TO ASSESS THE NEED OF MEDICOLEGAL EDUCATION IN INTERNS AND RESIDENTS IN MEDICAL INSTITUTION
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ABSTRACT: BACKGROUND & OBJECTIVES: Forensic Medicine and Toxicology is an important subject in medical education, but Medical Council of India has reduced the syllabus at undergraduate level losing its importance and role in giving justice in criminal cases. The public is now conscious about their legal rights as a patient that is why medical profession has come under purview of consumer protection act. MATERIAL & METHODS: A cross-sectional, questionnaire based study was conducted from January 2013 to January 2015 in 115 interns and 105 residents. The data was collected and analyzed statistically for number and percentage using EPI-Info statistical software version 6. RESULTS: Total 220 students were participated in the present study. We found that 103(89.6%) interns and 44(41.9%) residents had no experience of handling MLC, 17(14.8%) interns and 23(21.9%) residents were aware about preservatives to be used for chemical analysis of various articles like gastric lavage, blood, urine in poisoning cases, 37(32.2%) interns and 49(46.7%) residents were aware about medical indemnity insurance and 15 (13%) interns and 85(80%) residents were having idea of Consumer Protection Act. CONCLUSION: It was found that the knowledge about medicolegal aspects needs to boost up time to time particularly at internship and postgraduate levels. KEYWORDS: Medicolegal education, Clinical Forensic Medicine, Medical record.

INTRODUCTION: Forensic Medicine and Toxicology is an important subject in medical education. As Medical Council of India has reduced the syllabus considerably at undergraduate level, this has lost its importance and role in giving justice in criminal cases.¹ The public is now conscious about their legal rights as patient plus judiciary system is passing negative remarks about doctors. This has brought medical profession under purview of Consumer Protection Act in contrast to decreasing importance of Forensic Medicine. Complaints against doctors appear to be increasing day by day resulting in change in doctor-patient relationship and commercialization of practice.² In view of the above, the aim of medical institution should be to provide interns and residents medicolegal training in addition to the subject taught in second M.B.B.S. to refresh their knowledge because they are likely to forget after passing without realizing its important role in future.

Clinical Forensic Medicine (CFM) that includes medicolegal work related to judicial, legal and police system is taught to the students through theory only, with no provision for practical. Same situation exists for practical training of postmortem examination as there is no compulsory rotatory internship like in other subjects.³⁻⁴ Shortcomings in medicolegal examination in assault cases, injury report preparation, preservation of stomach wash and vomited material at the time of treating poisoning, and while giving opinion in courts has exposed doctors very badly due to lack of knowledge regarding subject.
At the same time, gross violation of various guidelines by medicos while handling medicolegal cases is leading to miscarriage of justice.\(^5\)

The training period is critical time for interns and postgraduates during this period transition from student to physician takes place with better understanding to learn medicolegal work.\(^6\)\(^7\) For proper training of medicolegal examination, the casualty must be attached to and supervised by the Forensic Medicine department and posting of interns and postgraduates in Forensic Medicine should be made compulsory.\(^1\) It should be realized by all doctors that they have to deal with medicolegal cases throughout their carrier irrespective of the faculty they choose. So having knowledge about the subject is very important while working in hospital or in private clinic. Also the medical ethics and various acts related to medical practice should be emphasized in the undergraduate and postgraduate levels.\(^8\)

With this in mind, the present study was carried out to assess the knowledge of interns and residents regarding medicolegal problems and to make them aware about law and liabilities related to medical practice.

**MATERIALS AND METHODS:** A questionnaire based cross-sectional study was conducted in N.K.P. Salve Institute of Medical Sciences and Research Centre, Nagpur, Maharashtra, India during period of 2 years (January 2013 to January 2015) after seeking permission from Institutional Ethics Committee. The study was carried out in 115 interns and 105 residents of all streams. A good rapport was established with them. They were explained the purpose of study and prior written informed consent was obtained from them. They were informed about the confidentiality of the information collected so as to get more reliable answers from them. A self-administered questionnaire containing 20 items relating to knowledge and attitudes of medical ethics and Forensic Medicine was designed and pre-tested. The data thus obtained was tabulated and analyzed statistically for number and percentage using EPI-Info statistical software version 6.

**RESULTS:** The present study was carried out on 115 interns and 105 residents. Out of which, we found that 103(89.6%) interns and 44(41.9%) residents had no experience of handling MLC, 17(14.8%) interns and 23(21.9%) residents were aware about preservatives to be used for chemical analysis of various articles like gastric lavage, blood, urine, etc. in poisoning cases, 37(32.2%) interns and 49(46.7%) residents were aware about medical indemnity insurance which is an insurance covering doctor in case of negligence cases and 15(13%) interns and 85(80%) residents were having idea of Consumer Protection Act (Table I).

We observed that 83(72.2%) interns and 66(62.9%) residents were aware of various steps of management of poisoning cases, 110(95.7%) intern and 99(94.3%) residents knew about preservation of gastric lavage in poisoning cases, and 72(62.6%) interns and 81(77.7%) residents were aware about collection of vital evidences in sexual assault cases. When enquired about the writing of injury certificate, only 6(5.2%) interns and 10(9.5%) residents were able to mention it properly. Interns 92(80%) and residents 97(92.4%) were aware about ‘Rule of Nine’ which is used for calculation and management of burn cases whereas 82(71.3%) interns and 75(71.4%) residents were aware of most common drugs of addiction. Death certificate is designed by World Health Organization was known to 28(24.2%) interns and 37(35.2%) residents. Very few interns 37(32.2%) and 61(58.5%) residents were aware that three copies of death certificate to be prepared.
Dead body is not to be sent for postmortem examination in natural cases was known to 88(76.5%) interns and 87(82.9%) residents (Table II).

