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An Analysis of the Role of Forensic Evidence from the Commission of Offence to the Trial

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ABSTRACT

Forensic evidence in Pakistan's criminal justice system is the point of focus in this study to harmonize legal frameworks, enhancing the effectiveness of evidence management and sufficiency of procedural guidelines. This involves research adopting quantitative methodology and involving 50 professionals from five sectors – judges, lawyers, public prosecutors, healthcare professionals, and police officers. This survey indicates that there is consensus that forensic evidence management maintains integrity and provides fair trials whereby 40-80% recognize well-preserved forensic samples while maintaining strict chain of custody protocols. However, some doubts arise as concerns the adequacy of healthcare staff training and clarity in collecting such proof. These include the Qanun-e-Shahadat Ordinance 1984, Criminal Procedure Code (Cr.P.C.) 1898, Punjab Forensic Science Agency Act 2007, Prevention of Electronic Crimes Act (PECA) 2016 are comprehensive legal frameworks for enabling forensic science which have been challenged during the implementation. Suggestions include better training programs for forensic experts, providing clearness and uniformity within evidencing procedures, and improving infrastructure related to forensics throughout Pakistan. Reliability and fairness in the criminal justice system depend on these measures.



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1. Introduction

The word 'forensic' is derived from the Latin word 'forum,' which the early Romans used for all sorts of things: markets, public speaking, and business deals. These are places where civil law is made and modified (Hussain, M. A., et al 2023). The term "forensic" comes from the Latin word "forensic," which means "of or about the forum." The forum was a place in ancient Rome where public debates, discussions, and legal proceedings were held. People came here for such activities, markets, and other business transactions. Concerning this definition, it should be noted that these were public spaces within which legal arguments and reasoning were often presented and examined against one another. Therefore, forums provided platforms for critical examination, scrutiny, and development of civil law. Hence, by its etymology itself "forensic" implies presenting well-reasoned arguments based on facts as well as systematic analysis reflecting upon intellectual rigour exercised during investigations carried out at ancient Roman forensic institutes (Watson, K. D. 2020).). Nowadays, though, it refers specifically to scientific methods used in investigations related to courts of justice or legal trials involving evidence examination.

Pakistan's criminal justice system didn't use forensic science well in the past. However, after the wake-up call caused by the ongoing terrorism threats, this trend changed significantly. Since 2001, great attempts have been made to rebuild the whole infrastructure of forensic science countrywide. The National Forensic Science Agency (NFSA) was established in 2002 as an independent body that should lead these works, concentrating on such departments as crime scene investigation, trace chemistry, questioned documents, and digital forensics. Despite these steps, there are not enough comprehensive forensic science laboratories established or widespread training facilities in Pakistan yet (Hussain, M. A. et al., 2023).

Pakistan formed legal frameworks relating to forensic science evidence. Article 164 of the Qanun-e-Shahadat Ordinance 1984 lays down the laws that govern forensic, scientific, and technological evidence in Pakistan. According to this section, modern technologies and scientific evidence are recognized as admissible modes of proof in criminal trials (Iqbal, S., & Alharbi, S. A. 2020). Section 510 of the Criminal Procedure Code (Cr. P.C.), written in 1898 but still valid, provides that reports by court-appointed or called experts shall be taken as prima facie evidence without specific cross-examination unless directed otherwise by the Court (Asif, M., & Qayum, S. 2023). However, Expert testimony must be cross-examined upon presentation during a criminal trial under Article 59 of the Qanun-e-Shahadat Ordinance so that its credibility and reliability can be tested (Fatima, M., Naz, R., Waseem, S., Waseem, F., Rasool, R., & Baig, R. U. 2023).

Investigation for Fair Trial Act, together with Section 510 Cr. P.C. also recognizes expert reports as primary evidence. Notable, among other things, is the Punjab Forensic Science Agency Act 2007 (PFSAA), which strengthens this framework through Sections 9 and 10, which equates PFSAA-employed experts with those appointed under Section 510 Cr. P.C or Article 59 Qanun-e-Shahadat Ordinance (Khan, M. S., & Bhatti, S. H. 2023). Additionally, Chapter XXV Police Rules, 1934 directs police on case preparation and investigation; these protocols, however, fall short when compared against elaborate requirements set out by PFSAA for crime scene preservation and collection of materials for scientific examination (Mangi & Khan., 2021). These legal provisions create an enabling environment for admitting forensic science evidence within Pakistan's criminal justice system while emphasizing fair procedures and expert scrutiny during the production and evaluation stages.

