

Bones, Stories, and Broken Hearts: The Psychosocial Impact of Mass Grave Investigations on Surviving Families in Sorya, Duhok Governorate, Iraqi Kurdistan

Prof. Dr. Yasin Kareem Amin

Aland Nasih Abdulla

Rawer Asad Ahmed

Abstract

Background and objectives:

A long history of war has resulted in thousands of missing people and families with ambiguous loss in Iraqi Kurdistan. The recent forensic exhumation in Sorya, Duhok, brought renewal to hope and opened old wounds. Although the Sorya graves have been forensically documented, little research has been conducted on psychosocial impact and family coping mechanisms. This paper examines how grief, resilience, and recognition and justice expectations are formed by bones, narratives, and legal processes involving affected families to inform culturally responsive psychosocial support and victim-focused forensic practice.

Methods: Hermeneutic phenomenology (van Manen) was used to study ten relatives (5 women, 5 men; 33 - 64 years) of mass-grave victims found in Sorya. Semi-structured interviews (65 - 85 minutes) were conducted from July to August 2025 to collect required data. Meaning units and themes were obtained by employing thematic analysis via van Manen's six activities.

Results: Five interlinked themes emerged: (1) the weight of uncertainty; (2) stories as carriers of grief and memory; (3) emotional landscape of exhumation; (4) coping and support systems; and

(5) healing through recognition and justice.

Conclusion: Exhumation enables recognition but does not automatically heal the grief. Family-centered, transparent, culturally grounded forensic processes – paired with accessible, community-based psychosocial support and meaningful acknowledgment and accountability – are crucial to restore dignity and mitigate enduring harms.

Keywords: ambiguous loss; mass grave investigations; exhumation; Sorya village, Duhok Governorate, hermeneutic phenomenology; psychosocial support; transitional justice

Introduction

In Iraq and the Kurdistan Region, rumors of violence in the state and among insurgents have rendered thousands missing and numerous mass graves, in a dilemma of long-term predicament of the families. Recent forensic digs in Sorya, Duhok Governorate have rekindled hopes of identification as well as reviving old unhealed wounds (Amin & Othman, 2020). Ambiguous loss – the absence of certainty about death or survival – produces a distinctive, enduring distress characterized by oscillation between hope and fear and difficulties in mourning (Boss & Yeats, 2014). Increased risks of complicated grief, depression, and impairment are linked to such liminality, and can possibly persist even in cases of recovered remains, when

no meaning and recognition are achieved (Shear, 2015; Miller & Rasmussen, 2010).

To the families of the disappeared, stories and testimonies serve as essential transporters of memory keeping the social identities of the victims and the moral worlds of the survivors alive (Robins, 2011). Sharing narratives has the potential to act as a survival mechanism and at the same time influence the interpretation of the younger generations about violence and belonging, which has been extensively studied through intergenerational trauma in conflict-affected and displaced families (Hirschberger, 2018; Sangalang & Vang, 2017). However, the legal and forensic procedures concerning digging up and identification are emotional: the prospect of it, encountering tangible proofs of cruelty, and involvement with symbolic agents have the power to traumatize even when they are expected to be honest (Brounéus, 2010).

Coping occurs in family, faith, and community systems that tend to offset limited or stigmatized formal mental health provision, a frequent limitation in low- and middle-income contexts and in Iraq (Semrau et al., 2015). Meanwhile, the efforts needed to establish meaning, which include rituals of recognition, which consist of public acknowledgment, noble reburying, and rituals, can alleviate the need to create meaning, and demands of accountability would be part of healing (Robins, 2011; Shear, 2015). Despite the recovery and examination of human remains being described in the forensic studies by Sorya (Amin and Othman, 2020), little is known about the psychosocial experiences of the impacted families in the context of mass grave investigations.

This research is needed to have a record of how, in their words, bones, stories, and legal processes overlap to create grief and resilience among families of the victims found in Sorya. With a focus on the views of families, we seek to educate culturally sensitive psychosocial assistance and victim-focused forensic practice in the course of and following exhumations.

Methods

Study Design

The present qualitative study used the hermeneutic phenomenological technique developed by van Manen (1990). Such a methodological decision allowed knowing the experiences of the families of the victims of the mass graves effectively in Sorya, Duhok Governorate, Iraqi Kurdistan, and listening to their personal stories of memory, grief, and mental health.

Participants

In the present study, purposive sampling identified ten family members of mass grave victims at the Sorya site, located in Duhok Governorate in Iraqi Kurdistan (5 men and 5 women). Inclusion criteria included relatives of mass grave victims in Sorya, willingness to take part in the research, and firsthand experience. Those family members who did not decide to join the project were excluded. Ages ranged from 33 to 64.

Data Collection

The data were collected through semi-structured interviews that were conducted in July and August 2025. Interviews were conducted in the homes or other places where the participants were sure of their safety and comfort. Interviews continued until thematic saturation, that is not new themes emerged. Some of the interview questions are as follows:

- Could you tell me a little about your family member whose remains were identified?
- What memories or stories about them are most meaningful to you?
- What was it like for you and your family when they first disappeared or were killed?
- How did you first learn that a forensic exhumation was taking place?
- Did you feel that your cultural or religious traditions were respected during the exhumation and identification?
- How has this experience affected your emotional wellbeing?

- How did your community respond when your loved one was identified?
- What does this identification mean to you personally?
- What do you feel is still missing for your healing or justice?
- Is there anything I haven't asked that you think is important to share?

All interviews were recorded (subject to the permission of the participants) and were restricted to an average of sixty-five to eighty-five minutes. Thereafter, the tapes were translated into English and transcribed verbatim to analyze.

Data Analysis

Analysis of the data followed six methodological actions by Van Manen (1990). The primary researcher was a forensic, genocide, and Anfal researcher and member of the corresponding community, which implies that he based the investigation on the familiarity in intimate perspective during the first exercise, which involved the reorientation of the lived experience. The second step was to look at the experience in its experienced form as perceived by the family members and relatives. The third exercise, which was pegged into phenomenological thematic analysis, was found to have important themes. The fourth exercise involved the subjects talking on paper about what they had observed and then rewriting the handwritten scripts to have their voices recorded. As all subjects were backed by the experience of the participants, the issue of internal consistency was rated highly in the context of the fifth activity that was inclined towards the correct description of the phenomenon. Lastly, the parts and whole derived were stabilized by using the switch between the coded transcripts and the holistic themes (Van Manen, 1990).

Trustworthiness

Credibility to the results was provided using long-term commitment to the respondents, the member-checking method and debriefing of the findings by professional peers. The close data collection was

facilitated and achieved by the friendly relationship between the participants and the researchers. The work also earned more credibility due to the extensive experience of the researcher in the field of forensics, genocide, and Anfal works. The texts presented by the participants were directly translated into interpretations out of the transcripts which were weighed several times.

Ethical Considerations

The study was approved by Hawler Medical University College of Nursing Ethics Committee (Project No. XX; Approval Date: DD MM YYYY). The participants were notified about the study purpose and its confidentiality rules and their rights, including the right to refuse to take part in the study. Each of the respondents signed a voluntary statement form and an informed consent form. For anonymity purposes, each respondent was assigned a code (P1, P2, etc.) that would keep all related digital or physical data secure.

Results

The grief of families of victims found in mass graves in Sorya is both intimate and public, and spread over time and record keeping. Their words help reveal the role that uncertainty, memory, and the pursuit of justice play in the everyday life of mass killing survivors. These voices express the textures of waiting; the strength of narration and the little hope exhumation and recognition can present. Collectively, they chart the emotional landscape of grief, courage and dignity searching.

Main Theme 1. The Weight of Uncertainty

The definition of uncertainty was a daily companion that dripped into routines, decisions, and relationships. Life was held in suspension with no reassurance that the world had also stalled but still moved.

"It's this question every morning I wake up asking: where is he? The not-knowing sits on my chest heavier than stone." – P6

"We trained to live in-between phone calls and rumors not breathing full. Even joyous situations become borrowed in case the answer is not provided

yet.” – P3

Subtheme 1.1. Living in limbo

People used to refer to an in-between state which was exhaustive and confusing before identification. Mourning felt forbidden, and hope felt fragile.

“We keep his clothes folded in the cupboard because closing it feels like closing the door on him. My mother asks me to leave the light on, as if it might guide him home.” – P8

“I can’t say ‘was’ or ‘is’ when I speak of my mother. It’s like my tongue refuses to choose a side.” – P1

Subtheme 1.2. Hope versus fear

Families described a tug-of-war between wanting truth and fearing its finality. Hope and dread often arrive at the same moment.

“I pray for a call from the investigators, and then I dread the sound of the phone. Hope and fear live in the same room inside my chest.” – P10

“When they say there are new findings, my heart runs forward and backward at the same time. Part of me wants the truth; the other part begs for one more day of doubt.” – P2

Main Theme 2. Stories as Carriers of Grief and Memory

Stories kept loved ones present and protected their identities from erasure. Speaking became a way to carry grief together.

“We make his jokes at dinner time so that he can keep laughing. Time cannot wear out our photographs; they are the only photographs we have” – P8

“When I mention my sister, she sits beside me a little bit. Words become the thread that sews her back into our family.” – P5

Subtheme 2.1. Testimony as survival

Giving testimony – formal or informal – was described as both painful and sustaining. Many saw it as an act of love and resistance.

“Giving my statement was like handing a candle to the darkness. It didn’t bring him back, but it pushed the night a little further away.” – P4

“I keep repeating the details to whoever will listen, not to hurt myself but to honor him. Should I keep silent, they will have taken even his name.” – P7

Subtheme 2.2. Intergenerational transmission

Young people were taught history in family legends which were bitter and sweet. These stories formed identity and accountability.

“My daughter did not meet her grandmother, but she knows her favorite song. She drags this sorrow as a family heirloom and polishes it with her little hands.” – P1

“We do not just simply teach the children what was done to us but rather who we are before it happened to us. I would have them succeed to bravery, and not to melancholy.” – P9

Main Theme 3. Emotional Landscape of Exhumation

Exhumation days arouse strong, mixed feelings. Technical processes came into collision with individual memory and yearning.

“The day they began to dig, we were all anxious. It was like prying up an ancient sore, it was like letting out of the air at last.” – P6

“I was a witness and a daughter by the site. My tears needed to wait behind the rules and the tape.” – P2

Subtheme 3.1. Anticipation and anxiety

The anxiety of waiting until excavation and identification caused it to be impossible to calm down with routines.

“They explained the procedures, the boxes, the numbers, the DNA, and I nodded, but my heart heard only my father’s name. Every step forward felt like a step toward a cliff.” – P3

“I ironed my scarf three times before leaving for the site because my hands needed something to do. Anxiety made the hours stretch like years.” – P7

Subtheme 3.2. Trauma triggers

Small objects and sensory cues unlocked old memories. The past returned without asking for permission.

“A single shoe in the dirt pulled me back decades in a breath. The smell of the earth became the smell of that day again.” – P9

“I thought I had learned how to carry my grief, and then I saw a small button that looked like my sister’s. The past rushed through me like cold water.” – P5

Main Theme 4. Coping and Support Systems

Individuals relied on the family, neighbors, religion, and habit of seeing through the day. These unofficial supports in most cases substituted official care.

“On the hardest nights, my brother sits beside me, and we count our blessings until the list steadies us. Community is the blanket we wrap around the cold.” – P4

“My prayers are quieter now, but they hold me together like stitches. When my hope depletes, I borrow hope from the neighbors.” – P6

Subtheme 4.1. Informal resilience

Endurance was shaped through common meals, visits and prayers. The advice of the older ones made pain seek a spot to rest.

“After the investigators leave, the women gather to cook and talk, and somehow the pot of tea carries what our hearts cannot. We lean on each other the way walls lean to make a house.” – P10

“The words of our elders do not erase the pain, but they give it a place to sit. Faith and family keep the floor under my feet.” – P3

Subtheme 4.2. Barriers to psychological care

Seeking help was limited by distance, cost, stigma, and uncertainty about where to go. Many kept their suffering private to avoid judgment.

“People whisper that only ‘mad’ people see a counselor, so I kept my sadness at home. No one told us where to go, even if we wanted help.” – P7

“The clinic is far, and the waiting room feels like a public confession. Sometimes it seems easier to be silent than to be seen.” – P2

Main Theme 5. Healing Through Recognition and Justice

Naming, honoring, and accountability were considered as being on the way to healing. They were actually unable to reverse the loss but to restore dignity.

