

KAP STUDY

AWARENESS OF MEDICAL ETHICS PRINCIPLES AND THEIR APPLICATIONS AMONG HEALTH-CARE PROFESSIONALS IN PAKISTAN

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ABSTRACT

Background: The importance of medical ethics principles is not emphasized therefore has diminished role in the medical students' mind. Additionally, practicing in an environment where senior physicians and consultants are not seen prioritizing moral ethical values in their clinical practice, creates an air of indifference. This study was done to assess the awareness of HEC defined objectives for Medical Ethics in the medical curriculum, along with gauging the understanding of key Medical Ethics concepts by way of multiple choice clinical scenarios.

Methods: This is a cross-sectional study conducted over three months. Response forms were filled at a private and government hospital. The sample size of 243 subjects was finalized according to the number of available House Officers and Postgraduate trainees. The questionnaire was aimed purely at MBBS graduates from Pakistan.

Results: A total of 243 responses were collected, ranging from House Officer level doctors 139(57%) up to Postgraduate level 104(43%). Analysis was done to determine association of awareness of Medical Ethics objectives with their medical school background. Ethical concepts of Confidentiality, Non-maleficence, Informed Consent, Respect for Privacy and Desirable Attitudes in Healthcare Professionals showed significant p-values of 0.006, 0.016, 0.005, 0.013 and 0.045. The number of incorrect responses to the clinical scenarios were: 55(25.3%), 111(51.4%), 87(42%), 119(55.3%), 104(47.9%), 170(78.7%), 50(23.4%). There was no significant difference in response among graduates from different backgrounds or with different years of clinical experience.

Conclusion: A significant disconnect exists in the application of the knowledge of medical ethics in the clinical setting with several factors affecting physician judgment in ethical dilemmas. Effective teaching and assessment methods, inclusion of postgraduate ethical courses along with a regulatory ethics committee in each hospital is needed to protect both doctors and patients.

KEYWORDS: Ethics, Medical Ethics, Confidentiality, Informed Consent.

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INTRODUCTION

Medical ethics can, in simple terms, be defined as a set code that establishes a morally justifiable approach towards patient care.¹ Over the last 40-50 years, Medical Ethics principles have been greatly refined and revolutionized in the western world. Particular emphasis is now being placed on

the concepts of autonomy, beneficence, non-maleficence, justice, informed consent, disclosure and confidentiality.² Several studies have shown that teaching medical ethics assists in producing morally grounded and principled physicians.⁴

The advent of medical ethics teaching in undergraduate courses in Pakistan was in the mid 1980's

at the Aga Khan University.² Currently, the Pakistan Medical & Dental Council (PMDC) and Higher Education Commission (HEC) curriculum for Medical Ethics specifies certain concepts that are meant to be taught and tested during medical school.³ These include the four primary concepts of autonomy, beneficence, non-maleficence and justice as well as patient confidentiality and privacy. The curriculum focuses on cultivating good communication skills that will in turn nurture a healthy doctor-patient relationship⁵.

The importance of inculcating these principles, however, is not emphasized and has therefore diminished their role in the medical students' mind. Moreover, practicing in an environment where senior physicians and consultants are not seen prioritizing moral ethical values in their clinical practice, creates an air of indifference.⁶ In a recent study conducted at a tertiary care hospital in Pakistan, it was demonstrated that an alarming 57.7% surgeons believe that there should be no damage claims if they fail to obtain informed consent from a patient prior to a surgical procedure.⁷ At present, in Pakistan, there is no statutory law that determines the culpability of medical negligence. Instead, these tortuous acts are dealt with under Islamic provisions of general penal law.⁸ Since the PMDC is the sole regulatory body that registers medical practitioners, there are rarely repercussions for medical errors and negligence.

METHOD

This is a performat based cross-sectional study conducted over a period of three months. Response forms were filled at two notable hospitals in Karachi, one from the private sector and another from the public sector. Each department was included and doctors participated according to availability and consent. The sample size of 243 subjects was finalized according to the number of available House Officers and PG's in the period that the study was conducted.

All medical graduates working as house officers and postgraduate candidates in any year of training, regardless of experience, age, religion and gender were included. House officers and

postgraduates who have, within the past one year, completed their period of training were also considered. Medical graduates from any country outside of Pakistan were not included.

The data collectors obtained consent from each subject verbally and in writing. The subject required about 5 minutes to complete the questionnaire. Upon completion of the questionnaire, the subject was provided with an informative handout containing the PMDC defined terms and appropriate behaviour for the scenarios described in the survey form.

