Qualitative research

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"... many scientifically trained researchers are unaware of qualitative methods and some even take pride in their ignorance" (Black, 1994).

Few qualitative studies have been published in leading psychiatric journals, and fewer still have employed the term 'qualitative'. Does this arise from ignorance about the nature of qualitative research, when qualitative methods should be utilised, and what actually constitutes scientific qualitative research?

In the British Medical Journal Mays & Pope (1996) have argued that scientific knowledge could be advanced by the application of qualitative investigative methods. The Lancet, a journal with a strong emphasis on quantitative research, recently published an essay which emphasised the value of qualitative research in its own right (Macnaughton, 1996). Should psychiatric journals have a more positive attitude to papers describing qualitative research studies?

WHAT IS QUALITATIVE RESEARCH?

Qualitative research seeks to answer 'what', 'why' and 'how' questions, rather than 'how often' or 'how many'. The prime goal is not to enumerate, as is usually the case in quantitative research. The key characteristic of qualitative research is that it facilitates the researcher's understanding of the meaning assigned to the phenomena by those being studied. The direction of research is guided by the research subjects to a much greater extent than is usual with quantitative strategies. Hence, the recognition that qualitative research is particularly pertinent in providing insight into the dimensions of care that matter to those receiving the care.

Commonly used qualitative methods of data collection include semi-structured or in-depth interviews, focus group sessions and observation. It is less useful to think of each of these methods as having particular advantages and disadvantages, rather they have particular strengths and weaknesses when used in certain situations. In-depth interviews can provide detailed data on individuals' experiences, views and feelings. The interview is often led by the respondent, enabling the researcher to gauge issues of particular importance to him or her. However, it gives one little idea of how that person behaves in real-life situations. Observation is a better method for giving the researcher access to the details of naturally occurring interactions. Focus groups (groups of people gathered together to discuss pertinent issues, with discussion facilitated by the researcher) are useful in providing data on how individuals interact in a group situation. Group norms can be examined and the arguments employed to justify particular beliefs can be documented, as can the arguments applied to refute these. However, minority or sensitive views may not be voiced, or the group may be dominated by one vociferous individual with the researcher unable, therefore, to study the views of all individuals. If this is the researcher's purpose, individual interviews should be used.

The researcher may interview, on a oneto-one basis, in-patients at an adolescent psychiatric unit about their illness-related experiences and explore the issues that are most salient to them. They may also spend some time in the unit, observing their behaviour in this setting. The researcher may also convene focus groups to collect data on how the young people interact when asked to talk about their time in the unit, what examples they bring to bear to illustrate arguments and how they respond to the statements and positions of others. Such a design would enable the researcher to collect many data on the illness experience for an adolescent with mental health problems. Any single component - one-toone interviews, focus groups or observation - would allow for part of this experience to be documented. The scope of the

research could be further broadened by including a quantitative element, perhaps surveying young people in adolescent psychiatric units nationwide about their time in such care. One could even use the results of the qualitative elements to help inform the design of the questionnaire. The qualitative and quantitative elements yield important and complementary information.

All of these components have strengths in themselves. Potential problems arise when the researcher claims to have gathered knowledge on all of these aspects while using only one data collection method, or when he or she uses a method inappropriate to the research question being asked.

The 'grounded theory' approach (Strauss & Corbin, 1994) is probably the most widely used strategy for analysis of qualitative data. It is fundamental to this approach that concepts and theory emerge from the data. Qualitative research, therefore, does not begin with a hypothesis, but starts with an area of study. Theory and concepts are grounded in the data collected and it is up to the researcher to extract these, thereby uncovering the research subjects' own understandings and explanations.

WHY EMBARK ON QUALITATIVE RESEARCH?