Pakistan has provided a comprehensive legal framework for investigating electronic offenses, emphasizing forensic science under the Prevention of Electronic Crimes Act (PECA) 2016. Section 29 of PECA 2016 requires the Federal Government to establish or designate an investigation agency responsible for investigating offenses under this Act. This agency must follow procedures outlined in the Code of Criminal Procedure (Cr. P.C) provided they do not conflict with PECA provisions and should be able to conduct forensic analysis on data and information systems. Reports emanating from such analysis are

admissible as evidence before any court, thus ensuring legality recognition of technical and digital evidence. To complement this, Section 40 mandates the Federal Government to establish or designate an independent forensic laboratory whose functions will include giving expert opinions to courts, among others, to enhance the integrity and reliability of electronic evidence within the judicial process (Rasool & Rasool 2022).

2. Literature Review

Current literature suggests that forensic science often deals with complicated situations where evidence is broken, incomplete, and difficult to handle. In such a setting, forensic scientists have the difficult job of piecing together these fragments to comprehend what happened in any given case coherently. Forensic science is based on the idea that every small detail may contain helpful information, even if it seems unimportant at first glance (Hussain et al., 2023).

The legal systems deal with the challenges and achievements of forensic science; one can look at laws governing the admission of forensic evidence. These rules dictate how and when forensic proof can be presented in courtrooms throughout different countries. Equity, credibility, and scientific validity are the key considerations. Regulatory frameworks also provide for the qualifications and training of experts in various fields within forensics. Most nations require that forensic investigators have relevant tertiary education besides being professional before they can testify in any case (Edmond et al., 2013). This is because findings made by skilled researchers who undertake their duties diligently always produce more persuasive court evidence.

Legalities surrounding this type of evidence demand transparency during its examination into admissibility. Therefore, it might be necessary for both sides—defense teams and prosecutors—to access information about data collection methods employed by forensic scientists involved in a particular investigation process alongside their results. This allows all interested parties, including judges and juries, an opportunity not only to evaluate but also to discuss such findings from different perspectives, thus ensuring fair trial outcomes.

Furthermore, expert opinion plays a crucial role when determining whether or not certain types of scientific knowledge should be allowed as evidence before courts of law (Edmond et al., 2013). Judges frequently seek help from professionals working within some specialized areas relating to science during decision-making processes on complex matters brought before them, especially those involving technicalities beyond ordinary understanding. Such testimonies are considered valid only if they meet three basic criteria: first, they must be found reliable; second, relevant; and lastly, non-prejudicial.

In addition to this point, there is a need for continuous evaluation of standards alongside methods used within the practice area due to rapid advancements made in technology over time coupled with new challenges that may arise from different quarters concerning this field's operations, particularly where legal systems are concerned (Edmond et al., 2013). There is also growing awareness about potential biases among some forensic disciplines based on complex statistical data analysis methods. Therefore, we can harmonize the evolving needs of criminal justice systems with those brought by advancements witnessed within forensic science through periodic reviews, which ensures rights protection remains intact at all times.

Several international regulations influence forensic evidence admissibility. The Universal Declaration of Human Rights (UDHR) of 1948 requires fair public trials. These standards relate both to law and to evidence. According to the International Covenant on Civil and Political Rights (ICCPR, 1966), every person has a right to a fair trial, which includes the right not to be tortured or detained arbitrarily. These protections are necessary for any court system that wants to consider evidence properly. Torture and other cruel, inhuman, or degrading treatment or punishment were prohibited under the Convention against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (CAT, 1984) (Teleki 2021). This can affect data that have been violently handled or abused. Rules for the Protection of Juveniles

Deprived of their Liberty – also known as Beijing Rules – reflect minimum juvenile justice standards according to which children who come into conflict with the law must be dealt with so as not only to protect them from unnecessary harm. At the same time, they are in contact with legal processes but also safeguard their rights and restrict admission of child testimony.

Human trafficking and migrant smuggling are addressed by The Palermo Convention or UNTOC, which stands for the United Nations Convention against Transnational Organized Crime. Several protocols attached to this convention guide how evidence related to organized crime should be collected, received, stored, preserved, used, etc. The European Court Of Human Rights has been discussing whether they can allow these proofs during human rights cases. ECHR ensures, among other things, the right to a fair hearing within reasonable time, respect for private life, freedom from torture, etc. therefore, all these aspects except one forensic evidence admission criteria globally are covered by international agreements, hence worldwide awareness on matters regarding fairness in trials coupled with observance of human rights. Therefore, there's global attention towards human rights and fair trials, but this area is indirectly impacted, particularly forensics collection, processing, and introduction. Forensic evidence admission may also be influenced by regional conventions within countries (Sheasby, D. 2023).

