

# Qualitative Research and its Uses in Health Care

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## البحث النوعي واستعمالاته في الرعاية الصحية

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**المخلص:** على الرغم من قلة استعمال طرق البحث النوعي في بحوث الرعاية الصحية . إلا أنها بدأت تلقى اهتماما ورواجا بين أوساط المشتغلين بالأبحاث الصحية ذات الأبعاد الاجتماعية والثقافية. ويختلف هذا النوع من البحوث عن البحوث الكمية المتعارف عليها . والتي تعتمد على تحليل الظواهر بالطرق الاحصائية. بينما تعتمد طرق البحث النوعية على تفسير ووصف الظواهر قيد البحث. وهدف الأخيرة تكوين مفاهيم تساعد في فهم الظواهر الطبيعية مع التأكيد على معنى وخبرات ووجهات نظر المشاركين . هناك اختلافات ايضا ضمن البحوث النوعية فيما يتعلق بعلم الوجود ونظرية المعرفة وطريقة جمع البيانات وتحليل النتائج. ليس الهدف من هذه المراجعة تقديم دليل عملي حول كيفية القيام بالبحث النوعي . ولكنها محاولة لوضع مدخلا الى طرق البحث النوعية واستخداماتها في مجال البحوث الصحية .

**مفتاح الكلمات :** الرعاية الصحية . البحث النوعي . علم الظواهر . الجغرافيا الاثنية . المقابلات . نصف منظم . مجموعات الاهتمام .

**ABSTRACT** Although relatively uncommon in health care research, qualitative research is now receiving recognition and is increasingly used in health care research with social and cultural dimensions. Unlike quantitative research, which is deductive and tends to analyze phenomena in terms of trends and frequencies, qualitative research seeks to determine the meaning of a phenomenon through description. It aims to develop concepts that aid in the understanding of natural phenomena with emphasis on the meaning, experiences and views of the participants. Differences among qualitative researchers exist on matters of ontology, epistemology, data collection methods and methods of evaluation. The aim of this article is not to act as a practical guide on how to conduct qualitative research, but is an attempt to give an introduction to qualitative research methods and their use in health-related research.

**Keywords:** Health Care; Qualitative Research; Phenomenology; Ethnography; Interviews, semi-structured; Focus Groups.

**Q**UALITATIVE RESEARCH IS DEFINED AS AN umbrella term covering an array of interpretative techniques which seek to describe, decode, translate and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world.<sup>1,2</sup>

As a method of inquiry, it was first used by sociologists and anthropologists in the early twentieth century, although it existed much earlier than that in its non-structural form. Researchers studied cultures and groups in their own and foreign settings and told stories of their experience long before then. In the 1920s and 1930s, social anthropologists and sociologists implemented a more focused approach compared to the old unsystematic and journalistic style used in those days. Since the 1960s, qualitative research has experienced a steady growth starting with the devel-

opment of grounded theory and new publications in ethnography.<sup>3, 4</sup> The number of books, articles and papers related to qualitative research has increased tremendously during the past 20 years and more researchers, including health-related professionals, have moved to a more qualitative paradigm adapting and modifying these approaches to the study needs of their own areas.<sup>4</sup>

Since qualitative research does not aim to enumerate, it is sometimes viewed as the exact opposite to quantitative methods and the two methods are frequently presented as antagonists. Quantitative research is based on structure and uses experiments and surveys as methods. In addition, it is deductive in nature and uses statistical sampling methods. In contrast, qualitative research is described as an action research using observation and interview methods. It is inductive in nature and depends on the purposeful

selection of participants. Whereas quantitative researchers use reliability as a way of verification, qualitative researchers use validity. Recently, there has been a growing recognition that the quantitative-qualitative debate and distinction is unnecessary and that it would be more fruitful for the relation between the two methods to be complementary and overlapping rather than exclusive.<sup>6</sup> In fact, neither qualitative nor quantitative research is superior to the other; there are weaknesses and strengths in each method. Qualitative and quantitative research methods can indeed be seen as complementary and both are necessary to provide an understanding of a phenomenon.

