Knowledge and practice of ethics among postgraduates in a public sector tertiary care hospital

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Abstract

Objective: To explore the present state of competency in clinical ethics among postgraduate trainees in a tertiary care hospital.

Methods: The interview-based cross-sectional study was conducted at the Civil Hospital, Karachi, from September 2018 to March 2019, and comprised postgraduate trainees of either gender in any year of the training programme across all specialties. Data was collected using self-reported questionnaire seeking opinion about present working conditions regarding clinical ethical issues on the hospital ground and problems they face from day to day. Data was analysed using SPSS 23.

Results: Of the 153 subjects, 96(62.7%) were females, 73(47.7%) were from Medicine and allied disciplines, and 80(52.3%) were from Surgery and allied disciplines. The primary source of their clinical ethics' understanding was derived from their workplace [116(75.82%)]. While only 104 (68%) of the subjects knew about the Hippocratic Oath's contents, less than 10% knew about Nuremberg Code and Helsinki declaration. They mainly relied on their seniors at work for guidance on ethical issues [108 (70.59%)]. Overall, the subjects lacked basic knowledge of medical ethics and failed to practise ethical conduct during their training.

Conclusions: The knowledge of medical ethics was found to be unsatisfactory among doctors, and timely intervention was needed to improve the situation.

Keywords: Clinical ethics, Postgraduate education, Knowledge, Practices, Pakistan. (JPMA 72: 000; 2022)

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Introduction

Doctors and healthcare professionals are confronted with questions of ethical conduct for as long as medicine has been practiced.[1] Doctor-patient communication is an integral part of professional relationship which has been repetitively shown to have a profound positive impact on the outcomes of medical procedures, quicker regaining of health by the patient, patient satisfaction, better adherence to the treatment and on the emotional wellbeing of the patient.[2-4] While legal actions against doctors are on the rise around the globe, it has been shown that better communicators are less likely to have a lawsuit filed against them.[5]

There seems to be a lack of proper attention given to bioethics both on the part of institutions and students. Lack of established curricula is reflected in statistics from studies carried out in the developing world in one of which 33% of the doctors did not know about the contents of the Hippocratic Oath.[6]

The current study was planned to assess the level of knowledge and practice of ethical conduct, communication and malpractice among postgraduates in a tertiary care hospital.

Subjects and Methods

The cross-sectional interview-based study was conducted at the Dr K.M. Ruth Pfau Civil Hospital, Karachi, a tertiary care, public-sector teaching hospital, from September 2018 to March 2019. After approval from the institutional ethics review board, the sample size was calculated using OpenEpi,[7] referencing previous similar studies[8] with an anticipated frequency 50% and confidence interval (CI) 95%.

After a thorough literature review, a questionnaire was adapted from previous studies[1,8,9] and was modified according to specific requirements. The questionnaires of the selected studies were chosen to encompass historical perspective, population and ethnic differences and precision of selected studies' rationale with that of the current study. The final questionnaire was modified to have a concise range of questions applicable to the medical setting and study design. Differences in religious views were also taken into account to have a more precise questionnaire pertaining to the specific setting. Before the distribution of the questionnaire, a pilot study was

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conducted and minor changes were made followed by a survey using convenience sampling technique. A few questions were omitted and the language was improved to ensure thorough pertinence among the study subjects who were postgraduate trainees (PGTs) of either gender in any year of their study programme across all specialties.

After taking written informed consent from the subjects, they were individually interviewed by one of the researchers.

The first part of the questionnaire noted the demographics. The second part dealt with questions regarding knowledge, beliefs and practices related to healthcare ethics which were marked accordingly after thorough discussion with the respondents. The section comprised multiple choice questions (MCQs) where participants had to choose a single-best answer. The respondents were also asked to share their concerns and the difficulties they faced regarding ethical issues in their everyday practice. This third section had open-ended free-text style questions.