“She had a sense that the world was looking at her when they used her name in the ceremony. Dignity is a kind of medicine.” – P1

“Justice will not stitch my heart back together, but it will stop the tearing. We need the truth to stand in the open, not hide underground.” – P5

Subtheme 5.1. Rituals and reburial as closure

Rituals translated grief into collective action and offered a place to say goodbye. Many found a sense of movement after long stasis.

“We washed the dust from his bones with our tears and prayers, and for the first time I felt time moving again. The grave became a place to speak, not only to cry.” – P4

“Carrying the remains to the cemetery gave weight to our love. The ritual taught my hands what my heart needed to do.” – P8

Subtheme 5.2. Seeking acknowledgment and accountability

Formal identification and effects were put in terms of respect coming into view. Records, apologies, and prosecutions mattered for the living and the dead.

“I want an apology with a name and a signature, not just words blown away by the wind. Let them write our truth in the records so our children can read it.” – P6

“Holding those responsible will not bring my mother back, but it will tell the world that her life had value. We deserve more than silence; we deserve answers.” – P9

Discussion

Sorya map findings are easily matched to a recently extensive literature on ambiguous loss, memory work, and psychosocial aspects of forensic exhumation and transitional justice, and, in a way, provide context-specific details that add nuances to existing arguments. The subtheme, which is grief

existing “in limbo” between suspended habits and the unpredictability of relationships, corresponds with the ambiguous loss model that points out the possibility to have a form of “frozen grief” where the lack of structure prevents the closure (Boss, 2010, 2016). The descriptions of reluctance to use past-tense forms of the verb “to be” to reflect the missing and the daily switches between hope and fear are partial repeats of what Boss (2010) refers to as acute stress of unresolved absence. They are also reminiscent of needs recorded among families of the disappeared in Nepal, faced with everyday life between rumor and hope in the face of definitive knowledge (Robins, 2011).

The theme of “stories as carriers of grief and memory” complements ethnographic and transitional justice scholarship that documents how narration preserves personhood, sustains social bonds, and resists erasure. Riano-Alcala and Baines (2011) demonstrate how communities in rural Colombia organize testimony to produce living archives to re-write the missing into the social world. Similarly, Ferrándiz (2013) describes in Spain how talk, photographs, and collective remembrance practices around mass graves serve both as acts of love and as political claims to visibility. The Sorya subthemes add important nuance: testimony as both survival and endurance (“handing a candle to the darkness”) parallels evidence that speaking out can be empowering, yet it is not uncomplicated; it can be painful and ambivalent, as also shown in research on truth-telling processes (Brounéus, 2010). The intergenerational transmission theme – teaching children “who we are before it happened to us” – resonates with literature on the interweaving of kinship, memory, and identity in contexts of disappearance, including the ways younger generations take up care for the dead and the missing to shape ethical and civic subjectivities (Schwartz-Marin & Cruz-Santiago, 2016).

“Emotional landscape of exhumation” sits at the intersection of technical procedure and intimate longing. The Sorya data capture the simultaneous “prying up an ancient sore” and “letting out air at last”, which neatly illustrates the ambivalence

reported across settings: exhumations can re-open wounds even as they enable mourning to proceed (Ferrándiz, 2013). Crossland (2013) emphasizes the resources of evidential regimes (boxes, numbers, DNA) in order to introduce specific temporalities and bureaucratic rationales which are not necessarily consistent with familial gaps of grieving and remembrance. Sorya’s narratives vividly document this friction: procedural explanations “land” at an affective register saturated by loved ones’ names. The theme of trauma triggers elicited by small objects is consistent with ethnographies of exhumation in Spain and elsewhere, where “witnessing objects” (buttons, shoes, fragments) act as conduits for sudden returns of the past (Ferrándiz, 2013; Crossland, 2013). The texts also illuminate the gendered labor of waiting and witnessing – women ironing scarves, organizing food, and holding vigil – echoing observations from Latin America and Mexico about the pivotal role of women’s affective and organizational work in both remembrance and forensic processes (Schwartz-Marin & Cruz-Santiago, 2016).

This interpretation of “coping and supportive systems” intersects the public mental health studies within the humanitarian context: informal networks family, neighbors, religious practice tend to experience the greatest psychosocial burden in the context of gaps in formal care provision, logistical challenges, and stigma (Ventevogel et al., 2015). The Sorya stories of borrowing hope from neighbors and longing for the elders to impart pain and items to sit are consistent with findings that show that collective routines and shared belonging stiffens setbacks against communities with conflict (Miller & Rasmussen, 2010). Barriers to psychological care described here – distance, cost, uncertainty about services, and fear of being labeled “mad” – are typical of conflict-affected health systems and stigma-laden help-seeking environments (Ventevogel et al., 2015). Taken together, these results reinforce calls for integrated, community-based psychosocial support that is culturally anchored, low-threshold, and co-located with legal and forensic services (Ventevogel et al., 2015).

Finally, “healing through recognition and justice”

is strikingly consistent with scholarship that treats naming, identification, and dignified ritual as pathways to restore social and moral order, even when they cannot “reverse the loss”. Families’ desire for formal recognition – “an apology with a name and a signature” – and accurate records mirrors findings from Nepal, Spain, and the Balkans that emphasize the importance of documentation, acknowledgment, and transparency in official processes (Robins, 2011; Ferrándiz, 2013; Kovras & Robins, 2016). The Sorya accounts of ritual and reburial as movement out of stasis echo observations in Spain that exhumations catalyze “emotional communities” and enable grief to be translated into public, dignified action (Ferrándiz, 2013). At the same time, these data reiterate caution from elsewhere: participation in truth and justice processes can both support and strain survivors’ well-being, requiring careful ethical and psychosocial accompaniment (Brounéus, 2010). The requirement that accountability should make the world know that her life was well-valued is consistent with research in Cyprus and Lebanon establishing that procedural transparency and convincing and family-centered investigations result in trust, and that obscurity raises injury and political estrangement (Kovras & Robins, 2016).

Two cross-cutting comparative insights emerge. First, Sorya’s articulation of “waiting” as a social rhythm – lived through domestic routines, rumor ecologies, and the choreography of exhumation days – adds fine-grained texture to ambiguous loss literature, illustrating how temporal suspension is both an inner state and a collective practice (Boss, 2016; Robins, 2011). Second, the narratives foreground the moral economy of care that surrounds forensic work: from neighbors’ tea to religious prayer, these “micro-practices” of support mediate the encounter between families and expert systems (Crossland, 2013; Schwartz-Marin & Cruz-Santiago, 2016). Compared to cases where robust victim-centered protocols have been institutionalized, the Sorya material suggests a heavier compensatory role for community supports in the face of limited formal psychosocial services and perceived stigma (Ventevogel et al., 2015).

Critically, the results trouble any linear equation of exhumation with healing. In line with previous research, exhumation and identification seem to be necessary but not sufficient to psychosocial relief; their beneficial action relies on clear process, a respectful approach, and inherent psychosocial accompaniment (Ferrándiz, 2013; Kovras & Robins, 2016). Similarly, testimony is resistance and risk: it has the potential to reclaim voice and presence, but it also has the potential to re-open wounds on the absence of proper support (Brounéus, 2010). Policy implications of the Sorya results support the following recommendations: incorporating culturally resonant ritual into forensic practice; ensuring that communication and transparency are family-centered; logistical and stigma obstacles to care are reduced with a community-based, low-intensity psychosocial intervention; and identify and rebury the dead with documentation, apology, and credible accountability.

Conclusion

Families of victims found in mass graves of Sorya live in a situation of suspended grief in between hope, memory and justice. Exhumation provides a form of recognition but no automatic curing; only when the forensic procedure is clearly defined and culturally located and assisted by the community-based care provides dignity and relief. It is important to include rituals, documentation, and psychosocial accompaniment in order to respect the dead and enhance the resilience of survivors.

Implications

The paper has indicated that forensic identification does not in itself solve grief. Families of mass grave victims need culturally sensitive rituals, open communication, and available community-based psychosocial support to influence successful healing. These aspects can be integrated in forensic and justice procedures to restore dignity, create resilience and eliminate stigma in conflict-impacted populations.

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Genetic Diversity in Hypervariable Segment I of Mitochondrial DNA Among the Kurdish Population Erbil City- Iraqi Kurdistan Region

Professor Hazha Jamal Hidayat

Abstract

Analysis of human sequence polymorphisms of mitochondrial DNA (mtDNA) hypervariable segment 1 (HV1) has become a significant technique in forensic casework and is used for genetic diversity and human evolution evaluation, consanguinity identification, and mitochondrial illness diagnosis. The present study aimed to provide insights into the demographic history and origins of the Kurdish people in the Iraqi Kurdistan region by analyzing mitochondrial DNA (mtDNA) sequence variations, particularly focusing on hypervariable segment 1 (HVS I). The HVS I of mtDNA was sequenced in 120 unrelated individuals from the Kurdish population by using Sangar sequencing. The study's findings reveal significant genetic diversity among the Kurdish population's HVS I of human mitochondrial DNA (mtDNA). The sequence of HVS I within the non-coding region had 413 mutations across 402 sites, resulting in 111 different haplotypes, as compared to the revised Cambridge Reference Sequence (rCRS) to gauge genetic diversity and community variety. Comparing this population sample to rCRS, the mutations found were (17.055%) transition and (0.921%) transversion. A considerable degree of community variety was revealed by the phylogenetic tree for the Kurdistan region. In order to determine the Kurdish ancestry and demographic history in the territory of Iraqi Kurdistan, the results also showed that the mtDNA haplotypes were classified into mtDNA haplogroups. The most frequent

haplogroups were U, H, J, and HV, with frequencies of 22.5%, 19.2%, 14.5%, and 12.9%, respectively; nevertheless, T and N had a moderate prevalence of 8% and 6.4%, respectively. The haplotype results exhibited that Europe and India had the most genetic diversity in common with the Kurdish people of Iraqi Kurdistan. The findings will contribute to a better knowledge of Kurdish mitochondrial genome diversity, as well as to demographic history and forensic science.

Keywords: mtDNA, HVSI, Haplogroup Prediction, Genetic Diversity, Population Origin

Introduction

Mitochondrial DNA (mtDNA) analysis has emerged as a crucial technique in population genetics, anthropology, and forensic research (Sultana and Sultan, 2018). Due to its distinctive features, including maternal inheritance, high mutation rate, and lack of recombination, mtDNA functions as a potent molecular marker for examining genetic diversity, human migratory patterns, and ancestry (Kivisild, 2015). One of the most informative regions of mtDNA is the hypervariable region 1 (HVR1), which is located in the non-coding displacement loop (D-loop). This region rapidly acquires mutations across generations, rendering it especially valuable for tracing maternal lineages and assessing genetic links among populations (Johnson, 2013).

The HVR region is a part of the mtDNA D-loop,

and mitochondrial function depends on polymorphisms in the non-coding D-loop region (Kwaśniewski et al., 2023). The elevated mutation rate characteristic of these hypervariable regions serves a significant purpose in the fields of population genetics and human identification assessments. The current analysis focuses on specific hypervariable segments of mtDNA, namely HVI (nucleotide positions 16024-16365), HVII (nucleotide positions 73-340), and HVIII (nucleotide positions 438-576), which were evaluated to enhance the understanding of genetic diversity within the population (Verma et al., 2018). mtDNA haplogroups facilitate the classification of HVR1 and HVR2 haplotypes into associated categories. The high-throughput sequencing of mtDNA from distinct human lineages has been made possible by the advent of new molecular biology methods. These developments have proven useful in tracing the matrilineal descent of modern humans from Africa, who were afterward distributed to Asia and Europe (Kapoor et al., 2017).

The Kurdish people represent one of the largest ethnic groups in the Middle East without a sovereign state. Despite their significant presence in countries such as Iraq, Iran, Turkey, and Syria, the genetic background of the Kurdish population remains underexplored. Given the complex migratory history and cultural diversity of the region, investigating the mitochondrial genome of the Kurdish people can provide new insights into their maternal lineage, genetic affiliations, and evolutionary background.

Overall, this study analyzed the genetic diversity of the Kurdish population in Iraqi Kurdistan using mtDNA sequences from 120 unrelated individuals. Results showed a high level of genetic diversity, with 413 mutations and 111 distinct haplotypes. The most common haplogroups were U, H, J, and HV, with significant genetic similarity to Europe and India. This research contributes to understanding the Kurdish population's genetic diversity and maternal ancestry and has implications for forensic investigations and anthropological studies.

Materials and Methods

Population Sample

For the current investigation, blood samples were taken from 120 unrelated Kurdish individuals from Erbil city, Iraqi Kurdistan region. All donors have received informed consent and information about their ethnic background. The study included only native peoples.