Several researchers have argued that the research questions and the phenomenon under investigation should determine the methodology to used.<sup>7, 8, 9</sup> The crucial question, therefore, is not “what is the best research method?” but “what is the best research method for answering this question most effectively and efficiently?”<sup>10</sup> So, while qualitative and quantitative research may well investigate similar topics, each will address a different type of question. Holman sums up this position: “true understanding in medicine cannot be achieved without adding qualitative methods to the research arsenal.”<sup>11</sup>

Traditional quantitative methods, such as randomised controlled trials, are the appropriate means of testing, for example, the effect of an intervention or a treatment, while a qualitative exploration of beliefs and understandings is needed to find out why the results of research are often not implemented in clinical practice. The aim of qualitative research is to develop concepts that can help us understand social phenomena in natural settings, giving emphasis on the meanings, experiences and views of the participants.<sup>10</sup>

Qualitative research methods are the most suitable for this approach because of their emphasis on people’s lived experience. They are considered to be well suited for locating the meanings that people place on the events, processes, and structures of their lives and their perceptions, presuppositions and assumptions.<sup>5</sup> In his advice to graduate students, Patton lists a number of conditions that are suitable for a qualitative study. These include: questions about people’s experiences; inquiry into the meanings people make of their experiences; studying a person in the context of her or his social/interpersonal environment and research where it is difficult to develop a standardised instrument due to the lack of knowledge on the

phenomenon.<sup>12</sup>

### ARGUMENTS FOR AND AGAINST QUALITATIVE METHODS

There are major differences of opinions among qualitative researchers on matters of ontology and epistemology as well as the methods to be used and criteria of evaluation. There are also disagreements about the nature, purpose, status and practice of its methods. A large number of authors take a predominantly method-based approach; authors such as Miles and Huberman<sup>5</sup> and Patton<sup>12</sup> put emphasis on data collection techniques. Another approach is to classify qualitative research according to research traditions, i.e. whether phenomenological, grounded theory or ethnography, amongst others. Authors such as Creswell<sup>9</sup> and Denzin and Lincoln<sup>3</sup> prefer this approach, which has the advantage of being based on systematisation of knowledge providing a sense of order and orientation. On the other hand, it has the disadvantage of oversimplification, ignoring the issues of the research question and conceptual frameworks used and the way these issues can shape the research process and the findings.<sup>13</sup> In addition, some researchers have decided to classify qualitative research according to the research question or the method of analysis.

Although the majority of qualitative researchers stress that qualitative research is inductive in nature, in contrast to quantitative research which is deductive, there are qualitative researchers who argue that both can be used for different purposes and at different times, and that qualitative research can be done in a deductive way where prior assumptions are tested on new cases.<sup>14</sup> Retroduction, which is defined as the movement backward and forward between theory and data or the combination of deduction and induction, is said to be a characteristic of qualitative research.<sup>11</sup> The degree of deduction or induction and which one follows the other depends on the research question.<sup>12</sup>

Guba and Lincoln<sup>15</sup> used the term “emergent design” to describe a qualitative study design that emerges as the study progresses in response to the researcher’s early observations. There are also qualitative studies in health care that base their research questions on the results of prior literature of quantitative studies on the subject.<sup>16, 17</sup> While the research questions in these studies were relatively precise, the method used was flexible.

Miles and Huberman<sup>5</sup> state that no study con-

forms exactly to a standard methodology and that the researcher bends the methodology to the peculiarities of the study. According to Creswell,<sup>9</sup> traditions of inquiry used “need not be pure, and one might mix procedures from several”. Mixing approaches and procedures is encouraged by some authors and regarded as a creative approach to qualitative research.<sup>12</sup>

Studies using qualitative research in health care have been criticised for the misguided separation of method from theory and of technique from the conceptual underpinnings.<sup>18</sup> However, qualitative health researchers respond by stating that the choice of method and how it is used can perfectly well be matched to what is being studied rather than to the methodological leanings of the researcher.<sup>10</sup> It has been suggested that incorporating qualitative research method experts into health research teams enriches research and ensures that the right methodology is used for answering the right questions. Finally, using qualitative methods in health-related research has resulted in more insight into health professionals’ perceptions of lay participation in care and identification of barriers to changing healthcare practice.

#### QUALITATIVE RESEARCH APPROACHES

Grounded theory, phenomenology and ethnography are three approaches used in qualitative research. Grounded theory approach is a commonly used qualitative method in the social sciences to inductively generate or discover a theory out of the data.<sup>9</sup> Phenomenology and ethnography are more commonly used qualitative approaches in health care and will be highlighted below.

