

## Ethical consideration in programme evaluation for health professional education programmes

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### Abstract

**Objective:** To explore the ethical considerations and measures of quality assurance during data-collection for programme evaluation in health professional education.

**Method:** The qualitative case study was conducted at Bahria University of Health Sciences, Karachi, from August to November 2023, and comprised faculty members involved in programme evaluation for at least two years having done a minimum two audit cycles. System thinking philosophical framework was used during the data-collection phase. A diverse sample was selected to ensure representation from different sectors and roles within the teams. Data was collected through participant observation, semi-structured interviews and focus group discussions. Data was subjected to thematic analysis.

**Results:** There were 7 faculty members who were interviewed individually twice in addition to 4 focus group discussion. Members of quality assurance team were experts in their respective fields, but were not found to be well-versed in terms of ethical considerations that should guide data-collection. This lack of knowledge may inadvertently lead to ethical lapses in the evaluation process. Another ethical challenge seen was bias in the data-collection phase.

**Conclusion:** Faculty members integral to programme evaluation efforts were found to lack knowledge regarding ethical considerations in data-collection, which can pose significant risks.

**Keywords:** Programme evaluation, Ethics, Health professional education. (JPMA 74: 1454; 2024)

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### Introduction

Medical education is the foundation upon which a healthcare system is built. Ensuring its quality and effectiveness is paramount to producing competent and ethical healthcare professionals. However, the evaluation of medical education programmes is a complex and multifaceted process that raises significant ethical concerns. The Pakistan Medical and Dental Council (PMDC) and the World Federation of Medical Education (WFME) mandate that all medical and dental colleges in Pakistan should have a quality assurance department for programme evaluation and improvement. Institutional review boards (IRB) present in medical colleges usually take care of ethical considerations related to research proposals and data-collection part of research. However, data collected during programme evaluation has no standard operating procedures (SOPs). There should be a separate educational ethics review board to review programme evaluation of data-collection procedure, teaching courses content, and assessment processes. There are many factors that need to be reviewed. Ethical evaluation of medical

education necessitates transparency and accountability.<sup>1</sup>

Ensuring ethical data-collection is crucial for maintaining the integrity of evaluations and upholding ethical standards in research and programme assessment. Stakeholders, including students, faculty, institutions, and the public, have a right to know how medical education programmes are evaluated and how their data is used.<sup>2</sup> Transparency in evaluation methods and outcomes builds trust and ensures accountability. Ethical considerations in programme evaluation in health professional education are crucial to protect the rights and wellbeing of all the relevant stakeholders.<sup>3</sup>

The current study was planned to explore the ethical considerations and measures of quality assurance during data-collection for programme evaluation in health professional education.

### Subjects and Methods

The qualitative case study was conducted at Bahria University of Health Sciences, Karachi, from August to November 2023. System thinking philosophical framework was used for guiding interviews and focus group discussions (FGDs). The sample was raised using purposive sampling technique. Those included were faculty members involved in programme evaluation for at least two years having done a minimum two audit cycles. Those who did not meet the inclusion criteria were excluded. A diverse

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sample was selected to ensure representation from different sectors and roles within the teams.

Data was collected through participant observation, semi-structured interviews and FGDs. The duration of individual interviews was 30-60 minutes, while FGDs lasted 2 hours.

There were 9 elements that were explored with relevant questions. The first element was Informed Consent, which was explored using questions, like: How do you ensure participants fully understand the purpose of the evaluation and what their involvement entails? Can you describe the process of obtaining informed consent, including how you explain potential risks and benefits?

The second element was Confidentiality, and it was explored with questions, like: How do you guarantee the confidentiality of participants and their responses? What measures are in place to protect participant anonymity, especially when reporting findings?

The third element was Voluntary Participation, and it was explored with questions, like: How do you ensure that participation is voluntary and not coerced? What steps are taken to communicate to participants that they can withdraw from the study at any point without consequences?

The fourth element was Data Security, and it was explored with questions, like: How is the collected data stored and secured to prevent unauthorised access? Are there protocols in place for data retention and eventual disposal?

The fifth element was Debriefing, and it was explored with questions, like: What is your approach to debriefing participants after the interview process is complete? How do you address any emotional or psychological impact on participants during or after the interview?

The sixth element was Sensitive Population, and it was explored with questions, like: How do you ensure cultural sensitivity and respect for diverse perspectives during the interview process? Are there any specific considerations in place for working with vulnerable or marginalised populations? How will participants be informed about the overall findings of the evaluation?

The seventh element was Feedback and Reporting, and it was explored with questions, like: Is there an opportunity for participants to provide feedback on the evaluation process and its outcome?

The eighth element was Programme Evaluator Reflexivity, and it was explored with questions, like: How do you acknowledge and manage your own biases or preconceptions during the interview process? Are there

mechanisms in place for the programme evaluation evaluator to reflect on their role in the study and its potential impact on participants?

