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## Impact of Forensic Evidence on Outcome of Criminal Trials

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### Abstract

*This research study aims to identify the impact of different types of forensic evidence like DNA, Fingerprint on outcome of different type of criminal trials. The research methodology used in this study was both qualitative and quantitative. Data used was taken from primary as well secondary sources. Research study was doctrinal in nature. Data was collected from last five years from 2019 to 2023 reported judgements of supreme court in which forensic evidence was utilized and Data was analyzed further to see its impact. Data collected showed that there are different loopholes in admissibility of forensic evidence like lack of evidence collection, lack of evidence preservation, lack of training of concerned personnels, limited number of laboratories etc. Data shows that there is no significant co-relation found between admissibility of forensic evidence and outcome of criminal trial. It is concluded that the rate of conviction is 48% if case is decided on forensic evidence admitted and relied by the court. It was also concluded that loopholes identified in the admissibility of forensic evidence showed that training of personnel, enhancing forensic laboratories, suitably amending laws and proper handling of forensic evidence will increase the current scenario and maximize the conviction rate.*

**Keywords:** Forensic Evidence, Forensic science, Admissibility of Forensic Evidence, Criminal Trial, Forensic investigation, Forensic Trials, Fingerprint Evidence, Impact of Forensic Evidence

### Introduction

The rate of conviction in Pakistan is very low as compared to other countries like India, China and Japan. By increasing the conviction rate, confidence of public on criminal justice system of Pakistan will be revived which is otherwise very low now. This is also one of the main objectives of this research study. To carry out this objective, this research aims to study different aspects of admissibility of forensic evidence in the criminal trial courts and to identify the lacunas which affect the outcome of cases. Finally, recommendations will be given to improve the admissibility so that evidentiary value of forensic evidence is increased. The current situation regarding the admissibility of forensic evidence is not satisfactory as there are certain lacunas and shortcomings which need to be addressed immediately. These shortcomings are becoming cause of low conviction rate due to wastage of available evidence which if presented in a proper way as per international standards will certainly lead to better results.

Currently forensic evidence has not attained the required popularity probably due to the fact that superior courts of Pakistan has held that forensic evidence is only corroborative piece of evidence and not conclusive evidence. Superior courts have also shown caution in relying on forensic evidence solely. However, there are few judgements where courts have awarded the conviction solely on the

basis of forensic evidence (Zainab murder case, Motorway Rape Case). This research study will also highlight the impact of forensic evidence on different criminal cases. Keeping in view these facts, it is worth doing work to find out how forensic evidence influence any criminal trial and whether admitted forensic evidence leads to conviction or not and if it does then, to what extent it affects the conviction rate.

### **Review of Literature**

A chemical analyst report is considered as an expert report which is accepted before the court of law. He needs to get notified by the government of Pakistan to give his opinion in judicial proceedings (Rasool et al., 2022). Forensic science has become an integral part of criminal investigations worldwide. In Pakistan, forensic science has gained recognition in the criminal justice system in recent years. In India, there has been recent push by government to mandatorily use modern established forensic evidence techniques for crimes where punishment of the offence is greater than 6 years (Chauhan, 2023). The forensic science techniques help in minimizing the number of suspects (Narejo et al., 2012). The forensic evidence presented in any court law is more valuable than any general evidence presented in court (Kishore, 2022).

Despite the positive impact of forensic science on criminal investigations in Pakistan, there are certain challenges that need to be addressed. These challenges include lack of funding for forensic laboratories, shortage of trained forensic scientists, absence of quality control and standardization, and limited use of forensic evidence in court proceedings (Jatoi et al., 2021). Pagliaro et al, (2013), it was concluded that even in USA, there is no guarantee that any of the parties in the evidentiary process will sufficiently understand the full potential of forensic evidence. DNA evidence is considered as gold standard for forensic techniques for jurors (Ling et al., 2021). DNA evidence has been recognized by the courts of law as the standard against which other forensic techniques are judged (McEven et al., 2015). Forensic reports have a great impact on judicial outcomes resulting in appropriate sentences, lesser sentences or an acquittal of accused (Charan, 2023). In Pakistan, in a recent survey conducted in (Jatoi et al., 2021), it was concluded that majority of participants which included lawyers, judges and chemical experts have opined that the expert report of chemical examiner is very important in criminal cases. The most important principle governing the expert evidence is not only to provide technical reasons to support his opinion but also the result should be directly demonstrable as well as verifiable (Chaurasiya et al., 2022).

