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ORIGINAL ARTICLE

Is there a place for qualitative research methods in pharmacy practice?

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ABSTRACT

Over the past years, there has been an increase in the use of qualitative methods in the medical literature. In this paper, we will attempt to put forward our experiences with use of these methods in research that we have conducted.

Qualitative research has its origins in the social science disciplines, including anthropology, sociology, psychology and educational theory, and historically has struggled to gain credibility in the medical literature often because of concerns about robustness of the study design and the differences in structure for presenting the findings. Over the past 10 years, however, there has been an increase in the use of qualitative research methods (which may include interviews, focus groups and case studies) in the medical literature. Examples in the literature where use of qualitative methods has added to the body of evidence include use to inform practise following a change in legislation to allow for pharmacist prescribing (PP);^{1–3} to gain an understanding of consumer needs;⁴ and to explore patients' preferences relating to specific treatments.⁵

With a growing emphasis on person-centred healthcare, there is increasing recognition of the richness of information that may be drawn from a qualitative approach to answering a research question. Holloway has put this very succinctly:

Qualitative research is a form of social inquiry that focuses on the way people interpret and make sense of their experiences and the world in which they live. A number of different approaches exist within the wider framework of this type of research, but most of these have the same aim: to understand the social reality of individuals, groups and cultures. Researchers use qualitative approaches to explore the behaviour, perspectives and experiences of the people they study.⁶

In our opinion, the types of research questions that can be answered using qualitative methods would include:

- ▶ areas where there is a lack of evidence; qualitative methods may be used as an initial exploration to inform further research;
- ▶ studies to explore views, perceptions and experiences;
- ▶ studies to gain an in-depth knowledge of why individuals are behaving in a particular way.

As part of this paper, we will share with you some experiences of our use of qualitative methods in our own areas of practice. Both of us are

currently pharmacy academics with a mixed hospital and community pharmacy background. Over the years, our training, including postgraduate education, has emphasised and mainly revolved around quantitative research methods resulting in a 'black or white' approach towards the literature. We were both novices when it came to qualitative research and embarked on our doctorate projects with a degree of trepidation. In this paper we aim to try and illustrate our experiences in the application of qualitative methods in our research and how we feel this has helped us develop as researchers to help others starting out on this process.

One of our research projects (AT) has centred on PP in Scotland, with a focus on antimicrobials.⁷ When embarking on the literature search, it was apparent that there was a paucity of data available on PP, but more so, on the implementation of PP. No studies had explored use of pharmacist prescribers within a speciality. The originally planned method of applying a cross-sectional questionnaire survey to measure pharmacists' views and attitudes to PP of antimicrobials in secondary care was therefore discarded. There was little information around the topic in the literature to inform a questionnaire. This led to a focus on a more exploratory approach to the research and a series of focus group discussions were carried out aiming to explore pharmacists' views and perceptions of PP in secondary care with a focus on antimicrobials. The experience was a steep learning curve since it was apparent from the start that focus groups are very complex to organise from an administrative point of view! Finding a suitable time for a group of busy hospital pharmacists to meet, ensuring that all recording equipment was in good working order and travelling to the venue in adverse weather conditions were only some of the challenges faced. However, it was apparent, even at the time of facilitation, that the richness of data and the strength of opinions expressed that were captured would not have been possible using a questionnaire.⁷ Another challenge to overcome was producing the ad verbatim transcript which was the raw data for analysis. Having pharmacists talking over each other during discussions, each using their own broad Scottish accent, was definitely not an easy job for a non-Scottish native! However, the whole process helped the researcher with immersion in the data and then facilitation of the analysis.

