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# Unveiling the Truth: An In-Depth Look into the Forensic Criminal Justice System in India

Swarnali Barua<sup>a</sup>

<sup>a</sup>Assistant Professor of Law, ICFAI Law School, IFHE, Hyderabad, India

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The right to a fair trial is one of the most important fundamental rights guaranteed to the person under trial and the person who has suffered loss. This basic principle of law cannot be deprived of the parties at any cost. It is well settled that the guilt of the accused person in a criminal case has to be proved beyond reasonable doubt. And the standard of proof in a civil case is the balance of probability. Thus, to achieve fair trial and impartial justice, these principles must have been fulfilled by the courts without any compromise. The law of evidence is the same for both civil and criminal cases. However, this research is particularly related to the criminal justice delivery system. There are always direct and indirect evidence that leads the judges to conclude, but many times, nowadays, it has been observed that the culprit executes his work in such a manner, leaving bardly any trail behind him. The modern-day techniques and the advancement of new scientific tools and cyber mechanisms add a lot to it. But, the point of concern is whether our existing mechanism is also equally equipped to handle such newly evolving crimes. Many times, it has been observed that direct evidence cannot be found and the court needs to rely on circumstantial evidence. In that case, the use of forensic evidence can significantly add to it. Forensic science, akin to its scientific counterpart, has significantly influenced the criminal adjudication process, particularly in criminal trials. Undoubtedly, forensic science plays a pivotal role in assisting the judiciary in resolving issues that extend beyond the understanding of judges. However, contemporary challenges have led to substantial criticism directed at forensic scientists and legal stakebolders, raising concerns about reliability and the legal community's ability to scrutinise it effectively. Numerous issues and pitfalls undermine the overall trustworthiness of forensic science, beginning from the initial stages

of crime scene investigation and persisting throughout the trial phase. A crucial challenge within the legal realm revolves around the disparity between the scientific and legal communities, creating a disconnect in their spheres of interaction. Addressing these genuine problems is imperative at this juncture to avoid potential miscarriages of justice.

Keywords: forensic, crime, justice, evidence, court.

### INTRODUCTION

# "Law should not sit limply, while those who defy it go free and those who seek its protection lose hope."<sup>1</sup>

A strong judicial system, particularly in handling criminal cases, is crucial for effective governance. With advancements in science and technology, the landscape of crime and criminal behaviour has rapidly evolved. Technology-driven crimes crossing borders present significant challenges to law enforcement. In India, where the conviction rate is around 29%, there's a struggle to maintain trust and credibility in the Criminal Justice System<sup>2</sup>. Today, the judiciary often requires solid evidence for convictions, but eyewitness or oral evidence can be difficult to obtain and may have limitations. This lack of substantial evidence results in about 90% of cases pending in acquittal<sup>3</sup>.

To prevent a loss of public trust in the justice system, it's imperative to leverage modern Science & Technology to enhance its credibility. The cornerstone of criminal jurisprudence is proving guilt beyond reasonable doubt, requiring reliable and scientific evidence. Traditionally, the justice system relied heavily on eyewitness testimony, but this proved unreliable due to witness tampering or coercion. Resorting to harsh interrogation methods like the 'third degree' often led to unjust outcomes. However, with advancements in forensic science, there's a new avenue for resolving such issues. Forensic science applies scientific methods to legal matters, offering new ways to uncover the truth. Forensic evidence, ranging from biology to cyber forensics, provides

<sup>&</sup>lt;sup>1</sup> Jennison v Baker (1972) 2 All ER 997

<sup>&</sup>lt;sup>2</sup> Dr. Ishita Chatterjee, Law of Forensic Science (1st edn, Central Law Publication 2017)

<sup>&</sup>lt;sup>3</sup> R. Chakraborty, Criminal Jurisprudence (3rd edn, Kamal Publishers (Lawmann's) 2023)

crucial insights into criminal cases. Its role extends beyond criminal justice to civil, social, and family matters. Forensic scientists analyse various evidence left at crime scenes, aiding investigations and providing invaluable information for the justice system. Given its scientific nature, forensic science plays a vital role globally in the pursuit of justice. This has led to a proliferation of crime laboratories worldwide, including several in India, providing expert analysis in criminal matters.