The ninth element was Ethical Oversight, and it was explored with questions, like: How will ethical considerations be monitored and evaluated throughout the course of programme evaluation? Is there a process for addressing any unforeseen ethical issues that may arise during the research?

The choice of qualitative methods allowed an in-depth exploration of attitudes and practices. Interviews were conducted individually for different perception exploration, while FGDs promoted group dynamics and the sharing of diverse perspectives. Thematic analysis was employed to analyse the qualitative data collected from interviews and FGDs. Themes related to attitudes, practices, challenges and strategies for ethical data-collection were identified and analysed. Informed consent was obtained from all the participants, and they were assured of anonymity and confidentiality. Ethical guidelines and principles for conducting research involving human participants were strictly followed. Any potential conflicts of interest among the research team were disclosed and managed appropriately. Semi-structured interview guides and FGD prompts were formulated. Interviews and FGDs were scheduled at a convenient time and location for the participants. Audio recordings were made with participants' consent, and detailed notes were taken. Transcribed data was coded and analysed using thematic analysis techniques both manually and with the help of Atlas.ti 9 software. The findings were compiled, and the participants were asked to confirm that perceived results matched their perceptions. They were also asked to review the results in case they want to remove any content for confidentiality. Recommendations for improving ethical data-collection practices within organisations were also generated. Causal loop diagrams were mapped out and the interconnections among components were explored. Within the system, efforts were made to identify leverage points, like areas of ethical considerations where small changes can have a significant impact on the overall system. Data was collected on various aspects of the programme, including faculty satisfaction, resource allocation and external factors. Data was analysed to assess how changes in one component might ripple through the system, affecting other components. Efforts were made to identify and analyse feedback loops within the system, like how faculty development programmes on ethics might influence the ethical consideration in programme evaluation, which, in turn, have an effect on faculty performance. The findings of individual interviews and FGDs were integrated.

## Results

There were 7 faculty members who were interviewed individually twice in addition to 4 FGDs. Members of quality assurance team were experts in their respective fields, but they were not found to be well-versed in the ethical considerations that should guide data-collection. This lack of knowledge can inadvertently lead to ethical lapses in the evaluation process. One common ethical concern in data collection was informed consent. Faculty members involved in quality assurance team had insufficient knowledge and understanding on the importance of obtaining informed consent from participants, especially when dealing with sensitive or vulnerable populations. This oversight was observed to result in data being collected without the proper ethical safeguards in place, potentially harming participants and compromising the integrity of the evaluation. Moreover, the issue of data privacy and confidentiality was found to be challenging for faculty not trained in research ethics. Inadvertent breaches of confidentiality may occur when data is not properly anonymised or when participants' identities are not adequately protected. Such breaches can erode trust between the institution and its stakeholders. Another ethical challenge seen was bias in data collection. Faculty members were observed to unconsciously introduce bias into their data-collection methods, affecting the validity and reliability of the evaluation. The reason of the bias was due to the observation that faculty failed to use standardised instruments, asked leading questions, or selectively reported findings that aligned with their preconceived notions.

## Discussion

The current qualitative study aimed at contributing to a better understanding of how quality assurance teams approached ethical considerations in the data-collection phase of programme evaluation. To address the ethical challenges, institutions should prioritise continuous professional development for faculty members involved in programme evaluation. Workshops, training sessions and resources on research ethics and best practices in data-collection can empower faculty to navigate these ethical considerations confidently. Collaboration with research ethics committees and experienced evaluators can also provide guidance and oversight.<sup>4</sup> The role of ethics has been explored in other sectors, such as public relation and social work practice.<sup>5</sup> But there is a deficiency of research in ethics during programme evaluation in medical education although research has been done on the subject in social sciences.<sup>6-8</sup> There are many studies on programme evaluation in health professional education on how the process can be improved by measuring outcomes or by

continuous monitoring, but ethics has not been highlighted in these studies.<sup>9-12</sup> The evaluation process should consider a conflict between conveying detailed, accurate accounts of the specific programme process and protecting the identities of the students and faculty who participated in that programme. Vulnerable populations, such as students or junior faculty members, in the workplace might face negative consequences if their identities are revealed. There are many studies on teaching ethics to undergraduate medical students in literature<sup>13-15</sup> and on research ethics.<sup>16,17</sup> But ethical consideration during programme evaluation in health professional education is generally an area not fully explored. Many studies have highlighted the importance of ethics in medical education.<sup>18,19</sup> A recent study focussed on the importance of ethics in artificial intelligence (AI) tools used in medical education.<sup>20</sup> Another study employed self-evaluation of ethical practice in health professional students.<sup>21</sup> Continuous monitoring of the ethical aspects of the evaluation throughout the data-collection process is important, and so is the willingness to promptly address any ethical concerns that may arise, and to have a plan for the responsible disposal of data once the evaluation is complete. By considering these ethical principles throughout programme evaluation, institutions and individuals can help ensure that the evaluation is conducted with integrity, fairness, and with the wellbeing of all participants in mind.