Most significant cases as far as forensic evidence are concerned are Ishtiaq Baig case PLD 2019 SC 675, Salman Akram vs state 2012 SCMR 203, state vs imam bakhsh case 2018 SCMR 2039 and Zainab murder case Imran vs state 2018 SCMR 1372. These cases have not only highlighted various aspects of forensic evidence such as admissibility of digital evidence, admissibility of DNA, Admissibility of Polygraphic test, safe custody of forensic evidence but also defined the criteria through which forensic evidence must be presented in the court of law to gain maximum evidentiary value. These studies have shown that there are many shortcomings in the use of forensic evidence in the courts of law which needs to be addressed. These shortcomings will be the main focus for this study. Lastly, this study will also recommend solutions to these problems.

### **Defining Forensic Evidence**

The “forensic” word is derived from “forensis” which is Latin word and it means “before forum” (Weizman, 2014). The early Romans used “Forum” to discuss various purposes like market, public discussions and shaped civil law (Conner, 2007). Black’s law dictionary defines forensic evidence as “evidence which is taken by scientific means”. This type of evidence is mostly obtained from material collected from the crime scene (Farooq & Waheed, 2013). Forensic evidence is key type of evidence

not only in criminal investigation and but also in trial of any type of criminal cases (Roman et al., 2008).

The type, nature and quality of evidence depends upon the nature of crime committed. The most basic requirements are that the evidence should not only be relevant but it should also be admissible in the court of law so that court can rely on it and it has probative value in any court of law. Its probative evidentiary value can be judged to the extent only that how much it can establish any relevant fact. (McEwen, 2010).

In 1910, Edmond Locard gave the most foundational concept in forensic science, Locard's principle, which is also known as the exchange principle. The Locard's principle explains that an executor of offence will leave crime traces at the crime scene. The collection of such evidences like hair, blood, semen, by investigating officers can help establish a connection between the accused and the crime. Some jurists consider medical as one of types of forensic evidence but it is very vast field and could not be termed as branch of forensic science and hence excluded from present study. DNA Evidence, Ballistics Evidence, Serology and Trace Evidence, Finger prints and Footprints Evidence, Digital Evidence, Drug and Chemical Evidence are key types of forensic evidence used in Pakistan.

### **Legal and Institutional Framework in Pakistan**

In Pakistan, forensic has been ignored for a long time. The legal system of Pakistan now recognizes the importance of forensic evidence and forensic testimony is frequently utilized to convict and acquit offenders during criminal trials. In Mateen et al., it was pointed out that general public as well as judiciary of Pakistan is relying heavily on forensic evidence in trials and making decisions.

The basic law which deals with the admissibility of forensic evidence in criminal courts in Pakistan is section 510 of code of criminal procedure, 1898. Article 164 of Qanoon-e-Shahadat ordinance, 1984 is the basic law which allows the admissibility of modern devices. Article 59 of Qanoon-e-Shahadat Ordinance, 1984 deals with the opinion of experts. There is lack of uniformity in admissibility of expert evidence while trying a case in judicial system i.e one type of evidence may be admissible in one court but it may not be admissible in other case in another court, (Rasool & Rasool). It is duty of the judge to consider and analyze the credibility and relevancy of any evidence. Punjab Forensic Science Agency Act was passed in 2007 by Punjab assembly. Through this Act, Punjab forensic science agency was formed to test various types of forensic evidences. Anti-Terrorism act was passed in 1997 and various amendments have been passed by the parliament to cater the current needs. This is a special law which deals in offences relevant to the terrorism. Section 27B of this Act provides the basis of admissibility of forensic evidence in special courts established under the law. Control of narcotics substances act was passed by the parliament in 1997. Parliament has passed various amendments in this law since its promulgation. This is a special law which deals in narcotics and psychotropic substances act. Section 34, 35 and 36 deals with the establishment of narcotics testing laboratories, appointment of government analysts and admissibility of reports of analysts.