Statistical analysis was carried out by using SPSS (Statistical Package for Social Sciences) version 20. A p-value of <0.05 was taken to indicate statistical significance.

RESULTS

Demographics

A total of 243 responses were randomly collected from the available doctors practicing in a private (53%) and public institute (47%). 41.8% of the total respondents were males and 58.2% were females. The included subjects ranged from house officer/intern level doctors with less than or equal to 2 years of clinical experience (57%) up to postgraduate level residents of every year with more than 2 years of experience (43%). Their ages ranged from 21 to 55 years, with the mean age coming out to be 27 years.

Knowledge of core Medical Ethics Objectives

Out of the total number of 243 respondents, 230 answered the complete list of objectives according to whether they recalled being taught these Ethics concepts during their medical school training, shown in Table 1.

The responses to the Medical Ethics objectives were further analyzed by dividing responses among Private and Public medical colleges to determine the association of the respondents' awareness of Medical Ethics objectives with their medical school background. A p-value of 0.05 was considered significant, for which the ethical concepts of Confidentiality, Non-maleficence, Informed Consent, Respect for Privacy and Desirable Attitudes in

TABLE 1

		TOTAL N(%)	PRIVATE MEDICAL COLLEGE N(%)	PUBLIC MEDICAL COLLEGE N(%)
AUTONOMY	YES	89 (38.7%)	46 (52%)	43 (48%)
	NO	141 (61.3%)	76 (54%)	65 (46%)
CONFIDENTIALITY	YES	151 (65.7%)	90 (60%)	61 (40%)
	NO	79 (34.3%)	32 (41%)	47 (59%)
BENEFACTANCE	YES	78 (33.9%)	46 (59%)	32 (41%)
	NO	152 (66.1%)	76 (50%)	76 (50%)
NON- MALEFACTANCE	YES	87 (37.8%)	55 (63.2%)	32 (36.8%)
	NO	143 (62.2%)	67 (47%)	76 (53%)
INFORMED CONSENT	YES	181 (79.0%)	105 (58%)	76 (42%)
	NO	48 (21.0%)	17 (35.4%)	31 (64.6%)
BREAKING BAD NEWS	YES	140 (60.9%)	80 (28.6%)	60 (71.4%)
	NO	90 (39.1%)	42 (46.6%)	48 (53.4%)
RESPECT FOR PRIVACY	YES	163 (70.9%)	95 (58.3%)	68 (41.7%)
	NO	67 (29.1%)	27 (40.3%)	40 (59.7%)
TREATMENT OF MINORS	YES	82 (35.7%)	50 (61%)	32 (39%)
	NO	148 (64.3%)	72 (48.6%)	76 (51.4%)
DEALING WITH CRISIS SITUATION	YES	92 (40.0%)	42 (45.6%)	50 (54.4%)
	NO	138 (60.0%)	80 (58%)	58 (42%)
DESIRABLE ATTITUDE	YES	131 (57.0%)	77 (58.8%)	54 (41.2%)
	NO	99 (43.0%)	45 (45.4%)	54 (54.6%)

TABLE 2

		TOTAL N(%)	PRIVATE MEDICAL COLLEGE N(%)	PUBLIC MEDICAL COLLEGE N(%)
HAVE YOU READ PMD CODE OF ETHICS?	YES	105 (48.8%)	47 (44.8%)	58 (55.2%)
	NO	110 (51.2%)	76 (69.1%)	34 (30.9%)

Healthcare Professionals showed significant values of 0.006, 0.016, 0.005, 0.013 and 0.045 on chi-square test, respectively. Whereas there was no significant difference in the responses to the topics of Autonomy, Beneficence, Breaking Bad News, Treatment of Minors and Dealing with Crisis Situations.

When the respondents were asked about examinations during medical school that tested them on these medical school objectives, 55.7% recalled that they were tested whereas 26.3% did not and 18% were unable to recall. It was also investigated whether the PMDC Code of Ethics has been read by doctors. 48.8% said that they had read the Code of Ethics at some point during their career but 51.2% had never read it. The responses were categorized between subjects who had < 2 years of clinical experience and those who had > 2 years of clinical experience. On chi-square test, there was a significant difference in response between these two groups of 0.0003.

