QUALITATIVE RESEARCH

The quality of qualitative research in family planning and reproductive health care

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In recent years the value of using qualitative methods in health and social care research has become widely acknowledged.^{1,2} This paper explores how we can assess the 'quality' of qualitative research. It is the second of three papers examining the use of qualitative research in family planning and reproductive health care. Our first paper described the three main methods that are generally used in qualitative studies.³ This paper begins with a discussion about when to use qualitative methods followed by a consideration of some general issues that arise throughout the process of qualitative data collection and analysis. The paper ends by highlighting the strengths and weaknesses of qualitative research methods.

When to use qualitative methods

In general, there are three main ways of using qualitative methods in research: (1) on their own to search for meaning and/or develop theory, (2) in preparation for quantitative questionnaire studies and (3) in parallel with quantitative

First, qualitative research can be used for its own sake to explore a particular issue or phenomenon – this is especially useful when a research problem has not been previously explored in much depth, for example, the barriers and facilitators in family communication about genetic risk.⁴ Second, focus groups or interviews can be used to find out the kind of questions that need to be incorporated in a questionnaire study. They can also help to establish the range of likely options for a multiple-choice question as respondents may highlight issues that have not been previously considered. Third, qualitative methods can help to provide explanations for statistically significant results in large-scale surveys. For example, it is well known that teenagers in situations of high socioeconomic deprivation are statistically more likely to fall pregnant, but this does not explain why. We could conduct interviews with different teenage groups to find out the likely explanation(s) for this phenomenon. Qualitative methods can also be used in conjunction with quantitative methods as a means of triangulation,⁵ namely enhancing validity through a variety of different types of data. We discuss this in more depth below.

Judging qualitative research: issues of validity, reliability and generalisability

We have previously described the three main qualitative methods that are likely to be used in health and social care research, namely (1) observation, (2) interviews and (3) focus groups.³ The analysis of textual material such as the minutes of meetings or visual material, e.g. service users' diagrams of their pathway through a service, are also increasingly used. These methods can be particularly valuable for user involvement with service development.

There are strengths and weaknesses with each particular method,³ but the same main methodological issues will arise when it comes to judging the quality of any of these methods of data collection. Similarly, there are multiple methods of 'doing' qualitative data analysis,6 but again any such approach will be judged in terms of how it addresses the general (qualitative) methodological issues of validity, reliability and generalisability.

Validity and reliability

Arguably, one of the strengths of a qualitative approach is its ability to generate a more valid account of the phenomenon under study because of the rich detail and complex accounts which can be generated, whilst quantitative methods are seen to be more replicable.3 Validity can be defined as "the extent to which an account accurately represents the social phenomena to which it refers". Within the quantitative literature, reliability is often presented as a combination of reproducibility and consistency,⁸ and qualitative methods are often criticised for not achieving this.

A number of techniques may be used to increase the validity and reliability of a qualitative study, for example, respondent and research team validation and triangulation.⁹ Respondent validation involves asking participants whether they agree with the findings of a study or not support is provided for the validity of the technique if they agree.⁸ Transcripts can also be read independently by another researcher in order to discuss the emerging analysis and check on major themes. Clearly this approach may be problematic if someone disagrees with or misunderstands the researcher's interpretations.^{8,10} A process of triangulation may also be used to validate findings. Originally this meant using three methods at the same time but it can be used to describe any study using more than one technique on the same population.8 Simple counting is also very useful for putting data in context, for example, how many quotes within an interview or series of interviews reflect a particular perspective.8

Generalisability

Qualitative methods are also criticised for their lack of generalisability to the population as a whole because the focus is on the unique phenomenon or community being investigated in its particular context. In this respect qualitative research has specificity,3 although the type of sampling approach one chooses may address some of these concerns. 11 For instance, one could follow the method of purposive sampling. This can be used to include respondents with as many different characteristics as possible, e.g. age, gender, social class, ethnicity, risk status, and so on, in order to elicit the widest range of responses.^{8,11} Similarly, the presentation of qualitative data

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with information about the context in which they were collected may allow extrapolation to similar contexts.

