

THE IMPORTANCE OF QUALITATIVE RESEARCH IN DENTISTRY

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During the last decade, qualitative research has gained more popularity in medicine, because of its role in providing medical professionals with better insight on patients' experiences and perspectives in different health situations. In dentistry, this does not seem the case. Dentists did not embrace qualitative research method the way it deserves. This opinion paper will shed some light on the importance of qualitative research in dentistry.

Can quantitative research answer all questions?

Advances in bio-medical technology make us know more about our bodies in health and disease. The more we know the more we ask questions about what we don't know. To answer these questions we assume (hypothesise). We conduct research to test our hypotheses.

Hypothesis testing in experimental setting is the essence of quantitative approach we adopt in bio-medical research. For decades this approach seems to be the only suitable approach to understand facts of our biological system.

There are, however, two problems with the quantitative approach in medical research. The first problem is that we deal with the patients on the basis of our assumptions about their health

conditions. We seem to ignore the patient's assumption about their disease within the frame of the life itself. That is why qualitative research is helpful to discover this aspect of patient's well-being. The aim of qualitative research is to develop a concept that helps to understand a social phenomenon in natural setting rather than in an experimental setting ^[1]. It seeks to explain and understand rather than quantify or predict.

The second problem of quantitative research is related to hypothesis testing. Testing hypothesis assumes some knowledge about the phenomenon we want to study. What about phenomena we don't know about? Here, again, comes the value of qualitative research. Qualitative studies seek to address questions cannot be answered by quantitative studies and predictions cannot be made ^[2,3]. Qualitative research can provide an insight about patients' interpretations, attitudes and preferences toward different aspects of health care management. This aspect of knowledge is unachievable using experimental bio-medical research design.

Furthermore, qualitative studies can provide knowledge about both physician's and patient's interpretation about the

objective findings provided by clinical and laboratory tests and the value they think in such findings^[4].

What answers can qualitative research methods provide?

It is true that well conducted Randomised Clinical Trials and systematic reviews lie on the top of the hierarchy of evidence in medical research^[5,6]. However, providing measurements and figures might not help enough to guide management decisions. Numbers and statistics are not necessarily representatives of the effects of a given health condition on patients' daily lives. They do not explain or help clinicians understand the bio-psychosocial impact of the disease process on patients. Accordingly, clinical definitions or classifications might not provide us with all the information we need for comprehensive health management planning^[7].

The goal of medical care today is to improve quality of life (QOL) through maintaining functioning and well-being. Consequently, there is an increasing consensus that the patient's perspective is pivotal in monitoring outcomes of medical care in general^[8]. This is particularly important when management decisions are not clear-cut through lack of clinical evidence. In such cases it is imperative to study the health problems from all possible aspects. To achieve this aim we might need to study patients' experiences of a particular disease process, in a hope

to optimise current management by improving the clinician's understanding of patients' perceived experiences and outcome.

Can qualitative research improve dental treatment outcome?

Qualitative studies can provide dental professionals with important aspects of disease process not usually known using widely used quantitative methods in medical research field. Most importantly, how does the patient perceive particular oral health problem and how does this knowledge improve oral health care.

In addition, Clinician's knowledge about treatment as perceived by patients and understanding the background of patient's view of outcome lies in the heart of dental practice. This is usually not fully comprehended using quantitative research. There is something unique about dentistry among other medical professions, that is aesthetic aspect of dental treatment. Patient's opinion about his/her appearance plays a crucial role in treatment decision. This involves all dental specialities with no exception.

Quantitative research cannot answer all research questions, especially when it comes to patients perspectives and opinions about their health. In dentistry, patient's concerns, aesthetic ones in particular, has important influence and dental treatment planning. This gives qualitative research more role in addressing treatment problems to improve dental health outcome.

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