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Original Article

Knowledge and Awareness about Medico-legal Issues in Clinical Setting Among Medical Interns – A Questionnaire-Based Study

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ABSTRACT

The increase in trend of medical negligence lawsuits against doctors due to awareness among general population because of various factors has led to increase anxiety among medical professionals. Knowledge about medico-legal issues, laws relating to medical practice and medical ethics, which were not taken seriously earlier by the health professionals, has made them more vulnerable to litigations. All these issues are taught to them in their second year of undergraduate training, but the lack of understanding of these issues during their internship training made them inadequate with respect to standards of noble medical profession. Hence, the present study was conducted to evaluate the knowledge and awareness of our interns on handling routine medico-legal issues in the wards and casualty. A total of 100 interns posted in various departments of the institute participated in this research. Data were collected in the form of a self-administered questionnaire comprising close-ended questions related to the topic of the study. The majority of participants had knowledge about bulk of medico-legal issues. However, there was uncertainty regarding preparation of injury certificate, hospital indemnity insurance, medical record preservation and evidence collection in sexual assault and poisoning cases. The knowledge gaps identified through this study on particular topics help us to plan some remedial measures in undergraduate and internship training.

Keywords: Informed consent, Medical ethics, Medical negligence, Medico-legal cases, Record keeping

INTRODUCTION

A doctor, whether in private or government service, not only has to manage sick patients but also face medico-legal challenges in routine practice. The medical students were taught about the medico-legal issues and medical jurisprudence in the second year of their undergraduate studies by the department of Forensic Medicine. But these young medical graduates when become interns

and face medico-legal issues after graduation are at a loss as they would have forgotten what they have learnt earlier^[1]. The rising medico-legal and medical negligence cases have led to an overall increase in the number of such cases reporting to the Casualty and Emergency department of hospitals in our state. Thus, the need-of-the-hour is to have medico-legal knowledge equipped doctors who are well-versed with the legal and ethical aspects of their practice^[2]. They must be content about

medical examination and report writing, standard operating procedures to be followed and appearing as expert witnesses in courts of law^[3].

The principal aim of the present study is to find the knowledge and awareness of the medical interns working in our hospital about their medico-legal awareness that they encounter during their clinical postings. This study also provides a way to reveal our teaching methodology in order to devise a way of making the curriculum more practical and applicable to real-life situations in the wards and casualty. Furthermore, we also planned some remedial measures in undergraduate and internship training if working knowledge is found to be inadequate.

METHODOLOGY

The current research is a cross-sectional study which was conducted on medical interns with a total sample size of 100 (one hundred) participants. All the interns who were posted in various departments of the institute during 1-month period and were willing to participate were included in the study. Those who did not give consent or failed to show up were excluded from the same. Data collection was done in the form of a structured self-administered questionnaire comprising 22 questions pertaining to basic knowledge of medical law, record keeping, ethics, informed consent, medical negligence and so on. The nature and purpose of the study was explained to them and oral informed consent

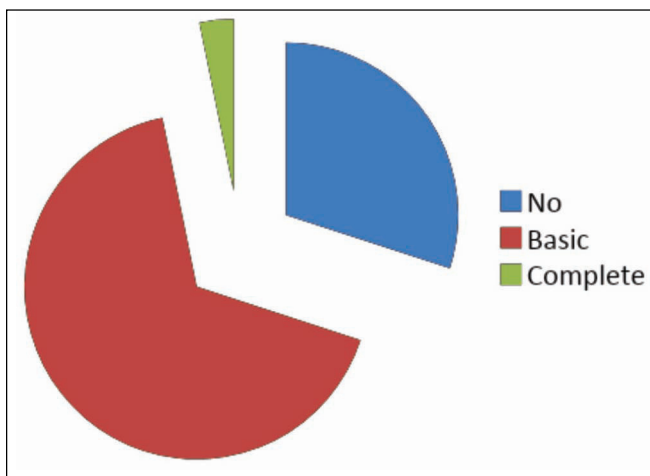
of all respondents was taken. The questionnaire was validated, pre-tested and modified accordingly. A pilot study was conducted among 10% of the study population for testing of validity and inter-item consistency of the developed questionnaire. Individuals included in the pilot study were not considered for the current study to prevent possible bias^[4]. The study was conducted over a period of 1 month. For each question, three responses were mentioned, out of which one response was marked for each question. The knowledge and awareness of the participants were graded into no knowledge, basic knowledge and full knowledge about the question asked.