HVSI amplification via PCR and genomic DNA extraction

The genomic DNA was extracted from the blood sample via the quick protocol of AddPrep Genomic DNA Extraction Kit (Cat. No. 10023, KOREA). The DNA extraction was conducted in the laboratory of IMMUNOGENE CENTER, Erbil – Iraqi Kurdistan region. Since there are multiple copies of mt-DNA in every cell, a simple method to extract and measure DNA was used to amplify HV1.

According to a study performed by Tsutsumi et al. (Tsutsumi et al., 2004), amplification from 15,997 nt to 16,401 nt of HVSI was done by using (forward primer: 5'CACCATTAGCACCCAAAGCT-3 and reverse primer:

5'TGATTTCACGGAGGATGGTG-3). In this experiment, these primers were used by applying a Polymerase Chain Reaction (PCR) machine to amplify the HVSI in the mtDNA control region. The primers were validated in silico against the human reference genome through the application of a Basic Local Alignment Search Tool (BLAST) utilizing the 2.2.27 release number. The PCR conditions were established for the HVSI region, consisting of an initial denaturation step at 94 degrees Celsius for one minute, followed by a denaturation step at 94 °C for 1 min, and an annealing step at 60 degrees Celsius for one minute, and an extension step at 72 degrees Celsius for one minute. A final extension was conducted at 72 degrees Celsius for ten minutes. The thermocyclers were programmed for a total of 40 cycles. Subsequently, the PCR products were sequenced at the IMMUNOGENE CENTER utilizing the 3130

Genetic Analyzer (Applied Biosystems, Hitachi High Technologies, Tokyo, Japan).

Phylogenetic and statistical analysis

Multiple alignment

The electropherograms were read by the tool of BioEdit 7.1 (Hall, 1999). All sequences were aligned with the revised rCRS using the MUSCLE tool of MEGA 11 (Kumar et al., 2008). A phylogenetic tree was constructed to analyze the mtDNA haplogroups by PhyloTree 16 (Van Oven and Kayser, 2009). The error rate during haplogroup organization was lowered by implementing an algorithm in HaploGrep (Kloss-Brandstätter et al., 2011).

Haplogroup interpretation

MitoTool, a complimentary online bioinformatics application for examining mtDNA sequences (Ruiz-Pesini et al., 2007, Fan and Yao, 2011), was utilized to present the haplogroup results. MitoTool Clustal W was employed to align HVS1 sequences with rCRS and to identify the variations for each batch mode sequence. The precise coordination, whether optimal or close, governed the haplogroup via mt-DNA, considering its unique variation patterns. However, We independently verified the induced haplogroups using MitoTool's mthap software. Ultimately, we integrated the MitoTool and mthap categorization data, and our phylogenetic tree has been developed to address and reconcile the inconsistencies in the derived haplogroups (Johnson et al., 2015). Finally, phylogenetically described haplogroups or branches were employed to assign individuals a potential haplogroup when MitoTool characterization and mthap yielded inconclusive or ambiguous results (more than one probable haplogroup per individual).

Statistical analysis

The evaluation of genetic diversity metrics and molecular variance analysis was performed using many criteria, specifically with Arlequin 3.5, as described by Excoffier and Lischer (Excoffier and

Lischer, 2010). Moreover, various neutrality tests were implemented, including Tajima's D (Tajima, 1989), Fu's Fs (Fu, 1997), and R2 (Bektas et al., 2020). Furthermore, the mismatch distribution, as articulated by Harpending (Harpending, 1994), was assessed using two separate approaches that emphasize genuine demographic analysis. Finally, to determine and analyze the normal distribution data pertaining to abrupt population increases, the sum of squared deviations (SSDs) and Harpending's raggedness score were utilized.

Results and Discussions

Sequence Diversities and Neutrality Test Statistics of HVS1

The use of mitochondrial markers in forensic casework requires knowledge of the prevalence of a particular mtDNA haplotype in a given population. The nucleotide sequences of the mtDNA D-loop (nt 15997-16401) and HV1 were determined in this study in a total of 120 unrelated people from the Kurdish-native speakers in the Iraqi Kurdistan region. All samples had PCR products with a size of roughly 420 bps, excluding the primers (Anderson et al., 1981, Andrews et al., 1999). As shown in (Table 1), which provides a statistical overview of the genetic diversity of the Kurdish population, with 111 distinct haplotypes detected among 120 individuals, overall diversity is fairly high. A grand number of 247 polymorphic sites were discovered in the Kurdish data collection. The low value of Tajima's D (-1.76378) suggests that the population is growing.

Moreover, Iraq (-25.27102) (Al-Zahery et al., 2011), Iran (-25.30270) (Nasidze et al., 2006), Turkey (-25.06957) (Mergen, 2004), Kuwait (-25.40242) (Theyab, 2010) are the four countries having populations with negative Fs values, which suggest population growth. The findings of the mtDNA diversity and neutrality measures for the Kurdish population are shown in (Table 2). The genetic diversity measure shows that the Kurdish population (0.9986) is similar to nearby populations in Iraq (0.9918) and Saudi Arabia (0.9905), Turkey

(0.9851), Iran (0.9895), Syria (0.9881), Kuwait (0.9863), and Kurdistan/Iraq as well as kurmanje-T, Zazaki-T, (0.988), and (0.986). The Kurdish population's Tajima's D (-1.76378) and Fu's FS (-96.565) values are significant at $P > 0.05$ and $P > 0.005$, respectively. These results suggest that the Kurdish population may be seeing growth in a relatively short period of time.

Table 1. Shows mitochondrial DNA HV1 sequence variability among the Kurdish population.

Genetic features	Statistical data
No. of the samples	120
No. of haplotypes (h)	111
No. of variable sites (s)	247
Haplotype diversity (S.D)	0.9986 (0.0013)
Nucleotide diversity	0.06901 (0.00855)
Average no. of nucleotide difference (K)	24.912
Tajima's D	-1.76378
Fu's FS	-96.565
Total no. of sites	402
Invariable (monomorphic) sites	87
Variable (polymorphic) sites	274
Total no. of mutation	413
Singleton variable sites	49
Parsimony informative sites	225

Table 2. Shows the mtDNA HVS1 sequence data and summary statistics for the Kurdish population, include the number of samples (N), gene diversity (H), nucleotide diversity, and Tajima's and Fu's FS.

Population	No.	Haplotype diversity	Nucleotide diversity	Tajima's diversity	Fu's FS	Reference
Kurdish	120	0.9986(0.0013)	0.06901(0.00855)	-1.76378	-96.565	Current study
Iraq	116	0.9918(0.0036)	0.019862(0.010659)	-2.10200	-25.27102	(Al-Zahery et al., 2011)
Iran	92	0.9895(0.0049)	0.020453(0.010967)	-2.10033	-25.30270	(Nasidze et al., 2006)
Turkey	290	0.9851(0.0039)	0.017378(0.009419)	-2.22379	-25.06957	(Mergen, 2004)
Syria	69	0.9881(0.007)	0.019229(0.010419)	-2.14505	-25.44560	(Richards et al., 2000)
England	242	0.9651(0.0078)	0.014654(0.008122)	-2.24347	-25.48480	(Piercy et al., 1993)
Saudi Arabia	15	0.9905(0.0281)	0.022234(0.012566)	-1.32083	-7.63765	(Abu-Amro et al., 2007)
Kuwait	94	0.9863(0.0051)	0.0239(0.012661)	-1.87839	-25.40242	(Theyab, 2010)
Kurmanje -t	51	0.988		-2.05		(Nasidze et al., 2005)
Zazaki -t	27	0.986		-1.81		(Nasidze et al., 2005)

Haplogroup Predication of HVSI

According to a study conducted in Iraq by Al-Rashedi and colleagues, Arabs constitute approximately 75–80% of the Iraqi population, while Kurds, Turkmen, and other minority groups make up the remaining 20–25% (Al-Rashedi et al., 2015). Due to the prevalence of unique genetic sequences among different populations, each ethnic group possesses a distinct genetic structure.

mtDNA haplogroups-such as U, H, and J-are key maternal lineage groups that represent branches of ancient human ancestry. These haplogroups originated at various times and locations across the globe and are characterized by unique genetic markers (Kristjansson et al., 2023). Haplogroup U, for instance, emerged around 55,000 years ago, likely in the Middle East or Central Asia, and is now widespread across Europe, Western Asia, and North Africa. Its subclades, including U2, U4, and U5, are especially significant, with U5 representing one of the earliest mtDNA lineages found among indigenous European populations (Sahakyan et al., 2017).

Haplogroup H is believed to have originated between 20,000 and 25,000 years ago in Southwest Asia or Europe. Today, it is the most common mtDNA haplogroup in Europe, comprising 40–50% of the population, and is also present in North Africa and the Middle East (Sahakyan et al., 2017). Similarly, haplogroup J is uniformly distributed across Europe, with notable frequencies in regions such as Cornwall (20%), Wales (15%), and Iceland (14%), and is also common in the Middle East-particularly in Saudi Arabia (21%), Kuwait (16%), Kurdistan (15%), and Iraq (13%) (Dato et al., 2004, Clark et al., 2011).

The Kurdish population in Iraq exhibits a diverse mixture of mitochondrial haplogroups derived from European, Asian, and Indian ancestries, as shown by sample sequence analyses from MITOMAP (<http://www.mitomap.org/>). According to the data presented in (Tables 2 and 3), haplogroup U is the most prevalent among Kurds (22%), followed by H (19.2%) and J. Other haplogroups, such as N, R, L, M, K, and W, occur at lower

frequencies within the Erbil population. The presence of these haplogroups suggests maternal genetic influences from both South Asia and Europe.

Supporting these findings, a study of various Kurdish subgroups- including Sorani, Hawrami, Kurmanji, and Kalhori- also demonstrated a high prevalence of haplogroups U, H, and J (Zarei and Rajabi-Maham, 2016). This genetic pattern implies significant recent gene flow from Europe into the Kurdish population. Notably, haplogroup U, which has an estimated age of 51,000 - 67,000 years, is substantially older than other haplogroups and appears widely across Europe and the Near East (Richards et al., 2000, Roostalu et al., 2007). Additionally, prehistoric European remains dating back up to 13,400 years have been linked to haplogroup U, further supporting its ancient presence in the region.

Comparative analyses of mtDNA haplogroup frequencies between the Kurdish population and neighboring populations revealed similar genetic patterns. As shown in (Table 4), the Kurdish population's haplogroup frequencies closely resemble those of populations in Iran and Iraq. Similar frequencies were also observed in Anatolia (Turkey), Syria, Saudi Arabia, and Kuwait (Triki-Fendri et al., 2016).

Moreover, our findings indicated a low presence of the African haplogroup L in Iraqi Kurdistan (3.3%) and Iran (2.2%), in contrast to a significantly higher frequency in Saudi Arabia (10.5%). The occurrence of haplogroup L in Iraqi Kurdistan points to historical African gene flow into the Kurdish population. Additionally, the presence of haplogroups M, N, and R in the Kurdish population serves as markers of gene flow from Asian regions, as demonstrated in (Table 4) (Figure 1).

