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Original Research Article

Study of Medico-Legal Awareness among the Medical Professionals

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Key words

Medical service,
Awareness,
Medico-legal,
Medical ethics.

Abstract

Background: Medical service is the noblest service to the mankind. In recent era shifts in patient's attitude towards the doctor has resulted in making the law an inseparable entity of health care today, being a reflection of increased public awareness and inappropriate practices by the healthcare professionals. Many doctors are apprehensive in dealing with Medicolegal cases, may be because of fear, laws and regulations, attending and answering by the court questions or police etc. Knowledge of Forensic Medicine and laws related to medical practice is also important when medical practitioner have to give evidence as expert witness in court of law.

Aim: The aim of this study is to assess the doctors of a tertiary health care institute, regarding their awareness and consciousness towards the different medico-legal terms.

Material and methods: Study was carried out on the basis of questionnaire developed and a total of 165 doctors were assessed on the basis of their responses. **Results & Conclusion:** In this study, we found that few doctors had basic knowledge regarding different medico-legal terms. Most of the participating doctors felt need for planning and conducting training programme related to legal medicine.

1. Introduction

The relationship between doctor and patient is based on trust and confidence. Now days, the doctor-patient relationship has deteriorated considerably and medical negligence is on the increase.¹ Global trends in medico-legal issues are gradually catching the attention of the public and complaints against physicians seem to be escalating in developing countries², the reasons

for these are media (electronic and print), professional accountability and decision making.³

Indian society is experiencing a growing awareness regarding patient's rights. The provisions of consumer protection act now covers deficiency of service by medical professionals in such cases to provide redresses to the patients.¹ With the increasing use of technology, paradigm

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shifts in patient's attitude towards the doctor has resulted in making the law an inseparable entity of health care today. Today, the fundamental principles of medicine insist that doctor should be aware about various medico-legal issues, understand the nature of these obligations and fulfill these obligations to best of his ability.³

Usually what happens is that medico-legal duties of Registered Medical Practitioners are taught in second year of M.B.B.S.' / Graduation and unfortunately afterwards nobody bothers about it till one faces some problem like compensation case or case of negligence.⁴ The syllabus for undergraduate students of this important subject has been reduced over the years, hence is losing its significance. 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 theoretically in 2nd and 3rd phase of MBBS and also by conducting regular medico-legal workshops all through their course, as it is very common that they will forget the subject in course of time and need to be refreshed on regular basis.⁵

The curriculum on medico-legal issues may not be adequate or practical enough to enable the medical student reliably address all ethical dilemmas likely to be faced in practice.²

Most of doctor, irrespective of his/her specialty, would have been faced certain cases, which at the time or subsequently, would be labeled as medico-legal. Members of the medical profession are liable to be called upon to give medico-legal assistance in varied circumstances and situations by police and law. Like any other witness, the medical practitioner is also bound to answer truly all questions posed to him in the court of law.⁶ There have been many reports stressing the importance of incorporating ethical and legal issues into medical curricula.⁷ Keeping in mind above mentioned scenario, this study was conducted to assess the medicolegal awareness among faculties in medical college, a tertiary health care and teaching centre.

Aims and Objectives

1. To find out status of knowledge about common medico legal terminologies/cases.
2. To suggest possible solutions or corrective measures.

2. Material and Methods

The present study was carried out at a Medical College in Udaipur. The doctors who have

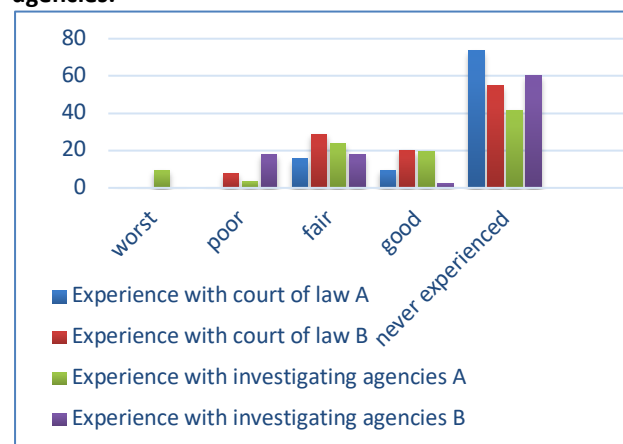
completed their post-graduation (MD/MS) course and working in the Institute were included. Keeping in view the ethical considerations, the participants were explained the purpose and the methodology of the study and individual consents were obtained. The study was approved by the institutional ethical committee.

