

## Qualitative research in health care

# Assessing quality in qualitative research

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### This is the first in a series of three articles

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In the past decade, qualitative methods have become more commonplace in areas such as health services research and health technology assessment, and there has been a corresponding rise in the reporting of qualitative research studies in medical and related journals.<sup>1</sup> Interest in these methods and their wider exposure in health research has led to necessary scrutiny of qualitative research. Researchers from other traditions are increasingly concerned to understand qualitative methods and, most importantly, to examine the claims researchers make about the findings obtained from these methods.

The status of all forms of research depends on the quality of the methods used. In qualitative research, concern about assessing quality has manifested itself recently in the proliferation of guidelines for doing and judging qualitative work.<sup>2-5</sup> Users and funders of research have had an important role in developing these guidelines as they become increasingly familiar with qualitative methods, but require some means of assessing their quality and of distinguishing “good” and “poor” quality research. However, the issue of “quality” in qualitative research is part of a much larger and contested debate about the nature of the knowledge produced by qualitative research, whether its quality can legitimately be judged, and, if so, how. This paper cannot do full justice to this wider epistemological debate. Rather it outlines two views of how qualitative methods might be judged and argues that qualitative research can be assessed according to two broad criteria: validity and relevance.

### Two opposing views

There has been considerable debate over whether qualitative and quantitative methods can and should be assessed according to the same quality criteria. Extreme relativists hold that all research perspectives are unique and each is equally valid in its own terms, but this position means that research cannot derive any unequivocal insights relevant to action, and it would therefore command little support among applied health researchers.<sup>6</sup> Other than this total rejection of any quality criteria, it is possible to identify two broad, competing positions, for and against using the same criteria.<sup>7</sup> Within each position there is a range of views.

#### Separate and different: the antirealist position

Advocates of the antirealist position argue that qualitative research represents a distinctive paradigm and as such it cannot and should not be judged by conventional measures of validity, generalisability, and reliability. At its core, this position rejects naive realism—a belief that there is a single, unequivocal social reality or truth which is entirely independent of the researcher and of the research process; instead there are multiple perspectives of the world that are created and constructed in the research process.<sup>8</sup>

### Summary points

Qualitative methods are now widely used and increasingly accepted in health research, but quality in qualitative research is a mystery to many health services researchers

There is considerable debate over the nature of the knowledge produced by such methods and how such research should be judged

Antirealists argue that qualitative and quantitative research are very different and that it is not possible to judge qualitative research by using conventional criteria such as reliability, validity, and generalisability

Quality in qualitative research can be assessed with the same broad concepts of validity and relevance used for quantitative research, but these need to be operationalised differently to take into account the distinctive goals of qualitative research

Those relativists who maintain that assessment criteria are feasible but that distinctive ones are required to evaluate qualitative research have put forward a range of different assessment schemes. In part, this is because the choice and relative importance of different criteria of quality depend on the topic and the purpose of the research. Hammersley has attempted to pull together these quality criteria (box).<sup>7</sup> These criteria are open to challenge (for example, it is arguable whether all research should be concerned to develop theory). At the same time, many of the criteria listed are not exclusive to qualitative research.

#### Relativist criteria for quality<sup>7</sup>

- Degree to which substantive and formal theory is produced and the degree of development of such theory
- Novelty of the claims made from the theory
- Consistency of the theoretical claims with the empirical data collected
- Credibility of the account to those studied and to readers
- Extent to which the description of the culture of the setting provides a basis for competent performance in the culture studied
- Extent to which the findings are transferable to other settings
- Reflexivity of the account—that is, the degree to which the effects of the research strategies on the findings are assessed or the amount of information about the research process that is provided to readers



## Relevance

Research can be relevant when it either adds to knowledge or increases the confidence with which existing knowledge is regarded. Another important dimension of relevance is the extent to which findings can be generalised beyond the setting in which they were generated. One way of achieving this is to ensure that the research report is sufficiently detailed for the reader to be able to judge whether or not the findings apply in similar settings. Another tactic is to use probability sampling (to ensure that the range of settings chosen is representative of a wider population, for example by using a stratified sample). Probability sampling is often ignored by qualitative researchers, but it can have its place. Alternatively, and more commonly, theoretical sampling ensures that an initial sample is drawn to include as many as possible of the factors that might affect variability of behaviour, and then this is extended, as required, in the light of early findings and emergent theory.<sup>2</sup> The full sample, therefore, attempts to include the full range of settings relevant to the conceptualisation of the subject.

## Is there any place for quality guidelines?

Whether quality criteria should be applied to qualitative research, which criteria are appropriate, and

### Some questions about quality that might be asked of a qualitative study

- Worth or relevance—Was this piece of work worth doing at all? Has it contributed usefully to knowledge?
- Clarity of research question—If not at the outset of the study, by the end of the research process was the research question clear? Was the researcher able to set aside his or her research preconceptions?
- Appropriateness of the design to the question—Would a different method have been more appropriate? For example, if a causal hypothesis was being tested, was a qualitative approach really appropriate?
- Context—Is the context or setting adequately described so that the reader could relate the findings to other settings?
- Sampling—Did the sample include the full range of possible cases or settings so that conceptual rather than statistical generalisations could be made (that is, more than convenience sampling)? If appropriate, were efforts made to obtain data that might contradict or modify the analysis by extending the sample (for example, to a different type of area)?
- Data collection and analysis—Were the data collection and analysis procedures systematic? Was an “audit trail” provided such that someone else could repeat each stage, including the analysis? How well did the analysis succeed in incorporating all the observations? To what extent did the analysis develop concepts and categories capable of explaining key processes or respondents’ accounts or observations? Was it possible to follow the iteration between data and the explanations for the data (theory)? Did the researcher search for disconfirming cases?
- Reflexivity of the account—Did the researcher self consciously assess the likely impact of the methods used on the data obtained? Were sufficient data included in the reports of the study to provide sufficient evidence for readers to assess whether analytical criteria had been met?

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## Further reading

Murphy E, Dingwall R, Greatbatch D, Parker S, Watson P. Qualitative research methods in health technology assessment: a review of the literature. *Health Technology Assessment* 1998;2.

Dingwall R, Murphy E, Watson P, Greatbatch D, Parker S. Catching goldfish: quality in qualitative research. *Journal of Health Services Research and Policy* 1998;3:167-72.

how they should be assessed is hotly debated. It would be unwise to consider any single set of guidelines as definitive. We list some questions to ask of any piece of qualitative research (box); the questions emphasise criteria of relevance and validity. They could also be used by researchers at different times during the life of a particular research project to improve its quality.

## Conclusion

Although the issue of quality in qualitative health and health services research has received considerable attention, a recent paper was able to argue, legitimately, that “quality in qualitative research is a mystery to many health services researchers.”<sup>12</sup> However, qualitative researchers can address the issue of quality in their research. As in quantitative research, the basic strategy to ensure rigour, and thus quality, in qualitative research is systematic, self conscious research design, data collection, interpretation, and communication. Qualitative research has much to offer. Its methods can, and do, enrich our knowledge of health and health care. It is not, however, an easy option or the route to a quick answer. As Dingwall et al conclude, “qualitative research requires real skill, a combination of thought and practice and not a little patience.”<sup>12</sup>

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