

## ORIGINAL ARTICLE

## KNOWLEDGE OF BEDSIDE ETHICS AND ITS IMPLEMENTATION IN A PUBLIC SECTOR UNIVERSITY HOSPITAL

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**Background:** Medical ethics have always been considered as fundamentally important and bedside ethics are challenging to teach due to lack of formal teaching sessions. This study aimed to identify the knowledge, attitude and misconceptions among medical students about bedside ethics in hospital and its implementation in their routine practice. **Methods:** The cross-sectional study was conducted in medical students from 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> year from public sector medical colleges from June to August 2020. **Results:** Out of 400 Medical students, 90% had knowledge about bedside ethics and 64% knew the principle of bedside ethics. Sixty-four of medical students believed that they lived in an environment that was inappropriate for an ethical evaluation of the doctor-patient relation. Three-hundred-forty-one (84%) opted to recognize the patient and address them in a sophisticated reserved manner when approaching the patient at bedside. Two-hundred eleven (52%) preferred to inform bad news to patients in front of their attendants. Two-hundred ninety-eight (73%) of medical students believed that ethics were required for moral values. Three-hundred-five (75%) selected the option to tell the patients honestly when they make a mistake while treatment. Moreover, 259 (64%) of students preferred to ask patients to expose the target body part but 131 (32%) of students preferred to do it by themselves. **Conclusion:** Majority of the undergraduate medical students had knowledge about bedside ethics and its principle. Inculcation of ethics as a subject into the curriculum of MBBS students is suggested.

**Keywords:** Knowledge, bedside ethics, implementation, public sector, medical students

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## INTRODUCTION

Medical ethics refers to a system of moral guidelines that apply value and judgment to the practice of medicine.<sup>1</sup> Ethics has always been of fundamental importance to the medical profession<sup>2</sup>, and with the advancement in the field of medicine, the significance of medical ethics has grown many folds<sup>3</sup>. Special emphasis is given to incorporate it in the training of medical students around the world, and it is taught as a component of Behavioural Sciences—a mandatory part of undergraduate medical school teaching.<sup>4</sup> Teaching bedside manners proves to be one of the most challenging tasks in medical education, since it is difficult to organize formal training sessions in this domain.<sup>5</sup> Practices differ across the countries based on their norms and values leading to disparity in the knowledge being conveyed to health care providers. World Health Organization (WHO) has developed a comprehensive teaching module on ethics to cater to the needs of medical students based on their region-specific practices.<sup>6</sup>

In Pakistan, lack of a structured curriculum for ethics in medical education has resulted in health care professionals being inadequately trained in medical ethics. Though, the current MBBS curriculum prepared by Pakistan Medical and Dental Council (PMDC) provides objectives and course outline for teaching ethics<sup>7</sup>, but it lacks details of

implementation. Unlike other countries, in Pakistan the components of Medical Ethics are incorporated into the Forensic and Community Medicine curricula instead of being taught as a separate subject.<sup>8</sup> Medical curriculum in Pakistan fails to effectively address the ethical issues faced by a doctor.

Medical students interact with patients in their clinical rotations and will soon become primary care practitioners encountering more patients in future. It is imperative to have the necessary knowledge regarding medical ethics, as well as the right attitude to follow the ethical code. This study aimed to identify the knowledge, attitude and misconceptions among medical students about bedside ethics in hospital and its implementation in their routine practice.

## MATERIAL AND METHODS

This cross-sectional study was conducted over a period of 3 months from June to August 2020. A sample size of 400 was estimated with a 95% confidence interval using OpenEpi. Ethical approval for the survey was taken from the Ethical Review Board. Volunteers included medical students from 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> year from public sector medical colleges. Medical students in the private sector were excluded.

A self-administered questionnaire was designed with the help of experts from the Department of Medical education and Psychiatry to

collect the data for the survey. The questionnaire consisted of 18 multiple-choice-questions which tested a students' ethical knowledge and its implementation in clinical settings with pilot study. The volunteers received no prior notification of the study. It was voluntary to fill the questionnaire and the volunteers were reassured that their responses will be kept confidential and 80% response rate was received.

Data were analysed using SPSS-16. Descriptive analysis was done with frequencies and percentages for all data including the comparison of attitudes towards practical ethical problems among students and patients.

### RESULTS

Four-hundred-eight medical students participated in this study and responded to a self-administered questionnaire of 18 ethic-based inquiries. The 90% of medical students had Knowledge about bedside ethics and 64% knew the principle of bedside ethics. The 64% of medical students believed that they lived in an environment that was inappropriate for an ethical evaluation of the doctor-patient relation (Table-1).