#### SIGNIFICANCE OF FORENSIC SCIENCE IN THE JUSTICE SYSTEM

The integration of forensic science into legal practice has significantly aided in the apprehension of offenders and the exoneration of the innocent. Forensic science employs scientific methodologies to recover, analyse, and interpret pertinent materials and data in criminal investigations and legal proceedings. It serves as both an intelligence and evidentiary tool, facilitating the administration of justice. Through scientific investigation, a connection between the past and present of a crime, known as the 'Corpus Delecti' or 'body of the offence', is established. Forensic science has played a crucial role in resolving various cases in India, including high-profile ones like the Rajiv Gandhi Murder case, the Tandoor Murder Case in Delhi, and the conviction of Amir Kasav, a terrorist involved in the Mumbai attacks. Similarly, in the aftermath of the 9/11 terrorist attack on the WTO building in New York, scientific technologies such as DNA testing were instrumental in identifying the victims<sup>4</sup>. Thus, forensic science contributes significantly to delivering swift justice to contemporary society. However, forensic laboratories and experts encounter certain challenges. This paper aims to highlight some of the major shortcomings in our system regarding forensic scientific evidence and propose suggestions for improvement.

Crime Scene Investigation (CSI) is the pivotal and initial process in every criminal case. Its importance has been recognised by the Supreme Court in numerous cases. Forensic science plays a critical role in establishing the elements of a crime, identifying suspects, and determining the guilt or innocence of the accused. One of the primary responsibilities of the investigating

<sup>&</sup>lt;sup>4</sup> Nitin Kumar Gupta and Sweksha Bhadauria, 'Role of Forensic Science in Criminal Investigation' (2024) 6(2) IJFMR

officer at the crime scene is to conduct a thorough search for potential evidence with probative value. Care must be taken to prevent potential contamination of physical evidence during collection, packing, and forwarding processes. Measures should be implemented to preserve evidence and prevent tampering or damage.

The quality of evidence derived from forensic procedures depends primarily on the quantity and quality of forensic samples collected from the crime scene. Therefore, investigators must exercise utmost care. In legal proceedings, the evaluation of evidence hinges on the robustness of the chain of custody for forensic evidence. Effective communication of information is crucial to ensure a precise chain of custody, extending from the initial individual at the crime scene to police investigators and crime scene examiners. All items associated with the crime must undergo thorough documentation through photographs, video recordings, and detailed records. Unfortunately, in India, maintaining a proper chain of custody is often overlooked by investigating officers and the judiciary.

Another significant issue affecting forensic evidence is the handling of crime scenes by investigating authorities, often due to their lack of expertise in crime scene investigation. Unlike the U.S. or U.K., India lacks criminalistics expertise, leading to inadvertent disturbance and contamination of valuable evidence by the police<sup>5</sup>. Seeking assistance from relevant Forensic Science Laboratories (FSL) for thorough investigations beyond their expertise could be a viable solution. Moreover, deliberate contamination of crime scene materials, either through bribery or political influence, poses a serious concern aimed at shielding the culprit from liability<sup>6</sup>.

# ADMISSIBILITY OF FORENSIC EVIDENCE:

In India, although forensic science is regarded as a dependable field, there are numerous significant factors beyond those previously mentioned that impact the reliability of its application to specific cases. These factors include the absence of scientific certainty, limited research, the neglect of forensic science as a discipline, the lack of a well-established code of

<sup>&</sup>lt;sup>5</sup> VR. Dinkar, 'Forensic scientific evidence: problems and pitfalls in India' (2015) 3(2) IJFP

<sup>&</sup>lt;<u>http://dx.doi.org/10.19070/2332-287X-1500020</u>> accessed 15 November 2024

<sup>&</sup>lt;sup>6</sup> Nivedita Grover and Isha Tyagi, 'Development of Forensic Science and Criminal Prosecution-India' (2014) 12(4) IJSRP <<u>https://www.ijsrp.org/research-paper-1214.php?rp=P363493</u>> accessed 15 November 2024

ethics, inadequate certification for technical personnel, the absence of a national database for identifying evidence, the scarcity of error rate statistics for various techniques, and so forth.

