**KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE ETHICS AMONG MEDICAL STUDENTS**

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### KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE ETHICS AMONG MEDICAL STUDENTS

**ABSTRACT**

Our objective is to evaluate knowledge, attitudes & practices of healthcare ethics among students. A Cross Sectional survey was conducted from medical students in Karachi during period of 6 months from January to June, 2016. Data was analyzed in SPSS 20. From 863 respondents, 81.3% were females and mean age was 21.79 years. 76.7% participants were unaware of any ethics committee in their institute. 60.1% respondents answered affirmative when asked about inclusion of healthcare ethics in curriculum. Although 42.4% knew about Hippocratic Oath, only <10% medical students knew about Helsinki declaration, Nuremburg & Nurses code. With respect to patients’ wishes, confidentiality, informing close relatives, paternalistic attitude of doctors, children’s ‘consent & religious beliefs, there was significant difference between pinions of 3rd, 4th & 5th year students. This study spotlights that healthcare ethics should be a part of undergraduate curriculum as most of the students don’t have enough knowledge about it.

KEYWORDS: Healthcare, Ethics, Medical curriculum, Euthanasia, Hippocratic Oath, Nuremberg Code

**INTRODUCTION:**

Healthcare ethics continues to be a concealed component of medical education however its existence is deeply rooted with the medical profession.[1] Although the major advancements in the field of science and technology, enhanced awareness and education among the masses and an increasing suspect of professional authority, had paved way for recognizing the importance of medical ethics;[2] it was only within the last three decades that it has emerged as a priority in formal medical education.[3]The American Association of Medical Colleges and the General Medical Council strongly recommended that the ethics education should be made the foundation constituent of curricula and medical graduates must have the knowledge of theories and principles of bioethics and effective skills for ethical decision making.[4,5] The purpose of teaching healthcare ethics is to create virtuous physicians and develop skills to evaluate and resolve ethical dilemmas.[6] The healthcare education has shown to have a positive impact on moral development and making better doctors; [7] However, most students do not receive enough training to adequately prepare themselves for the ethical challenges they face in practice.[8] Unethical behavioral patterns of medical students and physicians have been reported with patients as well as coworkers. [9] In teaching medical morals the value of both positive and negative role models has been well acknowledged. [10] There is an increasing trend of concerns regarding ethical conduct and litigation against medical practitioners. Despite the growth of ethical committees and updating codes of conduct and laws regulating the profession time to time.[11] Displeasure is reflected in expressions about poor ethical conduct within the healthcare sector which can be due to better public awareness or poor practice. The fundamental element in determining the ethical conduct is how doctors are trained. Keeping the significance in view, it is very heartrending to see that healthcare ethics is not the mandatory part of the health system or the curricula of most medical institutions, particularly in developing countries. [12] With this context the present survey is an effort to elucidate the knowledge, attitude, and practice of the medical students of Karachi.

**METHODS:**

This was a cross-sectional study conducted through convenient sampling technique. A questionnaire was adapted from Cave Hill [13] questionnaire and altered according to our clinical settings and social setup. The first half of questionnaire comprised demographics, basic knowledge about medical ethics and the attitude towards medical ethics. The latter half consisted of scenarios of ethical issues, questions related to ethics conduct, confidentiality, autonomy, informed consent, paternalism, religious beliefs influencing the treatment, informing patients about misconduct, notifying relatives about patient’s condition, treating a non-compliant or violent patient, abortion, and euthanasia. The data was collected from the medical students of public and private medical colleges of Karachi, during January 2016 to June 2016 including Dow Medical College, Sindh Medical College, Baqai Medical University and Jinnah Medical & Dental College. Aims and procedures of the study were explained and written consent was obtained.

Medical students who were exposed to clinical settings were included i.e. third, fourth and fifth-year medical student. Among the one thousand distributed questionnaires, 900 were returned, out of which 37 questionnaires were incompletely filled and were not included for analysis. Statistical Package for Social Sciences (SPSS) – version 20 software was used for descriptive analyses of all data; the attitudes towards practical ethical problems were compared among different years of students and public and private institutes using a Chi-square test. The p value < 0.05 considered as statically significant.

**RESULTS:**

Out of 863 respondents, 702(81.3%) were females with a male to female ratio of 1:4.35.

The mean age of the participants was 21.79 years ranging from 20-25 years.