An open-ended questionnaire was prepared comprising of 30 multiple choice questions. Faculty members were divided into two groups according to their work experience i.e., with experience < 4 years (110) and > 4 years (55). A total of 188 doctors responded, 23 responses were rejected/ excluded based on incomplete responses and by ineligible doctors (non-postgraduates). Knowledge of faculty members was assessed on the basis of their answers for the questionnaire designed. The individual written responses to the provided questionnaire were studied in detail. The particular response of the group of the professionals was studied and analyzed in relation to issue in question. Finally, responses were tabulated, grouped and analyzed.

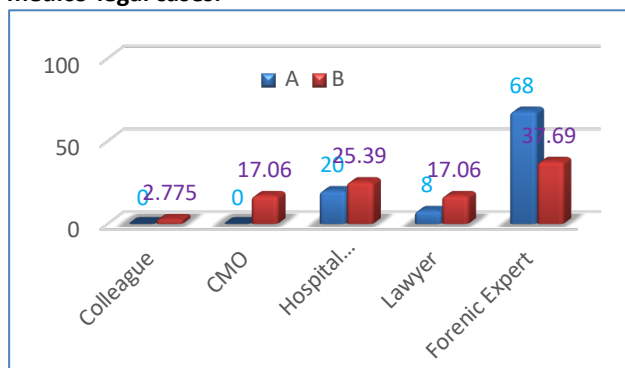
3. Observations and Results

Out of 188 faculties 165 participants in this survey study, out of these 165 faculties 110 contributed to group A (Having experience <4years) and remaining 55 contributed to group B (Having experience >4years) (**Graph 1**). About 72% faculty of both the groups opined UG teaching and exposure to medico-legal cases was not sufficient (**Table no.1**). We observed that 52% of group A and 42.5% group B faculty were not having adequate knowledge of injury certification. Around 16% of the members of both groups claimed to have knowledge of injury certification (**Table no.1**).

Graph 1: Experience with court of law and investigating agencies.

