

# Qualitative Research and Its Place in Health Research in Nepal

van Teijlingen E,<sup>1</sup> Simkhada B,<sup>2</sup> Porter M,<sup>3</sup> Simkhada P,<sup>4</sup> Pitchforth E,<sup>5</sup> Bhatta P<sup>3</sup>

<sup>1</sup>School of Health & Social Care

Bournemouth University, UK

Manmohan Memorial Institute of Health Sciences

Nepal

<sup>2</sup>Green Tara Nepal

Kathmandu, Nepal

<sup>3</sup>School of Medicine & Dentistry

University of Aberdeen, UK

<sup>4</sup> ScHARR, University of Sheffield, UK

Manmohan Memorial Institute of Health Sciences

Nepal

<sup>5</sup>RAND Europe, Cambridge, UK

## Corresponding Author

Van Teijlingen E

School of Health & Social Care

Bournemouth House 19, Christchurch Road

University of Bournemouth

Bournemouth, BH1 3LH

England, UK

E-mail: vanteijlingen@bournemouth.ac.uk

## Citation

van Teijlingen E, Simkhada B, Porter M, Simkhada P, Pitchforth E, Bhatta P. Qualitative Research and Its Place in Health Research in Nepal. *Kathmandu Univ Med J* 2011;36(4):301-5.

## BACKGROUND

Until recently, health and health services research in Nepal has been dominated by quantitative research, often using surveys and questionnaires and providing statistical data; e.g. an overview in numbers as highlighted in a recent review of health and medical research in Nepal.<sup>1</sup> There are many examples of good quantitative articles in the Kathmandu University Medical Journal (KUMJ), one example from the most recent issue would be Aryal's survey analysis of the

## ABSTRACT:

There has been a steady growth in recent decades in Nepal in health and health services research, much of it based on quantitative research methods. Over the same period international medical journals such as *The Lancet*, the *British Medical Journal* (BMJ), *The Journal of the American Medical Association* (JAMA) and the *Journal of Family Planning & Reproductive Health Care* and many more have published methods papers outlining and promoting qualitative methods.

This paper argues in favour of more high-quality qualitative research in Nepal, either on its own or as part of a mixed-methods approach, to help strengthen the country's research capacity. After outlining the reasons for using qualitative methods, we discuss the strengths and weaknesses of the three main approaches: (a) observation; (b) in-depth interviews; and (c) focus groups. We also discuss issues around sampling, analysis, presentation of findings, reflexivity of the qualitative researcher and theory building, and highlight some misconceptions about qualitative research and mistakes commonly made.

determinants of post-partum amenorrhea among mothers in rural Nepal.<sup>2</sup> Another common example of quantitative studies would be an institution-based health survey such as the one in KUMJ by Pandey and colleagues of pupils at schools in Bhaktapur.<sup>3</sup> A further example of quantitative research would be a community-based survey to determine the proportion of pregnant women in a certain district attending antenatal care or the proportion of Nepalese

women aged 16 to 24 who used a condom during their first sexual intercourse. Quantitative research can inform us thereby of what is happening in health education and health care delivery in Nepal. It addresses the ‘how many’ questions, i.e. what proportion of the population does Y, likes X or prefers Z, but not the ‘why’ questions. Qualitative methods, on the other hand, address the ‘how’ and ‘why’ questions, for example, “why do people use too much alcohol, tobacco or other drugs?” or “Why do some doctors prescribe drugs to patients with certain symptoms whilst others are more likely to operate on people with the same conditions?” or “How do doctors cope with making medical mistakes?”<sup>4</sup> Qualitative methods can also help to explain quantitative data, and to refine quantitative measures.<sup>5</sup> Qualitative research is a highly specialized field with its own methods, ways of sampling, analysis and dissemination of findings.

‘Qualitative Methods’ here refers to the three most commonly used techniques in health and social care, namely: (a) observation; (b) in-depth interviews; and (c) focus group discussions (Table 1). Before we discuss these key qualitative methods in detail, we outline why they should be used and when it is most appropriate to use them.