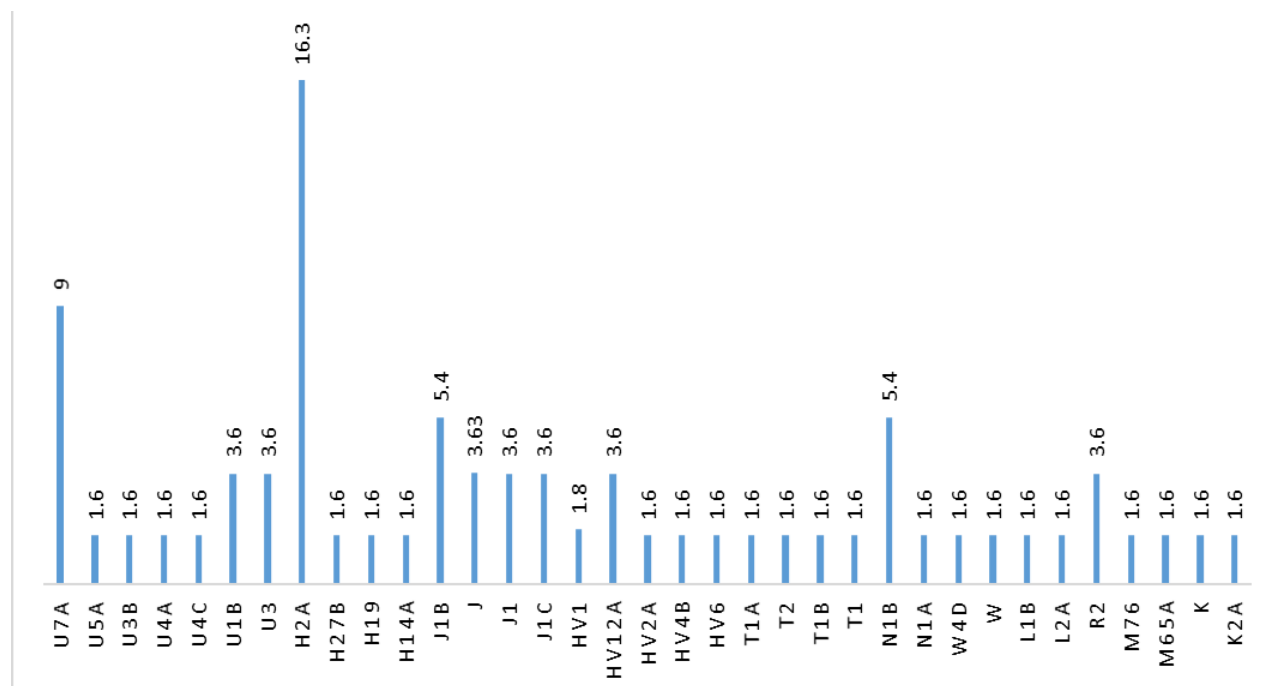
Table 3. Shows the comparison of haplogroup frequencies in the Kurdish population with different Regions in Iraq.

Population region	Sample size	Haplogroups frequency %	Ref.										
		U	H	J	HV	T	N	R	L	M	K	W	
Iraqi Kurdistan	120	22.5	19.2	14.5	12.9	8	6.4	3.3	3.3	3.3	3.3	3.3	This study
Iraq-Kurd	15	26.64	6.66	20	-	13.32	-	13.32	-	6.66	-	6.66	(Al-Zahery et al., 2013)
Sorani	79	10	35	10	5	-	15	10	-	-	-	-	(Zarei and Rajabi-Maham, 2016)
Hawrami	79	-	71.4	-	4.76	4.76	5.26	-	-	-	-	-	
Kurmanji	79	21.04	31.56	5.26	-	-	-	-	-	-	-	-	
Kalhor	79	15.78	31.56	10.52	5.26	10.52	-	5.26	-	-	-	10.52	
Iraq	100	18	14	10	10	7	7	-	1	9	2	-	(Al-Rashedi et al., 2015)
Thi-Qar	216	19	19.9	9.3	10.6	8.8	-	-	1.4	1.4	3.2	1.9	(Al-Zahery et al., 2013)
Iraq	153	15.3	16.9	8.06	6.4	-	-	-	4	8.1	12	8.87	(Azzawi et al., 2013)
Basrah	164	9	17	11	5	-	6	-	5	9	5	2	(Ohied and Al-Badran, 2020)

Table 4. Shows the comparison of Haplogroup frequencies in the Kurdish population with other Neighboring populations.

Population	Sample size	Haplogroups frequency %											
		U	H	J	HV	T	N	R	L	M	K	W	Ref.
Iraqi Kurdsi-atn	120	22.5	19.2	14.5	12.9	8	6.4	3.3	3.3	3.3	3.3	3.3	This study
Iraq	100	18	14	10	10	7	7	-	1	9	2	-	(Al-Rashedi et al., 2015)
Iran	451	21.5	17.1	13.5	5.5	8.4	6.1	-	2.2	-	7.5	2	(Kivisild et al., 2003)
Anatolia	388	19.3	25	10.9	3.6	11.9	1.8	-	0.3	4.4	5.9	3.9	(Tajima, 1989)
Syria	69	15.9	24.6	10.1	4.3	10.1	-	-	5.8	1.4	4.3	2.9	(Ohied and Al-Badran, 2020)
Saudi Arabia	389	10.5	12.9	20.8	3.6	4.6	2.6	-	10.5	-	3.6	1.8	(Kivisild et al., 2003)
Kuwait	117	12	9	-	5	-	9.8	-	1.6	7	-	-	(Theyab, 2013)

Figure 1. Shows the frequency of haplogroup subclade on HVSI of mtDNA in the Kurdish population.



Phylogenetic analysis

To assess the genetic diversity of the Kurdish population in comparison to the revised rCRS, a neighbor-joining phylogenetic tree was constructed using MEGA version 11. As illustrated in (Figure 2), the tree was generated based on mtDNA HVSI sequences from all samples relative to the rCRS. The analysis revealed a noticeable genetic divergence between the Kurdish population and the rCRS, which may be attributed to population-specific mutations. These findings align with a recent study that also reported a genetic gap between the Kurdish and rCRS populations, potentially due to region-specific mutations observed in the Basrah population (Ohied and Al-Badran, 2020).

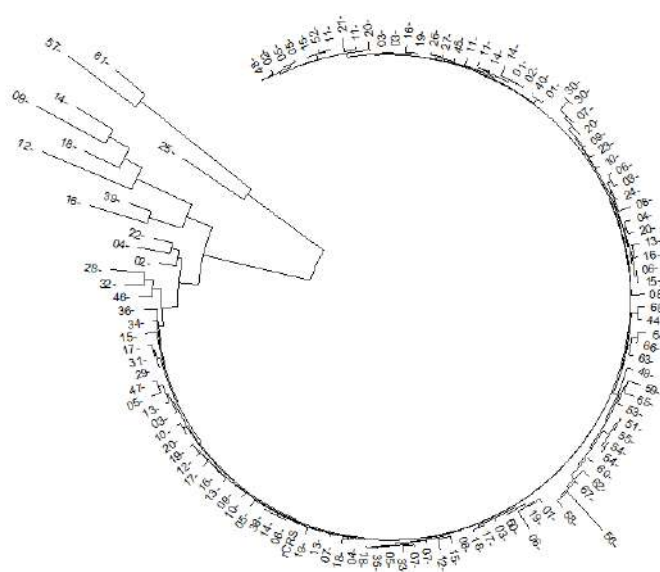


Figure 2. Shows the neighbor-joining tree of HV1 segment in Erbil/Kurdish population.

Sequence diversity of HV1

Table 5 summarizes all types of base mutations identified in the HVS1 of mtDNA, including both transitions and transversions. Among these, transition mutations were found to be the most prevalent. The most frequent transition was a thymine-to-cytosine (T→C) substitution, accounting for 11.170% of mutations, followed by a cytosine-to-thymine (C→T) transition at 3.217%, and a third, unspecified transition at 2.668%. In contrast, transversion mutations were comparatively rare, with a total frequency of only 0.921%. This observation aligns with previous literature, which consistently reports a predominance of transitions over transversions in human mtDNA variation (Hameed et al., 2015, Yang and Yoder, 1999).

Specifically, transitions were observed at positions 16100, 16122, and 16283, totaling 17.055%, while transversions were primarily detected at position 16292, accounting for the 0.921% frequency. Among all polymorphic sites, only two positions exhibited notably high levels of variation: position 16100, where the reference nucleotide T was substituted by C in 11.170% of cases, and position 16123, where a reference C was replaced by T in 3.217%. Despite these polymorphisms, the most frequent nucleotide at each site remained consistent with that of the revised rCRS. As shown in (Figure 3), the transition from T to C was the most frequent base substitution, comprising 62% of observed mutations, followed by C to T transitions at 18%. The least common mutation type was the A to T

transversion, which constituted only 5% of the total.

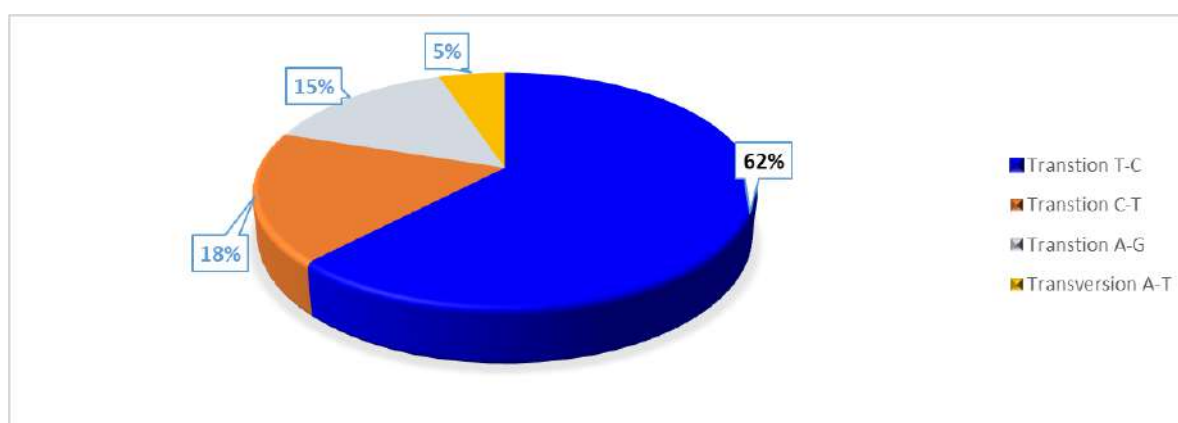
Previous studies have shown that the mtDNA coding region exhibits lower levels of genetic variability compared to the non-coding (regulatory) region (Walsh et al., 1991, Tang, 2002). To enhance the discriminatory power of forensic mtDNA analysis, the use of highly polymorphic sites is essential (Hadi et al., 2014). Particular attention should be given to selecting polymorphisms that are phenotypically neutral, especially within the mtDNA coding region, to avoid potential ethical concerns related to medical genetics and ethnic profiling.

Looking forward, comprehensive sequencing of the entire mitochondrial genome- including both coding and non-coding regions- combined with the use of informative single nucleotide polymorphisms (SNPs) from the regulatory region, may significantly improve the resolution and forensic utility of mtDNA profiling (Warshauer et al., 2013, Hadi et al., 2014).

Table 5. Type of base mutations on HVS1 of mtDNA.

Mutation type	Base	Position	Frequency
Transition	T-C	16100	11.170%
Transition	C-T	16122	3.217%
Transition	A-G	16283	2.668%
Transversion	A-T	16292	0.921%

Figure 3. Shows the percentage of base mutation frequency on HVI of mtDNA.



Conclusion

The present study highlights the high level of mtDNA genetic diversity within the Kurdish population, as revealed by the analysis of the HVS1. The Tajima's D test yielded a value of -1.76378, suggesting an excess of low-frequency polymorphisms, which may be indicative of population expansion or purifying selection. Similarly, Fu's Fs statistic, with a strongly negative value of -96.565, further supports the presence of population growth and demographic expansion. The nucleotide diversity was calculated at 0.06901, while the haplotype diversity reached 0.9986, indicating a remarkably high level of genetic variability in the population.

In terms of haplogroup distribution, the Kurdish population is predominantly represented by haplogroups U (22.5%), H (19.2%), and J (14.5%). These maternal lineages are associated with ancient human migrations across Europe, the Middle East, and Central Asia, providing valuable insights into the historical and evolutionary origins of the Kurdish people.

The genetic patterns observed in this study not only support the complex maternal ancestry of the Kurdish population but also offer a deeper understanding of their historical demographic processes. The combination of high haplotype diversity and signals of past population expansion underscores the genetic richness and historical mobility of Kurdish-speaking groups.

However, despite these important findings, the study has certain limitations that should be acknowledged. The sample size of 120 individuals may not adequately represent the genetic diversity of the entire Kurdish population, and the focus on individuals from Erbil City limits the geographic scope, potentially excluding variation present in other Kurdish regions such as Sulaimani and Duhok. Moreover, the exclusive analysis of the HVS1 region, while informative, may overlook additional variations found in other mtDNA segments like HVS2 and HVS3. The study also does not explore correlations between mtDNA variants and clinical conditions, which could be

essential for understanding mitochondrial disorders in this population.

Consequently, continued genetic analyses of mtDNA particularly when integrated with data on nuclear DNA, Y-chromosomal markers, and archaeological evidence can significantly contribute to reconstructing the migration history and ancestral origins of Kurdish populations. These findings open avenues for more comprehensive research into the genetic legacy of populations residing in the broader Middle Eastern region.

