

Content available at: <https://www.ipinnovative.com/open-access-journals>

IP International Journal of Forensic Medicine and Toxicological Sciences

Journal homepage: <http://www.ijfmts.com/>

## Original Research Article

## Institutional problems in the Indian judicial system relating to admissibility of scientific evidence: Causes and remedies

Sandhya Verma<sup>1</sup>, Anjum Parvez<sup>1,\*</sup><sup>1</sup>Dept. of Law, Law College Dehradun, Uttarakhand University, Dehradun, Uttarakhand, India

## ARTICLE INFO

## Article history:

Received 14-06-2021

Accepted 14-07-2021

Available online 24-07-2021

## Keywords:

Forensics

Evidence

Courts

State

## ABSTRACT

Problems with Justice are many although the object of every criminal Law is Justice, because Administration of Law always seeks to fair conclusion of Criminal Litigation. However, there are many stakeholders like Police, Court and State and also Prosecution and Accused in this process, who according to their interest make all out attempt to drag the course of Court proceeding towards the ends favourable to them. This article analyzes these sorts of institutional problems in the field of Admissibility of forensic evidence.

© This is an open access article distributed under the terms of the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### 1. Introduction

Objective of each and every law, generally, is justice to mankind which is, discreetly, based on foundation of truth, impartiality, independence and expertise of the persons concerned with the responsibility of maintaining the law and order and, of dispatching the justice. Any assistance in attaining the justice from any sector of any field is always welcome, be it from history, philosophy, social science or science and technology. It is generally believed that science and scientific methods & techniques are, generally, accurate and perfect because they are based on actual existing physical facts in this world. Science has been in existence since time immemorial but in earlier ages science and technology were almost independent activities, having no inter-link with each other.

Often centuries or decades would elapse before a scientific idea could have useful application. Engineering developed largely independent of science, and was guided by experience and tradition.<sup>1</sup> It is only in the modern age that science and technology have become closely interlinked, and the gap between them narrowed down

and rectified enormously later with emergence of diverse branches like chemical sciences, biological sciences, forensic sciences and many others that now, it is safe to say this modern age is indeed belongs to science and technology without any sort of skeptics. Role of forensic science has become vital now in the process of investigation conducted by the Investigation Officer of any crime and for proving a fact.

#### 1.1. Question of legality of scientific evidence before the court

However, as one can be convince about the exactness of science in unearthing the truth of any matter of fact under investigation, particularly in the criminal cases, the same is not the approach of the courts around the world as they don't rely as much upon the science and scientific methods as they are expected from the common masses and scientific community.

In the words of C. Michael Bowers "Several of forensic science thought for many years to be of sound basis have been criticized as being based on false assumptions, poor science, inaccurate techniques, and erroneous interpretations. Unfortunately, some of these

\* Corresponding author.

E-mail address: [sandhyaverma54@gmail.com](mailto:sandhyaverma54@gmail.com) (A. Parvez).

criticisms have turned out to be true as well founded".<sup>2</sup>

Central to this is an understanding of how the scientist's findings can be properly interpreted, evaluated and communicated to the court and how the court draws appropriate inferences from the expert opinion in reaching its decision on the ultimate issue. In doing so, the court must necessarily be satisfied that the science is valid and the evidence relevant to its deliberations.

Although, the concept of relevance has been enshrined in law across most jurisdictions for many years, in more recent times, questions have emerged around the world about wider aspects of the presentation of scientific evidence to the court and the role of the scientist as an expert witness. Many reasons including significant advances in scientific techniques, the need for investigators to deal with more complex and high profile crimes, increasing attention to these concerns and the ongoing responses of the legal profession and lawmakers to those events, are responsible for such skepticism relating to scientific findings and its status before court of law.

What is scientific knowledge and when is it reliable? These deceptively simple questions have been source of endless controversy. In the courtroom, the outcomes of criminal, paternity, environmental and medico-legal cases often turn on scientific evidence, the reliability of which may be hotly contested. Scientists have been arguing for years about the risk or non-risks of radon in the home, stilbestrol residues in food and other potential subtle causes of injury. Sometimes, as with D.N.A. testing in capital murder trials, the reliability of claims presented as scientific, become the matter of life and death of an accused person.<sup>3</sup>

One of the eminent judges of Supreme Court of India, Justice Markandey Katju wrote in his book that "Every institution is really the personnel manning to it, so, a High Court is not really a beautiful building or beautiful lawns but the judges who man the institution. Therefore, they should be the people of repute and integrity in conduct along with the legal knowledge they have inculcated."<sup>4</sup>

