

# An Analysis of Oral Health Campaigns from a Social Marketing Perspective

**Doç. Dr. Gonca MUMCU**  
**Yrd. Doç. Dr. Leyla KÖKSAL**  
**Ar. Gör. Nur ŞİŞMAN**

marmara üniversitesi, sağlık bilimleri fakültesi  
goncamumcu@marmara.edu.tr  
leyla.koksal@marmara.edu.tr  
nsisman@marmara.edu.tr

## **Abstract**

**Objective:** The aim of this study is to analyse oral health campaigns according to their use of social marketing in Turkey.

**Method:** 35 oral health campaigns regarding oral health were assessed according to social marketing principles including message, target group, aim, communication strategies and tactics, and mass media tools.

**Results:** The prominent aims of the campaigns were to facilitate awareness of oral health (24.5%, n=12), oral examination (26.5%, n=13), preventative oral healthcare and applications (16.4%, n=8). Since 22 of the 35 campaigns had more than one aim, different factors regarding target group and communication tools were combined. 7 campaigns used only communication tools such as billboard posters (5.71%, n=2), brochures (8.57%, n=3), TV programmes (2.86%, n=1), and CDs (2.86%, n=1) for oral health education.

**Conclusion:** Since it is essential to organise campaigns for improving oral health in the population, social marketing professionals could help health professionals in planning new campaigns. Thus, the effectiveness of new campaigns will be increased.

**keywords:** *social marketing, oral health, campaigns*

## Özet

### **Sosyal Pazarlama Perspektifinden Ağız Sağlığı Kampanyaları Analizi**

**Amaç:** Bu araştırmanın amacı ağız sağlığı kampanya içeriklerinin sosyal pazarlama perspektifinden incelenmesidir.

**Materyal/Metod:** Çalışmada 35 ağız diş sağlığı kampanyası sosyal pazarlama ilkelerini içeren mesaj, hedef grup, amaç, iletişim stratejileri ve taktikleri, kitle iletişim araçları bakımından değerlendirilmiştir.

**Bulgular:** Araştırma kapsamında incelenen kampanyaların asıl amaçları ağız diş sağlığı uygulamalarına ilişkin farkındalık oluşturmak (%24.5, n=12), ağız ve diş sağlığı muayenesi (%26.5, n=13), koruyucu ağız diş sağlığı uygulamaları (16.4%, n=8) olarak belirlenmiştir. Birden fazla amacı olan 22 ağız diş sağlığı kampanyasında hedef grup ve iletişim araçlarına ilişkin farklı kombinasyonlar kullanılmıştır.

Sadece 7 kampanyada iletişim aracı olarak ilan panolarına asılan posterler (%5.71, n=2), broşürler (%8.57, n=3), TV programları (%2.86, n=1) ve ağız diş sağlığı eğitimi CD materyalleri (%2.86, n=1) kullanılmıştır.

**Sonuç:** Toplumda ağız diş sağlığının geliştirilmesi için kampanyaların yapılması esas olduğundan yeni kampanyaların planlanmasında sosyal pazarlama uzmanlarının desteği kampanyaların etkinliğini artıracaktır.

**anahtar kelimler:** *sosyal pazarlama, ağız sağlığı, kampanyalar*

## Résumé

### **Analyse des campagnes pour la promotion de la sante buccale dans la perspective du marketing**

**But:** Le but de cette recherche est l'observation des composantes des campagnes de la promotion de la santé bucco-dentaire.

**Support/Méthode:** Dans cette étude, 35 campagnes de santé bucco-dentaire sont évaluées selon le message véhiculé qui contient les principes du marketing social, la cible, les stratégies et tactiques de communication, et les moyens de communication de masse.

**Constats:** Les buts essentiels des campagnes analysées dans le contexte de cette recherche sont déterminés ainsi : rétablir la conscience (24.5%, n=12), le contrôle de la santé bucco-dentaire (26.5%, n=13), les applications de la santé bucco-dentaire protectives (16.4%, n=8). Différentes combinaisons relatives aux moyens de communication et à la cible, dans 22 campagnes de la santé bucco-dentaire ayant plusieurs buts, sont utilisées.

Seulement dans 7 campagnes, les affiches qui sont affichées dans les panneaux publicitaires (5.71%, n=2) les brochures (8.57%, n=3), les émissions de télévision sont utilisés (2.86%, n=1), CD bucco-dentaire matériels d'éducation sanitaire (2.86%, n=1).

**Conclusion:** Etant donné que l'amélioration de la santé bucco-dentaire est essentielle dans la société, le soutien des experts pour la planification de nouvelles campagnes augmenterait l'efficacité des campagnes.