What seems increasingly clear is that quantitative notions of reliability, validity and generalisability may be problematic when used to judge the 'quality' of qualitative work. Some qualitative researchers propose the use of more appropriate terms to measure the quality and scientific rigour of their research, e.g. credibility, transferability, dependency, transparency and confirmability. However, these debates seem set to continue given that others argue that quantitative and qualitative research approaches do overlap and have many things in common. 14

Presentation of qualitative findings

A report presenting qualitative findings is expected to include quotes from fieldwork data (e.g. observations or interview quotes) in order to highlight, accentuate and support the claims made by the researcher. In general such excerpts will be chosen for their typicality, succinctness or unusualness. 15,16 In addition, although the focus is on 'meaning', some qualitative researchers may quantify results where they feel that a concept or issue is interpreted in the same manner by all participants and it is appropriate to do so.8 There also need to be data to show how the quotes fit into the context of the rest of the dataset; tables can be a useful means of presenting data from different interviews in a compressed form, for example, a summary of the answer to a particular question from all interviews in a table gives the reader a feel for the raw data and makes the process of analysis more transparent. When quoting participants particular care must be taken to ensure that selected quotations, incorporated in a statement of text, are from the range of interviews, not only from those interviewees who produced 'good' quotes. In addition, quotes can be identified by some key characteristics of the interviewee (e.g. gender, age and rural/urban) but still kept anonymous.

Subjectivity

Like any study, qualitative research is subject to bias, and the need to be transparent and systematic remains a constant concern. At the same time qualitative methodology acknowledges the subjective role of the researcher in the research process. This is balanced by the need to be continually reflexive about the process of data collection and analysis, and how it is influenced by the social, historical, political and personal context. ^{17,18} One strength of qualitative research is the ability to acknowledge bias, value it and make its impact on the research process as explicit as possible. Transparency about the theoretical framework within which the research takes place and the exact process of data collection and analysis is an important aspect of this process.

Ethical issues

In the main, qualitative research will involve working with people and ethical issues will inevitably arise. The two main areas of concern for any qualitative study are those of gaining informed consent from participants and maintaining promises of anonymity and confidentiality. The impact upon an individual from taking part in any study should also be considered, and post-interview/focus group support made available if necessary.

Promises of anonymity and confidentiality

Care must be taken to avoid the risk of an individual being identified, especially as part of observations or when the interviews covered: (a) sensitive topics, such as reproductive decision making in families with hereditary

disease, or sexual abuse; (b) places where people are likely to know each other well or (c) when there are very few study participants. All qualitative researchers should reflect upon the extent to which they can make promises to participants about issues of confidentiality and anonymity.¹⁹ There are practical mechanisms for maintaining confidentiality such as password protecting all transcripts that are kept on a computer, locking all cupboards with any tapes or personal data, and anonymising all transcripts. However, the anonymising of qualitative data can be particularly problematic as participants should be able to recognise their own accounts but be unidentifiable to others.²⁰ In practice this may be impossible to achieve without decontextualising the process to the extent that participants do not recognise themselves, or leaving some details unchanged and participants open to recognition. According to Lee, "all this might not matter too much if it were not for the fact that qualitative researchers, whatever the topic of their research, often cannot help discovering secret, discrediting or sensitive information".²¹ Hence in some circumstances data may have to be jettisoned in order to maintain these promises.8

Informed consent

In recent years there have been many debates about the true nature of informed consent when taking part in any type of research study, particularly with the introduction of the Data Protection Act.^{22–24} Nevertheless, consent should involve "the giving of clear information about what the research is for and how it will be used".²⁵ In addition, it should be viewed as a continual process, not just a one-off event after someone has signed a consent form.

In health and social care research this process may be particularly contentious given the potentially competing tensions between an individual's rights (e.g. not to participate) versus the long-term benefits of research for public health. As such, researchers have been encouraged to pay particular attention to issues of how professionals exchange information about research participants among their own professional group,²⁵ and the potential of coercion to participate.