Criminal Petition No. 513/2020 is an appeal in the Pakistan Supreme Court against the judgment of Lahore High Court, Multan Bench dated February 11, 2020 in Criminal Appeal No.436/2017 and Capital Sentence Reference No.61/2017 filed by Ali Haider @ Pappu petitioner against Jameel Hussain and others seeking review on appellate side of impugned decision of the trial court in a case of rape and murder where accused/appellant was convicted mainly on circumstantial evidence viz-a-viz witness accounts, extra-judicial confession and DNA analysis which according to him has been wrongly appreciated by learned courts below; it was observed that Qaumi Assembly Order 1984 Article 164 lays down admissibility as well reliability criteria for DNA evidence while determining guilt or innocence beyond reasonable doubts hence this finding also recognized modern forensic science's foundation stone i.e., deoxyribonucleic acid (DNA) technology which can conclusively connect offender with crime besides helping dispensation justice through such like cases.

In *State v Ahmad Omar Sheikh* (2021 SCMR 873), the Supreme Court considered an appeal against the conviction of the accused person and acquittal of a co-accused in a murder case relating to a foreign journalist's killing where the trial judge awarded capital punishment to the convict, but his sentence got substituted with seven years' rigorous imprisonment by the high court while setting free another alleged offender; however, apex tribunal reversed latter order because the prosecution had failed to establish conspiracy behind crime due to weak identification parade conducted by witnesses coupled with delayed reporting time about incident besides absence any forensic linkages such as laptop used for sending threatening emails etcetera so authenticity video clip relied upon could not be regarded beyond doubt either; thus these factors created severe doubts about honesty genuineness involved testimony given before lower forums thereby resulting into exoneration one Sri.

Muhammad Bilal v State (2021 SCMR 1039) is an appeal under Section 302(b) of PPC (XLV of 1860) for murder (Qatl-i-Amd) where the Supreme Court also discussed forensic evidence in light of QSO; however, it found that there were many loose ends regarding recovery weapon from the appellant as PFSA tests had shown positive match between accused's DNA and blood stains found on the knife, but the trial judge noted several discrepancies vis-a-viz its custody after discovery before IO who claimed to have seized same in absence accused person while latter contended that he never pointed out any such thing during the investigation so integrity chain custody remained questionable throughout proceedings leading towards failure proving beyond reasonable doubt against him hence this appeal allowed setting aside conviction sentence awarded.

3. Materials and Methods

In this study, the researchers employed the quantitative method to analyze the scope and importance of the forensic science evidence, resulting in a comprehensive examination through the quantitative data. Quantitative data was collected from the participants through the close-ended questionnaire approach. The questionnaire approach enables the validation and corroboration of findings across both data types and ornamental the trustworthiness and fertility of the results. The sample for this study consists of 50 individuals from diverse professional backgrounds relevant to the legal and forensic fields, including 15 judges, 10 lawyers, 10 public prosecutors, 10 healthcare professionals and 5 police departments. The populations for this study are the participants in the Bahawalpur Division, Multan Division and Lahore Division.

4. Results and Discussion

Table 4.1 Demographics: Age

Age

		Frequency	Per cent	Valid Percent	Cumulative Percent
Valid	28-32	10	20.0	20.0	20.0
	33-37	12	24.0	24.0	44.0
	38-42	10	20.0	20.0	64.0
	43-47	8	16.0	16.0	80.0
	48-52	6	12.0	12.0	92.0
	53-60	4	8.0	8.0	100
	Total	50	100.0	100.0	

The table of age distribution is established based on frequencies and percentages of people belonging to different age categories within a 50-person sample. Amongst the given five groups, the 33-37 intervals occupy the leading position in terms of both shares — which amounts to twenty-four percent (24%) — and absolute number. It is followed by two equally-sized ranges: one from twenty-eight to thirty-two years old inclusive; and another from thirty-eight to forty-two (20% each).

Sixteenth percent falls into the category denoted by ages between forty-three and forty-seven, while twelfth percent belongs among those aged between forty-eight and fifty-two. The last but one group includes eight-tenths part or put – eight percentage points less than the next smaller subcategory– this is represented with numbers showing that it takes up eight percent out of all studied individuals who participated in our research project as respondents were selected randomly regardless any other factor taken into account such as gender or occupation etcetera; thus making them representative enough for generalization purposes provided there are no significant biases present hereafter analyses should be done using cumulative percentages starting at zero going up till hundred where finally we end up having everything covered because otherwise, results might not be accurate.