The issue of lacking scientific certainty is not unique to India but is a widespread challenge globally within forensic science. Unlike many other scientific fields, forensic science does not offer absolute proof or certainty due to its close association with the legal system. In the pursuit of legal truth, certainty is not expected; instead, proof relies on probabilities. Trust in crime labs is limited compared to other research laboratories due to the unique challenges faced by forensic scientists. Working with samples that are often old, degraded, partial, distorted, blurred, or contaminated adds to these challenges. Moreover, forensic identification tests, which rely on matching samples, involve subjective evaluations by examiners, with the final interpretation resting with an independent person. Human involvement introduces the potential for errors in aligning different characteristics in two samples, further complicating the reliability of forensic findings.

Another significant challenge affecting reliability is the lack of research and a shortage of peerreviewed papers and validation studies in forensic science. Many forensic techniques are primarily applied based on their historical use in legal settings rather than rigorous scientific research<sup>7</sup>. For instance, fingerprint analysis, despite lacking a solid scientific foundation, is considered reliable by the judiciary due to its extensive historical use in court proceedings. This underscores the necessity for more extensive scientific inquiry and validation studies to enhance the credibility of forensic methods<sup>8</sup>. In criminal proceedings, forensic scientific evidence becomes part of the legal process through a presentation by both the prosecution and the defense. Various stakeholders handle it before it achieves the status of proof. Discussions are organised to understand the challenges in the sequence of different stakeholders involved in translating scientific evidence into proof.

<sup>&</sup>lt;sup>7</sup> Pawan Rana and Dr. Acharya Rishi Ranjan, 'Use of Forensic Science in Investigation of Crimes; a Critical Legal Study' (2020) JESC

<sup>&</sup>lt;sup>8</sup> Authority of the House of Lords, Forensic science and the criminal justice system: a blueprint for change, Authority of the House of Lords (2019)

Typically, in criminal cases, the prosecutor takes the lead in the presentation. Their responsibility is more significant than that of the defence. Despite representing the state, the prosecutor, unlike private parties, does not have a fiduciary relationship with the state. Their role is distinct from their adversary, with the duty not only to convict the real culprit but also to safeguard innocent individuals from wrongful convictions, preventing a serious miscarriage of justice. This is crucial for strengthening the criminal justice system based on the robust principles of the rule of law. Unfortunately, in India, a prevalent observation in prosecutions is that a majority of prosecutors are quick to conclude the guilt of the accused, irrespective of whether they have committed the offence. This tendency is more concerning than careless crimes, highlighting the need for a more cautious and just approach to legal proceedings.

In India, earlier Section 45<sup>9</sup> and Section 46<sup>10</sup> of the Indian Evidence Act 1872 gave a brief account of the admissibility of forensic evidence and Section 293 of the Code of Criminal Procedure, 1973 also dealt with the procedure to establish the report of the scientific expert before the court. Similarly, the newly introduced criminal laws also incorporate provisions for the admissibility of forensic evidence. The Bharatiya Shakshya Adhiniyam, 2023 (BNA) under Section 39 deals with the provision relating to an expert opinion, which was earlier in Section 45 of the Indian Evidence Act. Besides that, the Bharatiya Nagarik Suraksha Sanhita., 2023 (BNSS) also discusses the 'compulsory examination of a crime scene by a forensic expert where the prescribed punishment is more than seven years' under Section 176(3). In addition to that, the Identification of Prisoners Act 1920 and the Sale of Poisons Act 1919 are also some of the additional general legislations on forensic techniques<sup>11</sup>.

