# ORIGINAL ARTICLE

# Perception of Undergraduate Medical Students about Ethics and Medical Jurisprudence

Sundus Ambreen<sup>1</sup>, Ayesha Farheen Javid<sup>2</sup>, Yasmeen Aamir<sup>3</sup>

## ABSTRACT

**Objective:** To determine the importance of teaching medical ethics and medical jurisprudence as a part of curriculum.

**Study Design:** Descriptive survey based Study.

**Place and Duration of Study:** The study was conducted from June 2014 to December 2014 at Islamic International Medical College, Rawalpindi and Foundation University Medical College Islamabad.

**Materials and Methods:** One hundred and seventy seven students from 3<sup>rd</sup> year MBBS were included in this quantitative questionnaire based survey. A questionnaire of 22 items was adopted from the literature, validated by piloting among faculty members, modified accordingly and was self-administered. The data was entered into SPSS version 20 and analyzed by frequencies, cross tabulations and graphs.

**Results:** The results indicate that 47% students find studying medical ethics interesting and informative, 54% think that it increases awareness, and 62% find it effective in clinical problems. Majority of students are able to make ethical decisions about issues e.g patient's consent, discontinuation of artificial life support, patient decision regarding termination of its life, receiving gifts from pharmaceutical companies, offering life support, organ donation and commercialization of health sector.

**Conclusion:** The study concludes that medical ethics and medical jurisprudence are important content of curriculum to be taught at undergraduate level.

Key Words: Medical Ethics, Medical Jurisprudence, Perception, Curriculum.

## Introduction

Medical ethics is as old as medical profession but has remained as the 'hidden' curriculum of medical education. Ethics has been a part of medical practice since the time of Hippocrates however it is still an undiscovered entity<sup>1</sup> Ethics is the application of moral values and rules to human activities<sup>2</sup> and its application to health care system, The American Association of Medical Colleges and the General Medical Council maintain that the ethics education should be a core component of curricula, and medical graduates must have the knowledge of theories and principles of bioethics, and skills for ethical decision making.<sup>3,4</sup>

The purpose of teaching medical ethics is to create

Received: October 19, 2015; Accepted: December 08, 2015

virtuous physicians and develop skills to analyze and resolve ethical dilemma.<sup>5</sup>The medical ethics education has been shown to have positive impact on moral development and make complete and better doctors.<sup>6</sup> Forensic Medicine is the only subject at the Undergraduate level which teaches not only medical ethics but also imparts knowledge about medical Jurisprudence. The curriculum taught in third professional year of MBBS. According to Pakistan Medical and Dental Council (PM&DC), aims to produce such physicians who are well informed about the medico-legal responsibilities in the practice of medicine. But over the time a discussion is being generated whether to keep Forensic medicine in the curriculum of under graduation or to transfer it to Post graduate level. This could be a serious drawback to our health sector by deteriorating moral values and ethical practices leading to decline of professionalism of the Medical Doctors. In this globalized world we cannot leave our health sector unattended. This will never let us achieve the Millennium development goal in the health sector of Pakistan. The main drive behind our study is to do in depth analysis of perception and awareness of students who are taking this course and to highlight the importance of Forensic Medicine

as an Undergraduate subject. There is less research undertaken in this area in context of Pakistan. Only one study is found by Qadwai and Qureshi in year 2001<sup>2</sup> which was focused on general practitioners. This generates the need to explore the perception of under graduate medical students about importance of medical ethics and jurisprudence. The present study has tried to fill this gap by highlighting the significance of teaching the subject of Forensic Medicine at the undergraduate level. The present study update their analysis with latest data of 2014 with larger sample of 177 respondents and extending it by incorporating the scenario based approaches and stressing on the importance of the subject of Forensic medicine as a part of Undergraduate curriculum. This study, on one hand, contributes to the Medical Ethics and Jurisprudence and on the other hand contributes to the field of Medical Education.

#### **Materials and Methods**

It was a descriptive survey based study conducted among undergraduate medical students of the two private sector institutions, i.e. Islamic International Medical College, Rawalpindi and Foundation University Medical College, Islamabad in the month of June 2014. Initially a total of 200, third year students were selected who had studied subject of Forensic medicine. Out of 200 guestionnaires,23 were not considered due to incomplete information. Study was done on a sample size of (n-177). Aclose ended questionnaire of 22 items was adopted from the literature. It was validated by piloting among faculty members, modified accordingly and was selfadministered. Students included in the study were given a brief introduction of the study. Data was entered into SPSS version 20 and analyzed by frequencies, cross tabulations and graphs.

