

## Research methodology

### Questions

1. Highlight the importance of data collection in public health research
2. Explain in details interview and role play as a method of research

### Answers

The importance of data collection includes:

1. Data collection allows healthcare systems to create holistic view of patients, personalized treatment, and to have an advance treatment method.
2. Data collection improves communication between doctors and patients.
3. Data collection allows you to store and analyze important information about existing and potential patients .
4. Data collection for a better and higher medical facility performance.
5. Data collection helps in the kind of decision doctors are about to make on a patient.

### 2. Interview method

1. Interview method as a form of data collection is gotten from qualitative type of research,
2. Interview method is the most common method of data collection used in qualitative healthcare research
3. Interviews can be used to explore the views, experiences, beliefs and motivations of individual participants

### Qualitative research interviews

There are three fundamental types of research interviews:

1. structured,
2. semi-structured and
3. unstructured.

Structured interviews are, essentially, verbally administered questionnaires, in which a list of predetermined questions are asked, with little or no variation and with no scope for follow-up questions to responses that warrant further elaboration. Consequently, they are relatively quick and easy to administer and may be of particular use if clarification of certain questions are required or if there are likely to be literacy or numeracy problems with the respondents. However, by their very nature, they only allow for limited participant responses and are, therefore, of little use if 'depth' is required.

unstructured interviews do not reflect any preconceived theories or ideas and are performed with little or no organisation.<sup>4</sup> Such an interview may simply start with an opening question such as 'Can you tell me about your experience of visiting the dentist?' and will then progress based, primarily, upon the initial response. Unstructured

interviews are usually very time-consuming (often lasting several hours) and can be difficult to manage, and to participate in, as the lack of predetermined interview questions provides little guidance on what to talk about (which many participants find confusing and unhelpful). Their use is, therefore, generally only considered where significant 'depth' is required, or where virtually nothing is known about the subject area (or a different perspective of a known subject area is required).

Semi-structured interviews consist of several key questions that help to define the areas to be explored, but also allows the interviewer or interviewee to diverge in order to pursue an idea or response in more detail. This interview format is used most frequently in healthcare, as it provides participants with some guidance on what to talk about, which many find helpful. The flexibility of this approach, particularly compared to structured interviews, also allows for the discovery or elaboration of information that is important to participants but may not have previously been thought of as pertinent by the research team.

#### The purpose of research interviews

The purpose of the research interview is to explore the views, experiences, beliefs and/or motivations of individuals on specific matters (eg factors that influence their attendance at the dentist). Qualitative methods, such as interviews, are believed to provide a 'deeper' understanding of social phenomena than would be obtained from purely quantitative methods, such as questionnaires. Interviews are, therefore, most appropriate where little is already known about the study phenomenon or where detailed insights are required from individual participants. They are also particularly appropriate for exploring sensitive topics, where participants may not want to talk about such issues in a group environment.

#### The interview

1. When designing an interview schedule it is imperative to ask questions that are likely to yield as much information about the study phenomenon as possible and also be able to address the aims and objectives of the research. In a qualitative interview, good questions should be open-ended
2. It is usually best to start with questions that participants can answer easily and then proceed to more difficult or sensitive topics.
3. The length of interviews varies depending on the topic, researcher and participant. However, on average, healthcare interviews last 20-60 minutes.

#### The interview

1. When designing an interview schedule it is imperative to ask questions that are likely to yield as much information about the study phenomenon as possible and also be able to address the aims and objectives of the research. In a qualitative interview, good questions should be open-ended (ie, require more than a yes/no answer), neutral, sensitive and understandable.
2. It is usually best to start with questions that participants can answer easily and then

proceed to more difficult or sensitive topics. This can help put respondents at ease, build up confidence and rapport and often generates rich data that subsequently develops the interview further.

As in any research, it is often wise to first pilot the interview schedule on several respondents prior to data collection proper. This allows the research team to establish if the schedule is clear, understandable and capable of answering the research questions, and if, therefore, any changes to the interview schedule are required.

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#### Developing the interview

1. Before an interview takes place, respondents should be informed about the study details and given assurance about ethical principles, such as anonymity and confidentiality.
2. Interviews should be conducted in areas free from distractions and at times and locations that are most suitable for participants.
3. When conducting the actual interview it is prudent for the interviewer to familiarise themselves with the interview schedule, so that the process appears more natural and less rehearsed.
4. At the end of the interview it is important to thank participants for their time and ask them if there is anything they would like to add.

#### B. Role play

A role-play, just like prototyping can be used as a way to gather data, tweak and re-role-play to gather more data from the activity. The participants in this method of research essentially play certain roles in a skit or a conversation. Depending on the expected nature of the exchange or intended data to be gathered, a few participants are given the script in advance and a few are asked to either play themselves or specific roles based on instructions. The different scripts that the participants play out can be designed, as different scenarios where the participants are immersed in those scenarios to understand how each one would react in specific situations.

After each role-play exercise, the participants including the researchers reflect on the interaction and play out the other scenarios or re-play the same scenario with changes to gauge whether changes can alter the experiences of the participants. A variation of this exercise involves re-playing the same scenario with different participants or, changing the character profiles of the participants to understand how different users would act in the same situation.