

Original Research Article

LEGAL ASSESSMENT OF FORENSIC PATHOLOGICAL FINDINGS: A CROSS-SECTIONAL STUDY

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ABSTRACT

Background: Medical expert witness plays pivotal role in criminal courts. His/her testimony assists court in deciding innocence or guilt of accused. Although, it does not override the direct evidence but still, medical evidence speaks for the decedent in the court of law. Hence, it becomes necessary to understand the process of Justice delivery and search for the area of improvement for any doctor.

Material and Method: In that context, this study was conducted to evaluate the role of medical expert in legal investigation of death. Summon register entries such as crime number, court case number, name of court/accused, FIR number etc. were used to access and evaluate each judgement copy from the website of District e-courts.

Results: The results were obtained and grouped using simple descriptive statistical method. Total of 138 cases comprised of 71 registered under Indian Penal Code 304A, 62 under section IPC 302, 3 under section IPC 306 and 2 were found under section 304B of IPC. As per trial court orders, 57 of negligence cases, 38 from Murder and 1 from abetment of suicide were found to be non-guilty of the offences.

Conclusion: Expert medical witness plays corroborative role in prove and disproving medical fact in question. This novel study will provide an insight to look beyond mere medical evidence deposition.

Keywords: expert witness; testimony; medical evidence; forensic pathology.

INTRODUCTION

The Indian Medical Council act, 1956 under the section 15 clause (c) & (d) grants the right to every qualified registered medical practitioner to sign or authenticate any medical certificate which is required by any law. Subsequently, it entitles to give evidence at any inquest or any court of law as an expert; under section 45 of Indian Evidence act, 1872 (1 of 1872) or any matter relating to medicine.^[1,2] This special recognition of being a 'medical expert' is also preserved for future practitioners, according to the recently updated National Medical Commission act.^[2] Graduate and postgraduate doctors are allowed to practice medicine until they are enrolled in the Indian medical register.

The Indian law treats medical graduates and post-graduates the same when it comes to expert opinions.^[3] The doctor being the expert of medical science, assists judiciary to form an opinion over

observations made based on his expertise in the field. Application of medical and para-medical knowledge for administration of justice in the court of law is popularly known as Forensic Medicine. The Indian medical students learn basic medicolegal knowledge from the subject 'Forensic Medicine and Toxicology' during their training. The National Medical Commission through its reformed Competency Based curriculum, expects every graduating doctor to become familiar and well verse of the common medico-legal aspects in disposing their duties towards public, investigation agencies and to the justice. It includes clinical forensic medical examination like, age estimation, injured, survivor and accused of sexual offences, poisoning and drunkenness cases, while from Forensic Pathological examinations such as, conduction of medico-legal autopsies and skeletal remains. The students should be exposed to the legal procedure during their training, to make them confident and well versed.^[4]

An opinion is defined as a view or judgment formed about something, not necessarily based on fact or certainty.^[5] It is subjective experience (belief, emotions or expressions) depends upon one's own perception. The opinions cannot be proven right or wrong but only shared and defended. But, when the opinions are made over any facts or observations with the background of special knowledge, expertise in that field, it becomes difficult to counteract. This forms the basis of admissibility of any medical evidence at trial. The Indian criminal justice system adopts 'adversarial system' where, two opposing parties present their case to an impartial magistrate or judge, and prosecution is bound to prove the guilt beyond any reasonable doubt. Lastly, the court then decides the outcome. It is characterized by the parties' control over gathering evidence and presenting arguments, later in trial after completion of hearing from both sides, with judge ensuring fairness and adherence to the criminal procedure. Even though typically called by the prosecution, the medical experts neither advocates for the prosecution nor adversaries of the defence.^[6,7]

Thus, they are the independent expert witnesses whose opinions are always same regardless of the party calling them to testify and their evidence is regarded as 'corroborative evidence'. It means, the medical evidence is acceptable, if it supports prosecution factual evidence and withstands cross examination beyond reasonable doubt based on clear presentation of observed facts, their interpretation and the possibilities within the framework of medical science and his knowledge, skills, experience. Likewise, if the medical evidence contradicts the prosecution and supports the defence's fact witnesses, it can also be accepted but in such cases, decisions may rely on circumstantial evidence or other credible prosecution witnesses.