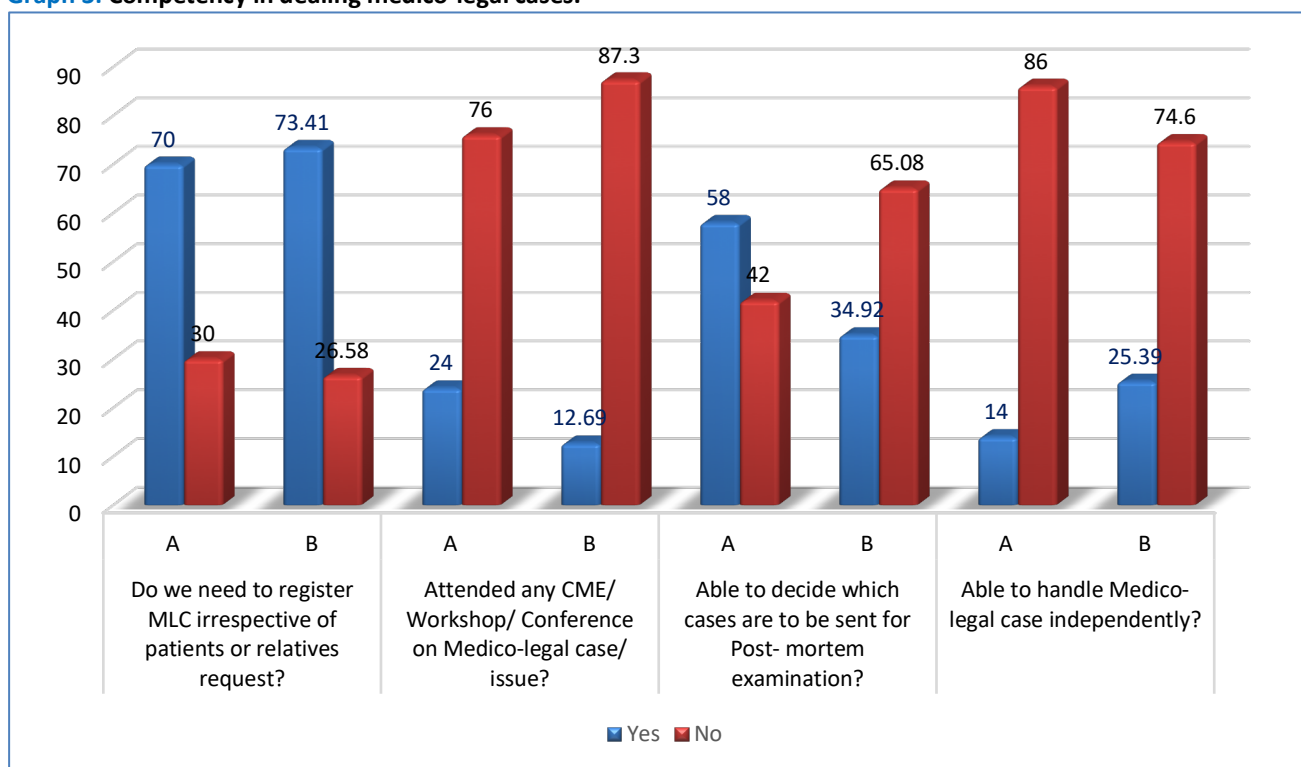


Graph 2: Preference of consultation in issues related to medico-legal cases.



Regarding certification of cause of death, 48% of Group A and 33.7% of Group B members claimed to

Graph 3: Competency in dealing medico-legal cases.



have adequate knowledge while, 32% of Group A and 38.4% of Group B members were not having adequate knowledge and 20% of Group A and 25.3% of Group B members claimed to have some knowledge of certification of death. Only 16% of Group A and 26.5% of Group B members possess adequate knowledge and 40% of Group A and 48% of Group B members do not have adequate knowledge of examination of victim/ accused of sexual assault. About 38% of Group A and 14.3% of Group B members were having some knowledge, while 34% of Group A and 50.7% of Group B members were having no knowledge of examination and certification of case of alcoholism (Table no.1).

Table no. 1: Opinion regarding exposure to medicolegal cases in UG and awareness regarding different certifications

Sr. No.	QUESTION	GROUP A				GROUP B			
		YES	NO	CAN'T SAY	SOME WHAT	YES	NO	CAN'T SAY	SOME WHAT
1	Sufficient exposure TO medico-legal cases and responsibilities in UG curriculum?	24%	72%	4%	0%	20.24%	75.59%	4.17%	0%
2	Knowledge of injury certification?	16%	52%	4%	28%	16.66%	42.46%	29.76%	11.11%
3	Knowledge of death certification?	48%	32%	0%	20%	33.72%	38.45%	2.77%	25.29%
4	Knowledge of examination of victim/accused of sexual assault?	16%	40%	6%	38%	26.58%	48.01%	5.55%	19.84%
5	Knowledge of examination and certification of case of alcoholism?	22%	34%	6%	38%	23.80%	50.79%	5.55%	14.28%

Table no. 2: Awareness regarding consent, indemnity insurance, negligence, liability and record keeping.

