

FORENSIC INVESTIGATION AND ANALYSIS OF HONOR KILLING: A CASE-BASED APPROACH TO JUSTICE IN FAMILIAL HOMICIDE

Muhammad Sajjad^{*1}, Muhammad Qideer Hassan², Muhammad Farhan Rashid³

^{*1}Department of Forensic Science, The Islamia University of Bahawalpur,

²Head of Department, Department of Forensic Science, IUB,

³Institute of Molecular Biology and Biotechnology (IMBB), The University of Lahore, Lahore, Pakistan

^{*1}muhammadsajjad7857488@gmail.com, ²qideerulhassan@iub.edu.pk, ³mfarhansohrani5@gmail.com

DOI: <https://doi.org/10.5281/zenodo.16078715>

Keywords

CRISPR-based gene therapy;
Pharmacological treatments;
Genetic disorders; Gene editing;
Precision medicine; CRISPR
technology; Combination
approach

Article History

Received: 08 April, 2025

Accepted: 25 June, 2025

Published: 18 July, 2025

Copyright @Author

Corresponding Author: *

Muhammad Sajjad

Abstract

Honor killing continues to be rooted as a gender violence, largely hidden behind family silence, cultural alibi, and legal ambivalence. The present study reports a thorough forensic analysis of an intra-family murder in Pakistan, where a 16-year-old female was killed by her brother on the excuse of upholding family "honor." Conducted with a multidisciplinary forensic pathway, the analysis involved careful management of the crime scene, collection of biological traces, ballistic analysis, gunshot residue (GSR) analysis, DNA typing, and medico-legal autopsy. The autopsy determined the cause of death to be hemorrhagic shock due to a close-range gunshot wound to the heart and left lung. Sexual assault was not observed. Ballistic examination detected the bullet casing with recovered 30-bore pistol, and analysis for GSR confirmed recent discharge of firearm by the accused. Even after the accused's tearful admission, forensic reports yielded conclusive evidence, and there was a conviction in terms of Section 302 of the Pakistan Penal Code. The case shows the pivotal role forensic science plays in overcoming challenges in honor crimes. It lays stress upon the fact that objective, fact-based inquiries are necessary in shattering impunity chains of domestic killings in culturally delicate cases and in providing justice to the victims where customary norms may bar legal accountability.

Key Words : Honor killing, forensic examination, family homicide, cultural violence, crime scene reconstruction, forensic pathology, gender violence, legal responsibility, case-based justice, forensic anthropology, bloodstain pattern analysis, motive analysis, forensic ethics, victimology.

INTRODUCTION

1.1 Contextual Background

1.1.1 Definition and Sociocultural Origins of Honor Killings in Pakistan

Honor killings in Pakistan are a type of gendered murder perpetrated by close family male members—brothers, fathers, or uncles—in the name of restoring "honor" allegedly lost owing to

the woman's behavior. Such behavior can include marrying independently, refusing arranged marriage, demanding divorce, or merely socializing with men outside the family. This tradition derives from patriarchal social norms prioritizing male authority and family honor over women's autonomy [1]. Concept of "honor" has

very strong roots in feudal as well as tribal societies, particularly in Sindh (in the form of karo-kari) and Khyber Pakhtunkhwa. "Honor" in these areas translates into women's chastity, and irresponsible rumors provide a justification for brutal murders. Misinterpretation of Islamic law and social pressure justify such homicides as necessary purges and not criminal acts [2].

1.1.2 Prevalence and Patterns: Statistics and Recent Trends

A total of 15,000 women have been honor-killed from 2004 to 2022, estimated by the Human Rights Commission of Pakistan (HRCP) [3]. It is very likely higher than that, with a good number more murders being committed to look like accidents or suicides and not reported through collusion by the family members. Teenage girls in the 15–30 age range are usually the victims, and murders usually follow a build-up of viral video or gossip on social media. For example, over the past few years, social media sites such as WhatsApp and TikTok have supplied the motive as well as the evidence upon which attackers relied to plea innocence for their crime [4]. Whereas urban activity is reported by media and occasionally judicial notice, rural areas lie outside the effective ambit of policing and administration of law [5].

1.2 Importance of Forensic Investigation

1.2.1 Contribution of Forensic Science to Finding Truth in Familial Homicides

In honor killings, where the victim is most likely to have been killed in their home and offenders are close relatives, forensic science offers the sole objective source of determining the truth. By the application of autopsies, toxicology, DNA analysis, and cyber forensics, investigators can build timelines, identify cause of death, and falsify fabricated statements [6]. The 2016 case of Qandeel Baloch illustrates how forensic pathology can uncover homicide when her death was being explained by her family as natural. Forensic evidence in the form of toxicology proved strangulation. Likewise, in British national Samia Shahid killed in Pakistan, it was only when exhumed and redone under forensic examination that she was found to have been killed [7].

Computer forensic methods like cell phone call details, GPS and video evidence have become more pivotal. They become unavoidable in scenarios where physical data is compromised or destroyed and when witnesses fail to cooperate based on family obligation or fear [8].

1.2.2 Limitations of Traditional Investigation in Honor-Based Crimes

Although crucial, the application of forensics in real life is derailed by intrinsic handicaps in Pakistan. To begin with, the countryside does not have forensic laboratories and professionals. Secondly, crime scenes are generally tampered with even before the police reach the site. Thirdly, forensic evidence is sometimes manipulated by dishonest medico-legal professionals or ignored by courts under coercion by powerful local clans [9]. Apart from this, legal provisions for Qisas and Diyat enable victims' families to pardon perpetrators—essentially rendering the prosecution ineffective in honor killing cases. Inasmuch as the perpetrator is a member of the family, pardon here equates to a legal technicality to escape punishment [10]. Even if forensic evidence is irrefutable, its effect is dented when courts yield to such legal proceedings.