Three-hundred-forty-one (84%) Opted to Recognize the patient and address them in a sophisticated reserved manner when approaching the patient at bedside (Figure-1). Two-hundred-eleven (52%) preferred to inform bad news to patients in front of their attendants (Figure-2). Two-hundred-nintyeight (73%) of medical students believed that ethics were required for moral values (Figure-3).

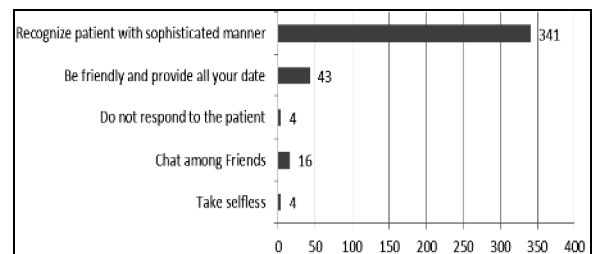
Three-hundred-five (75%) selected the option to tell the patients honestly when they make a mistake while treatment, 19 (5%) selected denial making a mistake, 14 (3%) selected to lie to the patient to save another colleague and only 7 (2%) opted to blame it on staff or another colleague.

Responding to the question that when patients refused treatment based on religious grounds, most of the students 330 (81%) chose to counsel the patient, 33 (8%) chose to let them go without treatment and 15 (4%) chose not to listen to the patient and continue the treatment.

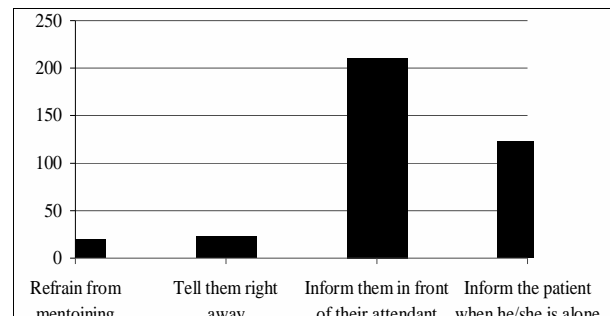
Almost half of the participants believed that age above 18 years was appropriate for consent writing and only 71 (17%) believed that patient of any age was fit to give consent. Meanwhile, most of the students 376 (92%) preferred to stand on the right side of the patient while treatments and history taking, and 364 (90%) opted to take permission every time for treatment. Moreover, 259 (64%) of students preferred to ask patients to expose the target body part but 131 (32%) of students preferred to do it by themselves.

**Table-1: Medical students' knowledge and attitude of ethics toward their patients**

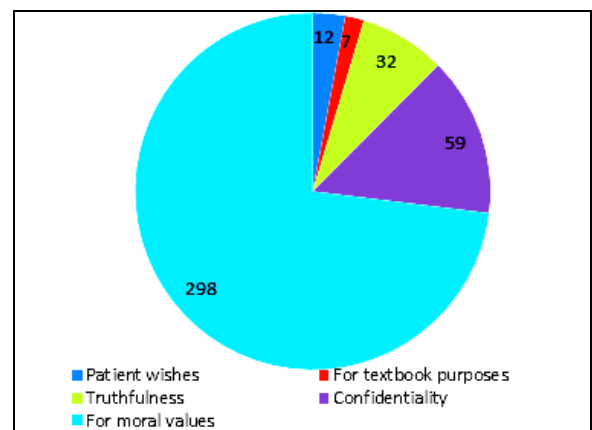
	Yes n (%)	No n (%)
Do you have any knowledge about bedside ethics?	366 (90)	42 (10)
Was the subject of bedside ethic were specifically discussed?	217 (53)	191 (47)
Do you know about the principles of bedside ethics?	261 (64)	147 (36)
Did you ever get evaluated based on your ethical attitude?	190 (47)	218 (53)
Do you as a patient think that ethical protocols are being practiced among the physician on the bedside?	172 (42)	236 (58)
Do you think the environment you live in is appropriate for an ethical evaluation of the doctor-patient relation?	147 (36)	261 (64)
Do you introduce yourself to the patient/ attendant?	398 (97.5)	10 (2.5)
Call your patient with their name?	278 (68)	130 (32)



**Figure-1: Medical students' attitude toward their patient at bedside**



**Figure-2: Medical students' attitude to deal with bad news**



**Figure-3: Medical students' attitude about ethics**

## DISCUSSION

Our study evaluated 3<sup>rd</sup> year, 4<sup>th</sup> year, and final year medical students about their knowledge and attitude related to medical ethics in colleges affiliated with public sector medical university in Karachi.