**mots-clés:** *marketing social, santé bucco-dentaire, campagnes*

## Introduction

Social marketing as the systematic application of marketing aims to achieve specific behavioural goals. Since social marketing has been widely defined as a process which is used to affect human behaviour rather than to focus on commercial benefit (Bennett and Sargeant 2005:797-805; Cugelman 2010:6; Çınarlı 2008:55; Dearing et al. 2006:11-23; Evans 2008:181-203; Gallopel-Morvan et al. 2011:7-11; Gordon et al. 2006:1133-1139; Herrick 2007:90-102; Kataria and Larsén 2009:429-433; Kotler and Zaltman 1971:3-12; Kotler et al. 2002:3; McKie and Toledano 2008:318-324; Morris and Clarkson 2009:135-141; Peattie and Peattie 2009:260-268; Pirani and Reizes 2005:131; Quinn et al. 2007:357-366; Sun et al. 2007:302-310; Shang et al. 2010:166-172), it is an effective method for health promotion in the area of health communication.

Generally, social marketing is consisted of social interaction theories and marketing concepts in order to reach the targeted behavioural change (Çınarlı 2008:55). Any marketing mix changes according to the subject of behavioural change and the target group (Bayraktaroğlu and İlter 2007:123). The process of social marketing consists of planning, improvement / message design and material, pretest, execution and evaluation. The planning phase is essential in order to segment the market and determine the target group. It is necessary to understand any problems to allow the creation of an effective social marketing programme. Following this, the target audience must be determined and the environment in which the programme will operate must be clearly stated (Serrat 2010:2; Weinreich 1999:3).

Determining a suitable target group may increase the possibility of desired behavioural change in social marketing programmes (Bellows et al. 2008:169-178). Inconsistencies between desired behavioural change and the needs of the target group is a hindrance to the effectiveness of social marketing (Bayraktaroğlu and İlter 2007:121). The selection of a target group is a three-phase process and includes the following: *Market Segmentation*; to accomplish market segmentation; different methods such as demographic, geographic, psychographic, and behavioural are used. *Evaluation of market segmentation*; every segment is evaluated by a rational process to understand what each group prioritizes. *Targeting one or more segment*; in a social marketing programme, several market segments are selected and marketing strategies must be developed in accordance with these segments (Çınarlı 2008:57; Kotler et al. 2002:7-11).

Social marketing seeks to utilise tools, techniques and concepts derived from commercial marketing in pursuit of social goals and it provides benefits to society by using such techniques to affect social behaviour. These techniques are also widely used in international health promotion programmes. Consequently, social marketing is another worthwhile tool in health promotion (Craven et al.

---

1994:131; Çınarlı 2008:59; Kohr et al. 2008:300-306; Lowry et al. 2004:239-243; Richards et al. 2009:31-37).

Social marketing contributes to health promotion (Bennett and Sargeant 2005:797-805; Bethune and Lewis 2009:17-22; Cairns and Stead 2009b:11; Grier and Bryant 2005:319-339; Johnson et al. 2009:6-10; Kohr et al., 2008:300-306; Kunze and Kunze 2003:62-65; Richards et al. 2009:31-37; Rothschild 2010:96; Serrat 2010:2; Wymer 2010b:99-103) in such areas as family planning (Çınarlı 2008:58), reproductive health (Meekers and Rahaim 2005:10; Van Rossem and Meekers 2007:352; Bull et al. 2008:71-78), awareness of HIV (Çınarlı 2008:54; Futterman et al. 2001:19-29), oral cancer (Al-Dakkak 2010:106-107; Dodd et al. 2008:684-692; Eadie et al. 2009:73-79; Grant et al. 2010:465-471; Jedele and Ismail 2010:371-382; Lowry et al. 2009:99-110; Papas et al. 2004:121-131; Torres-Pereira 2010:37-42; Warnakulasuriya et al. 1999:319-322; Watson et al. 2009:774-782), oral health promotion (Choo et al. 2001:166-173; Claessen et al. 2008:307-320; de Almeida et al. 2003:211-216; Edmunds and Fulwood 2002:180-184; Fitzgerald et al. 2004:62-71; Hill and Bell 2002:2811-2815; Hiiri 2008:89; Jamieson and Thomson 2002:4-8; Macpherson et al. 2010:73-78), cardiovascular disease (Nishtar et al. 2008:61-68), depression (Luck et al. 2009:64), obesity (Herrick 2007:90-102), nutrition (Cairns and Stead 2009a:11-16; Gregson et al. 2001:4-15; Kolodinsky and Reynolds 2009:13; Richards et al. 2009:31-37), physical activity (Bellows et al. 2008:169-178; Burroughs et al. 2006:1-13; Dearing et al. 2006:11-23), malaria (Schellenberg et al. 1999:255-231), alcohol and cigarette consumption (Brennan and Binney 2010:140-146; Çınarlı 2008:54; Gallopel-Morvan et al. 2011:7-11; Herrick 2007:90-102; Rothschild et al. 2006:1218-1230).