1.3 Research Objectives

1.3.1 Examine Forensic Processes in Honor Killing Cases

This research will review the forensic operations (e.g., postmortems, ballistic analysis, and computer analysis) applied to exemplary honor killing cases from 2000–2023 and examine their value added to decision-making.

1.3.2 Case-Based Measurement of Effectiveness

Through comparative review of 6–10 landmark cases, this research will evaluate the impact of forensic intervention on achieving justice or uncovering failures in the law.

1.3.3 Suggest Forensic and Legal Improvement

The article will end by encouraging evidence-based solutions to:

- Strengthening forensic capacity in provinces.

- Reforms in legislation to seal forgiveness loopholes.
- Instituting independent review committees for honor killing investigations.

2. Literature Review

2.1 The Concept of Honor Killing

2.1.1 Cultural Justifications and Legal Loopholes

Honor killings, predominantly of women, are carried out by the family in the guise of preserving family honor. South Asian patriarchal cultures have long promoted the myth that a woman's behavior accounts for the honor of her family, thus justifying violence against perceived deviations like choosing one's husband or not accepting arranged marriage [11]. The defense culture is most often abused in court to condone such crimes, and the culprits go free [112]. The Qisas and Diyat policy in Pakistan permits the victim's family to pardon the accused in exchange for financial compensation, which is not right given that the killer and the victim's family can be from the same group. This has translated into impunity within the judicial system and abuse of Islamic law for use in misogynistic offenses [13].

2.1.2 Violence Based on Gender in the Interest of Honor

Honor killings are a type of gender-based violence (GBV) with patriarchal dominance and collusivity by institutions. Women get over-proportionately targeted because of social norms that deny them agency. Even when there is legislation, state enforcement is poor [14]. Malik et al. note that honor killings have deepened socio-psychological frameworks with masculinity and honor teetering precariously in the balance [15]. The condonation of violence in the name of honor illustrates the typical failure of legal and ethical systems to create an effective gender-based dual legal standard [16].

2.2 Forensic Challenges in Familial Homicides

2.2.1 Manipulation of Crime Scenes

Family homicides are unique forensic issues because they are manipulated and tampered with. Lari, for instance, wrote that crime scenes were sanitized, evidence taken away, and witnesses coached or intimidated, thus making forensic

reconstruction in doubt [17]. The same family members who murder are usually the first to respond and thus can tamper with preliminary reports. This is furthered by the poor forensic infrastructure and ill-trained police and forensic officials. Even when evidence exists, it is usually not tapped due to social pressure or bribery [18].

2.2.2 Refusal of Witnesses and Altering of Evidence

Witness intimidation and family solidarity play an important role in honor killing underreporting and prosecution breakdown. Offender kin refuse to testify or withdraw statements for fear. In one study, repeated withdrawal of initial witness statements were reported by forensic experts as being caused by social intimidation and family pressure [19]. This hesitance is compounded by corruption within the police force where police officers accept bribes for falsifying records or intentionally ignoring procedural protocols [17]. Forensic evidence that is paramount to the case is, as a result, not procured or made inadmissible.

2.3 Pakistani Justice System

2.3.1 Impact of Qisas and Diyat Laws

The Pakistani legal system permits forgiveness on the part of the victim's heirs according to Islamic law, which tends to result in pardoning the accused in case he or she is also from the same family. The provision of law circumvents justice very much, especially in honor killings where victims are killed by their immediate family members. Palo argues that this facilitates a "charade of justice," whereby murderers get to go free through manipulated legal forgiveness [12]. The ineffectiveness of this system is also seen in the low rate of convictions even though the honor killings are very high. Judicial loopholes such as postponed trials and doctored evidence further deprive justice [13].

2.3.2 Review of Previous Studies on Legal Outcomes in Honor Killing Cases

Various research studies show the failure of Pakistan's justice system to solve honor killings. Khan's feminist legal critique exemplifies how judges, prosecutors, and police, too, are sometimes driven by social mores and therefore hand down

biased judgments [11]. Shafqat's dissertation also shows that the utilization of Qisas and Diyat disobeys the rule of law as it facilitates private settlements for public concern crimes [14]. Recent legislation efforts have sought to fill these loopholes by criminalizing honor killings regardless of pardons granted by the family, but enforcement remains incomplete and cosmetic in nature [20].

3. Methodology

3.1 Case Selection Criteria

3.1.1 6–10 Representative Cases of Honor Killings in Pakistan (2000–2023)

A qualitative case study approach is employed to examine 6–10 representative cases of honor killings in Pakistan between 2000 and 2023. The period covers significant legislation milestones, including the 2004 Criminal Law (Amendment) Act and the 2016 Anti-Honor Killing Law, and is therefore a critical period to examine shifts in legal and forensic responses. Cases were purposefully sampled from judicial decisions, press reports, forensic reports, and human rights organization records. Cases were assessed for inclusion because of the availability of valid legal records and forensic information, and descriptive accounts of the investigation and judicial processes. The research design is consistent with intersectional research designs used in gender-based violence research, which explores how intersecting identities and structures influence victimization and justice [21]. The first 10 cases were selected, the last 6–10 being considered for shortlisting in terms of diversity concerning main parameters. This representativeness-depth compromise enables the study to speak about patterns and exceptions of honor-based family murders.

3.1.2 Parameters: Region, Victims' Gender, Means of Killing, Forensic Intervention

To enable comparative firmness, each case was classified with respect to four analytical parameters:

Region:

Incidents are spread out over Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan, mirroring Pakistan's ethnically and culturally diverse terrain.

Differences in policing and tribal or feudal control frequently influence reporting of crime as well as judicial justice [22].

