

# Paying Lip Service? – The Role of Health-Carers in Promoting Oral Health, a Pilot Qualitative Study

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## Abstract

**Aim:** This pilot study explores the awareness of risk factors for dental disease and appropriate health behaviours for oral health and willingness to perform oral health promotion within a group of health-care professionals.

**Methods:** A qualitative focus group method was chosen as the most appropriate way of exploring these issues. In doing so, the participants would be able to express their thoughts and opinions openly on a range of ideas. Within this social context, the participants were also able to respond to the ideas and comments of their peers. Eleven participants, six school nurses and five health visitors were invited to the study.

**Results:** Six school nurses and three health visitors accepted invitations and were included in the focus group.

Overall there was an awareness of four of the five risk factors for dental disease reported in the Scientific Basis of Oral Health Education. Appropriate health behaviours for oral health, included using fluoride toothpastes of adequate strength with no rinsing following brushing, were promoted. However, there was poor understanding of the underpinning science on which messages were based. There was little awareness of methods to improve concordance (as opposed to compliance) within patients.

It became clear that as individuals, they felt a sense of responsibility to be involved in oral health promotion. Three overarching themes emerged. The first summarises the attitudes the groups had with regard to role and limitations, sub themes included responsibility and reality. The second described obstacles for patients, sub themes included access, barriers and consequences. The third surrounded effective communication, sub themes included messages and cohesive approach.

**Concluding remarks:** Health promotion includes health protection, prevention and health education and individual health-carers have little influence on certain aspects of health promotion such as policies on health protection.

The reality of preventing dental disease is scientifically understood by the dental profession. However, the reality of social structure, as perceived by the health-carers is such that the norms of social policy and social behaviour out-weigh what is scientifically possible in controlling dental diseases. This reality is compounded by a perceived lack of 'personal responsibility' by the non-compliant patient. Social division is a possible outcome if stereotyping of non-compliant patients persists.

The prevalence and distribution of dental caries in the community needs to be made clearer for health-carers. Only then can it be understood that dental caries is mainly a disease of lower socio-economic groups. Training in health behaviour change principles specific to the needs of the target group is required. This involves understanding that their own value systems may differ from their patients.

**Keywords:** Oral health; Dental caries; Health behaviour

## Introduction

An individual's experience of dental disease is dependent on whether the individual manages the environment of the oral cavity in order to create 'disease inactive' conditions. It is accepted by the dental profession that caries, periodontal disease and erosion are, in the main, preventable [1].

The starting point for any individual is therefore to have the knowledge of 'how' to create 'disease inactive' mouth conditions. The individual can then choose to behave in a way that will maintain health or disease. Individuals within the community have different levels of knowledge and understanding of the risk factors associated with oral health [2,3]. Knowledge gaps have been identified between and within professional groups who deliver oral health education, for disease risk factors. For example, there are differences within dental personnel, [4] and between dental and professional groups [5,6].

The Scientific Basis of Oral Health Education was first published in 1976; the focus of this document through its editions has been the standardisation of the oral health education message [1]. More recently the Department of Health and the British Association for the Study of Community Dentistry issued evidence based guidelines for the delivery of oral health education/promotion [7]. Both publications promote asymptomatic attendance and continuing care at the dentist.

Health-carers responsible for the delivery of health services have an important role in communicating messages to the community [8]. The Welsh Government recognises this role and recommend a multi-agency approach to tackling oral health problems in Wales. All health professionals, not just dental practitioners, should be involved in the delivery of oral health promotion [9,10].

Health visitors are registered nurses/midwives who have additional training in community public health nursing. They provide a professional

public health service based on best evidence of what works for individuals, families, groups and communities; enhancing health and reducing health inequalities through a proactive, universal service for all children 0-5 years and for vulnerable populations targeted according to need [11]. School nurses are registered on the Specialist Community Public Health Nursing part of the Nursing and Midwifery Council (NMC) register, and are recognised as public health nurses. They are key to promoting, improving and protecting the health and well-being of school-aged children and young people to ensure they achieve the best possible health [12].