# COMPARISON WITH US, UK AND GERMANY

A notable contrast between Indian courts and those of other jurisdictions, particularly the U. and UK, lies in the level of confidence judges place in relying solely on scientific evidence for convictions. In the USA, there are two theories which are taken into consideration by the US

<sup>&</sup>lt;sup>9</sup> Indian Evidence Act 1872, s 45

 $<sup>^{\</sup>rm 10}$  Indian Evidence Act 1872, s 46

<sup>&</sup>lt;sup>11</sup> Sujay Chhikara, 'Role of Forensic Science in Criminal Investigation' (2020) 2(1) IJLSI <<u>https://ijlsi.com/role-of-forensic-science-in-criminal-investigation/</u>> accessed 15 November 2024

courts, namely the *theory of scientific technique* and the *theory of acceptance*. Apart from that, in 1975, the Federal Rules of Evidence were implemented. Rule 702<sup>12</sup> states that if scientific, technical, or professional expertise can aid the fact-finder in comprehending or determining a disputed fact, a qualified expert witness may provide their opinion or insights<sup>13</sup>. The Federal Rules of Evidence underwent revisions in 2000 following the formulation of the *Daubert*<sup>14</sup> Guidelines. Currently, scientific, technological, or specialised evidence, often referred to as 'Expert Testimony', is permissible under certain conditions: (a) the expert possesses appropriate qualifications, (b) their testimony aids the jury in resolving case matters or comprehending evidence, and (c) the expert's testimony is based on pertinent facts or data, follows valid methodologies, and is demonstrated effectively during trial proceedings.

Indian judges often exhibit hesitancy in fully trusting scientific evidence due to concerns about its reliability. In many cases involving forensic science evidence in Indian courts, a common approach is to adhere to the principle of prudence, known as 'Corroboration', which requires linking scientific evidence with other independent evidence in the case. Unlike some other jurisdictions, India lacks specific standards, either mandated by law or outlined by the Supreme Court's guidelines, for assessing scientific evidence. This difference highlights the cautious stance of Indian courts, which lean on corroborative evidence to support the admissibility and reliability of forensic science in legal proceedings.

In the United States, landmark cases such as *Daubert* v *Merrell Dow Pharmaceuticals, Inc.*<sup>15</sup> represent pivotal moments where the Supreme Court established comprehensive guidelines for evaluating scientific expert evidence. These guidelines were further refined in *Kumho Tire Co.* v *Carmichael*<sup>16</sup>. In *Daubert*, the court tasked trial court judges with the role of gatekeepers for scientific evidence. *Kumho* expanded this gatekeeping function to encompass all expert evidence, whether scientific or nonscientific. The *Daubert* case introduced a detailed checklist for

<sup>&</sup>lt;sup>12</sup> Federal Rules of Evidence, r 702

<sup>&</sup>lt;sup>13</sup> Ridita Dey, 'Law of Forensic Evidence in India and Abroad: A Comparative Study' (2021) 4(2) IJLMH <<u>http://doi.one/10.1732/IJLMH.26627</u>> accessed 15 November 2024

<sup>&</sup>lt;sup>14</sup> Nisha Kumari, 'Forensic Evidence and Their Admissibility' (2020) 2(2) IJLSI <<u>https://ijlsi.com/75-forensic-evidence-and-their-admissibility/</u>> accessed 15 November 2024

<sup>&</sup>lt;sup>15</sup> Daubert v Merrell Dow Pharmaceuticals, Inc [1993] 509 US 579, 583

<sup>&</sup>lt;sup>16</sup> Kumho Tire Co. v Carmichael [1999] 526 US 137, 140

assessing scientific expert evidence, covering aspects such as testability, peer review, error rate, and general acceptance within the relevant scientific community. Moreover, Associate Justice Stephen Breyer articulated the significance of science in legal proceedings in the *Joiner Case*<sup>17</sup>, particularly in addressing the constitutionality of experimental evidence. He expressed the view that in the contemporary era dominated by scientific advancements, courts should offer a receptive environment, possibly even a permanent place, for scientific findings. The rationale behind this assertion is evident: scientific concepts and methodologies are frequently employed in court cases. The equitable resolution of such cases holds significance not only for the involved parties but also for the broader populace, encompassing individuals residing in our technologically varied society, whom the law aims to serve and represent.