Gender of Victims:

While women form most of the honor killing victims, male victims engaged in purported "illicit" relationships were also included to consider the gendered dynamics of power undergirding such crimes. This comports with wider scholarship demonstrating the ways patriarchal systems use morality as a weapon against non-conforming actors [23].

Mode of Killing:

Types of killing—ranging from strangulation, gun use, stabbing, to burning—were documented to determine the correlation of modes with the intent of the killer for hiding motives or evidence destruction. The mode also affects forensic detectability and potential legal culpability.

Forensic Intervention:

The extent of forensic input was a main concern. Cases were filtered for the utilization of postmortem reports, DNA analysis, crime scene examination, and toxicological examination. Forensic gaps—either caused by shortages in infrastructure or purposeful manipulation—nearly consistently destabilized prosecutions, toward a continued hindrance to justice in honor killings in Pakistan [24].

3.2 Data Sources

3.2.1 Police Records

Police records are the main source of data for criminal investigation, i.e., arrest reports, witness statements, and investigative summaries. Police records provide chronological data in enabling the reconstruction of events and the formation of evidentiary chains as evidence. Osterberg and Ward acknowledge their predominance in reconstructing the past and realizing procedural dynamics in investigations [25]. Additionally, police records become the basis for future legal and forensic procedures.

3.2.2 Court Judgments

Judicial rulings are interpretive legal conclusions by way of analysis of evidence, facts, and forensic evidence testimony. They play a crucial role for research in studying the place of forensic conclusions in sentencing and judging trends. As shown by Pakes, judicial records do more than convey judicial reasoning; they also display structural variation across legal jurisdictions, critical to comparative justice research [2]. Judgments provide an open track record of reasoning, rendering them critical to analytical studies of justice processes.

3.2.3 Forensic Reports

Forensic reports translate raw physical information into scientifically proven conclusions. They are DNA profiles, toxicology reports, and computer forensics examinations. Horvath and Meesig noted extreme deviation between textbook descriptions and real forensic practice, asserting the necessity for empirical testing of forensic methods [27]. Sunde further includes that computer forensic reports are more implicit and in a unique format than the classical reports and may affect their admissibility as evidence before the court [28]. Forensic records need to be accurate, reproducible, and understandable in order to maintain the integrity of judicial processes.

3.2.4 Media Archives

Media archives serve a double purpose: they portray public perception and influence the image of justice. Media archives archive media coverage, documentaries, and online media that represent the public discourse of sensational cases. Media coverage has the potential to influence the pace and form of case processing by shaping public attitude and opinion, as well as juror expectations [29]. Murphy cautions against the risks of forensic sensationalism, where oversimplification by the media generates unrealistic expectations of certainty for forensic results [30]. Media is not just an off-stage presence but is a player in justice proceedings as well.

3.3 Analytical Framework

3.3.1 Qualitative Case Study Method

Qualitative case study approaches enable in-depth examination of single incidents, highlighting the interplay of forensic evidence, police procedure, and judicial discretion. The approach places an importance on depth of description and understanding of setting. Miller and Whitehead highlight the fact that detail and preciseness in professional documentation have direct effects on the quality of analysis of case studies because subtle interpretation of data depends on well-documented case files [31]. The approach is most effective for investigation of anomalies, process breakdowns, or system bias.

3.3.2 Cross-Case Comparative Analysis of Forensic Patterns and Justice Outcomes

Cross-case comparative analysis pools data from several case studies to identify trends and systemic problems. Through pooling data, this method allows the identification of repeating discrepancies in forensic interpretation or judicial decision. Giles et al. applied this method in a retroactive investigation involving more than 1,800 medico-legal cases and identified regional variation in post-mortem interval estimation [32]. Through comparing similar cases within jurisdictions or time periods, this method allows for a macro understanding of forensic reliability and administration of justice.

4. Forensic Investigation in Honor Killing Cases

4.1 Scene of Crime Management

4.1.1 Delayed Reporting

Delayed reporting remains the most serious challenge in forensic investigation of honor killings since it tremendously hinders the preservation of physical evidence and the integrity of the crime scene (1,2). In most of the cases reported, the families intentionally wait before reporting to the authorities, and they either dispose of the body, tamper with the scene, or collude to construct a false account that will present the death as suicide or accident (3,4). This procrastination represents a disruption of the chain of custody, limits trace and biological evidence recovery, and prevents first-response

analysis of witness testimony, resulting in general loss of investigative capability (5,6). The patriarchal social constraints of the community can also deter neighbors or other likely informants from reporting the incident due to fear of reprisals or social exclusion (7,8). These systemic barriers not only reduce the probative value of forensic evidence but also encourage perpetrators expecting impunity from scrutiny through cultural complicity (9,10).

4.1.2 Contamination of the Crime Scene

Scene contamination of honor killing crime scenes is often considered a byproduct of active obstruction and passive apathy, especially in societies where family honor takes precedence over legal accountability (11,12). Relatives and family members could wash away bloodstains, wash the victim's body, or eliminate evidence incriminating the perpetrator prior to the police investigation, thereby removing valuable forensic evidence in the form of fingerprints, bloodstain patterns, and trace DNA (13,14). In addition, sometimes law enforcers also do not secure the crime scene properly, either due to lack of good forensic training or, worse, due to sociocultural socialization that underestimates the gravity of honor crimes (15,16). In rural and semi-urban areas, the time it takes for the forensic teams to reach the crime scene also exposes the scene to external influences and environmental damage (17,18). Such conditions significantly compromise the recovery of legally acceptable forensic evidence, decrease the genuineness of physical evidence, and disrupt the reconstruction of the chronology of the crime for presentation in court (19,20).

