# FORENSIC SCIENCE EVIDENCE AND ADMINISTRATION OF CRIMINAL JUSTICE: AN ANALYSIS

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#### INTRODUCTION

Criminal justice forms part of the set of processes, bodies and institutions that aim to secure or restore social control<sup>1</sup>. The latter may be defined as, the organized ways in which society responds to behaviour and people it regards as deviant, problematic, worrying, threatening, troublesome and undesirable<sup>2</sup>. Administration of criminal justice primarily rests on police, prosecution, courts and prisons. These four organs are engaged in the vital task of prevention, detection, prosecution, adjudication and penalization of offenders in society. Effective criminal justice machinery ensures a safe and peaceful society. In fact, the entire existence of an orderly society depends upon sound and effective criminal justice system<sup>3</sup>.

Justice does not come with a single click or a blink to anybody. It takes incredible several moves. Many people are misguided because of the idea of Hollywood movies or many web series, which shows that the cases are resolved within 1 hour, including advertisements. Reality isn't the same. Lots of time, patience, energy, and many steps are involved in serving justice to an individual. Starting from the commission of the crime to police investigation, to court proceedings, and finally to judgments and convictions. In a progressive and democratic society, legitimacy has always been considered as a hallmark in the justice system. In bringing about justice, judges play a crucial role and have been viewed as the backbone of the justice system. With the advancement of time, there has been considerable development in the process of the judiciary system. Due to this, there has been remarkable penetration of technology and techniques in the process of solving crime. In this, forensic science proves to be the helping hand.

Forensic science is where science meets the law. It has a great significance in the criminal as well as civil matters. Forensic evidence is the physical evidence found at the crime scene. For the

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<sup>&</sup>lt;sup>1</sup> Francis Pakes (Ed), Comparative Criminal Justice, p. 1 (Routledge, Oxon, Third Edition/2015).

<sup>&</sup>lt;sup>2</sup> David Shichor, The Meaning And Nature Of Punishment, (Waveland Press, Inc. 2006).

<sup>&</sup>lt;sup>3</sup> Committee on Reforms of Criminal Justice System, Government of India, Ministry of Home Affairs, Volume I, 2003.

impetus of fair judgment, the shreds of evidence found on the place of crime play a paramount role. They are considered as the secondary evidence, the documents being the primary evidence. The primary evidence amalgamated with secondary evidence are presented in the court of law, which helps the court to understand the facts and deliver the judgment.

After the commission of the crime, the investigating officer tries to collect the maximum evidence found at the site of the crime. Their role is to investigate minutely because a minuscule proof can revert the case. Forensic science has a remarkable contribution in solving criminal investigation and other heinous violence.

To understand the concept well, let's take the example of the collision of buildings. In this case, the forensic civil engineering experts will investigate for building collapse, and the same will be submitted in the court. The court will establish a link between the pieces of evidence and reach upon a conclusion.

Forensic science involves the method and technology from various branches of science like medicines, biology, pharmacy, chemistry, etc. For example, the blood found at the site, blueprinting of the blood is with the application of physics. Biology helps in recognizing the dead body, whereas chemistry can help in determining the reason for the death or combination of drugs in the body.

The concept of forensic science is not new to the judiciary system. Argentina was the first country to incorporate forensic evidence for a criminal investigation in 1902. Sir William Herschel presented the fingerprint evidence for the identification of the suspect. Even the Indian judiciary relies on evidence like a fingerprint, DNA analysis, post-mortem since ages. Lately, there has also been a jump in the use of advanced forensic methods like narco-analysis, lie detector, and more. The forensic analysis has made uplift the fundamentals of criminology that there is no perfect crime. It helps in equitability, i.e., to convict the guilty and pardon the innocent.

### LEGAL PROVISION SUPPORTING FORENSIC ANALYSIS CRIMINAL INVESTIGATION

Forensic science with the help of evidence found at the scene, with the help of scientific technology, provides the investigating officer a magnificent piece of information. They support the court to find an answer to certain questions like how was the crime committed? What is the nature of the crime? Who all are possible suspects? And by answering all the questions they try

to recreate the crime and try to find the reason for the commission of the crime, further reaching out to the criminal.

Though forensic science has made a remarkable contribution to the criminal justice system, the limitation of law cannot be ignored. Few questions have revolved around the mind of many legal professionals like are the forensic evidence admissible in the court of law? How far are these techniques legitimate?

There have been many debates since ages that forensic evidence presented in the court of law defeats the basic provision of law. As per Article 20(3) of the Indian constitution, any person who is accused of the criminal offense, he/she cannot be compelled to be a witness against himself. This article was for the protection of the accused from the mental harassment they undergo during the police investigation. It was found that police just to close the case, they would brutally beat the accused and force them to be a witness against themselves. According to this right, no one is under compulsion to answer any question or produce any document which can act against them in the court of law.

