The Role of Qualitative Methods in Evidence based Health Care

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Quality of evidence is not an inherent attribute of a design or methodological approach alone, but is also dependent on the question for which evidence is being sought.

Qualitative methods seek to answer different questions from those of RCT, and for those types of questions they potentially provide a high level of evidence, higher than that of the RCT. “Potentially” remains an important qualification since as with any research the level of evidence produced is also dependent on the rigour of the study itself. Just as a poorly designed or conducted RCT provides weak evidence so too with a qualitative project.

A) What questions can qualitative methods provide a high level of evidence for?

The subject matter of qualitative research is not the physical world itself but rather how it is interpreted and understood by individuals, societies and cultures. Consequently, it is concerned with exploring people’s perceptions of the world, their beliefs, attitudes and experiences, and conceptualising these in ways that are both meaningful and useful. It attempts to achieve understanding rather than explanations as such. Within contemporary health care such perspectives are important for two reasons. Firstly, the move towards more patient-centred care suggests that the meaning which an individual attaches to a clinical problem should be regarded as important and addressed where possible (Stewart et al. 1995; Williams 1995; Williams and Grant 1998). Secondly, the ongoing concern with health and illness behaviour (risk taking, adherence to prescribed regimen, appointment keeping etc) largely depends on a knowledge of people’s attitudes and beliefs as the content of most social cognition models in health psychology demonstrate (Conner and Norman 1998).

The contribution that qualitative methods can make to the design and implementation of evidence-based mental health care may become clearer by initially considering how well they can answer three types of questions.

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<tr>
<th>Question</th>
<th>Level of Evidence Provided by Qualitative Approach</th>
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<tr>
<td>• What exists?</td>
<td>High</td>
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<tr>
<td>• Questions of Process</td>
<td>Moderate</td>
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1) What Exists?
Qualitative research can provide a rich and rigorous descriptive base of people’s experiences, beliefs and attitudes upon which subsequent explanatory research can be based. While questionnaires may be of some use in identifying such issues they are have two disadvantages. Since the generation of questions largely depends on the views of the researcher key issues may be omitted and irrelevant ones included. Perhaps more importantly, there can be threats to various types of validity. Many of the assumptions upon which a data collection tool may based may not hold. Questionnaires assume a fixed meaning in the use of language; however, particular words or phrases may hold different meanings (or none at all) for the people being studied. Qualitative data and analysis can generate new concepts with precise definitions. Where these are grounded in the data and generated in the light of the research questions being asked or the wider issues of concern, they can have enormous relevance for subsequent quantitative research, whether that be in terms of questions of prevalence, explaining behaviour or in designing effective interventions. Qualitative research is therefore a powerful way of identifying what exists, conceptualising findings and providing precise definitions of key issues.

2) Questions of Process
Qualitative research can also play an important role in illuminating processes of change, both at an individual and organisational level. This may involve shedding light on decision-making processes, or exploring health or illness behaviour, or identifying how organisations respond to change. Quantitative research can infer cause and effect either directly through experimental studies, or indirectly through correlations in cross-sectional studies. However, the actual processes by which these causes are mediated are often less open to quantitative analysis. Qualitative research can examine the specific processes that an intervention sets in motion, and examine how these lead to a particular outcome. In this case the qualitative data is attempting to throw light on a statistical occurrence. Qualitative methods are now frequently being integrated into RCTs of complex interventions in order to reveal their mechanisms of action.

3) How many or how often?
Useful and meaningful quantification is entirely dependent on a precise definition of the thing to be counted. Since qualitative methods are a powerful tool for identifying what exists and generating useful concepts with precise definitions it would appear theoretically possible and advantageous to use qualitative methods for ensuring validity while assessing issues of prevalence and incidence.
One thousand people could be interviewed in depth and the number of people with particular views could be categorised. One could even use several coders and assess inter-rater reliability (Mays and Pope 1995). This might be methodologically desirable in that each interview would permit the respondents’ views to be thoroughly explored and meanings clarified such that any misinterpretation of questions or answers was minimised (i.e. ensure validity). In practice, this is rarely if ever done.

In depth interviews are time-consuming to arrange, conduct and analyse. Interviews with 20 people may take a minimum of two months to collect and prepare for analysis. Data analysis is a slow and laborious process as transcripts need to be carefully scrutinised and every few phrases considered for coding. Six months for this process is not excessive. Qualitative studies do not represent good value for money when answering quantitative questions.

**B) What are the qualities of a rigorous, well conducted qualitative study?**

Typical quantitative research involves a linear progression from a specific research question, through to data collection and then, once completed to analysis. Qualitative research begins with a board exploratory question and then intersperses analysis with sampling in order to explore new issues in more detail. A range of quality criteria have been developed to inform qualitative studies.

### Questions to ask of a qualitative study

- Overall, did the researcher make explicit in the account the theoretical framework and methods used at every stage of the research?
- Was the context clearly described?
- Was the sampling strategy clearly described and justified?
- Was the sampling strategy theoretically comprehensive to ensure the generalisability of the conceptual analyses (diverse range of individuals and settings, for example)?
- How was the fieldwork undertaken? Was it described in detail?
- Could the evidence (fieldwork notes, interview transcripts, recordings, documentary analysis, etc) be inspected independently by others; if relevant, could the process of transcription be independently inspected?
- Were the procedures for data analysis clearly described and theoretically justified? Did they relate to the original research questions? How were themes and concepts identified from the data?
- Was the analysis repeated by more than one researcher to ensure data?
- Did the investigator make use of quantitative evidence to test qualitative conclusions where appropriate?
- Did the investigator give evidence of seeking out observations that might have contradicted or modified the analysis?
- Was sufficient of the original evidence presented systematically in the written account to satisfy the sceptical reader of the relation between the interpretation and the evidence (for example, were quotations numbered and sources given)?
C) Are the questions that qualitative studies can answer useful in designing and implementing an evidence-based mental health service?

An evidence-based mental healthcare system relies on research addressing a range of questions through an ongoing process. The figure below shows the various stages which a service must go through if it is to arrive at a point at which it can claim to be delivering an evidence-based service which is meaningful to the patient and others.

The delivery of evidence-based health care relies on answering and addressing a sequence of questions as outlined below. Such a sequence mirrors the existence of a chain – it is only as strong as its weakest link. A randomised-controlled trial is useless if it using the wrong outcome measures. Similarly, identifying patients’ concerns or goals through a qualitative study is unlikely to lead to substantial changes in services unless an intervention can be tested to see if they can be addressed. Qualitative research can contribute at each of these levels.

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<tr>
<td>E.g. Symptoms, Social Networks, Support, Satisfaction.....</td>
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