Data was analysed using SPSS 23. The qualitative section was scrutinized individually by the researchers and common themes were highlighted. As imputation method was not used to fill in the missing data, unanswered questions by the participants were not included in the analysis, but their other responses were added. P<0.05 was considered significant.

Results

Of the 153 subjects, 96(62.7%) were females, 73(47.7%) were from Medicine and allied disciplines, and 80(52.3%) were from Surgery and allied disciplines (Table-1).

When the participants were asked about their predominant source of knowledge of clinical ethics, majority of them learned from their workplace [116(75.82%)], which included their seniors, colleagues or their own experience. This was followed by medical school [56(36.60%)] and books [24(15.69%)]. This was consistent throughout various specialties and year of training. Only 104(68%) participants knew about the contents of the Hippocratic Oath and this percentage plummeted when asked about the contents of the Nuremberg Code [15(9.8%)] and the Helsinki Declaration [13(8.5%)]. Only 42(52.5%) PGTs in surgical fields knew about the clinical ethics committee in their institution, 47(64.38%) of medical PGTs did not know if there was any clinical ethics committee at all, 118(77.12%) PGTs knew that a male doctor can refuse to examine a female patient when a female chaperone is not available, 71(46.41%) agreed that the doctors are obliged to do their best even if it includes going against the autonomy of the patient, and 89(58.17%) disagreed on always adhering to patient's wishes when it came to medical treatment and care. Around two-thirds of respondents who agreed on honouring patient's autonomy, disagreed that it was doctors' obligation to do their best even when it meant going against patients' wishes (p<0.05). PGTs who were past their first two years of training did not differ significantly than their junior counterparts when it came to complying with patients' healthcare desires (p=0.396). While almost all the subjects agreed on doctor-patient confidentiality being important, more than half [43(53.75%)] of surgical PGTs and [46(63.01%)] of medical PGTs said that it was the right of close relatives of the patients to know about the patient's diagnosis (p=0.09), and [127(83%)] said patients were entitled to know about their doctor's mistakes (Table-2).

When it came to practical applications of medical ethics, the number of times PGTs faced ethical dilemmas was noted. They were also asked about their preference in terms of who will they likely consult in case they come face-to-face with an ethical conflict. The responses were

Table-1: Demographic and professional characteristics (n=153).

	[n (%)]
Gender	
Male	57 (37.3)
Female	96 (62.7)
Year of Training	**[n (%)] +**
1st	60 (39.2)
2nd	32 (29.2)
3rd	19 (12.4)
4th	26 (17.0)
5th	13 (8.5)
Field of Study	**[n (%)]**
• **Medicine and allied**	**[73 (47.71)]:**
Internal Medicine	40 (54.79)
Paediatrics	16 (21.92)
Psychiatry	5 (6.85)
Neurology	4 (5.48)
Dermatology	4 (5.48)
Cardiology	3 (4.11)
Rehabilitation Medicine	1 (1.37)
• **Surgery and allied**	**[80 (52.29)]:**
General Surgery	42 (52.50)
Obs/Gyn	10 (12.50)
Orthopaedics	10 (12.50)
Plastic Surgery	8 (10)
ENT	6 (7.50)
Cardiac Surgery	4 (5)

Obs/Gyn: Obstetrics and gynaecology, ENT: Ear, nose, throat.
+Unanswered questions by the participants were not included, but their other responses were taken into account.

Table-2: Knowledge of medical ethics among post-graduate trainees. (n=153).

		KNOWLEDGE						
		Field of Study		Year of Training +				
		S&A fields (n=80) (%)	M&A fields (n=73) (%)	1st (n=60) (%)	2nd (n=32) (%)	3rd (n=19) (%)	4th (n=26) (%)	5th (n=13) (%)
Where have you acquired most of your knowledge regarding medical ethics from?*	Medical school	32 (40)	24 (32.88)	22 (36.67)	11 (34.37)	4 (21.05)	10 (38.46)	8 (61.54)
	Seniors at work	35 (43.75)	21 (28.77)	21 (35)	11 (34.37)	4 (21.05)	15 (57.69)	3 (23.08)
	Colleagues	4 (5)	3 (4.11)	3 (5)	2 (6.25)	0	2 (7.69)	0
	Books	12 (15)	12 (16.44)	11 (18.33)	3 (9.37)	5 (26.32)	2 (7.69)	3 (15.38)
	Internet	8 (10)	1 (1.37)	4 (6.67)	1 (3.13)	1 (5.27)	2 (7.69)	1 (7.69)
	Experience at work	30 (37.5)	23 (31.51)	18 (30)	10 (31.25)	10 (52.63)	11 (42.31)	4 (15.38)
	Other	4 (5)	1 (1.37)	1 (1.67)	1 (3.12)	1 (5.27)	2 (7.69)	0
Knowledge about the contents of the Hippocratic Oath?	Yes	57 (71.25)	47 (64.38)	39 (65)	22 (68.75)	15 (78.95)	17 (65.38)	9 (69.23)
Knowledge about the contents of the Nuremberg code?	Yes	9 (11.25)	6 (8.22)	6 (10)	1 (3.12)	4 (21.05)	3 (11.54)	1 (7.69)
Knowledge about the contents of the Helsinki Declaration?	Yes	9 (11.25)	4 (5.48)	4 (6.67)	3 (9.38)	2 (10.53)	4 (15.38)	0
Is there a clinical ethical committee in DUHS? +	Yes	42 (52.5)	26 (35.62)	23 (38.33)	18 (56.25)	6 (31.58)	14 (53.85)	7 (53.85)
	No	37 (46.25)	47 (64.38)	36 (60)	14 (43.75)	13 (68.42)	12 (46.15)	6 (46.15)
Can a male doctor to refuse to examine a female patient when a female attendant is unavailable? +	Yes	63 (78.75)	55 (75.34)	48 (80)	26 (81.25)	14 (73.68)	20 (76.92)	7 (53.85)
	No	16 (20)	18 (24.66)	11 (18.33)	6 (18.75)	5 (26.32)	6 (23.08)	6 (46.15)
Is the doctor obliged to do his/her best even if it means going against the patient's wishes? +	Yes	38 (47.5)	33 (45.21)	26 (43.33)	18 (56.25)	7 (36.84)	10 (38.46)	8 (61.54)
	No	41 (51.25)	39 (53.43)	34 (56.67)	14 (43.75)	10 (52.62)	16 (61.54)	5 (38.46)
Do close relatives have the right to be aware of the patient's diagnosis? +	Yes	43 (53.75)	46 (63.01)	39 (65)	19 (59.38)	11 (57.89)	8 (30.77)	9 (69.23)
	No	36 (45)	27 (36.99)	20 (33.33)	13 (40.62)	8 (42.11)	18 (69.23)	4 (30.77)
Is it okay to disclose patient's transmissible disease to their neighbours to avoid the disease from spreading? +	Yes	49 (61.25)	47 (64.38)	39 (65)	23 (71.88)	11 (57.89)	12 (46.15)	8 (61.54)
	No	30 (37.5)	25 (34.25)	21 (35)	9 (28.12)	6 (31.58)	14 (53.85)	5 (38.46)
Is it necessary to always adhere to patient's wishes?	Yes	32 (40)	32 (43.84)	24 (40)	16 (50)	8 (42.10)	12 (46.15)	3 (23.08)
	No	48 (60)	41 (56.16)	36 (60)	16 (50)	11 (57.90)	14 (53.85)	10 (76.92)
Is confidentiality important?	Yes	79 (98.75)	72 (98.63)	59 (98.33)	32 (100)	19 (100)	25 (96.15)	13 (100)
	No	1 (1.25)	1 (1.37)	1 (1.67)	0	0	1 (3.85)	0
Is the patient entitled to know about doctor's mistakes?	Yes	70 (87.5)	57 (78.08)	48 (80)	27 (84.38)	17 (89.47)	23 (88.46)	10 (76.92)
	No	10 (12.5)	16 (21.92)	12 (20)	5 (15.62)	2 (10.53)	3 (11.54)	3 (23.08)
Is it necessary to get consent from a child's parents when dealing with a child patient?	Yes	78 (97.5)	71(97.26)	58(96.67)	31(96.87)	19 (100)	25 (96.15)	13 (100)
	No	2 (2.5)	2 (2.74)	2 (3.33)	1 (3.13)	0	1 (3.85)	0
Is it ever right to withhold life-saving treatment from a severely handicapped baby? +	Yes	17 (21.25)	13 (17.80)	10 (16.67)	6 (18.75)	4 (21.05)	6 (23.08)	4 (30.77)
	No	62 (77.5)	60 (82.20)	50 (83.33)	26 (81.25)	15 (78.95)	19 (73.08)	9 (69.23)