The Universal Declaration of Human Rights, Article 11, states, Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.<sup>4</sup>

Many people felt that taking fingerprints and DNA analysis for verification defeats the provision of Article 20(3). They argued that forcing the accused to give fingerprints is like the accused giving evidence against them. The Supreme Court in the case of the *State of Bombay* v. *Kathi Kalu & Anr* held that compelling any person to give any sort of forensic evidence like fingerprints, blood, hair semen, does not violate the provision of Article 20 (3). The same is even mentioned in Sec. 73 of the Indian Evidence Act, which directs that any person can be asked to give the fingerprint or DNA examination even to the accused.

Another debate was on Narco-analysis and its validity. Narco-analysis is the new development in the field of criminal investigation. But the question arises is the evidence by narco-analysis admissible in the court of law. In this method, the investigating officer tries to acquire some sort of statements from a semi-conscious person which can be used as the evidence. This process

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<sup>&</sup>lt;sup>4</sup> Universal Declaration of Human Rights, United Nations High Commissioner For Human Rights,http://www.icnl.org/research/library/files/Transnational/UNIVERSAL\_DECLARATION\_OF\_HUMAN \_RI GHTS.pdf (Accessed on: 09.2.2016).

<sup>&</sup>lt;sup>5</sup> AIR 1961 SC 1808

possesses several questions about law and ethics. Some felt that it is violating the provision of Constitution against self-incrimination.

Earlier in the case of Ramchandra Reddy & Ors. v. The state of Maharashtra,<sup>6</sup> the Hon'ble court upheld the constitutional validity of the use of narco-analysis and lie detector but lately in 2006, in the case of Selvi & Ors. v. State of Karnataka & Anr<sup>7</sup>, held that the person giving statements in brain mapping or narco-analysis test is the semi-conscious state and therefore they cannot be considered conclusive and thus it cannot be made a part of the compulsory investigation process.

Section 53 of the Criminal Procedure Code, 1976, states that a person accused of any crime can be asked to undergo a medical examination if the officers feel that the examination can provide some evidence to the crime. In 2005, certain amendments were made in Criminal Procedure to include the examination pertaining to blood-stain, DNA profiling, semen test, swabs, etc., but it was constrictive only to the rape cases. Further Sec. 164A of Criminal Procedure, also authorizes the medical examiner to examine the victim of the rape case within twenty-four-hour. But the question lies whether the entire practitioner is proficient for the collection of DNA samples. It is a well-known fact that the sample collected must not be contaminated as it would be of no further use.

The Justice system has an immense belief in forensic science and has relied on them since ages for delivering judgment. Forensic reports are considered as the bible for many judges and have been regarded as belief tendered by experts. But courts are not bound by the reports and can reckon on other evidence.

## RESTRICTIVE APPLICATION FOR FORENSIC EVIDENCE IN INDIAN JUDICIARY SYSTEM

Though the use of forensic evidence has been on a spike in the judiciary system one can see restrictive use in the Indian judiciary. To date also, the court has relied majorly on non-forensic, non-scientific evidence for a judgment. According to the recent survey conducted by the Supreme court of India and the High court of Delhi showed that only 60-65 cases are solved with the involvement of forensic evidence. DNA evidence has been used only in about 5% of murder cases and 3% rape cases<sup>8</sup>. These figures are enough to show the lack of scientific

<sup>&</sup>lt;sup>6</sup> AIR 1961 SC 1808

<sup>7</sup> AIR 2010 SC 1974

<sup>8</sup> Nirpat Patel, Vidhwansh K Gautaman, ShyamSundarJangir, The Role of DNA in Criminal

evidence in a criminal investigation in the Indian scenario. There has been a cosmic endeavour for incorporating forensic science in the process of criminal investigation and judicial process. The rate of conviction has been persistently decreasing lately because of a lack of evidence. In this milieu, forensic evidence, having a clinching nature can to some extent reverse the situation<sup>9</sup>.

The Court's unwillingness to use forensic evidence for criminal investigation has multiple reasons. From improper collection to preservation, sometimes even non-collection. In many cases, the court found out that the evidence collected from the sites was not properly preserved because of which the reports showed the result which was impolitic. The DNA samples get contaminated and become ineffectual. Perpetually there has been a delay in sending the evidence to the lab<sup>10</sup>. The delay in the inspection of biological and serological evidence causes the decomposition of such evidence which tends to release a high amount of alcohol. So, in cases like determining the drunkenness of the body, the negative result can show positive which makes it difficult for the court to rely on the result.<sup>11</sup>

The motive of the forensic analysis was to determine the reason for the death and maybe strenuous by examining the crime site. Therefore, it is imperative to handle the evidence and organize the documents to make it valid in the court of law. Forensic evidence has immense potential in various affairs, the only step needed is it is incorporated in the investigation and analysis process efficiently<sup>12</sup>.

