The synthesis of art and science is lived by the nurse in the nursing act Josephine G PATERSON

If you would like to contribute to the art and science section contact: Gwen Clarke, art and science editor, Nursing Standard, The Heights, 59-65 Lowlands Road, Harrow-on-the-Hill, Middlesex HA1 3AW. email: gwen.clarke@rcnpublishing.co.uk

Semi-structured interviews: guidance for novice researchers

Whiting LS (2008) Semi-structured interviews: guidance for novice researchers. Nursing Standard. 22, 23, 35-40. Date of acceptance: November 2 2007.

Summary

Nurses are increasingly involved in research, particularly qualitative research. This article aims to prepare nurses for conducting semi-structured research interviews.

Author

Lisa S Whiting is professional lead, children's nursing, University of Hertfordshire, Hatfield. Email: I.whiting@herts.ac.uk

Keywords

Interviews and interviewing; Qualitative research: Semi-structured interviews

These keywords are based on the subject headings from the British Nursing Index. This article has been subject to double-blind review. For author and research article guidelines visit the *Nursing Standard* home page at www.nursing-standard.co.uk. For related articles visit our online archive and search using the keywords.

> NURSES ARE NOW able to undertake a range of post-qualification programmes, many of which include a research component. They are also increasingly involved in clinically based research. Emphasis is frequently placed on methodology, including the data collection tools that are used such as interviewing. However, the practical organisation and implementation of the research process do not always receive the same attention. Nurses may find they are conducting interviews with patients or service users who are in a vulnerable position, but who can provide insight into experiences that will enhance the provision of quality care. It is, therefore, crucial that nurses practise their interviewing skills and adopt a reflexive approach to interviewing.

Reflexivity

Koch and Harrington (1998) suggest that reflexivity enables self-examination, which, in turn means that the '... values, assumptions, prejudice and influence of the researcher must therefore be acknowledged' (Hand 2003). Hand (2003) highlights the need for a reflexive approach to the interview process. Spencer et al (2003) identify three components of reflexivity (Box 1).

A number of authors have provided reflexive insights into their research (Bannister 1999, Chesney 2000, Clarke 2006), suggesting that it should be incorporated into all stages of the research process. Hand (2003) states that a reflexive approach aids the auditability of qualitative research, which is necessary to demonstrate rigour (Sandelowski 1993). **Novice interviewer** It is imperative that researchers acknowledge their limitations and bias and that they strive to achieve the knowledge and skills that are required to do this (Treece and Treece 1986). It is important to take advantage of any available expert advice and support – this is essential for the novice (Loera 2006).

Interviews as a research tool

Polit and Beck (2006) define an interview as: 'A method of data collection in which one person (an interviewer) asks questions of another person (a respondent): interviews are conducted either face-to-face or by telephone.'

Interviews are one of the most commonly used methods of data collection (DiCicco-Bloom and Crabtree 2006). A number of texts (Burns and Grove 2005, Fontana and Frey 2005, Polit and Beck 2006) differentiate between structured, semi-structured and unstructured interviews. Structured interviews use a questionnaire format with closed questions and can be beneficial, particularly when participants have either a speech or language impairment. However, they are frequently used to generate quantitative rather

art & science professional issues

than qualitative data and are not the focus of discussion in this article.

Box 2 provides an overview of the key features of semi-structured and unstructured interviews although it should be remembered that these are not mutually exclusive.

Semi-structured, in-depth interviews are frequently used by health professionals. In-depth interviews should be personal and intimate encounters in which 'open, direct, verbal questions are used to elicit detailed narratives and stories' (DiCicco-Bloom and Crabtree 2006).

It has been suggested that the interviewer usually maintains control over the interview, asking questions, but contributing little else (Sorrell and Redmond 1995, Melia 2000). However, authors such as Oakley (1981), state that trying to control the interview process does not respect the role of participants and treats them as if they are there just waiting to produce data. Melia (2000) recalls developing a more giving approach while interviewing nurses in the intensive care environment. Personal reflection,

BOX 1

Three components of reflexivity

- ▶ Demonstrating an awareness of how biases may
- ▶ Thoughtfulness about, and attempts to minimise, the impact of the researcher on data collected.
- ▶ Attempts to address bias through systematic and comprehensive analysis, and reflectiveness on the research methods, the decisions made, and the consequent limitations of the study.

(Spencer et al 2003)

BOX 2

Key features of semi-structured and unstructured interviews

Semi-structured interviews

- ▶ Scheduled in advance at a designated time.
- ▶ Location normally outside everyday events.
- Organised around a set of predetermined questions.
- ▶ Other questions emerge from dialogue.
- ▶ Usually last from 30 minutes to several hours.