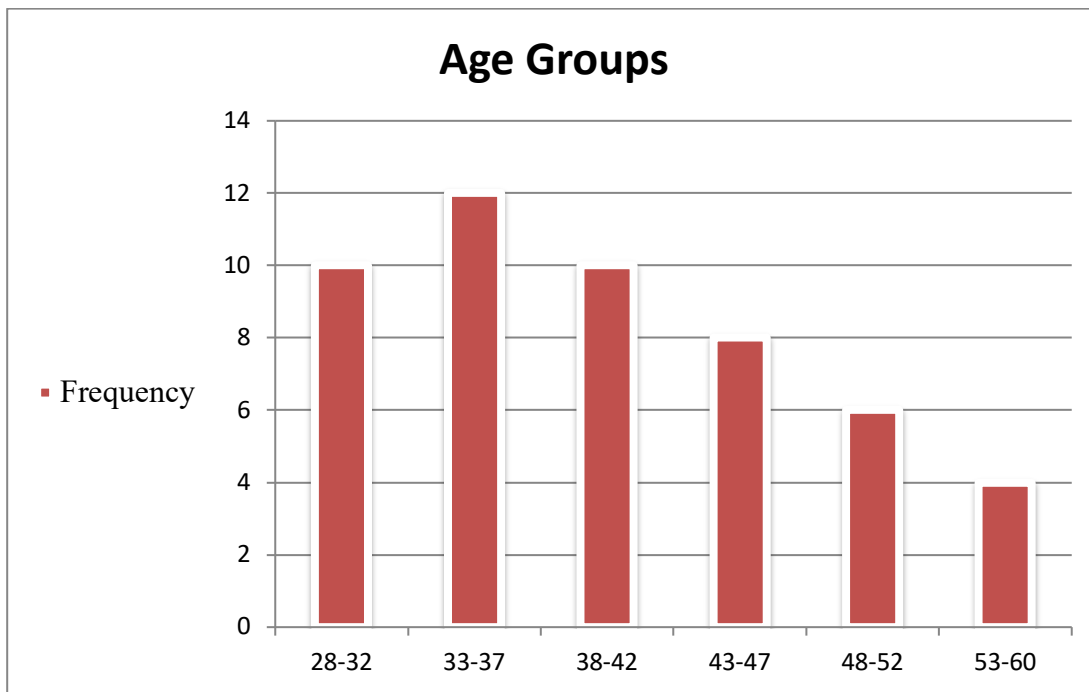


Figure 1 represents the age group graph for all participants in the deep breathing group

Table 4.2 Demographics: Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	35	70.0	70.0	70.0
	Female	15	30.0	30.0	100.0
	Total	50	100.0	100.0	

The distribution of the gender table shows 70% for the males, with a total sample size of 50 and 30% for females. There is a huge imbalance between males and females in this sample because their numbers differ by more than twofold. The sum percentage implies that when considering both genders, it equals 100%, thus indicating that this whole sample has been classified in these two categories.