4.2 Cause of Death Determination by Autopsy

4.2.1 Medico-Legal Officers' Role

The cause and mode of death in honor killings largely depend on the impartiality and professionalism of the medico-legal officers, who are usually under enormous sociopolitical pressure (21,22). Mostly, the officers are directed or indirectly influenced to declare the death as natural, accidental, or suicide to avoid public

disturbance or punitive actions by influential local constituencies (23,24). The lack of national guidelines for the performance of forensic post-mortems also adds to this problem, causing uneven practice and differing interpretation even among experienced experts (25,26). Gender bias is also complicating assessment since some examiners do not want to examine for signs of sexual or physical abuse if the victim is female due to conservative culture's perceptions of women's sexuality and honor (27,28). This institutional weakness is a source of a very high misclassification rate and creates huge breaks in the chain of evidence critical to judicial as well as policy-level accountability (29,30).

4.2.2 Forensic Characteristics of Honor Crimes

Forensic patterns in honor crimes have recognizable forensic fingerprints like ligature marks, pathognomonic petechial hemorrhages of asphyxiation, and signs of pre-mortem injury or physical constraint (13,14). These are usually underestimated or totally overlooked, particularly when the autopsy is conducted under compulsion from society or without suitable training to identify gender violence cultural patterns (15,16). In certain areas, unavailability of more sophisticated forensic tools like high-grade toxicology screening or radiology scanning reduces the capacity to identify internal injuries, poisoning, or other imperceptible causes of death (17,18). Post-mortem tampering like burning dead bodies or chemical treatment to alter fluids also hides these indicators, not only preventing determination of the cause of death but eroding legal responsibility (19,20).

4.3 DNA and Biological Evidence

4.3.1 Disputes over paternity

Most honor killings are precipitated by adultery or suspicion of paternity, and paternity testing has emerged as a principal way of establishing or refuting suspicion (1,17). If a woman is accused of having extramarital sex, her pregnancy or giving birth is the target of community condemnation, usually leading to death (18,19). Nonetheless, while DNA can clear or validate such suspicion, it is currently in short supply, especially in rural areas where forensic facilities do not exist or are not

readily available (20,21). In addition, paternity outcomes tend to be politically manipulated in the courtroom, where cultural beliefs substitute for scientific fact, and it is challenging for prosecutors to base their case on forensic evidence alone when proving motive or intent (22,23).

4.3.2 Body Fluid Analysis

Assault Body fluid analysis, including semen, saliva, blood, and vaginal secretions, offers crucial evidence of physical assault, rape, or struggle that can directly refute family accounts of accidental or natural death (24,25). However, such evidence is usually deliberately omitted in autopsy or else ruled out in court in the case of Qisas and Diyat laws, which facilitate family-based compensations in homicide (12,14). Such laws practically privatize justice administration so that families can pardon offenders who are usually members of their own family, thus rendering forensic evidence inconsequential in legal proceedings (11,13). This institutional deficit not only erodes the deterrent effect of criminal law but also discredits forensic science as a vehicle for seeking objective justice in cases that are culturally nuanced (9,10).

4.4 Digital Forensics and Surveillance

4.4.1 Mobile Call Records

Mobile telephone data, especially call detail records (CDRs), have increasingly been used to detect collusion between suspects and build the timeline of honor killings (11,16). Such logs can reveal communication patterns before, during, and after the crime, implicating individuals who otherwise claim innocence (25,26). Despite their value as evidence, these cyber-tools are all too often overlooked through judicial unfamiliarity with cyber-forensic processes or police reluctance to take their detective efforts into the cyber-world beyond normal interrogation (17,19). Moreover, police investigators similarly often also have difficulty obtaining telephone records without complaints or sufficient legal warrants, hence depriving access to potentially case-defining information (20,23).

4.4.2 CCTV Footage and Geo-Location Tracking

Video tracking and GPS tracking are now a necessity to the reconstruction of spatial and

temporal aspects of honor crimes, especially in urban areas where these technologies are more widespread (7,13). The CCTV cameras can record such crucial incidents like kidnap of the victim, suspect movement, or even the offence, and all of this is presented visually compared to the common false testimonies delivered in the courtroom (19,20). The probative value of the evidence, however, is reduced by technical shortcomings in data preservation, chain-of-custody contamination, or by the failure of legal officers to deal with digital formats effectively (24,25). The dearth of policy standard for the admissibility of such evidence subsequently aggravates the situation and renders it a negatively leveraged forensic tool in investigations of crime with cultural roots (26,27).

5. Case-Based Analysis

5.1.1 Victim Profile

The victim, Attiya Mubarak, was a 16-year-old female who lived with her family in a village of Sama Satta, Pakistan. According to the FIR lodged by her father, she is said to have been engaged in a war of words with her brother, Asad Ullah, which unfortunately concluded with a shooting death. The victim's own life background was typical of that of a run-of-the-mill Pakistani family environment where debate regarding perceived family honor issues, obedience, and gender roles still dominates. The lack of a history of prior behavioral misconduct and criminal offenses on the victim's part reinforced sociocultural pressures engendered by patriarchal notions of family honor rather than individual transgression. The motive of the offender was centered on perceived disrespect because of the sister's actions, indicating how even minor disagreements can result in the most outrageous repercussions in honor-bound situations.

5.1.2 Forensic Intervention

Forensic investigation was key to reconstructing the incident and incriminating the accused.

Crime Scene Management:

The police cordon had been established promptly after the shooting, and evidence like the discharged 30-bore shell casing and blood samples

were recovered under a controlled chain-of-custody process.

Autopsy:

The medico-legal post-mortem examination yielded a single shot to the front of the chest with an exit wound in the back. Injuries inside consisted of damage to the heart and left lung and resulted in hemorrhagic shock and death. There were no traces of physical or sexual abuse. Vaginal swabs were negative for male DNA, and hence, sexual assault as a cause is unlikely.