Maximum number of interns 78(48.8%) and residents 82(51.2%) were aware about the best type of consent being informed consent, however, only 15(13.1%) interns and 8(7.1%) residents were aware about minimum age for giving consent for organ donation in India. We also found that 102(88.7%) interns and 98(93.3%) residents knew about the action to be taken even when there is request from patients or their relatives for not to register MLC (Table III).

From Table IV, it is evident that 38(33.1%) interns and 45(42.9%) residents were acquainted with period of preservation of medical records of hospital. When enquired their opinion whether undergraduate teaching of Forensic Medicine is sufficient or not to handle medicolegal responsibilities, 60(52.2%) interns and 53(50.5%) residents opined that it is not sufficient and it needs to be refreshed in their internship and residency.

**DISCUSSION:** Due to rise in public awareness regarding ethical conduct of medical practitioners, litigations against doctors are on hike which is an issue of immediate concern. To avoid this, doctors need to familiarize themselves with laws and regulations that concern their practice. This will result in fulfillment of ethical, moral and legal obligations in their duties.

During the study of 220 interns and residents, we observed that most of the interns and residents had no experience of handling any medicolegal case which is in concordance with findings noted by Rai JJ et al. This could be due to fact that most of them have not come across medicolegal cases. Interns (32.2%) and residents (46.7%) were not aware about self-insurance i.e. medical indemnity insurance and whether the doctors are covered under Consumer Protection Act which is in agreement with findings of Dash SK and Kachare RV et al. Their responses could not be considered satisfactory as such things should be known by all doctors.

Regarding knowledge of Clinical Forensic Medicine, very few are acquainted with Rule of Nine, management of poisoning cases, collection of evidences in sexual assault cases, and preservation of gastric lavage. It was observed by us that very few interns and residents mentioned sub-headings of injury certificate correctly. In lifting importance of Clinical Forensic Medicines, this percentage is very poor. List of skills and attitude recommended by MCI desirable for MBBS and postgraduate for Forensic Medicine and Toxicology is compulsory to know about reporting of injury, collection of biological material.

General awareness about informed consent was there among students, however, very few interns and residents were not aware of minimum age for giving consent for organ donation. Knowledge of medicolegal issues was very poor which is in concordance with findings of Giri PA et al. A similar study was conducted in Vadodara in interns and residents which showed very less knowledge about medicolegal record among the interns and residents which is in congruence with our study.

**CONCLUSION:** The study was sincere effort to assess the knowledge of interns and residents about various aspects of medicolegal issues. By and large, we observed that the knowledge about various medicolegal aspects needs to boost up time to time particularly at internship and postgraduate levels. They need be refreshed about various medicolegal aspects which can be done by giving trainings to them.
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| Variables                                            | Interns          | Residents         |
|-------------------------------------------------------|------------------|-------------------|
| MLC cases not handled independently                   | 103 (89.5%)      | 44 (41.9%)        |
| Opinion regarding UG teaching sufficient to know medicolegal responsibilities | 60 (52.2%)       | 53 (50.1%)        |
| Preservative use for chemicals analysis of organ      | 17 (14.8%)       | 23 (21.9%)        |
| Awareness about Consumer Protection Act               | 15 (13%)         | 85 (80%)          |
| Awareness of Indemnity insurance                      | 37 (32.2%)       | 49 (46.7%)        |

Table I: Knowledge about Forensic Medicine
### Table II: Clinical Forensic Medicine

| Variables                                           | Interns | Residents |
|-----------------------------------------------------|---------|-----------|
| Important steps in management of poisoning case       | 83(72.2%) | 66 (62.9%) |
| Preservation of gastric lavage in poisoning cases     | 110(95.7%) | 99 (94.3%) |
| Evidences to be collected in a rape case             | 72(62.6%) | 81 (77.7%) |
| Knowledge of injury certificate                       | 6 (5.2%) | 10 (9.5%) |
| Knowledge of Rule of Nine                            | 92 (80%) | 97 (92.4%) |
| Death certificate designed by WHO                    | 28 (24.2%) | 37 (35.2%) |
| Copies of death certificate                          | 37 (32.2%) | 61 (58.5%) |
| Cause of death to be mentioned in death certificate   | 110(95.7%) | 73 (69.5%) |
| Dead body to be sent for postmortem                   | 88 (76.5%) | 87 (82.9%) |

### Table III: Various aspects of Consent

| Variables                                           | Interns | Residents |
|-----------------------------------------------------|---------|-----------|
| Best type of consent in MLC                          | 78 (67.8%) | 82 (78.1%) |
| Minimum age of consent for organ donation in India   | 15 (13.1%) | 8 (7.6%) |
| Duty to register MLC irrespective of patients or relatives request | 102 (88.7%) | 98 (93.3%) |

### Table IV: Awareness about record keeping

| Variables                                           | Interns | Residents |
|-----------------------------------------------------|---------|-----------|
| Hospital is legally bound to maintain records        | 38 (33.1%) | 45 (42.9%) |
| Medicolegal cases marked with capital letter         | 28 (24.3%) | 61 (58.1%) |
| Preservation of medicolegal records in computer      | 46 (40%) | 45 (42.9%) |

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