Oral health is an important component of general health and quality of life and oral disease is still a major public health problem in many countries. In addition, oral health promotion is widely neglected area in public health (Petersen and Kwan 2010:129-136). Therefore, the prevention of dental caries, periodontal disease and tooth loss are the main targets stated as global goals for oral health by the FDI (World Dental Federation), the WHO (World Health Association) and the IADR (International Association for Dental Research) authorities (<http://www.mah.se/CAPP/Oral-Health-Promotion/Caries-Global-Goals/21.07.2012>).

Oral health is closely related to oral hygiene applications and the utilisation of dental services. Campaigns related to oral health increase public awareness and dental care utilisation and build public support (Cohen 2009:451-468; Mumcu et al. 2004:90-96). Interaction among dentists, dental professional organisations and the dental industry is an important factor in increasing public awareness and communicating oral health recommendations to the population. Within this framework, social marketing campaigns are key factors in increasing public awareness, building public support, improving media coverage and

expanding access to dental care (Edmunds and Fulwood 2002:180-184). Therefore, effective campaigns are essential for the public to engage in a more extensive use of preventive methods (Marthaler 2005:785) and have proven to be a promising means of changing behaviour (Craven et al. 1994:131; Jedele and Ismail 2010:371-382). The selection of a suitable environment, target groups and methods are crucial factors that influence the performance of campaigns. Public health research has shown that a number of individual, professional and community preventative measures, and community oriented oral health promotion can be effective in the control of oral disease and the promotion of oral health (Petersen and Kwan 2010:129-136).

In Turkey, oral healthcare is mainly provided by the Ministry of Health, dental faculties, the Ministry of Defence and private practitioners (Topaloğlu-Ak et al. 2009:32). Since the utilisation of dental services is very low and the condition of oral health is poor in Turkey (Mumcu et al. 2004:90-96) when compared to developed countries (<http://apps.who.int/ghodata/?vid=20100&the me=country 25.07.2012>) (Mumcu et al. 2004:90-96), it is thought that oral health campaigns are much needed to compensate for the lack of a national health promotion policy. A great number of campaigns have been carried out to overcome these problems. However, it is unknown whether oral health related campaigns are conducted according to social marketing principles.

There is no official social marketing department in Turkey to determine standards for any such campaign. Therefore, the aim of this study was to evaluate the oral health campaigns in Turkey according to social marketing principles.

## **Materials and Methods**

Oral health campaigns conducted until 2010 have been searched on the web site of the Turkish Dental Association and on the *Google* search engine, "campaign" and "oral health" were specified as key words.

Data was collected in a structured form related to social marketing process. The research design was conducted through content analysis. Oral health campaigns were assessed by a researcher holding a PhD in Public Relations. According to the content of the campaigns, the prominent determinants were assessed as follows: message, target group, aim, communication strategies and use of mass media tools, places of the campaign, stakeholder involvements, and campaign life from a social marketing perspective were determined by using communication tools in oral health campaigns. Results were presented numerically and as percentages in the tables.

According to the search results 36 social marketing campaigns were available for analytical purposes. One of the campaigns contained the product name and was therefore not included to eliminate advertising effect in the study. Information from 35 social marketing campaigns related to oral health was obtained from the websites of the stakeholders.

## Results

### *Campaign life*

A total of 35 campaigns were evaluated according to social marketing principles in the present study. The average campaign life was  $230.8 \pm 382.83$  days (range:3-1800 days).

### *Target groups*

Half of the campaigns had determined children as their target group (57.1%, n=20). The other target groups were the whole of Turkey (31.4%, n=11), disabled people (5.7%, n=2), a group comprised of children, their parents and teachers (2.9%, n=1) and dentists (2.9%, n=1) (Table 1).

*Table 1: The Distribution of Campaigns According to Target Groups and Place*

<b>Target Group</b>	<b>n</b>	<b>%</b>
Children	20	57.1
Nation-wide	11	31.4
Disabled people	2	5.7
Children, their parents and teachers	1	2.9
Dentists	1	2.9
<i>Total</i>	<i>35</i>	<i>100.00</i>
<b>Place</b>	<b>n</b>	<b>%</b>
Nation-wide	11	31.4
Within the municipality of related city	3	8.6
Single city	21	60.0
<i>Total</i>	<i>35</i>	<i>100.00</i>

### *Place*

Over half of the campaigns were implemented in a single city (60%, n=21). 11 of the campaigns (31.4%) were conducted all across Turkey. 3 of the campaigns (8.6%) were within the municipality of the related city (Table 1).

