

A public display

Yvonne Buunk-Werkhoven and Lieneke Steverink-Jorna provide an overview of their oral health research based on a Dutch children's festival



Lieneke Steverink-Jorna
RDH

Lieneke is a dental hygienist, qualifying in 2003 from Nijmegen. She is a board member of the Dutch Dental Hygienists' Association. She is known as the Digital Dental Hygienist on behalf of her activities on social media. She was elected as the 'Dental Hygienist of the Year' in 2013.



Yvonne Buunk-Werkhoven
RDH PhD

Yvonne is social psychologist and dental hygienist with years of experience of policy issues and research at the interface of social psychology and promotion of (oral) healthcare. She is involved worldwide as a scientific consultant and researcher in promotion, prevention, education and behavioural change within oral healthcare (www.spho-arts.com).

Back in 2009, an editorial of *The Lancet* proclaimed, 'Oral health: prevention is key'. Nowadays, concepts like prevention and innovation in (oral) healthcare are very popular.

Indeed, from a social-health-psychological perspective, health promotion is at least as important. 'Promotion of optimal oral health' is perhaps an even more innovative approach than prevention that is primarily aimed at avoiding diseases.

Oral health promotion refers to the process by which people – or target groups of people – are able to gain more control over the determinants of their oral health, and improve their oral health (Buunk-Werkhoven, 2010).

Despite knowing that adequate daily home oral care and regular visits to an oral health professional are the best guarantee for maintaining oral health, many people fail to apply optimal oral self-care (Syrjälä, Knuuttila and Syrjälä, 1992a,b).

By performing daily self-care, and especially starting toothbrushing from birth, most common oral diseases, such as caries or gingivitis, can be prevented. However, even when preventive oral healthcare interventions are provided by oral health professionals and implemented at schools or workplaces, people are often not well informed and don't perform the appropriate behaviour. This is quite unfortunate, because expected behavioural changes related to oral health campaigns are seldom found (Rise and Sögaard, 1988).

Oral health awareness

In 2014, in a bid to raise public oral health awareness, both authors first participated in the children's festival 'Kidsfabriek' – broadly translated as Kids Factory in English – in a former factory in Ulft, a small, rural village in the eastern part of the Netherlands.

Kidsfabriek is an event for children aged between four and 12 years old and includes sports and all kinds of learning

activities concerning culture, nature, animals, and health.

By providing important yet entertaining and playful health education to children, Kidsfabriek is considered a unique opportunity to promote oral health knowledge and oral self-care among parents and their children.

After its great success in 2014, and the observation that a lot of children brushed their teeth once a day instead of the professional recommendation of twice a day with fluoride toothpaste, participation in Kidsfabriek in 2015 and 2016 was continued by four and seven oral hygienists, respectively.

The authors decided to conduct two studies, which aimed to evaluate the impact of a yearly regional campaign during Kidsfabriek to promote oral health, improve awareness and knowledge among parents and children.

The first study, conducted in 2015, was aimed to get insight in parents' knowledge, habits and oral healthcare of their children, while the second study, in 2016, determined the impact of a public play and learning approach for the promotion of oral health and oral self-care among children and their parents.

Method

For the 2015 study, 74 Kidsfabriek visitors completed a questionnaire, which included items about socio-demographics and oral health behaviour (such as visits to oral hygienists, sugar intake, opinions, and habits towards children's toothbrushing) (Steverink-Jorna & Buunk-Werkhoven, 2016).

Guest or grandparents (n=8) and three visitors who hadn't given permission for publication, were excluded from the final dataset.

In 2016, after a professional interactive workshop 'toothbrushing', 108 children were semi-structured interviewed by the authors, two dental hygienists.

Results

In 2015, it was determined that, out of 66 parents, more than a quarter (27.3%)



had never visited a dental hygienist. Two thirds were mothers and the mean age was 39 years (SD = 5.8, range 27-53 years), and their educational level varied from vocational training to advanced vocational training (45.4%), up to 'high' educational level (39.4%).

