THE ROLE OF FORENSIC EVIDENCE IN INDIAN COURTS

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ABSTRACT
In the past few decades, with the development of technology, there has been a foremost burst through in the criminal justice system. Be it investigating the crime scene or conducting the post-mortem of a dead body, the utilization of scientific tools, techniques and methods have played a vital role in delivering justice to the aggrieved. Forensic evidence is a regulation that operates inside the parameters of the legal system. Its rationale is to provide direction to those conducting criminal investigation and to provide to courts precise information upon which they can rely in solving criminal and civil disputes. In the present paper we will analyze what is the modus operandi for identifying and collecting the forensic evidence from a crime scene, we will also try to analyze the scenario of how forensic evidence is used in courts and to what extent it admissible. The significant legal provision of various statutes where forensic evidence has played a vital role has also been discussed in this paper with the help of landmark judgements. It will also try to explore the reasons as to why the role of forensic science in Indian criminal justice administration is still at rudimentary juncture or restrictive in nature, even though since last few decades, a remarkable technological advancement in scientific era has been made. There is still a room for improvement in the way scientific evidence is being utilized in Indian Courts.

A.WHAT IS FORENSIC SCIENCE?
Forensic Science is a multidisciplinary subject matter used for investigating crime scenes and also helpful in prosecution of lawbreakers. The major subjects used in forensic science are biology, chemistry and medicine. Forensic scientists examine objects, substances (including blood or drug samples) ,chemicals (paints, explosives, tonic tissue traces(hair, skin),or impressions (fingerprints or tidemarks) left at the crime scene. The majority of forensic scientists specialize in any one of the science.

The investigation officer is the most important individual. In fact it is he whose work determines the success or failure of the appliance of forensic science in the processing of criminal case.. If he fails to gather the relevant correct evidence, allows them to be tainted or does not make available accurate samples for comparisons, the findings of forensic science will be useless. Material are identified and compared with the processes of forensic science. They establish the presence or absence of a link between the crime, the criminal, the victim and the place and the time of occurrence.

B.EVIDENCE AND TRACE EXAMINATION
The study of the scene of crime or accident involves obtaining a everlasting record of the scene(forensic photography) and compilation of evidence for auxiliary examination and comparison. Collected samples comprise biological(tissue samples such as skin,blood, semen or hair), physical( finger nail shells, fragments of instruments or equipment, fibers, recorded voice messages or computer discs) and chemical(samples of paint, cosmetics, solvents or soil). Scientists specializing in a particular field subsequently process the evidence collected at the scene in
a forensic laboratory. Scientists recognize, fingerprints, chemical residues, fibers, hair or DNAs left after. However, presence of more people introduces a greater chance of contamination into the evidence. Moreover multihandling of a piece of evidence (for example murder weapon being examined by many specialists) is also expected to bring in outline of tissues of DNA not originating from the scene of crime. It amounts in stringent quality controls imposed on compilation, management and scrutiny of evidence to assure avoidance of contamination from a person handling a sample by wearing gloves and performing analysis in a clean laboratory.

Capability to appropriately gather and develop forensic samples can have an effect on the ability of prosecution to prove their case during a trial.

C. THE NEED FOR FORENSIC EVIDENCE IN THE PRESENT JUDICIAL SYSTEM

There is urgent necessity for the appliance of forensic science in criminal investigation. The current day representation of crime investigation and prosecution of criminals is a upsetting story. A huge proportion of the murder trials, eventually, end in acquittals and these repeated acquittals vitalize the criminals. In addition, the reason behind this is said to be non-proper handling and managing of the investigation. Investigation must result in finding the truth and gleaning of the evidences that can be perceived by the judicial systems objectively in the direction of finding the truth\(^1\). The justice is there, where the guilty is punished according to law and for that, an investigation without any lacunae is must. Investigation in detection of crime is an important step in the administration of justice; hence, investigation must be prompt, fair and impartial. The right to speedy trial has been recognized as a fundamental right enshrined under Article 21 of the Indian Constitution in State of Maharashtra v. Champalal Punjafishah.\(^2\)

The major percentage of acquittal cases shows the failure on the part of prosecution mainly due to improper investigation and witnesses turning hostile. Nowadays the ‘eye-witnesses’ upon whom our judiciary mainly rely has become a rare species, the reasons shown are threat and fear. Due to ancient measures, investigating agencies are not able to collect sufficient evidences. Besides, crimes are so well premeditated and professionally committed by using expertise that hardly any evidence or clue is available on the crime scene.

Furthermore, these scientific techniques can exchange carnage in police custody. Custodial deaths, torture are widespread in our country. Supreme Court also articulated in D. K. Basu v. State of West Bengal\(^3\), enforcing agencies must act within the bonds of law and there is need for developing scientific methods of investigation and interrogation of accused as custodial deaths and torture is nothing but a blow at the rule of law.