#### PHENOMENOLOGY

One of the major strengths of qualitative research is its emphasis upon understanding the phenomenon of interest holistically and in its context. The term phenomenology is popular and widely embraced, but its meaning has become confusing and faint. Different researchers refer to phenomenology differently. It can refer to an inquiry paradigm, an interpretive theory, a philosophy, an analytical perspective, a major qualitative research tradition or a research method framework.<sup>12</sup>

In spite of the differences, all of these approaches share the focus of phenomenology, which is exploring how human beings make sense of experience and the meaning they give to these experiences. Phenomenology is being used in the social and human sciences in-

cluding sociology, education, psychology, nursing and health sciences.<sup>9</sup>

Phenomenologists are interested in how people put together the phenomena they experience in such a way as to make sense of the world and develop a worldview. They assume commonality in human experience and focus on meaning-making as the essence of human experience. The essence is the core meaning mutually understood through a phenomenon commonly experienced.<sup>12</sup> The phenomenon under study may be emotions, relationships, a programme, an organisation or a culture.<sup>12</sup> Bracketing is one of the central ideas in phenomenology. It means that the researcher has to set aside all of his judgments and his previous experience about the phenomena and approach the field with an open mind, imagination and intuition. Although important, bracketing is often said to be a difficult task.<sup>9</sup>

Patton<sup>12</sup> describes the difference between conducting a phenomenological study and using a phenomenological perspective to a study. He argues that, “one can employ a general phenomenological perspective to elucidate the importance of using methods that capture people’s experience of the world without conducting a phenomenological study that focuses on the essence of shared experience”.

#### ETHNOGRAPHY

In ethnography, the researcher studies the structure and function of a group of people. An example of a structure or configuration is the kinship, while the function refers to patterns of relationships affecting and regulating behaviour.<sup>9</sup> The aim of ethnographic studies is to give a holistic picture of the social group studied, attempting to describe aspects of the cultural and social system of that particular group. These aspects could be the group history, religion, economy, politics or environment.

Data collection methods vary in ethnographic studies with observation and interviews being the most popular methods. Although some authors expressed concern that anthropological methods may be misused or applied superficially by the medical profession,<sup>19</sup> others, however, expressed the need for acknowledging and incorporating ethnographic methods in health care research.<sup>20</sup> Savage<sup>19</sup> explains that today the term ethnography can be applied to any small-scale social research carried out in everyday settings and uses several methods evolving in design

and focusing on an individual's meanings and explanations. In health care, ethnography has been used in topics related to health beliefs and practices, allowing these issues to be viewed in the context in which they occur and therefore helping broaden the understanding of behaviours related to health and illness.<sup>20</sup>

In addition, there has been an increase in the amount of cross-cultural research and a change in the form of this research. Recently, more short-term ethnographic and cross-cultural studies have been undertaken, for example, studies sponsored by international development agencies or student exchange projects.<sup>12</sup>

### QUALITATIVE RESEARCH INSTRUMENTS

Qualitative research instruments used for data collection include interviews, observations, and analysis of documents. Interviews are the most common techniques used to gather research information. There are three types of interviews: structured, semi-structured and unstructured, described in some books as structured, informed and guided, respectively.<sup>13</sup>

The semi-structured interview is more commonly used in health care-related qualitative research. Such an interview is characteristically based on a flexible topic guide that provides a loose structure of open-ended questions to explore experiences and attitudes. It has the advantage of great flexibility, enabling the researcher to enter new areas and produce richer data. In addition, it helps the researcher to develop a rapport with the informants. Semi-structured interviews elicit people's own views and descriptions and have the benefit of uncovering issues or concerns that have not been anticipated by the researcher.<sup>6</sup> They are commonly used when the aim is to gain information on the perspectives, understandings and meanings constructed by people regarding the events and experiences of their lives. However, this type of interviewing is claimed to reduce the researcher's control over the interview situation and take a longer time to conduct and analyse, in addition to the difficulties of the analysis process.<sup>21</sup>

In health care, interviews are the appropriate tool to be used if the research is concerned with interpersonal aspects of care or if the available evidence is limited.<sup>6</sup>

Another qualitative research instrument that can be used in health care research is the focus group. Focus group interviews have the advantage of being

more time efficient as more people can be interviewed for the same amount of time. They also provide a richer source of data. On the other hand, focus group interviews tend to document the 'public' rather than the 'private' views of the individuals. In addition some people do not interview well in-group situations.<sup>13</sup>