It is reasonable to assume that those involved in oral health promotion need an understanding of the issues surrounding oral health risk factors in order to communicate effectively with the community. Messages should be clear, accurate, consistent and unambiguous [13]. Clearly, improving the knowledge base in individuals will not necessarily influence behavioural choices [14] but is the first step in helping to understand the opportunities available for self help towards oral health. The prevalence of dental caries is higher in individuals from lower socio-economic groups [15] who utilise oral health services less regularly and symptomatically [16,17]. Therefore, if improvements are to be made to reduce social inequalities in oral health, opportunities to communicate with individuals from the whole community by health-carers need to be taken.

This study explores the awareness of risk factors for dental disease and appropriate health behaviours for oral health and willingness to perform oral health promotion within a group of health care professionals.

## Methodology

A qualitative focus group method was chosen as the most appropriate way of exploring these issues. In doing so, the participants would be able to express their thoughts and opinions openly on a range of ideas. Within this social context, the participants were also able to respond to the ideas and comments of their peers [18].

## Sample

The sample comprised of School Nurses and Health Visitors midway through the Specialist Community Public Health Nursing (SCPHN) course and having recently completed the Master's level Evidence Based Public Health module. At the time of recruitment for the study, those healthcare professionals deemed eligible for participation included nine School Nurses and eight Health Visitors. The potential participants were emailed personally by one of the authors, informed about the study and invited to participate. The initial response was positive with only three Health Visitors and three School Nurses who declined. The main reasons cited were difficulties arranging childcare and travelling to the University. Six School Nurses and five Health Visitors agreed to participate and a day and time convenient to the participants was arranged. In accordance with the current literature on focus group size, a sample size number between eight and 12 is considered feasible [19].

## Data collection tool

A 12 item focus group interview schedule was devised by the authors based on previously published research [5,20] and a comprehensive review of the literature. The interview schedule underwent a process in which face and content validity were established. The questions were peer-reviewed by four experts from the disciplines of dentistry, public health, and nutrition and nursing. As a result, minor amendments were made to the order, syntax and wording of the questions.

## Data collection

The setting of the focus group interview was a quiet and well ventilated room in the University. On the day of data collection, six School Nurses and three Health Visitors participated. Informed consent was obtained

prior to the commencement of the focus group interview and permission was granted to tape record it. The interview lasted approximately one hour. The focus group interview was conducted by both a facilitator (AMC) and a moderator (TF). The facilitator asked the semi-structured schedule of questions and was able to clarify, paraphrase and reflect back what was discussed by the participants. The moderator made notes on the dynamics of the group and, at the end of the interview, asked the participants to form a consensus on the main recommendation of advice for parents on oral health. High qualitative narrative data were obtained as well as the group dynamics successfully captured which would never have been achieved on a one to one basis [18,21]. The narrative data were transcribed verbatim. Nvivo was used in the analysis of the data in which nodes and sub-nodes were allocated. A thematic analysis was undertaken in which themes and sub-themes were identified until saturation of the data was reached. This process was undertaken independently by all of the authors. Inter-rater reliability was then established in which a consensus was reached on the main themes which enhanced the credibility of the analysis.

## Ethics

Ethical approval was granted by the University Faculty Research Programmes Committee (FPRC) and ethical principles of informed consent, confidentiality, and anonymity and data protection were maintained.

## Results

The findings show the beliefs, behaviours and social norms surrounding the delivery of oral health promotion by the health-carers studied. Three overarching themes emerged. The first summarises the attitudes the groups had with regard to role and limitations, sub themes included responsibility and reality. The second described obstacles for patients, sub themes included access, barriers and consequences. The third surrounded effective communication, sub themes included messages and cohesive approach.

## Role and limitations

There was some discussion surrounding the current reactive nature of the role of health-carers with regards to oral health. Rather than preventing disease much of their practical problems were dealing with consequences of disease. Even though many of the oral problems were reactive in nature the health-carers felt they had a responsibility for oral health promotion as health visitors and school nurses.