Abbreviations

BLAST	Basic Local Alignment Search Tool
HV1	Hypervariable segment 1
HVR I	Hypervariable region I
HVS I	Hypervariable site I
mtDNA	Mitochondrial DNA
PCR	Polymerase Chain Reaction
rCRS	Cambridge Reference Sequence
SSDs	Sum of squared deviations

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From Mass Graves to Memorial Graves: The Role of DNA in Srebrenica

Alek Barović

PhD Candidate, University of Padova, Italy

Abstract

The Srebrenica genocide of July 1995 resulted in the killing of more than 8,000 Bosniak men and boys, many of whom were buried in mass and secondary graves in an attempt to conceal the crime. In the aftermath, the process of identifying victims and returning them to their families became one of the largest and most complex DNA-led identification efforts in the world. This paper examines how DNA technology was employed to recover, identify, and reburial the victims of Srebrenica. It traces the work of the International Commission on Missing Persons (ICMP), highlighting the methodological shift from traditional forensic techniques to large-scale DNA matching between bone samples and family reference profiles. The paper also explores the challenges posed by body fragmentation, reburials, and incomplete remains, and how these were addressed scientifically and logistically. Finally, it considers the significance of DNA-based identifications for the reburial ceremonies at Potočari Memorial Centre, where families could lay their loved ones to rest with certainty. The Srebrenica case stands as a landmark in demonstrating the capacity of forensic genetics not only to restore identity to the victims of mass atrocities but also to provide a foundation for truth, mourning, and historical record.

1 Introduction

In July 1995, Bosnian Serb forces attacked the small town of Srebrenica in eastern Bosnia. This town was declared a United Nations safe zone during the Bosnian War, yet Serbian forces decided to attack it because of its important strategic

location for their future entity within Bosnia and Herzegovina. (Honig, 2001, p. 200)

The town was home to several thousand Bosniak Muslims from the region of eastern Bosnia, who came to Srebrenica to find protection in the safe zone. However, neither the United Nations nor its peacekeeping forces were able to protect them from their aggressors, leading to a systematic massacre that has since been recognised as an act of genocide. (Duijzings, 2016, p. 146)

Serbian forces separated men and women, and they took the men to different locations where they were killed. More than 8,000 men, boys and elderly individuals were executed, with their bodies buried in mass graves, with the intention to hide the atrocities. (Violante, 2015, p. 150)

In order to hide the mass killings of Bosniaks, the executioners buried their bodies in mass graves. However, the victims' families and the international community quickly spotted many men missing from Srebrenica. The emergence of the first male survivors who escaped the executioners and their subsequent testimonies gave rise to assumptions that international humanitarian law was infringed upon in Srebrenica and the surrounding regions. The international community pressured the Bosnian Serb army to allow independent supervisors into Srebrenica. To hide all evidence of the executions, the Bosnian Serb army command decided to dig through the mass graves and scatter the remains across several locations. By doing so, they created around 40 secondary mass graves. (ICTY IT-02-60-T, 2005, p. 142-147)

In addition, the Bosnian Serb army dug through even the secondary graves and thus created tertiary

mass graves. Excellent organisation and logistics were necessary for such a task. Civil services also played a role due to the Bosnian Serb army's lack of the means to hide the Srebrenica genocide. Thus, public communal services from Bratunac and Zvornik participated in the genocide's cover-up. (Srebrenica Memorial, 2023)

Due to the use of heavy machinery, remains were often mutilated and destroyed. This made the later process of identification significantly harder. Because of the secondary and tertiary mass graves, remains were frequently mixed up and buried in different locations. There are cases of parts of persons being discovered in five different graves, miles apart from each other. The Institute for Searching for Missing Persons says that around 3,350 massive and individual graves have been discovered. However, as some victims' remains only came up in a few bones, there is a reasonable assumption that more mass graves exist. (N. H., 2022)

In the years after the war, when many families sought to account for their missing loved ones, and when many mass graves were discovered, the idea of DNA identification emerged as a crucial, albeit challenging, method for victim identification. DNA identification was in its beginnings, and this idea was very optimistic for that time in Bosnia. However, it was developed in the best possible way, and helped the identification and reburial of more than 8,000 people, putting names to their graves and giving closure to their families.

This paper intends to examine the importance of DNA identification in post genocide societies and to motivate similar initiatives in other regions, like Kurdistan, so that families of those who were killed may also have a place where to mourn and remember their lost loved ones.

II The Search for the Missing

The brutal war in the former Yugoslavia left the region with tens of thousands of missing persons. The country was devastated by war, and without institutions, with fragile peace was achieved in

Dayton. However, one of the biggest issues was the problem of missing persons, whose numbers were counted in tens of thousands.

Following the cessation of hostilities, numerous families initiated inquiries into the whereabouts of their missing relatives, particularly as multiple mass graves were progressively uncovered. The conflict had dispersed many individuals, leading to a lack of knowledge regarding their loved ones' fates, while a significant number had been killed, their ultimate destinies yet to be determined, and their remains still unfound.

The international community was also worried because of this issue, and because of the inability of Bosnian institutions to deal with this question, it decided to act. In 1996, the International Commission on Missing Persons (ICMP) was established with a mandate to address the issue of missing persons from the conflicts in the former Yugoslavia. This organisation had a role to help families reunite with their lost ones or to facilitate the identification of unidentified remains. (DiCaprio, 2009, p. 88)

The establishment of ICMP proved to be a pivotal development, fundamentally transforming the methodology and scale of post-conflict victim identification efforts, particularly through its pioneering integration of DNA technology. This advancement from traditional identification methods to more sophisticated forensic techniques marked a significant stride, subsequently adopted in other contexts of mass atrocities and humanitarian crises globally.

III Forensic Innovations and DNA Methodology

Some of the killed people were able to be identified through traditional methods as through personal belongings. This was the most used method before, and it is suitable for remains that are largely intact. But after the Bosnian war, many remains were highly fragmented and not suitable for conventional identification approaches. During the period from 1996 to 2000, ICMP was able to identify just 70 remains of people killed in the Srebrenica genocide,

from a total of more than 8,000 victims, using conventional methods. (Wagner, 2008, p. 100)

Because of this, new technology needed to be implemented in the process of identification. With the development of technology and DNA testing, from 2001, ICMP laboratories started working on genetic identification.

At the beginning, scientists who were developing a DNA testing method were struggling with the type of DNA research. At the end, the success of DNA testing relied on two things: the successful extraction of a DNA sample from remains, but also the DNA sample from relatives, if they were alive or known. They first focused on mitochondrial DNA (mtDNA) - taking samples from female relatives, but this form of testing proved to be imprecise. Because of this, scientists shifted their focus to nuclear DNA analysis, which was more precise, but needed more sampling from different relatives. (Wagner, 2008, p. 104)

The problem with sampling was that many families were killed, but also many were displaced and continued their lives outside Bosnia. This necessitated the development of innovative strategies for collecting reference samples, often involving extensive outreach and collaboration with diaspora communities and NGOs. Also, at the beginning, it was hard in some cases to explain to people from traditional society the role of DNA, why they need to give their blood samples and the reliability of identification.

Podrinje Identification Project (PIP) and Lukavac Reassociation Centre (LKRC) were formed with the intent to focus only on the identification of Srebrenica victims. The huge success was the establishment of a DNA laboratory in Bosnia and Herzegovina. This provided a localised and efficient infrastructure for processing DNA samples, significantly reducing logistical hurdles and accelerating the identification process. Also, this gave an opportunity to local scientists to develop specialised expertise in forensic genetics. (ICMP, 2005)

The nuclear DNA method was very useful in some

of the most challenging circumstances. “One of the department’s most dramatic achievements was the identification of an entire family that was missing: a husband, wife, son, and daughter, along with both of the husband’s parents. Identification through the successful matching of nuclear DNA appeared almost impossible. With only the blood sample from the wife’s sister and brother, however, the staff were able to work along the chain of genetic material, from blood to bone, then bone to bone, until they had matched the remains of all family members. The wife’s siblings’ blood samples identified the wife; the profile from her bone sample identified the children, and from the combination of the children’s and wife’s DNA, they could identify the husband’s remains. Finally, his DNA led them to both of his parents’ remains.” (Wagner, 2008, p. 115)

When the institutions received the information about possible locations of mass graves or remains found, they would collect the skeletal material and take it to PIP or LKRC, where remains are cleaned and put back together into individual skeletons if possible. After that, the remains are labelled, and DNA is extracted for analysis. After the successful identification and match, families are notified and presented with the opportunity to accept the identification, and if accepted, the person is officially declared deceased and prepared for reburial at the Potočari Memorial Centre.

Till now, over 7,000 Srebrenica victims have been identified, mostly through the extensive application of DNA forensic techniques. ICMP collected more than 22,000 biological samples from surviving relatives to facilitate these identifications. Currently, the estimates suggest that approximately 1,000 victims from the Srebrenica genocide remain to be found, including the remains of around 100 persons whose remains have been recovered but are yet to be identified because of the lack of relative samples or other factors. (ICMP, 2025)

IV The Ritual of Reburial and Its Social Significance

Potočari Memorial Centre was founded in 2000 by a decision of the Higher Representative in Bosnia and Herzegovina. It lies in an old factory complex in Potočari that once served as the UN's base. The part of the Memorial Centre is the cemetery where the so far identified genocide victims are buried. The Memorial Centre's role is to ensure that Srebrenica is remembered. It also performs artistic and scientific work and cooperates with the survivors, victims' families, and international institutions. (Memorijalni centar Srebrenica, 2025)

Every year on July 11, those who were identified in the previous year are buried in Potočari. This annual ceremony not only serves as an act of remembrance but also as a powerful affirmation of identity and a collective rejection of the perpetrators' attempts to erase Bosniak existence.

This ritual also provides families the opportunity for closure, allowing them to finally lay their loved ones to rest with dignity and participate in collective mourning, which is profoundly significant within Islamic traditions. Also, this annual gathering serves as a platform for the memorialization of genocide and the preservation of memory about this atrocity.

Memorialization of the Srebrenica Genocide is the most powerful tool in the fight against genocide denial. Annual commemorations and reburials provide a continuous repetition of what happened there, thereby embedding the truth into everyday discourse and fostering collective memory across generations.

V Broader Implications and Global Legacy

Bosnian experience regarding DNA identification proved as a pivotal case study, initiating further research in this field and allowing the developed method to be used in other cases. Also, it formed a group of experts in this field, whose expertise has since been deployed in other post-conflict and mass disaster scenarios globally.

The ICMP facilities were used in the identification of victims of the tsunami in South Asia and victims of Hurricane Katrina in Louisiana. Also, ICMP experts from Bosnia were sent to New York after 9.11. terrorist attacks. Also, ICMP cooperated with Interpol. (Horigan, 2021, p. 43; Kirby, 2011, p. 868)

ICMP laboratory was moved from Bosnia to Hague, Netherlands in 2017. This relocation aimed to enhance its global reach and collaborative capabilities and also develop new technologies. (Mondo, 2017)

VI Conclusion

The Srebrenica genocide was the most terrible atrocity committed on European soil after World War II, leaving an indelible scar on the collective consciousness of the Bosniak people and the whole region. After the Bosnian war, tens of thousands of people were missing, and hundreds of thousands were displaced or refugees outside the country.

ICMP was formed to help families find their loved ones and reunite families. In most cases, this was not possible because those who were missing were dead, and hundreds of mass graves were found all across the country.

As the majority of human remains found in those mass graves were not able to be identified using traditional forensic methods, ICMP developed a pioneering DNA-based identification process that revolutionised post-conflict forensics. Using this method, more than 90% of victims of the Srebrenica genocide were identified and reburied.

This experience is of very significant importance that changed the field of forensics, but it is also very important for post-genocidal reconciliation. The Bosnian experience may be used as a model for future international efforts aimed at identifying victims of mass atrocities, all around the world, giving victims a name and allowing families to find closure.

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Turning Truth Into Action: The Urgent Need For Justice In The Barzani Genocide

Awring Shaways

The history of the Kurdish people is one marred by tragedy, loss, and a relentless struggle for justice. Across Kurdistan, we have uncovered the horrific truths of genocide truths that are undeniable and overwhelming. From the mass graves that hold the remains of entire families to the chemical attacks that have scarred both the land and its people, the evidence is clear. Survivors have shared their testimonies of unimaginable suffering, and forensic scientists have matched DNA to give names back to some of those who were once lost to history. Historians and legal scholars have worked tirelessly to document the numerous genocides that have been inflicted upon the Kurdish nation.

Yet, despite this mountain of evidence, despite the irrefutable truth, justice remains incomplete. This raises a crucial question: why is it that truth alone is not enough? Why is it that, despite the clear documentation of these atrocities, the recognition and justice we deserve remain so elusive? This is the harsh reality the Kurdish people continue to face, and the need for action has never been more urgent.

