

Knowledge, Attitude and Practice of Healthcare Professionals on Code of Ethics, Medico-Legal Aspects and Professional Indemnity Insurance in Coimbatore City – A Cross-Sectional Survey

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Abstract—Background: The healthcare profession is governed by ethical principles and increasing medico legal accountability. With the inclusion of medical and dental services under the Consumer Protection Act (CPA) in India, healthcare professionals are legally responsible for maintaining standards of care, documentation, informed consent, and confidentiality. Failure to adhere to these principles can result in negligence claims and legal consequences. Professional indemnity insurance (PII) serves as a financial safeguard against such liabilities. However, previous studies indicate inconsistent awareness and practice regarding medico-legal responsibilities and indemnity insurance among practitioners (1–4,6,8).

Aim: To assess the knowledge, attitude, and practice (KAP) of healthcare professionals regarding code of ethics, medico-legal aspects, and professional indemnity insurance in Tamil Nadu.

Materials and Methods: A cross-sectional questionnaire survey will be conducted among registered MBBS and BDS practitioners actively engaged in clinical practice. Convenience sampling will be used to distribute a validated, self-administered questionnaire via online platforms. The tool includes sections on demographic details, knowledge of medico-legal aspects, attitudes toward ethical and legal responsibilities (Likert scale), and practice patterns related to documentation, consent, and insurance coverage. Content validity index (CVI = 0.97) and pilot testing will ensure reliability. Data will be analysed using SPSS v27. Descriptive statistics and Chi-

square tests will be applied, with $p < 0.05$ considered statistically significant.

Expected Results: The study is expected to reveal gaps in medico legal knowledge, inconsistent ethical practices, and suboptimal utilization of professional indemnity insurance, despite generally positive attitudes toward medico-legal education (1,6,9).

Conclusion: The findings may highlight the need for strengthened medico-legal education in undergraduate curricula, continuing professional development programs, and increased awareness of indemnity insurance to promote ethical practice and professional security.

Index Terms—Code of ethics, medico legal aspects, professional indemnity insurance, healthcare professionals, Consumer Protection Act, KAP study

I. INTRODUCTION

The practice of medicine is one of the noblest professions in the world. The medical profession is a service-oriented liberal profession governed by a self-regulating code of ethics. The doctor patient relationship thrives on mutual trust and conviction^(1,2). As healthcare continues to evolve within a framework of regulation, accountability, and patient rights, medico-legal considerations have become an essential

aspect of a doctor's professional life. From informed consent and medical negligence to patient confidentiality and documentation standards, doctors are increasingly expected to navigate complex legal landscapes alongside their clinical duties. These medico-legal principles not only help to protect practitioners from legal risks but also promote ethical, patient centred care ^(2,3).

In India, the Consumer Protection Act was enacted in 1986 to protect the interests of consumers. For doctors and medical professionals, the COPRA Act has significant implications, as patients are now legally recognized as consumers entitled to safe, ethical, and accountable medical care ^(3,4). Despite best efforts, even the most experienced practitioners can face complaints or legal claims alleging errors, omissions, or negligence in the course of their duties. This is where professional indemnity insurance plays a vital role ^(5,6). The term "indemnity" means reimbursement or compensation. The principle of indemnity is strictly observed in liability insurance. These insurance policies are designed to provide the insured person protection against the financial consequences of legal liability ^(5,7). Studies have shown varying levels of awareness among healthcare professionals regarding medico-legal aspects and professional indemnity insurance, indicating the need for further assessment and education ⁽⁸⁻¹⁰⁾.

In this article, we explore the Knowledge, Attitude, and Practice of healthcare professionals regarding the code of ethics, medico-legal aspects, and professional indemnity insurance.

II. METHODOLOGY

Study design: A descriptive cross-sectional questionnaire-based survey was conducted to assess the knowledge, attitude, and practice (KAP) of healthcare professionals regarding code of ethics, medico-legal aspects, and professional indemnity insurance ^(1,6,8).

Study setting: The study was carried out among healthcare professionals working in government hospitals, private hospitals, clinics, and teaching institutions across Tamil Nadu.

Study population: The study population comprised registered medical (MBBS) and dental (BDS) practitioners actively engaged in clinical practice. Healthcare professionals were chosen because they are directly involved in patient care and are legally accountable under ethical and medico-legal frameworks ^(2,3).