### **OBSTRUCTION FACED BY ALLIED SUBSIDIARIES**

A technical domain like forensic evidence is still not much in use because of the very reason that even the investigating officer is unskilled and ill-informed. Investigations to date have been done with the old, non-scientific techniques. The investigating officer is considered as the first respondent to the crime, the lack of scientific knowledge serves as a serious threat to the fairness of the justice system<sup>13</sup>.

InvestigationAdmissibility in Indian Legal System and Future Perspectives, 15-21 IJHSSI Vol. 2 (2013)

<sup>&</sup>lt;sup>9</sup> Dipa Dube, 'Determining the Applicability of DNA Evidence in Rape Trials in India', Vol. 2 (1), IJSSR, 2014

ustice Jitendra N. Bhatt, A Profile of Forensic Science in Juristic Journey, http://www.ebcindia.com/lawyer/articles/2003v8a4.htm (Accessed on: 28.2.2016).

<sup>&</sup>lt;sup>11</sup> Olivier Ribaux, Simon J. Walsh and PierreMargot, The contribution of forensic science to crime analysis and investigation: Forensic intelligence, 171-181 FSI vol.156 (2006).

<sup>&</sup>lt;sup>12</sup> A. Dutta, R. C.Arora, and Dr. P.C. Sarmah, Analysis of Problems related to Forensic Examination in Offences against Human Body and Need for Auditing, Vol.LVIII (3), IPJ& pp. 10-11(2011).

The forensic use of bio-information: ethical issues, Nuffield Council on Bioethics, http://nuffieldbioethics.org/wpcontent/uploads/The-forensic-use-of-bioinformation-ethical-issues.pdf (Accessed

Another concern is the autonomy of the forensic labs. In India, the forensic science laboratories are either under their home department or under the police department. They are under some departments and cannot maintain sovereignty. For an unbiased result, it is cardinal for the forensic laboratories to be independent without any interference from any department<sup>14</sup>.

Laboratories even lack basic infrastructure and forensic scientists. Lack of equipment, funding, and coordination between police and forensic experts are some of the significant challenges faced in this field. A report by the committee on Draft National Policy highlights that guidance, professionalism, research, and development, of forensic science, should be given weightage in the framework<sup>15</sup>.

Also, in the Malimath committee report<sup>16</sup>, it was suggested that the special importance must be given to the advancement of the forensic labs with all the necessary equipment. Also, some rules must be laid down to set the standards for DNA profiling and handling the sample for analysis. Verma commission came out for the issue of storage of DNA samples.

### **CONCLUSION**

It is an unconcealed fact that the role of forensic science and evidence has extensive importance in the justice system. Thanks to the advancement in science and technology, there has been rapid development in forensic science as well. But after all this also there has been less dependence on the scientific methodologies, especially in India. In India, there has been prominence on the incorporation of technologies in the field of investigation. Several commissions reports suggested that if courts consider the scientific method in delivering the judgments, it can bring fairness, which is the hallmark of democracy. But courts have been reluctant to consolidate forensic science in their system, majorly because of the experience of contaminating evidence and forged results. They prefer using the old, non-scientific methods for their purpose. Frequently there have been amendments in the laws to make ways for forensic science and modern technology but this hadn't helped much. Investigating officers are unskilled in the subject and the number of forensic scientists and experts adds fuel in the fire. This field of law and science is quite notorious and thus has always faced the issue of lack of employers.

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<sup>&</sup>lt;sup>14</sup> V. R. Dinkar, 'Forensic Scientific Evidence: Problems and Pitfalls in India', 79-84, IJFSP Vol. 3 (2015).

<sup>&</sup>lt;sup>15</sup> Peerzada Yasir Latif Handoo, Forensic Science: A Boon to Criminal Justice, Administration with Special Reference to State of J&K.,53 JIARM Vol.1 (2013)

<sup>&</sup>lt;sup>16</sup> Committee on Reforms of Criminal Justice System, Government of India, Ministry of Home Affairs, Report, Volume 1, March 2003.

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The law and the medical colleges must include forensic science as their subject and encourage students to move forward in the field. The government must take steps to spread awareness about the importance of forensic in the criminal justice system. Police, investigating officers, detectives, scientists must be trained in the progress of science and technology and the importance of such evidence. Doubtlessly, forensic evidence is more legitimate than any other auricular evidence. This field being a blessing to the criminal justice system, we must work upon the loopholes. We must ensure that everybody involved in the justice system uses the privilege of forensic science to the maximum of its potential.