Not only may qualitative research be used to investigate different kinds of questions from those examined using quantitative methods, it may also be used for examining phenomena whose investigation remains beyond the scope of the latter. For example, qualitative methods are more appropriate when studying complex situations in which the relevant variables are not initially apparent. Rather than taking a reductionist view of the subject in order that events can be measured, the holistic nature of the qualitative approach allows preservation of complexities, so that their nature can be explored and better understood. We may have reason to believe, for example, that young people with manic-depression often fail to comply with their medication regime. In attempting to understand why this is the case, in-depth interviews with sufferers of this disorder may be very informative. Many such complex situations in psychiatry, involving the patient's perspective, may not have been adequately researched, in which case qualitative strategies may fulfil an important hypothesisgenerating function. In the area of health promotion, for example, an objective may be to reduce the incidence of anorexia nervosa. In order to design an intervention with this purpose, it may be extremely useful to explore, in-depth, the views of women who have this eating disorder, concerning their beliefs about why they developed the illness. Such data could be used to generate ideas which would inform the design of a health education campaign.

Studies of attitudes and beliefs can benefit from the application of qualitative methods, with their naturalistic basis. The complexity of public attitudes towards people with schizophrenia, for example, may be made easier to understand by allowing those interviewed to play a major part in guiding the direction of the discussion. Not only is this valuable in itself, but it could also be used to facilitate the construction of a comprehensive questionnaire. In combination, the two research methods could be used to obtain a greater understanding of perceptions of mental illness in society, in order that public education campaigns could be targeted more effectively.

There is also great scope for the application of qualitative methods to research on mental disorders and the organisation and delivery of mental health services. In child and adolescent psychiatry, for example, in-depth interviews designed to investigate the experience of chronic illness in young people with long-term mental health problems would highlight usefully the issues important to such adolescents, by providing a users' perspective. Mental health professionals could be made more aware of young people's concerns through the collection and analysis of such data. Similarly, focus group sessions with school children, investigating their ideas about mental illness, could be used to elucidate help-seeking behaviours in young people, and increase understanding of issues such as self-harm or failure to consult general practitioners on mental health issues. Moreover, the current emphasis on evidence-based medicine and clinical effectiveness has meant that the prescribing behaviour of clinicians, including psychiatrists, is high on the research agenda. Interviewing psychiatrists to obtain information on their prescribing behaviour would generate useful information on how prescribing habits may be changed. Where there is a need to understand the meaning given by respondents to the topic that is being researched, qualitative research methods may be applicable: there is a plethora of such areas.

Our own work (Bogan et al, 1997) has examined the experiential impact of head injury on adolescents. The main theme raised by those interviewed was that they had not received adequate explanation of the emotional problems associated with head injury and relevant support in coming to terms with their predicament. Recommendations were made for improvements in current health-care provision to address these concerns.

In general practice, Crosland & Jones (1995) conducted a questionnaire survey followed by semi-structured interviews in order to examine the prevalence and consultation behaviour of people who had experienced rectal bleeding. The questionnaire element was designed to determine the prevalence of such bleeding; the interview element was designed to examine the factors which lead some people to consult their general practitioner while others do not. Two thousand people were surveyed and 60 were interviewed (30 consulters and 30 nonconsulters). Data on perceptions, beliefs and health-care behaviour were gathered during the interviews, and it was found that the perception of seriousness of symptoms was the most important factor for people in deciding whether or not to consult a doctor for rectal bleeding. As their data also showed that many in high-risk groups of developing colorectal cancer did not consult, the authors recommend that information be targeted at these high-risk groups.

WHAT CONSTITUTES GOOD QUALITATIVE RESEARCH?

Different criteria are required to evaluate qualitative research from those used for quantitative work. The two approaches should not be confused. A good quantitative study has to measure the phenomena of interest accurately. It needs to generalise beyond the particular context in which the research has been conducted and has to be capable of replication. It is usually judged in terms of validity, representativeness and reliability. In contrast, the aim of a good qualitative study is to access the phenomena of interest from the perspective of the subject; to describe what is going on; and to emphasise the importance of both context and process. Evaluative criteria, therefore,

are different and should be based on credibility, transferability, confirmability and dependability (Lincoln & Guba, 1985).

