

Qualitative Methods

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Qualitative Research

Research design should be appropriate for the research question. If that question is about the effectiveness of treatment, then a randomised controlled trial (RCT) is the best design to choose; if about the prevalence of a particular eye problem within a community, then a sample survey is needed. Other questions raised by the practice of community ophthalmology are essentially qualitative questions – they are not asking ‘how many?’, or ‘what proportion?’, but about the *meaning* of symptoms, or health behaviour.

As in any area of health care, social factors are as important as clinical ones in determining who suffers from disease, who presents for treatment and how they manage treatment regimes. The aims of qualitative research are to understand the motivations and perceptions of patients and providers and how they impact on health behaviour. Many qualitative studies focus on behaviour in its ‘natural’ or everyday context, and consider how family, community and cultural factors impact on individual beliefs and behaviour.

Qualitative Data Collection

A number of methods of collecting qualitative data are commonly used in health research and in any one study it is usual to use more than one method of collecting information. These methods include:

- ***In depth interviews.***

Talking to patients (or non-attenders) in depth about their perceptions of eye health and disease, what they do to protect their health, and their beliefs about western and non-western health systems, can help providers understand both risk factors for disease and potential barriers to treatment.

- ***Focus group interviews.***

There may be advantages in interviewing people in a group setting, especially within a culture where people are not forthcoming with opinions, or when the researcher is interested in issues which

may be difficult to raise in one to one interviews, such as dissatisfaction with services provided.

- ***Participant observation.***

This refers to the direct observation of behaviour by the researcher who is also a ‘participant’ in social life. What people do can be very different to what they say they do in an interview or in a survey. Living or working within a community provides an opportunity to see health beliefs from the point of view of potential clients, with an insight into the constraints on their behaviour, and the rationale for apparently irrational beliefs.

Nick Mays and Cathy Pope have written an excellent short guide for health researchers on using these methods.¹ The aim of qualitative methods of data collection is to help understand eye care from the point of view of the community, so that issues such as risk-taking behaviour, or non-compliance, or non-attendance can be seen in their cultural context. Martine Donoghue, for instance, in her study of barriers to the use of cataract services, found that the costs of treatment, fear of treatment and perceptions of ageing, rather than ‘ignorance’, were likely causes of non-attendance in India and Nepal.² In another example, Parul Christian and colleagues³ found that women in Nepal saw night blindness as a normal part of pregnancy, and not an illness for which they should seek treatment. Studying the disease in the context of the lives of women allowed the researchers to understand why they did not seek treatment for what appeared to be a disabling condition.

Of course, community health workers also have their own culture which can be studied using qualitative methods. A participant observation of an eye clinic could be used to identify better ways of providing care, or to understand barriers to effective communication with patients.

The Uses of Qualitative Work

In community ophthalmology, a study design may be based solely on these qualitative methods, with the aim being to explore one aspect of health beliefs or behaviour in depth. In other studies, they are combined with other methods. Some common uses in larger studies include:

- ***An essential first step in survey design.***

Qualitative methods, such as in depth interviews, can be used to develop the

questions for a survey instrument, to ensure that the terms used are meaningful to the respondents, and that the categories used reflect those used by the community.

- ***Exploring the ‘meaning’ of survey results.***

A local survey or review of clinic records might reveal that the use of traditional remedies is common among people with trachoma, but a more in depth qualitative study could address why traditional remedies are chosen. In a study of trachoma in The Gambia, for instance, Mabey and colleagues found that the provision of antibiotics and free treatment was not enough to eradicate endemic disease.⁴ In addition, they suggest that clinicians need to understand what motivates parents to seek treatment (especially if children are asymptomatic) and to understand how everyday practices, such as face washing, as well as social conditions impact on disease prevalence. They suggest that involving the community in a control programme may be the most effective method.

- ***Rapid needs assessment.***

Qualitative methods can be combined with quantitative methods to assess likely service needs. They may be particularly useful for identifying how services could best be provided, and what the likely barriers to use might be.

Criteria for Judging Qualitative Research: Usefulness and Quality

Professionals reading qualitative research reports often have concerns about how generalisable the research is, particularly when it is based on only one site or a small number of people being interviewed. Unlike samples in quantitative studies, qualitative samples are rarely randomly drawn from the population of interest, so they are not statistically generalisable. However, if done well, qualitative research should be theoretically generalisable, in that the ideas developed should have some relevance beyond the actual participants in the study. Readers can ask themselves two questions to gauge how useful the research is for them:

- Has this research report made me think differently about my practice, or the motivations of my patients, or the problems they may face in completing treatment regimes? This is a question about how useful the research is in *sensitising* practitioners to aspects of health behaviour they may have only thought about from a ‘professional’ perspective.

- If this report is about a different client group, or a different community, are the general ideas relevant to the community within which I work? This is a question about theoretical generalisability.

As for any research design, a well conducted study should demonstrate the sound application of methodological principles and well grounded interpretation. The following criteria are a useful checklist for readers in judging the quality of a qualitative study:

- **A clear sampling strategy.**

If not randomly chosen, how were the interviewees selected? Were they chosen to represent the range of patients with this eye problem, or were new people interviewed until new conclusions could not be determined from the interviews? (This is often called *saturation*).

- **Steps taken to reduce threats to reliability and validity.**

This might include taping and transcribing interviews to ensure accuracy; using more than one researcher to analyse data to reduce researcher bias; including some basic counts of responses.

- **Some account of the context.**

In qualitative research, it is important to

understand how the context of the study might have affected the data collected: who did the interviews, and might this have affected respondents? Were interviews done in the home or in the clinic? In focus groups, were some participants (such as women, or elders) less able to give their opinions? A summary of this context helps the reader assess the validity and generalisability of the findings.

- **How 'deviant cases' were accounted for.**

One key way to strengthen faith in conclusions is deliberately to 'test' emerging ideas against negative cases, in order to try to falsify them. The researchers should demonstrate how they looked for cases which disproved their conclusions.⁵

- **Theoretical context.**

Although 'theory' may seem irrelevant to practical health research, good qualitative studies will account for health behaviour in the context of a theoretical account of social behaviour. They will make some reference to how a body of theory as well as other research in the area has contributed to the current research question and the interpretation of results.⁵

In summary, well conducted qualitative

research can provide invaluable insight into eye care related health behaviours and the use of services. Together with other study designs, qualitative studies can improve our understanding of how eye care is managed in the context of everyday life.

Acknowledgement

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References

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Test will consist of a multiple choice question paper:

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Those who achieve pass standard or above will receive a certificate confirming the standard achieved. This certificate is now accepted as equivalent to the basic science sections of the ophthalmology examinations of several countries.

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- 8 Glaucoma
- 9 Lens and cataract
- 10 Retina and vitreous

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