In Pakistan, there are only two recognized forensic agencies to conduct all types of forensic tests. National forensic science agency is established in Islamabad. In Punjab, Punjab forensic science agency is established. In Sindh, no laboratory has been established so far. In Balochistan, forensic science act was passed in 2015 but there is no laboratory established so far. Executive committee of national economic council gave approval for the building of National Forensic science agency in 2002 with the objective to establish other forensic science laboratories in all provinces. In Punjab, Punjab forensic science agency act was passed in 2007. Through this legislation, Punjab forensic science laboratory was established which is considered as one of the largest laboratories working in the field

of testing forensic materials and evidence. Punjab forensic science agency maintains the ISO 17025:2017 international quality management system for maintaining its quality. In addition to these two labs, there are many forensic science labs working in different universities and medical institutes. Some of them are Liaquat Medical university laboratory, Forensic science lab KPK Police. In addition to these, Sindh forensic science agency lab is under construction.

### Impact of Forensic Evidence

Data taken from the reported judgements of supreme court in criminal cases for the period of five years from 2019 to 2023 has been taken and analyzed. Data Analysis will be done statistically through MS Office tools.

### Materials and Methods

Data for this study has been collected from the reported judgements of supreme court from last five years i.e 2019 to 2023. Specific format has been developed for data collection which is given below.

Sr#	Case Title	Citation	Type	Case Type	Result	Positive	Relied	Reason

All the columns in this format are explained here. Ist column represent the serial number of all cases starting from one. Second column will represent the title of the case e.g Ali vs state. Third column will show the case citation as given in reported judgement expressing year name, magazine name and page number e.g 2024 SCMR 123. Fourth column will give the type of evidence used in the given case like DNA etc. Fifth column will give the type of case in which the evidence is used e.g murder etc. Sixth column will show whether the case resulted into conviction or acquittal. Seventh column will give information regarding forensic report whether it is positive or negative or NIL. Next column will show if report was relied by the court or not and last column will give the detailed reasons on why report was not relied by the court.

Certain limitations have been placed on the data collection which are given below.

1. Only data relevant to criminal cases have been taken.
2. Only data has been taken from judgements in which forensic evidence has been used.
3. Data has been taken from decided cases only and data from bails and miscellaneous applications have not been taken.
4. Only last five years (2019-2023) reported judgements of supreme court which have been reported are included in the data.

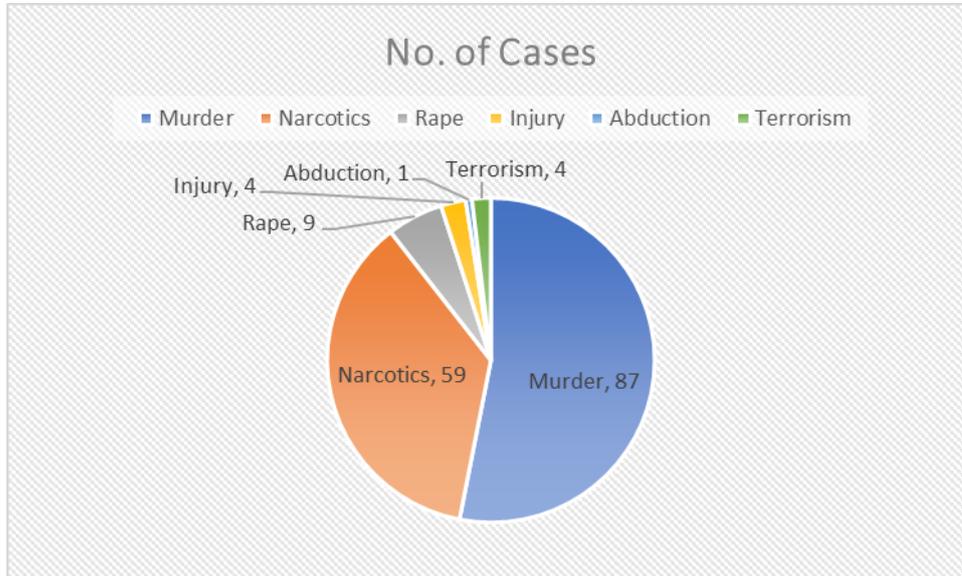
In this study, total 164 judgements of supreme court have been collected in which forensic evidence have been used and relevant detail of all cases according to type of offence have been outlined in the table below.

