Publishing qualitative research in Medical Journals

Introduction.

Qualitative research makes an important contribution to research in the medical sciences. It has a particular role in providing understandings with respect to decisions and behaviours of patients and professionals, in exploring factors affecting the implementation of new interventions, and in developing theory in fields such as illness behaviour, clinical decision-making, illness prevention and health promotion. Qualitative research papers account for almost a quarter of submissions to the British Journal of General Practice, with a similar acceptance rate for publication. About a quarter of the 40 most highly-cited papers published in the BJGP in recent years employ qualitative methods.

Although guidance on the conduct and reporting of qualitative studies has generally lagged behind those for quantitative research, guidance is now available. It includes recommendations such as COREQ (1) a set of reporting criteria making up a 32-item checklist for interviews and focus group-based research, and the more-recently published Standards for Reporting Qualitative Research (SRQR) a 21 item checklist (2). Both of these instruments aim to improve the transparency of all aspects of qualitative research and are designed not only to help authors, but also to support editors and reviewers in evaluating manuscripts for publication and readers in critically appraising qualitative papers. These recommendations do not however tackle the problems of limited word counts and traditional reporting formats required by peer-reviewed journals in medicine, indeed in many ways they exacerbate the problem by demanding more information.

There is however another more fundamental problem in publishing research that

employs qualitative methods. This was brought into sharp relief in a recent exchange of correspondence in the BMJ which highlighted a clear policy to exclude qualitative research due to the view results are largely exploratory and better suited to more 'specialist' journals; potentially limiting the reach of research using qualitative methodology (3) (4).

Aside from the particular policy taken by the BMJ, we argue that research which employs qualitative research methods may be negatively viewed if it does not adhere to certain reporting standards. These are discussed below. In particular, we consider the importance of appropriately framing the research question and choosing the correct methodology, assessing the validity, reliability and rigour of the report and its contribution to practice and theory. We also comment on particular issues including sampling, theoretical saturation and reflexivity. Finally, the challenges of writing for publication in a medical journal and of peer review are discussed.

Framing the research question.

Any research question must be chosen and articulated in relation to the existing evidence base. The authors need to move from what is known to what is not known. They need to justify their choice of methodology and be clear that the qualitative approach – exploratory, explanatory or evaluative – is the most appropriate choice for answering the particular question (5). A vague statement of intent to "explore" a particular topic, without a clear target, is a poor start to a research project and a research paper. The need to demonstrate that the research question is necessary and relevant, with the potential to make an impact, should be a concern for all types of studies (6) (7). In qualitative research, the concept of authenticity is useful to enabling a consideration of the wider context and implications of the research beyond publication (8). In summary the gap in knowledge being addressed needs to be clearly identified, with a clear statement as to why the particular research

approach is appropriate.

Contributing to practice

Having identified a gap in the knowledge base, the fundamental aim of any research is to address that gap and inform practice. Where quantitative methods are used, this is manifested through the degree of generalisability of the findings of a study. In qualitative approaches, often sitting within a relativist paradigm, the findings will be grounded within a very specific context and population which often begs the question whether the research has wider relevance. The concept of transferability enables that wider contribution but significantly it is the reader who judges the degree of transferability of the findings to their own context or population (9). It is essential therefore that the details provided in the methods section of the paper describe accurately what was actually done. The method used to obtain the sample, the means by which the data were collected and analysed, and the ways in which validity, reliability, and rigour are addressed need to form the basis for any claim to a contribution to theory or practice. For some researchers, criteria around trustworthiness may be deemed more relevant to assure rigour (10). The lack of consensus about which criteria are more germane for qualitative approaches should not mitigate the need for authors to demonstrate consideration about the integrity of the research and findings.

Within qualitative approaches a number of issues around design will materialise, which if not explicitly addressed, raise questions about trustworthiness. Sampling can be contentious, and readers unfamiliar with qualitative research are often surprised at the small samples involved. Theoretical saturation, continuing the interviews or focus groups until no new themes emerge, is one approach to ensuring an adequate sample size. The emphasis should not be on the concrete number but

rather on whether sufficient data have been collected to meaningfully answer the question. It is important to think about who has taken part in the research and any potential 'gaps' in the sample of respondents who took part. This will be determined by the research question but researchers should reflect on any groups whose views might add to, or be divergent from, the data collected. This search for divergent and possibly disconfirming data is essential to ensuring rigour and could be indicative of a significant finding.

Data analysis also reflects an iterative process and a number of methods can be used to inform the analysis. However, it is often presented somewhat simplistically; reference only to a 'grounded theory approach' belies the significance of Grounded Theory as a distinct methodology (11). Arguably, all findings should be 'grounded' in the data but this does not in itself report a method of analysis. Identifying multiple methods and the interchangeable use of codes and themes may also convey confusion and fail to convince the reader of any rigour in analysis. Qualitative analysis is a time consuming process but it should not be devoid of a method which outlines the key steps moving from the raw data to interpretation and explanation.

Concerns with bias and objectivity are often cited as limitations in qualitative studies. The identity of the researcher/interviewer, not simply whether or not (s)he is a medic, but also gender, age, and background will have inevitably have an effect on data collected (12). The "direction" of any effect is much less easy to predict or detect, but always requires consideration. In a workshop we ran recently at the Society for Academic Primary Care (SAPC) conference, participants explored how they managed their feelings when collecting data and the effects on data collection. For example, they discussed instances in which they felt research participants were not particularly forthcoming and how having documented this in field notes, they reflected on this when planning and conducting further research and analysing their data. Thus, reflexivity serves as an important strategy for assuring the quality and transparency of data collection and analysis. However, communicating the process of reflexivity

can be a difficult balancing act between providing sufficient self- disclosure to assure integrity of the analysis or a more detailed biographical account and commentary which may serve to shift the focus of the research (13).

Getting into print

The challenge for authors of qualitative papers is to use the journal's permitted word count (often 2500 in many medical journals) judiciously in writing the text – Introduction, Methods, Results and Discussion - and incorporating the narrative data as elegantly and as sparingly as possible whilst providing sufficient detail to support the analysis. Using boxes and collecting a number of extracts relating to a particular theme into each box may mean extracts are not included in the word count, but can create problems of flow and context for the reader. Incorporating extracts, generally one or perhaps two at a time, in the results section is often more effective but contributes to the word count. These dilemmas may however become a thing of the past with the increasing use of paper short: web long publication strategies. In such cases the provision of a carefully-written Abstract which captures the essence of the study is of increased importance.

Journals and their editors have a responsibility to ensure that qualitative research is peer- reviewed by qualitative experts. Misunderstandings about sample size, representativeness and generalisability are likely to occur if a subject expert, unversed in qualitative methodology, is asked to give recommendations on publication. Journals should direct reviewers, as well as authors, to the COREQ and SRQR criteria, as well as the other reporting guidelines collected in the Equator Network.

Conclusion

Qualitative research is important and well-conducted and well-reported studies make a significant contribution to both policy and practice. Researchers and the authors of qualitative papers can now find useful guidance on writing and submitting their findings, and this information will also be useful to journal editors and peer-reviewers.

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