Qualitative research methods: Why, when, and how to conduct interviews and focus groups in pharmacy research

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Abstract

Issue: The value of qualitative research methodologies is increasingly being recognized within health services research, and particularly within pharmacy research. Unlike quantitative research, qualitative research can offer insights into the question of “why” people engage in particular actions or behaviors. However, for the potential of this research to be fully realized within pharmacy teaching and learning, appropriate consideration of methodological issues surrounding qualitative research methodologies in interviews and focus groups is needed.

Methodological literature review: Before undertaking an interview or focus group it is important for the researcher to have carefully considered which data collection approach will provide the best information to answer the research question under investigation. Next researchers must carefully construct their interview guide, and collect their sample of participants. Finally, all interviews or transcripts must be completely transcribed and analyzed to identify important themes.

Recommendations: A total of eight recommendations are offered for researchers when considering, and undertaking, interviews or focus groups within pharmacy education research.

Applications and implications: Interviews and focus groups could be very helpful in scholarship around pharmacy teaching and learning as it is designed to provide an in-depth understanding of participants’ experiences and perceptions. In particular, this type of research has already been used to improve understandings around interprofessional education. It could also be used to better understand students' and faculties' perceptions of CAPE 2013 Education Outcomes.

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Issue

In this methodology review I provide an outline of in-depth interviews and focus groups, how they may be used in pharmacy education research, as well as a number of important methodological considerations to help ensure your research is of the highest quality. My research training began and focused primarily on qualitative research methodologies in sociology. My first research into pharmacy practice was a study that used in-depth interviews of pharmacists, nurses, and physicians, to examine the integration of pharmacists onto hospital rounding teams.1 Since that time I have consulted on and conducted a number of qualitative research studies in fields from pharmacy to treatment decisions in patients with end stage renal disease.2–5

Qualitative research is increasing in popularity in health services research as is evidenced by the number of commentaries espousing the value of qualitative research,6,7 as well as guidelines that outline the best approach to reporting qualitative research.8 This research methodology also makes a regular appearance in many pharmacy research journals. For example, recent studies have examined topics that include in-depth interviews about clinical pharmacists' care-taking behaviors,9 a qualitative assessment of a cognitive pharmaceutical

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program in a community pharmacy,¹⁰ improvement in pharmacy students’ cross-cultural competencies,¹¹ and examination of the perceptions of physicians and pharmacists around increasing numbers of patients suffering from chronic kidney disease.¹² It is anticipated that the popularity of qualitative research will continue to rise because it provides a mechanism through which the richness of patient experience can be explored and leveraged into patient-centered or quality improvement research studies.⁷,¹³,¹⁴

Traditionally, qualitative research methods are used in two circumstances. First, qualitative research methods are also employed when the researcher is interested in understanding the “why” behind peoples’ behaviors or actions. From this perspective qualitative research provides a way to get an in-depth understand of the underlying reasons, attitudes, and motivations behind various human behaviors.¹⁵ For example, a group of Canadian researchers conducted a study to better understand the motivations of pharmacists who leave the profession to become physicians.¹⁶ In this study one of the themes identified is exemplified in the following quotation from an interviewee:

When you're growing up, and you're pretty good at math and science, well, everyone just assumes you want to be a doctor. Doctors save people, doctors are heroes. I don't know many people who had a life-long dream to become a pharmacist.¹⁶p87

As this quote outlines many of the participants described their desire to become physicians with “idealistic, expansive notions related to the manifest destiny of physicians…”¹⁶p87 By delving into the motivations of these former pharmacists, the authors were not only able to gain a better understanding of why the interviewees decided to become physicians, but also insight into the cultures of both the profession of pharmacy and the profession of medicine.

Second, qualitative research methods are also used when the researcher is interested in better understanding a particular topic from the perspective of participants in order to develop a survey to draw upon a larger, generalizable sample. For example, Chisholm et al.,¹⁷ conducted a series of focus groups to explore six pre-specified tenets for professionalism with pharmacy students, pharmacists, and pharmacy faculty, to develop a measure of pharmacy student professionalism. The themes identified through the analysis of these focus groups were then used to develop the survey instrument, which was administered to pharmacy students, and recent pharmacy graduates.¹⁷ These are typically referred to as mixed-methods studies and will be explored in an upcoming issue of Methodology Matters.

Methodological literature review

Definitions

There are a number of methodologies in qualitative research including observations, in-depth interviews, and focus groups that may be used to collect data. While this discussion will focus on in-depth interviews and focus groups, see Patton¹⁸ for more information about observational research.

In-depth interviews involve the posing of open-ended questions and follow-up probes designed to obtain an in-depth understanding of participants’ experiences, perceptions, opinions, feelings, and knowledge.¹⁸ Focus groups are structurally similar to in-depth interviews in the sense that they are comprised of open-ended questions designed to capture the in-depth experiences of respondents.¹⁹ However, focus groups are a distinct data collection technique from in-depth interviews, which will provide researchers with data that relies upon the interaction of the group members to formulate answers to the researcher’s questions. For this reason focus groups should not be thought of as an efficient way to “interview” a large number of people with a minimal investment of time. The decision about which of these methodologies is best depends on whether or not the research question is looking for individual or a group’s perceptions of experiences.

Question types

Given qualitative research’s reputation as being more open and fluid than quantitative research, it is understandable for novice researchers to assume that in-depth interview and focus group questions need not be carefully designed. However, the quality of the data received from an in-depth interview or focus group is dependent upon the level of thought put into the development of the questions posed to interviewees.¹⁶

There are following six primary kinds of open-ended in-depth interview or focus groups questions: (1) experience or behavior questions, (2) sensory questions, (3) opinion or value questions, (4) knowledge questions, (5) feeling questions, and (6) background or demographic questions.¹⁸ Experience or behavior questions are designed to get at an interviewee’s actions, either past or present.¹⁶ In particular, a participant’s responses should reflect a direct observation that could have been made by watching the participant. These kinds of questions are often followed by sensory questions. This is a particularly useful questioning strategy because sensory questions focus on things that the interviewee physically experienced,¹⁸ and can help them to better remember other experiences or behaviors. Opinion or value questions, as the title implies, are designed to elicit interviewees’ understanding of a particular phenomenon or experience, and provide specific insight into their goals and intentions.¹⁸ Knowledge questions seek factual information from interviewees.

Feeling questions are slightly different than opinion or value questions as they are intended to elicit a description of an emotion from the participant.¹⁸ As such, it is particularly important to develop the wording of these questions carefully. Consider the following example: