

Methodological Issues in Social Health and Diabetes Research

Three types of interviews: Qualitative research methods in social health

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ABSTRACT

Interviewing is a primary way of collecting data in qualitative research to direct the participant in responding to a specific research question. In diabetes, this may include “what are the reasons that have contributed to your success in diabetes self-management” or “how do you believe stress impacts your blood glucose?” Three types of interviews are common in social health: (1) Structured; (2) semi-structured; and (3) narrative interview. These range in a format including specified sets of questions to the telling of patient stories in an organic way. This paper describes the differences between these types of interviews and examples of each related to diabetes research.

Key words: Interviews, qualitative research, social health

INTRODUCTION

When my son was age 4 or 5, he asked what I did for my job. I told him I talked to people to learn about their life and what they were thinking. As I was getting ready for the work, he asked if I was getting dressed up so I could do an “inner-view.” An interview is exactly that: A way for researchers to understand the thought process that exists inside, an inner look at why people behave in the way they do. This article is about using interviewing as a design method to collect the qualitative data that are desired based on the research question. The data are only as good as the questions that we ask. With a focus on questions about diabetes self-management and behaviors, this article offers guidelines for interviewing in social health and provides concrete examples from my experience in research.

One advantage of qualitative methods in exploratory health research is that use of open-ended questions and probing gives participants the opportunity to respond

in their own words, rather than forcing them to choose from fixed responses.^[1] Open-ended questions elicit responses that are meaningful and culturally salient to the participant; unanticipated by the researcher; rich and explanatory in nature. Another advantage of interviewing methods is they allow the researcher the flexibility to probe initial participant responses – that is, to ask why or how. The researcher must listen carefully to what participants say, engage with them according to their individual characteristics and think through “probes” to encourage their elaboration of answers.

Interview styles range widely, but share a defining characteristic of using questions to understand the thoughts, feelings, beliefs and behavior of people.^[2] Primarily, there are four types of interviews common in social health: (1) Structured; (2) semi-structured; and (3) narrative interview.^[3] The primary difference between them is the amount of control the interviewer has over the encounter and the aim of the interview. It is generally, best to tape-record interviews and later transcribe these tapes for analysis. While it is possible to take notes during the session (and encouraged), it is difficult to capture direct quotes from the participants while still engaging in the conversation. Because it is more important to maintain focus on the participant to build rapport and dialog rather than on the notes, the recorder will assist in capturing the data.

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STRUCTURED INTERVIEW

The questions asked during a structured interview control, the data elicited by the respondent quite tightly. The interview is structured because the researcher follows a specific set of questions in a predetermined order with a limited number of response categories.^[4] This would be appropriate to use when interviews require that the participant give a response to each ordered question, which are often shorter in nature. The questions in a structured interview are like those in a job interview, where the employer asks the same set of questions for consistency. It is also like a theatrical script to be followed in a standardized and straightforward manner. Because the questions are routinely asked, a larger number of participants typically are in these studies. The interviewer records the responses according to a coding scheme that has been established according to the research question.

In diabetes, an example of a research question in a structured interview is “from the following six items, tell me, which one of these positively affects your diabetes control the most and why.” A structured interview is helpful when the researcher knows much about the topic and creates the questions in a survey-like format with open-ended questions. An example of a structured interview can be found in a study of genetic and life-style causal beliefs about obesity and associated diseases among 205 ethnically diverse patients.^[5] Other examples in diabetes literature include prediction of glycemic control in children^[6] and treatment response in Type 2 with a major depression.^[7] According to Denzin and Lincoln (p. 124),^[4] there are five guidelines to keep in mind:

1. Stay consistent with the study introduction, sequence of questions and question wording.
2. Do not let another person answer for the participant or offer his/her opinion about the question.
3. Do not suggest an answer or agree or disagree with an answer. You do not want to give the respondent any idea of your personal views on the topic.
4. Do not interpret the meaning of a question. If the participant does not understand the question, you should just repeat the question and ask him/her to give the best response or choose to skip the question.
5. Do not improvise, such as adding answer categories or making word changes.

Telephone interviews, interviews in malls or public places and interviews generally associated with survey research are most likely to be included in the structured interview category. The other two types of interviews are more common in health research and are described below.

SEMI-STRUCTURED INTERVIEWS

In a semi-structured interview, the researcher sets the outline for the topics covered, but the interviewee’s responses determine the way, in which the interview is directed. This is the most commonly used type of interview used in qualitative research and many studies illustrate its use in the context of diabetes and diabetes self-management.^[8-17] The semi-structured interview guide provides a clear set of instructions for interviewers and can provide reliable, comparable qualitative data.