*Participants were allowed to mark multiple options.
+Unanswered questions by the participants are not included, but their other responses are taken into account.
S&A: Surgery and allied disciplines, M&A: Medicine and allied disciplines.

noted (Table-3).

Discussion

The current study aimed at assessing existing knowledge and practical implementation of clinical ethics among PGTs.

The findings showed that the principal source of knowledge of the ethical code of medicine among the PGTs was related to their working environment, patient cases and ward rotations at the hospital. This is in contrast to studies which reported internet and multifaceted resources to be the primary source.[8,10] This indicates that the current undergraduate curriculum fails to impart core ethical concepts, understanding and working practical models in medical graduates despite the introduction of the Code of Ethics by the Pakistan Medical and Dental Council (PMDC) in 2002.[11] A course on medical ethics was also made a mandatory part of undergraduate training across the country. This leads to infer that intervention at hospital rotations and morning ward sessions by senior attending physicians can prove to be crucial in facilitating the education. Knowledge can be reinforced using problem-based learning which can help them learn the content and develop critical thinking strategies by encouraging discussion on real scenarios, which allow the residents to debrief and reflect upon difficult cases.[12]

Table-3: Practices and belief system of the respondents. (n=153).

		PRACTICES AND BELIEFS						
		Field of Study		Year of Training +				
		S&A (n=80) (%)	M&A (n=73) (%)	1st (n=60) (%)	2nd (n=32) (%)	3rd (n=19) (%)	4th (n=26) (%)	5th (n=13) (%)
How often do you encounter an ethical conflict/difficulty?	Daily	18 (22.50)	14 (19.18)	11(18.33)	7(21.88)	4 (21.05)	7 (26.92)	3 (23.08)
	Weekly	42 (52.5)	50 (68.49)	38 (63.33)	21 (65.63)	11 (57.89)	14 (53.85)	6 (46.15)
	Monthly	15 (18.75)	8 (10.96)	8 (13.33)	4(12.50)	4 (21.05)	4 (15.38)	2 (15.38)
	Less than a month	5 (6.25)	1 (1.37)	3 (5)	0	0	1 (3.85)	2 (15.38)
Who will you prefer to consult in case you are stuck in an ethical problem?*	Senior	55 (68.75)	53 (72.60)	43(71.67)	18(56.25)	12(63.16)	22 (84.62)	11(84.62)
	Colleague	15 (18.75)	8(10.96)	10(16.67)	6 (18.75)	3(15.79)	2 (7.69)	1(7.69)
	Ethics committee of your institute	12(15)	10 (13.70)	5(8.33)	7(21.88)	4(21.05)	2 (7.69)	3(23.08)
	Doctor friend/family	4(5)	4(5.48)	2(3.33)	3(9.38)	1(5.26)	2 (7.69)	0
Has a senior ever told you to do anything you knew was unethical? +	Yes	35 (43.75)	36 (49.32)	28(46.67)	17(53.13)	7(36.84)	12 (46.15)	6 (46.15)
	No	43 (53.75)	37 (50.68)	32(53.33)	15(46.88)	11(57.89)	14 (53.85)	6 (46.15)
How often do you feel obligated to tell your patients about their diagnosis? +	Never	2 (2.50)	5 (6.85)	5(8.33)	1(3.13)	0	0	0
