QUALITATIVE RESEARCH METHODS

Why is it that people continue to smoke when the evidence about harmful effects of smoking is all around them and known to those who smoke?

Why do people not take the medicine prescribed for them?

Why do clinicians adopt innovations of unproven effectiveness while failing to adopt innovations of proven effectiveness?

What difference has the involvement of doctors in management made to the management of health services?

These are questions not easily answered by the quantitative research designs used commonly within the medical profession. They are however the type of questions best answered by qualitative research methods instead. An area of research which has really gained momentum in recent years, qualitative research is often regarded in some sense as competing with the more established (at least in medical circles) quantitative research. This is unfortunate, since the two approaches should be seen as complementary, providing different perspectives and answering different specific questions within any one broad area.

- Quantitative research is concerned with counting and measuring things, producing in particular estimates of averages and differences between groups (e.g., blood pressure of patients treated with two different drugs).

- Qualitative research has its roots in social science and is more concerned with understanding why people behave as they do: their knowledge, attitudes, beliefs, fears, etc. (e.g., why do patients prefer to be involved in decision-making about their treatment?)

Qualitative research allows the subjects being studied to give much ‘richer’ answers to questions put to them by the researcher, and may give valuable insights which might have been missed by any other method. Not only does it provide valuable information to certain research questions in its own right but there is a strong case for using it to complement quantitative research methods. For example if the area of interest has not been previously investigated then qualitative research may be a vital forerunner to conducting any quantitative research; for example, it’s impossible to carry out a meaningful structured questionnaire survey on patient satisfaction with a service, if the important issues to the patients surrounding the provision of that service are not known. At the other extreme qualitative research may also help you to understand the findings of quantitative research; for example, it is very easy to discover that some patients fail to keep appointments at outpatients clinics, but uncovering the reasons for this can be more difficult and conventional surveys may miss some of the important factors.
There are three main methods for collecting data in qualitative research. The resulting data is usually transcribed then analysed using one of a variety of techniques for analysis (development [and interpretation] on key themes for example). The three main methods of data collection are:

**Focus groups**

For this method the researcher brings together a small number of subjects to discuss the topic of interest. The group size is kept deliberately small, so that its members do not feel intimidated but can express opinions freely. A topic guide to aid discussion is usually prepared beforehand and the researcher usually ‘chairs’ the group, to ensure that a range of aspects of the topic are explored. The discussion is frequently tape-recorded, then transcribed and analysed.

*Example*: Rutman (1996) explored the policy and practice implications of caregivers’ experiences of powerfulness and powerlessness. She used group workshops to generate data. Brainstorming techniques were used to explore the ‘ideal’ caregiving situation.

**Direct observation**

Data can be collected by an external observer, referred to as a non-participant observer. Or the data can be collected by a participant observer, who can be a member of staff undertaking usual duties while observing the processes of care. In this type of study the researcher aims to become immersed in or become part of the population being studied, so that they can develop a detailed understanding of the values and beliefs held by members of the population.

Sometimes a list of observations the researcher is specifically looking for is prepared beforehand, other times the observer makes notes about anything they observe for analysis later.

*Example*: Johnson and Webb (1995) used observation to gather evidence about how value judgements made by staff and patients can impact on decision making. In this study, the researcher acted as a participant observer, working as a nurse on the ward while observing situations where nurses were faced with difficult moral choices. Observations were recorded as field notes and analysed for content.

**In-depth interviews**

Interviews use the same principle as a focus group, but subjects are interviewed individually, ideally in the patient’s own home. Interviews in qualitative research are usually wide ranging, probing issues in detail. They seldom involve asking a set of predetermined questions, as would be the case in quantitative surveys. Instead they encourage subjects to express their views at length. One particularly useful technique is the critical incident study, in which subjects are asked to comment on real events rather than giving generalisations. This can reveal more about beliefs and attitudes and behaviour. The researcher may be able to obtain more detailed information for each subject, but loses the richness that can arise in a group in which people debate issues and exchange views.

*Example*: Frederikson, et al (1996) used unstructured interviewing to explore family functioning and interpersonal relationships through the perceptions of women of Vietnam partners in New Zealand. The reasons they give for choosing this method include lack of adequate theory and definitions in the field to produce valid instruments for large-scale survey techniques and the complexity of the social interactions involved in the impact of post-traumatic stress disorder on families.
Further methods used in qualitative research studies

**Diary methods** - The researcher or subject keeps a personal account of daily events, feelings, discussions, interactions etc.

**Role-play and simulation** - Participants may be asked to play a role, or may be asked to observe role-play, after which they are asked to rate behaviour, report feelings, and predict further events.

**Case-study** - This is an in-depth study of just one person, group or event. This technique is simply a description of individuals.

**Problems**

The downside of qualitative research is that, invariably, only small numbers of subjects can be studied because data collection methods are so labour intensive. It is also often criticised for: being subject to researcher bias; the difficulties in analysing qualitative data rigorously; the lack of reproducibility and generalisability of the findings (i.e. findings may not be applicable to other subjects or settings). Proponents of qualitative research would however argue that there are strategies available to the qualitative researcher to protect against these potential biases and to enhance the rigour of the findings. Nicholas and Pope (1995) wrote an article in the BMJ specifically addressing techniques for improving the rigour of qualitative research findings. The methodological checklist below was developed by the same authors to help readers of qualitative projects assess the quality of published research but they also provide a useful checklist for researchers to consider when designing their own qualitative research.

**Check list for the appraisal of qualitative research**

– *Was the research question clearly identified?*
– *Was the setting in which the research took place clearly described?*
– *If sampling was undertaken, were the sampling methods described?*
– *Did the research worker address the issues of subjectivity and data collection?*
– *Were methods to test the validity of the results of the research used?*
– *Were any steps taken to increase the reliability of the information collected, for example, by repeating the information collection with another research worker?*
– *Were the results of the research kept separate from the conclusions drawn by the research workers?*
– *If quantitative methods were appropriate as a supplement to the qualitative methods, were they used?*

This helpsheet is intended only to provide an introduction to some of the key issues and techniques involved in qualitative research. As mentioned above there are several design issues to consider when conducting this type of research and we would advise new users of this research to seek further information before embarking on your own work. Please contact the R&D Support Unit on 01823 342799.

**References**

Miles MB and Huberman AM. An Expanded Sourcebook Qualitative Data Analysis - 2nd Edition. 1994
NHS Management Executive. College of Health: Consumer Audit Guidelines. 1994