**TITLE PAGE**

**Type of Article: Research Article**

**Perceptions and Practices regarding Clinical Ethics by Postgraduate Medical Students in a Tertiary care Hospital in Lucknow**

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**Competing Interests**: NIL

**Funding:** NIL

**Previous Submission**: NIL

**Abstract:**

**Background:** Postgraduate medical students face many issues regarding clinical ethics. Inadequate management of ethical issues in patient care can lead to multiple conflicts. This study was conducted to explore the perceptions and practices regarding standard clinical ethics and the challenges faced by postgraduate residents. **Methods:** Cross- sectional, facility-based study was conducted among 145 postgraduate medical students in King George’s Medical University using a pre-tested semi-structured questionnaire. **Results**: 64.1% residents face ethical problems daily during clinical practice. The most common challenge faced by them is lack of clear guidelines. Only 8.3% had received training in Clinical ethics. Majority of the participants felt a need for further training in dealing with issues of clinical ethics before completion of post-graduation. **Conclusion:** Postgraduate residents experience ethical Issues frequently at work, but lack the training to resolve these dilemmas. The incorporation of a bioethics curriculum in the post-graduation programmes would be beneficial.

**Perceptions and Practices regarding Clinical Ethics by Postgraduate Medical Students in a Tertiary care Hospital in Lucknow**

**Background:**

The practice of medicine is intricately intertwined with ethical quandaries. Dunstan et al defined clinical ethics as the obligations of moral nature which govern the practice of medicine.1 When clinical practice is in accordance with ethical guidelines, it leads to improvement in patient satisfaction and minimizes litigations. The escalating incidents of violence against doctors and ethics related cases also necessitate the need to probe into the issues of ethical dilemmas.

For the practice of clinical ethics, doctors should be sensitised to the possible issues and their skills sharpened. Postgraduate medical education in India is characterized by intense training in perfecting the clinical skills and proficiency. But rarely an emphasis is placed on clinical ethics. In most medical colleges, post graduate students are the first contact persons with patients and relatives and are involved in patient care till the end. So, it is obvious for them to find themselves in ethically difficult situations. If their doubts in such situations are not adequately tackled, we will be producing future doctors who might be competent to handle their specialty but incapable of catering the best care in terms of patient satisfaction. However, medical training in India provides little guidance for healthcare professionals to resolve the ethical dilemmas they encounter.2

Studies from other parts of India and the world show that there is a need for improving clinical ethics training to improve patient care.2-4 Since postgraduate residents will be practicing as qualified doctors in a few years’ time, this study was conducted to explore their perceptions and practices regarding standard clinical ethics and the challenges faced by them.

**Materials and Methods:**

This cross- sectional, facility-based study was conducted among postgraduate medical students in King George’s Medical University, Lucknow, Uttar Pradesh, between September and December 2019. Considering the negative perception about an important aspect of clinical ethics i.e., confidentiality among postgraduate medical students in a previous study as 9%, with the formula 4PQ/L2, taking precision to be 5% and level of confidence to be 95%, sample size was calculated to be 131.3 Taking a non-response rate of 10% into consideration, 145 participants were included.

Postgraduate medical students in clinical departments and departments of Pathology, Microbiology and Community Medicine were included in the study. A sampling frame of all postgraduates enrolled into the MD and MS courses in these departments was developed and systematic random sampling was done. As 145 participants had to be chosen from the 430 junior residents in the university, a sampling interval of three was taken. First participant was selected randomly and then every third resident was selected from the attendance rosters available from each department. Informed consent was obtained. In case a resident refused to participate in the study, the next resident in the attendance roster was approached.

The study was conducted using a pre-tested semi-structured questionnaire modified from the study by Hariharan et al.4 The questionnaire consisted of three parts. Demographic variables like age and sex of the participant, department, year of residency and clinical experience were included in the first part while perceptions and practices regarding clinical ethics were evaluated in the second part of the questionnaire. Participants were asked to grade their perceptions on a Likert scale ranging from 1 to 5(1-strongly disagree, 2-disagree, 3-not sure, 4-agree and 5-strongly agree). Practices were recorded as never, sometimes and always. The last part of the questionnaire recorded the challenges faced by the residents in practicing clinical ethics (open and closed ended questions), their familiarity with ICMR code of ethics, approaches in dealing with ethical issues and the necessity for further training.