On the contrary, the legislation in the UK governing the admission of empirical evidence differs notably from that of the United States. While the United States judiciary demonstrates reluctance in applying strict criteria like the 'Reliability Test', English courts persist in employing Lawton, L.J.'s conventional common law standard of 'helpfulness', as demonstrated in the renowned case of  $R \ v \ Turner^{18}$ . In common law jurisdictions such as England and Wales, the admissibility of expert opinions hinges on four primary conditions: the provision of assistance, possessing relevant expertise, maintaining impartiality, and ensuring evidentiary reliability.

In this regard, the situation in Germany is also very interesting. In Germany, typically, the court is required to select an expert approved by a state-level public law agency, commonly referred to as *Kammern*<sup>19</sup>. These agencies maintain a registry of approved experts to facilitate the selection process and avoid potential challenges in identifying an appropriate specialist for a specific field. However, there are instances where the court may choose experts outside the *Kammern* registry, which is a common practice. In preliminary criminal investigations, the public prosecutor often engages experts. During trial proceedings, the plaintiff may demand expert testimony, and if the defendant's chosen expert is demonstrably more qualified than the court-

<sup>&</sup>lt;sup>17</sup> General Electric Co. v Joiner [1997] 522 US 136

<sup>&</sup>lt;sup>18</sup> *R v Turner (Terence)* [1975] 1 All ER 70

<sup>&</sup>lt;sup>19</sup> Thomas Saalfeld, 'The German Party System: Continuity and Change' (2010) 11(3) German Politics

<sup>&</sup>lt;<u>https://doi.org/10.1080/714001303</u>> accessed 15 November 2024

appointed one, the court cannot refuse this request<sup>20</sup>. The plaintiff also has the right to challenge an expert witness on various legal grounds. Before being approved by the *Kammern*, experts undergo a rigorous screening process assessing their personal and technical capabilities to produce reports and their level of expertise. Accreditation is valid for five years, during which accredited experts are regularly assessed by the *Kammern*. Retaining accreditation depends on maintaining standards, such as above-average experience in a specific area, the ability to produce expert articles, and adherence to impartiality and independence criteria. Both extensive experience and the ability to meet these standards are common qualifications among experts. Notably, expert registrations in Germany are not limited to criminal proceedings but extend across various fields.

The relevance of expertise in the relevant field is a key criterion for admitting expert testimony in Germany. German evidentiary proceedings are governed by the principle of free assessment of evidence. With a few constitutional exceptions, the court has full authority over the admission and evaluation of evidence. Unlike US courts, German courts do not adhere to specific evidentiary rules. For instance, hearsay testimony is admissible in German courts, and it is at the discretion of the judge to determine its credibility<sup>21</sup>. Additionally, rules such as the 'opinion law', which restricts lay witnesses from providing factual statements, and the 'best evidence rule', which requires original documents to prove the content of the text, are not applicable in German courts. Judges in Germany actively engage in the gathering of evidence, and their admissibility decisions are final. Expert opinions are typically submitted to the court in written form. If necessary, the court may summon the expert for a hearing to examine specific aspects of their opinion. Blood sampling for genetic fingerprinting or DNA analysis was not legally permitted in Germany until March 1997<sup>22</sup>. Initially, under the Code of Criminal Procedure (StPO), blood samples could only be collected from victims for criminal investigations. Section 81a of the StPO was primarily utilised to ascertain the blood alcohol content of the accused in cases of traffic violations, to determine criminal culpability at the time of the offence, and

