### **Editorial**

## Use of qualitative data in oral health research

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Qualitative research encapsulates a broad range of methodological approaches which complement quantitative methods by providing, "an in-depth and interpreted understanding of the social world, by learning about people's social and material circumstances, their experiences, perspectives and histories" (Richie & Lewis 2003). The uses of qualitative data are fourfold:

### Describing a process or phenomenon or mapping the features of a phenomenon

Where little is known about a phenomenon or the features have not previously been clearly delineated, qualitative methods can provide a rich level of data to map such key features. For example Travess et al (2004) analysed themes emerging from focus group interviews with patients who had undergone combined orthodontic and orthognathic treatment. The data revealed that patients' experience of such treatment was disproportionately focussed on the surgical aspects of treatment, and highlighted themes (in particular post-operative pain relief) which were especially important to patients, but which would not necessarily take prominence in clinical descriptions of the treatment.

### Explaining social phenomena

Beyond description of a process or phenomenon, qualitative methods can be used to produce theoretical explanations of social behaviours through a combination of inductive and deductive inferences. As an example of this, Bedos et al (2009) conducted focus group and individual interviews with people in receipt of social assistance, a group who despite benefitting from free access to dental care, do not routinely use dental services. These researchers report that participants defined oral health in a social manner, placing great value on dental appearance, yet felt powerless to improve their oral health. Thus their non-attendance is interpreted not as ignorance or lack of motivation, but as the result of a feeling of being powerless to access services. This paper is remarkable for its place as the first study using qualitative methods to be published in Journal of Dental Research. Here the qualitative research provides information to explain a quantitative observation through understanding the meaning of the behaviour to participants.

# Understanding perspectives, motivations and frames of reference

Similarly the perspectives of particular groups on their oral health, their motivation for engaging in oral health related behaviours (or behaviours which are harmful to oral health) can all be explored through qualitative research. Bower & Newton (2007) conducted interviews with Albanian speaking individuals living in London. They were able to place oral health within a wide context of acculturation, by

which immigrants adopted the behaviours of their adopted country – in this case a greater intake of sugar containing food and drinks which were not so easy to access in their home country. The qualitative method allowed respondents to discuss their perceptions of the process through which their behaviour had changed and the many influences on this.

# Generating new ways of perceiving or understanding a social phenomenon

In-depth qualitative research can provide a startling new perspective on a phenomenon, even one as well researched as tooth decay. Nations & Nuto Sde (2002) describe beliefs about tooth decay and dental care amongst individuals in Brazil. They contrasted the views of university-trained dentists who had a disease-orientated, microbiological, technology-rational model of dental health, with a lay model in which tooth worms burrow from tooth to tooth and cannot be eradicated by placement of a filling. According to the latter model faith in God was as important for soothing pain as visiting the dentist. The authors suggest that the lay explanatory model shaped the experience of dental pain, the timing and sequencing of help-seeking behaviours, and contributed to the lack of acceptance of caries prevention advice. Understanding the patients' perspective has clear implications for health promotion, the provision of preventive advice and treatment.

### The role of qualitative methods in health research

Qualitative research provides a way of getting beyond the general to the specific and enables us to understand the minutiae of people's lives and the role of oral health and oral health related behaviours within them. This benefits health service research in five specific ways. Firstly, quantitative, positivist research produces generalisable knowledge, however as clinical practitioners we need to know when generalities end and individual factors become important. Further, we need to know how individuals interact with their environments. There are clear implications for the practice of evidence based dentistry. Under what circumstances should guidelines be considered inappropriate for a particular individual?

Second, the positivist paradigm is based on the belief that phenomena can be reduced to their constituent parts, measured, and then causal relationships deduced. Such an approach is linear as opposed to the holistic and context dependent nature of the social world in which we live.

The third benefit for health services research of the qualitative approach relates to the move from equating health with the absence of disease and towards a state of complete physical social and mental wellbeing. This has promoted lay-conceptions of health which need to be understood if we want to be able to treat our patients and influence their oral health related behaviours.

Fourth, the bio-medical approach has historically been individualistic in orientation and ignored socio-economic and political determinants of health. Treating people as constituent parts of larger aggregates turns their behaviour into facts that are not questioned and separates them from social values. If we are to design interventions that target the most vulnerable in society we need to understand what motivates them to act in the ways that they do and how we might change their behaviour.

Fifthly, control over the use and direction of research by a scientific elite has also been challenged. Research conducted on people should increasingly be open to those who have participated. In addition, research agendas need to agree with local communities in order that it becomes more participatory (Baum, 1995). Qualitative methods provide a valued way for participants to steer the direction of research.

Despite the general acceptance and increased recognition of the importance of qualitative research in the study of oral health, there is a dearth of experienced researchers with expertise in the theory and practice of qualitative methods. More training is needed if we are to ensure that quality qualitative research is undertaken. Barriers to the widespread reporting of qualitative research also remain. There is a lack of understanding of the methods for appraising qualitative research. The essential differences between quantitative and qualitative approaches to research range from the epistemological to the methodological and are summarised by Bower & Scambler (2007). Given the nature of these differences in assumptions and approaches it is clear that the quality of the two approaches cannot be compared using the same criteria. While a number of checklist approaches have been adopted, the appropriateness of these has been questioned (Bower & Scambler 2007). Further it is assumed that a single checklist can be used to review all forms of qualitative research. Even within the qualitative paradigm, researchers will differ in their underlying beliefs about the nature of knowledge and the methodological approaches they adopt. There is a clear need for journals to recruit a broad range of reviewers and editorial staff with expertise in different qualitative approaches in order to give accurate and informed peer review.

Within dentistry journal formats have generally restricted the ability of qualitative researchers to report their findings. Word limits which are suitable for the reporting of quantitative research and the use of tables to summarise data are too restrictive for the reporting of extensive quotes to illustrate the analysis. With the increasing use of on-line publishing and downloadable appendices the necessity to restrict journal space should become less of a barrier.

Qualitative research methods have much to offer oral health researchers, but their dissemination has hitherto been limited by practical considerations of available expertise and journal space requirements. If these can be overcome the potential benefits for our understanding of oral health are enormous.

It is encouraging to note an increase in the number of qualitative reports appearing in *Community Dental Health* and hopefully this trend will continue.

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### Announcement

It is with deep regret that we announce the deaths of Dr. Liana Zoitopoulos, BASCD President 2010 and of Professor David Locker, University of Toronto, one of the Journal's International Advisors. Obituaries for both colleagues will be published in a future issue of the Journal. Obituaries for both colleagues will be published in a future issue of the Journal.