The Challenge of Justice: Why Truth Alone Isn't Enough

It's one thing to uncover the evidence of atrocity. It's another to see justice served. We have seen mass graves uncovered, chemical attacks proven beyond a shadow of a doubt, and legal arguments laid out with meticulous precision. But despite all this, without political will, without international recognition, and without the collective voice of the

Kurdish people demanding action, these truths risk fading into silence.

Truth alone does not move the levers of justice.

The evidence of decades of genocides is clear, but without political will and commitment, the scars of history cannot be healed. And it is not enough for governments to acknowledge the genocides; it is necessary that they act. Justice is not simply about acknowledgment, it is about accountability, reparation, and the recognition that the crimes committed against the Kurdish people are crimes against humanity that must be addressed on the global stage.

The Missing Piece: Lobbying for Justice

This brings us to a concept often misunderstood: lobbying. Many people hear the word «lobbying» and immediately think of backroom deals, cynical politics, and corrupt influence. But I urge you to see it differently. In the context of genocide recognition, lobbying is not corruption it is courage.

Lobbying is the bridge between the lab and the courtroom. It's the gap between the grief of survivors and the halls of power. It is the means by which we turn historical evidence into political action. It is not simply about making noise; it's about organizing and demanding that the truth of our past be translated into policies that will protect our future.

Lessons from Recent Kurdish Experiences

We do not need to look far to find examples of how

lobbying can drive international recognition and change. One of the most poignant examples in recent years is the struggle of the Yazidi community. During the Yazidi genocide of 2014, it was not only the testimonies of survivors that moved the world, it was the tireless advocacy of Yazidi women who traveled to parliaments, the United Nations, and the European Parliament to demand action. Their voices were heard, and their lobbying efforts were integral to the international community's eventual recognition of the genocide.

Similarly, when we, Kurds sought international recognition for the Anfal genocide, it was not enough for mass graves to be opened and documented. The families of victims, Kurdish civil society, and diaspora communities had to organize, unite, and lobby governments. They had to make the world listen, to turn memory into policy, to demand accountability from those who were responsible.

The Path Forward: Uniting for the Recognition of All Kurdish Genocides

The road to justice for the Kurdish people is not only about acknowledging one atrocity—it is about recognizing the full scope of the pain, suffering, and destruction that has been inflicted upon us throughout our history. From the Fayli Genocide, to the Barzani Genocide, the Anfal Campaign, and the chemical attacks, to the destruction of thousands of Kurdish villages and even the ongoing genocide of Yazidis and the horrific atrocities still being committed by ISIS we continue to face each of these horrors and deserves recognition and accountability.

In recent history, the Yazidi Genocide and the genocide committed by ISIS against the Kurdish people have highlighted the continued vulnerability of our nation. These genocides are not an isolated events; they are part of a broader pattern of systemic violence, suppression, and ethnic cleansing. The Kurdish people have experienced generations of suffering, and it is crucial that the world acknowledges every chapter of our tragic history.

Why Recognition for All Genocides is Critical

The recognition of these genocides is not only an act of justice for the victims but an essential step toward unity. Our struggle for recognition is about more than individual atrocities—it is about solidifying the narrative of Kurdish resilience, survival, and dignity in the face of relentless persecution. Each genocide is a piece of our collective identity, and acknowledging them all is key to uniting our people, both within the Kurdish regions and in the global Kurdish diaspora.

For the Kurdish people to remain strong in the face of so many challenges, we must present a unified front. We must demand recognition not just for one event or another, but for all the genocides committed against us from the Barzani Genocide to the Anfal Campaign, from the destruction of villages to the horrific chemical attacks. We owe it to the victims of each of these atrocities and to future generations of Kurds to ensure that their suffering is not forgotten.

Lobbying for Global Recognition: Our Responsibility to Kurdistan

It is our responsibility to lobby for the recognition of every genocide committed against the Kurdish people. This is not just a matter of seeking justice for the past; it is a matter of securing a future where the Kurdish nation can rise above the cycles of violence and injustice. We must ensure that the world sees our pain and acknowledges our history, so that we can continue to fight for our rights and our land with strength and unity.

The recognition of these genocides, including the Yazidi Genocide and the horrors inflicted by ISIS, is not only a moral obligation; it is a critical part of our ongoing struggle for self-determination and security. The Kurdish people face many challenges today, from political instability to external threats. But the fight for recognition of our genocides is just as important as any other. It is our right, and we owe it to the memory of those who perished and to the future of Kurdistan.

Moving Forward Together

By lobbying for recognition of all the genocides committed against us, we are not only seeking justice for the past, but also building the foundation for a united and empowered Kurdish nation. The world must recognize what has been done to us, and through this recognition, we gain the political leverage to advocate for the rights of Kurds everywhere.

This is our fight. This is our responsibility. The road to justice may be long, but together, through collective action, we will ensure that the memory of our lost ones is honored, and that the Kurdish people can move forward, strong and united, in the face of adversity.

Let us turn the truth of our history into the power to demand action. Let us lobby, not just for acknowledgment, but for a world that stands in solidarity with Kurdistan so that we can rise together and ensure that the horrors of our past are never repeated.

The role of the media in documenting the crimes of Anfal and Mass graves

Prof.dr. Omed Barzan Brzoo

Dr .Chnar Namq Hasan

Abstract:

The Kurdish people have been subjected to genocide, Anfal and mass graves throughout the history of the Ba'ath regime, but due to the monopoly of the media, inequality and lack of Kurdish media, these crimes have not been documented and recognized internationally.

The aim of this study is to highlight the role of Kurdish media in documenting the crimes of Anfal and mass graves. and to show the extent of the participation of the media in documenting these crimes by paying attention to evidence, monuments, Anfal survivors and relatives of the victims. In addition to showing the role and methods of effective media coverage about the crimes of Anfal and mass graves.

Also, in the scope of the research to answer the main question of the research whether the Kurdish media has been able to play a role in documenting the crimes of Anfal and mass graves? This field research relies on a survey method to collect data and information using survey forms, as well as conducting interviews with a sample of researchers. In addition to the general framework of the research and the theoretical aspects of the research, it presents some conclusions and recommendations.

Keywords: Media - Documentation - Anfal crimes - Mass graves.

0) Introduction:

Throughout the rule of the late Ba'athist regime, the Kurdish people faced crimes of extermination, individual killing, mass killing, Anfal and genocide, which made the deserts of Iraq in particular and

Iraq in general become mass graves for the Kurds. These mass graves remained secret and no one knew.

The massacres of the Kurdish people was not direct and unplanned, but for a long time the Ba'ath media planted a bad image of the Kurds among the masses. This image was created as a result of the long-term influence of the media Genocide with discrimination. In a television message, Saddam himself did not hide this hate speech and published hate speech about the Barzanis in the newspaper Jumhuriya (13/9/1983). The Barzanis were punished and sent to hell. It can be used to counter the misrepresentation used throughout history to distort the image of the Kurds, as well as being an important tool for documenting Anfal and mass graves.

1) Research Methodology:

1/1) Research Problem:

The problem of this research is that in the era of advancement of human rights principles and international agreements and treaties, until this time of writing, the Kurdish people are looking for the bodies of Anfal victims in mass graves.

1/2) Significance of research:

The importance of this research stems from the importance of the subject, which is the role of the media in documenting and introducing the crimes of Anfal and mass graves, so it is the duty of the media to document and convey these facts in order to create international public opinion.

1/3) Research Objective:

- Know the role of Kurdish media in documenting the crimes of Anfal and mass graves.

- Demonstrate the extent of media participation in documenting the crimes of Anfal and mass graves by paying attention to evidence, monuments, Anfal survivors and relatives of the victims.
- Exposing the mass graves and the role of effective media coverage methods about the crimes of Anfal and mass graves.
- Highlight the importance of having a unified archival institution to document the crimes of Anfal and mass graves.

1/4) Research Questions:

- Has the Kurdish media been able to play a role in documenting the crimes of Anfal and mass graves?
- To what extent have the media participated in documenting the crimes of Anfal and mass graves through interviews with the relatives of the victims?
- Which methods of media coverage have been able to show the crimes of Anfal and mass graves more?
- To what extent does the existence of a unified archival institution help to document the crimes of Anfal and mass graves?

1/5) Study community and sample:

This research relies on university students to find out their opinions about Anfal and mass graves and the role of the media in documenting them. For this purpose, a sample of Garmian University (199) students participated in filling out the survey form. For this purpose, a survey form was designed and distributed to the students of the colleges of Garmian University according to the statistical table of the sample identification in the research community, which is about (3750) students.

On the other hand, in order to enrich the research, interviews were conducted with Kurdish activists and writers who consciously observed the media messages of the genocidal regime during the previous regime.

1/6) Type and approach of research:

This study goes into the field of descriptive research, in which the survey method is used in order to collect data and information about the role of the media in documenting the crimes of Anfal and mass graves.

1/7) Research validity and stability:

To ensure the validity and stability of the research, the researchers relied on apparent truth, so they

first presented the survey form to three experts in the field after presenting their comments and ensuring the accuracy of the items.

1/8) Statistical Tools:

The statistical tools used in this study to interpret and analyze the data are percentage and (SPSS), Statistical Package for the Social Sciences.

1/9) Research Areas:

Human Subject: The human subject of this study is the students of Garmian University.

Time scope: The time scope of this study is the beginning of the first semester in September (2025) (when students filled out the survey form).

Area scope: The setting of this study is Garmian University.

1/10) Determination of concepts:

Media: Media in this study refers to the old and new media, which is called classical media and digital media, the first is the means of mass communication, such as: television, radio, magazines and newspapers, etc. The second is the new media sites and platforms available to the consumer on the Internet. Currently, most of the old media tools have their own platforms in the electronic space.

Documentation: The purpose of documentation is to record all the crimes of Anfal and genocide committed against the Kurdish people, whether through writing or reports, reports, articles, films, documentaries, etc. in order to preserve, archive and publish them.

Anfal crimes: All these are crimes committed by the destroyed Ba'athist regime, from the genocide of the Failis and Barzanis and the Anfal campaigns in all its stages in order to erase the identity of the Kurdish people and ethnic cleansing.

Mass graves: Mass graves in this study refer to all the graves that belong to the bodies of martyrs and victims of Anfal in Kurdistan without distinction (Barzani, Sorani, etc.).

1/11) Previous studies:

Emily N Ware's research⁽¹⁾ on the role of the media in the development of conflict - the 1994 Rwandan genocide, media tools play an important role in public policy formulation and agenda setting. He cites reasons that have forced the media to

promote violence instead of playing a peaceful role in promoting peace and democracy, while the media can be a neutral issue and play a balanced role, while examining the challenges faced by media coverage under the umbrella of politics.

Lydia Gachungi's paper ⁽²⁾, entitled *The Role of the Media in Conflict Management: A Case Study of Rwanda and Burundi, 1990-2000*, highlights the role of the media in conflict management, explaining that the media is an important factor in conflict management. The conflicts in Rwanda and Burundi in 1990- 2000 are the cases of this paper, the study examines in particular the role of radio as the most powerful media tool in most African countries, where the majority of people are illiterate and too poor to afford television. It concludes, that radio during the conflict and especially Rwanda National Radio and Radio Television Libre des Mille Collines (RTML) was the main media outlet. The study reveals that there is serious suspicion by society about the behavior of the media, especially during conflicts, due to their role in the development of conflicts and expects the media to be part of resolving conflicts by creating an environment of peaceful coexistence.

Finally, the study highlights the fact that if concrete measures and strategies are put in place by conflict managers and by the international community on how the media should act in conflict situations, the media can be an effective tool to send messages about peace, democracy, national tolerance and conflict resolution. On the other hand, if these measures are not affected, the media will continue to contribute to the worsening of existing tensions between and within countries by whipping up nationalist sentiments and ethnic hatred leading to a repeat of the 1994 Rwandan genocide.

2) Theoretical framework of the study:

2/1) Anfal and mass graves are evidence of the crime of Kurdish genocide:

Throughout the history of the Iraqi authoritarian regimes, we Kurds have faced the most brutal campaigns of extermination, Anfal and genocide, from the genocide of the Failis and the Anfal of 8,000 Barzanis to the Anfal of 88 and Koraw. The

extermination of Kurds has not only focused on these, but Kurdish citizens have been constantly disappeared through arrests and secretly subjected to mass killings. In a document entitled *Secret and Personal Book No. 305*, which was sent to the headquarters of the First Iraqi Army Corps on July 8, 1986, the Ba'ath regime quoted Ali Hassan Majid, also known as Ali al-Kimiyawi, as saying: They should be interrogated, they may find something else before they are executed ⁽³⁾.