Sr. No.	QUESTION	GROUP A				GROUP B			
		YES	NO	CAN'T SAY	SOME WHAT	YES	NO	CAN'T SAY	SOME WHAT
1	Know how to explain and write informed consent?	82%	12%	0%	6%	53.57%	18.2%	2.77%	25.28%
2	Know about professional indemnity insurance?	34%	46%	20%	0%	46.42%	45.24%	8.33%	0%
3	Knowledge of Medical Negligence?	48%	12%	0%	40%	30.95%	26.98%	0%	42.06%
4	Knowledge about Vicarious Liability?	48%	18%	6%	28%	28.17%	46.43%	2.78%	22.62%
5	Aware about importance of evidence preservation?	54%	14%	6%	26%	38.09%	21.03%	0%	40.88%
6	Importance of record keeping.	84%	8%	1%	6%	61.9%	2.77%	2.77%	32.53%
7	Guidelines for preservation of medical & medico-legal records.	26%	28%	2%	44%	28.17%	28.17%	12.69%	30.95%

Table no. 3: Awareness regarding important acts related to medical practice.

Sr. No.	QUESTION	GROUP A				GROUP B			
		YES	NO	CAN'T SAY	SOME WHAT	YES	NO	CAN'T SAY	SOME WHAT
1	Aware of consumer protection act and its importance in doctor patient relationship?	38%	26%	4%	32%	45.238%	29.76%	5.55%	19.44%
2	Aware of MTP act?	80%	12%	2%	6%	66.26%	15.47%	2.77%	15.47%
3	Aware of PCPNDT act?	68%	18%	1%	6%	39.28%	28.17%	9.92%	22.61%
4	Aware of The Human Organ Transplantation Act?	40%	18%	2%	40%	28.17%	30.95%	9.92%	30.95%
5	Aware of Human Rights?	58%	10%	2%	30%	42.46%	21.03%	2.77%	33.72%
6	Aware of rights & duties of patients in India?	38%	28%	6%	28%	25.39%	19.84%	12.69%	42.06%

Regarding awareness about examination and medicolegal responsibilities in case of poisoning 28% of Group A and 16.6% of Group B members were aware of it. About 30% & 40% of Group A and 60.7% & 20% Group B members were not aware of have some knowledge of the same. About 60 % of Group A and 50.39 % of Group B members were of the opinion that they are bound to report every case of poisoning to investigating authorities. It was observed that, 82% of Group A and 53.7% of Group B members could explain and write informed consent. Around 12% of Group A and 18% of Group B members could not explain and write informed consent. 46% of Group A and 45.2% of Group B members were not aware of professional indemnity insurance, while about 34% of Group A and 46% of Group B members were aware of it (Table no.2).

84% of Group A and 61.9 % of Group B members were aware about importance of record keeping. Still only 26 % of Group A and 28.17 % of Group B members were aware about guidelines of preserving medical and medico-legal records, about

28% of both groups were having no knowledge of the guidelines. In this study, about 54 % of Group A and 38.09 % of Group B members were aware about importance of evidence preservation in medico-legal cases while, 18% of Group A and 21.03 % of Group B members had no knowledge about it (Table no.2). Regarding medical negligence 48 % of Group A and 30.95 % of Group B members had adequate knowledge, while 12% of Group A and 26.98 % of Group B members had no knowledge about it. About 48 % of Group A and 28.17 % of Group B members were aware of vicarious liability while, 18% of Group A and 46.43 % of Group B members were not (Table no.2).

About consumer protection act, only 38% of Group A and 45.2% of Group B members were familiar with consumer protection act and its importance in doctor patient relationship, 26 % of group A members and 29% of group B participants had no idea of it. Around 80% of Group A and 66.2% of Group B members were aware of MTP act; at the same time about 12% of group A & 15% of group B

participants had no idea about MTP act. It was observed that, 68% of Group A and 39.2% of Group B members were conversant with PCPNDT act while about 18% of group A and 28 % of Group B members were not.