**Table 1**

Type of Offence	No. of Cases (164 cases)
Murder	87
Narcotics	59
Rape	09
Injury	04
Abduction	01

Terrorism	04
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Data can be represented in the form of graphical representation as below. It can be seen from the data that mostly forensic evidence has been used in the cases of murder, narcotics and rape cases.

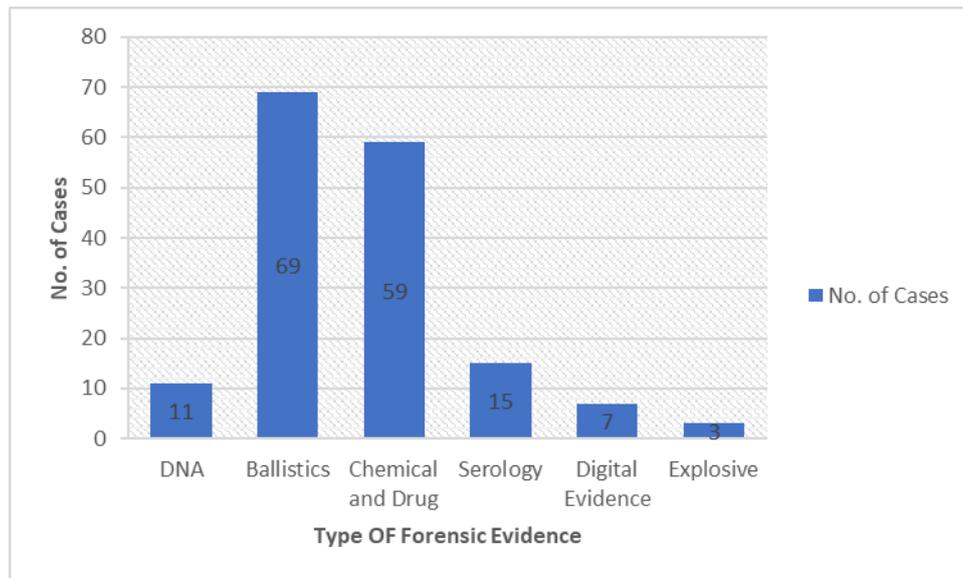


All 164 judgements have been divided according to type of forensic evidence also which are outlined in the table below.

**Table 2**

Type of Forensic Evidence	No. of Cases
DNA	11
Ballistics	69
Chemical and Drug	59
Serology	15
Digital Evidence	07
Explosive	03

It can be seen that most abundantly used forensic evidences are ballistics, chemical and DNA evidences. Graphical representation of all forensic types is given in below chart.



Data have been collected according to criminal cases results also to see whether acquittal or conviction was the final verdict of cases which have been given below in the table.

