Knowledge, attitude and practice of medical ethics of faculty of a medical university in Karachi, Pakistan

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Objectives
To assess knowledge, attitude and practice of medical teachers regarding medical ethics, and to provide a baseline to prepare bioethics curricula and training modules for the teachers.
Subjects and Methodology
This cross-sectional study was conducted at three medical colleges of Dow University of Health Sciences, Karachi, Pakistan from January to September, 2010. A questionnaire was used and survey included 202 subjects, assistant professors and above; and lecturers doing their M Phil /PhD who were enrolled by simple convenient method.
Results
All of the study participants conducted research in their field of specialty; to get promotion (71%), get funding (9%), discover new ideas/theories (4%), for personal interest (5%), and multiple reasons (11%). Among them, 16% had received training of research / bioethics, and only 2% got refresher training. Eighty two percent knew the existence of ethical review committee (ERC) in their institution; 55% got prior approval from ERC, 32% declared conflict of interest, 17% taught/discussed medical ethics with students; 21% took informed consent, 35% had idea of vulnerable population, 43% did not want to give full information to the study participants, and 70% recognized difference between medical research and care. According to 77%, the authors' list included only those who had contributed, but 17% also included supervisors/higher seniors and 6% colleagues.
Conclusion
Health care providers frequently encounter ethical issues. The medical teachers were not fully equipped with appropriate knowledge of bioethics. It should be included in curriculum and teachers be trained for the same. (Rawal Med J 2012;37:334-339).
Key Words
Medical ethics, bio-ethics, medical faculty knowledge.

INTRODUCTION

Medical ethics is as old as medical profession but has remained as the "hidden" curriculum of medical education.[1] Although the importance of medical ethics was recognized longtime ago, as a result of major developments in science and technology;[2] large societal changes, a better-educated public, and an increasing suspect of professional authority,[3] only within the last three decades has it emerged as a priority in formal medical education.[4] 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.[5,6]

Bioethics is a relatively new subspecialty in the medical field and is still in its infancy in many parts of the world.[7] The purpose of teaching medical ethics is to create virtuous physicians and develop skills to analyze and resolve ethical dilemmas.[8] The medical ethics education has been shown to have a positive impact on moral development and make complete and better doctors,[9] however, most students do not receive enough training to sufficiently prepare them for the ethical challenges they face in practice.[10] As a specific discipline, bioethics does not exist in the health system or the curricula of most medical institutions.[11] In order to formulate ethical curriculum relevant to every region, the first step may be to determine the current basic knowledge and attitudes of the medical teachers who prepare future doctors and equip them with the knowledge and skills to resolve the ethical dilemmas in their practical lives. The aim of this study was to assess the knowledge in relation to

medical ethics in a Medical University of Karachi, Pakistan.

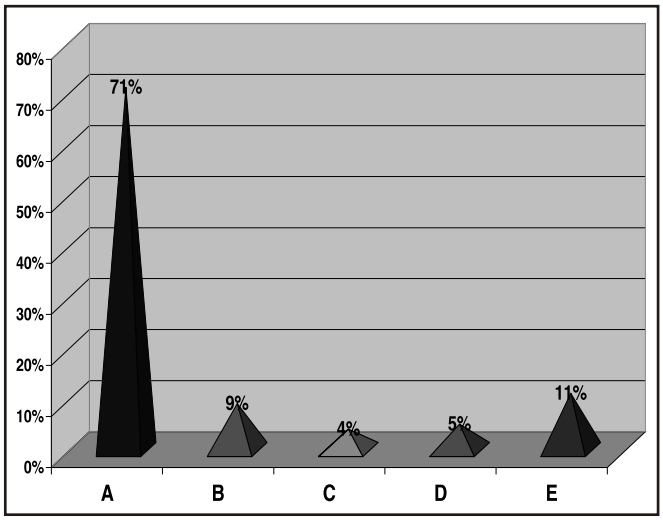
METHODOLOGY

This cross-sectional study was conducted from January 2010 to September 2010 at three medical colleges of Dow University of Health Sciences (DUHS), Karachi, Pakistan. The DUHS is one of the most prestigious Public Sector Medical University of Pakistan. The entire faculty of Assistant Professors and above, and the lecturers enrolled in M Phil/PhD from basic sciences departments were included in the study. The lecturers who were not doing their post-graduation were excluded because they generally are not involved in research. After explaining the purpose of the study and obtaining a verbal consent, the participants were asked to complete and return a pre-tested questionnaire. The general level of understanding and knowledge, attitude and practice of the medical teachers regarding research ethics were explored, with a convenient sampling technique. The results were analyzed by using SPSS software.