<sup>&</sup>lt;sup>20</sup> Ibid

<sup>&</sup>lt;sup>21</sup> Ibid

<sup>&</sup>lt;sup>22</sup> Upasana Borah, 'Role of Forensic Science in Crime Scene Investigation' (2020) (6)7 IJARPF

<sup>&</sup>lt;<u>https://www.allresearchjournal.com/archives/?year=2020&vol=6&issue=7&part=C&ArticleId=6899</u>> accessed 15 November 2024

occasionally, to assess the suspect's fitness to stand trial<sup>23</sup>. The lack of specificity in Section 81a regarding the reasons for blood collection led to the common acceptance of gathering blood samples for genetic fingerprinting within law enforcement circles. Although both the Federal Supreme Court and Federal Constitutional Court acknowledged Section 81a as a suitable legal basis for blood sample collection for DNA analysis in criminal cases, constitutional and criminal law concerns were raised by various sectors. To address these concerns, a draft amendment to the Code of Criminal Procedure was proposed on March 2, 1995. The German Social Democratic Parliamentary Group (SPD) presented its draft, leading to the passage of StVAG 1997 on December 6, 1996, based on earlier drafts by the Federal Ministry of Justice and the SPD. However, it faced a veto due to the absence of explicit provisions prohibiting the establishment of gene databanks. Subsequently, in March 1997, the Parliamentary Act was amended, and the Administrative Offenses Act came into effect, addressing these concerns.

In India, the legal framework regarding evidence applies uniformly to both civil and criminal cases, although the degree of proof required may vary slightly between them. The mode of presenting evidence is governed by the same legislation. India operates under an adversarial system of justice administration, where medical evidence is typically admitted only when an expert provides oral testimony under oath in court. Earlier, the Criminal Procedure Code 1973 and the Indian Evidence Act 1872 are the primary procedural laws governing criminal trials in India. The Criminal Procedure Code outlined the procedures from the point of taking cognisance of a crime by the appropriate judicial magistrate to the delivery of the final verdict. The Indian Evidence Act regulates the presentation of evidence in civil or criminal cases by either the prosecution or defense. It covers the types of evidence and the relevance of facts admissible in court. To prevent evidence manipulation, the mandatory inclusion of audio-video recording during search and seizure operations is a key element of the Bharatiya Nagarik Suraksha Sanhita (BNSS) and the Bharatiya Sakshya Adhiniyam (BSA), replacing the Code of Criminal Procedure (CrPC) and Indian Evidence Act (IEA), respectively. Recently, the Union Cabinet approved the creation of campuses for the National Forensic Sciences University (NFSU), the establishment of Central Forensic Science Laboratories, and the enhancement of the

<sup>&</sup>lt;sup>23</sup> German Code of Criminal Procedure

NFSU's Delhi campus infrastructure, with an allocated budget of INR 2,254.43 crore for the 2024-2029 period. Under BNSS, Clause 105 mandates audio-video recording during search and seizure processes, including documenting the list of seized items and obtaining the signatures of witnesses. This transparency is expected to deter evidence tampering and ensure the presence of independent witnesses. The recordings must be submitted to the district magistrate, sub-divisional magistrate, or judicial magistrate of first class without delay, as explained by an official. Similarly, Clause 176(3) of the BNSS requires videography of forensic evidence collection, further promoting transparency and accountability in evidence handling while preventing irregularities and manipulation. Clause 176(1) also allows for audio-video recording of any statements made during police investigations. Aligning with the CrPC, the BNSS continues the mandatory videography requirement for police statements and mandates audio-video recording of statements for certain vulnerable victims with physical or mental disabilities under Clauses 173(1) and 183(6), according to officials from the Ministry of Home Affairs (MHA)<sup>24</sup>.

