

Introduction

Despite some reports documenting nursing experiences in remote volunteer settings (Eucken, 2008, Evans, 2009), no published studies were identified describing the nature and culture of nursing in the context of a remote, humanitarian, mobile hospital setting. In this paper, we aim to provide a reflexive contribution to the ongoing discussion around the process of data collection in ethnographic fieldwork within an acute surgical setting. While many ethnographic studies feature short and intermittent periods of entry into the field, we specifically reflect on the process of data collection during sustained, full immersion on a ship in a remote context of a low-middle income country (LMIC).

Ethnography in context

Ethnography has its origins in anthropology (Brewer, 2000). Classical ethnography, beginning in the 19th century, was typically described as living with, observing, and reflecting on a particular group or subgroup of interest, to investigate their social interactions, culture, nuances and belief systems (Roper and Shapira, 2000). Contemporary ethnography has now evolved to embrace disciplines other than anthropology, allowing for a refined cultural focus whilst maintaining the study of values, and their influence on belief systems (O'Reilly, 2012). Ethnography commonly employs multiple approaches to data gathering (Brewer, 2000); including video or photography, formal and informal interviews, focus groups, and reflection on participant observation as key strategies (Madden, 2017).

Within the various subcategories of classical ethnography described, two concepts are commonly featured; firstly, information is gathered directly via embedded fieldwork (Whitehead, 2005, Fetterman, 2010) and secondly, there is a cultural aspect

the researcher seeks to understand and interpret (Lambert et al., 2011). Fetterman (2010 p.8) suggests that fieldwork is the most “characteristic element of any ethnographic research design”. Culture has traditionally related to ethnicity and/or nationality, but in contemporary nursing praxis it has been contextualised to describe particular aspects of a geographic region, gender, occupation, professional status, sub-speciality, socioeconomic status, and/or pathology related to health care (Higginbottom et al., 2013).

While there is a growing body of literature describing hospital-based ethnography (Long et al., 2008), descriptions of fieldwork and particular aspects of data collection within a health care environment, including the researcher’s position, are often only briefly portrayed in published reports (Wind, 2008, Rashid et al., 2015, Malachowski, 2015). Furthermore, the majority of ethnographic studies reflect intermittent entries into a near-by field, without detailing observation frequency or duration (Hopkinson and Wiegand, 2017, Philpin, 2007, Taxis and Barber, 2003, Allan, 2006). This paper reports on the process of data collection in ethnographic fieldwork involving sustained, fully immersive entry into the field, in a remote location. Reflections, including challenges experienced, and possible strategies to counteract them, are proposed. This work is drawn from a larger doctoral-based study that sought to investigate and describe the culture of nursing within the delivery of healthcare services that provide access to safe surgery for marginalised populations in a LMIC.

Study setting and participants

The setting was a humanitarian hospital ship providing acute and complex surgical procedures, delivered by a charitable non-governmental organisation, with 84 inpatient beds and docked in a port city of a LMIC. Nurses form a significant

component of the workforce and working as a nurse in this context required travel to the international location for periods between two weeks and 10 months or longer. All nurses volunteer without remuneration. Prospective patients presenting for health screening and surgery were from a different cultural background to the majority of nurses. A team of interpreters was therefore integral to communicate with patients and their families on a daily basis.

As security was paramount, working in the environment meant living on board, with accommodation and workspace in close proximity. While appropriate for safety, this proximity presented a number of challenges to the researcher. These included restricted ability to be distanced from the clinical area, colleagues and patients, and therefore, constraints to be detached from the intensity of the work setting; clearly an insistent need when working in a humanitarian context. Although conceptually present, delineation between being at work and being off duty were blurred and researcher discipline was necessary to maintain professional distance. Furthermore, being located geographically distant from doctoral research supervisors raised challenges including reduced access to support systems because of different time zones, limited access to resources and sporadic communication.

Participants were nurses aged 20-69 years with varied experience, from 12 developed-world nations. Despite their different educational backgrounds, these volunteer nurses were united through a humanitarian-based imperative, agreeing to abide by the host organisation's objectives and mission statement, and participating according to their motivation, and availability and organisational need. This international nursing cohort saw a regularly high turnover of staff due to the nature and location of the work.

Methods of data collection

Field research is a qualitative method of data collection that observes and interacts with people in their natural setting (Guest et al., 2012). Within fieldwork methods, four phases are commonly attributed to data collection (Emerson et al., 2011). In this study, the data collection process (see Table 1) provided a systematic and accurate representation of reality by allowing a voice from each of the subgroups of nurses, capturing their perspectives of nursing in this particular remote context.