The parents (29%, 44%, and 26.3%, respectively) reported to have one child (mean age = 8.2 years), two children (mean age = 6.7 years) or three – up to four – children (mean age = 3.9 years).

Almost the half of the parents had been seen by a dental hygienist once a year (45.5%) or twice a year (22.7%), and 40% of the parents reported to have never been instructed by an oral health professional about how to brush their children's dentition.

Fifty percent of the parents brushed the dentition of their children twice a day (16.7% brushed not daily and 22.7% brushed once a day). Just one out of five parents considered limitation of snacks as important, and a similar number reported to limiting the consumption of snacks.

The 2016 public campaign, 'Kidsfabriek – toothbrushing', approach was enthusiastically appreciated by 61% of the 108 children (66.7% were girls with a mean age of 7.5 years). Even though oral health promotion during Kidsfabriek was in the third year, it was the first time 71% of the children had visited the workshop, and one third of the children reported to not be familiar with the oral hygienist.

A quarter of the children (25%) stated that they would maybe like to visit, and 24% didn't want to visit a dental hygienist. Only 16% of the children had regularly visited a dental hygienist, and 20% mentioned actually visiting a hygienist.

Children's intention to change their oral self-care and food/drink consumption is high. In addition, of the children who

Kidsfactory 2016

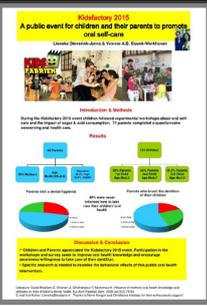
A public learning and play event to promote oral self-care for children and parents

Yvonne A.B. Buunk-Werkhoven & Lieneke Steverink-Jorna




Introduction & Methodes

During Kidsfactory 2016, after a professional interactive workshop 'tooth brushing', 108 children were semi-structured interviewed by two dental hygienists








Results

- 61% of the children (66.7% girls, mean age: 7.5 year) appreciated this 'tooth brushing' approach highly enthusiastic
- 71% of the children visit the workshop for the first time
- 65% of the children's parents had an average income and 26% above average
- 33% of the children is not familiar with the dental hygienist. 25% maybe like to visit, and 24% don't want to visit a dental hygienist. 16% have regularly visits and 20% plan to visit a dental hygienist
- Children's intention to change their oral self-care and food/drink consumption is high

Discussion & Conclusion

- Participation may improve children's and parents' knowledge; it may encourage their home self-care
- Both studies showed that effectively carried out programs of personal oral self-care may play an important role in the improvement of oral health awareness
- Research to refine the effects of public events is necessary

Figure 1: Yvonne and Lieneke's poster, presented at last year's BSDHT conference

participated in the workshop, the study found that two thirds (65%) of their parents had an average income and 26% of their parents had an income above average.

Conclusion

Professional oral health education through a playful learning approach for the promotion of oral health and oral self-care during the Kidsfabriek event was equally appreciated by the children and their parents.

Moreover, participation in the survey and the semi-structured interviews may improve parents' and children's knowledge.

In addition, the findings indicate at least a positive short-term impact; it may not only

encourage awareness and/or willingness of the parents to take better care of their children's dentition, but also may encourage children's own oral self-care.

Both studies showed that when carefully and effectively carried out, a population-based programme of personal oral self-care may play an important role in the improvement of oral health awareness.

Health awareness is a very important first step when it comes to health behavioural change, and therefore the different phases of the transtheoretical model (TTM) of behaviour change have to be involved in following oral public health campaign studies (Prochaska, DiClemente and Norcross, 1992).

The use of intervention mapping (IM) (Kok et al, 2016) as a protocol for developing theory- and evidence-based health promotion programmes is conditional, and further research to refine the effects of oral health promotion during Kidsfabriek events or other public awareness campaigns is necessary. [OH](#)

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CPD

Topic: children's preventive care
Level: beginner

Aims and objectives

This article aims to present original research on the topic of oral health awareness in children.

Anticipated outcomes

By the end of this article, the reader will understand the benefits of public awareness campaigns and oral health education.