Ballistic and GSR Analysis

The 30-bore gun used in the murder was recovered two days after the crime. Ballistic examination confirmed that the bullet cartridge was fit for the recovered weapon. GSR examinations identified the presence of lead, barium, and antimony on the suspect's right hand, confirming that he had just fired a gun.

DNA Testing:

The blood from the crime scene matched the victim's DNA. There was no foreign DNA on her clothing or body, attesting to there being no sexual intent.

Figure 1. Gun Wounds to Posterior Neck



Figure 2. Gun Wounds Honour Killing

5.1.3 Outcome

The forensic evidence was paramount in securing a conviction. Although the accused had confessed partially—to treating the act as a spontaneity during an argument—prosecutors utilized only scientific evidence to prove both direct participation and intent. The eyewitness account of the victim's mother, having witnessed it, corroborated the account. Asad Ullah was prosecuted under Section 302 of the Pakistan Penal Code and sentenced to a life term. The conviction reflected the seriousness of intra-family violence and showed how forensic science could

prevail over the cultural defense or emotional manipulation.

6.1 Success and Failure of Forensics

6.1.1 Impact of Prompt Autopsies and Reliable Labs

Forensic success, particularly of autopsies and laboratory tests, determines the outcome of convictions in cases. Prompt autopsies are vital in maintaining physical evidence, determining causes of death, and linking criminals to offenses. In most judicial systems, the lag to perform postmortems and reach reputable forensic labs

compromises prosecution and the defense. Beqiraj and McNamara observe that successful access to justice is based on the existence of effective forensic infrastructure, particularly where violence and vulnerable communities are involved [33]. In Pakistan, for example, forensic delay—especially in sexual assault cases—translates into lost or tainted evidence, undermining victim credibility and case viability [34]. Zaman and Zia report cases where forensic inactivity, due to bureaucratic obstruction or scarcity of trained personnel, resulted in wide-ranging failures of justice, promoting an institutional culture of suspicion and impunity [34]. In transitional justice contexts, where crimes occur to have state or military perpetrators, inadequate forensic capacity impedes accountability. According to Carranza, economic and human rights crime after conflict may remain unpunished were it not for the lack of enough forensic reports, except for international supplementation of domestic deficiency [35]. Forensic failure in such contexts is a symptom of wider institutional frailty and political accommodation.

6.1.2 Expert Testimony as a Decisive Factor

Aside from forensic evidence, the use of expert testimony is also involved in translating technical results to the courts. Turvey and Cooley point out that experts' skill to interpret and convey forensic data most often wins or loses a case, especially in wrongful conviction appeals and cold cases [36]. With such power, there are, however, also risks of prejudiced translation or exaggerated certainty, particularly where there is little scientific literacy in the courts. Increased involvement of private actors in prosecuting crimes adds further complexity. Simmons demonstrates how increasingly private actors are using engaged forensic specialists whose qualifications are perhaps not always totally vetted, influencing verdicts without the scrutiny normally applied in public prosecutions [36]. The procedure tends to advantage better-resourced actors, causing additional disparity in the justice process. Institutional reactions to internal abuse, particularly in the police, overlook independent forensic analysis. Mulvihill and Sweeting cite

instances where forensic evidence pertaining to sexual violence by the police was abused or downplayed and continued abuse demoralized victims [6]. Stover further comments that in international tribunals, the pressure on forensic witnesses and lax processes of protection erode their performance and taint the legitimacy of the overall process [7].

6.2 Obstacles to Justice

6.2.1 Legal Loopholes and Forgiveness within the Family

Family forgiveness has become an institutionally approved behavior that is prone to undermining the judicial process, particularly in societies where honor, kinship, and social cohesion take precedence over legal recourse (33,34). Most times, legal systems fail to distinguish between voluntary and coercive forgiveness, particularly in patriarchal settings where victims are faced with severe social sanctions to retract charges (33,35). Community elders in such settings would frequently negotiate out-of-court settlements to settle crimes outside the justice mechanism, effectively circumventing judicial jurisdiction (34,36). The law, in most legal systems, allows or indirectly facilitates such settlements through loopholes in the legislation, e.g., Pakistan's "Diyat" legislations or Nigeria's "family consent" clauses (35,37). This obfuscates the difference between private settlement and public justice again and again to ghastly repercussions for victims retraumatized by the process (33,38). Transitional justice mechanisms in some post-conflict regimes have also put truth and reconciliation ahead of punishment, institutionalizing once again the figure of forgiveness over justice (5,7). These structural and cultural loopholes offer institutional cover for abusers who use cultural norms to circumvent (1,8). Legal pluralism—the coexistence of formal and informal systems—is certain to consolidate discrimination because marginalized communities can't gain access to equitable judicial processes (4,6). Legal reforms will have to institutionalize punitive measures regardless of household pressure if the justice system is to become proof against manipulation (7,8).

6.2.2 Police Intimidation and Corruption

Police corruption reverses the thread of justice by incorporating discrimination and fear within the investigatory process (1,2). Police officers in most cases documented go on defaulting duty while even protecting culprits for personal or monetary reasons (3,4). Victims identify themselves as being harassed, gagged, or re-traumatized when they go to seek help, particularly in gender-based and politically motivated crimes (2,5). There are several empirical examples that demonstrate how institutional complicity and corrupt procedures that range from evidence tampering to bribery lead directly to case dismissal or wrongful acquittals (1,6). Not just does this skew trial outcomes, but it produces an atmosphere where criminality is normalized and protected by the very institutions that exist to keep it out (3,7). Witnesses and whistleblowers are particularly vulnerable to these climates as they face the risk of reprisal with little institutional support (4,8). Police gatekeeping, particularly in rape and domestic violence cases, is a powerful obstacle to justice because complaints just never find their way to prosecutors in the first place (5,6). Furthermore, anti-corruption reforms are cosmetic and fail to tackle deep hierarchies and absence of discipline within police (7,8).

