VOLUME - 15, ISSUE - 04, APRIL - 2026 • PRINT ISSN No. 2277 - 8160 • DOI : 10.36106/gjra

Original Research Paper

Anatomy

KNOWLEDGE, ATTITUDE, AND PRACTICE REGARDING ANATOMICAL KNOWLEDGE IN INJURY DOCUMENTATION AMONG MEDICAL INTERNS: A CROSS-SECTIONAL STUDY

Dr Sefaliben Patel Senior Resident, Anatomy Department, Parul Institute of Medical Sciences & Research

Dr Reekee Patel* Professor, Forensic Medicine Department, Parul Institute of Medical Sciences & Research *Corresponding Author

ABSTRACT Accurate injury documentation is a critical component of medico-legal practice. Adequate anatomical knowledge is necessary to correctly identify injury sites, describe wound characteristics and interpret medico-legal implications. Medical interns frequently encounter trauma patients and medico-legal cases; however, their competence in anatomical injury documentation has not been sufficiently evaluated. So to assess the knowledge, attitude and practice regarding anatomical knowledge in injury documentation among medical interns, A cross-sectional questionnaire-based study was conducted among 150 medical interns at a private medical college. A structured self-administered questionnaire comprising 25 items across three domains (knowledge, attitude, and practice) was used. Data were analyzed using descriptive statistics and chi-square tests. Statistical significance was considered at $p < 0.05$. A total of 138 interns completed the study (response rate 92%). Adequate knowledge regarding anatomical terminology used in injury documentation was observed in 61.6% of participants. Approximately 78.3% agreed that precise anatomical knowledge is essential for medico-legal reporting. However, only 44.2% reported confidence in documenting injuries accurately in medico-legal cases. About 52.9% of interns reported previous exposure to injury documentation training during undergraduate teaching. Although most medical interns demonstrate a positive attitude toward the importance of anatomical knowledge in injury documentation, gaps remain in practical competence and confidence. Integration of structured training modules combining clinical anatomy and forensic medicine may improve the quality of medico-legal documentation among young doctors.

KEYWORDS : Anatomical Knowledge; Injury Documentation; Medical Interns; Forensic Medicine Education

INTRODUCTION

Injury documentation forms an essential component of medico-legal practice and plays a pivotal role in the administration of justice. Medical practitioners are frequently required to examine victims of trauma, assault, accidents, and other medico-legal events, and to provide accurate descriptions of injuries in medico-legal reports. These reports serve as important documentary evidence in legal proceedings and may significantly influence judicial outcomes.

Accurate documentation of injuries requires a clear understanding of anatomical structures and standardized anatomical terminology. Proper identification of anatomical landmarks enables clinicians to precisely describe the location, size, orientation and characteristics of wounds. Inadequate anatomical knowledge may lead to ambiguous descriptions, misinterpretation of injury patterns and potential medico-legal complications. Consequently, clinical anatomy forms the foundation for reliable injury documentation in forensic practice.

Medical interns represent the transition phase between undergraduate training and independent clinical practice. During internship, young doctors are frequently involved in the examination and documentation of medico-legal cases. Despite this responsibility, many interns receive limited formal training in medico-legal documentation and practical injury description. Previous studies have indicated that inadequate training in medico-legal procedures among young doctors may result in incomplete or inaccurate medico-legal reports.

Anatomy education traditionally emphasizes structural understanding of the human body, while forensic medicine training focuses on medico-legal aspects of injury interpretation and documentation. However, integration between these disciplines during medical education may not always be sufficient to prepare students for real-world medico-legal responsibilities. Strengthening the link between anatomical knowledge and forensic practice is therefore essential for improving the quality of injury documentation. Assessing interns' knowledge of anatomical injury description, their attitudes toward the importance of anatomical accuracy, and their practical experience in injury documentation may help identify gaps in training.

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted to evaluate the knowledge, attitude and practice regarding anatomical knowledge in injury documentation among medical interns in a Parul Institute of Medical Sciences & Research, waghodia, Gujarat. Medical interns undergoing compulsory rotatory internship during the study period constituted the study population. Total 150 interns were invited to participate in the study. Interns who remained absent and incomplete responses were excluded. Data were collected using a structured self-administered questionnaire consisting of 25 items divided into three domains (Knowledge, Attitude, Practice) Attitude and practice items were measured using a five-point Likert scale (strongly agree to strongly disagree). After obtaining ethical approval, the questionnaires were distributed to interns during academic sessions. Participation was voluntary and anonymity was maintained. Data were analyzed using statistical software. Descriptive statistics including frequencies, percentages, means, and standard deviations were calculated. Associations between variables were evaluated using the chi-square test, and $p < 0.05$ was considered statistically significant.