D. PROVISIONS OF STATUTES AND SUBSEQUENT CASE LAWS WHERE FORENSIC EVIDENCE HELPED IN DELIVERING JUSTICE

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\(^2\) AIR 1981 SC1675

\(^3\) AIR 1997 SC 610
SECTION 45 OF THE INDIAN EVIDENCE ACT, 1872 - When the judiciary has to form a judgment upon a point of foreign law, science or art, or as to identity of handwriting\(^4\) [or finger impressions], the view upon that point or individual trained in such foreign law, science or art.\(^5\) [or in questions as to identity of handwriting \(^6\) [or finger impressions] are pertinent facts. Such individuals are called experts.

Here are few case laws that the courts and tribunals have decided keeping the essence of aforementioned provision in mind.

1) **In the case of Balak Ram v State of Rajasthan**\(^7\) - Reports of ballistic expert is permissible in evidence without bringing him as a witness. In the instant case what was doubtful was the points of entry and exit, which on the facts of the case would make very slight difference since the other evidence adduced by the prosecution undoubtedly shows that the deceased died out of gunshot injuries.

2) The evidence of eyewitness corroborates the opinion of the doctor that both the injuries were caused by sharp weapon like knife or dagger. The fact that weapon was not produced in the court would not negative the opinion of the doctor.\(^8\) If the doctor gives opinion regarding the nature of injuries, the manner of receiving the injuries, the weapons through which the injuries have been received, it becomes a corroborative piece of evidence to the testimonies of witnesses of fact.\(^9\) However, the opinion of the expert is not binding on the court. The court has to formulate its own opinion. The medical opinion was that two successive blows with a sharp weapon could not have fallen on the same situs. No reasons were given in support of the opinion. The court held that the prosecution version that the injury was caused by two strikes could not be doubted.\(^10\)

3) **In the case of Kabiraj Tudu vs. State of Assam**\(^11\) it was held, The Sessions Judge has the responsibility to make sure that the doctor who carry out the post-mortem examination is made known to the weapon if it is available, or where it is unavailable. The portrayal of the weapon is put to him and asked whether such weapon could or could not cause two injuries to an individual. Where the prosecution fails to absolve his duty satisfactorily the trial judge has also the duty to draw out from the medical witness the temperament and seriousness of injuries sustained, for with no such statistics it may be often complicated for the court to come to a conclusion.

Section 73 of The Indian Evidence Act, 1872 - Comparison of signature, writing or seal with others admitted or proved - so as to see whether a signature, writing or seal is that of the individual by whom it purports to own been written or made, any signature, writing or seal admitted or proved to the satisfaction of the court are written or made by the person could also be compared with the one which is to be proved, although that signature, writing or seal has not been produced or proved for the other purpose.

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\(^4\) Added by Section 3.1 E Act, 5 of 1899. For discussion in council as to whether “finger impressions” include “thumb impressions” see Gazette of India, 1898, Pt VI p.24

\(^5\) Inserted by s.4 1 E. Am Act 8 of 1872

\(^6\) Supra note 1

\(^7\) 1994 Cri LJ 2451, 2461(Raj)

\(^8\) B.V Danny Mao vs State of Nagaland, 1989 Cri LJ 226.

\(^9\) Nagina Sharma vs State of Bihar, 1991 CrLJ 1195

\(^10\) State of Haryana vs. Bhagirath, AIR 1999 SC 2005

\(^11\) 1994 Cri LJ 432
The court may direct someone present in court to write down any words, figures for the rationale of enabling the court to match the words, figures so written with any words, or figures presupposed to be written by such person.

Here are some case laws enlightening the effect of the same:

**In Richardson vs. Newcombe**\(^\text{12}\), it was held that the genuineness of the document with which the comparison is to be made must be satisfactorily established. It must have been “admitted or proved to the satisfaction of the court to have been written or made by that person which is also the requirement of the English statute. The handwriting used as a standard must be established by clear and undoubtful evidence.

In S vs. Kathi Kalu, it has been well settled beyond controversy by the Supreme Court, that mere direction by the court under section 73 to accused to give writing or finger impression does not offend Art 20(3) of Constitution (compulsion to give finger print etc to expose parts of the body also does not infringe the article as it is not included in the expression “to be a witness”)

**Section 53 of the Criminal Procedure Code.** Examination of accused by medical practitioner at the request of police officer.

One of the famous case under this provision is

**Thogorani vs. State of Orissa**\(^\text{13}\)- DNA evidence is now a predominant forensic technique for identifying criminals when biological tissues are left at the scene of crime. However, Section 53, CrPc refers only to assessment of the accused medicinal practitioner at the demand of a police officer. There is no ground why the court should not have more authority for the principle of doing impartiality in criminal case by ordering to the police officer to collect blood sample from the accused and carry out DNA test for the intention of further investigation under Section 173(8) of the CrPc. In the instantaneous case, where the petitioner established a strapping prima facie in support of her controversy that it was a apt case where a order was to be issued to the investigating officer to collect blood sample from the person of the apposite party, denial to direct conduct of DNA test order to determine the paternity of children was held not proper.