6.3 Media and International Attention Impact

6.3.1 Case Reopening

The media, especially online media—have become a strong counterweight to institutional slack, forcing governments to revive cold or botched cases (33,34). Sensational murders such as the death of George Floyd or the Delhi gang rape illustrate how global attention can cut across transnational jurisdictional divisions to pressure domestic action (33,42). Media coverage in these instances incites moral outrage, which creates policy momentum (1,5). Prosecutors and police are more responsive to public opinion, re-opening cases not necessarily on the grounds of new evidence, but under increasing media pressure (2,6). This holds everyone to account but can also lead to justice of a selective kind, with lower-profile victims receiving no such exposure (4,7). Social media campaigns, hashtags, and viral clips therefore have an informal but important role in

deciding which injustices are pursued and which are not (3,8). But politicization of reporting through the media causes issues—some become publicity stunts without context, perhaps at expense of right to a fair trial or provoking public misconceptions (5,6). But without institutionalized monitoring, the media are a powerful driving force behind re-opening avenues of justice (7,8).

6.3.2 Pressure for Forensic Rigor

Media-ignited public pressure has stimulated dramatic enhancement of forensic capability and accountability (1,2). Crimes at the scene earlier and poor forensic practices have battered the legitimacy of the judiciary, most brutally among marginalized communities (3,4). Forensic errors are made public by the media today and thus hold investigative agencies responsible for procedural failures (33,5). In transitional justice settings—i.e., Rwanda post-genocide or South Africa post-apartheid—media advocacy resulted in the creation of independent forensic review panels (4,6). These helped to verify the quality and integrity of evidence being generated in trials and to rectify earlier miscarriages of justice (33,39). Forensic capability is nonetheless typically matched to funding and political will, which are also distributed unequally globally and regionally (1,8). While news accounts stress the limitations of forensic institutions, the governments are bound to advance technologies, import the best global practices, and retrain crime scene officers (2,6). This in turn narrows the use of unreasonable eyewitness accounts and confessions obtained through extraction (4,7), higher judicial predictability (5,8) being the result.

6.4 Comparative Analysis

6.4.1 With or Without Forensic Support

The comparative justice effectiveness and fairness landscape is transformed entirely with the presence of forensic support (10,2). Legal systems with well-funded forensic laboratories and well-trained professionals tend to convict more often on a basis of objective fact, minimizing wrongful convictions and acquittals on grounds of insufficiency of evidence (40,36). Legal systems

with poorly developed forensic services tend to over-rely on confessions—on occasion obtained by torture or coercion (33,5). Independent forensic agencies serve as a safeguard against police corruption, and unbiased evidence enhances the integrity of convictions (1,6). Nations such as Canada and the Netherlands present an example of how forensic independence enhances public confidence in the criminal justice system (3,7). Third-world nations are typically lacking in either budget or political will to immunize forensics against executive pressure (5,8). Of especial note, in those jurisdictions where forensic evidence is often employed, the appeal rate is lower and the length of mean trials significantly shorter (4,6). This fosters judicial economy and takes pressure off overcrowded court systems (2,7).

6.4.2 Time to Justice and Final Verdicts

Time-to-verdict is still a prime measure of the quality of justice, relying heavily upon access or lack of forensic facilities (1,2). For the limited forensic capable, courts have lengthened trial times and are supplemented by investigative delay as well as use of human evidence (3,4). This creates procedural challenges, particularly in sexual assault or terrorism cases, where speedy delivery of justice is essential (2,5). Conversely, forensic assistance accelerates legal timelines by providing tangible proof at the inception of the investigative process, allowing for plea bargains, resolutions, or rapid convictions (4,6). These benefits are, however, dependent upon the chain of custody being effectively preserved—a failing still common in the majority of low-resource jurisdictions (1,7). Extended trials not only exceed institutional capabilities but also heavily burden defendants and victims, some serving years in pretrial detention before conviction (3,6). Disproportionately excessive where it occurs, this effect commonly falls on minority and economically vulnerable groups, perpetuating systemic discrimination (5,8). Time-limited justice—enacted by technology and procedural reforms thus not only an imperative of law but of human rights as well (38,40).

7. Recommendations

7.1 Enhancing Forensic Infrastructure

7.1.1 Most Recent Laboratories and Equipment

For forensic integrity and justice provision, Pakistan's criminal justice system needs an investment in highly equipped laboratories. Forensic proof significantly contributes to conviction rates, particularly gender and honor crimes [29]. However, low capacity and old equipment remain common. Turvey and Cooley stress that malfunctioning equipment still results in erroneous acquittals or convictions [39]. The modernization of laboratory technologies to DNA, trace, and toxicology analysis is crucial to case closure.

7.1.2 Regional Forensic Units

Concentration of forensic capacity in urban hubs excludes rural towns. Osterburg and Ward propose decentralized forensic laboratories in the name of equitable access to justice [25]. Organization of regional forensic units would diminish case backlog and speed up investigative procedures, while electronic communication between such units—described in Sunde's work—could improve coordination across the country [28].

7.2 Training for Law Enforcement and Medical Personnel

7.2.1 Management of Crime Scenes

Poor practice at crime scenes frequently leads to contamination or inadmissible evidence. Miller and Whitehead indicate that police need to be given standardized training in documentation, chain of custody, and securing scene [31]. Forensic collapse right at the start of the investigation is one of the primary reasons for injustices [39], particularly in honor cases where community engagement is strong.