In order to meet the study's aims, multiple perspectives were sought, as to rely on one source over another could pose a risk in neglecting the multi-dimensional nature of interaction between theory and practice in ethnography (Hammersley, 1992). Seeking to understand the meaning of a behaviour and the culture it lies within is as important as describing the frequency of it (Lareau, 2018). Field notes from researcher observation contributed to and validated the other forms of data so as to provide reflexivity.

Researcher position

Recording descriptive accounts as a participant observer requires a variety of lenses to effectively reflect on, frame and represent the activities observed, rather than habitually documenting copious facts (Emerson et al., 2011). In our work, the on-site researcher balanced the role of insider/outsider sufficiently to be accepted by the cohort, but 'outsider' enough to observe with new eyes (Blythe et al., 2013, Bonner and Tolhurst, 2002). This balance was possible by the researcher having had over a decade of service with the host organisation, with a decade having passed since that service and the commencement of the study. Fundamentally, the vision and mission of the host organisation had remained the same over that time, but as it had also grown

and changed, processes had been refined; the mobile team worked in new countries, and the surgical scope of practice had increased. This insider/outsider balance therefore, allowed for a current objective research lens.

Ethical Considerations

Ethics approval was granted by both the Ethics Committee of the university with which the researcher is enrolled as a PhD candidate, and the International Review Board of the host organisation. Data collection activities were conducted overtly.

Recruiting and gaining consent

Over the course of a typical field assignment, hundreds of nurses are engaged for a period of service. Some return year after year, becoming familiar to those coordinating the project on a longer-term basis. All measures to greet newly arriving nursing crew and get to know the core team members were taken. Using participant observation in a transient environment posed an additional challenge, because it was not practical for every person that could be observed to offer formal consent. As nurses were oriented to their positions within the team, information about the study was provided, and an opportunity to formally consent to an interview was given. Participants were able to inform the researcher if they did not wish to be included in the general observations, however, none chose to do so. Written consent was gained; forty-nine audio-recorded in depth interviews and one focus group, were conducted during the study's six-month duration.

Interview process

Adhering to the principles of privacy (Spradley, 2016), convenient interview times for participants were arranged. In practice, however, privacy was difficult to achieve and adjustment to a number of frequent interruptions was necessary. Although the aim was to transcribe the audio recording soon after each interview, time constraints prevented this. It had been planned that this sequence could allow for verification of the transcript and accuracy of the meanings attributed by the researcher, before the participant and/or researcher left the field. As volunteers transitioned so quickly, transcription was not completed until the researcher had left the field. Verification of transcriptions were subsequently conducted with participants by email.

Discussion: challenges and lessons learned

In reality, data collection in this setting was challenging. Key issues included role ambiguity due to blurring of clinical and researcher boundaries; space; logistical constraints in the remote location; the characteristics of a transient nursing cohort and limitations in resources within the mobile setting. Table 2 provides a summary of the challenges and possible strategies to address them.

Practicalities of the limited space within the mobile setting and associated community meant a secure work office, space to leave documents or a laptop computer were unavailable. The researcher's sleeping accommodation was the only secure space, which was used to collect notes and for reflection, but that space was also shared with another person not involved in the study. A perceived difficulty arose with a conflicted role between retreating from the busyness of the setting to reflect, which might have been construed as 'not working' when there was clearly a high clinical workload.

In addition to individual interviews, the researcher's aim was to complete focus groups of nursing teams (such as patient triage and selection, admissions, perioperative areas and outpatient follow-up); this was expected to contribute to a deeper understanding and allow synergy of discussion between participants. Practically, this was however too great a challenge and therefore did not occur as intended.

The process of data collection is a cyclical process that requires the researcher to move between collection, observation, reflection and discovery (Whitehead, 2005, Jones and Smith, 2017). While reflexive dialogue is a necessary component, undertaking fieldwork in a confined location far from home is vastly different than being a nurse researcher in one's own environment. Wind (2008, p 79) proposed redefining the concept of participant observation with the term 'negotiated interactive observation' due to finding it difficult to immerse as an ethnographer in highly specialised hospital settings. When conducting a study in a more familiar, urban environment, the ability to withdraw from the study or work site until the next scheduled visit is more practical than when in a remote setting. However, in this study, the experience of living where working, with a limited ability to withdraw or have the capacity to retreat was a key challenge that did not support Wind's experience or view. The restrictions in the study's physical environment, including lack of privacy, necessitated disciplined and concerted effort to find space to reflect, write, or gain relief from the intensity of the combined work/research environment.

