



Hearing voices: Comparing two methods for analysis of focus group data



Melanie Greenwood, RN, BN, MN, IC Cert^{a,*}, Tina Kendrick, RN, BN (Hons), MN, PIC Cert^b,
Hugh Davies, RN, PhD PG Dip (Intensive Care), B Nurse^d,
Fenella J. Gill, RN, PhD, BN, MN, Paediatric Cert, Grad Cert. in Tertiary Teaching^{c,e}

^a School of Health Sciences, University of Tasmania, Private Bag 135, Hobart, Tasmania, Australia

^b NETS, NSW, School of Health Sciences, University of Tasmania, Australia

^c School of Nursing, Midwifery and Paramedicine, Faculty Health Sciences, Curtin University, GPO Box U1987, Perth, Western Australia 6845, Australia

^d School of Nursing & Midwifery, Edith Cowan University, Perth, Western Australia 6027, Australia

^e Princess Margaret Hospital for Children, PO Box D184, Perth, Western Australia 6840, Australia

ARTICLE INFO

Article history:

Received 9 August 2016

Accepted 1 February 2017

Available online xxxx

Keywords:

Focus group

Qualitative data analysis

Audio recordings

Verbatim transcription

ABSTRACT

Aim: This paper compares two qualitative approaches used to thematically analyse data obtained from focus groups conducted with critical care nurses from Australia.

Background: Focus groups are an effective mechanism to generate understanding and gain insight into the research participants' world. Traditional verbatim transcription of participants' recorded words necessitates significant investment of time and resources. An alternative approach under reported in the literature is to directly analyse the audio recordings. To identify the effectiveness of the audio recording only approach, the study aimed to independently compare two qualitative methods of data analysis, namely the traditional transcribed method with the audio recording method.

Methods: The study to revise the specialist critical care competency standards included focus groups conducted in each state in Australia ($n = 12$) facilitated by experienced researchers. Two of the research team analysed transcribed focus group data and two team members were blinded to the transcription process and directly analysed audio recordings from the focus groups. A process of thematic analysis used independently by the two teams was used to identify themes.

Results: When the findings were compared, the themes generated using each technique were consistent and there were no different themes or subthemes identified. The two techniques appeared to be comparable. Overarching key themes were consistent with the approach.

Conclusion: The direct analysis method appears to have advantages. It is cost effective, trustworthy and possibly a superior alternative when used with focus group data. However, the audio only method requires experienced researchers who understand the context and if combining the two approaches takes time to do.

© 2017 Elsevier Inc. All rights reserved.

1. Introduction

Interviews and focus groups are popular data collection methods to gather opinions from research participants. Researchers invest significant time and resources to transcribe, analyse and manage data obtained from research studies that have significant financial implications. The standard approach to the analysis of interview and focus group data has been to undertake audio recordings, have verbatim transcription, i.e. word for word reproduction of verbal data, and to then analyse the

text to uncover themes in order to understand the topic from the participants' perspective. Transcripts also facilitate the development of an audit trail of data analysis, although it has been argued that cross-checking should be undertaken from the original audio recording, due to the potential errors that result in the transcribing process (Then, Rankin, & Ali, 2014).

Halcomb and Davidson (2006) proposed an alternative approach to the analysis of interview data, whereby the recordings themselves along with field notes are directly analysed, omitting the transcription process. In addition to the time and cost implications for transcribing and frequency of transcription errors, their criticism of analysing transcribed data suggested that it may not be the most rigorous way to treat such data. In particular focus group data can be difficult to analyse due to the competing voices that can be heard in the data recordings (Jayasekara, 2012).

* Corresponding author.

E-mail addresses: melanie.greenwood@utas.edu.au (M. Greenwood), tina.kendrick@nets.health.nsw.gov.au (T. Kendrick), h.davies@ecu.edu.au (H. Davies), f.gill@curtin.edu.au (F.J. Gill).

By listening directly to the data source, that is the audio recording of the participants, it may reasonably be argued that this is a purer way to approach the analysis of focus group data. Transcripts are one-dimensional and miss the intonations of voice, body language, seating arrangements and other behavioural data which can add meaning to the text, and which is lost in transcription. Field notes taken from audio recordings can only partially capture the atmosphere of the focus group. It often requires the support of an observer to gather additional data, which adds to resource requirements. In order to test whether listening directly to recordings is comparable to the standard method of analysing data, both approaches to data analysis were undertaken independently of each other and then compared.

