

Analysis of Medicolegal Awareness Among Fresh Indian Medical Graduates

Umesh Kumar Choudhary¹, Biyabani Naushad Husain², Ajit Malani³,
Vinod Rathod⁴, Neha Choudhary⁵

^{1,2}Associate Professor, Dept of Forensic medicine and Toxicology, American International Institute of Medical Sciences, Udaipur, Rajasthan

³Professor and Head, Dept of Forensic medicine and Toxicology, American International Institute of Medical Sciences, Udaipur, Rajasthan

⁴Assistant professor, Dept of Forensic medicine and Toxicology, Dr VM Govt Medical College, Solapur, Maharashtra

⁵Senior Demonstrator, Dept of Microbiology, RNT Medical College, Udaipur, Rajasthan

How to cite this article: Umesh Kumar Choudhary, Biyabani Naushad Husain, Ajit Malani, Vinod Rathod, Neha Choudhary et al Analysis of Medicolegal Awareness Among Fresh Indian Medical Graduates. Volume 22 | Number 3 | July-September 2022

Abstract

Introduction: Recent escalating trend in litigation against doctors is an issue of top concern, one important reason for it is poor handling of medico-legal cases.

Aims & Objective: To evaluate the status of knowledge about common medico-legal terminologies/cases among fresh Indian Medical Graduates(IMG) and problems if any in teaching medicolegal aspects in the medical curriculum.

Material & Methods: Observational analytical study involving 150 fresh IMG's working in medical colleges as interns or faculty with experience less than 1 year, using questionnaire of 30 pre-validated questions based on Likert's scale.

Results: In our study we observed that 99% IMG's are not able to handle medicolegal cases independently. Most of IMG's have poor knowledge of certification of death(60%), injury(87%) etc. and important medicolegal concepts like vicarious liability(62%) and ethical aspects of artificial insemination(75%). 58 to 91% IMG's have fair knowledge of different acts. 53% and 44% IMG's have fair knowledge of rights of patients and record keeping respectively. More than 90% participants didn't have any experience with investigating authorities or court. 64% IMG's would prefer to consult forensic medicine expert in medicolegal complications. No participant had attended any workshop or training session on medicolegal cases. More than 90% IMG's believe that UG teaching for medicolegal concepts and exposure to medicolegal cases is not sufficient.

Conclusion: Medicolegal awareness among IMG's is poor leading to inability of IMG to handle medicolegal cases independently.

Keywords: Medicolegal, Awareness, IMG, UG curriculum.

Corresponding Author address:

Dr. Umesh Kumar Choudhary

Dept of Forensic medicine and Toxicology

American international institute of medical sciences,

Udaipur, Rajasthan

Mob: 7742542307,

Email: ukc2307@gmail.com

Introduction

The Medical profession is considered as the most pious profession all over the world. The relationship between doctor and patient is based on trust and confidence but these trust, sacredness and confidence, has become the talk of olden days and now it sounds hollow. Lucky doctors of the past were treated like God and people revered and respected them.¹

The recent increasing trend in litigation against doctors is an issue of paramount concern. There is growing anxiety both within the medical profession and in the community regarding increasing trends of complaints and lawsuits against doctors.²

Now the doctor-patient relationship has deteriorated considerably and medical negligence is on the increase. With commercialization spreading to all aspects of our lives, the medical profession and services rendered by hospitals and private clinics are going through dramatic changes.¹

With the increasing use of technology, paradigm shifts in patient's attitude towards the doctor have resulted in making the law an inseparable entity of health care today. The reasons for these are media, professional accountability and decision making. The negativity spread through the media has done further damage to the once considered white collar profession.² Some incidences cause suffering to the patients, forcing the legislature and the public to think twice about the credibility and authenticity of medical treatment given to the patients.¹

Today's medical practitioners need knowledge of the law governing the practice of medicine. The practice of law and the practice of medicine increasingly overlap. Changes to legislation place an increased burden on health care providers to update their medicolegal knowledge continually. The trend in recent years toward codifying individual rights and freedoms has filtered down to the relationship between physicians and patients. For example, one group (e.g. patients) is given rights, another group (eg, physicians) is charged with obligations and responsibilities to respect and uphold those rights.³

The knowledge of medical negligence and medical ethics are essential for maintaining the patient doctor relationship and prevent the commercialization of the profession. Ignorance of the law cannot be used as a ground for escaping punishment. Therefore doctors should be familiar with the regulations and

laws dealing with medical practice. Training period is the crucial time for developing the ethical views and awareness in young doctors.⁴