Data analysis was done using SPSS version 23. Descriptive statistical analysis was applied. Chi-Square test was applied to find statistical significance of associations. During representation of data in tables, scores 1 and 2 were put together to represent a disagreement, score 3 for not sure and scores 4 and 5 together indicated an agreement with a statement.

Ethical approval was obtained from the institutional ethics committee, King George’s Medical University, U.P., Lucknow.

**Results:**

The study population consisted of 145 postgraduate residents of which 53.1% were females. The age of the study participants ranged from 24 to 40(28.2±3.1) years with clinical experience (including one year of compulsory resident internship programme after MBBS) ranging from 1 to 15 (3±2.4) years. 113 participants (77.9%) belonged to the clinical departments and 32(22.1%) were from Pathology, Microbiology and Community Medicine. 53.1% residents were from first year, while 24.1% and 22.8% were second and third-year residents respectively.

As shown in Table 1, 64.1% residents stated that they come across ethical problems daily during clinical practice. 49.7% of the participants approached their senior colleagues when facing matters of clinical ethics while 35.2% approached the head of their departments.

Table 2 shows the perceptions of the residents regarding important aspects of clinical ethics while their practices are depicted in table 3.

Figures 1 and 2 depict the challenges faced by the residents with regards to discussion with patients and about practice of clinical ethics.

Only 12 participants (8.3%) had received training in Clinical Ethics. 70.3% of the participants felt a need for further training in dealing with issues of clinical ethics before completion of post-graduation. 99.3% of the participants felt it is necessary to teach about clinical ethics during under-graduation.

Only 16 participants (11%) had read the Indian Medical Council Professional Conduct, Etiquette and Ethics Regulations, 2002 and knew it well while 55.9% had read it but could not recall it. 33.1% had never read it. 53.8% felt that the current scenario of violence against doctors can be minimised if doctors put more stress on clinical ethics**.**

**Table 1: Frequency of ethical problems and source for solutions**

|  |  |  |
| --- | --- | --- |
|  | Frequency of encountering an ethical problem in clinical practice | Number of respondents N (%) |
|  | Daily | 93 (64.1) |
|  | weekly | 23 (15.9) |
|  | monthly | 22 (15.2) |
|  | yearly | 5 (3.4) |
|  | never | 2 (1.4) |
|  | The first approach for solution of ethical issues |  |
|  | Head of department | 1. (35.2) |
|  | Other Senior faculty members | 2(1.3) |
|  | Seniors | 72 (49.7) |
|  | Ethics committee | 20(13.8) |