## *Aims*

The campaigns were classified according to their aims. Campaigns could have more than one aim. Oral examination (26.5%, n=13), awareness of oral health (24.5%, n=12), preventative oral healthcare application (16.4%, n=8) and improving health (14.2%, n=7) were their main aims. Generating a healthy population, overcoming dental anxiety in the population, determining oral health problems and finding solutions to those problems, changes in oral health behaviour (4.1%, n=2), and oral healthcare for disabled people (2.0%, n=1) were additional subjects of the campaigns (Table 2). Each subject described in Table 2 was a health promotion problem that could be used as a sample for social marketing applications.

*Table 2: The Distribution of Campaigns According To Aims*

<b>Aims</b>	<b>n</b>	<b>%</b>
Awareness of oral health	12	24.5
Improving health	7	14.2
Generating healthy population	2	4.1
Overcoming dental anxiety in population	2	4.1
Determining oral health problems and finding solutions	2	4.1
Preventative oral healthcare application	8	16.4
Oral examination	13	26.5
Change in oral health behaviour	2	4.1
Oral healthcare for disabled people	1	2.0
<i>Total</i>	<i>49</i>	<i>100.00</i>

\*More than one aim was selected.

## *Communication strategies and tactics*

The most frequently used communication strategies and tactics were face to face communication and education (31.43%, n=11), free delivery of toothbrushes and toothpaste (37.14%, n=13). In addition, training seminars (5.71%, n=2) and oral health record cards (2.86%, n=1) were also included. When assessing materials, 8 of the 35 campaigns did not state the communication strategies and tactics (22.86%, n=35) (Table 3).



*Table 3: The Distribution of the Communication Strategies and Tactics in the Campaigns*

<b>Communication Strategies and Tactics</b>	<b>n</b>	<b>%</b>
Face to face communication and education	11	31.43
Free delivery of toothbrush and toothpaste	13	37.14
Training seminars	2	5.71
Oral health record cards	1	2.86
No information	8	22.86
<i>Total</i>	<i>35</i>	<i>100.00</i>

### *Communication instruments*

In order to support the campaigns, several media were used. Only 7 (20%) of the 35 campaigns used communication instruments. Of these, the most widely used communication instruments were brochures (8.57%, n=3) and billboard posters (5.71%, n=2). Other communication instruments were TV programmes (2.86%, n=1) and CDs for oral health education (2.86%, n=1) (Table 4).

*Table 4: The Distribution of the Communication Instruments in the Campaigns*

<b>Communication Instruments</b>	<b>n</b>	<b>%</b>
Billboard posters	2	5.71
Brochure	3	8.57
TV programmes	1	2.86
CDs for oral health education	1	2.86
No information	28	80.00
<i>Total</i>	<i>35</i>	<i>100.00</i>

### *Slogans*

Slogans are as effective as current knowledge. Therefore, in order to increase the effectiveness of the campaigns slogans were used in 17 of the 35 campaigns (48.57%). These were as follows: "Dental rooms for healthy smiles" (2.86%, n=1), "Oral health promoting schools" (2.86%, n=1), "Live, learn, laugh" (2.86%, n=1), "Your smile is enough for us" (2.86%, n=1), "Having healthy teeth depends on me" (2.86%, n=1), "Smiling children with healthy teeth" (2.86%, n=1), "We can not eat and speak without teeth" (2.86%, n=1), "Healthy generations are possible with healthy teeth" (2.86%, n=1), "Toothbrushes are in bags and teeth are healthy" (2.86%, n=1), "Being healthy is possible with a healthy oral profile" (2.86%, n=1), "The target is perfect oral health" (5.71%, n=2), "I love my teeth 2005" (2.86%, n=1), "Hand in hand for a smiling Malatya" (2.86%, n=1), "Smiling permanent molars" (2.86%, n=1), "Healthy smiling" (2.86%, n=1), "There is no barrier to happiness" (2.86%, n=1) (Table 5).