40% of Group A and 28.1% of Group B members were aware about Organ Transplantation Act while 40% of Group A and 30.9% of Group B members were having some knowledge of it. We observed that, 58% of Group A and 42.4% of Group B members were aware and 30% of Group A and 33.7% of Group B members claimed to have some knowledge of human rights. For medicolegal and ethical issues of artificial insemination 18 % & 40% of Group A and 42.4% & 28.1% of Group B members expressed awareness and some knowledge respectively. Only 20% of Group A and 5.5% of Group B members were aware of medico-legal & ethical issues of surrogacy in India (**Table no.3**).

We observed that about 38% of Group A and 25.4% of Group B members were aware while 28% of Group A were having some knowledge OR no knowledge about rights & duties of patients in India while, 42% of Group B members were having some knowledge and 19.8% had no knowledge about it (Table no.5). Regarding experience with investigating agencies and court of law, 42 % group A & 60 % group B never had any kind of experience with investigating authorities at the same time about 20% of group A & 2.8% of group B had good experience. About 74 % group A & 55 % group B never had any experience of court of law, whereas 10% of group A & 20.47% of group B rated it as a good experience (**Graph no. 1 & 2**).

Regarding preference of consultation in need of help in medico-legal cases, 68 % group A & 37.69 % group B would like to consult Forensic medicine personal, only 8 % of group A & 17.06 % of group B would like to consult lawyer, about 20 % of group A & 25.39 % of group B would like to consult hospital administration, 17% of group B would like to consult CMO and about 3% 17% of group B would like to consult their colleague (**Graph no. 3**).

We observed that, 70% of Group A and 73.4 % of Group B members were aware about need of registering MLC irrespective of request by relatives etc. About 76 % of Group A and 87.3 % of Group B members did not attend any CME /Workshop on medico-legal case/issues after completion UG education. About 42% of Group A and 65.08 % of

Group B members could not decide which body is to be sent for postmortem examination. Majority of the participants, 86 % of Group A and 74.61 % of Group B members could not handle medico-legal case independently.

The data was statistically analyzed (chi square test) and we observed Statistically non - significant difference (P value >0.01) in opinions among the two groups regarding sufficiency of UG teaching about medico-legal responsibilities, exposure of MLC in UG teaching, knowledge of cause of death certification, consumer protection act, MTP act, opinion towards registering MLC irrespective of request of relatives and compulsion of informing cases of poisoning to authorities. Except above mentioned parameters statistically significant difference (P value <0.01) was observed in opinion of participants of the two groups. The difference in awareness may be attributed to fresh knowledge and over confidence of group A participants and gradual awareness of incompetence's, increasing knowledge with experience among group B participants.

4. Discussion

This study was an effort to investigate the awareness of medico legal issues among medical faculties in a medical college in Udaipur. The outcome provides a valuable information regarding awareness among faculty member about medico-legal issues, medical jurisprudence and its practical application. The opinion of both the groups UG teaching and exposure to medico-legal cases during UG was not sufficient, was supported by similar observations by Baheti MJ³ and Rao GV⁵ contradicted by Barnie BA.² We observed that knowledge of different medicolegal certification varied among the faculty members, about 16% of both group A & group B faculty showed adequate knowledge of it. This finding was similar to findings of Singh AK⁶ and Rao GV.⁵

With regard to cause of death certification 48% of Group A and 33.7% of Group B members were having adequate knowledge, similar observations were reported by Nanandkar SD⁴, while Singh AK⁶ and Rao GV⁵ both reported Poor knowledge of cause of death certification. Only 16% of Group A and 26.5% of Group B members were having knowledge of examination of victim/accused of sexual assault. Similar findings were observed by Nanandkar SD⁴ along with Singh AK.⁶ Contrary observation was reported by Rao GV.⁵ In our study, 82% of Group A and 53.7% of Group B members were able to explain

and write informed consent. Similar findings were reported by Haripriya A¹, Chavda KL¹⁰, Rai JJ⁹, Rao GV⁵, and Senthilkumar S.¹¹ Converse finding was reported by Pandey U.¹² We found that, 46% of Group A and 45.2% of Group B members were not aware of professional indemnity insurance. Our findings were supported by Baheti MJ³ and Senthilkumar S.¹¹