49.2% of the respondents were the third year medical students, 25.4% were the fourth year medical students while 25.4% were fifth year medical students. 57.6% of the participants belong to public institute while 42.4% were from private institutes.

76.7% of the medical students were unaware of the existence of ethics committee in their institute.

About 60.1% of the respondents answered affirmatively when asked about the inclusion of healthcare ethics in their curriculum

**INSERT FIGURE 1 HERE:**

Figure 1.0 shows the response of the medical students about the importance of medical ethics knowledge. 26 out of 863 participants answered that knowledge of ethics was not at all important.

When asked about the source of medical ethics knowledge in a question where respondents can select multiple options, about 90% of the participants marked lectures and seminars, 62% chose self-tuition and followed by clinical learning experience picked by around 46%.

**INSERT TABLE 1 HERE:**

About 42.4% of the respondents knew the main content of Hippocratic Oath. But only less than 10% of the medical students have the knowledge regarding the main content of Helsinki declaration, Nuremberg code and Nurses code, showed in Table 1.0.

**INSERT TABLE 2 HERE:**

When asked about the consultation preferences of the participants where they can select multiple options, about 47% of them chose Head of Department, followed by colleague 31% and ethics committee 30%. Table 2.0 shows the complete distribution of answers.

**INSERT TABLE 3 HERE:**

Table 3.0 depicts the responses of medical students regarding the questions related to various aspects of healthcare ethics. statistically significant difference was found between the opinions third, fourth and fifth-year medical students with respect to adherence to patients' wishes, informing close relatives about patient condition, confidentiality, euthanasia, the paternalistic attitude of doctors, seeking consent for children and religious beliefs influencing the treatment. When the opinions of public and private medical institutes were analyzed there was a statically significant difference with respect to ethical conduct, adherence to patients' wishes, consenting for procedures, confidentiality, informing close relatives about patient condition, treating violent/noncompliant patients, euthanasia and paternalistic attitude of doctors.

**DISCUSSION:**

No one can deny the importance of healthcare ethical knowledge in this advance medical era. Being a Muslim country, Pakistan has its own code of healthcare ethics with its specific socioeconomic and cultural background surrounding the everyday issues encountered by medical professionals. But the knowledge and attitude of ethics and its application were not up to the mark among the medical students of Karachi surveyed.

It is an alarming finding of the study that about only 60% of the respondents marked that ethics was part of their undergraduate medical curriculum. Only 23.3% of the participants know about the existence of ethics committee in their institute in comparison to a study conducted by Walrond et al at Cave Hill campus in which about half of the respondents knew about the presence of ethics committee in their institute [13] while in a studies in India by Mohammad et al and Janakiram et al almost 50% and 98% of the medical postgraduates students knew about institution ethics committee respectively. [14, 15] Most of the respondents acknowledged the significance of ethical knowledge, however, 3% of the medical students did not think that it is important at all. Since it is known that only a few individuals could be the reason behind ethical conduct complaints, it is important to devise such methods which can identify and stimulate the interest in ethics knowledge of such individuals.

Very few participants had attained their knowledge of ethics from a single source. Still, lectures and seminars are the main sources of their knowledge followed by one’s own reading. According to the findings in the study about half of the respondents preferred to consult with the head of the department followed by friend or family and then with a colleague in any matter of ethical problem. Similar trends regarding the source of knowledge and consultation were observed by Walrond et al , Adhikari et al and Janakiram et al [13,16,15].

Another finding of the study was that about 42% of the participants had knowledge regarding the main content of Hippocrates oath but less than 10% of them know about Helsinki declaration and Nuremberg code. While in a study conducted by Adhikari et al two third of doctors knew the Hippocrates oath content, 15 % knew about Helsinki declaration but only about 10% had knowledge regarding Nuremberg code.[16] Similar results were found in another study in which almost all the medical postgraduate students knew the content of Hippocrates oath and about one fourth of them have the knowledge regarding Helsinki declaration and Nuremberg code.[15]With the increasing trend of research in the present era, a medical student must understand the important aspect of Helsinki declaration and Nuremberg code.