The most fundamental difference concerns generalisability, or transferability. Although some qualitative research seeks to be capable of generalisation beyond the sample studied and may use sampling methods, this is frequently not the case. Instead, an in-depth examination of small numbers of subjects is regarded as of greater value than a more limited examination of larger numbers. For this type of qualitative research, a traditional assessment of generalisability is not appropriate, though the research may be conceptually generalisable. That is, the researcher may recognise further cases that are similar to those already researched and be able to use his or her knowledge in understanding these cases, as does the practitioner in day-to-day clinical practice. For this transfer of knowledge to be possible, reports of qualitative research should provide a full description of the sample and the findings (Miles & Huberman, 1994).

The distinctive differences between dependability and reliability are also crucial. While quantitative researchers tend to assume an unchanging universe, in which inquiry could be replicated, qualitative researchers hold that the social context is always changing and that the concept of replication is flawed. Dependability, therefore, involves investigators keeping clear records of the research process and of its products, in order that, in principal at least, the study can be replicated. Such a 'research audit' is also important in enabling readers to ascertain that procedures have been carried out carefully (Miles & Huberman, 1994).

Confirmability refers to confidence in the findings of qualitative research. Both the researcher and those reading his or her findings need to be sure that the conclusions reached about the data are fair and accurate. Negative evidence should be actively sought out and considered, and rival explanations tested before final conclusions are reached. If the same findings are supported when using more than one data source, method, researcher, theory and/or data type (qualitative and quantitative), confidence in the research should rise (Miles & Huberman, 1994). Finally, credibility refers to the internal validity of a study. In short, do the findings make sense? Again, providing sufficient information about the study generally and the findings will help the reader judge its credibility.

BUT IS IT SCIENCE?

The tenets of good, scientific research dictate that it is rigorous and systematic, generating greater knowledge on a topic. Without doubt, good qualitative research is as effective in achieving this aim as is good quantitative research. Numbers may indeed reveal a good deal about individual patterns of disorder but being able to look behind the numbers at the underlying meanings will usually enhance understanding. Qualitative data focus on "naturally occurring, ordinary events in natural settings" (Miles & Huberman, 1994) allowing us to see more of the whole picture than is often the case with a more quantitative, hypothesistesting approach. Qualitative research should, however, be judged on its own terms, as a different kind of investigation. Much qualitative research is compromised if it is presented as if it were quantitative (Macnaughton, 1996).

It is not intended to argue here that qualitative research is a paradigm, appropriate for each and every research situation. Its very strengths may be weaknesses in seeking to answer certain research questions. Nevertheless, it is time that psychiatric researchers explored the potential benefits of qualitative methods and that

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psychiatric journals afforded qualitative studies more exposure, thereby facilitating greater understanding of how such methods can be used as valuable and distinctive research techniques.

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REFERENCES

Black, N. (1994) Why we need qualitative research. *Journal of Epidemiology and Community Health.* **48**, 425–426.

Bogan, A. M., Livingston, M. G., Parry-Jones, W. L., et al (1997) The experiential impact of head injury on adolescents: individual perspectives on long-term outcomes. *Brain Injury*, 11, 431–443.

Crosland, A. & Jones, R. (1995) Rectal bleeding: prevalence and consultation behaviour. *British Medical Journal*, 311, 486–488.

Lincoln, Y. & Guba, E. (1985) Naturalistic Inquiry. Beverly Hills, CA: Sage.

Macnaughton, R. J. (1996) Numbers, scales, and qualitative research. *Lancet*, 347, 1099–1100.

Mays, N. & Pope, C. (1996) Qualitative Research in Health Care. London: BMJ Publishing.

Miles, M. B. & Huberman, A. M. (1994) Qualitative Data Analysis: An Expanded Sourcebook. Thousand Oaks, CA: Sage.

Strauss, A. & Corbin, J. (1994) Grounded theory methodology. In *Handbook of Qualitative Research* (eds N. K. Denzin & Y. S. Lincoln), pp. 273–285. Thousand Oaks, CA: Sage Publications.