The doctor can be thrust, often unwillingly, into a foreign environment where the flow of information is tightly controlled by complex rules of evidence which have been shaped by volumes of case law with which the expert witness cannot expect to be familiar.^[7,8] But, Dr. J. B. Modi's textbook through his court-room experience, has been inspiring generations to ease this pressure.^[9] It is worth to mention that few of lawyers, retired judges and forensic science experts have expressed their views over medical expert witness in their work.^[10-13] The obvious reasons for insignificant studies by the doctors over this topic, may be lack of time from their regular duties, awareness towards their right as expert witness.

Indian Government's law and Judiciary department has been running a website for the public since 2013, where general timeline proceedings and judgements of any district courts are accessible to the public.^[14] Here, combination of following information pertaining to case such as the state, district, court complex, FIR number, concerned police station, name/s of petitioner/respondents, case type, court case and filing number are needed.

The present study aimed at to review the role of medical expert witness in dispensing the justice and how judiciary deduce their opinions for establishments of facts within the different criminal cases at trial, pertaining to the investigation of death. In addition, it shows how medical opinion can affect justice delivery in particular circumstances.

MATERIAL AND METHOD

Present cross sectional observational study was conducted at the department of Forensic Medicine and Toxicology in June and July 2025. The author attended various trial courts in the Bastar region of Chhattisgarh to give testimony. The entries of the summon register (Crime number, Court case file number, name of accused/s, and criminal sections applied) maintained at the department was used to study each case. Using this information, cases that were disposed, and had judgement copies available online at the High courts and District e-courts website or mobile application, maintained by National Informatics Centre were selected. The cases those were not decided and/or judgement copy is not uploaded during the study period, were excluded. Each Judgement copy was then downloaded and evaluated. Author's role in each case then identified by using parameters such as, criminal charges as per I.P.C. (Indian Penal Code) and primary case details. Case-wise common questions asked at Examination in Chief, Cross examination, Re-examination and by presiding officers (Judges and Magistrates) were searched. Similarly, the author responses were searched and mentioned if any. Lastly, Case-wise data was subjected for making descriptive statistics.

RESULTS

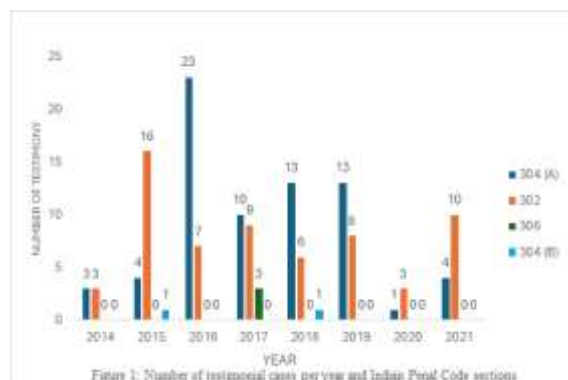
The cases registered under section 304 (A) of Indian Penal Code (I.P.C.) were 71 (51.4%) out of 138 Court appearances in the eight years period and 62 (44.9%) belonged to section 302 of I. P. C. as shown in Figure 1. As shown in Table 2, autopsy findings, chemical analysis and histopathology reports revealed three cases as 'Natural' among, which were registered as 'Murder' cases. Out of 8 cases, 2 each were found to be decomposed and with bony injuries. Remaining 4 cases were of burnt bones. Among 3 strangulation cases, two were with the use of ligature and 1 of Throttling. Road accidents include from head injury (n =33), blunt trauma to trunk (n=19) and trauma to limbs (n=4). Twelve cases were reported to be falls from the height workplace. Three electrocution cases were reported to be charged with framed against Employer. The Medical negligence case involved death of a neonate and of Drowning due to negligent act of a boatman. Under section 304 (B) of I.P.C, one case of Zinc phosphide poisoning and another was of Flame Burns. Hanging, Drowning and Organophosphorus compound Poisoning formed three cases registered under I.P.C 306.

