



KNOWLEDGE OF MEDICO-LEGAL RESPONSIBILITIES AMONG MBBS INTERNS IN A MEDICAL COLLEGE

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ABSTRACT Medical practitioners frequently encounter medico-legal cases in clinical practice, including injury reporting, consent documentation, sexual assault examination, and death certification. Adequate knowledge of medico-legal responsibilities is essential to ensure proper documentation, protection of patient rights, and compliance with legal requirements. MBBS interns often represent the first point of contact for patients in hospital settings; therefore, assessing their awareness regarding medico-legal duties is important. A prospective observational study was conducted among MBBS interns at a tertiary care medical college. The mean age of participants was 23.8 ± 0.9 years, with 56% females and 44% males. Overall, 62% of interns demonstrated moderate knowledge, 23% had good knowledge, and 15% had poor knowledge regarding medico-legal responsibilities. Knowledge related to consent and medico-legal documentation was adequate in 68% of interns, whereas only 42% demonstrated correct knowledge regarding legal procedures in sexual assault cases. A statistically significant association was observed between prior exposure to medico-legal cases and higher knowledge scores ($p = 0.03$). Pearson correlation analysis showed a moderate positive correlation between exposure to medico-legal training sessions and knowledge scores ($r = 0.41$). Regression analysis indicated that previous medico-legal training was a significant predictor of knowledge. Although most interns demonstrated moderate knowledge regarding medico-legal responsibilities, significant gaps remain, particularly in areas related to sexual assault examination and legal reporting procedures.

KEYWORDS : Medico-Legal Knowledge; Medical Interns; Forensic Medicine; Medical Law; Medico-Legal Cases; Medical Education

INTRODUCTION

Medico-legal practice represents an important interface between medicine and law. Medical practitioners are frequently required to manage cases that have legal implications, such as road traffic accidents, assaults, poisoning, sexual offences, and other unnatural events. In such situations, doctors are responsible not only for providing appropriate medical care but also for fulfilling certain legal obligations, including registration of medico-legal cases, proper documentation of injuries, collection and preservation of evidence, and preparation of medico-legal reports. Accurate medico-legal documentation is essential because it serves as important evidence in judicial proceedings and assists courts in determining the cause, nature, and circumstances of injuries or death.^{1,2}

Medical interns frequently serve as the first point of contact for patients presenting with medico-legal conditions, especially in emergency departments and trauma care settings. During their internship training, they frequently participate in initial clinical assessment, injury documentation, and preparation of medico-legal records under supervision.³ Adequate knowledge of medico-legal responsibilities is therefore essential to ensure proper patient management as well as compliance with legal requirements.

However, previous studies have reported that newly graduated doctors and medical students may have insufficient awareness regarding medico-legal documentation, consent procedures, and legal reporting obligations, which may adversely affect the quality of medico-legal evidence and patient care.^{4,5} Considering the crucial role of interns in initial management of medico-legal cases, the present study was conducted to assess the knowledge of medico-legal responsibilities among MBBS interns in a tertiary care medical college in Maharashtra.

MATERIALS AND METHODS

The present study was conducted as a prospective observational study to assess the level of knowledge regarding medico-legal responsibilities among MBBS interns. The study was carried out in a tertiary care teaching medical college and attached hospital in Maharashtra, India. The study was conducted over a one-year period from January 2025 to December 2025. The study population consisted of MBBS interns undergoing compulsory rotating internship in the medical college during the study period. Prior approval for the study was obtained from the Institutional Ethics Committee of the medical college.

Inclusion Criteria

- MBBS interns currently undergoing compulsory rotating internship, willing to participate in the study.

Exclusion Criteria

- Interns who were absent during data collection
- Interns unwilling to participate in the study
- Incomplete questionnaire responses

A convenience sampling method was used. All interns available during the study period were approached and invited to participate. Participation was voluntary.

Demographic variables included: Age, Gender Knowledge variables included awareness regarding:

- Registration of medico-legal cases
- Documentation of injury reports
- Consent procedures in medical practice
- Legal aspects of sexual assault examination
- Reporting obligations to police authorities
- Preservation of medical evidence

A knowledge score was calculated based on the number of correct responses to the questionnaire. Data were collected using a structured and pre-validated questionnaire developed after reviewing relevant forensic medicine literature and medico-legal guidelines. The questionnaire consisted of multiple-choice questions covering various aspects of medico-legal responsibilities of medical practitioners.