Comparison of the two approaches to data analysis occurred in the context of a national study to revise standards for critical care nursing practice in Australia (Gill, Kendrick, Davies & Greenwood, 2016). The recent publication of the 3rd edition of the Practice Standards for Specialist Critical Care Nurses (Australian College of Critical Care Nurses, 2015) was the culmination of a two-phased study to ensure the standards continued to reflect contemporary practice. The methodological approach involved focus groups conducted across Australia with key stakeholders identified as critical care nurses, followed by a three round eDelphi process to reach agreement on the newly revised standards. This paper reports on the successful adaptation of Halcomb and Davidson's (2006) approach to the analysis of qualitative data, specifically to the analysis of focus group data. The traditional transcription of audio recordings into text was compared with the audio recordings and field notes only method (Halcomb & Davidson, 2006).

2. Methods

Following a university Ethics Committee approval, Australian critical care nurses were invited to participate in focus groups. Participants provided written informed consent. Focus group facilitators who directed the flow of questions consisted of the three lead researchers, an experienced independent researcher and, in support roles, other members of the research team who met regularly to audit the conduct of the research prior to and during the data collection. During the initial meetings the method for conducting the focus groups was agreed – there was one leader, generally a lead researcher, with at least one other member of the research team present to take field notes.

A literature review informed the development of four semi-structured questions which were piloted by an independent researcher with a representative convenience sample of nurses in a focus group conducted during a national critical care conference. Questions were reviewed and minor adjustments made by the research team following review of the transcript.

1. How have the Competency Standards for Specialist Critical Care Nurses been used? And how could they be used?
2. Should the Competency Standards for Specialist Critical Care Nurses be broadened or be more specialised?
3. Has the role of specialist critical care nurse changed since the original Competency Standards for Specialist Critical Care Nurses were developed in 1990's?
4. What has changed since the Competency Standards for Specialist Critical Care Nurses were last reviewed?

Data recorded from the pilot were included in the research project. Each focus group was recorded via digital recording devices and written field notes were taken. Participant demographic information was collected.

In total twelve focus groups consisting of between four to twelve participants ($n = 79$) were conducted in each state of Australia. Each focus group lasted between 30 and 55 min, generating 10 h of recordings. Audio recordings were transcribed verbatim by a third party.

2.1. Data analysis

Thematic analysis (Braun & Clarke, 2006) was undertaken using the two techniques. The lead researchers split into two groups and independently analysed the data.

2.2. Data analysis from transcripts

Two researchers (xx) undertook thematic analysis using the traditional approach of reading the transcribed audio recordings and listening to the recordings for verification of what was in the text. Braun and Clarke's (2006) approach was used; namely data familiarisation, generation of initial codes, searching the data for themes, reviewing themes, reaching agreement for defining and naming themes.

2.3. Direct data analysis from audio recordings

Two researchers (xx) undertook the approach recommended by Halcomb and Davidson (2006), Table 1) and independently listened to the audio recordings and took notes, reviewed field notes and then formulated codes and themes (Braun & Clarke, 2006) that emerged from listening to the recordings. The audio recordings were independently scrutinised for emerging themes and concepts. These two researchers resided in separate states of Australia and did not communicate during this period of data analysis. This maintained an independent approach to analysis, credible representation of results and blinded the researchers to each other to ensure representation of data was faithfully reported.

A quiet non-distractive environment allowed both researchers to review the audio recordings of each focus group and independently focus on what was said, how it was said and what was not conveyed. Key textual and conceptual themes were noted and additional field notes developed. The field notes consisted of a description about what was heard along with researcher interpretations. Following this, thematic coding was performed by each researcher looking for patterns in the data, grouping 'like' concepts as they related to each other and core themes generated. After the completion of independent analysis, the two researchers then undertook joint review to verify and confirm findings.

3. Result of combining the two data analysis methods

When compared, the generated themes from the two approaches were found to be consistent. The two research teams (xx and xx) met and compared their findings to confirm the themes and sub themes, noting that no new themes or sub themes were generated (Table 2). The final stage to data analysis was to review and draw together the concepts generated from each approach for final confirmation. Findings from the full study have been reported (Gill et al., 2016). Data were compared across the two separate approaches and overarching themes of 'visibility', 'opportunity' and 'applicability' were identified. Methodological rigour during and following the combination of methods was maintained by the incorporation of independent researchers that assured the trustworthiness and quality of conclusions in each approach for analysis of the focus group data.

Table 1
Direct analysis six steps.

| | |
|---------|--|
| Step 1. | Audiotaping of focus group and concurrent note taking |
| Step 2. | Reflective journaling immediately post focus group |
| Step 3. | Listening to audio recording and amending/revising field notes |
| Step 4. | Preliminary content analysis |
| Step 5. | Secondary content analysis |
| Step 6. | Thematic review |

Adapted from Halcomb & Davidson (2006).

Download English Version:

<https://daneshyari.com/en/article/5567384>

Download Persian Version:

<https://daneshyari.com/article/5567384>

[Daneshyari.com](https://daneshyari.com)