

## Seven ways to get a grip on using participant observation in medical education research

Kaylee Eady, Katherine A Moreau

<sup>1</sup>Faculty of Education, University of Ottawa, Ontario, Canada

Correspondence to: Kaylee Eady, Faculty of Education, University of Ottawa, 145 Jean-Jacques-Lussier Private, Lamoureux Hall, Room 358, Ottawa, Ontario, Canada, K1N 6N5; email: [keady@uottawa.ca](mailto:keady@uottawa.ca)

Published ahead of issue: Sept 29, 2025. CMEJ 2025 Available at <https://doi.org/10.36834/cmej.81494>

© 2025 Eady, Moreau; licensee Synergies Partners. This is an Open Journal Systems article distributed under the terms of the Creative Commons Attribution License. (<https://creativecommons.org/licenses/by-nc-nd/4.0>) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is cited.

### Abstract

Medical education phenomena are complex, and researchers need to use diverse methods to explore topics. Participant observation is a qualitative research method that connects researchers to human interactions, allowing them to experience firsthand behaviours, conversations, characteristics, and qualities related to the phenomenon under study. It can provide unique insights, beyond those of participant narratives, and enhance understanding. However, this method is rarely used in medical education research; it is challenging and resource-intensive to implement, which likely discourages researchers from using it. To help researchers get a grip on using it in medical education research, we offer seven recommendations for planning participant observation: Determine the study setting(s), Identify key interest-holders and establish relationships, Determine the researcher-participant relationship to be established, Take steps to minimize reactivity to research, Use knowledge to guide data collection procedures, Use knowledge to inform instrument development, and Anticipate possible dilemmas and be mindful of unanticipated ones. We urge researchers to consider participant observation when appropriate to advance methods in medical education research.

### Résumé

*Résumé français à venir.*

### Introduction

Medical education researchers need to use diverse methods to advance medical education topics. Focus groups and interviews are highly used qualitative methods within medical education research (MER). However, relying on second-hand accounts of phenomena limits the perspectives from which the field develops understanding.

Participant observation, another qualitative method, can provide insights into complex phenomena unique to medical education and to academic and healthcare contexts.<sup>1</sup> Yet, researchers rarely use it in MER, likely because it is challenging and resource-intensive, requiring time and skills.<sup>2</sup> Nevertheless, this should not discourage researchers from using it when appropriate.

Medical education is competency-focused; learning experiences are practical, experiential, and interactional. Learners interact with others (e.g., patients, peers, faculty), objects they use (e.g., instruments, teaching models), the physical setting (e.g., patient room, lab), and with the surrounding environment (e.g., difficult conversations, power dynamics). Harmoniously, participant observation connects researchers to such human interactions. They directly experience behaviours, conversations, characteristics, and qualities related to phenomena as they happen.<sup>3</sup> In this way, participant observation is appropriate to help researchers understand an array of phenomena more wholly and intimately within community, social, and organizational contexts.<sup>4</sup> It is grounded in interpretive, critical, and transformative perspectives,<sup>5</sup> and associated with exploratory and explanatory research.<sup>2,6</sup> Thus, participant observation is well aligned to enhance understanding in the field. Further, medical educators and learners develop relevant skills through their teaching, assessment, and learning experiences, such as observational, reflective, and relational skills, that they can bring to their research practices. Thoughtful planning and effective use of skills can facilitate the feasibility of participant observation in MER.

## How to get a grip on participant observation in medical education research

Drawing on literature and our experiences as medical education researchers, trained in health and social sciences and experienced with the method, we offer recommendations (see Table 1 for summary) for planning participant observation to help get a grip on using it in MER.