Sample size determination: Based on previous literature reporting awareness of professional indemnity insurance at approximately 60% ⁽¹⁾, the sample size was calculated using a 95% confidence level and 5% margin of error. The required sample size was 369 participants. Considering a 10% non-response rate, the final target sample size was 385.

Sampling technique: Convenience sampling was used. A Google Form link containing the questionnaire was circulated through professional networks, WhatsApp groups, and social media platforms to ensure broad participation.

III. DATA COLLECTION TOOL

A structured, self-administered questionnaire was developed after reviewing previous studies on medico-legal awareness and professional indemnity insurance ^(6,8,9). The questionnaire consisted of four sections:

- Demographic details – age, gender, qualification, years of experience, and practice setting
- Knowledge assessment – objective questions on code of ethics, CPA, consent, and insurance
- Attitude assessment – statements rated on a 5-point Likert scale
- Practice assessment – questions on documentation, consent, record maintenance, and insurance coverage

3.1 Validation and reliability:

The questionnaire underwent content validation by subject experts, yielding a Content Validity Index (CVI) of 0.97. A pilot study was conducted among 30 healthcare professionals to assess clarity and feasibility. Test-retest reliability was evaluated after two weeks.

3.2 Data collection procedure:

Participation was voluntary. The online questionnaire took approximately 10–15 minutes to complete.

Informed consent was obtained electronically prior to participation. Responses were anonymized to ensure confidentiality.

IV. STATISTICAL ANALYSIS

Data were entered into Microsoft Excel and analysed using SPSS version 27. Descriptive statistics (frequencies and percentages) were used to summarize variables. Inferential analysis was performed using the Chi-square test to determine associations between demographic variables and KAP scores. A p-value < 0.05 was considered statistically significant.

4.1 Ethical considerations:

Participation was voluntary, and confidentiality of responses was maintained. No identifying information was collected. The study adhered to ethical principles for research involving human participants.

4.2 Inclusion criteria:

Registered MBBS and BDS practitioners with valid medical/dental council registration
 Healthcare professionals actively involved in clinical practice
 Individuals who provided informed consent to participate

4.3 Exclusion criteria:

Interns and undergraduate/postgraduate students
 Non-practicing graduates
 AYUSH practitioners and other non-allopathic professionals

V. RESULTS

A total of 570 healthcare professionals participated in the study. Results are presented under knowledge, attitude, and practice domains.

Table 1: Knowledge Regarding Ethics & Medico-Legal Aspects

Knowledge Variable	Correct/Expected Response (%)
Consent for 15-year-old patient - Parent/Guardian	81.2%
Aware patients can claim compensation	96.1%
Correct COPRA compensation limit awareness	59.1%
Correct appeal period knowledge	59.6%
Liability in LA anaphylaxis case	94.4%

5.1 Narrative Summary – Knowledge

Most participants demonstrated good awareness of legal accountability, with 96.1% knowing that patients can claim compensation and 94.4% recognizing liability in negligence scenarios. However, only around 60% were aware of specific legal procedures such as compensation limits and appeal periods, indicating moderate procedural knowledge gaps.

Table 2: Attitude Toward Medico-Legal Education & Ethics

Attitude Variable	Positive Response (%)
Medico-legal topics should be in UG curriculum	92.8%
Laws Favor both doctor and patient	30.9%
Professional indemnity insurance mandatory belief	10.2%

5.2 Narrative Summary – Attitude

A highly positive attitude toward medico-legal education was observed, with 92.8% supporting its inclusion in undergraduate curricula. However, only 10.2% believed professional indemnity insurance is mandatory, reflecting underestimation of risk protection importance.

Table 3: Practice Patterns

Practice Variable	Appropriate Practice (%)
Always obtain informed consent	66%
Discuss prognosis before treatment	79.8%
Provide case summary during referral	95.3%
Maintain records >3 years	32.6%
Have professional indemnity insurance	44.7%

5.3 Narrative Summary – Practice

While consent (66%) and treatment discussion (79.8%) practices were reasonably followed, long-term record maintenance was low. Only 44.7% had professional indemnity insurance coverage. Many non-insured participants stated it was “not mandatory” (57.6%) as the main reason, highlighting a practice–awareness gap.

5.4 Overall interpretation:

Knowledge: Good general awareness, moderate gaps in legal procedures
 Attitude: Strong support for medico-legal education

Practice: Acceptable ethical practices but poor insurance adoption.