Responses to scenarios related to practical ethics (Table 3.0) shows that final year students had the significantly stronger opinion regarding issues like autonomy, confidentiality, informing close relatives about patient condition, the paternalistic attitude of doctors and religious beliefs influencing the treatment. When the opinions of public and private medical institutes were analyzed, although medical students of public institutes had the statically stronger opinion with respect to certain ethical matters. However overall scenario was not much different with respect to ethical knowledge in between public and private institutes. There was still the substantial uncertainty among students on concerns like ethical conduct is only important to avoid legal action, how to deal with religious strictures in treating patients, on the information to be given to relatives, and paternalistic attitude of doctors. These are important disputes which when faced often require quick decision to make on spot, and consequently are the areas that need some emphasis in the ethical education.

This study was conducted only among the limited number of medical students who were exposed to clinical settings. A broader study should be done including the young physicians, consultants and nurses to evaluate the complete picture. Under the light of these findings, we recommend that medical ethics should be a mandatory part of the undergraduate medical curriculum in public and private institutions. Likewise, interactive workshops, seminars and continuing medical education programs on healthcare ethics should be organized on a vast scale to educate the students and practicing professionals.

**CONCLUSION:**

The study spotlights that most of medical students do not have enough knowledge about healthcare ethics and they agreed that health care ethics should be mandatory part of undergraduate curriculum. Students need to be trained regarding different aspects of healthcare ethics to decrease ethical misconducts during practice in future.

This survey depicts the existing scenario of knowledge, attitudes, and practice of ethics by medical students in Pakistan where ethics is not a mandatory subject of undergraduate medical curriculum in public or private medical institute. Despite the efforts of the Pakistan Medical and Dental Council (PMDC) and its new guidelines that clearly state that medical students must be taught ethics and evaluated.[17] Nowadays, Micro ethics like cloning and euthanasia are the focus of discussions, globally. We are struggling with the basic questions of ethical professional practice in Pakistan. [18] The significance of moral and ethical problems in healthcare is not concealed anymore. The Accreditation Council for Graduate Medical Education has recommended the need to address ethical issues in medical practice. [5] This issue deserve further consideration more than ever.

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**STATEMENT:**

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This article is only being submitted for the first time in indian journal of medical ethics. There is no other article similar to this published elsewhere.

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**TABLE 1: Knowledge about main content**

|  |  |  |
| --- | --- | --- |
| know the main content of | Yes | No |
| Hippocratic Oath | 42.4% | 57.6% |
| Helsinki Declaration | 8.1% | 91.9% |
| Nuremberg Code | 8.5% | 91.5% |
| Nurse Code | 10.4% | 89.6% |

**TABLE 2: Preference in Consulting**

|  |  |  |
| --- | --- | --- |
| Consultation preference | Frequency | Percentage |
| head of department | 408 | 47.2% |
| close friend/family | 286 | 33.2% |
| colleague | 270 | 31.2% |
| ethics committee | 258 | 29.8% |
| chief of medical staff | 134 | 15.6% |
| religious person | 128 | 14.8% |
| supervisor | 76 | 8.8% |
| text, internet | 62 | 7.2% |
| professional association | 56 | 6.4% |
| hospital administrator | 48 | 5.6% |