As per the Medical Council of India amendment act no.24 of 1964, the Council has specified a warning notice that violation of this ethical code shall constitute "infamous conduct in a professional sense; i.e. it will be Professional Misconduct. Control of medical profession by the legislative actions of the government through various legal provisions like MTP act, PNDT, CPA were enacted to curb the growing malpractice in medical profession. Numerous verdicts of the courts on cases between doctors and patients have frequently been in favor of the patients which have proved the guilt of the faltering physicians.⁵

Ethics teaching has been shown to have a significant influence on the professionalism and moral qualities of medical professionals.⁶ The instructional programs in medical education field are aimed at developing a competent medical graduate. However, the current student community gives importance only to cognitive domain, which is essential to get through postgraduate entrance tests. A medical graduate should have sufficient knowledge about medicolegal cases and his role as a responsible learned citizen in assisting the administration of law and justice in the country.⁷

Forensic Medicine and Toxicology is a very important subject that deals primarily with evidence in criminal cases. The syllabus for undergraduate students of this important subject was reduced over the years, hence is losing its significance.⁸

Day by day there is increase in complaints against both government and private doctors by the patients, and judicial system is also passing negative remarks about doctors. Doctors are called to the court to give expert witness regarding assault cases, poisoning cases. Due to lack of proper medicolegal knowledge, most of the doctors are very badly exposed in courts. Every doctor should realize that irrespective of the post graduate specialty they choose, throughout their career they have to deal with medicolegal cases. Hence they should have sufficient knowledge about medicolegal aspects whether they work in private clinics or government hospitals. Keeping the above facts in mind, medical colleges all over India should increase the importance of Forensic Medicine and Toxicology subject by covering all its aspects.⁸

Keeping the above facts in mind, we carried our study to know medicolegal knowledge of fresh Indian Medical Graduates (IMG's) and also to make them aware of medicolegal issues, so that they can handle medicolegal cases effectively.

Aims & Objectives

1. To evaluate the status of knowledge about common medicolegal terminologies / cases among fresh IMG and medical faculty.
2. To evaluate problems if any in teaching medicolegal aspects in medical curriculum regarding medicolegal issues.
3. To recommend possible solutions.

Material and Methods

- The present Observational analytical study was carried out at a Medical College in Udaipur with sample size 150.

Inclusion criteria

- Students who have passed final MBBS with less than one year experience or working as Interns in hospital.

Exclusion criteria

- Doctors/Faculty with MBBS degree working at the Institute with experience more than one year or with degree other than MBBS and MD/MS degree.

Methodology

- A questionnaire comprising of pre-validated 30 multiple choice questions was prepared and given to participants after taking consent for voluntary participation.
- Knowledge of participants was assessed and analyzed on the basis of their answers for the questionnaire designed.

Results

The study population comprised of 40% female and 60% male participants. Out of 150 participants about 82.67% (124 participants) were of the opinion that UG curriculum teaches fair amount of knowledge about

medicolegal responsibilities. 8.67 % (13 participants) consider UG teaching good to excellent in addressing medicolegal responsibilities while 8.67 % (13 participants) considered it poor in it (Table 1).

Out of total 150 participants 87.33% (131 participants) felt that they are poor in issuing injury certificate, 60% (90 participants) are poor in issuing death certificate, 92% (138 participants) were of the opinion that they are poor in examining accused / victim of sexual assault and 64% (96 participants) considered themselves poor in examination of case of alcoholism.(Table 1)

Regarding common acts which are related to day to day practice. 64% (96 participants) had poor to fair knowledge of MTP act, 94% (141 participants) had fair to poor knowledge of PCPNDT act, 90% (135 participants) and 70.67% (106 participants) had fair to poor knowledge of Organ transplantation act and consumer protection act and its importance in day to day medical practice respectively. (Table 2)

With respect to common medicolegal terminologies/concepts, 91.33% (137 participants) had fair to good knowledge of informed consent, while 100% participants claimed poor to fair knowledge of professional indemnity insurance, 84.6% (127 participants) and 92% (138 participants) had poor to fair knowledge of medical negligence and vicarious liability respectively.(Table 3)

Among 150 participants, 48% (72 participants) had good knowledge of importance of record keeping while 44.67% (67 participants) had fair and 7.33% (11 participants) had poor knowledge of the same. Whereas, out of 150 participants 68% (102 participants) had fair knowledge of guidelines on preservation of medical and medicolegal records, 24% (36 participants) had poor and 8% (12 participants) had good knowledge of guidelines on preservation of medical and medicolegal records.(Table 2)