OBSERVATIONS

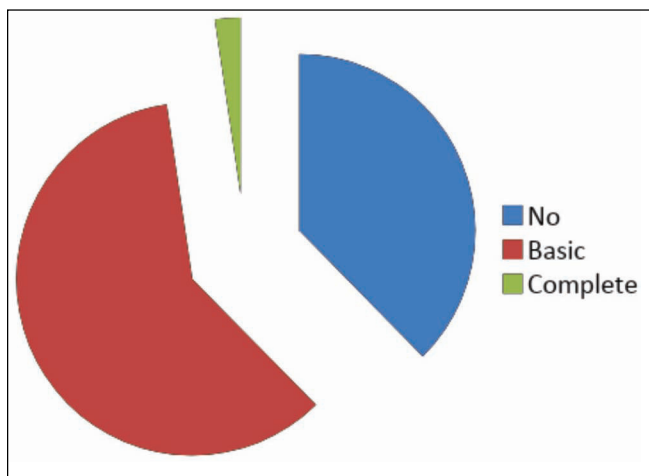
A total of 100 participants (interns) took part in this study from various departments of Medical College. Out of the 100 participants, 74 were male interns and 26 were female interns. The interns were chosen for the study because they are not only research facilitators, but also future doctors who should have an insight and knowledge of health-care ethics.^[5] In accordance with the medical curriculum of India, the medical students during their undergraduate medical education are told about health-care ethics, laws, jurisprudence and other related issues in the subject specialty of Forensic Medicine. Response rate was 100%. All the 22 questions and their responses were categorized (Pie chart 1 and 2) into Table 1 to 6 six groups for the suitability of further discussion.

Table 1: Table showing knowledge and awareness of interns about medico-legal cases

Questions	Knowledge		
	No	Basic	Complete
Do you know what the medico-legal case is?	9	87	4
Do you know your responsibilities while handling medico-legal case?	22	76	2
Do you know type of consent used in medico-legal cases MLC?	21	74	5
Do you know how to prepare injury certificate?	57	39	4
Do you know how to prepare medical certificate for cause of death?	23	76	1
Do you know which cases require medico-legal autopsy?	32	65	3
Do you know which evidences should be collected in sexual assault cases?	46	51	3



Pie Chart 1: Knowledge and awareness of interns about medico-legal cases



Pie Chart 2: Knowledge and awareness of interns regarding management of poisoning cases

Table 2: Table showing knowledge and awareness of interns about medical records

Questions	Knowledge		
	No	Basic	Complete
Do you know what medical records are?	18	77	5
Do you know the time period for which the hospital is legally bound to preserve the medical records?	54	44	2

Table 3: Table showing knowledge and awareness of interns regarding management of poisoning cases

Questions	Knowledge		
	No	Basic	Complete
Do you know steps in management of poisoning cases?	16	81	3
Do you know how to perform a gastric lavage?	46	51	3
Do you know which preservative should be used in preservation of gastric lavage sample?	51	48	1

Table 4: Table showing knowledge and awareness of interns about laws relating to medical practice

Questions	Knowledge		
	No	Basic	Complete
Do you know what is COPRA (Consumers Protection Act)?	28	68	4
Do you know what is HOTA (Human Organ Transplantation Act)?	40	55	5
Do you know what is POCSO Act (Prevention of Child Against Sexual Offence)?	33	64	3
Do you know what is Mental Health Act?	35	63	2

Table 5: Table showing knowledge and awareness of interns about HIV-related issues

Questions	Knowledge		
	No	Basic	Complete
Do you know about the rights of HIV-positive patients?	19	78	3
Do you know about post-exposure prophylaxis?	13	77	10

Table 6: Table showing knowledge and awareness of interns about various medico-legal issues

Questions	Knowledge		
	No	Basic	Complete
Do you know what medical negligence is?	9	86	5
Do you know what medical ethics are?	7	87	6
Do you know what hospital indemnity insurance is?	58	41	1
Do you know what bio-medical waste management is?	5	67	26

DISCUSSION

After gaining theoretical and some practical training for four and half years, internship period becomes vital for the medicos to gain proper training and experience before becoming a registered medical practitioner. This is a significant move for a medical student in the graduation training. Most of the understanding earned in last few years will be applied in the daily clinical settings and more skills and knowledge will be learnt. But apart from learning vital clinical skills, in today's scenario, basic medico-legal issues concerned with clinical practice should also be kept in mind which enables future doctor to face problems related with such matters more confidently. Medical faculty especially Forensic Medicine department has significant role in imparting such knowledge and awareness to these young trainees.