	Sometimes	37 (46.25)	33 (45.21)	27 (45)	18 (56.25)	10 (52.63)	6 (23.08)	7(53.85)
	Always	40 (50)	35 (47.95)	28(46.67)	13(40.63)	9(47.37)	19 (73.08)	6(46.15)
How often do you discuss your daily cases with your colleagues? +	Daily	40 (50)	43 (58.90)	33 (55)	18(56.25)	12 (63.16)	15 (78.95)	4 (30.77)
	Weekly	23 (28.75)	9(12.33)	13(21.67)	4 (12.50)	5 (26.32)	2 (7.69)	7 (53.85)
	Less than weekly	1(1.25)	5 (6.85)	3 (5)	1(3.13)	0	2 (7.7)	0
	When needed	16(20)	15 (20.55)	11(18.33)	9 (28.13)	2 (10.53)	6 (23.08)	2 (15.38)
Do you think it is okay to write HEENT and BP as normal without performing either? +	Yes	18 (22.50)	18 (24.66)	17(28.33)	8 (25)	4 (21.05)	4 (15.38)	3 (23.08)
	No	61 (76.25)	55 (75.34)	42 (70)	24 (75)	15 (78.95)	22 (84.62)	10(76.92)
Does the doctor have a right to refuse a violent patient? +	Yes	46 (57.50)	38 (52.05)	32(53.33)	17(53.13)	10 (52.63)	14 (53.85)	10(76.92)
	No	34 (42.50)	32 (43.84)	27(45)	13(40.63)	9 (47.37)	12 (46.15)	3(23.08)
Have you ever experienced an ethical dilemma i.e. conflict between medical ethics guidelines and your thoughts? +	Yes	47(58.75)	50(62.50)	35(58.33)	22(36.67)	15(78.95)	17(65.38)	6 (46.15)
	No	32 (40)	23(31.51)	25(41.67)	10(31.25)	3 (15.79)	9 (34.62)	7 (53.85)
Have you heard any staff or a colleague refer to a patient in a derogatory manner? +	Yes	43(53.75)	37(50.68)	27 (45)	22(68.75)	8 (42.11)	18(69.23)	5 (38.46)
	No	36 (45)	36(49.32)	32(53.33)	10(31.25)	11(57.89)	8 (30.77)	8 (61.54)
How important do you think is the knowledge of ethics for doctors?	Less important	1 (1.25)	2 (2.74)	1 (1.67)	0	0	2 (7.69)	0
	Important	24 (30)	20(27.40)	15 (25)	8 (25)	9(47.37)	6(23.08)	6(46.15)
	Fairly important	8(10)	10(13.70)	9(15)	3(9.38)	1(5.26)	5(19.23)	0
	Very important	47(58.75)	41(56.16)	35 (58.33)	21 (65.63)	9(47.37)	13(50)	7(53.85)
When do you think a patient has the right to take his own life?	Always	7(8.75)	6(8.22)	7(11.67)	1(3.13)	2(10.53)	2(7.70)	0
	If terminally ill	16(20)	23(31.51)	10(16.67)	10(31.25)	3(15.79)	10(38.46)	5(38.46)
	Never	57(71.25)	44(60.27)	43(71.67)	21(65.63)	14(73.68)	14(53.85)	8(61.54)

*Participants were allowed to mark multiple options.
+Unanswered questions by the participants are not included, but their other responses are taken into account.
S&A: Surgery and allied disciplines, M&A: Medicine and allied disciplines.

The Hippocratic Oath has been the cornerstone of ethical values in medicine for centuries, but only about two-thirds of PGTs were aware of its contents. A study from Lahore, Pakistan, reported similar statistics.[13] The participants were deficient in knowledge about the principles of research ethics and the rules that govern human intervention, with less than one-tenth being aware of the guidelines. This is comparable to previous data[8,10] and signifies the dearth of proper training in ethical concerns in medical research.

