

## “ISSUES AND CHALLENGES IN THE PRACTICAL APPLICABILITY OF MEDICAL JURISPRUDENCE: A STUDY IN REFERENCE TO CRIMINAL JUSTICE ADMINISTRATION”

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### Abstract

Medical jurisprudence plays a pivotal role in bridging the disciplines of law and medicine, particularly within the framework of criminal justice administration. It provides scientific and medical evidence essential for investigation, adjudication, and administration of justice. However, despite its importance, the practical applicability of medical jurisprudence in India faces numerous challenges, including lack of infrastructure, inadequate training, procedural delays, ethical dilemmas, and poor coordination between medical and legal professionals. This research paper critically examines these issues and highlights the systemic gaps that hinder the effective utilization of medical jurisprudence in criminal proceedings. The paper further suggests reforms aimed at strengthening medico-legal practices to ensure fair and efficient justice delivery.

**Keywords:** Medical Jurisprudence, Criminal Justice, Medico-Legal Evidence, Forensic Science, Legal Challenges

### 1. Introduction

Medical jurisprudence, commonly referred to as forensic medicine, represents a vital interdisciplinary field that integrates principles of medical science with the requirements of law. It primarily involves the application of medical knowledge to assist in the administration of justice, particularly within the domain of criminal law. The scope of medical jurisprudence is wide-ranging and includes areas such as post-mortem examinations (autopsies), assessment and documentation of injuries, toxicological analysis of poisons and drugs, forensic psychiatry, and the examination of victims and accused persons in cases of sexual offences. By providing objective, scientific, and expert opinions, medical

jurisprudence strengthens the evidentiary framework of the criminal justice system and aids courts in arriving at just and reasoned decisions.

In modern legal systems, where the emphasis is increasingly placed on evidence-based adjudication, medical jurisprudence has emerged as an indispensable component. It ensures that judicial determinations are not based solely on oral testimonies or circumstantial evidence but are supported by scientific findings that enhance reliability and accuracy. Medical evidence often serves as expert evidence and is relied upon to corroborate or contradict other forms of evidence presented before the court. For instance, the opinion of a forensic expert

regarding the cause and time of death can significantly influence the direction of a criminal investigation as well as the outcome of a trial. Similarly, injury reports prepared by medical practitioners can help determine the nature of an offence, whether it is simple, grievous, accidental, suicidal, or homicidal.

The integration of medical science into criminal justice administration thus promotes objectivity and reduces the likelihood of wrongful convictions or acquittals. It also plays a crucial role in safeguarding the rights of both victims and accused persons by ensuring that findings are based on empirical data rather than conjecture. In cases involving violent crimes, sexual offences, poisoning, and mental illness, medical jurisprudence becomes particularly significant. It not only aids in establishing the facts of the case but also assists in interpreting complex issues such as consent, intoxication, insanity, and the physical and psychological impact of criminal acts.

In the Indian context, the importance of medical jurisprudence is further accentuated by the diversity and complexity of criminal cases. India's criminal justice system relies heavily on medico-legal evidence in a wide array of cases, including homicide, assault, rape, custodial deaths, and cases involving alleged medical negligence. Post-mortem examinations help determine the cause, manner, and time of death, which are critical in distinguishing between natural and unnatural deaths. In cases of physical assault, the medical examination of injuries provides crucial insights into the weapon used, the force applied, and the possible sequence of events. In sexual offence cases, medico-legal examinations of victims and accused persons are essential for collecting biological evidence, documenting injuries, and supporting the testimony of the victim.

Toxicology, another important branch of medical jurisprudence, plays a significant role in detecting and analyzing poisons, drugs, and other toxic substances in the human body. This

is particularly relevant in cases of suspected poisoning, drug abuse, and accidental or intentional ingestion of harmful substances. Forensic psychiatry, on the other hand, assists courts in assessing the mental condition of accused persons, determining their fitness to stand trial, and evaluating criminal responsibility in cases involving the defence of insanity. Thus, medical jurisprudence serves as a bridge between medicine and law, facilitating the effective functioning of the criminal justice system.

Despite its critical importance, the practical applicability of medical jurisprudence in India is beset with numerous challenges and limitations. One of the primary issues is the lack of adequate infrastructure and resources in many parts of the country. Forensic laboratories are often overburdened, understaffed, and ill-equipped, leading to delays in the analysis of evidence and the submission of reports. Similarly, many government hospitals, particularly in rural and semi-urban areas, lack the necessary facilities and trained personnel to handle medico-legal cases effectively. This not only affects the quality of medical evidence but also undermines its reliability in court proceedings.