## Responsibility

Responsibility was discussed on three levels by the health-carers; firstly the patients/parents ownership of responsibility for disease activity, secondly their own responsibility to act proactively and thirdly responsibilities from the viewpoint of policy and the environment within which they had to operate. There was a definite reference towards the inability of parents/patients to take responsibility for themselves in terms of their behavioural choices.

In addition reference was made to a 'nanny state' mindset which cultivated the inability to take responsibility.

The responsibility to operate proactively by the health-carers was influenced by the presence of the public health initiative Design to Smile. It appeared that a compartmentalized approach to the delivery of care where oral health promotion was delivered by a 'dental team' detracted from opportunistic oral health promotion delivered by them.

Also the constraints of service provision influenced the ability of health-carers to deliver oral health promotion. It was evident that organizational policy over-rode individual responsibility with differences identified between 'should do' and actually done' and the importance of 'tick boxing'

## Reality

In reality, within the bigger picture, oral health promotion was not perceived as a priority within their organizational strategies and possibly themselves as operatives within that system. Some questioned, with others agreeing, their ability to deliver oral health promotion stating the need for improved training.

## Obstacles for patients

**Access:** The availability of dentists to provide care for the community was identified as a barrier to successful oral health promotion. There was some discussion surrounding resource re-distribution through the application of NICE guidelines regarding routine recalling for examinations. However, the consensus view did not support the application of the guidelines.

**Barriers:** Practical issues were discussed as barriers for individuals choosing to attend for ongoing dental care. These included the timing of appointments, location and distance from dental practice, cost of treatment, anxiety and family anxiety transfer. Interestingly the barriers for effective proactive oral health promotion included; the service was reactive rather than proactive, that oral health promotion needed time for its delivery, language was a communication barrier, information overload that irritated people and finally the taste of toothpaste for children.

**Consequences:** The lack of awareness of the long term serious consequences of behaviours that created disease activity in the oral cavity was identified as an obstacle for individuals choosing healthy options.

## Effective communication

**Messages:** Many of the messages identified were in line with those promoted by the Scientific Basis of Oral Health Education. Awareness for the need to use fluoride toothpaste of adequate strength without rinsing following brushing was also observed in the group. However, the discussion showed a confused understanding of the science behind the messages promoted for oral health.

Historical accepted norms and clichés emerged in conversations such as caries is down to genetics.

Ambiguity in resource materials raised confusion in the minds of the health-carers and also undermined their credibility as oral health promoters.

**Cohesive approach:** Cohesive approaches were seen to be necessary in order to improve the effectiveness of oral health promotion on macro, meso and micro levels.

## Discussion

The participants did not represent health-carers in the workplace but were from cohorts of students attending higher degree courses. This may create a bias towards a more informed health-carer. The generalisability of the results from this small pilot study needs further research in order to support the reported outcomes.

The findings of this study suggest that the health-carer were aware of four of the five fundamental messages stated in the Scientific Basis of Oral Health Education, namely dental attendance, tooth brushing, diet, fluorides. Smoking was not mentioned during the discussion, this may be because the focus was on oral health promotion and children. There was an awareness of the need for toothpastes with adequate levels of fluoride and that rinsing following brushing should be avoided. This is in contrast with other published work in the field [22,23]. However, the level of understanding regarding the science underpinning the messages was lacking resulting in confusion amongst the group. In the role of health educator it would be valuable to have the understanding so that difficult questioning from patients could be addressed.

Much of the discussion with the health-carers focused on their experiences of delivering oral health promotion within their role. It became clear that as individuals, they felt a sense of responsibility to provide oral health education. Similar findings have been reported by Rabiell et al. [24-26]. However, the inability to deliver results within this responsibility due to organisational constraints demonstrated a tolerance to this reality. This resulted in some level of frustration in the health-carers.

The availability of the dental public health project Design to Smile (D2S) [27], where supervised brushing in schools is delivered by dental teams, almost enabled the health-carers to absolve their responsibility as oral health educators now that it had been compartmentalised into another part of the service. This reality seemed to appeal to the health-carers who showed positive regard for the service even though they were unclear as to the aims and objectives of the service, whether it was effective or value for money. It is understandable that such initiatives would be welcomed if workforce resources are limited and other issues, such as child protection and immunisation are prioritised.

