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# UNDERSTANDING MEDICO LEGAL RESPONSIBILITIES IN POISONING CASES: INSIGHTS FROM MEDICAL INTERNS. A CROSSSECTIONAL STUDY

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## **Abstract:**

**Introduction:** Poisoning cases represent a significant portion of cases coming to the Emergency Department of any Hospital. Most of the time, the initial management is done by the junior doctors. Treatment part is not the issue, but the medico legal part is often overlooked either due to lack of awareness and knowledge or paucity of time. Junior doctors, particularly interns who are at the threshold of independent clinical practice must possess a sound knowledge of their legal responsibilities in the management of poisoning cases, in order, to save themselves from a lot of legal implications later on.

This study aimed to assess the awareness among medical interns regarding the legal duties of doctors in cases of poisoning including mandatory reporting, medicolegal documentation, sample collection and dispatching, and the ethical obligations.

**Material and methods**: A cross sectional questionnaire based study was conducted among 150 medical interns of ACMS.

**Results:** Results revealed that while most interns were aware of basic clinical management, significant gaps existed in their understanding of legal duties such as reporting to the police, proper documentation and maintenance of records and collection and dispatching of samples for evidence.

Conclusion: The study highlights the need for improved medicolegal practical training in the undergraduate medical curriculum

**Keywords**: poisoning, poison, doctor, medicolegal duties, medicolegal cases.

## **Introduction:**

Poisoning cases represent a significant portion of cases coming to the Emergency Department of any Hospital. Both suicidal and accidental poisoning and rarely homicidal poisoning cases lead to considerable mortality and morbidity among the patients of all age groups. Prompt and effective treatment forms the backbone of patient care in these cases.

Role of a doctor in these cases is to follow a basic line of treatment including diagnosis, elimination of poison, treatment with specific antidote and supportive therapy. And along with the therapeutic

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part, the medicolegal aspect must also be given equal importance. This initial management is usually done by the junior doctors. Treatment part is not the issue as it is usually handled well but the medico legal part is often overlooked either due to lack of awareness and knowledge or paucity of time. Junior doctors, particularly interns who are at the threshold of their clinical career must have a thorough knowledge of their medico legal responsibilities in the management of poisoning cases. Their awareness and understanding of the medico- legal responsibilities is vital to ensuring appropriate patient care and safeguarding both patient rights and the legal standing of the treating doctor and the medical institution in the future. However, the extent of their knowledge in this area often remains sketchy and incomplete.

This cross-sectional study aims to assess the level of awareness among medical interns regarding the legal duties of a doctor in poisoning cases. By identifying knowledge gaps, the study seeks to highlight areas for improvement in medical education and medico-legal training, ultimately contributing to better preparedness and legal compliance in clinical practice.

## Material and methods

This was a cross-sectional anonymous questionnaire-based study conducted among medical interns of ACMS to assess their awareness regarding the legal duties of a doctor in poisoning cases. Google forms were used.

**Study sample:** The study population consisted of medical interns (MBBS graduates undergoing compulsory rotatory internship) posted across various clinical departments. Interns who had completed at least one, emergency medicine or forensic medicine posting, were included to ensure some level of exposure to medico-legal procedures. Google forms were given to 200 interns across a period of 6 months, out of which only 150 were responded, sonthe sample size is 150.

## **Inclusion Criteria:**

- Medical interns currently undergoing internship.
- Willingness to participate and provide informed consent.

# **Exclusion Criteria:**

- Interns who had completed their internship.
- Those unwilling to participate or who failed to complete the questionnaire.

## **Data Collection Tool:**

A structured questionnaire was given via google forms. A valid informed consent was taken before proceeding with study. The questionnaire consisted of both multiple-choice and true/false questions covering various aspects such as:

- Legal requirement for informing police in poisoning cases
- Documentation procedures (e.g., medicolegal case (MLC) registration)
- Consent and confidentiality issues
- Role of the doctor in suspected homicidal or suicidal poisoning
- Preservation and dispatch of samples for toxicological analysis

#### Results

A total of 150 medical interns participated in the study. The mean age of the participants was 23.5, with 54% (n = 81) being female and 46% (n = 69) male. All participants had completed postings in either emergency medicine or forensic medicine during their internship.

# **General Awareness Levels**

Out of 150 interns, 96 (64%) demonstrated awareness regarding the legal duties of a doctor in poisoning cases, while 54 (36%) showed inadequate or poor awareness. Interns who had completed their forensic medicine posting within the last 6 months scored significantly higher (p < 0.05).

## **Knowledge of Specific Legal Duties**

• 87.3% (n = 131) knew that all poisoning cases must be registered as medico-legal cases (MLCs).

- 78.7% (n = 118) were aware of the mandatory requirement to inform the police in poisoning cases.
- Only 40% (n = 60) correctly identified the legal procedure for obtaining consent in unconscious poisoning victims.
- 68% (n = 102) knew that toxicological samples must be preserved and sent to the appropriate authority.

The majority cited forensic medicine lectures (56%) and clinical postings (32%) as their primary sources of knowledge, while only 12% mentioned other sources of knowledge like self-reading, social media including newspaper, etc.