**Table 3**

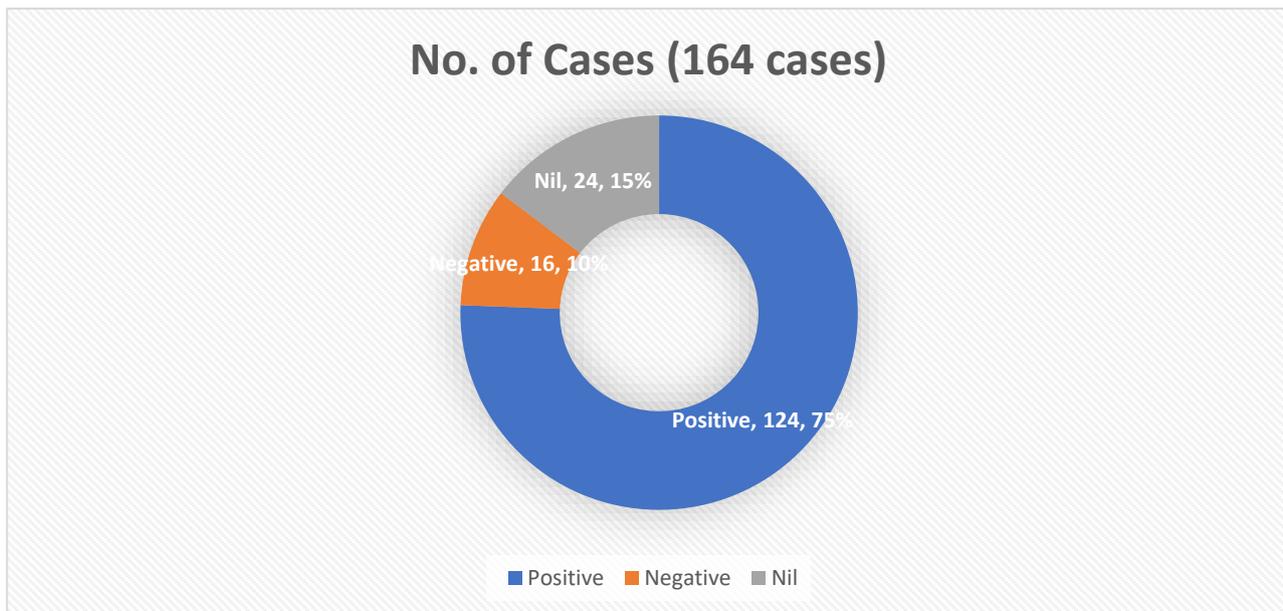
Result of Cases (conviction/acquittal)	No. of Cases
Conviction	99
Acquittal	65

Data have been collected according to results of forensic evidence also to see whether they are positive or negative and detail is given below in table.

**Table 4**

Forensic Evidence Report Result	No. of Cases
Positive	124
Negative	16
Nil	24

It can be seen from the data that in 75% of cases (124 cases), the forensic evidence is positive which is quite high. Graphical representation is given below. Positive forensic evidence means that evidence is relevant and admitted as per law applicable.



### Data Analysis and Discussion

In total 164 cases that have been collected for analysis, include 87 murder cases, 59 narcotics cases, 09 rape cases, 04 injury cases, one abduction case and 04 terrorism cases.

It could be seen from table also that in 124 (75%) cases forensic report is positive and 16 cases (10%) cases forensic report is declared negative by the PFSA laboratory. In 24 cases (15%) cases, there is no forensic report admitted in evidence due to various reasons which will be discussed in detail later.

In 99 cases (60%), the case is resulted into conviction and 65 cases (40%), result the cases is acquittal. In 46 cases (28%), despite the positive report accused has been acquitted. In 10 cases (6%), despite negative forensic report the accused is convicted. In 11 cases (7%), despite the fact that there is no forensic report available, the accused was convicted while in 13 (8%) cases, accused was acquitted even when report was found negative. However, in 78 cases (48%) cases, the court has relied on positive forensic evidence report.

This means that in 67 cases (41%), court has not relied on the forensic evidence. This is because court has decided against the forensic evidence result. This is due to various reasons which have been discussed in detail later. This also means that court has relied in 97 cases (59%) on forensic evidence.

### Flaws in Admissibility of Forensic Evidence

It is extremely important to identify and discuss loopholes in admissibility of forensic evidence due to the fact that superior courts have clarified these mistakes in various judgements but still investigating agencies seldom care in following these judgements. One of the major problems that is causing trouble in reliance of forensic evidence is that despite the availability of forensic evidence at the crime scene, investigating officer has not collected evidence for analysis. It was astonishing to note that in data collected of 164 supreme court reported judgements consisting of last five years, in 13 cases no forensic evidence was collected from the crime scene. Supreme court has deprecated this negligence of investigating officers in its various judgements.

In *Nisar Ahmed vs state* (2023 SCMR 478), *Aqil vs state* (2023 SCMR 831), court has also mentioned regarding non-collection of forensic evidence at the crime scene. It was held that it was a lapse on the part of investigating officer not to collect empties at the crime scene.

