QUALITATIVE RESEARCH, ITS RELEVANCE AND THE USE OF FOCUS GROUPS

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INTRODUCTION

Most medical professionals equate research with quantitative research. There has been a proliferation of recommendations and guidelines derived from the recent wave of enthusiasm in evidence-based medicine. Practising physicians, especially family physicians, who have to deal with patients with undifferentiated problems living in a real world often find it hard to follow such guidelines.

Part of the reason is that most of the "evidence" are derived from quantitative research which tend to emphasise the biomedical aspects of illnesses. For evidence-based medicine to be effectively applied in the real world, it has to be tempered by the understanding of the biopsychosocial model of sickness and health.

Likewise, quantitative research should be interpreted in the context of the findings from qualitative research. There is a limit to the extent to which the data from quantitative research can be generalised to a unique individual living in a unique environment.

WHAT IS QUALITATIVE RESEARCH?

The purpose of qualitative research is not to generalise but to enrich our understanding. Although many medical professionals are unfamiliar with it, qualitative research is well recognised and used extensively in the social sciences.

A unique area that qualitative research can provide information that other methods cannot is in the area of organisational culture and group

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behaviour. In medicine, the attitudes and group culture of healthcare workers have a great impact on the manner in which heath care is provided. Our daily experiences tell us there is great dissonance between what is said, written and what is practised. This has always been a constant source of mystery and frustration to those who hold rigid views on the validity of knowledge derived from quantitative research.

Qualitative research tries to find such answers. It does not seek quantified answers. It is not interested in how many percentages of a certain sample reply in a certain way to a question. It wants to know why they reply in such a way and how a respondent would actually behave in a particular role or group. For example, observational studies, which is one method of qualitative research, can overcome the discrepancy between what people say and what they actually do1. It seeks to conceptualise attitudes, shared knowledge and group norms in its natural (not experimental and controlled) settings. As most of us are more familiar with quantitative research, it may be helpful to understand qualitative research in its light.

Qualitative research is about "What is X and how it varies with Y in various circumstances and why?" It is not about "How many X's are there?"²

Qualitative research uses interviews, group interactions and observations. The investigator may be required to actively intervene and becomes a tool of investigation. Quantitative research uses surveys and experiments and the investigators try to minimise his impact when the research is in progress.

Qualitative research is more interested in validity. It is more concerned about how people actually behave and how treatment decisions are actually made. Quantitative research is more concerned about the reliability of the findings. It is more concerned about effects and whether results are reproducible.

The method of qualitative research is relatively unstructured. The investigator is encouraged to move between collecting the raw data and conceptualising. On the other hand, quantitative research has a rigid structure of research design, data collection and analysis. Breaching these structures would bring reliability into question and diminish its value greatly.

Qualitative study uses imaginative sampling. A concept that would make a person brought up in quantitative methods shudder. The investigator deliberately seeks out relatively small samples that form natural groupings. Groups are formed to try to represent segments of a group such as according to ethnicity, gender or seniority in an organisation. Depending on the study, he may form homogenous groups to seek out consensus or diverse groups to explore dissent. Quantitative research is well know for its obsession with huge and random samples. It also tries to control confounding by various means.

The analysis of qualitative research is inductive. The investigator observes, conceptualises and then forms the hypothesis. Quantitative research is deductive. A precise hypothesis is made and the investigator sets out to collect data to prove or disprove it. It is this aspect of apparent contradiction that makes them so complementary to one another. A qualitative study can give rise to hypothesis that can be tested by quantitative methods. The circle is completed when a qualitative study is made to validate the findings of the quantitative study.

How to reconcile qualitative research and quantitative research?

As mentioned earlier, there is contradiction as well as synergy between these two methods. The two methods are actually complementary in the search for answers in medicine and health care. There is presently an over-representation of quantitative research. Qualitative research is in relative neglect and not well used to complement and validate findings of quantitative research. In areas of medicine where the psychosocial dimension is a major component, quantitative research becomes a blunt and cumbersome tool. In some situations, only qualitative methods can yield meaningful results. Examples of such a phenomena are the emotions of terminally ill patients and the doctor-patient relationship.

In summary, qualitative research complements quantitative research in three ways:

- 1. A preliminary qualitative survey can help to conceptualise hypothesis and help to make the study design of quantitative survey more appropriate.
- 2. It can be used to validate the findings of quantitative studies.
- 3. It can help study complex phenomena in areas that cannot be tested by quantitative methods.

FOCUS GROUP AS AN EXAMPLE OF QUALITATIVE RESEARCH

Focus group interactions, observational studies and interviews are the main methods of qualitative research. Of these, the focus groups method is perhaps the most representative and illustrates the principles of qualitative research very well.

In this method, groups of subjects are gathered

and encouraged to talk about the subject of the research. Selection and arranging the group members is a critical process. The success depends on recruiting people that are influential or greatly influenced by the topic under study. This is done with an understanding of how possible group dynamics may work. It is during the interpersonal interaction that data and concepts are generated. The investigator usually plays the role of the facilitator. The skill of the facilitator in encouraging interaction, conceptualising and exploring ideas brought up is very important. This determines to a large extent how much data would be harvested eventually.

Group interaction is therefore the essence of the focus group method. It is also important to understand that the interaction involves more than just what is said to the facilitator. It involves and includes the subjects talking to one another, asking, exchanging anecdotes, commenting on each other's experiences and viewpoints³. Attention is paid to all forms of communication that ensues. Jokes, disagreements, teasing, quarrels and body language are all relevant and noted.