However, the genocide before Anfal in 1988 was different from the genocide of the Anfal campaign, which was conspired in eight stages and officially and openly advocated by Ali Kimyawa, in terms of time, place, mass of the massacre and even the weapons used ⁽⁴⁾. This time, about 182,000 Kurds were killed in all regions and villages of Kurdistan, from Garmian, Badinan and Sewsenan, to the chemical attack on Halabja and the bombing of other areas. In other words, the Anfal campaigns were not a passing event, but a complete project in terms of study, planning and then implementation, which targeted the land before the people ⁽⁵⁾.

After the fall of the Ba'ath regime, these crimes became clear through the discovery of mass graves. Mass graves as evidence of the crimes of genocide against the Kurdish people in international centers is an important and influential factor in the recognition and internationalization of this great crime and proving the crime of genocide, which can ensure compensation for victims. Iraq continues to try to mislead public opinion on this issue by covering up and downplaying this serious crime ⁽⁶⁾. This issue is extremely important, so documenting the Anfal campaign and mass graves is considered the primary duty and responsibility of the media. In order to raise this issue in international centers, legally an effective factor in recognizing and internationalizing this crime It is the duty of the media to continuously present and disseminate information about the genocide of the Kurdish people in order to create public opinion about the genocide of the Kurdish people. To find out the role of the media in covering and documenting the crimes of Anfal, the research examines two types of media. The first is the media coverage of the

Ba'ath regime in presenting the crimes of Anfal: 2/1-1) Media coverage of the Ba'ath regime's media in presenting the crimes of Anfal:

In his book *Controlling the Media*, Naum Chomsky discusses the role, influence and ability of the media to become an effective tool for the masses in order to occupy their minds. Chomsky's view was reflected in the media of the Ba'ath regime, which used the media to beautify the image of the dictatorship of the time.

On the other hand, the media of the destroyed regime was able to mislead public opinion through various ways of presenting events, as it intended about the Anfal and genocide campaigns, due to the lack of a free media to present issues objectively ⁽⁷⁾. However, during the uprising, many documents were seized from Ba'athist institutions, which paved the way for more talk about these crimes ⁽⁸⁾. In addition to these documents, the media must work to publish any video footage of crimes, research confirms how a video becomes evidence against perpetrators of crimes in court ⁽⁹⁾.

Here we present the views of research samples on Iraqi media discourse in the 1980s to prepare and justify the Kurdish genocide and Anfal. This study relies on the views of Kurdish activists and writers who closely monitored the Ba'ath regime's media during the Anfal campaign. Let's better examine the media's messages. The researcher interviewed this selection and asked some questions:

Q1: What was the dominant media discourse in the Iraqi media about Kurdish national rights?

The totalitarian media discourse was in the hands of the ruling Ba'ath Party. This discourse was based on an extreme right-wing nationalist ideology. This media discourse promoted the ideas and principles of the Arab Ba'ath Party by imposing its intellectual hegemony on society and rejecting all other intellectual and political movements ⁽¹⁰⁾. The media adopted a racist and nationalist discourse, based on the extension of Arab nationalism to all other Iraqi nations, including Kurdish nationalism ⁽¹¹⁾. The media discourse of that time was the non-recognition and violation of the national rights of the Kurdish people, including the right to Kurdish education and the right to citizenship ⁽¹²⁾.

Misleading discourse prevailed in the media, having a negative impact on Iraqi, regional and international media circles (Fatih Sangawi, 2021) due to the media's submission to the Ba'ath regime in Iraq, which led to a lack of impartial media discourse ⁽¹³⁾.

The Iraqi media followed the discourse of covering up the truth about the genocide committed against the Kurds in the 1980s, but the Iranian media covered up these crimes ⁽¹⁴⁾.

Q2: What media arts did the media use in to convey their messages?

The Iraqi media used all visual, audio and print media to convey their messages, making use of all journalistic and media arts. These include: news, statements, reports, interviews, articles, etc ⁽¹⁵⁾. In return, he prohibited reports and interviews with pro-regime Kurds on radio and television, or the broadcast of series and films that were in favor of the regime's policies ⁽¹⁶⁾. In addition to publishing false news and false reports with the aim of distorting the facts ⁽¹⁷⁾.

Q3: What are the trends in the media discourse adopted by the Iraqi media regarding the genocide committed against the Kurds in the 1980s?

Iraq had a special ministry of information that distorted the facts and blamed the Kurdish liberation movement for many crimes and described it as a foreign mercenary, while never mentioning the Halabja massacre and any other crimes it committed ⁽¹⁸⁾. Iraq covered up the genocide against the Kurds in all local and Arab media ⁽¹⁹⁾. The Ba'ath media used inappropriate terms to create a negative image of the Kurds, which influenced public opinion, including: calling the Peshmerga "rebels" and likening the Kurdish revolutionaries to saboteurs ⁽²⁰⁾.

Media discourse in the media justified the forced deportations, the programmatic destruction of villages and their concentration in forced labor camps, using the excuse that these actions were to punish the rebels, not civilians ⁽²¹⁾. The media adopted the method of distorting the facts, which led to a media cover-up for the destruction that the Kurdish people faced ⁽²²⁾.

Q4: How did the media use its directed discourse to

portray the Kurds as hostile to the public?

The media was used to promote propaganda as a means of suppressing freedoms, spreading false and misleading information, spreading hostile ideas, and denying citizens the right to seek accurate information ⁽²³⁾. The media campaigns of 1988 paved the way for the attack on Kurdistan, which later led to the Anfal genocide. After the media discourse was able to influence the recipient, by talking about a great victory over Iran through news and publishing pictures of war and slogans of victory on Iraqi channels ⁽²⁴⁾. The Iraqi media tried to mislead public opinion to legitimize crimes committed against the Kurds under the pretext of protecting the country from threats ⁽²⁵⁾. The media sometimes portrayed the Kurds as a backward people, and sometimes as an integral part of the Iraqi people ⁽²⁶⁾. The media was devoted to spreading hate speech among citizens ⁽²⁷⁾.

Q5: What was the purpose of spreading hate speech in the Iraqi media during 1988?

The media played a key role in encouraging the Iraqi street to create conflict between Arabs and Kurds, especially in Kirkuk ⁽²⁸⁾. The aim of the speech was to instill hatred in the minds of the Arabs against the Kurds, especially against the Kurdish opposition parties, thus encouraging them to participate in the genocide of Kurdish civilians during the Anfal campaign ⁽²⁹⁾. The aim of the media in publishing hate speech was to justify Iraqi and international public opinion to pave the way for the genocide of the Kurdish people ⁽³⁰⁾. The aim of the media messages was to spread fear and intimidation among Kurdish citizens ⁽³¹⁾. The aim of the Iraqi media discourse was to produce hostility and hatred to destroy the ranks of citizens ⁽³²⁾.

2/1-2) Duties of the media regarding the documentation of Kurdish genocide and Anfal:

After understanding the role of the Ba'ath regime's media in misleading public opinion and monopolizing the media as a weapon to use against the Kurdish people, we need to know the role of the Kurdish media in presenting the facts and documenting crimes against the Kurds.

Advances in technology and media made it possible to see scenes as they were. Academic research on

visual fields such as film and media has led to a rigorous analysis of genocide images, asking how they contribute to the transmission of events and the preservation of the memory of genocide as a form of memory ⁽³³⁾.

2/2) Functions of the media:

The media has several duties in this regard, including:

1. Publishing news and information about the Kurdish genocide. It is the main duty of the media to work to introduce the genocide, Anfal and all the crimes committed against the Kurdish people. Whether this recognition is national, regional or international.
 2. In addition, the media should present the facts, contribute to changing the directions of public opinion through presenting the facts.
 3. In addition to creating public opinion, it is one of the duties of the media. In order for the Kurdish media to be able to introduce the genocide and crimes against the Kurds, it must work on documenting these crimes, that is, documenting through different genres of media.
 4. The media must educate the society about the genocide so that it does not happen again in the future.
 5. Another duty of the media is to put pressure on governments. For example, the Kurdish media should put pressure on the Iraqi government to bring justice to the crimes of the Ba'ath regime.
 6. It contributes to the documentation of crimes of genocide and mass graves not only by presenting the facts, but can also be a fundamental tool for achieving accountability.
 7. Preserving the public memory of the victims and their stories, creating a historical record free from misrepresentation.
 8. Demand independent accountability and investigation, highlight mass graves when they are discovered, and pressure the international community to recognize the rights of genocide victims.
 9. Fighting justification discourse and denying genocide.
- That is, the media should respond to any attempt to

reduce the crime of genocide and deny it, while fighting propaganda that tries to beautify the faces of the perpetrators of the crime, or justify the perpetrators.

10. Conveying the voices of the victims of Anfal directly through the media and providing them with the opportunity to express their views, which is a fundamental right for the survivors and families of the missing. For example, the right of survivors and families of Anfal victims to have information about the Anfal perpetrators and the media to guide them on how to file a complaint against them.

11. Establishment of a center for documenting Anfal and genocide.

12. Publish all existing documents regarding Anfal, whether they are documents of the regime itself, or international documents, records, reports and documents of the United Nations ⁽³⁴⁾.

13. The responsibility of creating public opinion about the crimes of genocide, Anfal and mass killings falls on the shoulders of the media. Hence, the authorities of these institutions must work to formulate a comprehensive media policy on the coverage and documentation of genocide crimes.

In 1972, Elizabeth Newman developed a theory called the spread of silence, in which she hypothesized that there are three factors through which the media can create public opinion. The second is the universality of its messages. The third assumption is similarity: in the sense that media messages must be similar in structure in order to create a popular agenda and be valued by the recipient ⁽³⁵⁾. Because the media is the most sensitive strategic tool in times of crisis, in the sense that the media can be both the source of the crisis and the foundation of the solution ⁽³⁶⁾.

In addition, inculcation theory emphasizes cognitive inculcation, where the media can instill information in the mind of the recipient through repetition and over a long period of time. This means that the effect here is cumulative over time. Of course, all forms of media are useful for documenting the issue of Anfal, mass graves, genocide and shaping public opinion. In addition to choosing appropriate tools, for example, use local media, which reaches the local audience provided

that its messages are presented in a simple manner to a specific audience. Also, to form public opinion, we can make use of modern media or directed media, since modern web media platforms are of great importance in opinion formation and documentation. If we look at new media platforms, we see that these platforms reach a global audience, and that a platform can be created in different languages. Through the characteristics of digital media, we can interact with the recipient or consumer, despite the widespread nature of the archiving process and the importance of electronic archives. Crossing the boundaries of place, time and proximity is an important advantage of digital media, as well as the advantage of simultaneity and the presence of chat rooms, through which people can get to know each other and exchange opinions and ideas on any topic that occupies their minds.

14. The phenomena of electronic media can be used to document and draft crimes in order to create public opinion, including electronic campaigns through hashtags, electronic petitions and electronic voting, followed and exploited through electronic media.

2/3) Digital Archive on Introducing Anfal and Kurdish Mass Graves:

Digital archives are important in introducing Anfal and mass graves, providing opportunities for nations that suffered from dictatorship and media control, while opening the door to researchers to introduce the history of genocide, Anfal, mass graves, present facts and reject rumors. Therefore, the existence of a unified archival institution is a key factor for documenting important paper archives and digitizing them, documenting and conducting interviews, using oral methods, documenting witness stories in various fields and publishing them digitally.

2/4) Methods of Digitization:

The first is offline, which is used to maintain documents and records of institutions and is important because it is a key principle of e-government, and will play an important role in documenting and promoting Anfal and mass

graves.

The second is online, which is dedicated to publishing articles on electronic sites that are directly archived. The electronic archive feature plays an important role in documenting the Kurdish genocide to obtain.

3) Framework of Research Practice:

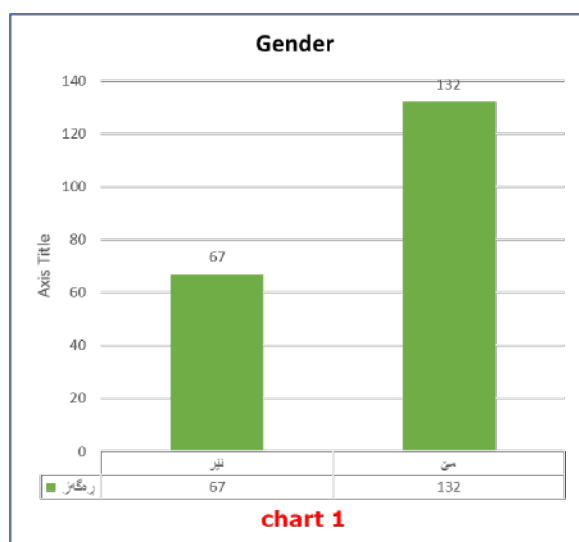
In the practical aspect of this research, the researchers relied on a survey form in order to know the opinion of a sample of students in Garmian University colleges, the sample number is (199) students:

3/1) Data of the study sample according to demographic characteristics:

Gender: Out of (199) students, (67) male students, which is (33.7%), (132) female students, which is (66.3%) participated in this survey, which is mean (1.66) and std. deviation (0.474). See Table and Chart (1).