In 164 cases, in 09 cases, evidence was collected but not sent to forensic laboratory for analysis purposes. In *Ansar vs state* (2023 SCMR 929), *Qasim Shahzad vs state* (2023 SCMR 117), court has

depreciated this practice of investigating officer as he did not sent the blood stained churri to forensic lab for blood analysis.

In 164 cases, 12(7%) cases were identified where safe custody of samples and forensic evidence was not ensured. There are many supreme court judgements in which safe custody of samples and recovered materials is emphasized. In *Mr. Hazir vs state* (2023 SCMR 986), It was unexplained where sample were retained for three days as they were received in PFSA with delay of three days and hence safe custody of samples as well as narcotics was not established. *Javed Iqbal vs state* (2023 SCMR 139), it was held that it is duty of prosecution to establish the safe custody of parcels as well as samples. In *Said Wazir vs state* (2023 SCMR 1144), Sample parcels of narcotics were received after 4 days which was never explained so it was held that safe custody is not established.

One of the major reasons of court not relying on forensic evidence in narcotics cases is that sample bearer is not produced in court for his testimony. Out of 164 cases, in 09 cases sample bearer was not produced by the prosecution. In *Laljan vs state* (2023 SCMR 1009), accused was acquitted from the case on the ground that sample bearer was not produced in the court as witness and even no reason was given for his non production as witness. In *Abdul Ghaffar vs state* (2022 SCMR 819), it was held that responsibility of prosecution to produce sample bearer as witness was not fulfilled.

It was held mandatory by the supreme court in various judgements to give complete test protocols in the laboratory analysis report. Complete details of test conducted, reagents used, methods of analysis must be mentioned in the report to make it admissible in court. In absence of test protocols, report is inadmissible in evidence and could not be relied by the court to convict the accused. Out of 164 cases, 04 cases were identified where test protocols were not given as per law enunciated by the supreme court of Pakistan. In *Khairul Bashir vs state* (2019 SCMR 930), supreme court of Pakistan has held that three elements are necessary to give in forensic analysis report. First of all, it is mandatory to mention test, then results of these tests and finally protocols for these tests. In absence of any of these three elements, forensic test report cannot be relied. In *Muhammad Boota vs state* (2020 SCMR 196), court has held that it is mandatory that confirmation of narcotics results must be supported by the test protocols. Same views are taken in *Minhaj Khan vs state* (2019 SCMR 326), *Qaiser Javed vs state* (PLD 2020 SC 57). In these cases, plea of prosecution that non-compliance of mandatory test protocols did not affect prosecution case was rejected by the superior court.

Case property has been held by supreme court of Pakistan mandatory to exhibit in the trial court. Case property in narcotics cases include narcotics, cash sale amount and vehicle recovered. This view is taken by hon'ble supreme court in its esteemed judgement reported as *Ahmed ali vs State* (2023 SCMR 781).

Forensic evidence is submitted as per law and rules to the forensic laboratory for analysis and result is given in the report which is presented as evidence in the trial court. There are certain circumstances when the report is held inconsequential by the court. Some of these circumstances are given. In *Mr. Bashir vs state* (2023 SCMR 190), court has held that forensic report is inconsequential due to recovery of pistol was not believed by the court. Same view was taken by supreme court in *Ijaz vs state* (2023 SCMR 1375) also. In *Maskeen ullah vs state* (2023 SCMR 1568), supreme court taken view that since recovery of empties was not from the crime scene so report is inconsequential. *Akbar ali vs State* (2021 SCMR 104), also presented similar view. In *M. Ashraf vs state* (2019 SCMR 652), it was held that since crime empties and weapon was sent together for analysis so in such circumstances positive report is inconsequential. It was held by supreme court in *Haji Nawaz vs state* (2020 SCMR 687) that since no PFSA report was put to accused in his statement under section 342 Crpc, so it is inconsequential and can not be used againt accused as evidence.