(DiCicco-Bloom and Crabtree 2006)

Unstructured interviews

- ▶ Guided conversations.
- Originate from ethnographic and anthropological traditions.
- Key informants are selected.
- ▶ Interviewer elicits information about the meaning of behaviour, interactions, artefacts and rituals - with questions emerging as the investigator learns about the setting.

aided by a literature review on interviewing within and outside the nursing profession, will enhance understanding of the fundamental issues and enable researchers to question their practice and develop a personal philosophical approach to interviewing.

The interview process

Identification of a 'good informant' To develop and enhance personal skills before conducting research interviews, it is useful to practise the technique of interviewing. The first stage involves identifying a suitable participant. Morse (1991) identifies the particular qualities of a 'good informant' and these attributes can be used to guide selection. The qualities involve being:

- ▶ Knowledgeable about the topic an expert by virtue of involvement in specific life events.
- Able to reflect and provide detailed experiential information about the area under investigation.
- Willing to talk.

Work colleagues might be willing to participate in practice interviews, but McEvoy (2001) suggests that caution is required because an established relationship already exists with the participant and so the interviews might not reflect a genuine interview situation. An interview can also be influenced by gender, professional background, ethnicity and age (Rubin and Rubin 2005). Participants often respond more favourably to interviewers who are similar to themselves (Fielding 1994).

Interview preparation Before the start of the interview, it is beneficial to draw up a checklist that identifies practical preparations and areas to be clarified (Rose 1994). Box 3 highlights key issues that need to be explained to the participant.

Burns and Grove (2005) recommend that interviews are held in a quiet, private room and it has been suggested that the participant should be given the choice of venue (Clarke 2006). Interviews should be conducted in a comfortable environment where seats are carefully arranged and where there is suitable decor. However, this is not always possible and does not necessarily affect the interview process - communication skills are more crucial.

Recording the interview Audio recorders, note taking or video cameras are the most common methods of recording interview data (Rubin and Rubin 2005). A permanent record of the interview is important and the use of a digital recorder - after some practice - is effective and easy. It contributes to a more relaxed atmosphere because the interviewer is freed from the distraction of note taking and can concentrate on

BOX 3

Checklist of points for explanation before an interview

- ▶ Purpose of the interview.
- ▶ Clarification of topic under discussion.
- ▶ Format of the interview.
- ▶ Approximate length of interview.
- ▶ Assurance of confidentiality.
- ▶ Purpose of digital recorder ask permission to use it. Explain who will listen to the recording.
- Assure participant that he or she may seek clarification of questions.
- Assure participant that he or she can decline to answer a question.
- Assure participant that there will be opportunity during the interview to ask questions.

(Adapted from Rose 1994)

interacting with the participant and allows an accurate and verbatim transcription of the interview. Although concerns have been expressed that the interviewee and interviewer might feel inhibited by the presence of the recorder, it can be surprising how quickly a rapport is developed in the author's experience.

In addition to audio recording, it has been suggested that the interviewer writes down his or her thoughts and feelings before, during and after the interview (Chesney 2000) and that the use of a reflective diary (Clarke 2006) can be beneficial. Ribbens (1989) comments on the importance of 'listening' beyond the oral – taking note of pauses, silences and non-verbal actions. The use of reflective notes, particularly at the end of the interview, can help identify strengths and weaknesses of the interviewer. This can be the key to developing personal interview skills and is potentially less disruptive than documenting these elements during the interview.

Phases of the interview *Building rapport*Because communication is fundamental to nursing practice, nurses often have an affinity for this aspect of interviewing. The importance of building a rapport with the participant has been emphasised (Oakley 1981, Spencer *et al* 2003), and others (Miller and Crabtree 1999, Rubin and Rubin 2005) have identified that it occurs in stages throughout the interview.

Apprehension phase The initial stage of the interview displays elements of strangeness and uncertainty (DiCicco-Bloom and Crabtree 2006). Engaging in general conversation before the interview can induce a more relaxed atmosphere.

In view of the potential discomfort that the participant can feel, the wording of the opening

question is important. DiCicco-Bloom and Crabtree (2006) suggest that it should be clearly focused on the research but also open-ended and broad. This can then be followed by a 'prompt' question that repeats the key concept. For example, if interviewing older patients about their experiences of growing old, an opening question might be: 'Could you describe your typical day, please?' This would help to put the participant at ease since he or she is being asked to describe something familiar, which is also central to the research. 'Prompt' questions are crucial to the interview process because they help the interviewer to gain more information, especially if the participant does not provide detailed replies. A suitable 'prompt' question might be: 'You mentioned that you don't cook regular meals, could you tell me a little more about this, please?'