RESULTS

Out of 202 participants, the male to female ratio was 56:44, having work experience of years 1-5 (46%), 6-10 (21%), 11-20 (16%) and more than 20 (17%). The purpose of conducting research by majority was to get promotion (Fig 1).

Graph 1: Purpose of Conducting Research



A = Get Promotion B = Get Funding C = Discover New Ideas / Theories
D = Personal Interest E = Multiple Reasons

Among these medical teachers, 32 (16%) had received training of research / bioethics (1-5 years back), and only 4 (2%) got refresher training. Their views for Ethical Review Committee (ERC) are shown in Table 1.

Table 1: Knowledge and attitude of study participants about ethical review committee.

	Yes	No	Don't Know	Not Applicable
ERC is there in the Institution	166 (82.2%)	12 (5.9%)	24 (11.9%)	—
ERC Head is trained to deal Ethical Issues	104 (51.5%)	34 (16.8%)	28 (13.9%)	36(17.8%)
Need for ERC	186 (92%)	—	16 (8%)	—
ERC Function Independently	132 (65.3%)	14 (6.9%)	56 (27.7%)	—
Ethical Guidelines Necessary for Scientific Accuracy	184 (91.1%)	—	18 (8.9%)	—
ERCs Working in other Medical Colleges/Universities	140 (69.3%)	—	62 (30.7%)	—
Get Prior Approval from ERC	110 (54.5%)	92 (45.5%)	—	—

Eighty six (43%) did not want to give full information to the study participants. They (156 n, 77%) included in the list of authors only those who had contributed, but 34 (17%) and 12 (6%) also included supervisors/higher seniors and colleagues respectively. According to the study respondents, unproven therapeutic drug could be prescribed at the request of the subjects (14%), a medical doctor / team (1%), and in no circumstances (85%). The attitude and practice of the respondents about research are given in Table 2.

Table 2: Attitude and practice regarding research.

	Yes	No	Don't Know	Not Applicable
Physician-Pharma Relationship Pose Conflict of Interest	152 (75.2%)	38 (18.8%)	12 (6%)	—
Refusal to Participate in Study interferes with Patient-Physician Relationship	32 (15.8%)	170 (84.2%)	—	—
Weigh for Risk-Benefit Assessment	170 (84.2%)	32 (15.8%)	—	—
Risk-Benefit Assessment Documented	136 (67.3%)	34 (16.8%)	—	32 (15.8%)
Possible Risks of Disability and Death be Disclosed	190 (94.1%)	12 (5.9%)	—	—
Medical Research and Medical Care are Different	142 (70.3%)	32 (15.8%)	28 (13.9%)	
Physician can combine Medical Research with Medical Care	84 (41.6%)	58 (28.7%)	—	60 (29.7%)
Apply Additional Standards to protect Research Patients	188 (93.1%)	14 (6.9%)	—	—
Placebo Information be given to Study Participants	154 (76.2%)	48 (23.8%)	—	—
Can Placebo or No Treatment be Used	132 (65.3%)	36 (17.8%)	34 (16.8%)	—
Volunteers Be Paid	184 (91%)	18 (9%)	—	—
Payment can Unduly Induce	172 (85%)	30 (15%)	—	—
Acknowledge Research Helpers	186 (92%)	16 (8%)	—	—
Take Informed Consent from Study Participants	42 (20.8%)	160 (79.2%)	—	—

There was no separate Bioethics department and 34 (17%) did and 168 (83%) did not teach/discuss bio-ethics with students. Bio-ethics was part of the curriculum, 38 (19%) not in 130 (64%) and 34 (17%) did not have idea. For the access of study subjects/community to post trial benefits, 160 (79%) said yes, 30 (15%) no, and 12 (6%) were not clear; and the responsibility for the provision of these benefits lied on sponsors / researchers (48%), the government (26%) and both (6%).

Table 3: Knowledge, attitude and practice of faculty for contravention in research.

	Yes	No	Don't Know	Not Applicable
Idea of Vulnerable Population	70 (34.7%)	132 (65.3%)	—	—
Conduct Research on Vulnerable Population	26 (12.9%)	22 (10.9%)	154 (76.2%)	—
Idea of Plagiarism	202 (100%)	—	—	—
Ever Committed any Plagiarism in Study	18 (9%)	184 (91%)	—	—
Idea of Misconduct in Research	132 (65.3%)	70 (34.7%)	—	—
Ever Committed Misconduct in Study	16 (8%)	54 (26.7%)	—	132 (65.3%)
Colleagues Committed any Misconduct in Research	16 (8%)	—	186 (93%)	—

In study results/publication, all included positive results, 71% of them included negative results, and 32% source of funding and conflict of interest. The knowledge, attitude and practice of study participants for misconduct in research are shown in Table 3.