This indicates the need for structured medico-legal training and promotion of professional indemnity insurance among healthcare professionals

VI. DISCUSSION

The present study assessed the knowledge, attitude, and practice (KAP) of healthcare professionals regarding code of ethics, medico-legal aspects, and professional indemnity insurance. The findings highlight that while general awareness of legal accountability is high, Specific procedural knowledge and practical implementation remain inconsistent.

A majority of participants demonstrated awareness that patients can claim compensation for negligence and that practitioners may be legally liable in cases of clinical error. Similar findings were reported in previous Indian studies, where healthcare professionals showed good general awareness of medico-legal responsibility but lacked detailed knowledge regarding legal procedures such as appeal periods and compensation limits (2,3,8). Limited understanding of specific legal provisions may increase vulnerability to litigation despite overall awareness of accountability. Studies have emphasized that inadequate knowledge of medico-legal regulations, particularly documentation standards and legal timelines, is a major contributor to professional risk (13). The study revealed a highly positive attitude toward medico-legal education, with most participants supporting its inclusion in undergraduate curricula. This aligns with earlier research showing strong professional agreement that ethics and medico-legal training should be strengthened during academic training (6,9,10).

However, only a small proportion considered professional indemnity insurance mandatory, reflecting underestimation of its importance. Similar misconceptions regarding indemnity insurance necessity have been observed in other studies, where practitioners perceived insurance as optional rather than essential (1,7,9).

Regarding practice patterns, many practitioners reported routinely obtaining informed consent and discussing treatment prognosis, which are key components of ethical and legal compliance. These findings are consistent with previous reports showing

improved awareness of consent procedures among practitioners (6,10). However, long-term maintenance of patient records was suboptimal, echoing earlier studies where documentation practices were found inadequate despite awareness (2,13). Proper record keeping is crucial in defending against negligence claims, and failure in this area significantly increases medico-legal risk. Professional indemnity insurance uptake in the present study was less than half of participants, with many citing the belief that insurance is not mandatory as the main reason for non-adoption. Comparable trends were noted in studies among dental and medical professionals in India, where awareness did not translate into practice (1,7,9). Barriers such as lack of awareness, cost concerns, and underestimation of risk have been repeatedly identified.

The results demonstrate a knowledge–practice gap, where awareness does not consistently lead to appropriate medico-legal practices or financial risk protection. Strengthening structured training programs, continuing medical education, and institutional policies is essential to improve compliance. Professional regulatory bodies should also promote indemnity insurance as a standard component of professional security.

This study reinforces evidence from earlier literature that, although healthcare professionals possess general awareness of medico-legal responsibilities, there is a pressing need to improve procedural knowledge, documentation practices, and insurance coverage. Bridging this gap is crucial for ensuring ethical care, patient safety, and professional protection.

VII. CONCLUSION

The present study demonstrates that healthcare professionals possess good general awareness regarding medico-legal accountability and ethical responsibilities. However, gaps exist in detailed procedural knowledge, particularly concerning legal timelines, compensation limits, and documentation standards. While attitudes toward medico-legal education are highly positive, this awareness does not consistently translate into optimal practice. Key deficiencies were observed in long-term record maintenance and adoption of professional indemnity insurance.

These findings indicate a clear knowledge–practice gap, suggesting that healthcare professionals

recognize the importance of medico-legal principles but may not implement them fully in routine practice. Strengthening education, practical training, and awareness regarding professional indemnity insurance is essential to ensure ethical, legally compliant, and secure clinical practice.

VIII. LIMITATIONS

- The study used convenience sampling, which may limit generalizability.
- Data were collected through self-reported responses, which may be subject to recall bias and social desirability bias.
- The study was limited to one geographic region, and findings may not represent healthcare professionals in other areas.
- Cross-sectional design prevents establishing cause-effect relationships.

IX. RECOMMENDATIONS

- Integration of medico-legal education into undergraduate and postgraduate medical and dental curricula.
- Regular continuing education programs and workshops on legal updates, documentation standards, and ethical practice.
- Institutional policies to enforce proper consent and record maintenance protocols.
- Awareness campaigns by professional bodies to promote professional indemnity insurance coverage as a routine professional safeguard.
- Further multicentric studies with randomized sampling to improve external validity.

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