#### Results

A total of 200 undergraduate medical students from two private sector medical colleges of Rawalpindi and Islamabad were surveyed. Our responders (n=177) include 69% females and 31% males. Mean age was 22 years. Majority of our responder's i.e. 65% belong to province of Punjab. Results have been tabulated in the two tables below. Table II lists the demographic profile of the respondents. Table I shows the results of knowledge and attitude of

Table I: Knowledge and attitude of undergraduate
medical students on the ethical issues

	Agree	Neutral	Disagree
I find that the studying of	54%	27%	19%
medical ethics has enabled			
to be well informed			
regarding the current			
ethical issues.			
I find studying forensic	62%	9%	29%
medicine effective in			
clinical problems.			
I have to take consent	86%	9%	5%
from my patient before			
starting health care			
intervention.			
It is ethical not to disclose	41%	27%	32%
diagnosis to terminally ill			
cancer patient.			
It is ethical to let a	28%	26%	46%
suffering patient decide			
about ending its life in			
order to reduce its pain.			
It is unethical to reveal any	71%	16%	13%
information about			
patient's health to			
patient's relatives without			
his/her permission.			
A pregnancy can be	84%	13%	3%
terminated if there is			
serious threat to mother's			
life.			
I should not offer life	25%	25%	50%
support to patient with no			
chance of survival.			
It is unethical to accept	50%	24%	26%
gifts or favors by			
pharmaceutical companies			
in expense of prescribing			
their drugs.			
It is ethical to take consent	71%	10%	19%
of patient before using it			
as a subject of research			
and to explain its potential			
benefits and risks.	5001	0.400	070/
It is unethical for rich	52%	21%	27%
person to buy organs from			
poor person for saving			
his/her life.			1.70/
One reason that doctors	60%	25%	15%
are not following medical			
ethics is the			
commercialization of the			
health sector.			

Note: The questionnaire is developed by the authors.

Parameter	Number/	Parameter	Number/		
	Percentage		Percentage		
Gender		Family Income			
Male	31%	High	52%		
Female	69%	Middle	44%		
Mean Age	22 years	Low	4%		
Father Education	ather Education		Domicile		
High	46%	Federal	14.6%		
Middle	40%	Punjab	65.2%		
Low	14%	Sind	9%		
Mother Education		КРК	10.1%		
High	24%	Baluchistan	6%		
Middle	44%				
Low	32%				

Table II: Demographic Profile of Respondents (N=177)

undergraduate medical students on the ethical issues. Table III displays opinion of respondents regarding medico legal issues.

Results of the awareness among students regarding medical ethics and medico-legal issues reveal that 47% of the respondents find studying medical ethics and medico legal issues interesting and informative. Cross tabulation shows that among them 32% are males and 68% are females. Respondents with educated parents have higher awareness as compared to respondents with less educated parents. Results of cross tabulation of parents' education show 84% are more aware and 16% less aware.

About 54% of respondents think that studying of this subject has enabled them to be well informed regarding the current ethical issues. The 62% find studying forensic medicine effective in clinical problems. Only 13% find it irrelevant and 39% just common sense. The 86% agrees to take consent before starting a health care intervention.

The 41% agree that it is unethical to disclose diagnosis of terminally ill cancer patient. Less than 30% think it is ethical to let a suffering patient decide about ending its life in order to reduce pain. Most of students, 71% agrees not to disclose patient's diagnosis or treatment without patient's consent even to the closest relative. Majority of 84% agrees that a pregnancy can be terminated if there is serious risk to the life of the mother. According to our results, 25% agree not to offer life support if patient has no chance of survival. Half of the students think it is unethical to accept gifts from pharmaceutical companies in exchange of prescribing their medicine. 52% find it unethical for a rich person to

Table III: Opinion Regarding Medico-legal issue
-------------------------------------------------

	Yes	No	Do
			not
			Know
Can only authorized doctor perform	78%	8%	14%
a medico legal autopsy?			
Should I take consent of relatives for	55%	28	17%
a medico legal autopsy?		%	
Should I issue sickness certificate to	17%	65	18%
apatient who is not under my care?		%	
Is a printed consent form for a	51%	15	34%
surgical procedure available at your		%	
hospital?			
Should I take consent of an adult	71%	9%	20%
victim of sexual assault before			
physical examination?			

buy organ from a poor person for saving his/her life.

Results of medico-legal issues show that 78% agreed that autopsy can only be performed by a registered medical officer. 52% know that a printed consent form is available for surgical procedure in their hospital. 72% know that on a victim of sexual assault physical examination cannot be carried without consent. 64% understand the concept of dying declaration. 28% know that there is no need of consent of relatives in the case of medico-legal autopsy. The 65% know that it is unethical to write sickness certificate to a patient who is not under their care.

#### Discussion

The awareness of the Medico-legal issues is important for the undergraduate students as they are the future of the health sector and the subject of Forensic Medicine provides a foundation for this purpose. There are other studies which highlight the importance of the same issue as well. The study done by Sheikh and Khan in 2010 have assessed the knowledge, attitude and practice of medical teachers regarding medical ethics in a medical university of Karachi, Pakistan.

