

Letters to the Editor

Response to the *JPHD*'s Guest Editorial: Qualitative Research—Does It Have a Place in Dental Public Health?

A recent guest editorial (1) in the *Journal of Public Health Dentistry* entitled "Qualitative Research—Does It Have a Place in Dental Public Health?" revisited the field of qualitative research. Under the hegemony of quantitative scientific methodology, this editorial serves nicely as a flagship in the *JPHD* for qualitative research to be recognized, discussed, and critiqued just as its quantitative counterpart. A conclusion that qualitative research does have utility in dental public health is sound. However, part of the contents of this article, especially the author's cautions for qualitative researchers, is debatable. I discuss three of the author's points.

First, unlike quantitative scientific research, qualitative methods are not grounded solely on the post-positivist root on which the author focuses. A qualitative study can be placed under an umbrella of several paradigms, e.g., post-positivism, constructivism, critical theory, or participatory paradigm (2). Therefore, quality criteria for qualitative research are not limited to internal and external validity, reliability, and objectivity of a scientific paradigm, but depend on what paradigm that particular qualitative inquiry holds. According to Guba and Lincoln (3), a paradigm in the context discussed here means "a set of basic beliefs ... representing the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts...." Thus, these diverse world views direct researchers in ontological, epistemological, and methodological ways of research (2,3). For example, trustworthiness and authenticity are the goodness criteria for the constructivist paradigm (2-4). Constructivism covers several strategies of qualitative inquiry, such as ethnography, life history, and narrative methods. To have their reconstructed work accepted, researchers need to establish their credibility and present their standpoint to readers. This com-

prehensive process includes, but is not limited to: (1) their multidisciplinary expertise and experiences pertinent to the research question and their selected methodology; (2) the appropriateness of informants and adequacy of the collected information; (3) the rigor of obtaining in-depth, but nonpreconceived, information; and (4) how they analyze and ensure the "right" interpretation of collected information. When presenting the study informants' story/information, qualitative researchers have to illustrate clearly how descriptive validity and interpretive validity have been managed and achieved (5). Credibility cannot be obtained by doing a 10 percent interresearcher reproducibility check, as suggested by the author. Without a holistic view of the data, it is not likely that someone will understand and interpret the collected information correctly (6,7). Furthermore, an external review of some of the raw data, as recommended by the author, is inapplicable because qualitative data are rich in context. An external reviewer is unlikely to comprehend the research informants' meanings by reading only part of the written data because, in many cases, even an informant's silence is poignant and meaningful.

Second, qualitative research does not equate focus groups and vice versa. Many qualitative inquiry strategies use focus groups as a tool to collect information. Besides focus groups, researchers may use other data collection methods, such as focused interviews, episodic interviews, observations, and group discussions. Within this context, a "focus group" is one subset of verbal data collecting methods (8). In a different scenario, "focus group" has been recognized as a research methodology in its own entity that could be used to collect quantitative, qualitative, or mixed data, depending on how the study is designed (9-14). In the editorial, the author uses the terms qualitative research and focus groups interchangeably. Thus, readers may conclude mistakenly that focus group research and qualitative research are one and the same. Also, all cautions raised by the author for

qualitative researchers are based solely on focus groups in a post-positivist paradigm, rather than in a broader view of qualitative research. In his conclusion, the author incorrectly refers to Gibson et al.'s paper (15), which was published in the same journal issue, as a qualitative study that used few focus groups. As shown in the text, Gibson et al.'s findings were generated from interviews and observations, not focus groups.

The third issue is sampling in qualitative research. The author states that "researchers using qualitative techniques must always be aware that their results are based on relatively few respondents; thus, other confirmatory studies must confirm new findings." This statement may mislead readers into believing that the small sample size in qualitative research is one of its methodologic weaknesses and requires confirmation by other studies with a larger sample. Follow-up research is desirable. However, the need for additional studies because of a small sample size of a previous qualitative study is arguable. For the generalization of knowledge, other paradigms besides positivism and post-positivism do not use statistics as an "objective" tool to help generalize cause-effect linkages through hypothesis falsification. Statistics used for research hypothesis testing require a particular number of probability samples to justify parameter estimations. However, generalizations can be made from a different logic, such as dialectical reasoning (16), historical insights, and vicarious experience (2,3). These latter types of case-bound generalization (17), which qualitative research usually employs, do not rely on a specific number in the sample to control for various types of errors and to ensure optimal power of estimations. For qualitative sampling, appropriateness and adequacy are two tenets. The number of cases in qualitative research is decided based on information adequacy, which means no additional information is emerging from new recruited cases (18). Unlike quantitative studies, qualitative research cannot determine a definite sample size in ad-

vance. Also, the process of qualitative data collection, preparation, analysis, and interpretation is intertwined (6). Because relevant information-rich cases congruous to the focus of the study are of prime concern, qualitative research uses purposeful sampling (18-20) as a primary sampling strategy to identify, recruit, and exclude studied informants. When it is determined that collected information is adequate for the purpose of the study, the data collection stops regardless of how many cases have been included. The quality of qualitative research cannot and should not be judged by the number of cases alone. Also, the relatively small sample sizes used in qualitative research are definitely not the methodology's weakness.

Finally, the aim of research inquiry should not be limited to solution testing and an explanation for prediction and control. There are many problems in the world that need to be critiqued and understood in depth before jumping to test an intervention. As reiterated by Patton (21), "Qualitative inquiry cultivates the most useful of all human capacities—the capacity to learn from others." Thus, an aim to understand more clearly is definitely not the trap in academia, as concluded by the author (1).

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Dr. Blinkhorn Responds

I am delighted that my guest editorial has provoked a response. All too often in academia, discussion on methodology is ignored and individuals fail to take the opportunity to discuss differences in the open forum of peer-reviewed journals. Clearly, my respect and enthusiasm for qualitative

methodology has drawn support; but the tone of some of the comments on aspects of my text suggests a certain defensiveness and sensitivity.

I totally agree that qualitative research can be placed under "an umbrella of several paradigms"; however, I have concerns that external review of data is unacceptable. It smacks of "I know I am right and my interpretation of issues raised is the only tenable answer." There must be a middle way, and my suggestion on external review clearly needs more discussion, but should be addressed by researchers in the field of qualitative research.

"Focus groups" has become a somewhat tarnished term, as politicians and others may misuse them for their own ends; thus, I agree wholeheartedly with the elegant description of the range of qualitative inquiry given in the comment on my editorial.

I stand by my assertion, which counsels caution when interpreting results from small qualitative studies, so follow-up studies are essential. However, these do not have to be the rather blunt "questionnaire" approach, but can be based on qualitative methodologies. I still believe, despite the cogent arguments raised by the author, that all too often oral health researchers have repeatedly investigated the same problems without offering or testing any solutions. It is up to a new generation of qualitative researchers to give a clearer picture of human behavior in relation to oral health that will help us all to offer practical advice to those involved in health promotion and the provision of clinical services.

In conclusion, may I once again emphasise that qualitative methods do have the potential to contribute to formative evaluation, the understanding of process, and the identification of multiple, often unexpected interactions and impacts of complex human behavior related to both general and oral health.

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