### THE USE OF THE INTERVIEW GUIDE

Some qualitative researchers are reluctant to plan a design of their study in advance of the data collection. They argue that the phenomenon studied must first be discovered and they describe their design as emergent. However, increasingly more qualitative researchers appear ready to define a research question and develop an interview guide prior to starting the data collection.<sup>11</sup> Patton defines an interview guide as a series of topics or broad interview questions which the researcher is free to explore and probe with the interviewee.<sup>12</sup> The advantage of an interview guide is that it helps the interviewer pursue the same basic lines of inquiry with each person interviewed and manage the interviews in a more systematic and comprehensive way. The findings of earlier work are increasingly being used as a facilitator for further research. However, concepts drawn from earlier work are supposed to be held lightly and to be subject to reformulation or rejection by the researcher especially as the study goes on and the research progresses.<sup>11</sup> The extent to which such a flexibility of design is important will vary depending on the topic and the aim of the study.

### SAMPLING

Sampling strategies in qualitative research are largely determined by the purpose of the study. Statistical representativeness is not considered as a prime requirement in qualitative research and is not normally sought. Furthermore, qualitative data collection is more time consuming and expensive, which makes the use of a probability sample impractical.<sup>6</sup> The aim of sampling in qualitative research is to identify specific groups of people who hold characteristics or live in circumstances relevant to the phenomena being studied. In this way, identified informants are expected to enable enriched exploration of attitudes and aspects of behaviour relevant to the research.<sup>10</sup> Two types of samples used in qualitative research, maximum variation and homogenous samples, are explained below.

According to Patton,<sup>12</sup> maximum variation sam-

pling is where the researcher attempts to study a phenomenon by seeking out settings or persons that represent the greatest differences in that phenomenon. A maximum variation sample documents diverse variations and identifies important common patterns by representing diverse cases to develop fully multiple perspectives about the cases.<sup>9</sup> This means that the participants are sampled based on particular predetermined criteria in order to cover a range of constituencies, such as different age, cultural background or class.<sup>6</sup>

Similarly, the researcher can select the setting of the data collection on the basis that it is sufficiently similar to other settings in which generalisation is sought. This way the researcher is demonstrating the possibility that the setting studied is representative of the population studied.<sup>2</sup>

In homogeneous sampling, the researcher chooses a small homogenous sample with the purpose of describing some particular subgroups in depth.<sup>12</sup>

The sample size in qualitative research is not determined by fixed rules, but by factors such as the depth and duration of the interview and what is feasible for a single interviewer.<sup>22</sup> Although it is theoretically possible to carry out qualitative research on large samples, qualitative researchers find themselves obliged by time and resource limits to trade breadth for depth.<sup>11</sup> The sample size for interview studies is usually much smaller than those of a quantitative research, usually not exceeding 50 participants, although this can vary with the research question asked.<sup>6</sup> Patton<sup>12</sup> states, "there are no rules for sample size in qualitative inquiry". In other words, sample size depends on the aim of the study and what is possible, given the time and resources available.

### ANALYSING QUALITATIVE RESEARCH

Although there are plenty of guidelines for analysing qualitative research, applying these guidelines requires judgment and creativity because each qualitative study is unique.<sup>12</sup> A researcher might also be confused by the different terms used by qualitative researchers when describing analysis. Analysis might be described as interpretation, making sense of data, or transforming data. Analysis is sometimes presented to indicate different procedures based on language, theory or what is described as interpretive/descriptive analysis.<sup>11</sup> However, overlap can take place between

these different methods and a researcher might decide to use a method of analysis that is based on language, such as symbolic interactionist, while using grounded theory to develop a theory at the same time. Most of the analytical approaches to qualitative research in health care are 'generic' and are not labelled within one of the specific traditions of qualitative research. A common approach in most of these studies is general and inductive in nature, but does not comply with the very systematic and rigorous inductive approach of grounded theory. In addition, it has been described that many researchers use a simple two-level analysis scheme followed by a more specific level. This means that the researcher can initiate the analysis based on the conceptual framework used in order to produce more inductive data, and the coding moves from the descriptive to the more interpretative and inferential codes.<sup>5</sup>