Another significant challenge is the inadequate training and awareness among medical professionals regarding medico-legal procedures. Many doctors receive limited exposure to forensic medicine during their medical education and are not sufficiently trained to handle medico-legal cases with the required precision and diligence. As a result, errors in documentation, improper preservation of evidence, and inconsistencies in medical reports are not uncommon. These deficiencies can weaken the prosecution's case and, in some instances, lead to the miscarriage of justice.

Furthermore, there exists a lack of effective coordination between medical professionals, law enforcement agencies, and the judiciary. The absence of a streamlined and integrated

approach often results in procedural lapses, miscommunication, and delays in the investigation and trial process. Medical experts are also required to appear in court to provide testimony, which can be a daunting and time-consuming task. The adversarial nature of court proceedings and the rigorous cross-examination by defence counsel may discourage medical practitioners from actively engaging in medico-legal work.

Ethical dilemmas also pose a significant challenge in the practice of medical jurisprudence. Medical professionals are often required to balance their duty of confidentiality towards patients with their legal obligation to report certain cases to the authorities. Issues relating to informed consent, especially in cases involving sexual offences or mentally ill patients, further complicate the situation. The absence of clear and uniform guidelines in certain areas adds to the ambiguity and uncertainty faced by practitioners.

In addition to these challenges, delays in the criminal justice system further exacerbate the problem. The time taken for the completion of investigations, submission of forensic reports, and disposal of cases can be considerable, thereby affecting the relevance and impact of medical evidence. In some cases, prolonged delays may result in the degradation or loss of crucial evidence, thereby weakening the overall case.

In light of these issues, it becomes imperative to critically examine the practical challenges associated with the application of medical jurisprudence in India. This paper seeks to explore these challenges in detail, with a view to identifying the gaps in the existing system and suggesting measures for improvement. By addressing these issues, it is possible to enhance the effectiveness of medical jurisprudence and ensure that it continues to play a vital role in the fair and efficient administration of criminal justice.

## 2. Role of Medical Jurisprudence in Criminal Justice Administration

Medical jurisprudence occupies a central and indispensable position in the effective functioning of the criminal justice administration. As an interface between medical science and law, it ensures that legal decisions are grounded in scientific reasoning and empirical evidence. In criminal proceedings, where the determination of guilt or innocence often hinges upon factual accuracy, medical jurisprudence provides an objective and reliable foundation for judicial adjudication. It assists investigative agencies, prosecutors, defence counsel, and the judiciary at various stages of the criminal process, from the initial investigation to the final verdict.

One of the most significant contributions of medical jurisprudence lies in the **determination of the cause of death** through post-mortem examinations. In cases involving suspicious, unnatural, or unexplained deaths, autopsies conducted by qualified forensic experts help establish the precise cause, manner, and time of death. This becomes particularly crucial in distinguishing between homicidal, suicidal, accidental, and natural deaths. For instance, the presence of specific injury patterns, internal hemorrhages, or signs of poisoning can provide vital clues regarding the circumstances leading to death. The findings of a post-mortem report often guide the direction of the investigation and play a decisive role in court proceedings. Without such scientific examination, it would be exceedingly difficult to ascertain the truth in many criminal cases.

Another important function of medical jurisprudence is the **assessment and classification of injuries**. In offences involving physical harm, such as assault, grievous hurt, or attempted murder, the medical examination of the victim is essential for documenting the nature, extent, and severity of injuries. Medical practitioners are required to determine whether the injuries are simple or grievous, the type of weapon used, and the probable manner in

which the injuries were inflicted. Such assessments help in correlating the medical findings with the statements of witnesses and the accused. Moreover, they assist courts in determining the appropriate charges and the degree of culpability of the offender. The distinction between accidental, self-inflicted, and homicidal injuries is particularly significant, as it directly impacts the outcome of the case.

Medical jurisprudence also plays a vital role in **sexual offence cases**, where medico-legal examination is crucial for both the victim and the accused. In cases of rape, sexual assault, or offences under special legislations such as the Protection of Children from Sexual Offences Act, timely medical examination helps in the collection of biological evidence, such as semen, blood, hair, and other trace materials. It also involves the documentation of physical injuries, signs of resistance, and psychological trauma suffered by the victim. The examination of the accused is equally important for establishing links between the accused and the offence. Medical evidence in such cases serves as corroborative evidence, supporting the testimony of the victim and strengthening the prosecution's case. Proper handling and preservation of evidence are critical to ensure its admissibility and reliability in court.