86% (129 participants) were of the opinion that they are bound to report every case of suicidal attempt to investigating authorities. 97.33% (146 participants) of the participants could independently decide which cases are to be sent for medicolegal autopsy. 66% (99 participants) participants were of the opinion that MLC is to be registered irrespective of the patients or relatives request. (Table 4)

Out of 150 participants 137 claimed to have poor to fair knowledge of examination and medicolegal

responsibilities in case of poisoning. 103 of 150 participants claimed poor knowledge of importance of evidence preservation while 42 had fair and 5 had good knowledge of it. (Table 3)

Majority of participants (142/150) never had any experience with investigating agencies while 3 claimed Fair and 5 claimed Poor experience. None of the participants had any experience of testimony in court.(Table 2)

96 (64%) participants would like to consult forensic medicine experts in problems related to medicolegal cases while 41(27%), 09(06%), 04(3%) would prefer to consult lawyer, administration and CMO respectively.

79% of Fresh IMG's believed that exposure to medicolegal cases in UG curriculum is not sufficient. 95% of Fresh IMG's believed that more importance should be given to medicolegal aspect in UG curriculum in comparison to present status. 97% of IMG's have not attended any CME/ Workshop/ Conference related to medicolegal issues and 99% of Fresh IMG's cannot handle medico- legal cases independently. (Table 5)

Table 1: Competency of IMG in issuing common medicolegal certificates and UG curriculum in teaching medicolegal responsibilities.

Parameter	Very poor	Poor	Fair	Good	Excellent
Competency in issuing correct injury certificate independently ?	00%	87.3%	9.3%	3.3%	00%
Competency in issuing correct death certificate independently ?	00%	60%	32.6%	7.3%	00%
Competency in examination of victim/accused of sexual assault ?	00%	92%	7.3%	0.6%	00%
Competency in examination and certification of alcoholism ?	00%	64%	24.6%	11.3%	00%
UG curriculum in teaching medicolegal responsibilities	00%	8.67%	82.6%	8.67%	00%

Table 2: Knowledge of fresh IMG'S regarding important acts, guidelines related to medical practice and experience with legal system.

Parameter	Very poor	Poor	Fair	Good	Excellent
MTP act	00%	5.3%	58.6%	37.3%	00%
PCPNDT act	00%	2.6%	91.3%	6%	00%
The Human Organ Transplantation act	00%	6%	84%	10%	00%
Consumer protection act and its importance	00%	10.6%	60%	29.3%	00%
Importance of medical record keeping	00%	7.3%	44.66%	48%	00%
Guidelines for preservation of medical and medicolegal records	00%	24%	68%	08%	00%
Experience with investigating agencies	00%	3.33%	02%	No experience: 94.67%	
Experience in court for testimony	Never experienced				

Table 3: Knowledge of Indian Medical Graduates regarding common medicolegal terminologies / concepts and handling cases of poisoning.

Terminology/ Concept	Very poor	Poor	Fair	Good	Excellent
Informed consent	00%	8.6%	68%	23.3%	00%
Professional Indemnity Insurance	00%	72%	28%	00%	00%
Medical Negligence	00%	7.3%	77.3%	15.3%	00%
Vicarious Liability	00%	62%	30%	8%	00%
Examination and medicolegal responsibilities in case of poisoning	00%	37.33%	54%	8.67%	00%
Importance of evidence preservation	00%	68%	28%	3.33%	00%

Table 4: Competency of fresh IMG's in handling MLC cases.

Parameter	Yes	No

Whether bound to report every case if suicidal attempt to investigating authorities?	14%	86%
Can decide independently which cases are to be sent for medicolegal autopsy or not.	2.6%	97.3%
Need to register MLC irrespective of patients or relatives request or not.	34%	66%

Table 5: Exposure to medicolegal cases and handling.

Parameter	Yes	No
Is Exposure to medico legal cases sufficient in your UG curriculum.	21 %	79 %
Should medico legal education be given more importance than its present status in medical teaching curriculum	95 %	5 %
Attended any CME/ Workshop/ Conference on Medico legal case/ issue	03 %	97 %
Handing medico legal case independently	01 %	99 %

Discussion

With increased use of internet, electronic and print media there is an increase in awareness among public on the subject of ethical conduct of medical practitioners. Hence there are more litigations against doctors, which is an issue of immediate concern to the medical fraternity. To keep away from this, doctors need to make acquainted themselves with laws and regulations governing their practice and fulfilment of ethical, moral and legal obligations in their duties.

In our study, total of 157 responses were received out of which 7 were incomplete and hence rejected.