### COMPUTER USE IN QUALITATIVE DATA ANALYSIS

Qualitative research studies typically produce very large amount of data that needs to be managed efficiently. Computer packages can improve the efficiency of data management.<sup>11</sup> Computer programs provide a way of storing and retrieving material. They are therefore useful in locating cases, statements, phrases or even words, thereby replacing the tedious and time-consuming process of "cutting and pasting" and "colour coding". The use of computer packages, however, is claimed to distance the analyst from the data,<sup>11</sup> and may take the place of a close and careful analysis. Using a computer programme can lead to quantitative analysis instead of qualitative, for example, counting occurrences, giving more weight to more frequent events, and ignoring isolated incidences.<sup>23</sup> In addition, computer programmes are said to fix and label categories during the analysis process and the researcher may be reluctant to change these categories.<sup>9</sup> Furthermore, the researcher is required to learn the computer programme, which may add to the time and effort he or she will need to spend on the research project. The researcher also has to be aware of the limitations of computer programmes. While computer packages can help with the intensive process of analysis and the management of large data sets, they are not a substitute for "immersion" in the data, and thorough knowledge that can enable the researcher to make comparisons, identify patterns and develop interpretations.<sup>6</sup> There

are different packages available: Ethnograph, Atlas and NUD.IST are the mostly used. QSR NVivo is a new product developed by the makers of NUD.IST and is user-friendlier, more suitable for individual research projects and more visually attractive than previous packages.

### THE ROLE OF THE RESEARCHER IN QUALITATIVE RESEARCH

Patton<sup>12</sup> states that, “the human element in qualitative research is both its strength and weakness”. It is considered a point of strength because it allows human insight and experience to develop new understandings of the world, and a point of weakness because it depends heavily on the researcher’s skills, creativity, training and intellect. Qualitative methods depend on both critical and creative thinking and the balance between the two in conducting the study and interpreting its results. The role of the researcher is approached differently according to the type of research tradition used. A phenomenologist researcher is required to bracket his/her own assumptions when collecting data. On the other hand, in an ethnographic study, the effect of the researcher on the interview and the interaction is seen as inevitable and important in shaping the results of the study.

Although practising clinicians routinely interview patients during their clinical work, interviewing is a well-established technique in sociology and related disciplines. One of the differences between clinical and research-aimed interviews lies in their different purposes. The usual aim of the clinical interview is to fit the patient’s problem into the appropriate medical category for diagnosis and management. On the other hand, the aim of a qualitative research interview is to discover the interviewee’s own meaning and avoid prior assumptions and preset categories.<sup>22</sup> Having said that, there are general skills in clinical interviewing that can be useful, such as listening and observation. A good level of self-awareness is necessary in the researcher in order to reduce possible biases.

Researchers in qualitative research need to consider how they are perceived by interviewees and the effect of features related to the researcher, such as class, race, and sex on the interview. This question is more important if the interviewee knows that the interviewer is a doctor. It has been described that a patient, or someone who is likely to become one, may give what he or she thinks is a desirable response, thinking

that the doctor will be pleased.

### RIGOUR IN QUALITATIVE RESEARCH

Health field research is generally quantitative and based on biomedical traditions and experimental methods. In this field, qualitative research is criticized for being subject to researcher bias and for lacking reproducibility and generalisability.<sup>10</sup> Researchers presenting their qualitative work in health-related research are partly responsible for this view. Many qualitative researchers neglect the importance of giving an adequate description of their theoretical concepts and methods used in their research. A systematic research method is also essential when conducting qualitative research. Rigour in qualitative research includes procedures taken at different stages of the research process including during data collection and analysis. Several procedures have been described to increase rigour in qualitative research. For example, triangulation is commonly used as a way of validating of data.

#### TRIANGULATION

In triangulation, the researcher uses multiple methods, sources, researchers or theories to provide evidence that strengthens his or her study. Triangulation provides different ways of looking at the same phenomenon and adds credibility and confidence in the conclusions drawn from the study. There are two main types of triangulation, triangulation of sources and analyst triangulation. Patton<sup>12</sup> defines triangulation of sources as “checking out the consistency of different data sources within the same method”. When using this type of triangulation, the researcher compares the perspectives of people from different points of view. For example, studies in programme evaluation might compare the views of staff, clients or funding bodies.<sup>12</sup> Studies in health care have used this method of verification to study the accounts of doctors, patients, and managers in order to identify similarities and differences in views. An example is the study of patients’ versus doctors’ agendas in general practice.<sup>23</sup> Both similarities and differences from different sources, when given reasonable explanation, could contribute significantly to the credibility of the findings. Triangulation with multiple analysts can also be used as a method of verification. It is defined as “having two or more persons independently analyse the same qualitative data and compare their findings”.<sup>12</sup>