The patients have the absolute right over their body and this is one of the foundational principles in medical ethics, but almost half of the PGTs disagreed on always abiding by it. Upon interviewing, some of their key viewpoints included:

"They don't always know what is good for them."

"We always think better of them."

"They are not that educated so they can't fully comprehend the details or understand their implications."

"They fully trust us to do our best for their maximum benefit."

This is in comparison to a study by Okoye and colleagues

comprising of Nigerian medical students.[14] Similar viewpoints and conflicting responses on autonomy were shared by doctors in Lahore.[15]

It was seen that most of the PGTs preferred consulting their senior regarding any ethical dilemma, but neither knowledge nor viewpoints seemed to change significantly as their years of training progressed. This is in contrast to earlier findings reported by Imran et al. where only 25% of participants discussed their problem with their clinical supervisor.[13] Moreover, they also reported that their seniors had asked them to act unethically on various occasions. These facts potentially point towards lack of consensus on clinical grounds when faced with ethical dilemmas. This needs to be further explored and systematic measures taken to rectify any ambiguity in clinical practice and decision-making.

Western ethical concepts dictate that adult patients are at complete liberty whether or not to disclose their medical status to their family or relatives. However, in our setting, religious views and family coherence across generations make medical decisions to be a joint affair rather than a patient-oriented right.[16] Doctors are therefore 'obliged' to direct confidential medical information about their patients to their relatives. This explains doctors' predilection and confusion to imply that it is the relatives' right to information. We think that this must be further explored and addressed and a unanimous conclusion must be made as to which ideology must be adopted to better suit our working environment.

Clinical ethics committee of an institution sorts out and provides an action plan to counter ever-complex ethical dilemmas. However, less than half of all the PGTs were aware of any clinical ethics committee operating in the hospital and fewer relied on it in case they faced any problem. This can lead to unethical practice and potentially result in unnoticed malpractice.

Violence on the part of patients and their attendants have been on the rise in Pakistan[17,18] and it is a doctor's right to refuse providing service in case of aggressiveness on the part of patients. Half of the current respondents were unaware of this. Majority of the respondents opposed the idea of active voluntary euthanasia. Similar results were reported in a Sudanese study in which 76.6% believed that euthanasia and physician-assisted suicide are not justified.[19]

The current study is a single-centre study and its findings may not be generalisable. The responses might have suffered from social desirability bias, as participants might have responded in a way to project a favourable image to others. However, the participants were assured of the confidentiality of their identity and responses. The study focussed on clinical ethics and the knowledge about research ethics remained largely undetermined. Finally, the students, nurses and healthcare staff of the hospital were not included. Further studies are needed to explore the subject without these limitations.

Conclusions

The situation regarding understanding and practical application of medical ethics among the PGTs was found to be far from ideal. Medical schools do not provide sufficient educational background to the trainees in healthcare ethics.

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Conflict of Interest: None.

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Participate: All participants were asked for written informed consent and their signatures were documented before they answered the questionnaire. The research ethical committee, Institutional Review Board (IRB) of Dow University of Health Sciences, Karachi approved the study design. (Approval letter reference number: IRB-1051/DUHS/Approval/2018/105)

• **Availability of data and materials:** All data generated or analyzed during this study are included in this published article.

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• **Contributor-ship statement:** Sahlish Kumar helped in the collection and interpretation of the data and made significant contribution to the writing and editing of the final manuscript. Iqra Ismail and Fatima A. Ganatra were involved in analysis of the data and compiling the results of the study. Komal Noorani was involved in the collection of data, computer work for results and in writing of the manuscript. Insiya Hashim contributed to the methodology of the study and interpretation of the data. Sara M. Ali was involved in collection of data and writing of the manuscript. Dr. Abu Talib worked in formulating the study and final editing of the work along with constant guidance regarding data collection and write-up.

• The abstract has never been published or presented in a conference elsewhere, nor is it a part of a thesis, etc.

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