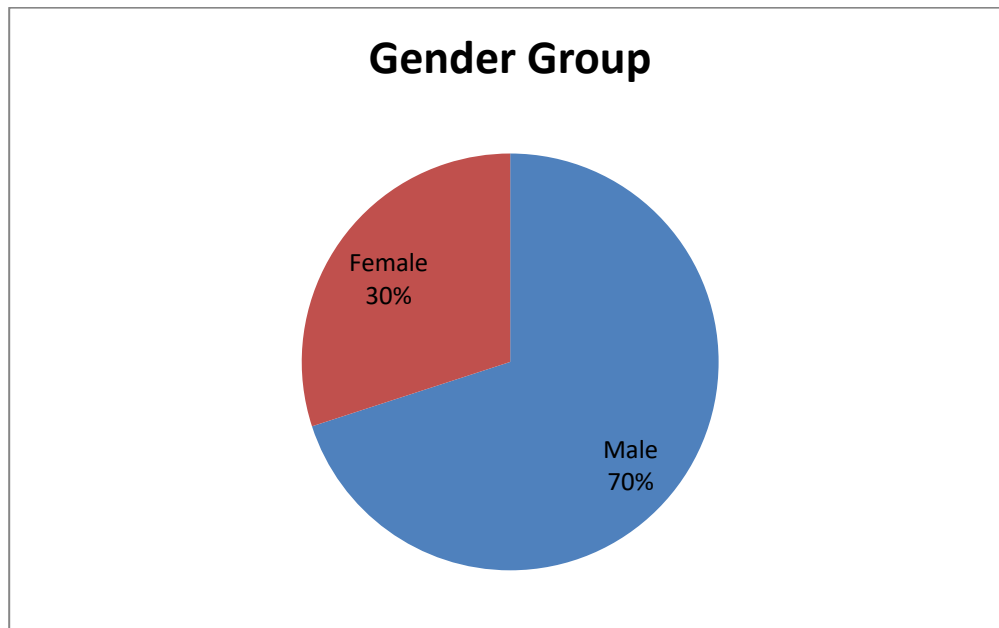


Figure 2: Shows the gender group graph of participants

Table 4.3 Demographics: Experience**Work Experience**

Frequency	No. of years	Percent	Valid Percent	Cumulative Percent
12	10	24.0	24.0	24.0
10	8	20.0	10.0	44.0
8	7	16.0	16.0	60.0
7	6	14.0	14.0	74.0
6	5	12.0	12.0	86.0
5	4	10.0	10.0	96.0
2	13	4.0	4.0	100
Total	50	100.0	100.0	

The table presents the distribution of work experience among 50 individuals, highlighting the number of people corresponding to specific years of experience. The most common work experience level is 10 years, with 12 individuals. Then, 10 people have 8 years of experience, 8 have 7 years, 7 have 6 years, 6 have 5 years, and 5 have 4 years of experience. The smallest group, with only 2 individuals, has 13 years of experience. This distribution indicates that the majority of the sample has between 4 to 10 years of work experience, with fewer individuals having longer or shorter durations.

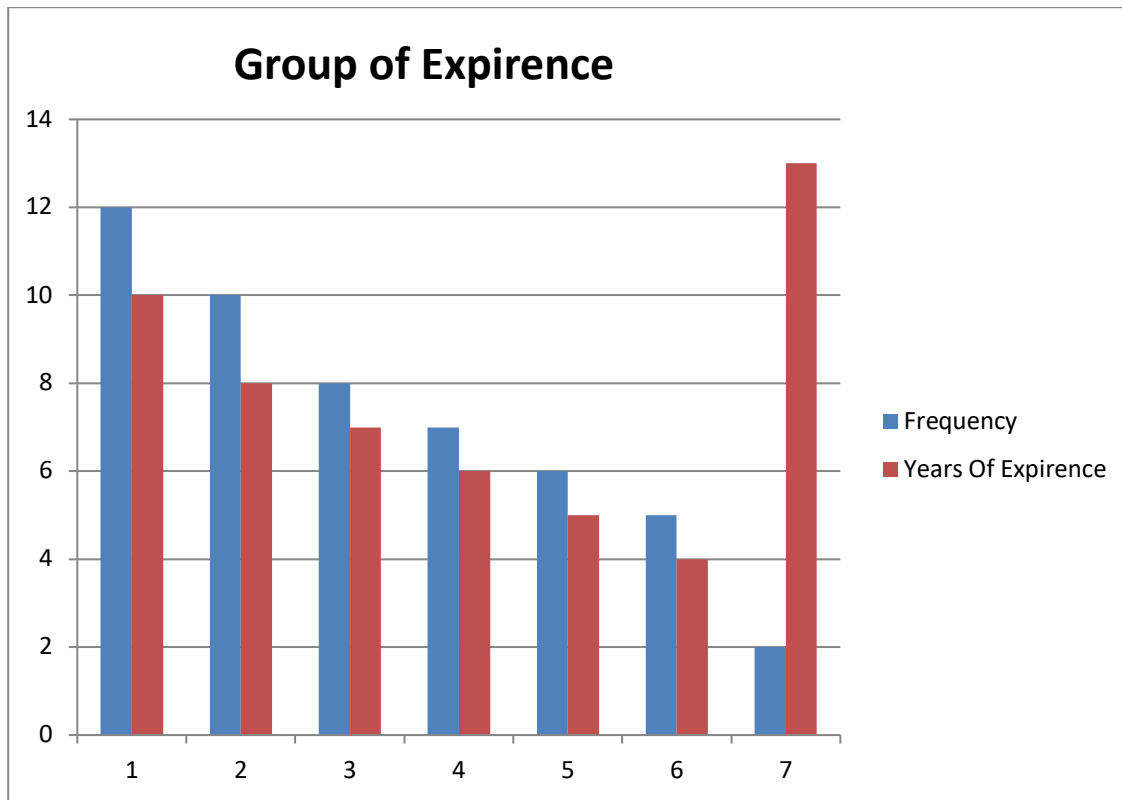


Figure 3: Shows the group of experience graph of participants

Table 4.4 Demographics: Profession

Profession

	Frequency	Percent	Valid Percent	Cumulative Percent
Judge	15	30.0	30.0	30.0
Lawyer	10	20.0	20.0	50.0
Public Prosecutor	10	20.0	20.0	70.0
Healthcare	10	20.0	20.0	90.0
Police Department	5	10.0	10.0	100.0
Total	50	100.0	100.0	