**Table 2: Perceptions of participants on issues relating to ethics.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.no** | **Perception** | **Disagree**  **N (%)** | **Not sure**  **N (%)** | **Agree**  **N (%)** |
|  | Informed consent merely means signing the consent form. | 132(91.0) | 1(0.7) | 12(8.3) |
|  | Patients should be explained in detail before being asked to sign the consent form. | 2(1.4) | 1(0.7) | 142(97.9) |
|  | Written informed consent should be taken for |  |  |  |
|  | 1. Major Operations | 0 | 0 | 145(100) |
|  | 1. Minor procedures | 15(10.3) | 4(2.8) | 126(86.9) |
|  | 1. Routine investigations | 74(51.0) | 22(15.2) | 49(33.8) |
|  | 1. Treatment with possible severe adverse reactions | 36(24.8) | 15(10.4) | 94(64.8) |
|  | 1. General physical examinations | 59(40.7) | 11(7.6) | 75(51.7) |
|  | Detailed explanation should be done and verbal consent taken for |  |  |  |
|  | 1. Major operations | 15(10.3) | 1(0.7) | 129(89.0) |
|  | 1. Minor procedures | 41(28.3) | 3(2.0) | 101(69.7) |
|  | 1. Routine investigations | 19(13.1) | 14(9.7) | 112(77.2) |
|  | 1. Treatment with possible severe adverse reactions | 39(26.9) | 3(2.1) | 103(71.0) |
|  | 1. General physical examinations | 39(26.9) | 6(4.1) | 100(69.0) |
|  | Children can be treated without the written informed consent of parents/local guardian in |  |  |  |
|  | Emergency | 13(9.0) | 4(2.7) | 128(88.3) |
|  | Non- Emergency | 96(66.2) | 37(25.5) | 12(8.3) |
|  | It is better to understand patients’/relatives’ level of knowledge before explaining the condition. | 17(11.7) | 8(5.5) | 120(82.8) |
|  | Doctors should do their best for the patient irrespective of the patient’s opinion. | 34(23.4) | 6(4.2) | 105(72.4) |
|  | Patient’s opinions and choices should be taken into consideration while making a decision. | 8(5.5) | 4(2.8) | 133(91.7) |
|  | Patient’s wishes must be adhered to in |  |  |  |
|  | Emergency | 96(66.2) | 13(9.0) | 36(24.8) |
|  | Non- Emergency | 50(34.5) | 11(7.6) | 84(57.9) |
|  | Doctor’s decision should be final in case of disagreement on treatment. | 58(40.3) | 55(37.6) | 32(22.1) |
|  | Doctors can refuse to treat a violent patient in |  |  |  |
|  | Emergency | 54(36.9) | 52(36.2) | 39(26.9) |
|  | Non- Emergency | 34(23.4) | 10(6.9) | 101(69.7) |
|  | Close relatives should always be detailed on patient’s condition |  |  |  |
|  | When the condition is serious | 10(6.9) | 2(1.4) | 133(91.7) |
|  | When the condition is not serious | 23(15.9) | 12(8.2) | 110(75.9) |
|  | Continuous dialogue and communication of details with the relatives of patient is important during entire process of treatment and not just in case of adverse events. | 14(9.7) | 10(6.9) | 121(83.4) |
|  | If a patient refuses certain treatment due to his/her beliefs, he/she should be |  |  |  |
|  | Instructed to find another doctor | 95(65.5) | 13(9.0) | 37(25.5) |
|  | Forced to continue with the treatment | 113(77.9) | 17(11.7) | 15(10.3) |
|  | Doctor should heed the wishes of the patient | 31(21.4) | 57(39.3) | 57(39.3) |
|  | Patients should be informed about wrongdoing or therapeutic misadventures | 19(13.1) | 13(9.0) | 113(77.9) |
|  | A doctor should expose incompetent, corrupt or unethical conduct of colleagues. | 22(15.2) | 22(15.2) | 101(69.7) |
|  | Confidential details about patient can be disclosed: |  |  |  |
|  | To close relatives if they ask. | 78(53.8) | 7(4.8) | 60(41.4) |
|  | To protect a healthy person/community against a communicable disease | 5(3.4) | 7(4.8) | 133(91.7) |
|  | If revelation is required by the laws of the state. | 3(2.1) | 7(4.8) | 135(93.1) |

**Table 3: Practices of participants regarding clinical ethics**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.No** | **Practice** | **Never** | **Sometimes** | **Always** |
| 1. | Detailed explanation to the patient/relatives before getting signature on the consent form | 0 | 18(12.4) | 127(87.6) |
| 2. | Written Informed consent is taken for |  |  |  |
|  | 1. Major Operations | 1(0.7) | 2(1.4) | 142(97.9) |
|  | 1. Minor procedures | 9(6.2) | 65(44.8) | 71(49.0) |
|  | 1. Routine investigations | 97(66.9) | 29(20) | 19(13.1) |
|  | 1. Treatment with possible severe adverse reactions | 18(12.4) | 36(24.8) | 91(62.8) |
|  | 1. General physical examinations | 73(50.3) | 57(39.3) | 15(10.3) |
| **3.** | Verbal consent is taken after detailed explanation for |  |  |  |
|  | 1. Major Operations | 7(4.8) | 5(3.4) | 133(91.7) |
|  | 1. Minor procedures | 6(4.1) | 32(22.1) | 107(73.8) |
|  | 1. Routine investigations | 25(17.2) | 72(49.7) | 48(33.1) |
|  | 1. Treatment with possible severe adverse reactions | 5(3.4) | 24(16.6) | 116(80) |
|  | 1. General physical examinations | 9(6.2) | 40(27.6) | 96(66.2) |
| **4.** | Effort is made to understand patients’/relatives’ level of knowledge before explaining the condition. | 10(6.9) | 48(33.1) | 87(60.0) |
| **5.** | Patient’s opinions and choices should be taken into consideration while making a decision. | 3(2.1) | 46(31.7) | 96(66.2) |
| **6.** | Close relatives are being detailed on patient’s condition |  |  |  |
|  | When the condition is serious | 2(1.4) | 17(11.7) | 126(86.9) |
|  | When the condition is not serious | 14(9.7) | 51(35.2) | 80(55.2) |
| **7.** | Patients are informed about wrongdoing or therapeutic misadventures | 21(14.5) | 70(48.3) | 54(37.2) |