The other of our doctoral research projects (RE) was educational in focus and involved exploring pharmacy students' experiences of learning during individual face-to-face interviews with 'a loose

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agenda of questions'.⁸ The study involved students selecting three artefacts which represented learning for them and these were used to focus the discussions. In conducting the interview, openness to changing the sequence of themes was applied and additional probing questions were used in response to the 'stories' told by the participants.⁹

There were a number of challenges in designing and conducting this research. One ethical issue involved the 'power' relationship between the researcher and participants as lecturer/student. This often exists whether the participants are students, patients or colleagues and it is important for the researcher to take account of this relationship when collecting and analysing the data. DiCicco-Bloom and Crabtree argue that social roles shape the interview process and that acknowledging and responding to the power differentials that exist requires reflexivity on the part of the researcher.¹⁰ In this study, the interviews were conducted in a 'neutral space' and there was assurance given that the decision of whether or not to participate would not alter participants' 'right to or quality of service'¹¹ that they would otherwise receive. That is, declining to participate would not affect the researcher's relationship with them as a lecturer. The use of the artefacts in this study helped shift the balance of power in the interview, allowing participants 'to select the episodes or situations he or she wants to recount'.¹²

In addition to ethical issues, another major challenge was considering and deciding on the theoretical perspectives underpinning the research. As an inexperienced qualitative researcher, this was something which I had never considered before. Ringsted *et al*¹³ argue that the first step in generating a researchable problem is situating the idea within a conceptual theoretical framework and this is a step that quantitative researchers often omit. Ringsted *et al*¹³ go on to explain that this conceptual framework incorporates

theories ... that can clarify the underlying mechanisms pertaining to the idea or problem; a critical synthesis of information from the empirical literature identifying what is already known and what is not known about the idea to inform the development of a concrete research topic; and the researcher's individual thoughts and ideas.

Reeves *et al* present a useful introduction to three common theories that can underpin qualitative research and explain why these are 'important for clinicians, for health policy, and for patient care'.¹⁴ This process of finding a conceptual framework, although difficult, increased the credibility and rigour of the research in this study.

There has been much criticism in the literature about the robustness and rigour of qualitative research. This has led to a number of toolkits and guides being developed, some of which are suggested for further reading in box 1. Our opinion, based on the research projects discussed and on the literature, is that analysis of raw data based on qualitative methods is time consuming but satisfying and potentially involves more steps than a quantitative project. For example, focus group transcripts in the project described above (AT) were initially coded into themes and input into the software package NVIVO to facilitate data management. A more detailed qualitative analysis followed for which the framework method¹⁵ was used as a tool to aid in the analytic process. AT initially read and reviewed all transcripts and developed themes. To enhance the validity of the findings, each transcript was independently reviewed for emerging themes by one of the other researchers.⁷ In the case of the second project (RE), mind-mapping software was used to analyse the data.¹⁶

Box 1 Further reading on analysis and quality of qualitative research

- ▶ *Critical Appraisal Skills Programme: 10 Questions to Help You Make Sense of Qualitative Research*. Milton Keynes Primary Care Trust, 2002. http://www.casp-uk.net/wp-content/uploads/2011/11/CASP_Qualitative_Appraisal_Checklist_14oct10.pdf (accessed 12 Dec 2012).
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- ▶ Hannes K. Chapter 4: Critical appraisal of qualitative research. In: Noyes J, Booth A, Hannes K, *et al*, eds. *Supplementary Guidance for Inclusion of Qualitative Research in Cochrane Systematic Reviews of Interventions*. Version 1 (updated August 2011). Cochrane Collaboration Qualitative Methods Group, 2011. <http://cqrmg.cochrane.org/supplemental-handbook-guidance> (accessed 12 Dec 2012).
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On reflection, we cannot claim to be seasoned qualitative researchers; however, these experiences have helped us to have a better understanding of what qualitative methods involve and the richness of information they provide. Though pharmacy is traditionally a quantitative discipline, we share Hammersley's view that

'which of these approaches [quantitative or qualitative] is most appropriate should depend on our purposes, and the stage that our research has reached, not on paradigmatic commitments'.¹⁷

We would encourage all readers to dip their fingers into the world of qualitative research. Not all research questions may be appropriately addressed through the 'gold standard' of a randomised controlled trial, for example, finding reasons for patients non-adherence or understanding the meaning and impact of drug therapy on a patient's life. Gaining insight into patient knowledge, understanding, views and perceptions on care are paramount to our practice and may be a potential starting point for us as pharmacists, to think of ways of improving our service delivery.

Key message

This paper describes our experiences conducting research using qualitative methods.

Contributors All authors have contributed to this commentary equally sharing our experiences in qualitative methods.

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