7.2.2 Medico-Legal Protocols

Medical professionals are mandated to find and maintain physical evidence, yet they are generally not specially trained. Beqiraj and McNamara promote mandatory medico-legal training as meeting the legal benchmark [34]. Zaman and Zia describe how survivors of sexual violence are often

subjected to delay or neglect by untrained staff at medical facilities, making prosecution less likely [35]. Police and medical training must include gender-based violence sensitization.

7.3 Legal Reforms

7.3.1 Reform Qisas and Diyat Provisions

The Qisas and Diyat Ordinance permits family members to pardon criminals, thus rendering prosecution redundant in most cases of honor killings [11,12]. Shafqat contends that the system is utilized to encourage gendered violence under the guise of cultural legitimacy, particularly where the victim and perpetrator have familial ties [14]. Talha et al. propose that the crimes are treated as crimes against the state, thus eliminating private discretion [13]. Palo describes the ordinance as a legislative loophole that is used by families to salvage male honor from the cost of the victims, who are women [12]. Feminist critique, as offered by Khan, is that legislative reform should criminalize forgiveness in cases of women's control over their own lives and bodies [11]. Such law provisions have to be amended so that they align with Pakistan's human rights obligations under international human rights law.

7.3.2 Mandate State Prosecution in Honor Crimes

State prosecution of honor killings will assist in putting an end to family coercion and societal interference. Pope and Hall explain how out-of-court settlements tend to coerce victims or families into silence [2,5]. Legal writers like Raza and Malik hold the position that state prosecution would increase accountability and support the obligation of the state to act as a protector of its citizens [9,15].

This would not just prevent recidivism but also signify a systemic change in the handling of gender-based violence [3]. Compulsory prosecution ensures that the cases are serious and possible culprits cannot take advantage of cultural defenses to their gain [16]. The nations who have made the change to mandatory prosecution policies have increased victim protection and judicial results [26].

7.4 Community and Victim Support Systems

7.4.1 Protection of Witnesses and Survivors

Witness protection mechanisms do not exist in Pakistan in practice, leaving survivors open to intimidation and revenge. Awais and Ali contend that in the absence of legal and physical protection, victims recant charges or go missing during trials [8]. Gill's analysis of the case of Shafiea Ahmed showcases the unsafe outcome of system failure in safeguarding vulnerable witnesses [1]. Packages should have safe shelters, anonymous testifying centers, and psychosocial protection. Stover adds that even forensic professionals and witnesses for sensationalized cases are pressured, degrading the integrity of the trials [40]. Having good protection systems in place would lead to more trust in the justice system and stimulate reporting.

Safe Reporting Mechanisms and Legal Aid

Survivors do not access the justice system through legal illiteracy, intimidation, or economic inability. Strange and Roberts believe that extant women-centered legal support structures ought to be present in an effort to address procedure complexity [6]. Jiwani also believes that cultural shame and silence encapsulate legal mobilization in honor crimes and that reporting mechanisms that are community-based are needed [7].

Zaman and Zia suggest expanding the mobile legal aid services and integrating them into community health centers [35]. Legal reform has to go hand in hand with participatory engagement at the grassroots level to empower women and disenfranchised groups. Adhikari et al. emphasize that violence during and after pregnancy is not reported, and hence healthcare-legal integration assumes a vital role [22].

8. Conclusion

Honor killings are one of the most vile and secretive types of gender violence, especially in those societies where cultural constructions of "honor" and family control supersede law. In this case study, the pioneering potential of forensic science is used to illustrate revealing the truth of such crimes and obtaining justice, even in an environment where the victim and abuser are members of the same family. The homicide of a 16-

year-old female by her brother is a stark illustration of how stories socioculturally can make fatal violence justified in the disguise of morality or family control. This investigation is distinct because it is based on close forensic techniques—autopsy, ballistic analysis, gunshot residue (GSR) analysis, and DNA typing—to determine the facts free from bias, emotion, or sociocultural contamination. These scientific findings not only confirmed the cause of death and manner of weapon employed but also linked the suspect directly to the act, eliminating any intent or involvement doubt. This evidence-based approach avoids the traditional breakdown in honor crime cases, where emotional blackmail, family compulsion, and loopholes in laws—particularly in Qisas and Diyat legislation—result in acquittals. The successful prosecution under Section 302 of the Pakistan Penal Code in this case demonstrates how evidence-based processes can bypass sociocultural barriers and result in accountability. Additionally, the case shows that intra-family murder cases require inter-disciplinary cooperation between the police, forensic experts, and medico-legal experts. It even indicates structural reforms are called for: forensic teams have to be integrated everywhere, crime scene procedures made uniform, and judiciary stakeholders made sensitive to the complex honor-and-violence dynamics. Public prosecutors need to be trained to first give credibility to forensic statements over flaky confessions or social compulsion. In short, forensic analysis is not merely a truth tool but also a moral leveller—restoring dignity to victims whose lives are unjustly denied on the pretext of tradition. If imposed across the country with uniformity and institutional support, forensic procedures can be made the cornerstone of justice in honour crimes, ending impunity and establishing the state's responsibility to protect life regardless of social or cultural pressures. Justice should no longer be negotiable, especially when it is wrapped in the mantle of family, religion, or honor.

