

Can we use qualitative research approach in biomedical studies?

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There is no good or bad research approach; both qualitative as well quantitative research methods are better means of inquiring about a phenomenon/problem. However, choice of selecting the appropriate approach depends upon the type of information needed to be answered by the research question. If researchers want to explore about perceived experiences, feelings, attitudes or behaviors of a particular group (event) which is relatively unknown; they may need to investigate on the given issue in order to build up on the existing knowledge for developing a theory.

In reflection to the statement made by Creswell, qualitative research is defined as an inquiry process of understanding relying on distinct methodological traditions related to a social or human problem based on building a complex holistic picture, formed with words, reporting detailed views of informants and often conducted in a natural setting.¹ While Denzin and Lincoln have viewed qualitative research as a multi-method involving an interpretive, naturalistic approach to its subject matter where data is collected by using a variety of empirical materials: case study, personal experience, introspection, life story interview, observation, historical events, interaction and visual texts that describe routine or problematic moments and meaning in an individuals' life.²

The ultimate goal of qualitative research is to gather credible data which has received relatively little attention and where existing information is unclear or spurious. Hence, researchers formulate a research question that seeks to explore, describe and expand knowledge maintaining reliability as well. This qualitative research approach is also used to solve scientific problems by expanding knowledge for understanding, explaining and developing a theory in inductive manner based on emerging data set.

There are different types of qualitative research approaches. Amongst them major types are; phenomenology: used to understand life experiences of the respondents where perceived meanings and practices can be visualized;

ethnography: used to study people in their familiar and natural settings to explore patterns of behavior in their natural environment; grounded theory: used to develop theory; historical research: used to reveal various cultural and social heritages as it focuses more on people and their views in relation to past events; case study: involving an intensive exploration of a single unit of phenomena such as person, family, community or institution (where a very small number of subjects are examined); and action research: which is a solution-oriented investigation that is often conducted in a group or personally owned institutions. As it provides description of social research related to planned action and its consequences which is more collective in nature, this 'action research' is more or less participatory and enables action as part of the process. In some types of qualitative research approaches, both subjective and intuitive data are explored to elicit information on subjective, mystical, religious and philosophical life experiences where reflective accounts, semantic data analysis and attentive listening, observing and participating in recurrent life situations can be discovered.³

In order to differentiate from quantitative research approach, it is essential to specify the characteristics of qualitative research such as its reliance on research strategy which is rather flexible and iterative in nature but having limited pre-defined set of questions for data collection methods; adoption of an emergent design to make an inquiry on the realities; attempting to find view points of those under study (using semistructure/unstructured guideline); collecting the data in the natural setting; pertaining the "emic perspectives" of the respondents which is used to describe and analyze the cultural or behavioral patterns of humans and their groups from the point of those being studied in order to understand and visualize the social settings of everyday life. Moreover, in this study the quality of data is checked by different techniques (triangulation) based on the nature of inquiry. It tries to understand social or human problem by building a complex, holistic picture, formed with

words/phrases and reporting detailed narrative views of informants obtained from the natural setting.

This qualitative research approach enables to make sense out of reality, where the researchers initiate activities from a topic/setting by asking themselves “what is going on here?” and systematically explaining the topic/setting as a learner making an assumption and keeping the knowledge as an “abeyance” until they are conformed. This process of “bracketing” (not disclosing the previously known information) helps to validate the findings. Cultural values and opinion should be well understood otherwise, misinterpretation may occur.⁴

Moreover, this approach can also be used to answer questions related to illness behaviors, whether chronic illness has caused any change in their behavior? How do they cope with life styles? How do they perceive others (doctors/friends/relatives) behaviors? Additionally, qualitative research is often conducted by biomedical personnel when explaining attitudes and behaviors of different groups, particularly among drug abusers, patients living with AIDS (PLWA), family planning defaulters, non compliance of TB treatment etc. Hence, this qualitative research approaches has more implications in biomedical research to understand perceived feelings and behaviors of clients who have experienced unique diseases and where more information needs to be explored.

In most of the situations, though subjective data is collected, emic (insiders’ view) as well as etic perspective (outsider’s view) of the respondents is also used to emphasize the opinion of subjects/care providers/relatives who have witnessed the particular event under study. While conducting a qualitative research, the study phenomena should be properly explained before use. This approach uses inductive process to develop or refine the theory by providing elaborate description. It enables to understand reality which can be used in a clinical setting as well as in developing conceptual framework or testing instruments or triangulating the quantitative findings. In order to construct a valid theory that guides knowledge development within a discipline, qualitative researchers use a consistent effort where a holistic approach is used to collect data pertaining to the studied phenomena.

In this multicultural world, public health researchers need to identify and document cultural patterns and lifestyles of people for their optimal health and survival in the world. As qualitative researchers are interested to study on cultural care of individuals, families, institutions and the world as a whole, it is recommended to use qualitative research approach as a primary method to gain new knowledge to

understand the complexities. Primarily, inductive process is used as a tool to facilitate inquiry to answer research question(s) that enables to get intimate knowledge of the lifestyle patterns of people which cannot be answered appropriately by quantitative methods.

References

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