We observed that, 38% of Group A and 45.2% of Group B members were not aware of consumer protection act and its importance in doctor patient relationship. Findings were similar to that of Baheti MJ³ and Senthilkumar S.¹¹ Better results were reported by Haripriya A¹ and Chavda KL.¹⁰ Among our study participants, 80% of Group A and 66.2% of Group B members were aware of MTP act which is contrary to findings of Nanandkar SD⁴ and Singh AK.⁶ About 68% of Group A and 39.2% of Group B members in our study were aware of PCPNDT act while somewhat similar finding was reported by Nanandkar SD⁴ and poor knowledge about PCPNDT was reported by Singh AK.⁶ In our study, 40% of Group A and 28.1% of Group B members were aware of organ transplantation act. Chavda KL¹⁰ reported better awareness while Rao GV⁵ reported poor awareness.

Among our study participants around 18% of Group A and 42.4% of Group B members were aware of medico-legal aspect & ethical issues of artificial insemination. Varghese AM⁸ reported higher awareness about it. We observed that about 38% of Group A and 25.4% of Group B members were aware, of rights & duties of patients in India, similar result was reported by Singh AK.⁶ In our study, 70% of Group A and 73.4 % of Group B participants were of the opinion that we need to register MLC irrespective of any request or denial by relatives. Similar finding was reported by Rao GV.⁵

84% of Group A and 61.9% of Group B members were aware of importance of record keeping, similar to Haripriya A.¹ Regarding guidelines for preservation of medical and medicolegal records we found that, about 1/4th of the participants were aware about it. Slightly better results were reported by, some Rao GV⁵ and Rai JJ.⁹ It was found that, 72% of Group A and 78.9% of Group B members were of the opinion that they were not exposed to sufficient medico-legal cases in UG, similar to observations by Rao GV⁵ and Senthilkumar S.¹¹ Further it was observed that 76% of Group A and 87.3% of Group B members did not attend any

CME/Workshop/conference/training on medicolegal case/issues after completion of professional education. Similar results were reported by Baheti MJ³ and Senthilkumar S.¹¹ It was observed that, 48% of Group A and 30.95% of Group B members were having knowledge of medical negligence. Similar results were reported by Nanandkar SD⁴, Varghese AM⁸, Senthilkumar S.¹¹ Better results were observed by Rai JJ⁹ and Chavda KL¹⁰ with more than 80% participants aware of medical negligence whereas Singh AK⁶ reported poor awareness about negligence.

In this study, 48% of Group A and 28.17% of Group B members were aware about Vicarious Liability. Chavda KL¹⁰, Varghese AM⁸ and Rai JJ⁹ reported bit higher variable awareness about Vicarious Liability. We found that, 54% of Group A and 38.09% of Group B members aware about importance of evidence preservation, comparatively better than Nanandkar SD⁴ and Singh AK⁶ who reported awareness among less than 30% participants.

We found that, 58% of Group A and 34.92% of Group B participants could decide which cases are to be sent for Post-mortem examination. G V Rao⁵ reported opposite observation with more than 2/3rd of participants being able to decide. Only few participants, 14% of Group A and 25.39% of Group B members were confident to handle medicolegal cases independently. Contrary to Rao GV⁵ with 60% of PG participants being able to handle MLC independently.

Most of our study participants do not have any experience with investigating agencies or court of law. 42% Group A & 60% Group B never had experience with investigating authorities. Similarly, 74% Group A & 55% Group B never had experience with court of law. Slightly better findings were reported by S D Nanandkar⁴ who found that 41.77% and 37.98% had good experience with investigating agencies & court of law respectively. We found that 68% Group A & 37.69% Group B would like to consult Forensic Medicine personal for help in issues related to medico-legal cases. Different choice was reported by Rai JJ⁹ and Hariharan S.⁷

5. Conclusion

- During UG, teaching & exposure to Medico-legal cases is not sufficient.
- The knowledge of cause of death certification is bit better than other medicolegal certifications.
- Awareness about MTP, PCPNDT, CPA etc is variable & not up to satisfactory level.