We observed that out of total 150 participants, 60% were male and 40% were females. This is similar to observation of Alex M Varghese (57.2% male and 42.8% female), Uma Pandey (70% male participants), Anil HariPriya (55.42 % males) and Contrary to Mamdouh kamal zaki (40.6 percent male).

We observed that 82.67% (124) participants believed that present UG curriculum teaches fair amount of knowledge about medicolegal responsibilities.

In present study 87.33% (131), 60% (90), 92% (138), 64% (96) participants considered themselves poor in issuing injury certificate, death certificate, examining

accused / victim of sexual assault and examination of case of alcoholism respectively. Similar observations were reported by G Venkat Rao (4.16% know how to write injury certificate, 20.83 had fair knowledge about death certificate), Mamdouh kamal zaki (4.1% and 20.83% had knowledge of injury certificate and death certificate respectively).

We observed that 64% (96), 94% (141), 90% (135), 70.67% (106) participants had poor to fair knowledge of MTP act, PCPNDT act, Organ transplantation act and consumer protection act(CPA) respectively. Above findings were similar to observations of Anil HariPriya (More than 70% aware about CPA), Mayuresh J Baheti (41.8 % not aware of CPA), jasuma j ra (52% and 85% had knowledge of CPA and organ transplantation act respectively). Contrary observations were reported by Mamdouh Kamal Zaki (52% and 85% had knowledge of CPA and organ transplantation act respectively), Radhika T (about 31% have knowledge of CPA), S Senthilkumar (18.8 % were aware of copra) and G Venkat Rao (20.83 % aware of CPA).

In this study, 91.33%(137) participants had fair to good knowledge of informed consent, all 100%(150) participants had fair to poor knowledge of professional indemnity insurance, 84.6%(127) and 92%(138) participants had fair to poor knowledge of medical negligence and vicarious liability respectively. Similar observations were reported by G Venkat Rao (69.16% had fair awareness about consent), Mayuresh J Baheti (80% were aware about consent), S Senthilkumar (87.4% were aware about consent), Radhika T (75% HAD knowledge about consent being experience members), Mamdouh kamal zaki (69.2% knew best type of consent while 100% basic knowledge of negligence), Jasuma J Ra (100% had basic knowledge of negligence), Alex M Varghese (54%had knowledge about consent while 46.5% had no knowledge of vicarious liability), Jasuma J Ra (55% had no idea of vicarious liability) and Mamdouh kamal zaki (55% had no idea of vicarious liability). Differing findings were reported by Uma Pandey (20% were aware about consent and 10% aware about medical negligence), Mamdouh kamal zaki (21.74% knew about importance of consent), Jasuma J Rai (90% interns had no knowledge of informed consent), Mayuresh J Baheti (13.54% knew about indemnity insurance), Mayuresh J Baheti (92% were not aware about course regarding medicolegal issues) and S Senthilkumar (76.1% had no knowledge of indemnity

insurance).

It was observed that 48%(72) participants had good knowledge while 44.67%(67) participants had fair knowledge of importance record keeping. Whereas, among 150 participants 68%(102) had fair knowledge of guidelines of preservation of medical and medicolegal records while 24%(36) participants had poor knowledge of the guidelines. It was similar to observations of Anil Haripriya (77% had knowledge of record keeping), Jasuma J Rai (94% knew about record keeping), Radhika T (59.3% had knowledge of record maintenance) while contrary findings were reported by G Venkat Rao (38.33% present had knowledge about duration of medical record preservation) and Jasuma J Rai (45% had poor knowledge of medicolegal record keeping and guidelines)

It was observed that 86%(129) participants were of the opinion that they are bound to report every case of suicidal attempt to investigating authorities, 97.33%(146) participants could independently decide which cases are to be sent for medicolegal autopsy and 66%(99) participants were of the opinion that MLC is to be registered irrespective of the patients or relatives request. Similar observations were reported by Mamdouh kamal zaki (76.6% MLC is to be registered irrespective of patients and relatives request while 75% could decide which body is to be sent for autopsy), G Venkat Rao (90 % can decide which body is to be set for autopsy and 76.66% know action to be taken in registering MLC irrespective of patients request)

It was observed that out of 150 participants 91.3%(137) claimed that they have poor to fair knowledge of examination and medicolegal responsibilities in case of poisoning, while 68.67%(103) participants had poor knowledge of importance of evidence preservation. Contrary findings were reported by G Venkat Rao (56.66% knew importance of preservation of evidence in sexual assault cases, 91.6% and 71.6% knew importance of preservation of gastric lavage and steps of management of poisoning), Mamdouh kamal zaki (56.66% had knowledge of collection of evidence in sexual assault cases, 71.66% knew important steps in management of case of poisoning).