At the western world, it appears that the courts of those countries are ready enough to accept and admit the scientific evidence, although, problems regarding their admissibility are same but judicial dynamism is the tool which can be immensely effective in the matters of application of science in the courtrooms. While acknowledging the importance of science in the area of justice, Stephen Breyer, said that "In this age of science, science should expect to find a warm welcome, perhaps a permanent home, in our courtrooms. The reason is simple one. The legal disputes before us increasingly involve the principles and tools of science. Proper resolution of those disputes matters not just to the litigants, but also to the general public-those who live in our technologically complex society and whom the law must serve. Our decisions should reflect a proper scientific and technical understanding so that the law can respond to the

needs of the public".<sup>5</sup>

However, that is equally true that all the judges cannot be eminent in all the spheres of social life, including the science and criminal investigation. In 2013, reflecting on the controversial decision in *Bush v. Gore* in which the U.S. Supreme Court effectively awarded the presidency to Mr. George W. Bush, former Justice Sandra Day O'Connor said "Maybe the Court should have said. 'We are not going to take it, goodbye'".<sup>6</sup>

Judicial Tribunals usually exercise considerable caution around the world regarding the admissibility of scientific evidence in the form of expert opinions concerning some new phase of ever increasing wealth of scientific knowledge.<sup>7</sup>

Frequently, the amateurish and unconvincing, and in some instances the deliberately dishonest presentation of scientific testimony is responsible for a court's refusal to admit it as evidence. Likewise, the super-cautiousness, or the innate inability of a judge of the court, either due to his personal lack of scientific knowledge or because of the command of the law,<sup>8</sup> to appreciate the significance and importance of scientific evidence even when properly presented often accounts for the unduly deferred recognition as a scientific principle or its application

Forensic Science in criminal investigation and trials is mainly concerned with materials and indirectly through materials with men, place and time. Among men, the investigating officer is the most important person. In fact, it is he whose work determines the success or failure of the application of forensic science in the process of criminal case. If he fails to collect the relevant correct evidence, or allows to be contaminated, mutilated, switched, destroyed or does not provide correct samples for comparison in then forensic science laboratories, the findings of the forensic scientist will not only be useless; but they will be misleading and even go to the extent of helping the culprits.<sup>9</sup>

On the positive note, scientific methods and techniques identify and compare the materials. They establish the presence or absence of a link between the crime and the criminal, the victim, the weapon of offence etc.

In the Indian Judicial system, it appears that the it has an advantage over the U.S. Courts' approach because there are no parameters or standards so far laid down by the apex court, thus, it gives an additional extension of jurisdiction, but with the mist of confusion because here at the most courts can go on relying the principle of justice, equity and good conscience. Nonetheless, this approach become almost unworkable in those complicated cases where judge has to rely entirely on scientific facts and expert opinion.

Regarding the admissibility of scientific evidence in the court of the law, many institutional and systemic problems exist. Certification standards for crime data analysts and quality assurance programs for Forensic Science Laboratories<sup>10</sup> including the laboratories exclusively

concerned with criminal data analyses are generally, *condicio sine qua non* in the Indian courts.

The need for the application of science in the dissemination of justice is pressing. Some of the factors demanding the extensive use of science not only in the investigation process but also in the court rooms are i.e. social change, efficient and accurate evidence, reconstruction of crime scene etc.

**Social Changes:** Indian society is undergoing drastic social change at very high rate. Sizable industrial complex has sprung up now in almost all regions of India, and the rural area is on decline. The result is multidimensional, which includes modern rapid transport facilities, better medical science growth like plastic surgery, blood transfusion etc. at the technical front, while it also includes increase in the cases concerning the domestic violence, nuclear families (which are often vulnerable to crime) at the social front. The offender after committing the crime in any of such areas can escape to the unknown place which may be suitable for hiding away from the place of crime. The modern communication techniques are immensely useful for criminals. Satellite communication has been used to guide by these criminals, not only in commission of crimes in the country but globally.

But, the same techniques may be used by the Crime investigators in tracking out the criminals very effectively.

**Anonymity:** as the modern means of transportation become quick and fast, offenders often make themselves away from the hands of law by dodging the law enforcement agencies.

**Self-centered Attitude:** the individual is becoming self-centered. He, especially in cities, does not know even his next-door neighbor. Thus, even if the neighbours are killed, the murder comes into the light sometimes only when considerable time lapses. In the meanwhile, culprit fled away from the scene of crime and the evidence is also destroyed, obscured, becomes indistinct or diminished.