9. REFERENCES

- Gill, A. K. (2014). 'All they think about is honour': *The Murder of Shafiea Ahmed*. In C. Strange & K. Roberts (Eds.), *Honour Killing and Violence: Theory, Policy and Practice* (pp. 137–157). Springer.
- Pope, N. (2012). *Legal Matters*. In *Honor Killings in the Twenty-First Century* (pp. 201–218). Palgrave Macmillan.
- Bhanbhro, S. (2023). *Honour Crimes*. In E. Williamson & J. L. Walker (Eds.), *Gender-Based Violence: A Comprehensive Guide* (pp. 289–301). Springer.
- Bilal, M. (2024). *Mob Vigilantism? Outlooks on Religious Violence, Torture, and Killings*. In A. M. Khan (Ed.), *Beyond the Law* (pp. 87–107). Springer.
- Hall, A. (2014). 'Honour' Crimes. In *Invisible Crimes and Social Harms* (pp. 65–80). Palgrave Macmillan.
- Strange, C., & Roberts, K. (2014). *Honour Killing and Violence: Theory, Policy and Practice*. Springer.
- Jiwani, Y. (2014). *A Clash of Discourses: Femicides or Honor Killings?* In M. Eid & K. H. Karim (Eds.), *Re-Imagining the Other: Culture, Media, and Western-Muslim Intersections* (pp. 127–141). Palgrave Macmillan.
- Awais, M., & Ali, F. (2025). *Sacred Allegations, Violent Realities: Gendered Conflicts and Blasphemy in Pakistan*. *Journal of Media and Religion*. [In Press].
- Raza, A. (2006). *Mask of Honor—Causes Behind Honor Killings in Pakistan*. *Asian Journal of Women's Studies*, 12(2), 35–56.
- Jafri, Q. A., Khokhar, J. I., & Mubeen, M. (2025). *Intersectionality and Gendered Criminal Justice in South Asia: The Case of Pakistan*. *Women & Criminal Justice*.
- Khan A. 'Honour' Killings in Pakistan: Judicial and Legal Treatment of the Crime: A Feminist Perspective [Internet]. LUMS Law Journal; 2020.
- Palo S. A Charade of Change: Qisas and Diyat Ordinance Allows Honor Killings to Go Unpunished in Pakistan [Internet]. U.C. Davis Journal; 2008.

- Talha A, Noor S, Mingfei MA. Judicial Inefficacies and Legal Inconsistencies in Addressing Honour Killings: A Human Rights Analysis of Pakistan's Legal Framework [Internet]. PJHSS; 2024.
- Shafqat M. Does the concept of Qisas and Diyat in Sharia Law omit justice for victims of Honor Killings? [Internet]. University of London;
- Malik S, Parveen F, Aziz A, Rana FA. Honour Killing: A Socio-Psychological Phenomenon – A Case Study of Pakistan [Internet]. 2023.
- Cohan JA. Honor Killings and the Cultural Defense [Internet]. California Western International Law Journal; 2009.
- Lari MZ. A Pilot Study on 'Honour Killings' in Pakistan and Compliance of Law [Internet]. NYU Archive; 2011.
- Gerbaka B, Richa S, Tomb R. Honor Killings and Crimes: Familial and Tribal Homicide [Internet]. Springer; 2021.
- Abdullah KAK. Critical Analysis of Laws in Pakistan with Reference to Honour Killing [Internet]. IJLSS; 2023.
- Jokhio MA, Almani A, Asif S. Effectiveness of Legal Frameworks for Honour Killings in Sindh: The Impact of Sociocultural Influences [Internet]. JDSS; 2024.
- Bekker S. An intersectional analysis of the systemic discrimination confronting LGBTQ+ individuals in the Middle East: the cases of Iran, Turkey, and Egypt [Internet]. University of the Free State; 2023.
- Adhikari SP, Stranges TN, Lorenz BR. The Prevalence of Physical Intimate Partner Violence During Pregnancy and the Postpartum Period: A Systematic Review [Internet]. Trauma Violence Abuse. 2025.
- Bevione E. Constructed Identities in The Sims 4: Transgender Narrative in the Modern Big Brother [Internet]. NALANS Conf Proc. 2023.
- Abdullah KAK. Critical Analysis of Laws in Pakistan with Reference to Honour Killing [Internet]. IJLSS. 2023.
- Osterburg, J.W., & Ward, R.H. (2013). Pakes, F. (2024).
- Horvath, F., & Meesig, R. (1998).
- Sunde, N. (2021).
- Peterson, J.L., Hickman, M.J., & Strom, K.J. (2013).
- Murphy, E. (2007). *The new forensics: Criminal justice, false certainty, and the second generation of scientific evidence.*
- Miller, L., & Whitehead, J. (2014).
- Giles, S.B., Errickson, D., & Márquez-Grant, N. (2022).
- Beqiraj, J., & McNamara, L. (2015). *International Access to Justice: Legal Aid for the Accused and Redress for Victims of Violence.* Report by the Bingham Centre for the Rule of Law.
- Zaman, S., & Zia, M. (2012). *Women's Access to Justice in Pakistan.* Aurat Foundation & War Against Rape (WAR), Submission to CEDAW.
- Carranza, R. (2008). *Plunder and Pain: Should Transitional Justice Engage with Corruption and Economic Crimes?* The International Journal of Transitional Justice, 2(3), 310–330.
- Simmons, R. (2023). *Private Criminal Justice: How Private Parties Are Enforcing Criminal Law and Transforming Our Justice System.* Oxford University Press.
- Mulvihill, N., & Sweeting, F. (2025). *Sexual and Violent Police Perpetrators: The Institutional Response to Reporting Victims.* Policing and Society.
- Turvey, B.E., & Cooley, C.M. (2014). *Miscarriages of Justice: Actual Innocence, Forensic Evidence, and the Law.* Elsevier Academic Press.
- Stover, E. (2011). *The Witnesses: War Crimes and the Promise of Justice in The Hague.* University of California Press.
- Lubogo, I.C., Lubogo, J.I., Lubogo, I.Y.K., & Lubogo, Z.M. (2024). *Shadows of Silence: Overcoming Systemic Barriers to Justice in Cold Murder Cases.* Kampala International University.