| Table 1: Case-wise data of Hon'ble Courts | | | | | | |
|---|----------------|---------------------------|---------------------------------|---------------------------------|------------------------------|-------------|
| Number of cases at Trial Courts Year of testimony | Sessions Court | Additional Sessions Court | Chief Judicial Magistrate Court | First Judicial Magistrate Court | Class Juvenile Justice Board | Total Cases |
| 2014 | 2 | 1 | 0 | 3 | 0 | 06 |
| 2015 | 7 | 10 | 2 | 1 | 1 | 21 |
| 2016 | 4 | 3 | 7 | 14 | 2 | 30 |
| 2017 | 5 | 4 | 3 | 10 | 0 | 22 |
| 2018 | 3 | 4 | 2 | 11 | 0 | 20 |
| 2019 | 2 | 6 | 5 | 8 | 0 | 21 |
| 2020 | 0 | 3 | 1 | 0 | 0 | 04 |
| 2021 | 4 | 6 | 1 | 3 | 0 | 15 |
| Total | 27 | 37 | 21 | 50 | 3 | 138 |

| Table 2: Depicts Case-wise data under section 302 of Indian Penal Code Homicidal Death Cases as per Inquest (n = 62) Causes of Death at PM Report | | | | | | | |
|--|---|---|-------------------------------|-----------------------------------|----------------|--|-------|
| Year | Sharp force trauma (Stab & Chop Wounds) to body | Blunt force Trauma to Head, Neck, Trunk & Limbs | Firearm Injury & Blast Injury | Strangulation (Manual & Ligature) | Natural Causes | Decomposed/ Skeletal remains, Bony Injury, No bony injury, No opinion can be given | Burns |
| 2014 | 3 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2015 | 5 | 4 | 5 | 0 | 0 | 2 | 0 |
| 2016 | 0 | 4 | 2 | 1 | 0 | 0 | 0 |
| 2017 | 3 | 2 | 1 | 0 | 1 | 2 | 0 |
| 2018 | 3 | 1 | 1 | 0 | 1 | 0 | 0 |
| 2019 | 6 | 0 | 0 | 1 | 1 | 0 | 0 |
| 2020 | 1 | 1 | 0 | 0 | 0 | 1 | 0 |
| 2021 | 3 | 1 | 1 | 1 | 0 | 3 | 1 |
| Total | 24 | 13 | 10 | 3 | 3 | 8 | 1 |

| Table 3: Depicts Case-wise data under section 304 (A) of Indian Penal Code | | | | | | |
|--|--|--|--|-----------------------|---------------|----------|
| Accidental Death Cases as per Inquest (n = 71) | | | | | | |
| Year | Head Injury (Road accidents, Fall from height) | Blunt Trauma to Chest & Abdomen (Road accidents, fall from height) | Blunt trauma to Limbs (Road accidents) | Medical Negligence | Electrocution | Drowning |
| 2014 | 2 | 1 | 0 | 0 | 0 | 0 |
| 2015 | 3 | 1 | 0 | 0 | 0 | 0 |
| 2016 | 13 | 8 | 1 | 1 | 0 | 0 |
| 2017 | 4 | 4 | 1 | 0 | 1 | 0 |
| 2018 | 7 | 4 | 2 | 0 | 0 | 0 |
| 2019 | 5 | 6 | 0 | 0 | 2 | 0 |
| 2020 | 1 | 0 | 0 | 0 | 0 | 0 |
| 2021 | 2 | 1 | 0 | 0 | 0 | 1 |
| Total | 37 | 25 | 4 | 1 | 3 | 1 |

| Table 4: Depicts Case-wise decision pronounced by Hon'ble Trial Courts | | | | | | | | |
|--|-----------|-----|---------|-----|------------|-----|---------|-----|
| Year | Acquittal | | | | Conviction | | | |
| | 304(A) | 302 | 304 (B) | 306 | 304 (A) | 302 | 304 (B) | 306 |
| 2014 | 3 | 2 | 0 | 0 | 0 | 1 | 0 | 0 |
| 2015 | 3 | 8 | 0 | 0 | 1 | 8 | 1 | 0 |
| 2016 | 20 | 4 | 0 | 0 | 3 | 3 | 0 | 0 |
| 2017 | 8 | 6 | 0 | 2 | 2 | 3 | 0 | 1 |
| 2018 | 9 | 3 | 0 | 0 | 4 | 3 | 1 | 0 |
| 2019 | 10 | 6 | 0 | 0 | 2 | 2 | 0 | 0 |
| 2020 | 1 | 2 | 0 | 0 | 0 | 1 | 0 | 0 |
| 2021 | 3 | 7 | 0 | 0 | 1 | 3 | 0 | 0 |
| Total | 57 | 38 | 0 | 2 | 14 | 24 | 2 | 1 |



DISCUSSION

The result of autopsy has a high level of truth, as it is a physical documentation not leaving too much room for interpretations.^[15] Every case presents with specific set of findings. The doctor needs to have logical approach to determine the cause, manner, and time of death, with the use of best knowledge and belief. His testimony can be considered as the decedent's own.