**Discussion:**

Clinical ethics refers to the activity in the clinical setting regarding ethical practices, which will lead to holistic care.

64.1% post graduate residents stated that they come across ethical problems during clinical practice daily. This can be because these doctors are the first contacts with patients especially during emergency care and are involved throughout a patient’s hospital stay. This can also imply that the residents are sensitive to ethical practices but need to be better equipped to handle these difficult situations. This highlights the need for further training. In a similar study conducted in a tertiary care teaching hospital in Barbados in 2003, junior physicians responded that they encountered an ethical problem more often than the consultant physicians, with 40% of junior physicians facing ethical issues monthly and 38% daily.4

49.7% of the participants approached their senior colleagues when facing matters of clinical ethics while 35.2% approached the head of their departments,1.4% other senior faculty members.13.8% claimed that they approached the ethics committee for resolution of ethical conflicts. There was no statistical difference between perceptions and practices of residents based on year of residency (p value=0.8). Thus, the competency of the senior colleagues in handling these problems is questionable. Resident doctors should therefore be provided clear guidelines as to who can be approached in such situations.

The four principles at the core of moral reasoning in health care are- respect for autonomy, nonmaleficence, beneficence, and justice.5 The ethical and medicolegal reasoning regarding consent for treatment is based on the principle of autonomy.6 Autonomy can be ensured only when the individual comprehends the procedure and the consequences and thus, it is informed consent or informed refusal.7 It is encouraging to note that majority (91.0%) felt informed consent is not merely signing the consent form and 97.9% agreed that patients should be explained in detail before being asked to sign the consent form. 87.6% said they always practised this. While majority of the participants felt it is important to take written informed consent for procedures (major and minor) and for treatment with adverse reactions, relatively lesser number of participants felt it was needed for routine investigations and for general physical examination. This is similar to study by Unnikrishnan et al.9 Though majority of the participants seemed to agree about importance of verbal consent, it was noted that 26.9% felt there was no need for taking verbal consent for general physical examinations and 27.6% do this sometimes while 6.2% never take verbal consent for physical examinations and 17.2% never take it for routine investigations. While a written informed consent serves as a legal document, not taking verbal consent is a violation of basic human rights.

Majority (66.2%) of the participants felt it is not important to adhere to the patient’s wishes in emergency. The participants had mixed opinion on if patient’s wishes must be adhered to in non-emergency. The study done by Asghari F et al. shows that given a choice, patients would like to actively participate in decision making.8Majority in our study group did not know that the patient’s wishes should be adhered to. In the study from Barbados, a lower proportion of doctors agreed for the view that patients’ wishes must be adhered to in emergency and non-emergency cases.4

It was interesting to note that in the scenario that a patient refuses certain treatment due to his/her beliefs, 39.3% of residents agreed that doctor should heed the wishes of the patient while 39.3%were not sure and 21.4% disagreed to it. It was also noted that there was a mixed opinion among the participants about whether a doctor’s decision is final in case of disagreement with the patient on treatment. While 40.3% of the participants disagreed with this, 37.6% were not sure and 22.1% agreed to the statement. This points to a physician centred paternalistic attitude among doctors which has been seen in a study from Kathmandu also.7 Beauchamp and Childress define paternalism as “the intentional overriding of one person’s known preferences or actions by another, where the person who overrides justifies the action by the goal of benefiting or avoiding harm to the person whose preferences or actions are overridden”.5 Paternalism contradicts autonomy. This is an area that requires further clarity.