## QUALITATIVE RESEARCH IN HEALTH CARE MANAGEMENT

Recently, there has been a greater acceptance of the qualitative approach, even as a stand-alone method, in health care research. Institutions that control funding for medical research have developed ethical guidelines for assessing qualitative studies which indicates formal acceptance of this form of research within an area previously dominated by quantitative methods.<sup>13</sup> More qualitative research articles are published in health-related journals, in addition to a new qualitative research journal (Qualitative Health Research).

Quality of health care is one of the areas where qualitative methods can be used. The concept of quality in health care is multidimensional and multifaceted and some of the questions asked related to the quality of care or services may not be acquiescent to quantitative methods.<sup>6</sup> Qualitative research offers a variety of methods to be used for identifying what is really important to both patients and carers. It can also be used to identify and detect obstacles to change and the reasons why improvement does not occur.<sup>6</sup> It is therefore an essential component of health services research because it enables us to reach areas not amenable to quantitative research, for example, lay and professional health beliefs. In addition, qualitative description can be a prerequisite of quantitative research, particularly in areas that have received little previous investigation.

Qualitative research is widely used to study issues related to doctor-patient interaction especially in general practice. Studies concerning patients' versus doctors' agendas in general practice and general practitioners perceptions of effective health care are examples.<sup>23, 24</sup> Recently there have been more studies concentrating on patients' own perceptions and views regarding their health and health care services, for example a study on women's views on the impact of operative delivery in the second stage of labour.<sup>25</sup> Another example is the study on middle-aged person's experience of living with severe heart failure.<sup>26</sup>

Another area where qualitative research is being used in health care is to identify obstacles and barriers to practice change by exploring the reasons behind certain behaviours. A good example of this is the study of patients' decisions about whether or not to take anti-hypertensive drugs.<sup>27</sup> There are similar studies on issues such as the use of antibiotics in general practice and patient compliance.

In addition to issues related to the patients' perception, some qualitative studies concentrated on factors fostering the doctor's motivation and the effect of doctors' social life and culture, in addition to issues related to the doctor's own health. Examples are the study by Dumelow et al.<sup>28</sup> on the relation between a career and family life for English hospital consultants. Another example is a study aimed at exploring general practitioners' perceptions of the effects of their profession and training on their attitudes to illness in themselves and colleagues.<sup>29</sup>

Qualitative work can help in identifying cultural and social factors that affect health care positively or negatively. Such information can be helpful in improving service delivery.<sup>6</sup> Studies on patients from ethnic minorities have identified administrative and language barriers that affected health care and shed light on some of the beliefs and behaviours of these patients that might have affected help seeking and compliance. Good examples are the studies by Bush et al.<sup>30</sup> exploring the influences on smoking in Bangladeshi and Pakistani adults in the UK, and the multi-centre cross-cultural postnatal depression study.<sup>31</sup>

There has been an increasing interest and use of qualitative research methods in primary health care and general practice articles. Britten<sup>32</sup> states that "the nature of general practice is such that a variety of research methods are needed to explore all its intricacies" He adds that qualitative methods can enrich research in general practice by opening up areas not amenable to quantitative methods, topics such as patient satisfaction, doctor-patient interaction, in addition to identifying and explaining attitudes, beliefs and behaviour. In addition, qualitative research has been used in the assessment of new technology methods used in health care. For example, the studies on the implementation of the National Health System information technology programme in the UK.<sup>11, 33</sup>

## CONCLUSION

Qualitative research methods are receiving an increasing recognition in health care related research. The use of qualitative research in health care enables researchers to answer questions that may not be easily answered by quantitative methods. Moreover, it seeks to understand the phenomenon under study in the context of the culture or the setting in which it has been studied, therefore, aiding in the development of new research instruments, such as questionnaires

that are more culturally acceptable. However, because health care related research has, for decades, been based on quantitative methods, the introduction of a new method requires researchers in health care who attempt to use it, to have a thorough understanding of its theoretical basis, methodology and evaluation techniques.

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