The field of **toxicological analysis** constitutes another essential aspect of medical jurisprudence. Toxicology involves the detection, identification, and analysis of poisons, drugs, and other toxic substances within the human body. This is particularly relevant in cases of suspected poisoning, drug overdose, and intoxication. Forensic experts analyze bodily fluids and tissues to determine the presence and quantity of toxic substances, thereby helping to establish whether the poisoning was accidental, suicidal, or homicidal. Toxicological reports are also important in cases involving driving under the influence of alcohol or drugs, where the level of intoxication can have significant legal implications. The scientific precision of toxicological analysis enhances the credibility

of evidence and aids in establishing causation.

In addition to physical and chemical examinations, medical jurisprudence encompasses **mental health evaluation**, which is crucial in determining the criminal responsibility of an accused person. Forensic psychiatry deals with the assessment of an individual's mental state at the time of the commission of the offence, as well as their fitness to stand trial. In cases where the defence of insanity is raised, medical experts are required to evaluate whether the accused was capable of understanding the nature and consequences of their actions. Such evaluations are essential in ensuring that individuals suffering from mental disorders are treated in accordance with legal and humanitarian principles. The role of medical jurisprudence in this context is not only to assist the court in determining liability but also to safeguard the rights of mentally ill individuals within the criminal justice system.

Medical evidence derived from these various branches of forensic medicine is recognized as **expert evidence** under Section 45 of the Indian Evidence Act, 1872<sup>1</sup>. This provision allows courts to rely on the opinions of persons specially skilled in fields such as medicine, science, or art when forming an opinion on matters requiring specialized knowledge. The testimony of medical experts thus holds considerable evidentiary value and often plays a **o** role in influencing judicial outcomes. However, it is important to note that while medical evidence is highly persuasive, it is generally considered corroborative in nature and must be evaluated in conjunction with other evidence on record.

The significance of medical jurisprudence in criminal justice administration extends beyond the courtroom. It contributes to the overall integrity and efficiency of the justice delivery system by promoting scientific investigation methods and reducing reliance on unreliable or coerced confessions. It also enhances public confidence in the legal system by ensuring that

decisions are based on objective and verifiable evidence.

In conclusion, medical jurisprudence serves as a cornerstone of modern criminal justice administration. Its role in determining the cause of death, assessing injuries, handling sexual offence cases, conducting toxicological analysis, and evaluating mental health is indispensable for the fair and effective adjudication of criminal cases. By providing scientific validation to legal processes, it not only strengthens the evidentiary framework but also ensures that justice is administered in a rational, objective, and humane manner.

### 3. Issues in the Practical Applicability of Medical Jurisprudence

#### 3.1 Lack of Infrastructure and Resources

One of the major challenges is the inadequate availability of forensic laboratories, modern equipment, and trained personnel. Many government hospitals lack proper medico-legal facilities, leading to compromised quality of evidence<sup>2</sup>.

#### 3.2 Delay in Forensic Reports

Delays in obtaining forensic and post-mortem reports often hamper criminal trials. The backlog in forensic laboratories results in prolonged investigations and denial of timely justice<sup>3</sup>.

#### 3.3 Inadequate Training of Medical Professionals

Medical practitioners often lack proper training in medico-legal procedures. This leads to errors in documentation, improper evidence collection, and weak testimony in courts<sup>4</sup>.

#### 3.4 Poor Coordination Between Legal and Medical Authorities

There is a significant communication gap between police, doctors, and judicial officers. Lack of coordination results in improper handling of evidence and procedural lapses<sup>5</sup>.

#### 3.5 Ethical and Legal Dilemmas

Doctors frequently face ethical dilemmas,

especially in cases involving consent, confidentiality, and reporting obligations. Balancing professional ethics with legal duties remains a challenge<sup>6</sup>.

### 3.6 Hostile Court Environment

Medical experts often find court proceedings intimidating and adversarial. Cross-examination by lawyers may discourage doctors from actively participating in medico-legal cases<sup>7</sup>.

## 4. Challenges in Medico-Legal Evidence

### 4.1 Reliability and Admissibility

Courts sometimes question the reliability of medical evidence due to inconsistencies or lack of proper documentation. Poorly maintained records weaken the evidentiary value<sup>8</sup>.

### 4.2 Chain of Custody Issues

Maintaining the integrity of evidence from collection to presentation is critical. Any break in the chain of custody can render evidence inadmissible<sup>9</sup>.

### 4.3 Standardization Problems

There is a lack of uniform standards in medico-legal practices across different states and institutions in India<sup>10</sup>.