Each clinical scenario was based on a core Medical Ethics concept. The number of correct responses in the first question regarding providing information on a boy admitted with an STD, was 72.5%, reflecting correct management knowledge in reference to the confidentiality of a patient. In the second question regarding informing a patient with the diagnosis of an esophageal mass, only 48.5% of the subjects selected an option where they were obligated to inform the patient directly without interference of the family. The third question addressed a DNR order from a female who was no longer conscious to reconsider, 58.1% of the responses agreed the family should be informed that the DNR order must be followed. The fourth question involving a female patient with IBS being given medications that she had refused was recognized as the incorrect action by only 42% of respondents, with majority not supporting complete information and consent in treatment. In the fifth scenario addressing medical error in administering antibiotics to a meningitis patient, 49.8% of the respondents said they would directly apologize to the patient and accept their mistake. The sixth scenario about a pregnant woman who refuses a

Ethical Response to Clinical Scenarios

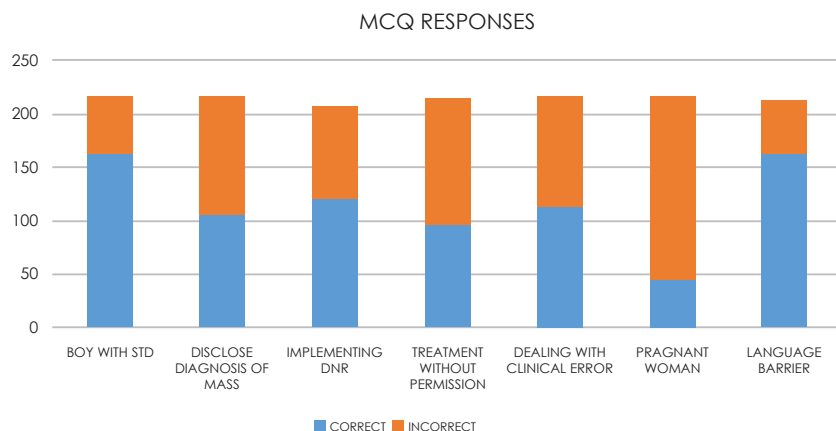


FIGURE 1.

C-section had the lowest number of correct responses with only 19.7% supporting her right to autonomy to make decisions regarding her own body. The final question asked about the correct procedure to obtain consent from a patient with language barriers where 76.9% subject correctly chose an option asking for assistance rather than assuming consent or directing counselling instead to the family.

The clinical scenarios in the questionnaire representing various Medical Ethics concepts were also analyzed according to years of clinical experience and respondents from public and private medical colleges. There was no significant difference in response among graduates from different backgrounds on Chi-square test, except in the question

regarding confidentiality of a boy admitted with an STD with a p-value of 0.014. Years of clinical experience also did not significantly change the number of correct and incorrect responses, except in the question regarding treating a female with IBS without her permission (p value 0.034).

DISCUSSION

The recall of medical ethics objectives yielded significantly different responses from physicians of different backgrounds. Knowledge of the PMDC Code of Ethics between physicians with different years of clinical experience also varied significantly. Contrastingly, no difference was noted in the responses to ethical scenarios from physicians who attended public or private medical colleges or

those with greater clinical experience.

Medical professionals require a sound theoretical base beginning from the initial years of medical school throughout their clinical training.¹⁰ It is a grave mistake to assume that students will be able to understand the importance of Ethical principles without due importance being given to them during their schooling years. Respondents from public medical schools were less likely to recall being taught medical ethics objectives suggesting that the current attitude and practices at different institutes can have long-lasting effects. Although the HEC and PMDC revised MBBS Curriculum of 2011 lists extensive medical ethics objectives¹¹, students and consequently physicians are wholly unfocused on ethical conduct and this may be as a result of inadequate effectiveness of the teaching and testing methods currently being used.¹⁹ A similar observation was made by a noted medical university in Pakistan (UHS), where Behavioural Sciences were introduced as essential objectives in 2007, however, there has been no improvement in their standard of medical practice and patient care.¹²

The need for enhanced testing methods is reflected by the fact that only 47.2% of the respondents from public schools, and 55.7% overall, had memory of ever being tested on medical ethics. The multitude of concepts currently covered in the PMDC defined medical ethics curriculum are primarily taught via lectures and tested in written examinations. However, ethical situations require a certain level of tact and sensitivity that are difficult to replicate unless practiced. Students should be given comprehensive simulated ethical scenarios during OSCE examinations where they partake in a role play and are assessed on their speech and behaviour around patients and their families.¹⁰ The medical ethics curriculum at The University of Pittsburgh School of Medicine includes three initiatives that are student-driven and integrated throughout the four years of medical school. These are: The Area of Concentration program, the Integrated Life Sciences course and the Scholarly project. Students are required to choose and pursue a focused ethical research project over a course of four years. This program allows them to develop a deeper understanding of ethics and values while simultaneously refining their ability to critically read the literature and combine ethical concepts with science and medicine.¹³ Such practical methods that take the teaching of ethical principles outside the classroom, will help build student confidence and enhance their ability to tackle ethical situations with a more holistic outlook. These skills should be further reinforced during their clinical training period by patient-centred role models serving as examples.