**Table 1. Common qualitative techniques<sup>4</sup>**

Method	Specific issues to be considered:
Interviews	Face-to-face, telephone or Internet based
	Structured, semi-structured or unstructured
Focus groups	With existing groups or specifically invited participants
	Similar people or people with different characteristics
Observation	Outsider or participant observation
	Structured or unstructured

Each of these popular techniques allows the respondent to ‘speak for themselves’ either during an interview or focus groups or through their actions being carefully observed. They provide insight into why people do the things they do and the reasoning behind their actions. Additionally, observation may illustrate what people actually do, rather than what they say they do. Instead of ticking a box on a questionnaire which may or may not conform to their situation, they describe their feelings or actions for themselves. This enables a greater depth and quality of information to be collected, leading to a greater understanding of why people do the things they do. Qualitative methods are especially suitable for exploring new topics and obtaining insightful data on complex issues. For example, Regmi and colleagues studied the relatively new phenomenon of dating among young people in Nepal.<sup>6,7</sup> Since no one else has done this kind of research before there is no existing questionnaire that can be used, therefore explorative qualitative research offers insights not otherwise available.

## THE QUALITATIVE RESEARCHER

The role of the researcher is quite different in qualitative research compared to quantitative research. The researcher plays a more active role in data collection and the interaction between researcher and participant can often be crucial. For example, as interviewers come into contact with a participant, they need to be aware of their own role and the effect they may have had on the participant and their answers. This is called being reflexive and is an important part of qualitative research from study design to data interpretation. The next section outlines the three key qualitative methods, each with one example.

## INTERVIEWS

Face-to-face interviews are the most commonly used method, but telephone and internet interviews are increasing.<sup>8</sup> Interviews range from structured, through semi-structured to unstructured format, depending how strictly the schedule is followed. Structured interviews are conducted by interviewers using a questionnaire with fixed questions and sometimes pre-coded responses. Qualitative researchers typically use semi-structured or unstructured interviews. In semi-structured interviews the researcher wants to make sure a number of key questions or topics are addressed, but the order in which they are covered is determined by the interviewee, not the interviewer. The schedule or aide-mémoire may change as interviews progress in order to accommodate new topics emerging from earlier interviews. The term ‘unstructured’ refers to interviews in which the interviewer sets out to address a few key issues, but leaves it largely to the interviewee what is discussed and in what order.

### Example interview studies

A study which lends itself to face-to-face interviews is being conducted by one of the authors (BS) at present in Nepal. She is interested in the decision made by women who recently had a baby about whether or not to attend for antenatal care. As the literature suggests that the decision to attend antenatal services is not taken by the woman alone, BS also interviewed the husband and mother-in-law where possible. She recruited women who did and did not attend through the local hospital and health post. She met the local health worker and attended a training day for health volunteers in order to gain their confidence and support.<sup>9</sup>

Our second example is an interview study of trekking guides on sexual health issues conducted in Kathmandu, Pokhara and trekking areas in Annapurna, Langtang and Everest.<sup>10</sup> The in-depth interviews were conducted by PB who is a native Nepali speaker and explored the participants’ attitudes towards sexual health, their reasons for having sex with tourists/trekkers, patterns of risky sexual behaviours and knowledge of sexually transmitted infections and HIV (Human Immunodeficiency Virus). This

topic is particularly suitable to this method as a sensitive issue such as sexual behaviour is more likely to be disclosed in the more confidential private setting of individual face-to-face interviews.