The investigator must therefore be a very keen observer of human communications, very much like a naturalist observing wildlife in nature. He is involved and yet detached, to allow for accurate observations. Group processes are used to explore ideas and clarify views. Group members are usually allowed to generate new topics and pursue their own priorities.

Group norms sometimes suppress dissent or contrary views and the investigator must try minimise this effect during sampling and include ways to obtain suppressed views in his study design. On the other hand, group processes do not always suppress. Most of the time the reverse happens.

For example, dissenting views can be brought forth when "dissidents" form a group and find safety in numbers. This brings us to a point of ethics. Confidentially breaches are more likely to happen in focus groups when compared to one- on-one interview.

In summary, the focus group method is a good research tool to study cultural variables, organisational value norms, dominant values and individual behaviour. It can be used to identify areas of consensus, dissent and shared knowledge within groups of individuals. Encouraging group interactions and skilful observations are important elements of focus group studies.

HOW TO RUN A FOCUS GROUP?

Sampling

Unlike quantitative survey, theoretical sampling is used rather than random sampling. Depending on the subject and the scope of the study, usually 6 to 50 groups of subjects are formed. Each group usually comprises 4 to 8 persons.

Effective grouping is very important. Factors to consider in grouping the subjects would depend on how likely factors like gender, ethnicity, age, organisational hierarchy would affect group dynamics and interactions. Natural groupings are sometimes used. Group members who are familiar with one another may improve interaction and allow comments on shared experiences.

Groups may be homogenous or diverse. Homogenous groups facilitate interactions and are good for exploring consensus. Diverse groups although difficult to study can generate important findings that may otherwise be missed. It is good for identifying areas of dissent.

Method

The setting where the focus group takes place is important. There should be minimum distractions and external interruptions. It is important to create a relaxed and reassuring atmosphere. The participants are seated in a manner that would allow everybody to talk to everyone else, with due consideration given to the need for eye contact and body language. This would usually require them to sit in a circle or a semi-circle. Audio or video recording instruments must be unobtrusive. The investigator must take into account that they may inhibit interaction and must not be used if there is any objection from any participant.

The facilitator, who is usually the investigator, would start the interaction. This is usually done in open-ended questions. This is usually followed by questions based on what the participant says and consists mainly of probing for details and clarification4. It must be emphasised to the participants that there are no right answers and the emphasis is to encourage communication between members and explore ideas. The facilitator should try to make the participants feel at ease. Subsequent to that, the investigator has two roles. One is the detached naturalist observing and recording the data generated from the interaction. The other is the interventionist, identifying ideas and concepts that have been thrown up and encouraging more interaction to explore them. Conventionally, the investigator is usually passive in the beginning and interventionist towards the end. It is important to remember that any intervention is done to facilitate more interaction. The investigator should resist explaining ideas or correcting factual errors. In other words, he can intervene but should not participate in the focus group interactions.

Group exercises are sometimes used to facilitate the process of interactions. One exercise is to use large cards with statements and ask the participants to rank in terms of agreement or importance. This helps participants to crystallise their views. It must be remembered that qualitative research is not interested in how many, rank what statement , in what order. The importance is in finding out why they are ranked in a particular manner. The focus is on the interactions that the exercise produces and not the exercise itself.

At the end of the meeting, it is useful to gather views that may have been suppressed by the group dynamics. This may be in the form of one-to-one interview or an open-ended survey form. The participants are encouraged to express private views that they feel uncomfortable about bringing up during the group interaction.

Careful field notes are taken and subsequently analysed. Audio recording and video recording greatly enhance the accuracy and reliability of data collection. Unfortunately, participants may feel uncomfortable with their use. The advantages and disadvantages of the use of such equipment must be weighed carefully.

How to analyse the findings obtained from a focus group?

The statistical methods that are almost synonymous with quantitative research are not useful. The process of analysis in qualitative research is inductive and not deductive.

The investigators collate the data from the different groups and compare them to see how they relate to the variables within and between the groups. It is important to try to conceptualise the attitudes, perceptions, group norms, cultural values, consensus and dissent. A unique aspect of the focus group is that group dynamics and how it affects the interaction should be noted and explained. It is also useful to quote the participants in context to illustrate aspects that may lose some of its meanings if rephrased or interpreted. Deviant case analysis is important. Attention must be given to minority opinions and examples that do not fit the investigator's overall theory.⁵

CONCLUSION

In order to study the biomedical aspects of diseases, abstraction is necessary. It allows quantitative data collection and generalization to the population. The power of generalization increases with each level of abstraction. However, the abstraction is not the complete picture, just as the "map is not the territory". In McWhinney's (1997) own words, "the higher the level of abstraction, the more the rich texture of the world of experience is flattened out and rendered unrecognisable". The other problems with quantitative research are that human events are not repeatable in exactly the same way and randomisation of human subjects is often impossible. The act of studying people changes them?

Just as abstraction enables quantitative research to produce information, such new knowledge has to undergo a process of "de-abstraction" before it can be applied in the real world. Validation is one of many such processes. Qualitative research is an important tool of validation. The data from qualitative research also adds a new dimension to the abstract facts and figures produced by quantitative survey.

Ideally, all guidelines and recommendations developed from quantitative research should be validated by qualitative studies. The practising physicians in the frontline of medicine and the real patient coping in the real world should be acknowledged. Acceptability and practicality should be studied before guidelines are implemented.

Ultimately, the usefulness of any type of research in medicine depends on making it relevant to the real world of patients and healthcare providers. It requires a large measure of common sense and having a caring, competent doctor who treats the patient in the context of his or her psychosocial milieu.

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