



AWARENESS OF MEDICAL NEGLIGENCE LAWS AMONG RESIDENT DOCTORS IN A MEDICAL COLLEGE

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ABSTRACT

Medical negligence litigation has increased globally in recent decades, placing greater medico-legal responsibility on healthcare professionals. Resident doctors are often the first point of contact for patients in teaching hospitals and play a crucial role in documentation, consent procedures, and medico-legal reporting. Inadequate awareness of medical negligence laws may lead to professional liability, compromised patient safety, and legal consequences. The present study aimed to assess awareness of medical negligence laws among resident doctors in a medical college in Maharashtra. A prospective observational study was conducted from January 2025 to December 2025 among 100 resident doctors pursuing postgraduate training in a tertiary care medical college in Maharashtra. The mean age of participants was 27.8 ± 2.4 years. Male residents constituted 58% and females 42%. Overall, 26% of residents demonstrated good awareness of medical negligence laws, 52% had moderate awareness, and 22% had poor awareness. Awareness regarding informed consent was relatively high (78%), while knowledge of Consumer Protection Act provisions (44%) and legal documentation requirements (49%) was comparatively lower. A significant association was observed between year of residency training and knowledge level. Pearson correlation showed a moderate positive correlation between years of clinical experience and knowledge score. The study demonstrates moderate overall awareness of medical negligence laws among resident doctors; however, significant knowledge gaps persist in legal procedures and statutory regulations. Structured medico-legal training during postgraduate education may improve legal competence and reduce medico-legal risks in clinical practice.

KEYWORDS : Medical Negligence; Resident Doctors; Medico-legal Awareness; Consumer Protection Act; Forensic Medicine; Medical Law

INTRODUCTION

Medical negligence represents a major medico-legal concern in modern healthcare systems. With increasing patient awareness and expansion of consumer rights, litigation against healthcare providers has increased worldwide. Medical negligence is defined as failure of a healthcare professional to exercise reasonable care and skill expected in clinical practice, resulting in harm to the patient. Globally, medico-legal cases involving negligence, malpractice, and professional misconduct have increased significantly over the past two decades.^{1,2}

In India, the inclusion of medical services under the Consumer Protection Act (CPA) has further strengthened patients' rights to seek compensation for medical negligence.³ Subsequently, several medico-legal litigations involving diagnostic errors, inadequate consent, and improper documentation have highlighted the importance of legal awareness among healthcare professionals.⁴

Resident doctors form the backbone of hospital services in teaching institutions. They are frequently responsible for obtaining informed consent, documenting clinical findings, managing emergency cases, and communicating with patients and relatives. Lack of awareness regarding legal obligations may expose both the doctor and institution to litigation. Previous studies have reported variable levels of medico-legal knowledge among healthcare providers, with several identifying inadequate training in medical law during undergraduate and postgraduate education.⁵⁻⁷ Therefore, the present study was conducted to assess awareness of medical negligence laws among resident doctors in a medical college in Maharashtra and to identify factors associated with knowledge levels.

MATERIALS AND METHODS

The present study was conducted as a prospective observational study, carried out in a tertiary care teaching

medical college located in Maharashtra, India, to assess awareness of medical negligence laws among resident doctors. The study was conducted over a 12-month period from January 2025 to December 2025.

During this period, resident doctors undergoing postgraduate training in different clinical departments were approached for participation. The study population consisted of resident doctors enrolled in postgraduate medical programs, including first-year, second-year, and third-year residents.

Resident doctors were included in the study if they were actively involved in postgraduate clinical training and patient care activities and were willing to participate voluntarily. Doctors who declined participation, were unavailable during the study period, or submitted incomplete questionnaires were excluded from the final analysis.

Data were collected using a structured and pre-validated questionnaire designed to evaluate awareness of medical negligence laws and medico-legal responsibilities. The questionnaire was developed in consultation with experts from the department of forensic medicine to ensure content validity and relevance to clinical practice. It consisted of multiple sections addressing different aspects of medico-legal knowledge. These included awareness regarding the definition of medical negligence, legal provisions under the Consumer Protection Act, principles of informed consent, medico-legal documentation practices, and legal obligations in managing medico-legal cases. The questionnaire contained multiple-choice questions and knowledge-based statements aimed at assessing both theoretical understanding and practical awareness of medico-legal responsibilities.