- More than 2/3rd faculties are aware about record keeping & MLC registration but most of them are not aware about guidelines for preservation of MLC records.
- Most of the faculties have not attended any CME/Workshop/Conference related to medico legal cases.
- Majority of the faculty members are not exposed to Investigating agency or Court.
- Senior & Junior faculties wish to consult FMT expert for medico-legal cases while middle level wish to consult CMO/Admin/Lawyer.
- Overall, less than 50% faculties are aware about Medical Jurisprudence.
- About 2/3rd faculties can decide which cases are to be sent for postmortem examination.
- Most of the faculties cannot handle MLC independently.

Recommendations

- Teaching hours in UG curriculum should be increased further with involvement of new methods of teaching & learning.
- Casualty posting should be under Forensic Medicine Department.
- There should be compulsory clinical posting to mortuary during UG course and internship.
- There should be regular workshops at institute level or in small groups.

Ethical Clearance: IEC approval is taken from the Institutional Ethical committee.

Contributor ship of Author: All authors equally contributed.

Conflict of interest: None to declare.

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References:

1. Haripriya A, Haripriya V. Knowledge about medical law and its negligence among doctors: A cross-sectional study. *Int J Sci Res Publ.* 2014; 4(5):1-3.
2. Barnie BA, Forson PK, Opare-Addo MNA, Appiah-Poku J, Rhule GP, Oduro G et al. Knowledge and Perceptions of Health Workers Training on Ethics, Confidentiality and Medico-Legal Issues. *J Clinic Res Bioeth.* 2015; 6(1):205.
3. Baheti MJ, Thakur S, Khokhani R, Mahagaonkar P, Toshniwal N G and Gangadhar S A. Medico Legal Awareness: Where are we? – A Survey among Health Professionals in Maharashtra and Haryana. *Int J Public Health Res.* 2015; 5(1):525-30.
4. Nanandkar SD, Chavan GS. Assessment of medico-legal awareness of practicing obstetricians & gynecologists. *J Indian Acad Forensic Med.* 30(3):136.
5. Rao GV, Hari N. Medico-legal knowledge assessment of interns and post graduate students in a medical institution. *International Archives of Integrated Medicine.* 2016; 3(10):105-10.
6. Singh AK, Singh K, Verma A. Study of Medico-legal Case Management in Tertiary Care Hospital. *J Indian Acad Forensic Med.* 2011; 33(4):337-42.
7. Hariharan S, Jonnalagadda R, Walrond E, Moseley H. Knowledge, attitudes and practice of healthcare ethics and law among doctors and nurses in Barbados. *BMC Medical ethics.* 2006; 7:1-9.
8. Varghese AM, Vaswani VR, Kumar BK, Shenoy V. Awareness and Attitude of Medical Negligence and Medical Ethics among Interns and Resident Doctors. *Int J Curr Microbiol App Sci.* 2016;5(11):532-5.
9. Rai JJ, Acharya RV, Dave D. Knowledge and Awareness among interns and residents about medical law and negligence in a medical college in Vadodara – A Questionnaire Study. *J Dental Med Sci.* 2013; 3(4):32-8.
10. Chavda KL, Jadav JC, Padmaraj RY, Shah KA, Silajiya DA, Joshiyara RV. A Study on Awareness and Consciousness Towards The different Medico-legal terms Among the Doctors of Different Areas of Gujarat. *Int J Res Med.* 2014; 3(4); 43-5.
11. Senthilkumar S, Reddy VC, Ingle NA. Awareness of medico-legal issues among medical and dental college health professionals. *Journal of Indian Association of Public Health Dentistry.* 2013; 11(3):44-50.
12. Pandey U. Knowledge of medical negligence among medical students. *Innovare Jf Med Sci.* 2014; 2(4):1-2.