## FOCUS GROUPS

'Focus groups' refer to group interviews with a researcher who facilitates the discussion. Focus groups are widely used to seek opinions and experiences of (potential) service users and health care providers. The underlying notion is that focus group participants interact with each other in ways that the facilitator could not predict beforehand. Usually the group members trigger off ideas amongst themselves, ask each other questions, deliberate over issues and hence reconsider their own understandings of their specific experiences or opinions. The dynamics of the focus group and interaction among participants is a key feature of the data.<sup>11</sup> Generally, focus groups work well for topics which people "could talk about to each other in their everyday lives-but don't".<sup>12</sup> Focus groups should not be seen as an opportunity to interview several people at once, as people may express different views outside the group. They often present organisational challenges in getting six to 12 or 15 participants together at one time.<sup>11</sup>

### Example focus group study

A non-governmental organisation (NGO) keen to set up health clinics in remote parts of Nepal might want to know the views of different groups in the locality - adult males, adult females, young women, young men – and hence hold separate focus groups to address such issues as perceived needs, current barriers to health care, appropriate opening hours or attitudes of health care staff. As part of a study of the influence of user demand on prescription behaviour, the Britain Nepal Medical Trust, an international NGO, conducted focus groups with patients attending health facilities to explore patients' attitudes towards drugs.<sup>13</sup> Another example is a focus groups run with young people to illuminate the changing attitudes in Nepal toward love, marriage, and childbearing.<sup>14</sup>

## OBSERVATION

The traditional anthropologist would study a community or group of people by living with them for some time, asking questions about their everyday life, their religious festivals, their myths and so on. For example, a medical anthropologist might live with a community in a remote part of Nepal to study people's everyday lives, their decision-making around accessing health care (formal or informal), or the organisation of their health care system. As part of an ethnographic approach, observations are typically combined with informal conversations with those being observed and with more formal interviews. This allows the researcher to directly observe, but also seek greater explanation and understanding around events being

observed. Observation can provide additional information that is not obtained through other qualitative methods. For example, an interviewer can observe facial expressions and body posture of an interviewee that can trigger doubt about what the person is stating. The interviewer can ask for clarification, or suggest that the interview is continued at a different place, away from the prying ears of partners or neighbours. BS used health workers to gain access to interviewees in Nepal, but quickly found that the positive things which interviewees said about the health worker were belied by their facial expressions and body posture.

Observations can be unstructured and unobtrusive, with a researcher walking around and making occasional notes, or they can be fairly structured. For example, an educational researcher attending an epidemiology lecture for medical students at a university might note every five minutes who is paying attention, who is asleep and who making notes, etc. The qualitative aspect of such a structured set of observations lies in the fact that the observer often has to make a qualitative judgement on how to code each observation.

Observers can be outsiders such as sociologists who come in to directly observe an existing situation, or participants such as patients or staff who actively participate in the situation.<sup>4</sup> Participant observation has the advantage that those observed are less conscious of the observation and less likely to change their behaviour. For example, a Nepalese midwifery student might observe a training event as a group member, of course taking considerations about research ethics into account.

## THE NEED FOR INTERPRETERS

Research in some parts of Nepal may need interpreters.<sup>15,16</sup> Using translation in any kind of research raises issues of quality and accuracy. Techniques such as back translation of research tools such as questionnaires should be common practice. Qualitative research raises particular issues that need careful consideration. When an interpreter is used, this effectively adds another layer to the research interaction and the researcher needs then to reflect not only on their own effect on the research process, but the added effect of the interpreter.<sup>15</sup> When using semi or unstructured interviews, qualitative researchers often aim for an interview to flow like a conversation. Using an interpreter, means the flow is inevitably disrupted to allow time for translation back and forth. An alternative model of practice is to train the interpreter to carry out much of the interview themselves and only translate main points to the researcher during the interview. This allows greater flow in the interview, but removes the researcher from the interaction and depending on the particular study, may be impractical. It is important always to consider best use of interpreters in qualitative research, and the effect they have on the research process.<sup>16</sup>

## SAMPLING

Unlike quantitative methods where the gold standard is random sampling, qualitative studies use purposive, snowball or opportunistic sampling.<sup>8</sup> Purposive sampling selects participants according to different characteristics such as age, gender, social class, ethnicity, risk status and so on, in order to elicit the widest range of responses.<sup>17</sup> Snowball sampling is a technique whereby one research participant gives the researcher the name of another, who in turn provides the next respondent.<sup>18</sup> Snowball sampling is useful when there is no sampling frame or the topic of study occurs infrequently. For example studying the health care needs of illegal drug users in Pokhara, a researcher may have access to one or two drug users through the police or local health clinic. If these drug users participate in the study, they are asked for contact details of other drug users who might be willing to participate. Opportunistic sampling is often used for small explorative pilot studies where easily accessible populations are targeted.