The questionnaire was administered to interns during their internship postings. Participants were asked to complete the questionnaire independently without consultation. The responses were collected and analyzed to determine the level of knowledge among interns.

Based on the total score obtained, knowledge levels were categorized as:

- Poor knowledge – less than 50% correct responses
- Moderate knowledge – 50–75% correct responses
- Good knowledge – > 75% correct responses

The collected data were entered into Microsoft Excel and analyzed using statistical software. Descriptive statistics were used to summarize demographic variables and knowledge levels. Results were expressed as frequency (n), percentage (%), mean $\pm$ standard

deviation (SD) where appropriate. Chi-square test to evaluate associations between categorical variables. Pearson correlation analysis to assess the relationship between training exposure and knowledge scores. Multiple regression analysis to identify predictors of knowledge level. A p-value less than 0.05 was considered statistically significant.

RESULTS

A total of 100 MBBS interns participated in the study. In the present study, the majority of interns (62%) belonged to the 24–25 year age group, reflecting the typical age of MBBS graduates undergoing internship. Female interns constituted 56% of the study population, while males accounted for 44%.

Table 1: Demographic Characteristics of Study Participants

Variable	Frequency (n)	Percentage (%)
Age		
22–23 years	38	38
24–25 years	62	62
Gender		
Male	44	44
Female	56	56

The knowledge of interns regarding medico-legal responsibilities was assessed using the questionnaire score. The findings showed that 62% of interns had moderate knowledge regarding medico-legal responsibilities. Only 23% demonstrated good knowledge, while 15% showed poor knowledge, indicating the presence of knowledge gaps among some interns.

Table 2: Distribution of Knowledge Levels

Knowledge Level	Frequency (n)	Percentage (%)
Poor	15	15
Moderate	62	62
Good	23	23

The mean knowledge score was 14.8 ± 3.2 , indicating an overall moderate level of awareness among interns regarding medico-legal responsibilities.

Table 3: Mean Knowledge Score

Variable	Mean	Standard Deviation
Knowledge score	14.8	3.2
Age	23.8	0.9

Interns who had previous exposure to medico-legal training sessions demonstrated significantly better knowledge compared with those without training (p value 0.03).

Table 4: Association Between Medico-Legal Training and Knowledge

Training Exposure	Good Knowledge (n)	Moderate/Poor Knowledge (n)	p value
Yes	18	32	0.03
No	5	45	

Pearson correlation analysis was conducted to evaluate the relationship between training exposure and knowledge score. A moderate positive correlation ($r = 0.41$) was observed between exposure to medico-legal training and knowledge score.

Table 5: Correlation Analysis

Variables	Correlation coefficient (r)	p value
Training exposure vs knowledge score	0.41	0.02

Multiple regression analysis was performed to identify predictors of knowledge score. Previous exposure to medico-legal training was found to be a significant predictor of higher knowledge scores.

Table 6: Regression Analysis

Predictor	Beta coefficient	p value
Age	0.12	0.31
Gender	0.09	0.42
Training exposure	0.38	0.01

DISCUSSION

Medico-legal responsibilities constitute an integral component of medical practice. Physicians frequently encounter situations requiring legal documentation and reporting, particularly in emergency departments and trauma care settings.^{6,7}

In the present study, the majority of interns belonged to the 24–25 year age group, which reflects the typical age range of MBBS graduates undergoing compulsory rotating internship. Similar demographic patterns have been reported in several studies assessing medico-legal awareness among medical students and interns. Gupta and Gupta⁸ observed a comparable age distribution among interns in their study evaluating medico-legal knowledge among medical trainees. The gender distribution in the present study also showed a slightly higher proportion of female interns, which reflects the increasing representation of women in medical education in India.

The findings of the present study showed that 62% of interns had moderate knowledge regarding medico-legal responsibilities, while only 23% demonstrated good knowledge. These findings suggest that although interns possess a basic understanding of medico-legal procedures, important knowledge gaps still exist. Similar observations were reported by Rai et al.,⁶ who found that many interns had limited awareness regarding medico-legal documentation and legal procedures involved in injury reporting. Likewise, Chaudhary et al.,⁷ reported that although medical students were aware of the concept of medico-legal cases, their knowledge regarding practical medico-legal procedures was inadequate.