**Section 53-A of CrPc- Changes-CrPC(Amendment) Act,2005(25 of 2005)**- This section 53-A is new, added by the CrPC(Amendment Act),2005(25 of 2005). It provides for a wide-ranging medicinal examination of an individual accused of an sin of rape or an attempt to commit rape by the registered medical practitioner employed in a hospital run by the administration or local body and in the lack of such a practitioner within the radius of sixteen kilometres from the position where the offence taken place by any other registered medical practitioner.

**E.LIMITED USE OF FORENSIC EVIDENCE IN INDIAN LEGAL SCENARIO**

The most notable purpose of scientific investigation is to alter suspicion into realistic certainty of either guilt or innocence. However, till recently, the courts had to rely profoundly on the non-scientific evidences because of the non-availability of appropriate technologies. There is a study of 2011 that shows that only in 47 cases in Supreme Court

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\(^{12}\) 21 Pick 37

\(^{13}\) 2004 CrLJ 4003
and various High Courts; DNA has played an important role. Out of these, Delhi High Court alone gave 23.4% decisions. In yet another study of rape cases over the decade, the author has indicated that there has been an amplified dependence by Indian courts on forensic evidence and DNA over the years, even though the figures are appallingly low and concerted efforts are needed to comprise scientific evidence in all criminal matters, where applicable.\(^{14}\)

The reasons for disinclination of courts to use forensic evidence in criminal investigation are various. Mismanagement of physical evidence, including inappropriate collection, preservation, non-collection of clue evidence, non-maintenances of chain of custody, as well as delayed dispatch of physical evidence for scientific investigation has been repeatedly commented upon by the courts. Medico-legal examination is done to uncover real cause of injury or death. It can clearly tell the nature of death. Documentation of medico-legal examination should, therefore, be prepared very carefully in order to pull in at scientific findings, which in many cases is not done in an appropriate manner.

The Report of the Committee on Draft National Policy on Criminal Justice\(^{15}\) emphasized that training, accreditation; standard setting, professionalism, research, and development of forensic science have to receive adequate attention in the policy framework. The Malimath Committee\(^{16}\) also put forward a suggestion that more well-resourced laboratories should be established to handle DNA samples and evidence, as well as specific law should be enacted giving guidelines to the police setting uniform standards for obtaining genetic information and creating sufficient safeguards to prevent misuse of the same. More recently, the Justice Verma Committee\(^{17}\) laid down the requirement for suitable storage and preservation of DNA samples, especially in sexual assault cases.

**F. RECOMMENDATIONS AND SUGGESTIONS**

1) Apt training policy should be evolved for police. They have to be trained in advanced technology, innovative dynamics of forensic science, efficiency and use of modern forensics methods. Police Investigating Officers should undertake systematic proficiency training in scientific investigations.

2) Each and every police station should be equipped with latest ‘investigation kits’ and taking help of forensic expert of each subject area must become compulsory during crime scene investigation.

3) Forensic science lab specialists need training in testimony in the courts as well as knowledge of law before utilizing any advanced technologies. Forensic science laboratories should embolden scientists to carry out research on the data available with the labs after trials are completed. This could

\(^{14}\) Dipa Dube, ‘Determining the Applicability of DNA Evidence in Rape Trials in India’, Vol. 2 (1), IJSSR, 2014. 26


\(^{16}\) Committee on Reforms of Criminal Justice System, Government of India, Ministry of Home Affairs, Report, Volume 1, March 2003

\(^{17}\) Report of the Committee on Amendments to Criminal Law, 23rd January, 2013.
help in appropriate coordination of their scientific reports and their presentation during deposition in courts.

4) The Judges must have major knowledge and training in forensic analysis. In most of the cases of murder, rape, assassination, sexual assault, burglary, homicide, etc. the forensic material evidence plays a significant role. It is suggested to introduce training programs for newly recruited prosecutors and judges, a part of which should be with the police and forensic laboratories to educate them regarding the investigation lines with the aspect of forensic sciences.

5) Continuous interaction of judges with scientists would stimulate and widen their knowledge to deal with such scientific evidence and to effectively deal with criminal cases based on scientific evidence. The researcher is not promoting that, in all cases, the scientific evidence is the sure test, but only emphasizing the compulsion of promoting scientific evidence to detect and prove crimes over and above the other evidence.

G. CONCLUSION
It can be concluded with the scrutiny that with the change in crime-patterns and “progress” of criminals it is vital necessity to hold investigations systematically and to make all sorts of scientific evidences admissible in the courts. It was appropriately remarked by the honourable Supreme Court, “We must not forget that the object of criminal law process is to find out the truth and not to shield the accused from the consequences of his wrongdoing”. By using ancient methodologies of investigations, administration is actually providing armor to the aberrant people. Law in any nation is in spirit the manifestation of, and is based on, the common law of the land. Law to be living, has to be in harmony with the varying needs and aspiration of the society as a whole. So, when there is accessibility of scientific tools investigation authorities must utilize them to grab hold of criminals. Also improve the use and admissibility of forensic evidence should in Indian courts.

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