The chosen method of sampling in any study will depend on the particular research question being addressed or the ease of access to a particular population at a certain time. It should be noted however, that because the sample is not randomly selected, results cannot usually be generalised to a wider population. Perhaps the solution is to use mixed methods, combining the valuable insights which typically emerge from a qualitative study, with the generalisability achieved through a quantitative study of a representative sample.<sup>19</sup>

## QUALITATIVE ANALYSIS

Qualitative data are usually transcribed audio recordings. Transcribing is surprisingly time consuming; one hour of recording can take a skilled secretary four to five hours to transcribe word for word. Transcriptions could be accompanied by notes describing the mood of the interviewee, the setting where the interview took place, any incidents, or any other information which may help to understand the particular interview. The transcripts can then be analysed by hand or by one of a number of computer software packages. For smaller studies and novice researchers, it is advisable to do the coding by hand through reading and re-reading the transcripts using what is called an inductive thematic analysis.<sup>17,20,21</sup> As Subedi recently outlined: "The researcher assesses, analyses, and interprets the empirical materials ... (the researcher) moves from field text to a research text, notes and interpretations."<sup>22</sup> A qualitative analysis usually leads to a number of key themes, each supported by one of more sub-themes.

## DISSEMINATION OF QUALITATIVE RESEARCH

The findings of qualitative research are usually presented in text format. First the key themes are listed and explained.

Usually verbatim quotes from focus group discussions or from interviews are used to illustrate the key themes distilled in the analysis. These provide rich descriptive data which generally answer the question of 'why' people act as they do.<sup>23</sup> When transcribing qualitative data it is obvious that many people do not speak in grammatically correct sentences. The researchers have to decide whether to present quotes verbatim or to add words which make the quote and its contents easier to understand. Table 2 provides an example of disseminating qualitative research; this particular quote relates to a sub-theme of 'safe sex' in the above mentioned study of Nepalese trekking guides.<sup>10</sup> This example also illustrates the common practice of labelling quotes to allow the reader to understand the context a little better without identifying the interviewee.

**Table 2. Example of using quotes in qualitative publication.<sup>10</sup>**

Male guides reported unsafe sexual practices despite having adequate knowledge, especially irregular condom use:

"...I didn't use last time but I used (a condom) in previous sexual intercourse. But last time we had sexual intercourse without condoms because we didn't remember to use condoms. It happened in such a rush." (Guide, age 35)

## CONCLUSION

In this paper we have highlighted the role of qualitative research in the growing field of health and health services research in Nepal. We introduced the three main qualitative methods (with relevant examples) and discussed sampling, analysis, dissemination and the use of interpreters. Conducting rigorous qualitative research is challenging and can be resource-intensive but we hope to have shown the benefits of doing so. Qualitative research can help to develop a deeper understanding of the complex issues influencing health and health service use and give insight into the design of intervention programmes. We would like to finish off with the warning that qualitative research is not as easy as some novice researchers think it is. A doctor or nurse who conducts many clinical interviews every day might be tempted into thinking: "I do interviews with patients all the time; research interviews can't be that different." The difficulty lies in being able to step out of that health professional role, letting interviewees talk without directing the conversation and using the language of the interviewees or focus group participants rather than medical jargon.