Benefits and limitations of qualitative methods

The two main limitations of undertaking qualitative research are the extent to which one's results are generalisable to the population as a whole, and the replicability of the study itself. As we previously noted these are generally forsaken in aid of generating a more indepth valid account,³ or different criteria may be used to assess the quality of the research. Qualitative research is also open to different interpretations, so the approach one chooses as an analysis strategy may not illuminate the issues that a reader feels are most relevant. The time and cost of undertaking a qualitative research project may also be of concern.

The strength of qualitative methods is that they can generate rich, detailed accounts of complex social phenomena. Qualitative methods enable researchers to focus upon people's lived subjective experiences, to explore the meanings in respondents' accounts, and enhance our understanding of how participants construct their social world; researchers can then critically examine the underlying processes which may frame these accounts. 15,26,27 Furthermore, the complexities and contradictions of a particular phenomenon, social group or social setting can be explored and examined in a detailed and comprehensive manner. Ultimately, the results of qualitative research can be used to inform health and social care policies. Health and social care research may also challenge societal stereotypes (e.g. see Humphreys 28) and

perhaps in the long term contribute towards the empowerment of marginalised groups.

Conclusions

Qualitative research methods, whether used on their own or in conjunction with quantitative studies, are increasingly valued in health and social care settings and recognised as an approach that, when done well, can illuminate some of the many complexities of human feelings and behaviour. This paper should go some way to helping readers assess the 'quality' of qualitative studies, as well as being able to identify the ethical issues that they need to address. The issues around analysis and interpretation of qualitative data will form the basis of the final paper in this mini-series on qualitative research.

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References

- Bowling A. Research Methods in Health (2nd edn). Buckingham,
- UK: Open University Press, 2002. Murphy E, Dingwall R. *Qualitative Methods and Health Policy Research*. New York, NY: Aldine de Gruyter, 2003.
- Van Teijlingen E, Forrest K. The range of qualitative research methods in family planning and reproductive health care. *J Fam Plann Reprod Health Care* 2004; **30**(3): 171–173.
- Forrest K, Wilson BJ, van Teijlingen E, et al. To tell or not to tell: barriers and facilitators in family communication about genetic risk. Clin Genet 2003; 64: 317-326.
- Critcher C, Waddington D, Dicks B. Qualitative methods and welfare research (Chapter 4). In: Williams F, Popay J, Oakley A (eds), Welfare Research: A Critical Review. London, UK: UCL Press, 1999.

 Coffey A, Atkinson P. Making Sense of Qualitative Data: Complementary Research Strategies. London, UK: Sage, 1996.
- Hammersley M. Reading Ethnography: A Critical Guide. London, UK: Longman, 1990.
- Mason J. Qualitative Researching (2nd edn). London, UK: Sage,

- Seale C. The Quality of Qualitative Research. London, UK: Sage,
- Opie A. Qualitative research, appropriation of the 'other' and 'empowerment'. *Fem Rev* 1992; **40**: 52–69. Mays N, Pope C. Qualitative research in health care: assessing quality
- in qualitative research. *BMJ* 2000; **320**: 50–52
- Robson C. Real World Research. Oxford, UK: Blackwell, 1995.
- Beeson D. Nuance, complexity, and context: qualitative methods in genetic counselling research. J Genet Couns 1997; 1: 21–40
- 14 Oakley A. Experiments in Knowing. Gender and Method in the Social Sciences. Cambridge, UK: Polity Press, 2000.
- Forrest K. Befriending young people: the fostering or loaning of friendship? A qualitative study exploring befrienders' experiences. MLitt thesis, University of Aberdeen, Aberdeen, UK, 2002.
- Phillip K. New perspectives in mentoring. PhD thesis, University of Aberdeen, Aberdeen, UK, 1997.
- Holland J, Ramazanoglu C. Coming to conclusions: power and interpretation in researching young women's sexuality (Chapter 7). In: Maynard M, Purvis J (eds), Researching Women's Lives from a
- Feminist Perspective. London, UK: Taylor & Francis Ltd, 1994.