Forensic report is inadmissible in evidence due to various reasons. One of the major reasons is that it is deficient in material particulars. Out of 164 cases, in 12 cases Report was held deficient. In *Raza vs state* (PLD 2020 SC 523), *M.Sadiq vs state* (2022 SCMR 690), *Abdul Ghani vs state* (2022 SCMR 544), *Liaqat ali vs state* (2021 SCMR 780), recovery was held not supportive to prosecution due to deficient forensic report as it gave no clear results. In *Fiaz Ahmed vs M.Khan* (2020 SCMR 281), court did not believe on forensic evidence because churri recovered was not stained with blood. In *Sagheer ahmed vs state* (2023 SCMR 241), court did not believed report on DNA forensic report being deficient as it did not give any definite finding regarding act of sodomy. In *Mr.Naeem vs state* (PLD 2019 SC 669), no definite finding regarding percentage of intoxicant was given so report was held deficient by the supreme court of Pakistan. *M.Javed vs state* (2019 SCMR 1920), report was deficient on the basis that no semen grouping was done in the analysis. In *Khair-ul-Bashar vs state* (2019 SCMR 930), It was held that since no test protocols were mentioned in report so it was deficient report. It is also very important to mention that re-testing of deficient report was not allowed to be re-tested by laboratory.

The apex court of Pakistan has held in its various judgements that fire arm empties should not be sent along with weapon of offence as it will diminish value of forensic report. In 164 judgements, 5 cases were identified in which forensic report was not relied due to this loophole by the investigating officer. This view of supreme court was given in *Sarfraz vs state* (2023 SCMR 670) by holding that empties were sent to forensic laboratory along with firearm and hence it does not have any evidentiary value.

There are certain instances in which forensic report is positive but it does not corroborate with the substantive evidence like ocular evidence. In these instances, courts generally did not rely on the forensic reports. In 164 cases, there are 7 cases in which court did not rely on forensic evidence due to the fact that report did not provided corroboration.

DNA is considered as one of the most important forensic pieces of evidence. Different type of biological materials can be used for DNA test like semen, saliva, hair, nail, urine, teeth and cells. *Salman akram raja vs state* (2013 SCMR 203) is leading Judgement in which DNA was made mandatory by the superior court. It was held that it is not necessary to get permission of the victim to conduct DNA and it is DNA samples must be preserved for use whenever required. In *Attaul Mustafa vs state* (2023 SCMR 1698), court has held that it is merely corroborative evidence and it is not primary evidence.

One of the major issues in criminal justice system is that investigating officers collect forensic evidence but send this evidence late in opposition to legal requirement. Out of 164 cases there were three cases in which supreme court did not relied on positive forensic report due to this lacuna. In *Muhammad abass vs state* (2023 SCMR 487), court refused to rely on positive forensic report of recovered blood stained churri by holding that it was sent late after 7 months of recovery. In *M.Amin vs state* (2019 SCMR 2057), court did not relied on positive forensic ballistics report as weapon of offence was sent late to laboratory. In *Abdul Jabbar vs state* (2019 SCMR 129), supreme court has categorically stated that it was inefficiency of police that crime empties were sent late to forensic laboratory.

Joint Recovery is also one of the issues which have influence on the admissibility of forensic evidence. Out of 164 judgements, one judgement has highlighted these flaws and court has not relied on positive forensic ballistic report. In *Munir Malik vs state* (2022 SCMR 1494), supreme court has held that joint recovery from two appellants is inadmissible in evidence.

Supreme court has recently in its landmark judgement *Ishtiaq ahmed* (PLD 2019 SC 675), has held that electronic evidence and digital evidence must be admitted in evidence after following established principles given in the judgement. Call Data Record or CDR data is very important digital forensic evidence which can be helpful in identifying location of the culprit. It is very important that CDR data be produced in court through official of the company. In one out of 164 cases under discussion, in one case this lacuna was highlighted. In, *Sajid Hussian vs state* (2022 SCMR 1540), accused was acquitted on the ground that no CDR data was produced in court to prove his connection with the offence.

In some of the cases, there was no forensic evidence report available on case file. In these conditions, court generally held this evidence inconsequential. There are four cases out of 164 cases in which no forensic report was available. In *Abbass ali vs state* (2021 SCMR 349), no weapon of offence was ever recovered and hence no report was available despite the collection of other forensic evidence in the shape of empties. In *State vs ahmed umar vs state* (2021 SCMR 873), despite the availability of video tape evidence, prosecution did not present the forensic evidence in the court and all four accused were acquitted from the charge. In *Mazhar vs state* (2020 SCMR 586), accused was acquitted from murder case on the ground that no forensic report was produced in court regarding weapon of offence and empties although evidence in such regard was collected in shape of recovery. In *Zahid vs state* (2020 SCMR 590) in a rape case, court had held that absence of DNA report is useless for accused as it is not ground for acquittal.