**Technical Knowledge:** Technical knowledge of an average man has increased tremendously in recent years and, undoubtedly, criminals are using these technical advancements in the field of science and technology. For example, plastic surgery which may altogether alters all the natural features of the human being from his personality. Further, the night vision appliances equipped with infra-red devices are generally used by the smugglers and terrorists in commission of serious crimes where they also target the security personnel of the armed forces.

**Better Evidence:** Forensics evaluate physical evidence which is objective. If a fingerprint found at the scene of crime, it can belong to only one person. If this person happens to be the suspect, he must account for his presence at the scene of crime.

## 1.2. Laws and rules of crime investigation in india

The laws and rules for the administration of criminal justice system are framed basically by the Indian Parliament, in India, except few minor laws which are enacted by the State legislatures. All laws need modification from time to time in the form of amendments, which are made by parliament whenever, it requires so to do. There are three main codes which deals with the criminal investigation and trials: one specifies the Procedural Mode (Code of Criminal Procedure, 1973), the second (Indian Evidence Act, 1872) specifies the varied nature, the mode of production of the evidence in civil and criminal cases and the value of evidence produced by the prosecution for or against an accused, the third (Indian Penal Code, 1860) delineates the nature of different types of offences and the punishment for them.

## 1.3. Suggestion

There is urgent and wide need for the application of forensic science in the criminal justice delivery system. The present scenario of crime investigation and prosecution of criminals, in India is rather dismal. A large percentage of the trials, even in those matters involving felony, ultimately, end in acquittals. The official figure for acquittal is very high. Unofficial figures are a even higher, above ninety percent. It is estimated that in India, investigative agency spends millions of rupees (Indian currency) on each trial, but often case culminated in acquittal of accused. Thus, not only the money stands wasted in acquittal cases but worse still a dangerous criminal goes scot-free and let loose on the society. The worst consequence of these frequent acquittals is that the citizen loses respect for law. They also embolden the criminals and escalate crime and multiply criminals.

## 2. Source of Funding

None.

## 3. Conflict of Interest

None.

## References

1. Katju JM. 2000. Available from: [http://14.139.60.114:8080/jspui/bitstream/123456789/12521/1/027\\_Law%20in%20the%20Scientific%20Era\\_The%20Theory%20of%20Dynamic%20Positivism%20%28132-135%29.pdf](http://14.139.60.114:8080/jspui/bitstream/123456789/12521/1/027_Law%20in%20the%20Scientific%20Era_The%20Theory%20of%20Dynamic%20Positivism%20%28132-135%29.pdf).
2. Michael C. Forensic testimony. vol. 23; 2014. p. 296. Available from: <https://www.elsevier.com/books/forensic-testimony/bowers/978-0-12-397005-3>.
3. Kenneth R, Foster PW, Huber. Whither indian judiciary. vol. 1; 1999. p. 308. Available from: <https://www.bloomsbury.com/in/whither-indian-judiciary-9789386141125/>.
4. Katju JM. Whither indian judiciary. vol. 175; 2018. Available from: <https://www.bloomsbury.com/in/whither-indian-judiciary-9789386141125/>.
5. Breyer S. is the Associate Judge of the U.S. Supreme Court. His Views are published in "Reference Manual on Scientific Evidence; 2011. p. 2. Available from: <https://www.fjc.gov/sites/default/files/2015/SciMan3D01.pdf>.

6. Garoupa N, Ginsburg T. Judicial Reputation A Comparative theory . vol. 14; 2015. p. 272. Available from: <https://press.uchicago.edu/ucp/books/book/chicago/J/bo21516068.html>.
7. Fred E. Inbau “Scientific Evidence In Criminal Cases. *J Criminal Law Criminology*. 1933;24(4):825–44.
8. Shukla VC. Section 83 of the Indian Penal Code, 1860, which provides that court shall presume conclusively about the innocence of child who committed any sort of crime if he is under seven years of age; 1974. Available from: <https://indiankanoon.org/doc/445276/>.
9. Sharma BR. Forensic Science in Criminal Investigation & Trials; 2015. p. 1819. Available from: <https://www.amazon.in/Forensic-Science-Criminal-Investigation-Trials/dp/9350354683>.
10. Paul C, Giannelli. Criminal Discovery, Scientific Evidence. *Vanderbilt Law Rev*. 1997;44:791–825.

### Author biography

**Sandhya Verma**, Assistant Professor

**Anjum Parvez**, Assistant Professor

**Cite this article:** Verma S, Parvez A. Institutional problems in the Indian judicial system relating to admissibility of scientific evidence: Causes and remedies. *IP Int J Forensic Med Toxicol Sci* 2021;6(2):43-46.