Adequate emphasis is currently not given to the development of necessary personality traits, as only 57% of our respondents recalled being taught

"desirable attitudes in a physician" during their schooling or training. Good communication skills are an essential characteristic in building a good doctor patient relationship. Past studies have proven that good communication skills can be achieved by comprehensive and organized training, rather than being an in-born quality that the doctor should already have¹⁴. In Pakistan, doctors at every level of training regularly face ethical dilemmas. Unfortunately, the present level of ethical understanding in healthcare professionals, proves to be insufficient more often than not⁴.

In the clinical scenario describing a female patient with IBS who was given a drug she had not provided consent for, only 42% respondents said this was unethical and informed consent should have been taken, although 79% of the same respondents had previously recalled being taught the principles of Informed Consent during medical school. If compared to a previous study where only 9.7% of patients had been asked for informed consent before taking history, physical examinations or medical therapy at a public hospital,¹⁵ we wonder if a correct answer to an MCQ truthfully portrays the behaviour of a doctor in a clinical setting. A possible explanation may be that although young doctors have a basic understanding of ethical principles, reality proves to be more challenging and complex than anticipated, hindering the implementation of the principles they learned theoretically. Additionally, it was noted that 51.2% had not read the PMDC Code of Ethics at any point in their careers. Reinforcement of ethical concepts needs to continue after the end of medical school. Education and practice of medical ethics is ineffectual if not solidified during the practical clinical exposure in the house job (internship) and postgraduate years.¹⁴ The PMDC curriculum largely omits ethics courses in postgraduate programs, taking the candidate's approach towards patients largely for granted.

It is important to consider the cultural context and its' effect on everyday dealings between doctors and patients. The practice of medicine in this day and age, does not allow a dominantly paternalistic role to be adopted by the doctor.²⁸ Patients expect to be a major part of the decision making process reflected by their desire to be thoroughly explained all relevant details.^{16,17} However, every population presents a different prevailing attitude. In Nepal households, a majority (72.7%) of medical health decisions for women were reported to be made without the female's participation. Bangladeshi (54.3%) and Indian (48.5%) households¹⁸ also mirrored a lack of decision-making power resting with women. Following this trend seen in South Asian communities, it was noted in our question regarding autonomy of a pregnant female, that only 19.7% respondents supported the patient independently making decisions about herself and her foetus. Many subjects argued that the authority of the

husband cannot be ignored in the Pakistani society, however, autonomy – as the basic human right on which the realm of medical ethics rests – needs to be prioritized over personal opinions.⁹

Most respondents in this study did not identify religion as a factor that would affect their clinical approach. However, some were of the opinion that the religion of the patient inevitably affects doctor-patient interaction depending on the decision making dynamics of patients and their families. A study previously done in Karachi found that patient's families most often react to death due to negligence with forgiveness. Many families also decided against legal action as a likely reaction to negligence and instead chose to consider the turn of events as the "will of God".¹⁷ Since a patient's level of satisfaction is directly determined by their expectations of the doctor and hospital²⁰, satisfaction is an unreliable parameter to solely judge physician behaviour by and even more difficult to gauge objectively in an environment where there is decreased patient expectation and an apparent lack of awareness of legal rights.²¹ It has also been observed that patients' questioning of a doctor about their diagnosis and treatment plan is significantly related to their level of education. Educated patients also observe side effects more commonly than others.²² This reflects poorly on the current state of affairs in Pakistan, particularly in public setups, where many of the presenting patients have not had more than a basic primary education.²³

Lack of hospital facilities was a factor that many subjects claimed decreases the efficiency of patient care and the extent to which patients can be worked up. Many respondents also agreed that the level of their fatigue, specifically during the post-call period affects the time spent and their overall behaviour towards patients. A considerable percentage of surgeons from public sector hospitals also have multiple employments or practices in order to fulfil their financial obligations.⁷ It can therefore be deduced that absence and consequent desertion of the large patient volume presenting at public hospitals can be attributed to inadequate salaries of medical trainees in Pakistan.