One component of our study was to understand the knowledge of ethics among medical students. Results of our study showed that the majority of medical students (90%) knew bedside ethics. These results were similar to cross-sectional studies conducted by Chatterjee and Sarkar<sup>9</sup> in Bangladesh and another study by Walrond *et al*<sup>10</sup> from Barbados. However, in the cross-sectional survey from Pakistan, Majeed *et al*<sup>11</sup>, reported that most of the students were not aware of medical ethics. It was observed that third-year MBBS students had more knowledge than fourth and final year students since behavioural sciences were incorporated as a subject into the third year curriculum while fourth and final year students had a curriculum focused on clinical subjects. The finding of this study is in contrast to the findings of our study and the plausible explanation for this contrast between the two studies may be the incorporation of ethics into the modular curriculum of sciences in the third, fourth, and final year, at public sector setting of healthcare training, which may have resulted in better understanding of ethics.

Beauchamp and Childress introduced four principles of ethics including autonomy, beneficence, non-maleficence, and justice.<sup>12</sup> These four principles along with the right to refuse treatment, Fairness or equity, Capacity, or competence are essential in understanding the modern concepts of ethics.<sup>13</sup> In a recent cross-sectional survey from Malaysia<sup>14</sup>, it was observed that only 18% of the MBBS student knew the basic principles of ethics. Similar findings were reported in a cross-sectional survey from Azad Kashmir<sup>15</sup>, Pakistan, the majority of students did not know about the basic principles of ethics. Surprisingly, more than half (64%) of students knew about basic principles of ethics in our study; a possible reason for this finding could be the inculcation of basic principles of ethics in the curriculum of the third, fourth and final year MBBS program in our study. At present ethics is incorporated into the subject of forensic medicine and community medicine and is not taught as a separate subject in the majority of medical colleges across Pakistan and these observations highlight the need to introduce ethics as a separate subject in the medical curriculum of MBBS.<sup>8</sup>

Another component of our study was to understand the attitude of medical students towards the patients. It was observed that more than half 55% of students preferred to inform bad news to patients in front of their attendants. These findings are similar to

the observations in a cross-sectional study on final year medical students Iswarya and Bhuvaneshwari<sup>16</sup> where 61% of participants agreed that close relatives of patients always were informed about the patient's condition. Likewise in cross-sectional studies by Subramanian *et al*<sup>17</sup> and Borgen *et al*<sup>18</sup> on physicians, similar findings were reported. Similarities of findings reported by the authors of South Asian countries reflected common values and beliefs shared by the population of this region.

Medical errors may be defined as accidental harm to patient harm caused by health care providers and may have serious consequences on a patient's health and well-being and it is estimated that 50% to 96% of errors go unreported in the healthcare delivery system.<sup>19</sup> In this study, more than half (75%) opted to tell the patients honestly when they made a mistake during treatment, 5% opted to deny, 3% chose to lie to the patient to save a friend while 2% selected the option to blame it on staff or another medical student. This is in accordance with the findings of studies conducted earlier on this subject, where the majority of students chose to inform the patient about the mistake made by a doctor.<sup>16,20,21</sup> On the other hand, a cross-sectional survey on residents of the faculty of medicine by Mohammed *et al*<sup>22</sup> discovered that 83% of residents disagreed that patients should always be informed about the mistake made by health workers, and mentioned fear of malpractice as their key reason for disagreement.

According to our study, almost half of the participants believed that age above 18 years was appropriate for giving consent and 73% believed that not every patient is fit to giving consent. Similarly, Chatterjee and Sarkar<sup>9</sup> observed that many participants had agreed that children should never be treated without the consent of their parents.

Observations of our study have to be interpreted after considering the limitations of this study. This strength of this study were large sample size and sample population covering different institutes of a public sector university, however, findings were based on self-reported knowledge, what students believed. Moreover, this survey does not compare the responses between third, fourth, and final year survey, and a comparative study would have given a holistic picture of understanding of knowledge and attitudes of students as they progress from to the final year, exposed to the clinical situations demanding ethical consideration.

## CONCLUSION

Majority of the undergraduate medical students had knowledge about bedside ethics and its principle. Inculcation of ethics as a subject into the curriculum of MBBS students is suggested.

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**RS:** Data acquisition, conception

**FB:** Drafting and analysis

**FZ:** Data acquisition, revising

**FI:** Revision and approval

**AQ:** Analysis and interpretation of data

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