**TABLE 3: Medical ethics related questions**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Medical ethics issues related questions | Year of education /  Institute | Agree | Not sure | Disagree | Chi Square | P-value |
| Ethical conduct is only important to avoid legal action | 3rd year  4th year  5th year | 37.4% | 30.1% | 30.5% | 9.39 | 0.052 |
| 42% | 19.2% | 38.8% |
| 41.1% | 26% | 32.9% |
| Public  Private | 35.8% | 26.2% | 38% | 9.135 | 0.01 |
| 44.5% | 26.5% | 29% |
| The patient’s wishes must always be adhered to | 3rd year  4th year  5th year | 73.6% | 16% | 10.4% | 15.666 | 0.004 |
| 78.1% | 13.7% | 8.2% |
| 87.2% | 7.8% | 5% |
| Public  Private | 82.3% | 10.3% | 7.4% | 12.173 | 0.002 |
| 72.7% | 17.5% | 9.8% |
| Confidentiality is not important in modern care and should be abandoned | 3rd year  4th year  5th year | 8.9% | 22.4% | 68.7% | 21.049 | <0.001 |
| 10.5% | 16.4% | 73.1% |
| 12.8% | 8.2% | 79% |
| Public  Private | 10.5% | 11.1% | 78.5% | 32.029 | <0.001 |
| 10.1% | 25.7% | 64.2% |
| Patients only need to consent for operations not for tests or medications | 3rd year  4th year  5th year | 25.4% | 10.6% | 64% | 3.783 | 0.436 |
| 21.9% | 8.2% | 69.9% |
| 26.5% | 7.3% | 66.2% |
| Public  Private | 18.1% | 6.8% | 75.1% | 42.368 | <0.001 |
| 33.9% | 12.3% | 53.8% |
| Close relatives must always be told about a patient’s condition | 3rd year  4th year  5th year | 81.4% | 6.6% | 12% | 18.768 | 0.001 |
| 75.2% | 8.7% | 16.1% |
| 66.2% | 13.2% | 20.5% |
| Public  Private | 69.6% | 9.9% | 20.5% | 29.619 | <0.001 |
| 84.7% | 7.4% | 7.9% |
| Doctors and nurses should refuse to treat patients who behave violently’ | 3rd year  4th year  5th year | 19.1% | 13.4% | 67.5% | 6.365 | 0.174 |
| 14.7% | 14.2% | 71.7% |
| 16.9% | 19.2% | 63.9% |
| Public  Private | 14.9% | 16.7% | 68.4% | 6.01 | 0.05 |
| 20.5% | 19.2% | 66.7% |
| The patient should always be told if something goes wrong | 3rd year  4th year  5th year | 66.8% | 17.4% | 15.8% | 5.484 | 0.241 |
| 73.1% | 12.3% | 14.6% |
| 73.1% | 11.9% | 15.1% |
| Public  Private | 72.8% | 17.4% | 15.8% | 4.733 | 0.094 |
| 66.1% | 16.1% | 17.8% |
| A patient who wishes to die should be assisted in doing so no matter what their illness | 3rd year  4th year  5th year | 20.2% | 18.6% | 61.2% | 10.338 | 0.035 |
| 19.2% | 9.6% | 71.2% |
| 21.9% | 15.5% | 62.6% |
| Public  Private | 14.3% | 16.9% | 68.8% | 26.964 | <0.001 |
| 28.7% | 13.7% | 57.7% |
| The doctor should do what is best irrespective of the patients opinion | 3rd year  4th year  5th year | 60.5% | 16.7% | 22.8% | 20.307 | <0.001 |
| 61.2% | 11.4% | 27.4% |
| 56.9% | 24.2% | 30.1% |
| Public  Private | 50.5% | 20.5% | 29% | 20.072 | <0.001 |
| 65.6% | 12.8% | 21.6% |
| If the law allows abortion to be performed, therefore a doctor cannot refuse to do an abortion for a patient. | 3rd year  4th year  5th year | 48.7% | 21.4% | 29.9% | 1.895 | 0.755 |
| 44.3% | 23.7% | 32% |
| 44.3% | 24.7% | 31.1% |
| Public  Private | 46.5% | 23.7% | 29.8% | 0.759 | 0.684 |
| 46.4% | 21.6% | 32% |
| Children [except in an emergency] should never be treated without the consent of their parents or guardians’ | 3rd year  4th year  5th year | 68.7% | 13.2% | 18.1% | 11.451 | 0.022 |
| 74.4% | 9.1% | 16.4% |
| 60.7% | 13.2% | 26% |
| Public  Private | 68.2% | 13.3% | 18.5% | 2.033 | 0.362 |
| 68% | 10.7% | 21.3% |
| A patient who refuses to be treated on religious or other grounds should be told that they need to find another doctor with their beliefs or accept the treatment offered | 3rd year  4th year  5th year | 52.7% | 21.2% | 26.1% | 9.773 | 0.044 |
| 47.9% | 22.8% | 29.2% |
| 45.2% | 17.4% | 37.4% |
| Public  Private | 46.7% | 22.5% | 30.8% | 4.476 | 0.107 |
| 53.6% | 18% | 28.4% |
| The doctor should treat the HIV patient without any discrimination | 3rd year  4th year  5th year | 81.4% | 6.8% | 11.8% | 2.386 | 0.665 |
| 81.7% | 7.8% | 10.5% |
| 82.6% | 4.6% | 12.8% |
| Public  Private | 80.7% | 6.4% | 12.95 | 1.565 | 0.457 |
| 83.3% | 6.6% | 10.1% |

**FIGURE 1: Importance of ethics knowledge**