Dental caries is more prevalent in lower socioeconomic groups and many of the oral health issues the health-carers had experienced were symptomatic episodes with children from low socioeconomic backgrounds. This may have impacted on the health-carers perceptions regarding levels of caries in children in the community in general and the willingness of non-compliant patients/parents to take responsibility for oral health. Other publications imply similar themes [28,29]. It is possible that this results in sub-conscious stereotyping of patients that compounds problems for the 'non-compliant'. The Scottish Government have reported that women with complex social problems (often those with high dental need) reported discrimination and judgemental behaviour from health care staff and that this impacted on their engagement with health services [30]. Could the fact that 'hidden unintended' discrimination and judgment play a part in non-compliance for dental services?

Similar themes have been reported in the dental literature for example, dentists were more inclined to give advice and spend more time advising middle class parents as they were more motivated and compliant. Threlfall et al. [31] also stated that there was little evidence of reflection about the way that dentists delivered prevention. Failure to evaluate preventive activities was cited by Blinkhorn [32] with enthusiasm for prevention fading in the absence of compliance following the delivery of prevention.

In order to engage those with the greatest need for care, into care, different approaches should be considered. Sheiham and Watts stated that a 'simplistic and outdated approach' based on the KAB (Knowledge, Attitude, Behaviour) model did not acknowledge the complexities of human behaviour [33]. There is some evidence that the health-carers here valued the KAB model. This is shown in that the sub-theme consequences where it is suggested that if the individuals had the knowledge about the consequences they would behave differently. There was an implication that improved health would be a motivator. However, the literature surrounding health behaviour change states that health is not a prime motivating factor for patients. Such a mind-set within the carer can hinder behaviour change in the patient [34]. There was little reference towards different approaches to the delivery of care, such as the application of motivational interviewing techniques [34,35] to improve concordance in the context of behaviour change. Concordance refers to the creation of an agreement that respects the beliefs and wishes of the patient, and not to compliance – the following of instructions [34].

It was recognised that further training was required in order to become more effective oral health promoters and improve their confidence as oral health educators. However, the training need focused on message content and the understanding of the science underpinning the accuracy and consistency of the messages rather than methods of delivery. There was

mention of information overload and irritating people with information. Roberts and Condon highlighted the fact that parents' believed that oral health care for their children was common sense [36]. It may be that the health-carers had themselves felt uncomfortable when interacting with patients, if the patients felt they were being told something that was common sense.

The barriers to improved outcomes were more physical in nature rather than the way in which oral health promotion was delivered. For example, the lack of dental workforce was regarded as an obstacle for the delivery of oral health promotion as they could not promote registration if there was nowhere for the individual patient to access dental care, The reality of redeployment of resources through the application of NICE guidelines [37] regarding routine checkups was not discussed as a feasible option even though this is a reality for increased capacity within general dental service delivery. Furthermore, the physical barriers of resources and time were reported in the findings. It seems as though brief opportunistic interactions concurrent with other tasks were not considered.

The group voiced solutions to improve the effectiveness of oral health promotion, these included a cohesive approach to the delivery of oral health promotion on micro, meso and macro levels. This is in line with theoretical and practical approaches [10,38,39].

### Concluding Remarks

Health promotion includes health protection, prevention and health education [40] and individual health-carers have little influence on certain aspects of health promotion such as policies on health protection. The subtle difference between health education and promotion did not emerge from the study.

The reality of preventing dental disease is scientifically understood by the dental profession. However, the reality of social structure, as perceived by the health-carers is such that the norms of social policy and social behaviour out-weigh what is scientifically possible in controlling dental diseases. This reality is compounded by a level of victim blaming and perceived lack of 'personal responsibility' by the non-compliant patient. Social division is a possible outcome if stereotyping of non-compliant patients persists.

The prevalence and distribution of dental caries in the community needs to be made clearer for health-carers. Only then can it be understood that dental caries is mainly a disease of lower socio-economic groups. Training in health behaviour change principles specific to the needs of the target group is required. This involves understanding that their own value systems may differ from their patients otherwise they are paying lip service to oral health promotion.

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