MLC is a case of injury/illness where the attending doctor, after eliciting history and examining the patient, thinks that some investigation by law enforcement agencies is essential to establish and fix responsibility for the case in accordance with the law of the land ^[6]. Many doctors are apprehensive in handling such cases may be because of fear, unwarranted laws and regulations, attending the court, harassment by the lawyers and questions by police personnel ^[7]. We observed in our study that very few

interns knew exactly how to prepare a injury certificate. Medical council of India (MCI) has recommended that it is desirable and compulsory for MBBS graduates and post-graduates to know about reporting of injury, collection of biological material and all aspects of medico-legal cases. Our findings are in agreement with the findings of Mardikar and Kasulkar ^[8], Venkat Rao and Hari ^[9], Giri *et al.* ^[10]. Our research reveals that only half of participants were sure about preservative and method used for gastric lavage sample collection in a case of poisoning, which differs from a study done by Mardikar and Kasulkar ^[8]. in Nagpur in 2015, where 95.7% of interns knew about preservation of gastric lavage in poisoning cases which also showed in the study conducted by Ropmay *et al.* ^[3,8]. As per Article 51 A(h) of the Constitution of India, there is a moral responsibility on the doctor, and a legal duty of medical practitioner to maintain and preserve medical, medico-legal and legal documents related to patients in the best interests of social and professional justice ^[9]. In addition, we found that knowledge regarding retention of medical records was lacking in the majority of respondents, which is similar to the findings of Rai *et al.* ^[4] conducted in Vadodara in 2012 and Ropmay *et al.* ^[3]. Interns were aware about COPRA but very few knows about HOTA and Hospital indemnity insurance, which was also noticed in the study conducted by Jambure and Jambure ^[11] in Aurangabad

in 2017. As there is more awareness about human organ donation among people due to social media and different government initiatives, doctors should also make themselves aware about laws related to it. Due to increase in number of medical negligence cases against doctors, it has now become pertinent to have Hospital indemnity insurance by every practitioner. Due to the limited knowledge of laws in relation to medical practice of the health professionals, there is an increased risk of malpractice suits. In addition, the expanding patient population is becoming more knowledgeable and aware of their rights; consequently taking action by contacting the consumer forum to lodge their complaints^[12]. Moreover, the study group also showed lack of knowledge in relation to examination of cases of sexual assault and required sample preservation.

Our observations clearly indicate that some counteractive measures are necessary to explicate certain questions elucidating response of less than 50%. As medical teachers, we could revise our teaching methodology, lecture style, lecture content and evaluation for a more practical approach to medico-legal education.^[13] The inclusion of problem-based learning exercises and case scenarios could facilitate better learning among students. A refresher/orientation class at the start of internship may be introduced to enable new interns to recollect what they have already learnt and apply it while doing the rounds in the wards and casualty^[3]. Topics may be selected and taken up for discussion with concerned departments at varying intervals during internship to strengthen weak areas and address specific issues, for example, 'How to prepare a injury certificate', 'Collection and Preservation of samples in sexual assault cases', 'Preservative to be used in preservation of gastric lavage sample' and 'Medical indemnity insurance'. A 15 days posting in the Department of Forensic Medicine and Toxicology during internship may be made mandatory to enable proper handling of medico-legal cases^[5]. Problem-oriented on-the-job training and regular updates on new developments in the field could possibly improve knowledge and perception of these issues^[14]. Further, regular Continuing Medical Education (CME)

programmes on medical law and ethics could be held from time to time to ensure that interns and doctors are confident about dealing with such situations on a day-to-day basis^[3]. The observation of the present study only depicts the awareness of the interns of a particular institute and verifies the level of knowledge acquired after teaching medical jurisprudence, and not of the whole country which is the limitation of the study. More detailed perception and awareness level could have been established if the same group of students were followed during the entire medical course. However, the present study paves way for future research in the country to transform undergraduate curriculum based on practical aspects of medico-legal practice, health-care law and ethics.

CONCLUSION

In the modern day practice, good knowledge and awareness of health-care ethics is mandatory. Ignorance to the matter concerned does not mean the rule is not there; neither will it be an excuse that the rule will not be applied. This present study attempts to present the evaluation of interns on issues relating to ethics and medico-legal practice and also stress on the importance of ethics in the practice of medicine, and the specific need to incorporate practical aspects of medico-legal practice in the undergraduate curriculum. Practice of medicine in accordance with the well-established medico-legal and medical laws not only saves a medical man from allegations of negligence or litigation, but also increases the trust in doctor-patient relationship, thus, upholding the dignity of noble medical profession.

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