The admissibility of expert opinions was earlier governed by sections 45 to 51 of the Indian Evidence Act, falling under secondary evidence, and courts are not obligated to accept such evidence unless corroborated. However, in *Mahmood* v *State of UP*<sup>25</sup>, the Hon'ble Supreme Court defined the term 'Expert' and cautioned against convicting individuals solely based on expert testimony, emphasising the inherent dangers of such a practice. Despite the risks associated with prosecutions relying solely on expert evidence, Sections 53 and 53A of the then Code of Criminal Procedure, 1973, mandate the utilisation of expert evidence in such instances. In the case of *Selvi* v *State of Karnataka*<sup>26</sup>, the Supreme Court declared that the 'compulsory administration of forensic techniques like *polygraphy* is unconstitutional if conducted without the accused's consent, as it infringes upon Articles 20(3) and 21 of the Indian Constitution'. Apart from that, laboratories should be granted independent and autonomous status, free from influence by the police and other investigative authorities. However, the forensic sector in India is often

<sup>&</sup>lt;sup>24</sup> Rahul Tripathi, 'New criminal laws hinge on technology and forensic throughout all stages' *Economic Times* (02 July 2024) <<u>https://economictimes.indiatimes.com/news/india/new-criminal-laws-hinge-on-technology-and-forensic-throughout-all-stages/articleshow/111412388.cms?from=</u>> accessed 15 November, 2024

<sup>&</sup>lt;sup>25</sup> Mahmood v State of UP AIR 1975 SC 542

<sup>&</sup>lt;sup>26</sup> Selvi v State of Karnataka (2010) 7 SCC 263

neglected by the government, lacking sufficient financial support. The Malimath Committee recommended amending sections of the Criminal Procedure Code to incorporate forensic science principles, such as enacting specific laws to regulate genetic information collection and establishing guidelines for crime scene investigation.

### CONCLUSION AND SUGGESTIONS

This paper outlines the standards by which criminal prosecutions involving forensic evidence are handled by the judiciary in India and across different countries. In the United States, the Judge must assess the validity, credibility, effectiveness, and appropriateness of expert testimony when determining its admissibility. In the United Kingdom (UK), the criteria for admitting expert testimony include support, appropriate competence, impartiality, and evidentiary reliability. In Germany, the admissibility of expert testimony is contingent upon expertise in the subject field, and German courts operate under the principles of free assessment of proof, where the court has complete jurisdiction over the admission and evaluation of evidence. Unlike US courts, German courts allow hearsay testimony, and judges hold the authority to determine the evidentiary value of such testimony. Additionally, statutes such as the *opinion law* and the *best proof rule* are not applicable in German courts. In India, the relevance theory governs proof admissibility, as outlined in the Indian Evidence Act 1872 (now Bharatiya Shakshya Sanhita), which mandates evidence to be provided only for specific facts and relevant matters. Forensic evidence is recognised based on its significance and admissibility in Indian courts, with relevance being a crucial criterion for its recognition.

Efforts should be made to enhance forensic science in India, including creating a national DNA database to combat terrorism, establishing well-equipped laboratories for DNA analysis, and increasing awareness among the public, prosecutors, judges, and police. Plans to establish a Forensic Council to integrate laws such as the Evidence Act, Information Technology Act, and Criminal Procedure Code with forensic science have been proposed to the Ministry of Home Affairs. Additionally, recent rulings, like that of the Allahabad High Court in Jose Luis *Quintanilla Sacristan* v *State of UP*<sup>27</sup>, have affirmed the admissibility of reports from State Forensic

<sup>&</sup>lt;sup>27</sup> Jose Luis Quintanilla Sacristan v State of UP Crim App No 757/2018

Science Laboratories as evidence, eliminating the need to call laboratory directors to authenticate them. Addressing ongoing issues in forensic science and medical jurisprudence in India, the Bar Council of India should include forensic science and medical jurisprudence as courses, particularly for students specialising in criminal law. Bar Associations could also offer specialised training programs in these areas for practising lawyers, enhancing their proficiency in handling cases involving forensic evidence and medical aspects.