Knowledge regarding medico-legal documentation and injury reporting is particularly important because medico-legal reports serve as critical evidence in legal proceedings. Textbooks of forensic medicine emphasize that medical documentation must be accurate, objective, and complete in order to assist courts in determining the circumstances surrounding injuries or death.^{1,4} Inadequate documentation may weaken legal cases and may also expose medical practitioners to allegations of negligence.

One of the key findings of the present study was that interns who had previous exposure to medico-legal training demonstrated significantly better knowledge scores. This observation highlights the importance of structured training in forensic medicine and medico-legal procedures. Educational interventions such as workshops, seminars, and case-based discussions can improve the understanding of medico-legal responsibilities among medical trainees. Gupta and Gupta⁸ similarly reported that students who had received formal teaching sessions on medico-legal procedures demonstrated significantly higher awareness levels.

Another important aspect of medico-legal practice is the examination of victims of sexual assault. Proper medico-legal examination, documentation, and evidence collection are essential for the successful prosecution of offenders and protection of victims' rights. The World Health Organization guidelines emphasize that healthcare professionals should be adequately trained in medico-legal examination of sexual violence victims and evidence preservation.^{9,10} However, several studies have reported inadequate knowledge among doctors regarding legal provisions related to sexual assault examination.^{9,10} These deficiencies highlight the need for improved training in this area.

Correlation analysis in the present study demonstrated a moderate positive relationship between exposure to medico-legal training and knowledge score, indicating that increased educational exposure improves awareness among interns. Similar conclusions have been reported in international studies evaluating medico-legal education among medical students. Forensic medicine textbooks also emphasize that medical practitioners must be familiar with legal requirements in order to fulfill their professional responsibilities effectively.^{2,3}

The increasing incidence of medico-legal litigation in healthcare further underscores the importance of medico-legal awareness among doctors. Improper documentation, failure to obtain informed consent, or negligence in reporting medico-legal cases may lead to legal consequences for healthcare providers. Therefore, strengthening medico-legal education during undergraduate training and internship is essential to prepare young doctors for real-world clinical practice.^{1,5}

The present study contributes to the existing literature by providing insight into the level of medico-legal awareness among interns in Maharashtra. The findings indicate that although most interns possess moderate knowledge, significant gaps remain in several areas of medico-legal practice. Addressing these gaps through structured educational interventions may improve the competence and confidence of interns in handling medico-legal cases.

Overall, the results of the present study highlight the need to strengthen medico-legal education during undergraduate medical training and to provide regular training sessions during internship postings. Improved awareness of medico-legal responsibilities will not only enhance clinical practice but also contribute to the effective functioning of the justice system.

The limitations of the present study include, study conducted in a single tertiary care medical college, which may limit the generalizability of the findings. The sample size was relatively small, with only 100 interns included. The study population was restricted to MBBS interns and may not represent practicing doctors or postgraduate trainees. Additionally, the questionnaire-based assessment mainly evaluated theoretical knowledge and may not accurately reflect practical competence in managing medico-legal cases.

Medico-legal education should be strengthened during undergraduate medical training to improve awareness among interns. Regular workshops, seminars, and case-based discussions on medico-legal issues should be incorporated during internship postings. Practical training in medico-legal documentation and procedures under supervision of forensic medicine specialists may improve competency. Future multicentric studies with larger sample sizes are recommended to better evaluate medico-legal awareness among medical professionals.

CONCLUSIONS

The present study assessed the knowledge of medico-legal responsibilities among MBBS interns in a tertiary care medical college in Maharashtra. The findings indicate that although most interns possess moderate knowledge regarding medico-legal responsibilities, important gaps remain in several areas of medico-legal practice. Exposure to medico-legal training was found to be significantly associated with higher knowledge scores.

These findings highlight the need for structured medico-legal education and practical training during internship, which can improve awareness and competency in handling medico-legal cases. Strengthening medico-legal teaching in undergraduate medical curricula and providing regular training sessions may help prepare young doctors to fulfill their legal and ethical responsibilities effectively in clinical practice.

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