DISCUSSION

The practice of medicine is inherently an ethical venture as the patients are vulnerable and medical treatments are not just technical, but they often invade patients' bodies and take on their consciences.[12] Ethical and other patient issues of today include the human genome project, cloning, patenting of human tissue products, transplants, and patient autonomy, informed consent, privacy and confidentiality, end-of-life decision making, research ethics, reproductive health, and managed care and related economic matters. This study revealed that only 16% of the faculty had received some training of research / bioethics. In another study, 37% had received training and knowledge gaps were found regarding research ethics among the faculty.[13] As most of the respondents were not skilled, they could not train the medical students in this specialty. Bio-ethics was not part of the curriculum, and only 17% of the faculty had ever discussed it with students.

During the recent years, medical research has increased significantly in many developing countries.[14] This should be guided by elementary ethical principles and reviewed by the ERCs to ensure the protection of participants' rights.[15,16] Conversely, research regulations do not exist in many developing countries, and concerns are expressed regarding the extent of individual and institutional research ethics capacity.[17] The ERCs are either non existent or incapable to do their job efficiently. The futile functioning of ERCs in developing countries has been linked to deficient training of members and lack of diverse membership.[18] In our study, 18% of the study participants even did not know the existence of ERC in their institute; and 50% were of the view that ERC was just a formality, its head was not capable to deal with ethical issues. Eight percent were not sure for the need of ERC and 9% for ethical guidelines. In another study, 44% respondents thought that ERCs would delay research.[13] These concerns have also been shown in Western countries.[19,20] Nearly half (45.5%) did not get prior approval from ERC. This trend seems prevalent as around 28% of researchers in the Middle East Region did not get ethical clearance for their research proposals submitted for funding.[21]

Majority (71%) was not interested in real research and only conducted it to get promotion in their career; therefore, also included supervisors/higher seniors and colleagues in the list of authors. Among these faculty, 35% and 65% did not have idea of misconduct in research and vulnerable population respectively, and 76% were not clear whether their study participants were among vulnerable population; and 9% admitted of committing plagiarism. Similar results were also found in other studies where 10% of respondents thought it acceptable to fabricate data,[13] 2% fabricated data for a grant or a paper, and about 27% did same to improve the results;[22] and 15% admitted of research misconduct.[23]

Many respondents were in favour of hiding the facts from study participants; as 43% did not want to give full information to them and even 6% did not disclose possible risks of disability and death. For 16%, refusal to participate in study caused soar patient-physician relations. Around 25% thought Physician-Pharma relationship did not pose any conflict of interest, 68% did not declare conflict of interest and source of funding, and 30% viewed medical research and medical care were the same and physician could combine them. A significant number did not take into account risk-benefit assessment, and 29% did not include negative results in study findings / publication. Surprisingly, 79% did not take informed consent from study participants. This all could be because of lack of proper training of the faculty and separate Bioethics department in the institute. It has been found that many academicians lacked training in research ethics and their attitude towards several ethical issues was not optimal.[24]

Medical students have to face and resolve ethical issues during their training and later in practice; and the teachers have to guide and train them. There is a

need of recognition of medical students' ethical dilemmas. In a study 47% of students reported that they had to act unethically under pressure; and 61% said about clinical teachers acting unethically and ethical issues they encountered were not discussed or resolved by these teachers.[25] Medical teachers who exhibit unethical behavior towards patients and in teaching act as negative role models for the students and the faculty's insufficient knowledge of and hostile attitudes towards ethics make it difficult to effective education in ethics for the students.[26] Limitation of the study include data from only one Public Sector Medical University and results could be different from Private Sector Universities.

CONCLUSION

Health care providers frequently encounter ethical issues and many are either unaware of their importance or unable to appropriately deal with these issues. The medical teachers, who teach and train the future doctors, were not fully trained to accomplish this job satisfactorily. All the stakeholders must come forward to make bioethics the part of curriculum and implement it fully in all the medical institutions of the country.

ACKNOWLEDGEMENT

The authors are grateful to the respondents who consented to participate in the study and completed the questionnaire.

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Rec. Date: Dec 02, 2011 Accept Date: Jun 12, 2012

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