RESULTS

Table – 1 Participant Characteristics

Variable	Frequency	Percentage
Total interns approached	150	—
Completed responses	138	92%
Male	76	55.1%
Female	62	44.9%

Table – 2 Knowledge Regarding Anatomical Injury Documentation

Knowledge Level	Number	Percentage
Adequate knowledge	85	61.6%
Moderate knowledge	34	24.6%
Poor knowledge	19	13.8%

Table – 3 Attitude Toward Anatomical Knowledge in Injury Documentation

Statement	Agreement (%)
Anatomical knowledge is essential for medico-legal documentation	78.3
Additional training in injury documentation is necessary	82.6
Integration of anatomy with forensic medicine teaching is beneficial	80.4

Table – 4 Practice Related to Injury Documentation

Practice Indicator	Yes (%)
Previously documented injuries in medico-legal cases	58.7
Confident in identifying injury sites using anatomical terms	44.2
Received formal training in injury documentation	52.9

DISCUSSION

Accurate injury documentation is essential in medico-legal practice, as medical reports frequently serve as key evidence in legal proceedings. The present study evaluated the knowledge, attitude, and practice regarding anatomical knowledge in injury documentation among medical interns. The findings highlight important gaps between theoretical awareness and practical competence.

The majority of interns demonstrated adequate knowledge regarding anatomical terminology used in injury description. This finding likely reflects the foundational anatomical training received during the preclinical years of medical education [1,2]. However, knowledge gaps were identified in the application of anatomical landmarks and directional terminology during injury documentation. Such gaps may arise from limited opportunities to apply anatomical knowledge in clinical contexts.

Attitudinal assessment revealed that most interns recognized the importance of anatomical accuracy in medico-legal reporting [3,4]. A substantial proportion also expressed the need for additional training in injury documentation. Positive attitudes toward medico-legal education are encouraging, as they suggest willingness among interns to improve their competencies in this domain.

Despite reasonable knowledge levels and positive attitudes, the practice domain revealed relatively low confidence among interns in documenting injuries accurately. Less than half of the participants reported confidence in describing injuries using appropriate anatomical terminology. This discrepancy between knowledge and practice may be attributed to limited hands-on training and inadequate exposure to medico-legal case documentation during undergraduate education [5].

Previous studies in medical education have emphasized the importance of integrating clinical anatomy with applied forensic medicine teaching [6–8]. Case-based learning, simulated medico-legal scenarios, and supervised injury documentation exercises may enhance practical competencies among students and interns. Such educational interventions may help bridge the gap between theoretical knowledge and clinical practice.

Considering the medico-legal responsibilities of medical practitioners, structured training programs during internship could significantly improve documentation quality and accuracy as well. The findings of this study support the need for interdisciplinary teaching approaches combining anatomy and forensic medicine. Integrating anatomical landmark identification with medico-legal case analysis may strengthen students' ability to apply anatomical knowledge in real clinical situations.

CONCLUSION

The present study demonstrates that medical interns possess moderate knowledge and a positive attitude regarding the role of anatomical knowledge in injury documentation. However, practical confidence and training in medico-legal injury documentation remain limited. Strengthening the integration of clinical anatomy with forensic medicine education and providing structured training during internship may enhance the competence of young doctors in accurate medico-legal reporting.

REFERENCES

[1]. Standring S. Gray's Anatomy: The Anatomical Basis of Clinical Practice. 42nd ed. Elsevier; 2021.
[2]. Moore KL, Dalley AF, Agur AMR. Clinically Oriented Anatomy. 8th ed. Wolters Kluwer; 2018.
[3]. Saukko P, Knight B. Knight's Forensic Pathology. 4th ed. CRC Press; 20163 of theEgyptian code of practice for the design andconstruction of reinforced concrete structures.
[4]. Reddy KSN, Murty OP. The Essentials of Forensic Medicine and Toxicology. 34th ed. Jaypee; 2017.
[5]. Hostiuc S, Drima E, Curca GC. Teaching forensic medicine in medical education. J Forensic Leg Med. 2017;52:45-50.
[6]. Sugand K, Abrahams P, Khurana A. The anatomy of anatomy: a review for its modernization. Anat Sci Educ. 2010;3:83-93.
[7]. Cook DA, Levinson AJ, Garside S. Internet-based learning in the health professions. JAMA. 2008;300:1181-1196.
[8]. Estai M, Bunt S. Best teaching practices in anatomy education. Ann Anat. 2016;208:151-157.