### 1. Determine the study setting(s)

Researchers should make informed decisions about the setting(s) in which participant observation will occur to ensure the collection of relevant data. Alongside the research questions, they can consider: *During what types of activities and interactions might this phenomenon occur? In what setting(s) do these activities and interactions take place?* This questioning can help researchers identify a relevant and feasible setting well-suited to answering the research question(s). Further, being actively selective, particularly if the phenomenon occurs across various settings (e.g., inpatient, outpatient, community settings), ensures effective use of resources.<sup>2</sup>

### 2. Identify key interest-holders and establish relationships

Researchers should identify key interest-holders (e.g., administrators, leadership, faculty/staff) with whom to establish and maintain collaborative relationships. For example, in our experiences in academic hospital-based settings, we first established relationships with the Program Directors who introduced us to key clinician-educators. They then introduced us to additional staff, facilitating our abilities to grow our relationships. Such relationships are critical, particularly when exploring phenomena in restricted spaces.<sup>3</sup> They can enable a research plan that respects the setting and participants' needs by facilitating access to the setting, informing ethical considerations, and providing information on, for example, policies, processes, and schedules.

### 3. Determine the researcher-participant relationship to be established

Researchers must decide the extent to which they will partake in activities and interact with participants. There are four types of researcher-participant relationships, ranging from being fully immersed to being an outsider: complete participant, participant as observer, observer as participant, and complete observer.<sup>7</sup> Many factors inform this decision. For example, in our above-mentioned experiences, we adopted *observer as participant*. We were visible, and all individuals were aware of our presence and the study topic, but we did not participate in educational activities. In these decisions, we considered, for instance, the phenomena, the restricted settings, patient and learner needs, and our skills.

### 4. Take steps to minimize reactivity to research

Participants may adapt their behaviour (perform as expected) in the researcher's presence (a new person) and in reaction to being studied (a change in their environment), which can influence the phenomenon and data collection. Integrating the recommendations in this article, researchers should establish themselves in the setting, establish rapport, and be reflective and reflexive to support meaningful and representative data collection.<sup>8</sup>

### 5. Use knowledge to guide data collection procedures

Researchers should use insights gained to guide data collection, and initial observations should inform future sessions. This information can identify initial activities and interactions to observe (e.g., handover, procedures) and spaces to enter (e.g., ward desk, patient rooms, procedure rooms).<sup>2</sup> It can inform scheduling to prioritize data collection when the phenomenon primarily occurs. It can

inform the overall observation period, considering the time needed to establish oneself in the setting, and, for example, the average length of a rotation, service, or patient stay. The length of an observation session should allow observation of the full scope of an activity and preceding or subsequent interactions, while limiting fatigue and maintaining quality data collection. Participant observation is demanding, observing and recording minute details (e.g., voice tones, facial expressions, body language, object placement, physical spaces) while mindful of presence, relationships, and arising dilemmas.<sup>3</sup> We recommend reflective notetaking in a quiet space following each session.

## 6. Use knowledge to inform instrument development

What researchers observe and record depends on the phenomenon and research question(s). However, they should consider the participants involved, activities and interactions, conversations, and the physical setting.<sup>5</sup> They can conduct semi-structured data recording using an observational field guide.<sup>9</sup> Insights gained can inform details of the guide to facilitate the recording of contextual information and focused attention on observing and recording quality data. For example, researchers can include (1) a contextual information section to record the date, weekday, time, participants involved, physical space, and the primary activity occurring; (2) a descriptive section to record conversations, interactions, and experiences, (3) a reflective notes section to record reflections and evolving interpretations, and (4) a section to sketch the physical space.

## 7. Anticipate possible dilemmas and be mindful of unanticipated ones

Preparation for participant observation requires consultation of the literature and collaborative discussions with interest-holders and local institutional review boards to inform ethical considerations. For example, a topic of careful consultation is participant consent. In our experiences mentioned above, the reviewing research ethics boards deemed that it was not required. Using *observer as participant*, we informed all individuals of the observations, were accompanied in restricted spaces, and sought verbal permission to be present. We did not record personal, identifying, or confidential information, and did not participate in activities. With this, phenomena can raise unique ethical considerations (e.g., difficult conversations, critical situations), as can the setting (e.g., classroom, hospital ward, community clinic). Researchers must consider the dilemmas created by their relationships with participants, where they may immerse or hide

themselves.<sup>2,3,10</sup> Researchers must consider the data they will collect and disseminate; information about participants and conversations or behaviours where one might expect privacy requires careful consideration.<sup>2,10</sup>