In addition to knowledge-based questions, demographic information including age, gender, specialty, and year of residency training was also recorded. Based on the responses

to the questionnaire, an overall knowledge score was calculated for each participant. The knowledge scores were categorized into three levels for analytical purposes. Participants scoring 75% or more correct responses were categorized as having good knowledge, those scoring 50-74% were categorized as having moderate knowledge, and those scoring less than 50% were categorized as having poor knowledge.

After completion of data collection, the responses were compiled and entered into a database for statistical analysis. Data analysis was performed using Statistical Package for the Social Sciences (SPSS) software version 25. Descriptive statistics were used to summarize demographic characteristics and knowledge levels of the participants. Categorical variables were expressed as frequency and percentage, while continuous variables were expressed as mean $\pm$ standard deviation. The chi-square test was used to determine associations between categorical variables such as knowledge level and demographic characteristics. Pearson correlation analysis was performed to assess the relationship between years of clinical experience and knowledge score. Additionally, multiple regression analysis was conducted to identify independent predictors of knowledge level among resident doctors. A p-value less than 0.05 was considered statistically significant.

RESULTS

The study included 100 resident doctors working in different clinical departments of the medical college. Study population consisted predominantly of male resident doctors (58%), while female residents constituted 42% of participants. The largest proportion of residents belonged to the 27-29 years age group (46%), followed by 24-26 years (36%), whereas only 18% were aged 30 years or above. With regard to year of training, first-year residents formed the largest group (38%), followed by second-year residents (34%) and third-year residents (28%).

Table 1 – Demographic Characteristics of Participants

Variable	Frequency (n)	Percentage (%)
Gender		
Male	58	58
Female	42	42
Age group		
24-26 years	38	38
27-29 years	44	44
≥ 30 years	18	18
Year of Residency		
First year	36	36
Second year	34	34
Third year	30	30

More than half of residents (52%) demonstrated moderate awareness, while only 26% showed good knowledge of medical negligence laws.

Table 2 – Distribution of Awareness Levels

Awareness level	Frequency	Percentage
Good knowledge	26	26
Moderate knowledge	52	52
Poor knowledge	22	22

Mean knowledge score of the participants was 13.6 ± 3.8 , indicating an overall moderate level of awareness regarding medical negligence laws.

Table 3 – Knowledge Score (Mean $\pm$ SD)

Variable	Mean	SD
Knowledge score	13.6	3.8
Experience (years)	2.1	0.9

A statistically significant association was observed between year of residency and knowledge level ($p = 0.02$).

Table 4 – Association Between Residency Year and Knowledge Level

Residency Year	Good	Moderate	Poor	p value
First year	6	17	13	
Second year	9	19	6	
Third year	11	16	3	0.02

Table 5 shows a moderate positive correlation between clinical experience and knowledge score ($r = 0.39$, $p < 0.001$). This means that as years of clinical exposure increased, knowledge regarding medical negligence laws also tended to improve.

Table 5 – Correlation Analysis

Variables	r value	p value
Experience vs knowledge score	0.39	<0.001

Among the variables entered into the regression model, residency year emerged as the only statistically significant predictor of knowledge score ($\text{Beta} = 0.35$, $p = 0.01$), whereas age and gender were not significant predictors.

Table 6 – Regression Analysis

Predictor	Beta	p value
Age	0.12	0.22
Gender	0.08	0.34
Residency year	0.35	0.01

The relatively small differences between actual and predicted values suggest that the regression model had reasonable explanatory ability. This indicates that the selected predictors, particularly residency year, contributed meaningfully to the estimation of knowledge score. However, since predicted values do not perfectly match actual values, it is evident that other unmeasured factors such as prior medico-legal training, interest in forensic medicine, specialty-specific exposure, or previous experience with legal cases may also influence awareness levels.

Table 7 – Predicted vs Actual Knowledge Scores

Actual Score	Predicted Score
14.2	13.9
12.6	12.4
15.8	15.1

DISCUSSION

Medical negligence has become an important medico-legal issue in modern healthcare practice due to increasing patient awareness, expansion of consumer rights, and growing accountability of healthcare professionals. Doctors are expected to adhere to established standards of care, maintain proper documentation, and ensure effective communication with patients. Failure to meet these professional obligations may lead to medico-legal disputes and litigation.

The present study assessed awareness of medical negligence laws among resident doctors in a tertiary care teaching hospital. The results demonstrated that the majority of resident doctors had moderate knowledge of medical negligence laws, while only a smaller proportion showed good awareness. These findings indicate that although resident doctors possess some basic understanding of medico-legal responsibilities, comprehensive knowledge of legal provisions remains inadequate.