Treece and Treece (1986) stress that questions need to be planned well, particularly because some can cause unexpected embarrassment or discomfort. It is useful to make a list of 'prompt' questions before the interview, and read and reread these to ensure familiarity. In addition, 'prompt' questions can ensure that the key issues are addressed and the flow of the interview is maintained. The planned order of the 'prompt' questions does not need to be strictly adhered to, because it is not appropriate for this style of interviewing. Consideration should be given to the phrasing of 'prompt' questions to avoid leading the participant. This is crucial because the interviewer's expectations can affect the participant's response (Moser and Kalton 1979).

While the 'prompt' questions give a sense of security if the interviewer has planned appropriately, they are only an *aide-mémoire*. It is important to keep the questions open-ended, so that the participants are encouraged to reflect on and identify their true feelings (Warren and Karner 2005). This is noticeable during transcription, when some of the pauses may indicate thinking time. Although the opening phase of the interview can lower apprehension, it is sometimes not until much later in the interview that both parties feel relaxed.

Exploration phase As the interview progresses, the participant should begin to engage in more in-depth descriptions (DiCicco-Bloom and Crabtree 2006). To encourage this, the interviewer should continue to use open-ended questions because some people are not used to expressing their feelings. Good use of interview questions will maintain interaction and lead to the generation of knowledge. To gain more insight into the interviewee's experiences, probing questions are frequently used. When interviewing colleagues, there is a potential that the relationship could be damaged if this is not approached delicately. Price (2002) suggests that

art & science professional issues

quickly in the interview and to decide how far to probe. Box 4 highlights examples of differing probing techniques that could be used. It can feel more comfortable using probes when the subject under discussion is relatively 'safe', for example, how the interviewee travels to work. It can be difficult if the focus of the interview is of a sensitive nature and requires more practice. Co-operative phase At this stage a comfort level is reached and there is the potential for more free discussion. For example, the interviewer and participant show signs of enjoying the process and are less worried about offending each other (DiCicco-Bloom and Crabtree 2006). Clarke (2006) describes how she strove to generate a 'two-way' process during her interviews, something that nurses sometimes avoid. Oakley (1981) and Devault (1990) suggest that it is acceptable for the interviewer to share information about themselves and their families. However, care should be taken to prevent 'sharing' leading to a loss of focus. The interview should not degenerate into a 'chat'.

novice researchers often find it difficult to think

It is often during this phase of the interview that more sensitive questions can be asked. Confidence has grown and clarification can be used more widely. This can prompt a confessional element from the participant (Collins 1998) that can give more depth and

BOX 4

DOX :	
Examples of probing techniques to use during an interview	
Type of probe technique	Description of probe
Silent	Interviewer remains silent and allows the participant to think aloud.
Echo	Interviewer repeats the participant's point, encouraging him or her to develop it further.
Verbal agreement	The interviewer expresses interest in the participant's views with the use of phrases, such as 'uh-huh', or 'yes, okay'.
'Tell me more'	The interviewer clearly asks the participant to expand on a particular point or issue – without the use of echoing.
Long question	The interviewer asks a lengthier question that also suggests that a detailed response is sought.
Leading	The interviewer asks a question that encourages the participant to explain his or her reasoning.
'Baiting'	The interviewer gives the impression that he or she is aware of certain information. This might prompt the participant to explain further.
(Russell Bernard 2000)

richness to the data collection. For example, in a study about family meals, a mother may confess that she only cooks vegetables once a week. At this stage rapport develops and the interview can be a fulfilling experience.

Participation phase It is during the participation phase that the greatest rapport is developed, success is indicated by the interviewee 'guiding and teaching the interviewer' (DiCicco-Bloom and Crabtree 2006). This phase is not always reached and sometimes the short length of an interview can hinder the process. Alternatively, there can be other causative factors, such as the topic, the environment or timing. It is important to remember that in-depth interviews can be time-consuming.

Concluding the interview The conclusion of the interview does not always receive the attention that it deserves. Both parties should feel comfortable and ready to finish. Clarke (2006) states that it is good to end on a positive note, or to inject humour. The latter may not be possible or appropriate, but it is usual to thank the participant. Interviewees may report that they have enjoyed the experience and have found it beneficial (McIlfatrick et al 2006); it is important to remember that this might be the first time that someone has listened to their story.

Anderson (1991) suggests that the value of the participants should be acknowledged and that there should be a means to 'reimburse' them. Although the appropriateness of giving a gift is a contentious issue because it could be construed as an incentive, leading to accusations of bias, it should not be shied away from if the researcher feels it is the right thing to do. Examples of gifts are the reimbursement of travel expenses, or, in the case of children, stickers.