Table 1. Summary of recommendations

Recommendations	Key Benefits
Determine the study setting(s)	Selectively identifying the study setting ensures relevant data collection and effective use of resources.
Identify key interest-holders and establish relationships	Establishing and maintaining collaborative relationships facilitates setting access and enables a feasible research plan.
Determine the researcher-participant relationship to be established	Selecting an appropriate relationship facilitates answering the research question while respecting the setting's needs and the researcher's skills.
Take steps to minimize reactivity to research	Integrating the recommendations supports representative data collection to answer the research question.
Use knowledge to guide data collection procedures	Informed decision making facilitates relevant data collection and effective use of resources.
Use knowledge to inform instrument development	Informed instrument development facilitates effective and quality data collection.
Anticipate possible dilemmas and be mindful of unanticipated ones	Collaborative discussions provide guidance on issues unique to participant observation and ensure high quality research.

## Conclusion

Medical education researchers should not neglect the contribution of participant observation. It is the most natural method for understanding human interaction and experience in a natural setting.<sup>3</sup> Considering the interconnected, dynamic nature of medical education, participant observation can deepen and broaden our understanding of complex phenomena and contribute to influential works in the field. We urge researchers to explore beyond the standard and consider participant observation when appropriate to advance research methods in MER.

**Conflict of Interest:** The authors have no conflict of interest to disclose.

**Funding:** None

**Authorship:** All authors have each signed their own attestation statement that they meet the requirements of authors. The lead author, in addition to their own attestation as an author, has signed an attestation that all authors listed on this paper meet the requirements for authors.

**Edited by:** Heather Buckley (section editor); Jane Gair (senior section editor); Marcel D'Eon (editor-in-chief)

## References

1. Morse JM. Perspectives of the observer and the observed. *Qual Health Res.* 2003;13(2):155-157. <https://doi.org/10.1177/1049732302239595>
2. Guest G, Namey EE, Mitchell ML. *Collecting qualitative data: a field manual for applied research.* Thousand Oaks (CA): SAGE Publications Inc. 2013. Chapter 3, Participant observation; p. 75-112. <https://dx.doi.org/10.4135/9781506374680.n3>
3. DeWalt KM, DeWalt BR. *Participant observation: a guide for fieldworkers.* 2<sup>nd</sup> ed. Plymouth (UK): AltaMira Press, 2011.
4. Blevins MD. Participant observation. In: Allen M, editor. *The SAGE encyclopedia of communication research methods.* Thousand Oaks (CA): SAGE Publications Inc; 2017; p. 1188-1190. <https://dx.doi.org/10.4135/9781483381411.n412>
5. Merriam SB. *Qualitative research and case study applications in education.* San Francisco (CA): Jossey-Bass Publishers; 1998.
6. Jorgensen DL. *Participant observation: a methodology for human studies.* Thousand Oaks (CA): SAGE Publications Inc. 1989. <https://dx.doi.org/10.4135/9781412985376>
7. Creswell JW. *Qualitative inquiry and research design: choosing among five approaches.* 3<sup>rd</sup> ed.; Thousand Oaks (CA): SAGE Publications Inc.; 2013.
8. Paradis E, Sutkin G. Beyond a good story: from Hawthorne effect to reactivity in health professions education research. *Med Educ.* 2017;51:31-39. <https://doi.org/10.1111/medu.13122>
9. Creswell JW. *Research design: qualitative, quantitative, and mixed-methods approaches.* 3<sup>rd</sup> ed. Thousand Oaks (CA): SAGE Publications Inc.; 2009.
10. Reid AM, Brown JM, Smith JM, Cope AC, Jamieson S. Ethical dilemmas and reflexivity in qualitative research. *Perspect Med Educ.* 2018;7:69-75. <https://doi.org/10.1007/s40037-018-0412-2>