Particular work dynamics meant only a fixed number of nurses at any one time were available for data collection activities. Confined living and working spaces, and security issues meant that it was natural to spend time off duty, socialising with colleagues, and eating meals together in a common dining hall. Furthermore, the field

environment space provided little delineation between proximity to the patients, minimal downtime or ability to withdraw from the clinical tasks at hand and heeding the expectation to respond on call when needed. When necessary, communication via loudspeaker was made for health personnel to report to the clinical area in emergencies. An admirable 'all hands-on deck' attitude resulted in a heightened sense of responsibility and willingness to go above and beyond for both colleagues and patients; and therefore, living on board in a confined space truly meant full immersion. Being sensitive to the environment's demands on colleagues, so as to maintain respect and trust, was important. However, purposeful, disciplined time was also needed for the researcher to remain focused on the task of data collection. Remaining flexible with planned work and research schedules was a key strategy. Similar to Watts (2011), the experience of dual roles as both researcher and volunteer nurse created blurred boundaries that needed consistent negotiation and clarification during the study.

Other constraints included infrequent access to others on the research team not present on site, which related to technological challenges and time zone differences. This allowed for little opportunity for discussion or debriefing with limited phone and internet access of being in a LMIC. Further limitations came with security restrictions in the environment – that is, leaving the dock area alone was not considered safe, so group outings, and appropriate transportation and security accompaniment had to be arranged. Ways to overcome those constraints required extra communication and organisation.

Conclusion

Ethnography is an open-ended, inductive and reflexive process that requires flexibility, adaptability and critical thinking to collect data in a cyclical movement between observation, collection, reflection, and discovery. As a participant observer being immersed fully in a setting dissimilar from everyday life, it is important to be aware of the challenges to data collection before commencing the process and being flexible and reflexive in managing issues while in the field. Despite the challenges encountered in collecting data by full immersion into the remote field, the process allowed for authentic engagement, with an opportunity for the researcher to live the journey with participants and thereby providing rich, in-depth daily observations that illuminated and validated the participants' perceptions, as gleaned from interviews. These may not have been as easily identified in intermittent, multiple entries to the field.

Table 1: Data Collection Process

	Data Collection Process
Phase 1	Gaining access, developing trust, identifying key informants
Phase 2	Recruiting and gaining consent, participant observation, conducting interviews
Phase 3	Transcribing, reflecting on observations, document analysis, participant check of transcriptions
Phase 4	Resolve any ambiguities, withdraw from site

Table 2: Challenges and lessons learned

Challenges	Contributing factors	Strategies
Role ambiguity and blurred boundaries in researcher position	• Expectation of self and colleagues to commit to a 'worker' role can lead to pressure to delay data collection and prefer more urgent needs • Frequent adaptation to expectations related to work context • Relentless volume of work in a LMIC, with limited number of nurses • Presentation of ethical and moral dilemma in choosing to meet perceived urgency of work needs over research • Fixed time constraint for gathering data and transcription	• Ensure clear boundaries are defined and articulated to all stakeholders before commencing data collection • Flexibility in changing circumstances of changing clinical needs; negotiation of hours and time allocation • Needs assessment and plan research output related to data collection, necessitating flexibility and frequent adjustment
Geographical remoteness	• Reduced accessibility to phone and internet impacting on outside communication with research team; time differences; disruptions in connectivity/availability of technology	• Alternative ways of contact (e.g. secure multiple SIM cards for various telecommunication providers) • Clarify agreement of research team availability and flexibility; plan meetings with time difference in mind
Safety and security issues	• Possibility of an unsecured data network • Physical threat of danger • Necessity to live on site to reduce risk of harm • Limited ability to delineate and withdraw physically or emotionally from the intensity during field presence	• Conduct a comprehensive risk assessment and develop a realistic plan • Develop rapport and an accountability agreement with another colleague on site that can guarantee confidentiality
Physical environment	• Lack of private space, impacting on confidentiality, limitations in ability to store data • Frequent interruptions to data collection	• Seek solutions to locate personal privacy and space within a noisy, hectic environment • Anticipate and factor in interruptions

Transient Nurse Cohort	• High turnover of volunteer staff; limited potential for member checking and developing trust over a short time frame • An international team means participants may be culturally and linguistically diverse (CALD) so rapport and common understanding may take longer to develop than expected.	• Plan meet and greet, and information sessions as soon as possible to secure recruits to study early in data collection phase • Plan for appropriate time for participant checking of transcripts and follow up meetings with participants; gain multiple contact details before departing
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