Collegian (2016) 23, 47—52

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/coll

Some strategies to address the challenges of collecting observational data in a busy clinical environment

Debra Jackson, RN, PhD[a,*], Glenda McDonald, BSocSc, Grad Dip SocSc (Adult Ed), PhD[b], Lauretta Luck, RN, BAMA, PhD[b], Melissa Waine, BSci (Hons I), BComm[a], Lesley Wilkes, RN, CM, MHPEd, PhD[b,c]

[a] *Faculty of Health, University of Technology, Sydney (UTS), Australia*
[b] *School of Nursing and Midwifery University of Western Sydney (UWS), Australia*
[c] *Centre for Nursing Research and Practice Development, Nepean Blue Mountains Local Health District, Sydney, Australia*

Received 6 May 2014; received in revised form 30 July 2014; accepted 8 October 2014

KEYWORDS
Observational methods;
Clinical setting;
Research;
Data collection;
Violence Assessment Tool (VAT)

Summary Studies drawing on observational methods can provide vital data to enhance healthcare. However, collecting observational data in clinical settings is replete with challenges, particularly where multiple data-collecting observers are used. Observers collecting data require shared understanding and training to ensure data quality, and particularly, to confirm accurate and consistent identification, discrimination and recording of data. The aim of this paper is to describe strategies for preparing and supporting multiple researchers tasked with collecting observational data in a busy, and often unpredictable, hospital environment. We hope our insights might assist future researchers undertaking research in similar settings.

1. Introduction

The aim of this paper is to describe and address the issues involved in collecting observational data in a busy, and often unpredictable, hospital environment while using multiple data collectors. In doing so, we hope to assist future researchers undertake research in similar settings. The study we draw on in this paper focused on violence in the health care environment. The specific phenomenon of interest was the examination of cues to violence and the violence itself. This required contextual detail; therefore data was collected in a clinical setting using an observational approach. The challenges faced from conducting the study included: ensuring and maintaining the multiple observers'

* Corresponding author. Tel.: +61 2 9514 4817.
E-mail address: debra.jackson@uts.edu.au (D. Jackson).

http://dx.doi.org/10.1016/j.colegn.2014.10.001
1322-7696/

shared understanding of the phenomenon under investigation; and issues around data collection and recording in a busy hospital environment.

1.1. Background

Studies drawing on observational methods can generate valuable data that provides insight and a deeper understanding of many types of social interactions. In the health context, aspects of clinical practice are amendable to observation (Caldwell, 2005) and data thus gathered can make an important contribution to knowledge and enhance healthcare delivery. Observational data collection methods and qualitative approaches contribute to research by using 'natural' settings, which allow an explanation of social processes and phenomena. This is especially relevant for service professions such as nursing. Maas and Buckwalter (1989) suggest that for research to be optimally relevant to nursing practice it is necessary for it to take place in natural settings. Such methods can facilitate understandings of peoples' responses, behaviours, and practices; as well as how these responses, behaviours, and practices may change over time and in different contexts and situations.

Observational data may be structured or unstructured. Unstructured observations allow the observer to take notes (Pretzlik, 1994), to record naturally occurring phenomena, and do not restrict data collection to concepts and actions previously identified. Structured observations apply check lists or specific questions to be answered by observers and are considered to provide a more systematic approach to data collection (Wilkes, Mohan, Luck, & Jackson, 2010).

Some of the challenges of non-participatory observation in health care settings are outlined in the literature (Borbasi, Jackson, & Wilkes, 2005, chap. 5; Fitzpatrick & Boulton, 1996; Turnock & Gibson, 2001). The conflict between being an observer and being a clinician has been previously documented (Borbasi & Jackson, 2005; Borbasi, 1994; Parshuram et al., 2008). These issues can be challenging for the nurse/observer, particularly if issues related to ethical conduct or patient safety are observed. However, as suggested by Fitzpatrick and Boulton (1996), observer intervention can potentially alienate participants. Observer conspicuousness can also be an issue.

Borbasi and Jackson (2005) outlines the advantages and disadvantages of observers in hospital settings with and without nursing backgrounds and the fine line between establishing sufficient rapport with informants in order to collect meaningful data without 'going native'. Personal variables can also come into play during observation and these can include motivational, attentional and stylistic factors (Feldt & Brennan, 1989). Observer reliability can also be an issue when multiple observers are recruited and observer error can increase during long observation periods (Fitzpatrick & Boulton, 1996; Turnock & Gibson, 2001).

Observational studies can be very useful in studying subjects who might be excluded from studies due to perceived impediments, such as health issues, or those that are dying; communication issues (such as hearing impairment, cognitive impairment), issues of age or maturity (the very young and the very old), and where issues of social desirability may alter responses (such as drug use, sex workers) (Hammersley & Atkinson, 2007). The use of non-participant structured observation allows incidents and interactions to be captured in busy hospital settings and thereby has the potential to uncover novel information about the nature of violence towards nurses in hospital settings (Jackson, Hutchinson, Luck, & Wilkes, 2013).

The observational study design addresses the challenges of conducting research in busy clinical settings because it allows researchers to explore or describe the phenomenon under investigation in context, using a variety of data sources (Baxter & Susan, 2008). As behaviour does not occur in isolation, research designs need to be able to capture the context of violence to provide essential contextual information (Gates, Fitzwater, & Deets, 2003). Observational studies can contribute something particularly useful to the discourses about violence in hospitals where self-reporting, often retrospectively, has previously been the most common method of reporting (Jackson et al., 2013). This is especially so given that an estimated 70—75% of violent incidents in the health workplace are underreported, unreported or underestimated (Luck, Jackson, & Usher, 2007). Furthermore, retrospective self-report is often restricted to a yes/no response meaning that the nature and context of phenomenon is not clarified.

1.2. Background to the study

Research undertaken by Wilkes et al. (2010) extended preliminary work conducted by Luck et al. (2007) and resulted in a predictive tool, the Violence Assessment Tool (VAT), to identify behavioural cues for physical violence towards nurses. This instrument comprised of 18 behavioural cues for physical violence in the emergency department, with staring, tone and volume of voice, anxiety, mumbling and pacing (STAMP) being the salient themes (Luck et al., 2007; Wilkes et al., 2010). Observers had an option to add unstructured comments on the situation and subjects in order to refine the cues and further develop the tool. In the study upon which this paper is based, the VAT was applied in real-world settings, that being in multiple busy hospital wards and emergency environments. Findings of the study have been published elsewhere (Jackson, Wilkes, Waine, & Luck, in press; Jackson, Wilkes, & Luck, 2014). The aim of this paper is to describe strategies for preparing and supporting research staff tasked with collecting observational data in a busy and often unpredictable hospital environment and using multiple data collectors. We hope our insights might assist future researchers undertaking research with multiple observers in similar settings.

1.3. Ethical considerations

The study received ethical approval from the relevant human ethics committees. Observations were undertaken in public areas, hospital wards and waiting rooms so that personal consent procedures were not required. The act of observing people caused no harm and did not impact on any relationships. Because of the sensitivity of conducting observations within the clinical setting, the ethics committee instructed that approval was given on the proviso that the team could not collect any medical, demographic or