Most important ethical issues asked where about, consent, organ donation, and mercy killing, issuing false medical certificates and receiving gifts from pharmaceutical companies.

Majority of the students agree to ask for consent when taking a patient as a subject to research and to explain all the pros and cons of the research. The process of informed consent has two objectives. One objective is the completion of the physician or hospitals' legal requirement while the other is the fulfillment of the physicians' moral obligation.<sup>7</sup> The requirement for an informed consent is well established in all decision making situations both clinical as well as research in which human subjects are invited to participate.<sup>8</sup>

It is unfortunate that the issue of the discontinuation of artificial life support to patient with poor prognosis is controversial.<sup>2</sup> Issue of mercy killing and euthanasia should be highlighted because it is one of the major ethical issues worldwide. Opinion about organ donation was that 51% finds it unethical for a rich person to buy organ from a poor person for saving his/her life. Placing living donation within an ethical framework can allow for careful consideration and guide decision making in each individual case.<sup>9</sup> The important finding of study is that majority of students believe that commercialization of health sector is important reason for poor practice of medical ethics and laws by the health professionals.

In our set up Medico-legal cases are often not autopsied, especially in rural areas.<sup>10</sup> Due to wrong Medicolegal reporting injustices are occurring daily. 78% students know it well that autopsy should be performed by a registered medical officer. Future medical officers must have basic knowledge of ethical and legal requirements to meet the demands of the state in execution of justice. Regarding issuing false medical certificates, it must be realized that patients are a stronger controlling element then the general practitioners in the process of certification of sickness.<sup>11</sup> Qadwai and Qureshi (2002) have also come to the same conclusion.

In some cases ethical theories and principles do not help physicians in resolving conflicts; other approaches to clinical ethics have been suggested.<sup>12</sup> Instead of relying on theories some writers resolve dilemmas by looking at the concrete details of a particular case.<sup>13</sup> Emphasis should be given on educating our students on modern ethical grounds based on our own ideology.

The limitation of our study is that it only focuses on two cities and for two private sector medical colleges. In future this study can be extended by increasing the sample size, by including public sector colleges and by taking a nationwide sample.

#### Recommendations

Increased unethical and illegal practices in hospitals

.....

are an emerging issue and are gaining importance over the time. The study concludes that medical ethics and jurisprudence is very important content to be taught at undergraduate level. Forensic Medicine is the only source for it. It makes health professionals stronger and capable of handling serious clinical emergencies regarding medico-legal issues. Limiting this subject to a Postgraduate specialty will deprive most of our doctors of the knowledge and awareness of the basic ethical values. Therefore, authorities should consider the importance of the subject of Forensic Medicine and keep it as an essential part of undergraduate curriculum.

#### REFERENCES

- 1. Hafferty FW, Franks R. The hidden curriculum, ethics teaching, and the structure of medical education. Acad Med 1994; 69: 861-71.
- 2. Qidwai, Qureshi. Perception of bioethics among general practitioners in Karachi, Pakistan. Pak J Med Sci2002, 18: 221-6.
- 3. Lehmann LS, Kasoff WS, Koch P, Federman DD. Asurvey of medical ethics education at U.S. and Canadian medical schools. Acad Med 2004;79: 682-9.
- Mattick K, Bligh J. Undergraduate ethics teaching:Revisiting the Consensus Statement. Med Educ 2006; 40: 329-32.
- 5. Rachael E, Eric M, Margaret, Paul R. Medical Ethics Education: Where Are We? Where Should We Be Going? Acad Med 2005; 80: 1143-52.
- Price J, Price D, Williams G, Hoffenberg R. Changesinmedical student attitudes as they progress through amedical course. J Med Ethics 1998; 24: 110-17.
- 7. Lantos J. Informed consent. The whole truth for the patient? Cancer 1993; 9: 2811-5.
- 8. Beauchamp TL, Childress JF. The principles of biomedical ethics, 4th ed. New York: Oxford University Press, 2001.
- 9. Nolan MT. Ethical dilemmas in living donor organ transplantation. J TranspiCoord 1999; 9: 225-9.
- 10. Jagadeesh N. The status of forensic medicine in India. Indian Journal of Medical Ethics. 2008; 4: 155.
- 11. Larsen BA, Forde OH, Telines G. Physician's role in certification for sick leave. Tidsskr Nor Laegeforen 1994; 114: 1442-4.
- 12. Pellegrino ED. The metamorphosis of medical ethics: a 30 years retrospective. JAMA 1993; 269: 1158-62.
- 13. Jonsen AR, Toulmion S. The abuse of casuistry: a history of moral reasoning. California: Berkely University Press 1988, pp. 30-5.