The professional distribution of the 50 participants is represented in percentages, showing that 30% are judges, making them the largest group. Lawyers, public prosecutors, and healthcare department professionals account for 20% of the participants, indicating equal representation among these groups. The police department is the least represented, with only 10% of the participants. This distribution highlights a strong judicial presence, alongside balanced participation from legal, prosecutorial, and healthcare professionals, with fewer contributions from the police department.

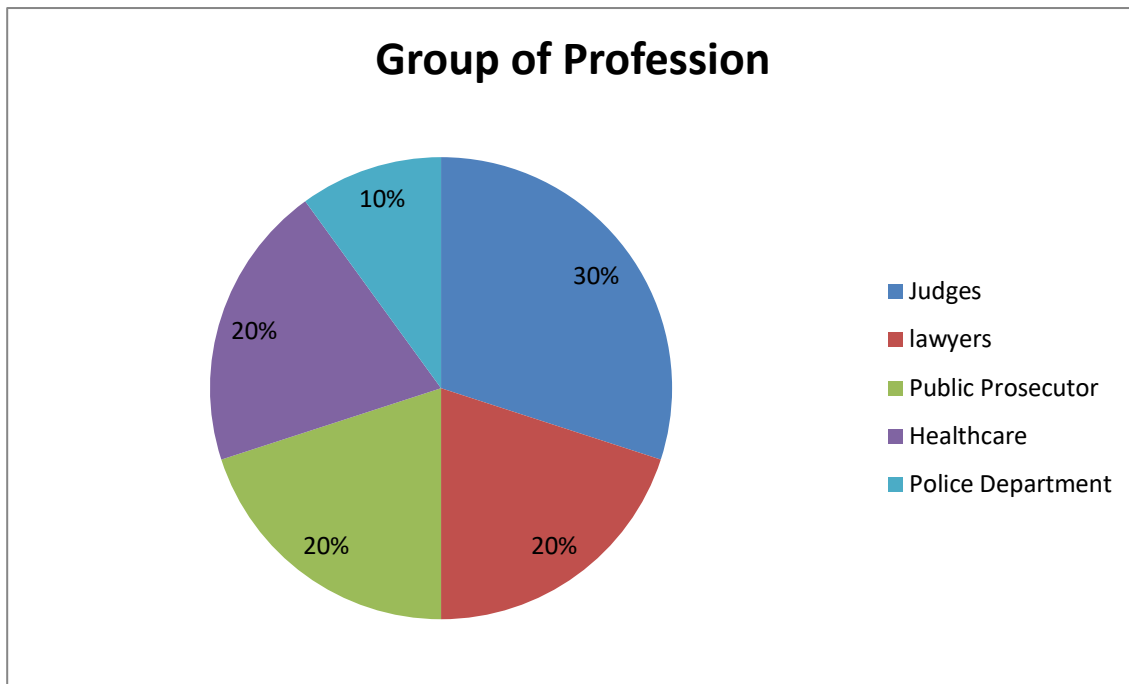


Figure 4: Shows groups of professional graphs of participants

1.5.Questioners’ results Chi-square test:

- i. The integrity of forensic evidence is maintained throughout the judicial process from the committing of offence collection to courtroom presentation.**

	Profession				
	Judge	Lawyer	Public Prosecutor	Healthcare	Police Department
Agree	7	4	3	2	2
strongly agree	8	6	7	8	3
Disagree	0	0	0	0	0
strongly disagree	0	0	0	0	0
unable to decide	0	0	0	0	0
Total	15	10	10	10	5

This research involved a survey on forensic evidence integrity across the judicial process, which was analyzed by an expert group, and the results show that there is total unanimity among all 50 respondents. Judges, attorneys, public prosecutors, medical practitioners, and police officers concur that preserving the integrity of forensic evidence from the crime scene to the courtroom is possible. Specifically, seven judges, four lawyers, three public prosecutors, two medical doctors, and two police officers concurred with this position. In comparison, eight judges, six lawyers, seven public prosecutors, eight healthcare professionals, and three police officers strongly agreed. No disagreement or uncertainty was expressed by any respondent, implying that there is a shared belief in the significance and effectiveness of maintaining forensic evidence integrity within different professional groups engaged in the litigation process.

ii. The current forensic evidence management system allows for a fair trial for the accused.