Transcription

The interview recording needs to be transcribed verbatim. This is more challenging than might be expected and is an aspect of the research process that DiCicco-Bloom and Crabtree (2006) say has not been fully explored. There are a number of issues that might cause problems. One of the most difficult aspects is capturing the wording accurately. Playing the recorder back several times increases accuracy but can take an inordinate amount of time.

During the transcription, interviewers can be surprised by some of the phrases they have used but were not consciously aware of during the interview. Practising interview technique can help to identify areas that require personal development before data collection.

Consideration should be given to whether or not the transcript is returned to the participant for verification of accuracy. This should be

thought through before the research and incorporated into the overall study design. However, if this process is adopted, further data might be generated and must be incorporated into the analysis (Sandelowski 1993). Also participants might be surprised by their scripts, particularly because speech can appear disjointed when seen in a written form. The researcher should also consider whether part of the analysis of the data should be returned to the participants to further establish validity. It is important to think about the decisions made so that a sound rationale can be provided.

Ethical duties

Ethical issues are a priority when vulnerable people are being interviewed, but the same concern is not always displayed towards professionals. The Department of Health (2001), stresses that the wellbeing of all participants must be a priority. It is therefore important that all the necessary processes are adhered to, this includes acquisition of informed consent, approval by the Local Research Ethics

Committee, and provision of details to the interviewee about distribution of the research findings, for example, via publication or

conference presentation. While there are a range of ethical theories and frameworks to guide the researcher (Hammick 1996, Beauchamp and Childress 2001), two areas of prime concern are confidentiality and the potential consequences of the interview process.

Confidentiality Polit and Beck (2006) describe confidentiality as: 'Protection of study participants such that individual identities are not linked to information provided and are never publicly divulged.' Burns and Grove (2005) state that all participants have the right to privacy, anonymity and confidentiality, however, they also stress that true anonymity exists only if the participant's identity cannot be linked to the data, even by the researcher. The investigator can design the study to achieve anonymity, although not if face-to-face interviews are conducted. Levine (1981) emphasises that the information that each participant shares with the researcher should not be passed on to others in any form, unless specific consent has been given. Consideration therefore needs to be given to the destruction of the interview recordings and transcribed data. This is often required by ethics committees. However, this can mean that an audit trail cannot be conducted at a later date; researchers

References

Anderson M (1991) Reflexivity in fieldwork: toward a feminist epistemology. *Image: Journal of Nursing Scholarship.* 23, 2, 115-118.

Bannister EM (1999) Evolving reflexivity: negotiating meanings of women's midlife experience. *Qualitative Enquiry*. 5, 1, 3-23.

Beauchamp T, Childress J (2001) *Principles of Biomedical Ethics.* Fifth edition. Oxford University Press, Oxford.

Burns N, Grove SK (2005) The Practice of Nursing Research. Conduct, Critique and Utilization. Fifth edition. WB Saunders, Philadelphia PA.

Chesney M (2000) Interaction and understanding: 'me' in the research. *Nurse Researcher*. 7, 3, 58-69.

Clarke A (2006) Qualitative interviewing: encountering ethical issues and challenges. *Nurse Researcher*. 13, 4, 19-29.

Collins P (1998) Negotiating selves: reflections on unstructured interviews.

Sociological Research Online. 3, 3. www.socresonline.org.uk/socresonline/ 3/3/2/html (Last accessed: January 4 2008.)

Department of Health (2001) *Research Governance Framework for Health and Social Care*. The Stationery Office,

Devault ML (1990) Talking and listening from women's standpoint: feminist strategies for interviewing and analysis. *Social Problems*. 37, 1, 96-116.

DiCicco-Bloom B, Crabtree BF (2006) The qualitative research interview. *Medical Education*. 40, 4, 314-321.

Fielding N (1994) Varieties of research interviews. *Nurse Researcher*. 1, 3, 4-13.

Fontana A, Frey J (2005) The interview: from neutral stance to political involvement. In Denzin N, Lincoln Y (Eds) *The Sage Handbook of Qualitative Research*. Third edition. Sage, Thousand

Oaks, California CA, 695-728.

Hammick M (1996) Managing the Ethical Process in Research. Quay Books,

Hand H (2003) The mentor's tale: a reflexive account of semi-structured interviews. *Nurse Researcher*. 10, 3, 15-27.

Koch T, Harrington A (1998) Reconceptualizing rigour: the case for reflexivity. *Journal of Advanced Nursing*. 28, 4, 882-890.