## REFERENCES

1. Simkhada P, Baral YR, van Teijlingen E. Health and Medical Research: A Bibliometric Review, *Asia Pac J Public Health* 2010; 22: 492-500 <http://aph.sagepub.com/content/22/4/492.full.pdf+html>
2. Aryal TR. Determinants of post-partum amenorrhoea among Nepalese rural mothers: A multivariate analysis. *Kathmandu Univ Med J* 2010; 8: 5-11

3. Pandey S, Dudani I, Pradhan A. Health profile of school children in Bhaktapur. *Kathmandu Univ Med J* 2005; 3: 274-280.
4. 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: 171-73.
5. FHI. Many uses for qualitative research. Network. 2002; 22, No 2 (accessed on 05.03.2010) [http://www.fhi.org/en/RH/Pubs/Network/v22\\_2/NWvol22-2manyuseQR.htm](http://www.fhi.org/en/RH/Pubs/Network/v22_2/NWvol22-2manyuseQR.htm)
6. Regmi PR, Simkhada PP, van Teijlingen ER. "Boys Remain Prestigious, Girls Become Prostitutes": Socio-Cultural Context of Relationships and Sex among Young People in Nepal. *Global J Health Sci* 2010; 2: 60-72.
7. Regmi P, Simkhada P, van Teijlingen ER. Sexual and reproductive health status among young people in Nepal: opportunities and barriers for sexual health education and service utilisation. *Kathmandu Univ Med J* 2008; 6: 248-256.
8. Bowling, A. Research methods in health. Open University Press Philadelphia, PA. 2002.
9. Simkhada B, Porter M, van Teijlingen E. The role of mothers-in-law in antenatal care decision-making in Nepal: A qualitative study. *BMC Pregnancy Childbirth* 2010; 10: 34 Online journal, web address: [www.biomedcentral.com/1471-2393/10/34/abstract](http://www.biomedcentral.com/1471-2393/10/34/abstract)
10. Simkhada P, Bhatta P, van Teijlingen E, Regmi P. Sexual health knowledge, sexual relationships and condom use among male trekking guides in Nepal. *Cult Health Sex* 2010; 12: 45-58.
11. van Teijlingen E, Pitchforth E. Focus Group Research in Family Planning and Reproductive Health Care. *J Fam Plann Reprod Health Care* 2006; 32: 30-32.
12. Macnaghten P, Myers G. Focus groups, In: Seale C, Giampietri G, Jaber F, Silverman D. (eds.) *Qualitative Research Practice* Sage: London, 2004; p.65.
13. Holloway KA., Gautam BR., Harpham T, Tabet A. The influence of user fees and patient demand on prescribers in rural Nepal. *Soc Sci Med* 2002; 54: 905-18.
14. Thapa S, Davey J, Waszak C, et al. Reproductive Health Needs of Adolescents and Youth in Nepal. Kathmandu, Nepal. Family Health International. 2001.
15. Jentsch B. The 'interpreter effect': rendering interpreters visible in cross-cultural research and methodology. *J Eur Soc Policy* 1998; 8:275-289.
16. Pitchforth E, van Teijlingen E. International Public Health Research involving interpreters: a case study approach from Bangladesh, *BMC Public Health* 2005; 5: 71 See: <http://www.biomedcentral.com/content/pdf/1471-2458-5-71.pdf>
17. Mason J. *Qualitative Researching* (2nd edn). London, UK: Sage, 2002.
18. Atkinson R, Flint J. Accessing hidden and hard-to-reach populations: Snowball Research Strategies Soc Res Update. 2001; 33 see: <http://sru.soc.surrey.ac.uk/SRU33.html>
19. DiCiccio-Bloom B, Crabtree BF. The qualitative research interview. *Med. Educ* 2006; 30:4 314-321.
20. Forrest Keenan K, van Teijlingen E, Pitchforth E. The analysis of qualitative research data in family planning and reproductive health care. *J Fam Plann Reprod Health Care* 2005; 31: 40-43.
21. Attride-Stirling J. Thematic networks: an analytic tool for qualitative research. *Qualitative Research* 2001; 1: 385-405.
22. Subedi PK. A research methodology for social sciences. *Nepal Popul J* 2011; 16: 151-158.
23. Pitchforth E, Porter M, van Teijlingen E, Forrest Keenan K. Writing up and presenting qualitative research in family planning and reproductive health care. *J Fam Plann Reprod Health Care* 2005; 31: 132-135.