Semi-structured interviews are often preceded by observation, informal and unstructured interviewing in order to allow researchers to develop a keen understanding the topic of interest necessary for developing relevant and meaningful semi-structured questions. The inclusion of open-ended questions and training of interviewers to follow relevant topics that may stray from the interview guide does; however, still provide the opportunity for identifying new ways of seeing and understanding the topic at hand.^[18] An example of an interview guide that is semi-structured:

Topic one: Personal story

1. Tell us something about yourself (your work, family, what you enjoy doing in your spare time).
2. What were your symptoms at diagnosis? What were you feeling?
3. Where did you learn to take care of your diabetes? What kinds of things did you learn?
4. What are some of your motivations for wanting to control your diabetes?

Topic two: Best practices of diabetes self-management

5. What do you do to manage your diabetes?
6. Walk me through a typical day. What time do you wake up, exercise, eat, take your medications, check your blood sugar and go to bed?
7. Please tell me what you ate yesterday at each meal, drink and snacks?
8. What do you do in particular that helps you the most with your diabetes?
9. Did you always take care of your diabetes? Tell me about that.
10. What are you thinking when you are checking your blood sugar or doing something good for yourself?

Topic three: Barriers and factors for success in diabetes self-management

11. What’s your biggest struggle that you have with daily diabetes self-management?
12. What keeps you on track?
13. What happens when you get off track?

14. How do you manage low blood sugars? What are you thinking? What do you do?
15. How do you manage high blood sugars? What are you thinking? What do you do?
16. If you could describe your diabetes when you were first diagnosed in the form of a picture or an image or a word, how would you describe or imagine it? How would you describe or imagine it now?

In general, the interviewer has a paper-based interview guide to follow, which is based on the research question. It is called semi-structured because discussions may diverge from the interview guide, which can be more interesting than the initial question that is asked. The participant does not need to answer the questions in order. Semi-structured interviews allow questions to be prepared ahead of time, which allows the interviewer to be prepared, yet gives the participant freedom to express views with his/her own words.

NARRATIVE INTERVIEWS

Narratives are stories that are based on the unfolding of events or actions from the perspective of a participant's life experience. Narration is not new; in fact, it is one of the oldest human activities.^[19] In diabetes, patients tell their stories of illness and how they live with illness over time. The story of the individual patient (the case) is still, despite the reliance of medicine on scientific theory and generalizable results, an important mechanism for understanding how general scientific knowledge is applied.^[20] In recent years, more formal study of narratives in social health has become a method to represent and interpret an individual's lived experience.

Certain questions or concerns in diabetes social health research lend themselves to a narrative interview approach. It is an approach to use when little is known about the research topic, for instance how religious beliefs might affect diabetes self-management. The researcher could begin the narrative interview with a wide net, such as "what are your religious beliefs?" with one follow-up question of "how do you these beliefs impact your diabetes management?"

Researchers who conduct narrative research assume that a narrative of chronic illness, such as diabetes, is not simply the story of an illness, but the story of a life that is altered by illness.^[21] Researchers interested in narrative and diabetes have conducted studies in a variety of topics^[22-25], which are displayed below in Table 1. After asking the narrative question, researchers encourage participants to tell their illness stories.

Table 1: Selected examples of narrative interviews related to diabetes self-management

Author	Disease description	Narrative question
Auduly ^[22]	Chronic disease self-management	What was it that made you seek care?
Garmo <i>et al.</i> ^[23]	Insulin pump therapy	Describe a typical day with an insulin pump
Gomersall <i>et al.</i> ^[24]	Poorly controlled type 2 diabetes in women	Please tell me the story of your life since your first encounter with diabetes
Minet <i>et al.</i> ^[25]	Diabetes self-management and motivational interviewing	What is the lived experience of diabetes on a daily basis?

The benefit of narrative interviews is that the participant guides the interview and may tell you information that could not have been predicted. The downside of these types of interviews is that they are often lengthy, lasting often 1 h. They are also more difficult to analysis than other types of interviews because it is an unstructured approach to interviewing that yields wide and deep themes.

CONCLUSION

In this article, we discussed three types of interviews used in social health research: (1) Structured; (2) semi-structured; and (3) narrative interview, each with varied levels of openness in format. Structured interviews have sequential and defined order in the questioning, where semi-structured interviews have a focus, but are flexible in order based upon the direction of the participant's responses. Narrative interviews are unstructured and typically begin with a wide open-ended question about a participant experience, where the participant is rarely interrupted in the telling of their story. Each of these three interview types can be used in qualitative research to extrapolate meaning of illness from the participant's perspective.

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