	Profession				
	Judge	Lawyer	Public Prosecutor	Healthcare	Police Department
Agree	10	9	6	8	3
strongly agree	5	1	4	2	2
Disagree	0	0	0	0	0
strongly disagree	0	0	0	0	0
unable to decide	0	0	0	0	0
Total	15	10	10	10	5

All professional groups participating in the survey agree that the forensic evidence management system provides fair trials for the accused. Indeed, 10 judges, 9 lawyers, 6 public prosecutors, 8 healthcare professionals, and 3 police officers agree with this statement. Moreover, only a few of them – five judges, one lawyer, four public prosecutors, two healthcare professionals, and two police officers – “strongly agree.” Remarkably enough, there was no dissent or ambivalence among these fifty respondents, indicating a unanimous consent on the efficiency of the forensic evidence management system towards guaranteeing fair trial to the defendants.

iii. The chain of custody protocols are strictly adhered to by all departments involved in forensic evidence handling.

	Profession				
	Judge	Lawyer	Public Prosecutor	Healthcare	Police Department
Agree	9	7	6	8	4
strongly agree	6	3	4	2	1
Disagree	0	0	0	0	0
strongly disagree	0	0	0	0	0
unable to decide	0	0	0	0	0
Total	15	10	10	10	5

The survey results showed that all the professionals unanimously consented to adhere to the chain of custody protocols as indicated. It is a consensus of judges (9), lawyers (7), public prosecutors (6), healthcare professionals (8), and police officers (4) that these protocols are strictly observed. Additionally, some participants “strongly agree” with this statement; specifically, 6 judges, 3 lawyers, 4 public prosecutors, two healthcare professionals, and 1 police officer. These results show conclusively that there was no disagreement or indecision among those surveyed, implying that every department in forensic evidence management follows a chain of custody protocols religiously.

iv. The health department is adequately trained to handle and preserve forensic evidence in compliance with legal and scientific standards.

	Profession				
	Judge	Lawyer	Public Prosecutor	Healthcare	Police Department
Agree	4	4	2	6	1
strongly agree	2	1	1	4	2
Disagree	3	3	4	0	0
strongly disagree	6	2	3	0	2
unable to decide	0	0	0	0	0
Total	15	10	10	10	5

The survey results on whether or not health department staff are trained in handling and preserving forensic evidence differ for various professional groups. These included 4 magistrates, 4 advocates, 2 state prosecutors, 6 medics, and one cop, holding that “the health department is well-trained.” Others, however, stated that: “there were two magistrates, one advocate (who added on ‘strongly agrees’), and three other medical practitioners, but two police officers did not.” However, there is also remarkable skepticism among judges (3), lawyers (3), and public prosecutors (4) who “disagree” but even more strongly reject this idea – judges (6), lawyers(2), and public prosecutors(3). This reflects participants’ collective uncertainty about educational requirements necessary to handle and preserve forensic evidence, with many doubting compliance with legal and scientific standards.

v. The guidelines provided for collecting forensic evidence at crime scenes are clear and consistently followed by all officers.

	Profession				
	Judge	Lawyer	Public Prosecutor	Healthcare	Police Department
Agree	2	2	4	3	4
strongly agree	3	3	2	5	1
Disagree	8	3	3	2	0
strongly disagree	2	2	1	0	0
unable to decide	0	0	0	0	0
Total	15	10	10	10	5

There is a lot of worry amongst professional associations about the reaction they got when it came to clarity and adherence to guidelines when collecting forensic evidence from crime scenes. Just a few participants from each group “agree” or “strongly agree that things are always clear as per them.” 2 judges, 2 lawyers, 4 public prosecutors, 3 healthcare professionals, “and “4 police officers” said “agree”, while other respondents such as 3 judges, 3 lawyers, 2 public prosecutors, 5 healthcare professionals, and one police officer said “strongly agree.” Conversely, there exists considerable disagreement: eight judges; three attorneys; three public prosecutors; and two healthcare professionals "disagree" while two judges; two attorneys; and one public prosecutor strongly disagree. This shows that many respondents are unhappy with how unclear and inconsistent these guidelines are, thus reflecting concern over the efficacy and uniformity of evidence-collection methods at crime scenes.

4. Recommendations

Boosting Training and Development Capabilities: A training scheme that encompasses all healthcare professionals and other employees who work with forensic evidence must be created. This scheme should involve continual legal and scientific updates to ensure compliance and effectiveness.

Expanding Forensic Science Infrastructure: Pakistan needs to invest in establishing and developing forensic science laboratories and training facilities, which would significantly enhance the overall capacity and accessibility of forensic services.

Standardize Guidelines and Procedures: Standardized collection and handling protocols for crime scene evidence should be created and implemented. These guidelines must be followed consistently by all agencies involved to achieve uniformity and avoid discrepancies while collecting evidence.

Strengthen Chain of Custody Practices: Every department responsible for custody management must strictly adhere to the chain of custody procedures for forensic evidence. Additionally, routine monitoring exercises should address any non-adherence issues that might arise.

Increase Transparency and Communication: All stakeholders should be provided with information on how data was collected or processed during a transparent process involving defense teams or even prosecutors. Consequently, this will ensure fair trial outcomes while inspiring trust in forensics generally.

5. Conclusion

In conclusion, even though forensic science has been integrated into the criminal justice system of Pakistan to some extent, specific areas still have to be addressed. Hence, further training is needed; infrastructure should also be expanded while standardized forensic management procedures must be implemented to ensure its integrity and efficiency remain high. By doing these things, a more dependable and fair criminal justice system is achieved, enhancing forensic science's role in delivering justice. Evidence on how evidence is handled in Pakistan's criminal justice system provides essential insights into prevailing patterns of conduct among various actors. Although people agreed on the best way to deal with forensic evidence during adjudication, some concerns and suggestions were raised.

The response shows that all respondents favor this current forensic management system, which ensures fair trials according to the survey results. It is important to note that most judges (67%), lawyers (90%), public prosecutors (60%), health care providers (80%), and police officers (60%) agree that an accused person can receive a fair trial through this system while about 33% of judges hold a similar view; meanwhile, only 10% lawyers, 40% prosecutors, 20% healthcare providers and 40% police officers think otherwise. This indicates a general acceptance rather than total satisfaction with its fairness by judges who strongly agreed 53%, lawyers who did so for up to 60%, etc, regarding forensic investigation evidence. Surveyed respondents agreed that crime scene forensics is handled correctly, as indicated by the study. These include judges (40%), lawyers (40%), medical officers (30%), public prosecutors (20%), and police officers (40%), who said such proofs remain intact throughout judicial proceedings while other judges up to 53%, lawyers 60%, etc strongly agreed; thus they believe generally that investigation evidence can be trusted. All over compliance with chain of custody protocols exists. For example, findings showed that 60%, 70%, 60%, 80%, and 80% of judges, lawyers, public prosecutors, health care providers, and police officers respect it. Furthermore, 40%, 30%, 40%, 20%, and 20% of the above-mentioned professionals highly agreed. Consequently, a chain of custody guidelines are generally observed, but some skeptics are among them.

The survey on Training and Guidelines for Evidence Collection highlighted serious concerns about the adequacy of forensic evidence handling training, particularly in the medical sector. Although a fair number believe that the Department of Health has competent staff (judges) (40% lawyers) (20%), public prosecutors(60%), and healthcare providers(20%), others contradicted or supported in powerful terms. This indicates that many people have doubts about the competence of health workers to handle such leads given by their institutions. There was a so-called forensic evidence handling training deficiency, particularly in the healthcare industry, as shown by findings from the Training and Guidelines for Evidence Collection survey. For example, while some had this perception (27%), including members of the judiciary (40%) or lawyers (20%), insurers (10%), and medics(60%), even more, had contrary opinions or strongly debated about it. Therefore, all respondents have expressed concern over healthcare practitioners' capability to process such evidence as stipulated within their curriculum.

The level of transparency and adherence to data collection guidelines at the scene had mixed findings. Different professionals argue whether these guidelines are clear: only 13% of judges, 20% of attorney generals, 30% of public prosecutors, 30% of medical practitioners, and 20% of police officers strongly agree that they are not unclear and inconsistent. On the other hand, for instance, approximately one-half (53%) of judges disagreed with the clarity or compliance with these rules; in the same vein, other professional bodies, including lawyers (30%), public prosecutors (30%), healthcare providers (20%), police personnel (40%) have expressed reservations about its implications on quality of information collection. To this end, while most respondents were generally optimistic about FEMS in terms of maintaining the integrity of evidence and ensuring fair trials, as revealed by findings from the survey, it, however, gave some valuable insights regarding the adequacy of training as well as procedural clarity. However, interestingly enough, it went into details to reveal how much further training was needed, thus exposing the correctness or otherwise thereof in question number three. It also showed a lack of procedural clarity, particularly about roles played by experts in such cases. Therefore, forensic evidence management must address this problem to make Pakistan's criminal justice system more effective and dependable.

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