None of the respondents (0%) in our study expressed fear of legal action from patients or family of the deceased. The medical litigation cases reported in

Pakistan not only under-represent the actual number of malpractice and negligence cases but are often not pursued to resolution.²⁴ The Constitution of Pakistan currently addresses medical negligence, malpractice or hurt caused by healthcare professionals through Healthcare Commission Acts for individual provinces (Punjab Healthcare Commission 2010²⁵, Sindh Healthcare Commission 2013²⁶). These Acts specify that healthcare professionals can only be tried through this Act and that this Commission will refer to PMDC for specific fines, repercussions and sentences for specific acts of wrongdoing.²⁹ Consequently, members of the PMDC who are appointed to fulfil this role become the sole deciders of the penance to be applied to the offender. The objectivity of these members who are making decisions for their colleagues and peers, needs to be studied and analysed. If analysed from the perspective of the physician, previous studies report that a key challenge of working as a doctor in the public sector is threat of assault.⁶ Lack of security employed by the hospital and lack of legal coverage and protection offered to physicians by the system as a whole leaves doctors feeling vulnerable, inevitably adopting a defensive attitude and manner.

This study was done to showcase the current dilemma of ethical behaviour in a medical setting, with a new perspective. The integration of medical ethics objectives into the medical curriculum will not prove to be a holistic solution to the problem at hand.²⁷

Clinical settings seen in both private and government setups in Karachi, reflect many varying factors that directly impact the conduct and judgment of clinicians, especially those in their training years. Low patient expectations and the lack of awareness of their rights is a perpetually overlooked limitation, along with lack of support from legal bodies regarding physician accountability. There is a dire need for an ethics committee or an accessible reporting body in each hospital that works in collaboration with the legal monitoring body (PMDC) in Pakistan. The accused party, whether an individual, a group of people or an organization should be identified, accounted for, condemned and penalized after strict monitoring of medical training and duty hours. It is also necessary for this body to simultaneously protect interests of doctors by monitoring adequate pay scales and implement policies for

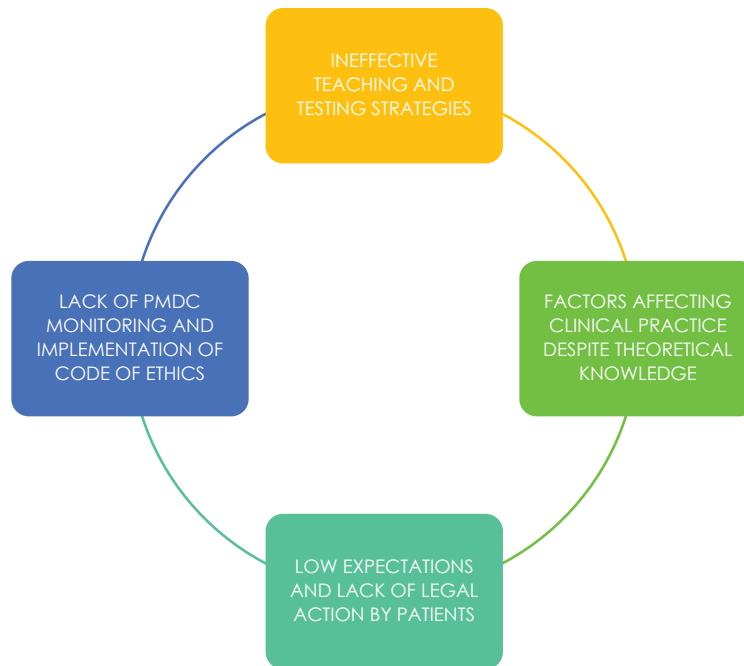


Figure 2. Factors leading to decreased ethical practice among physicians.

secure premises of all hospital employees.¹¹

CONCLUSION

Although the theoretical knowledge of ethical concepts is evident in our subjects, there seems to be a significant disconnect between the awareness of concepts in theory and their application in the clinical setting. Several factors including low salaries, lack of hospital facilities, low patient expectations, lack of medical litigation and the consequent complacency affects ethical behaviour among physicians. Effective teaching and assessment strategies as well as the inclusion of an ethics course during postgraduate training is essential to producing ethically aware medical professionals who should then be monitored and supported by a regulatory ethics committee at their workplace.

ETHICAL CONSIDERATIONS

Anonymity of the subject was maintained at all times. Their name and personal contact information was not recorded. The personal knowledge and judgment of the doctor in the theoretical situations do not reflect the patient care offered by the Consultant.

In order to avoid comparisons between educational standards of specific institutes, the statistical comparison was done according to private and government institute graduates.

Doctors were approached individually and were

requested to be seated in a relatively private area where their peers or seniors were not present to avoid any bias.

For definition of operational terms⁹.

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