There are certain circumstances under which court do not believe on the forensic evidence in one context or the other. There are two cases out of 164 cases in which court has disbelieved forensic evidence. In *Umair vs state* (2023 SCMR 566), court did not believe the positive serology report when bloodstained hatchet was recovered from a common thoroughfare place. In *Muhammad Yaseen vs state* (2021 SCMR 404), court did not believe the recovery of casing after three weeks.

There are certain cases in which duplicate forensic report was presented as evidence in court. This act of prosecution has been deprecated by the supreme court. In one case, out of 164 cases, duplicate forensic report was given in evidence. In *Zubair Khan vs state* (2021 SCMR 492) which was a narcotics case, the accused was acquitted due to the fact that duplicate report is inadmissible in evidence.

### **Conclusions and Results**

The aim of this study was to check the impact of forensic evidence on the criminal cases results. Purpose was to see how conviction and acquittal will be affected when forensic evidence is not relied by the court. Data from 164 reported judgements of supreme court has been collected from last five years (2019-2023) and results have been compiled statistically to see the impact in the given format. Following results can be drawn and concluded from the data collected and analyzed.

- 1- There are 78 cases in all cases in which court has admitted forensic report and relied on forensic evidence from 164 overall cases and result of the case was conviction. It means that there is 48% conviction rate in all cases when court relies on positive forensic evidence.
- 2- There are 11 cases out of 164 cases in which despite no forensic report, accused was convicted. It means that there is 6% conviction rate in all cases even when there was no forensic report available on case file.

### **Recommendations**

Following are the recommendations which can be helpful for the policy makers to improve the current situation to increase the conviction rate which will ultimately raise the confidence level of the public on the criminal justice system of Pakistan. Training and development of all people working in every aspect of criminal justice system is basic requirement for improving the forensic evidence

admissibility problems. These will include but not limited to judges, forensic scientists, lawyers, investigating officers and evidence handling staff.

There are only two labs currently working in the field of forensic science in Pakistan. There is dire need to establish more laboratories in the country so that samples collected are not only tested but also delay is not so much which may ruin the evidentiary value of the sample. Laboratories must be internationally approved through ISO accreditation Standards like ISO17025. These may be converted into independent institutions for better and efficient working. Proper funding should be given so that proper research may be conducted in the testing of forensic materials.

It is very important part of criminal justice system that investigation of each case, which involve forensic evidence, be carried out by the professional investigators. In current study, there were 13 cases in which no evidence was collected at all. Also, there were 9 cases out of 164 in which sample collected was not sent to forensic laboratory for analysis. So, it is recommended that qualified persons be part of police investigating so that this lacuna may be covered. Law graduates may also be hired in police department. Forensic evidence needs to be reliable as well as admissible. Forensic evidence collected at the crime scene is not handled and stored properly which should be done. There are certain ambiguities in the forensic reports when they are presented in any court of law. These can be removed by calling expert evidence of the persons who made the reports. There is a need to properly legislate the forensic evidence relevant specialized laws so that any ambiguity may be removed and principles established by the superior courts may be implemented in its true letter and spirit.

It is also recommended that in order to improve the understanding of forensic evidence, specialized course must be introduced as compulsory subject. It is very important aspect of any judicial system that delinquents in any department are held accountable for their mistakes and negligence. It has been identified in the current study that investigating officers make mistakes in collection of samples. They also make mistakes in preserving and sending the forensic evidence to labs. In spite of thousand of judgements by superior courts that crime weapon and empties must not be sent to lab together as it will diminish its evidentiary value. In current study of 164 supreme court judgements, there were 5 cases in which empties were sent to lab together with firearm and court rejected the evidence. This is serious laps on the part of investigating officers. This situation can be improved if above recommendations are implemented.

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