A similar conflict of opinion was seen about the perception that doctors can refuse to treat a violent patient in emergency and non-emergency conditions. While 36.9% disagreed to refusal of treatment in emergency, 36.2% were not sure and 26.9% agreed to the statement. In non-emergency cases, majority (69.7%) agreed that treatment can be refused. This is similar to the findings of Unnikrishnan et al.9 According to the Code of Ethics Regulations, 2002 of the Medical Council of India, the patient must not be neglected.10 Although a physician is free to choose whom he will serve, he should, however, respond to any request for his assistance in an emergency. The Supreme Court has stated that Art. 21 imposes an obligation on the State to safeguard the right to life of every person and in numerous cases has ruled that a medical practitioner has a duty to treat a patient in an emergency.11

Confidentiality is an important facet of clinical ethics. Majority of the participants had right perceptions that confidential details about patient can be disclosed to protect a healthy person/community against a communicable disease and if revelation is required by the laws of the state. This is in accordance with the Medical Council of India Code of Ethics Regulations, 2002.10 But 41.4% of the participants felt confidential information can be disclosed to close relatives if they ask. This is an unethical practice.

Good communication is another important aspect of clinical ethics. Though 82.8% agreed that it is better to understand patients’/relatives’ level of knowledge before explaining the condition, only 60% practice this always.

Majority of the participants claimed poor literacy of the patients/relatives (71%), and the lack of time to explain (60%) are the most common challenges faced by them while discussion of details. Majority of the participants identified the lack of guidelines (75.2%) and lack of training (41.4%) as the most common challenges faced regarding ethical clinical practice. But it should be noted that only 16 participants (11%) had read the Indian Medical Council Professional Conduct, Etiquette and Ethics Regulations, 2002 and knew it well while 55.9% had read it but could not recall it. 33.1% had never read it. This reveals that it is vital to sensitise the participants to the existing guidelines. Only 12 participants (8.3%) had received training in Clinical Ethics. Majority (70.3%) of the participants felt a need for further training in dealing with issues of clinical ethics before completion of post-graduation.

Most of the bioethics expertise in India is concentrated in research ethics, which is different from clinical ethics.3 Several studies have called for the inclusion of clinical ethics in the medical school and residency.3,9 Since 2004, ICMR has been conducting sensitisation workshops for students as well as faculty throughout the country.12 Though earlier ethics was taught as part of Forensic Medicine, Medical Council of India has initiated the Attitudes, Ethics and Communication (AETCOM) competencies for Indian Medical Graduate in 2018.13 Jonsen et al has suggested an approach for case-based teaching of clinical and ethical decision making. Medical factors like the nature of diagnosis, treatment and prognosis, preferences of the patient, family and the treating team, quality of life before, during and after the proposed treatment or procedure and the context which involves the support system, cost, availability and special circumstances have to be considered.14 This method has been considered in training of bioethics for clinicians in Canada. This can be adopted in our setting too.

Since 2019, lessons on research methodology, delivered by ICMR via an online platform has been made mandatory for MD/MS course. A similar option can be considered for clinical ethics lessons from experts in the field. Other options are pedagogy, group discussions and CMEs.

Our study had the limitations that practices of the residents were self-reported and their responses may have been tailored according to what they believed were appropriate. Though the sample is representative of the study population, the number is too small to generalise the findings to all postgraduate residents. The observations of the study however, provide useful comparisons for the future researchers from India as well as abroad on this very relevant topic.

**Conclusion**

The findings of this study reveal that there are gaps in the perceptions and practices of postgraduates regarding clinical ethics. Postgraduate residents experience ethical Issues frequently at work, but lack the training to resolve these dilemmas. The incorporation of a bioethics curriculum in the post-graduation programmes would be beneficial.

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