Levine RJ (1981) *Ethics and Regulation of Clinical Research*. Urban and Schwarzenberg, Baltimore MD.

Loera G (2006) Experiencing the barriers of nursing research. *Gastroenterology Nursing*. 29, 3, 251-253.

McEvoy P (2001) Interviewing colleagues: addressing the issue of perspective, inquiry and representation. *Nurse Researcher*. 9, 2, 49-59.

art & science professional issues

often destroy the recordings, but keep copies of the transcripts under secure conditions. **Consequences** Streubert and Carpenter (1999) suggest that a research interview may provide the only opportunity for the participant to discuss the identified topic. Although it may not be anticipated, the interview can provoke strong emotional feelings. Any research has the potential to cause distress and Streubert and Carpenter (1999) advocate that time is made available at the end of the interview in case the interviewee requires help. It is not unusual for the participant to ask the interviewer whether he or she obtained the information that was wanted. It is easy to focus on the stress of conducting the interview without fully considering how nervous the participant might have been and how important it is that he or she is able to 'debrief'. Also, the interviewer is vulnerable and can experience stress as a result of his or her research. This might be associated with the issues being

explored - for example, the experiences of patients who are receiving palliative care – but can be a result of the organisation of the research study. Management of this potential stress should not be underestimated and, if required, appropriate techniques should be planned. Frequently personal concerns can be addressed through reflective discussions with a colleague who has the relevant expertise. This can also help to identify strengths and weaknesses which will assist in the development of personal interview technique. However, on occasions more formal approaches might need to be used.

Conclusion

The interview experience is thought-provoking and challenging. Although there is not one correct way to conduct an interview, it is essential that the interviewer has a sound, well-considered underpinning rationale for the style he or she adopts. Practising interview technique and developing a reflexive approach enhance selfconfidence and the use of a more self-aware and giving approach to future research interviews NS

McIlfatrick S, Sullivan K, McKenna H (2006) Exploring the ethical issues of the research interview in the cancer context. European Journal of Oncology Nursing. 10 1 39-47

Melia K (2000) Conducting an interview. Nurse Researcher, 7, 4, 75-89.

Miller W, Crabtree B (1999) Depth interviewing. In Crabtree B, Miller W (Eds) Doing Qualitative Research. Second edition. Sage, Thousand Oaks CA, 89-108.

Morse J (1991) Strategies for sampling. In Morse J (Ed) Qualitative Nursing Research. A Contemporary Dialogue. Second edition. Sage, Newbury Park CA, 127-145

Moser CA, Kalton G (1979) Survey Methods in Social Investigation. Second edition. Gower, Aldershot, 20-61.

Oakley A (1981) Interviewing women: a contradiction in terms. In Roberts H (Ed) Doing Feminist Research. Routledge and Kegan Paul, London, 30-61.

Polit DF, Beck CT (2006) Essentials of Nursing Research. Methods, Appraisal, and Utilization. Sixth edition. Lippincott Williams and Wilkins, Philadelphia PA.

Price B (2002) Laddered questions and qualitative data research interviews. Journal of Advanced Nursing. 37, 3, 273-

Ribbens J (1989) Interviewing: an unnatural situation. Women's Studies International Forum. 12, 6, 579-592.

Rose K (1994) Unstructured and semi-structured interviewing. Nurse Researcher. 1, 3, 23-32.

Rubin H, Rubin I (2005) Qualitative Interviewing: The Art of Hearing Data. Sage, Thousand Oaks CA.

Russell Bernard H (2000) Social Research Methods: Qualitative and Quantitative Approaches. Sage, Thousand Oaks CA.

Sandelowski M (1993) Rigor or rigor mortis: the problem of rigor in qualitative research revisited. Advances in Nursing Science, 16, 2, 1-8,

Sorrell JM, Redmond GM (1995) Interviews in qualitative nursing research: differing approaches for ethnographic and phenomenological studies. Journal of Advanced Nursing. 21, 6, 1117-1122.

Spencer L, Ritchie J, Lewis J, Dillon L (2003) Quality in Qualitative Evaluation: A Framework for Assessing Evidence. Cabinet Office, London.

Streubert HJ, Carpenter DR (1999) Qualitative Research in Nursing. Advancing the Humanistic Imperative. Second edition, Lippincott, Philadelphia

Treece EW. Treece JW (1986) Elements of Research in Nursing. Fourth edition. Mosby, St Louis MO.

Warren C, Karner T (2005) The Interview. Discovering Qualitative Methods: Field Research, Interviews and Analysis. Roxbury, Los Angeles CA.