#### **Discussion**

When a case of suspected poisoning comes to the Emergency, the doctor has two aspects to take care of: the medical aspect and the medicalegal aspect. The first priority is always the medical aspect as saving the life of the patient should always take precedence over any other aspect. Every hospital whether government or private has a legal obligation to treat patients of suspected poisoning in situations where there is danger to life and no hospital can deny these cases citing that they are not permitted to handle medicolegal cases<sup>1</sup>.

# Outline of management of poisoning cases<sup>2</sup>

- Clinical Assessment and Diagnosis
- Stabilization of patient; airway, breathing, circulation and CNS depression should be corrected immediately to save life.
- Elimination of poison: decontamination, gastric lavage, activated charcoal, diuresis, peritoneal dialysis, haemodialysis, hemoperfusion, etc The benefits and the right procedure for each poison should be focussed on.
- Antidote therapy, if available
- Supportive Care

# Medicolegal duties of a doctor<sup>3</sup>:

# 1. Inform the Nearest Magistrate/Police Officer:

Doctors are under legal obligation to report all suspected or confirmed poisoning cases—whether accidental, suicidal, or homicidal—to the nearest police station or magistrate as early as possible. This duty arises under Sec 33 Bharatiya Nagarik Suraksha Sanhita, which mandates reporting of certain offences, including those involving grievous hurt or suspicious death. Failure to inform the authorities may amount to negligence or suppression of evidence. A Medicolegal Case (MLC) registration is done, and the police are informed through a written intimation, usually via a medicolegal register or designated Police Information form.

# 2. Dying Declaration<sup>4</sup>

In cases where the patient is critically ill or not expected to survive, a dying declaration, (which is a statement made by the patient regarding the cause and circumstances of poisoning) is recorded. As per Section 26(a) of Bharatiya Sakshya Adhiniyam<sup>5</sup>, a dying declaration is admissible in court. Preferably, a Judicial Magistrate should record the dying declaration. However, if the magistrate is unavailable and time is of essence, the attending doctor may record it. The declaration must be recorded in the patient's own words, after ensuring they are mentally and physically fit to make such a statement. Certification of the mental fitness (known as "compos mentis") is essential. The statement should be signed or thumb-impression of the patient taken, and countersigned by the doctor.

# 3. Detailed Medico-Legal Documentation and Proper Maintenance of Records<sup>6,7</sup>

Accurate and complete documentation is vital for legal and ethical reasons:

• The doctor must document the time of arrival, history of poisoning, clinical findings, treatment provided, and patient's condition.

- All medico-legal cases should be entered in the MLC Register, and the MLC number should be noted on the patient's file.
- Proper maintenance of records and treatment notes is essential for future legal proceedings and reference.
- All entries should be legible, dated, signed, and free from overwriting. Corrections, if any, must be made properly with a note and countersignature.

# 4. Preservation of Sample<sup>6,7</sup>

In poisoning cases, preservation of biological and non-biological samples is a critical duty:

- Gastric lavage (stomach wash), vomitus, blood, urine, and any remaining poison container should be preserved.
- The samples should be sealed, labelled, signed by the doctor and stored under appropriate conditions.
- These samples are handed over to the police after taking their signature; (for forensic toxicological analysis) and must be accompanied by a chain-of-custody form.
- Proper preservation prevents deterioration of the sample or any tampering, which could compromise legal proceedings.

# 5. Recommend for Medico-Legal Postmortem in Case of Death<sup>6,7</sup>

If a patient with suspected or confirmed poisoning dies:

- The case becomes a medico-legal death, and a postmortem examination must be conducted by a certified government-appointed medical officer.
- The treating doctor should not issue a death certificate, but rather inform the police and recommend a medico-legal autopsy.
- The postmortem helps determine the exact cause of death, type of poison, and route of administration, which are important for judicial investigations.

# 6. Opinion in Poisoning Cases

Doctors may be required to provide a professional opinion regarding:

- Nature of poison suspected based on symptoms and clinical findings.
- Likely mode of poisoning accidental, suicidal, or homicidal.
- Severity and prognosis of poisoning.
- Their opinion may be sought by the police and judiciary, and should be based on clinical findings, toxicology reports, and circumstantial evidence.<sup>8</sup>
- If summoned by the court, the doctor must attend as a witness and present findings clearly and truthfully.

These medico-legal duties are not only legal obligations but also reflect the ethical commitment of a doctor to help the law provide justice. Failure to perform these duties appropriately may lead to disciplinary actions, legal liability, or prosecution for negligence.<sup>9</sup>

In this study, out of 150 interns, 64% have demonstrated awareness regarding the legal duties of a doctor in poisoning cases, while 36% showed inadequate or poor awareness. Interns who had completed their forensic medicine posting within the last 6 months scored significantly higher. This demonstrates the need for further refining the teaching and training tools while guiding these young minds in performing their medico legal duties correctly and with confidence.

#### Conclusion

The study summarizes that it is critical for these young doctors to have adequate knowledge of what all steps must be taken in a cases of poisoning, immediately after the medical part (including stabilization of patient) is taken care of. Adequate teaching which includes both theory and practical (methods of demonstration and role play) during their MBBS training, regular workshops during their medical career, first hand demonstration in the emergency department and wards during their clinical

postings and internships, all provide an in depth knowledge and awareness of their medicolegal role in all cases of poisoning. This knowledge translates to actual performance during the required emergency situations and saves them from future legal implications if and when the case goes to Court.

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