Gender	Number	The percentage	Mean	Std. Deviation
Male	67	%33.7	1.66	0.474
Female	132	%66.3		

Table (1)



Age: Out of (199) students, (94) students aged (18 to 20) years, which is (47.2%), (95) students aged (21 to 23) years, which is (47.7%), (8) students aged (24 to 26) years, which is (4%). (2) students aged (27 and above), which is (2%) participated in this survey, which is a mean of (1.59) and a standard

deviation of (0.620), see Table (2)

Age	Number	The percentage	Mean	Std. Deviation
18-20	94	%47.2	1.59	0.620
21-23	95	%47.7		
24-26	8	%4		
27 above	2	%1		

Table (2)

Stage: Out of (199) students, (92) students in the second stage, which is (46.2%), (56) students in the third stage, which is (28.1%), (51) students in the fourth grade, which is (25.6%) participated in this survey, which is a mean of (1.79) and a standard deviation of (0.824), see Table (3).

Stage	Frequency	percentage	Mean	Std. Deviation
Second	92	%46.2	1.79	0.824
Third	56	%28.1		
Forth	51	%25.6		

Table (3)

Specialty: Out of (199) students, (20) students in English department, which is (10.1%), (18) students in Engineering department, which is (9%), (5) students in Biology department, which is (2.5%), (6) students in mathematics department, which is (3%), (6) students in mathematics department, which is (3%), (20) students in medical department, which is (10.1%), (15) students in geography department, which is (7.5%). (10) students in the Physics Department, which is (5%), (16) students in the Kurdish Department, which is (8%), (6) students in the Social Department, which is (3%), (12) students in the Department of Chemistry, which is (6%), (9) students in the Department of History, which is (4.5%), (47) students in the law department, which is (23.6%) participated in this survey. deviations, see Table (4).

Specialty	Frequency	percentage
English	20	%10.1
Engineering	18	%9
Biology	5	%2.5
Mathematics	6	%3

Medical	20	%10.1
Geography	15	%7.5
Psychology	4	%2
Arabic	11	%5.5
Physics	10	%5
Kurdish	16	%8
Social	6	%3
Chemistry	12	%6
History	9	%4.5
Law	47	%23.6
	199	

Time: Out of 199 students in this survey, (17) students spent less than an hour, which is (8.5%). (54) students in (1-2) hours, which is (27.1%), (71) students in (3-4) hours, which is (35.7%), (57) students spend more than (5) hours, which is (28.6%), daily using and watching media and platforms, which is a mean of (2.84) and a standard deviation of (0.938), see Table (5).

Time	Frequency	percentage	Mean	Std. Deviation
Less than an hour	17	%8.5	2.84	0.938
(1-2) hours	54	%27.1		
(3-4) hours	71	%35.7		
more than (5) hours	57	%28.6		

Table (5)

Information acquisition: The tools used by students to acquisition information about Anfal and mass graves, out of (199) students in this survey, (130) students through social networks, which is (65.3%), (8) students through media sites on the Internet, which is (4%), (29) students through television channels, which is (14.6%), (5) students through newspapers and magazines, which is (2.5%), (27) students obtain information through other means, which is (13.6%), which is mean (1.95) and standard deviation (1.459), see Table (6).

Information acquisition	Frequency	percentage	Mean	Std. Deviation
social networks	130	%65.3	1.95	1.459
media sites on the Internet	8	%4		
television channels	29	%14.6		
newspapers and magazines	5	%2.5		
other means	27	%13.6		

Table (6)

Message and Content: The purpose of the media coverage, whether it has been able to show the crimes of Anfal and mass graves, out of (199) students in this survey, (145) students through Video messages and content, which is (72.9%), (2) students through messages and audio content, which is (1%), (18) students through messages and visual content, which is (9%), (20) students through messages and written content, which is (10.1%), (14) students obtain information in other ways, which is (7%), which is the mean (1.77) and the standard deviation (1.346), see Table (7).

Message and Content	Frequency	percentage	Mean	Std. Deviation
Video messages and content	145	%72.9	1.77	1.346
Audio messages and content	2	%1		
Photographic messages and content	18	%9		
Written messages and content	20	%10.1		
other means	14	%7		

Table (7)

3/2) The role of the media in documenting the crimes of Anfal and mass graves:

Table (8) shows the researchers' answers to the research questions. In this table, the frequency, percentage, arithmetic mean, standard deviation and ranking of the answers are presented.

Q.	I totally agree	I agree	I'm neutral	I don't agree	I completely agree	Mean	Std. Deviation	Order of questions					
	n.	p.	n.	p.	n.	p.	n.	p.	n.	p.			
1	43	%21.6	62	%31.2	48	%24.1	31	%15.6	15	%7.5	3.44	1.204	First
2	19	%9.5	86	%43.2	47	%23.6	28	%14.1	19	%9.5	3.29	1.122	second
3	25	%12.6	92	%46.2	47	%23.6	26	%13.1	9	%4.5	3.49	1.019	Sixth
4	30	%15.1	101	%50.8	38	%19.1	19	%9.5	11	%5.5	3.60	1.034	Fourth
5	23	%11.6	88	%44.2	59	%29.6	22	%11.1	7	%3.5	3.49	0.958	Fifth
6	47	%23.6	85	%42.7	55	%27.6	6	%3	6	%3	3.81	0.934	Seventh
7	34	%17.1	75	%37.7	56	%28.1	22	%11.1	12	6%	3.49	1.086	Third

Out of 199 students who participated in this survey, we reached the following results, according to the statistical system (Spss):

Q1: The Kurdish media has not been able to play a proper role in documenting the crimes of Anfal and mass graves. This paragraph comes first, which means that the Kurdish media should review itself to identify its weaknesses on this important issue.

Q2: The media have helped in providing information and showing the facts about Anfal and mass graves. This item ranked second in the researchers' responses, so the media worked to cover the crimes, although not at the required level.

Q3: Electronic media platforms provided more opportunities to promote Anfal and mass graves through various contents.

Q4: The media have participated in documenting the crimes of Anfal and mass graves by conducting interviews with the relatives of the victims.

Q5: Electronic media platforms provided more opportunities to promote Anfal and mass graves through electronic archives.

Q6: The existence of a unified archival institution is a major factor for documenting the crimes of Anfal and mass graves.

Q7: The media outlets have neglected to conduct electronic campaigns to promote the crimes of Anfal and mass graves through new media. This item ranked third, that these campaigns can play an effective role because of the nature of the tool, which crosses the boundaries of time and space and is always available and can be done in any language and directed to Internet users anywhere in the world.

Results:

1. The results of the study showed that females pay more attention to the issue of genocide.
2. Video content and messages have an impact on the recipient through sound and color and movement attracts the recipient's attention.
3. Social networks have provided a good platform for obtaining information about documenting crimes, but the Kurdish media has not been able to play a role in documenting the crimes of Anfal and mass graves.
4. The media helped in providing information and showing the facts about Anfal and mass graves.
5. Despite the importance of electronic public opinion manifestations, the media have neglected to conduct

electronic campaigns to promote the crimes of Anfal and mass graves through new media.

6. Media outlets have been able to use interviews with relatives of victims to document the crimes of Anfal and mass graves.

Recommendations:

1. More attention by the media to documenting crimes in order to introduce them in international centers.
2. Drafting a comprehensive national plan on how to introduce these crimes in order to keep them in the public memory.
3. Work to pay more attention to the media to conduct interviews, receive witness statements, document their statements and document their stories.
4. Using the manifestations of electronic public opinion to create public opinion through new media, which is a favorable ground for conveying the voices of peoples whose voices have not been heard, whether through electronic campaigns, or electronic petitions to recognize the crimes of Anfal and mass graves.

رۆلى ميديا له دۆكيومينتکردن و ناساندنى تاوانهكانى ئه نفال و گۆره به كۆمه له كاندا

د. چنار نامق حسن

زانكۆی سه لاهه دین - هه ولیر

chnar.hasan@su.edu.krd

07504538311

پ.د. ئومید برزان برزو

زانکۆی گهرمان

omed.barzan@garmian.edu.krd

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گه لئ کورد به درژایی میژووی هوکمرانی پژی می به عس دو چاری تاوانی جینۆساید کردن و شالاهه کانی ئه نفال و گۆری به کۆمه ل و کیمیا باران بۆ ته وه، به لام به هۆی قۆرخ کردنی میدیایی و نایه کسانیی و نه بوونی میدیای کوردی نه توانراوه، ئه م تاوانانه به دۆکۆمێنت بکری ت وله رووی چیهانییه وه بناسنێرت.

ئامانجى ئەم توۋىژىنەۋە ئەۋەيە تىشكېخاتە سەر زانىنى پۇلى مېدىيى كوردى لە بەدۇكىۋمىتتكردى تاۋانەكانى ئەنفال و گۆرەبەكۆمەلەكان و دەرخستى رادەي بەشدارىكردى ئامرازەكانى مېدىا لە دۇكىۋمىتتكردى ئەۋ تاۋانانە لە رېگەي گرنىگىدان بە بەلگە و شوئىنەۋار و دەر بازبۋوانى ئەنفال و كەسوكارى قوربانىيان. وىراي دەرخستى پۇل و شىۋازەكانى پومالكردى مېدىيى كاريگەر سەبارەت بە تاۋانەكانى ئەنفال و گۆرەبەكۆمەلەكان. ھەروەھا لە مەۋداي توۋىژىنەۋە بەگىن بە ۋەلامى پرسىارى سەرەكى توۋىژىنەۋەكە، ئايا مېدىيى كوردى تۋانىۋىيەتى پۇل لە بەدۇكىۋمىتتكردى تاۋانەكانى ئەنفال و گۆرەبەكۆمەلەكاندا بگىرت؟

ئەم توڭزىنە ۋە توڭزىنە ۋەكى مەيدانىيە، پشت بەرپىيازى روپپىۋى دەستىت لە كۆكردنە ۋەى داتا و زانىرىيەكان بە بەكارهينى فورمى راپرسى، وىراى ئەنجامدانى ئىنتەرقىو لەگەل سامپلىك لە لە توڭزەرەن. جگەلە چوارچىۋەى گشتى توڭزىنە ۋە و لايەنى تېۋرى توڭزىنە ۋەكە، كۆمەلەك دەرەنجام و راسپاردە دەخاتەروو.

وشه سەرەکیبەکان: مەدبا، بەدۆکیۆ مەنتەکردن، تاوانەکانی، ئەنفال، گۆرەبەکیۆ مەله‌کان.

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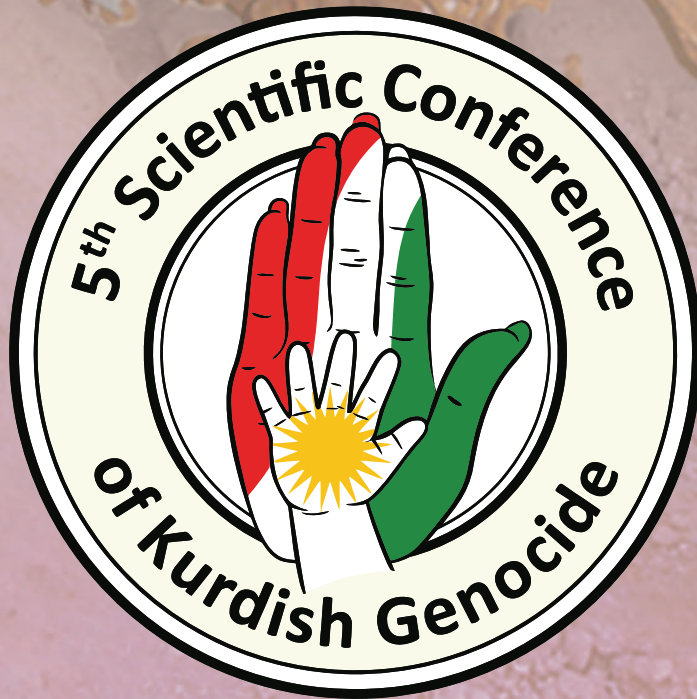
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Hawler Medical University University Of Duhok



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