## 5. Legal Framework Governing Medical Jurisprudence in India

Medical jurisprudence is governed by various laws, including:

- Indian Penal Code, 1860
- Code of Criminal Procedure, 1973
- Indian Evidence Act, 1872
- Protection of Children from Sexual Offences Act, 2012
- Mental Healthcare Act, 2017

These laws provide the legal basis for medico-legal procedures, but implementation remains inconsistent.

## 6. Judicial Approach

Indian courts have emphasized the importance of medical evidence in several cases. However, they have also cautioned against over-reliance on it when it conflicts with ocular evidence.

For instance, courts have held that medical evidence is **corroborative in nature**, and not always conclusive<sup>11</sup>. This highlights the need for accurate and reliable medico-legal practices.

## 7. Suggestions and Recommendations

### 7.1 Strengthening Infrastructure

- Establish more forensic laboratories
- Upgrade hospital facilities
- Provide modern equipment

### 7.2 Training and Capacity Building

- Mandatory medico-legal training for doctors
- Regular workshops for police and judicial officers

### 7.3 Standardization of Procedures

- Develop uniform guidelines for medico-legal cases
- Ensure proper documentation and reporting

### 7.4 Improving Coordination

- Create integrated systems between police, hospitals, and courts
- Use digital platforms for information sharing

### 7.5 Legal Reforms

- Fast-track forensic report processes
- Provide legal protection to medical professionals

### 7.6 Awareness and Sensitization

- Educate medical practitioners about legal responsibilities
- Sensitize judiciary about scientific aspects

## 8. Conclusion

Medical jurisprudence stands as a cornerstone in the administration of criminal justice, providing the much-needed scientific basis for legal decision-making. Its contribution to the justice delivery system is both foundational and transformative, as it ensures that conclusions drawn in criminal cases are supported by objective, empirical, and verifiable evidence rather than mere conjecture or unreliable testimony. In an era where the complexity of crimes is steadily increasing, the role of medical jurisprudence has become even more significant in ensuring accuracy, fairness, and credibility in judicial outcomes.

Despite its undeniable importance, the practical applicability of medical jurisprudence in India continues to face a multitude of challenges. One of the most pressing issues is the lack of adequate infrastructure. Forensic laboratories are often overburdened, under-equipped, and unevenly distributed across the country, leading to disparities in access to quality forensic services. Similarly, many healthcare institutions, especially in rural and semi-urban areas, lack the necessary facilities and trained personnel to effectively handle medico-legal cases. This infrastructural inadequacy not only compromises the quality of medical evidence but also undermines its reliability and admissibility in courts.

Procedural delays further exacerbate the problem. The backlog in forensic laboratories, delays in conducting post-mortem examinations, and the late submission of medico-legal reports significantly hinder the progress of criminal investigations and trials. Justice delayed, particularly in criminal cases, often results in justice denied, as the evidentiary value of medical findings may diminish over time. Such delays also contribute to prolonged incarceration of undertrial prisoners and increased pendency of cases, thereby burdening the already strained criminal justice system.

Another critical challenge lies in the lack of

adequate training and awareness among medical professionals. Although forensic medicine is a part of medical education, the practical exposure and specialized training required for handling medico-legal cases are often insufficient. This leads to errors in documentation, improper collection and preservation of evidence, and inconsistencies in medical reports. These shortcomings can weaken the prosecution's case and, in some instances, lead to the acquittal of guilty individuals or wrongful implication of the innocent.

Systemic inefficiencies, including poor coordination between medical practitioners, law enforcement agencies, and the judiciary, further impede the effective application of medical jurisprudence. The absence of a streamlined and integrated approach often results in miscommunication, duplication of efforts, and procedural lapses. Additionally, the adversarial nature of court proceedings and the reluctance of medical professionals to participate in lengthy and complex legal processes pose practical difficulties in securing expert testimony.

Addressing these challenges requires a comprehensive and multi-disciplinary approach. Legal reforms are essential to streamline medico-legal procedures, ensure timely submission of reports, and provide adequate protection and support to medical professionals involved in legal proceedings. Technological advancements, such as the establishment of modern forensic laboratories, digitization of records, and adoption of advanced analytical techniques, can significantly enhance the efficiency and accuracy of medico-legal investigations. Furthermore, institutional strengthening through capacity building, regular training programs, and the development of standardized protocols can improve the quality and consistency of medical evidence.

Equally important is the need to foster better coordination and collaboration among all

stakeholders in the criminal justice system. Integrated frameworks that facilitate communication and cooperation between medical experts, police authorities, and judicial officers can help in minimizing delays and ensuring the proper handling of evidence. Sensitization programs for both legal and medical professionals can also play a vital role in bridging the gap between these two disciplines.

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