A similar observation was reported by Singh et al.¹ Their study revealed that although most healthcare professionals had heard about the Consumer Protection Act, detailed knowledge regarding its provisions and legal implications was limited. The findings of the present study are consistent with these results, indicating that awareness of medico-legal legislation among healthcare professionals remains incomplete.

In the present study, the mean knowledge score among

resident doctors indicated an overall moderate level of awareness regarding medical negligence laws. This finding is comparable with the results of Rai et al.,⁵ reported that although a majority of participants were aware of the concept of medical negligence, their knowledge regarding legal procedures and statutory regulations was insufficient. This suggests that basic conceptual awareness may exist among doctors, but detailed understanding of medico-legal regulations remains limited.

The present study also demonstrated that awareness of medical negligence laws improved with increasing year of residency training. Senior residents showed better knowledge compared to junior residents. This finding may be explained by the fact that senior residents gain greater clinical exposure and practical experience in patient management, documentation, and medico-legal procedures during their training period. Similar observations were reported by Varghese et al.,² found that although many participants were aware of medico-legal responsibilities, a significant proportion lacked detailed knowledge regarding legal aspects of medical practice.

Another study conducted by Radhika et al.,³ assessed awareness regarding medico-legal aspects and Consumer Protection Act provisions among healthcare professionals and reported inadequate knowledge among many participants. The authors emphasized the need for improving medico-legal education among healthcare providers to reduce the risk of negligence claims. The results of the present study support these findings, as a considerable proportion of resident doctors demonstrated only moderate or poor knowledge of medical negligence laws.

Similarly, Kasulkar and Narde (2015) studied awareness of ethical and medico-legal issues among medical professionals and found that although most doctors were aware of ethical principles in clinical practice, knowledge regarding medico-legal responsibilities was often inadequate (8). The authors highlighted that insufficient training in medical law during medical education may contribute to this knowledge gap.

In the present study, correlation analysis revealed a moderate positive relationship between clinical experience and knowledge score, indicating that increased clinical exposure contributes to improved medico-legal awareness. This observation is consistent with findings reported in other studies assessing medico-legal knowledge among healthcare professionals. With increasing clinical experience, doctors are more frequently involved in documentation, consent procedures, and management of medico-legal cases, which may enhance their awareness of legal responsibilities.

The importance of medico-legal awareness among healthcare professionals has also been highlighted in more recent studies. Reddy PS et al.,⁹ reported that although participants were aware of certain medico-legal procedures, detailed knowledge regarding legal provisions and reporting responsibilities was limited. These findings further support the results of the present study.

Furthermore, recent analyses of the Consumer Protection Act 2019 have highlighted that the updated legislation has strengthened consumer rights and expanded legal accountability for service providers, including healthcare professionals.¹⁰ These legal developments have further increased the importance of medico-legal awareness among doctors, particularly those involved in frontline patient care such as resident doctors.

The present study has certain limitations that should be considered while interpreting the findings. The study was

conducted in a single tertiary care medical college, which may limit the generalizability of the results to other institutions. The sample size was relatively small, including only 100 resident doctors. In addition, the study relied on a questionnaire-based assessment that evaluated theoretical knowledge rather than actual medico-legal practice.

Medical law and medico-legal responsibilities should be integrated more comprehensively into postgraduate medical training programs. Regular workshops and continuing medical education sessions on medico-legal topics should be organized for resident doctors. Practical training involving case-based discussions, simulation exercises, and interdisciplinary teaching involving forensic medicine experts may improve medico-legal competence. Future research should involve multicentric studies with larger sample sizes to evaluate medico-legal awareness among healthcare professionals across different regions of India.

Overall, the findings of the present study demonstrate that although resident doctors possess basic awareness regarding medical negligence laws, significant gaps in knowledge still exist. Considering the increasing number of medico-legal cases and the expanding legal framework governing medical practice, it is essential to strengthen medico-legal education during postgraduate medical training.

CONCLUSIONS

The present study demonstrated moderate awareness of medical negligence laws among resident doctors, with significant knowledge gaps related to statutory legal provisions and medico-legal documentation. Awareness improved with increasing residency training and clinical experience. Strengthening medico-legal education during postgraduate medical training may improve legal competence and reduce medico-legal risks in clinical practice. The study also highlights the importance of incorporating medico-legal training modules, workshops, and simulation-based learning in postgraduate curricula.

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