## Conclusion

Faculty members are integral to programme evaluation efforts, and their lack of knowledge regarding ethical considerations in data collection can pose significant risks. Institutions should invest in equipping faculty with the necessary ethical tools to ensure that programme evaluations are conducted with the utmost integrity, protecting the rights and wellbeing of participants, and maintaining the credibility of the evaluation process.

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## References

1. Masters K. Ethical use of Artificial Intelligence in Health Professions Education: AMEE Guide No. 158. *Med Teach* 2023;45:574-84. doi: 10.1080/0142159X.2023.2186203.
2. Newman DL, Brown RD. *Applied ethics for program evaluation*. New York, NY: Sage Publications, Inc. 1996.
3. Stake R, Mabry L. Ethics in program evaluation. *Scand J Soc Welf* 1998;7:99-109. Doi: 10.1111/j.1468-2397.1998.tb00209.x
4. Stout B, Dadich A, Evans S, Plath D, Lawson K. Researching social work practice ethically and developing ethical researchers. *Ethics*

- Soc Welf 2020;14:172-86. Doi: 10.1080/17496535.2019.1698630
5. Place KR. Exploring the role of ethics in public relations program evaluation. *J Public Relat Res* 2015;27:118-35. Doi: 10.1080/1062726X.2014.976825
  6. Monah SR, Wagner MW, Biswas A, Khalvati F, Erdman LE, Amirabadi A, et al. Data governance functions to support responsible data stewardship in pediatric radiology research studies using artificial intelligence. *Pediatr Radiol* 2022;52:2111-9. doi: 10.1007/s00247-022-05427-2
  7. Schweigert FJ. The priority of justice: a framework approach to ethics in program evaluation. *Eval Program Plann* 2007;30:394-9. doi: 10.1016/j.evalprogplan.2007.06.007
  8. Allen LM, Hay M, Palermo C. Evaluation in health professions education-Is measuring outcomes enough? *Med Educ* 2022;56:127-36. doi: 10.1111/medu.14654
  9. McKenzie JF, Neiger BL, Thackeray R. Planning, implementing and evaluating health promotion programs, 8th ed. Burlington, MA: Jones & Bartlett Learning; 2023.
  10. Pozgar GD. Legal and ethical issues for health professionals, 6th ed. Burlington, MA: Jones & Bartlett Learning; 2023.
  11. Mbunge E, Jiyane S, Muchemwa B. Towards emotive sensory Web in virtual health care: Trends, technologies, challenges and ethical issues. *Sens Int* 2022;3:100134. Doi: 10.1016/j.sintl.2021.100134.
  12. Dowie A. Ethical sense, medical ethics education, and maieutics. *Med Teach* 2023;45:838-44. doi: 10.1080/0142159X.2023.2178885
  13. Reid AM, Brown JM, Smith JM, Cope AC, Jamieson S. Ethical dilemmas and reflexivity in qualitative research. *Perspect Med Educ* 2018;7:69-75. doi: 10.1007/s40037-018-0412-2
  14. Ten Cate O. The Ethics of Health Professions Education Research: Protecting the Integrity of Science, Research Subjects, and Authorship. *Acad Med* 2022;97:13-7. doi: 10.1097/ACM.0000000000004413
  15. Klitzman RL. Understanding Ethical Challenges in Medical Education Research. *Acad Med* 2022;97:18-21. doi: 10.1097/ACM.0000000000004253
  16. Thomas HC, Meador K, Payne K, Drolet BC. Interdisciplinary Ethics Certificate Program for Graduate Medical Education Trainees. *J Grad Med Educ* 2021;13:863-7. doi: 10.4300/JGME-D-21-00474.1
  17. Lazarus CJ, Chauvin SW, Rodenhauser P, Whitlock R. The program for professional values and ethics in medical education. *Teach Learn Med* 2000;12:208-11. doi: 10.1207/S15328015TLM1204\_8
  18. Balak N, Broekman MLD, Mathiesen T. Ethics in contemporary health care management and medical education. *J Eval Clin Pract* 2020;26:699-706. doi: 10.1111/jep.13352
  19. Weidener L, Fischer M. Teaching AI Ethics in Medical Education: A Scoping Review of Current Literature and Practices. *Perspect Med Educ* 2023;12:399-410. doi: 10.5334/pme.954
  20. Hur Y, Yeo S, Lee K. Medical students' self-evaluation of character, and method of character education. *BMC Med Educ* 2022;22:271. doi: 10.1186/s12909-022-03342-6

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KF: Concept, data collection, analysis and writing.