

Methodological and ethical considerations in investigating nurses' experiences of medication errors

Efstratios Athanasakis BSc (Hons), RN, MA Research Methods
Staff Nurse, Respiratory Assessment Unit, Nottingham University Hospitals, Nottingham, UK



Background The investigation of medication errors in nursing includes considerations, either methodological or ethical, because it is a sensitive and emotive field of research. The identification of as many as possible considerations, their adequate construction, researcher's reflexivity and vigilance to manage effectively all raised issues during the research process are essential factors when designing an original research protocol to investigate registered nurses' experiences of medication errors.

Aim To examine the range of reflections about the methodological and ethical considerations the investigation of nurses' experiences of medication errors entails. The reflections were based on the design of a relevant original research protocol to investigate nurses' experiences with Interpretative Phenomenological Analysis (IPA).

Methodological discussion

A literature review took place to retrieve studies published in English from 1990-2018 on PUBMED, BNI, CINAHL, ScienceDirect and Wiley Online Library to support the reflections and present relevant examples.

Methodological considerations

Participants' recruitment: purposive sampling method of 7-10 nurses, adoption of snowball sampling method, consider nurses from various wards of same hospital, all nurses experienced their own medication error, invite nurses via their hospital e-mails, consider research nurses to disseminate the recruitment process



Data collection: obtain verbal and written informed consent, undertake pilot interviews-refinement of the research questions, semi-structured interviews to establish rapport, phenomenological interviews, keep a gap between each interview completion, ensure adherence of participants' anonymity and confidentiality



Data analysis: keep reflective journals (e.g. record participants' body language and tone of voice), adopt phenomenological analysis guideline to analyse data, achieve data saturation, provision of rich and thick quotes

Ethical considerations

Phrasing of sentences and words: ensure the language on ethics forms is objective and not offensive-e.g. use 'make' instead of 'commit' a medication error or use data to indicate that medication errors happen, clear articulation of the interview questions-reduce ambiguity

Participants' recruitment: reassurance of confidentiality, data anonymisation (RN1..., RN2...), recognition of study's boundaries

Management of emotionality: recognise signs of catharsis or emotionality, use quick pauses during interviewing/respect participants' periods of silence, express responding confirmations, look for signs that would indicate psychological support, post-interview care for the participants

Location of interviews: offer the choice to participants to decide, promote participants' relaxation and alertness to recall

Type of interviews: offer to participants the choice of telephone or face-to-face interviewing

Management of medication error incidents: follow hospital's policy, researcher's moral codes

Researcher or nurse?: stay calm-be vigilant, self-disclosure or not?, define boundaries between these two roles

Conclusion The research about medication errors is a sensitive field, therefore the identification of its methodological and ethical parts should be developed adequately and effectively. Their thorough designing determines the formation of data, their understanding enables the uncovering and interpretation of the meanings of nurses' experiences. Only a specific number of considerations is mentioned in the present work. By facing as many as possible methodological and ethical considerations, and establish manageable solutions for them, the study's validity, reliability, rigor are enhanced, and the study is ethically robust. The information presented is useful for future qualitative researchers and can be used as a guide to investigate nurses' experiences or parts of it can be integrated in similar projects.

References

- Armitage, G. 2005. Drug errors, qualitative research and some reflections on ethics. *Journal of Clinical Nursing*, 14 (7), pp.869-875
Gelling, L. 2016. Applying for ethical approval for research: the main issues. *Nursing Standard*, 30 (20), pp.40-44
Mansour, M. 2011. Methodological and ethical challenges in investigating the safety of medication administration. *Nurse Researcher*, 18 (4), pp.28-32