 18 Brechin A. Sharing (Chapter 6). In: Shakespeare P, Atkinson D, French S (eds), Reflecting on Research Practice. Buckingham, UK:
- Open University Press, 1993.

 19 British Sociological Association. Statement of Ethical Practice (2002). http://www.britsoc.org.uk/about/ethic.htm.
- Grinyer A. The anonymity of research participants: assumptions, ethics and practicalities. *Social Research Update*, Issue 36. Guildford, UK, Department of Sociology, University of Surrey, Spring 2002.
- Lee RM. Doing Research on Sensitive Subjects. London, UK: Sage, 1993.
- 22 Doyal L. Informed consent in medical research: journals should not publish research to which patients have not given fully informed consent – with three exceptions. *BMJ* 1997; **314**: 1107.
- Strobel J, Cave E, Walley T. Data protection legislation: interpretation and barriers to research. *BMJ* 2000; **321**: 890–892. Rogers WA, Draper H. Confidentiality and the ethics of medical
- ethics. *J Med Ethics* 2003; **29**: 220–224. Blaxter M. Ethical issues in the teaching of qualitative research
- method (Chapter 1). In: Alderson P (ed.), Qualitative Research: A Vital Resource for Ethical Healthcare, vol. 2. London, UK: The Wellcome Trust, 1999.
- Sarangi S, Coulthard M. Discourse and Social Life. London, UK: Longman, 2000.
- Smith JA. Semi-structured interviewing and qualitative analysis. In: Smith JA, Harre R, Langenhave L (eds), Rethinking Methods in Psychology. London, UK: Sage, 1995.
- Humphreys L. Tearoom Trade: Impersonal Sex in Public Places. Chicago, IL: Aldine, 1970.

The David Bromham Annual Memorial Award DYNAMIC DOCTORS DESERVE RECOGNITION

David Bromham was the first Chairman of The Faculty of Family Planning and Reproductive Health Care. Sadly, halfway through his second term of office he became ill, and in 1996 he died. His loss was tragic, not only for the Faculty, but for the family planning movement in Britain and worldwide.

Throughout his life, David was an energetic and inspirational man. Whilst in Leeds, he set up an assisted conception programme, which was and is one of the most successful in the world. In 1991 he set up a fertility control unit designed to provide a more accessible service for the termination of pregnancy. He also carried out an extensive programme of research and was closely involved with the British Journal of Family Planning (now the Journal of Family Planning and Reproductive Health Care).

The David Bromham Memorial Award

David Bromham would have said: 'Just do it! You have an idea? Follow it up. Keep it simple, don't worry if it fails. Any and every effort aids progress.' Although David was a man of action he also knew how difficult it is to make time to further a project in the middle of a busy life. Dynamic doctors therefore deserve recognition.

The David Bromham Memorial Award is in remembrance of a man who was happiest when deeply immersed in all that was happening within his fields of interest and who never wasted any time

The Award is not intended to be a prize for long and distinguished service, rather for a piece of work which through inspiration, innovation or energy has furthered the practice of family planning and reproductive health care in any way and any setting. It is not a research grant. Younger health professionals sometimes undervalue their achievements but they are exactly the people that David Bromham would have wished to see encouraged as this award now acknowledges

The award will be made either to an individual (who must be a current Diplomate or Member of the Faculty) or to a team, which could be multidisciplinary. In the latter case, the lead doctor should be a current member of the Faculty. You may nominate yourself or your team or be nominated by someone else.

The award itself, which will be presented at each year's AGM, will comprise a monetary sum and inscribed memento.

The award is sponsored by the Pharmaceutical Contraceptive Group and its member companies: Hoechst Marion Roussel, Janssen-Cilag, Organon Laboratories, Pharmacia & Upjohn, Schering Health Care and Wyeth Laboratories, with contributions from the members of the Faculty, affiliated groups and other organisations with which David had links.

Nomination is by completion of a form that can be downloaded from the Faculty website at www.ffprhc.org.uk. Completed submissions must be received at the Faculty