The nature of this study does not allow to make comparison with other and moreover this is the first-

ever study being reported. We cannot criticise the outcome of criminal case, simply based on proving innocence or guilt. To avoid any impeachment to witness testimony with respect and faith towards Indian judiciary and Law, only common questions are posed here, those were asked.

Homicidal Sharp Force: Is it true that, the PM report is written later based on notes at autopsy?... all injuries were not sufficient to cause death? What was extent of sharp injury?....that exact age of injury cannot be determined?....if deceased was hospitalised early, would have survived?

Is it true that...weapon was not pointed?no blood stains were found over weapon? ..., no fingerprints were found over weapon?.....your weapon report doesn't contain details of seal of police?deceased's clothes were not presented for examination?maggots can form and alter injuries? you haven't mentioned the type of tree leaves found over clothes?

Homicidal Blunt force

Can this head injury you mentioned is possible after self-fall? Can chest trauma be due to fall while running? Is it right that, you haven't mentioned the wooden stick is hollow or filled? Is it right that, police brought this weapon to you after—days of Postmortem ? Did you find any deformity over wooden stick?

Fire-arm Injury/Blast injuries Is it true that, you have not mentioned in your report the exact distance of fire?.....you have not mentioned, whether it a Rifled or smooth bored firearm injury?, you have not found any residues of blast causing substance residues over body?

Asphyxia

Is it true that, ordinarily oblique nature of ligature signifies Hanging mark? ..stomach emptying completes after 1-2 hrs after meal? Is it true that, bones of neck fracture in every strangulation case? Is it true, ligature material was intact?, there froth is present in every case of drowning?

Burns

Is it true, if anyone sets his own body at fire, the soles are spared? If hospitalised in less than 50% of burns, there is a chance of recovery of patient? Had this person been fit to give dying declaration ?

Burnt Bony Remains

Can DNA be extracted from burnt remains? Is it true exact age of a person from bone examination is not possible?

Accidental Injuries

If any person falls over a hard, ir-regular surface, the same injuries mentioned are possible? Is it true that, recent injuries mean within 2-3 days? If any person is drunk and falls over a hard surface, the similar injuries you mentioned are possible?

Electrocution

Is it true that, if a person wears protective gloves, electrical shock is preventable?

Negligence: Is it true that, there were no injuries to the body? If physical condition of premature baby at birth is weak, it is difficult to survive?

Poisoning: Is it true that, no injuries were present over the body? ...that you have not mentioned in your preliminary PM report the cause of death?

The answers to plausible anticipated questions before testimony should not be attempted. It is to be dealt with its merits and only applies to facts of the case in question. The medical evidence was accepted by the honourable courts with comments mentioned in majority cases “as no sustainable objection was made from defence party, to cause and manner of death, hence, it can't be rejected that, this could not had happened” in most cases. The same sentences were present, in acquittal cases as well. It is made clear that only medical evidence acceptance, did not proved innocence or guilt. It only confirmed the cause and manner of death. Strong direct evidence proved its significance. It is worth to read such observations made by courts, that you must have had performed proper duty towards criminal justice. The experts must not testify on the ‘ultimate issue’ nor on matters of ‘common knowledge’ and must not stray from their ‘area of expertise’.^[16]

Recommendations

The medical expert opinion remains advisory in criminal proceedings of the courts. Our assistance is required to understand complexities of medical science. Every doctor should be aware of the general procedure for recording of evidence. Based on the medical examination performed and provided reports, his evidence should be fair and unbiased borne within the knowledge of medical science. Lastly, it is suggested to track court case to ensure fair testimony, its result and to become more versed in the subject.

CONCLUSION

An expert medical witness can never determine fate of criminal cases but can remain truthful to one another by deposition of their evidence within framework of science and law to prevail justice. Therefore, judgement copies should be read and studied by every medical expert.

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