94.6% participants never had any experience of dealing with investigating agencies, while none of the participants had any experience of testimony in court.

It was observed that 96(64%), 41(27%), 09(06%), 04(3%) participants would like to consult forensic

medicine experts, lawyer, administration and CMO respectively in problems related to medicolegal cases. Contrary findings were reported by Jasuma J Ra (40% to consult head of own department, 30% to consult lawyer, 12% preferred to consult supervisor) and Mamdouh kamal zaki (40% preferred to consult head of own department followed by lawyer 30%).

It was observed that 79% of IMG's felt exposure to medicolegal cases in UG curriculum is not sufficient and 95% of IMG's believed that more importance should be given to medicolegal aspect in UG curriculum in comparison to present status. 97% IMG's did not attend any CME/ Workshop/ Conference related to medicolegal issues. Similar findings were reported by Mayuresh J Baheti (90.46% believed more medicolegal issue should be taught in UG), S Senthilkumar (81% did not study about medicolegal issues in UG while 95.1% NEVER attended any CME), Mayuresh J Baheti (14.15% attended some CME on medicolegal issues). Opposite observations were reported by Mamdouh kamal zaki and G Venkat Rao (less than 50% consider UG teaching is not sufficient in teaching medicolegal responsibilities).

99% IMG's claimed that they cannot handle medico-legal cases independently which was lesser than observations of G Venkat Rao (only 30% could handle MLC independently).

Conclusion

- Exposure to medicolegal cases during UG teaching is NOT sufficient.
- The knowledge of routine medicolegal certification and medical jurisprudence is poor.
- Most of the Indian Medical Graduates cannot handle MLC independently.

Recommendations

- Teaching hours of Forensic Medicine in UG curriculum should be increased further with involvement of new methods of teaching & learning.
- Compulsory Casualty and mortuary posting under Forensic Medicine Department during IInd / IIIrd professional phase and internship.

No conflict of interest

No external funding agency

References

1. Anil Haripriya, Vibha Haripriya. Knowledge about Medical Law and Its Negligence among Doctors: A Cross-Sectional Study. *International Journal of Scientific and Research Publications*. 2014 May;4(5):1-3.
2. Mayuresh J Baheti et al. Medicolegal Awareness: Where are we? - A Survey among Health Professionals in Maharashtra and Haryana. *International Journal of Public Health Research*. 2015;5(1):525-530.
3. S Senthilkumar et al. Awareness of Medicolegal Issues among Medical and Dental College Health Professionals. *JIAPHD*. 2013;11(3):44-50.
4. Alex. M. Varghese et al. Awareness and Attitude of Medical Negligence and Medical Ethics among Interns and Resident Doctors. *Int.J.Curr.Microbiol.App.Sci*. 2016;5(11): 532-535.
5. C.S. Makhani et al. Awareness of Medical Ethics and Medicolegal Issues amongst Medical Professionals *Indian Journal of Forensic Medicine and Pathology. IJFMP*. 2011; 4(4):152-155.
6. Biswajit Chatterjee, Jhuma Sarkar. Awareness of medical ethics among undergraduates in a West Bengal medical college *Indian J Med Ethics*. 2012;9(2):93-100.
7. Sadasivan Sivasuthan et al. Awareness of 3rd semester mbbs students regarding the medicolegal Issues in our society and the need for training in forensic medicine- A Descriptive cross-sectional study. *Journal of evolution of medical and dental sciences*. 2018;7(36):4018-402.
8. G Venkat Rao, N Hari. Medicolegal knowledge assessment of interns and post graduate students in a medical institution. *IAIM*, 2016;3(10):105-110.
9. Dr. Jasuma J. Rai et al. Knowledge and Awareness among interns and residents about medical law and negligence in a medical college in Vadodara - A Questionnaire Study. *Journal of Dental and Medical Sciences (JDMS)*. 2013 Feb;3(4):32-38.
10. Mamdouh Kamal Zaki et al. Final year medical students' knowledge, attitude and Practice of medicolegal problems: a cross sectional study at ibn sina national college in jeddah. *Int. J. Life sci. Pharma res*. 2019 April;9(2):16-23.
11. Radhika T et al. Awareness about medicolegal aspects and consumer protection act among dentists. *JFOS*. 2017 July;35(1):1-8.
12. Uma Pandey. Knowledge of medical negligence among medical students. *Innovative journal of medical science*. 2014;2(4):1-2.