*Table 5: The Distribution of the Slogans of the Campaigns*

<b>Slogans</b>	<b>n</b>	<b>%</b>
Dental rooms for healthy smiles	1	2.86
Oral health promoting schools	1	2.86
Live, learn, laugh	1	2.86
Your smile is enough for us	1	2.86
Having healthy teeth depends on me	1	2.86
Smiling children with healthy teeth	1	2.86
We can not eat and speak without teeth	1	2.86
Healthy generations are possible with healthy teeth	1	2.86
Toothbrushes are in bags and teeth are healthy	1	2.86
Being healthy is possible with a healthy oral profile	1	2.86
Target is perfect oral health	2	5.71
I love my teeth 2005	1	2.86
Hand in hand for a smiling Malatya	1	2.86
Smiling permanent molars	1	2.86
Healthy smiling	1	2.86
There is no barrier to happiness	1	2.86
No information	18	51.43
<i>Total</i>	<i>35</i>	<i>100,0</i>

### *Stakeholders*

According to the accessible campaign documents the stakeholders included municipalities (13.3%, n=11), product companies (12.5%, n=10), the Directorate for National Education (11.3%, n=9), the Turkish Dental Association (7.5%, n=6), local health authorities (7.5%, n=6), local dental chambers (8.8%, n=7), centers for oral and dental health (7.5%, n=6), Governorships (6.3%, n=5), the Turkish Periodontology Society (5.0%, n=4), public hospitals (3.8%, n=3), the Turkish Ministry of Health (2.5%, n=2), the Turkish Ministry of Education (2.5%, n=2), chambers of commerce and industry (2.5%, n=2), a faculty of dentistry (2.5%, n=2), private hospitals (1.3%, n=1), Social Services and Child Protection Institution (1.3%, n=1), the World Dental Federation (1.3%, n=1), medical associations (1.3%, n=1) and non-governmental organisations (1.3%, n=1) (Table 6).

*Table 6: The Distribution of the Stakeholders in the Campaigns*

<b>Stakeholders</b>	<b>n</b>	<b>%</b>
Turkish Dental Association	6	7.5
Product companies	10	1.5
Social services and child protection institution	1	1.3
Municipalities	11	13.3
World Dental Federation	1	1.3
Turkish Periodontology Society	4	5.0
Medical Association	1	1.3
Non-governmental organisations	1	1.3
Governorship	5	6.3
Turkish Ministry of Health	2	2.5
Turkish Ministry of Education	2	2.5
Local dental association/chamber	7	8.8
Chamber of commerce and industry	2	2.5
Directorate for national education	9	11.3
Faculty of dentistry	2	2.5
Public hospitals	3	3.8
Centre for oral and dental health	6	7.5
Local health authorities	6	7.5
Private hospitals	1	1.3
<i>Total</i>	<i>80</i>	<i>100.00</i>

\*Most of the campaigns included more than one stakeholders.

## **Discussion**

Social marketing is widely used to influence health behaviour by using health communication strategies based on mass media to achieve predetermined goals (Evans 2006:1207). Its framework provides a useful solution-focused to promote individual behavioural change (Morris and Clarkson 2009:135-141). The development of a social marketing strategy involves the selection of communication channels and materials based on the required behavioural change and knowledge of the target audience.

The campaigns could be evaluated by different domains of social marketing (Evans 2006:1207). Campaign life is related to campaign factors such as aim, target group, communication instrument and place (McCormack et al. 2004:52). In the present study, the campaign life was between 3-1800 days.

The most frequent selected target group were children (57.1%, n=20). The WHO statement is an impetus for countries to develop or adjust national oral health programmes to develop and implement oral health promotion for school children as a part of activities in schools (Petersen 2010:194-198). Therefore, changes in oral hygiene behaviour are vital. Preventative oral healthcare applications can result in a sustained and long-term improvement of

the oral health in children (Oh et al. 2011:20-22; Meyer et al. 2010:257-264). Thus, costs of dental treatment may decrease in the future.

The percentage of the campaigns which were conducted in a single city was 60% (n=21). The advantages of the application in a single city are ease of access to the campaign for the target group, ease of conduct for campaign organisers, and easy illumination of external opportunities and threats. These points all increase the effectiveness of the campaign and the probability of its success (McCormack et al. 2004:63-67).

In the present study, the campaigns sought to upgrade an awareness of oral health, and oral examination. Since some campaigns had more than one aim, different factors were combined, such as improving oral health, determining oral health problems, prevention of dental anxiety, and oral healthcare in disabled people. They were health promotion problems that could be used as samples for social marketing applications. Populations could be classified into subgroups whose needs, wants, behaviours and lifestyles are similar (Grier and Bryant 2005:319-339). Selecting a homogeneous target group according to aim of campaigns is essential to form messages (Özdoğan 2006:30). Thus, social marketing campaigns increase the effectiveness of health promotion programmes by providing principles and tools that impact on target audiences (Donovan 2011:23-40). Oral health is a crucial part of health promotion. Poor oral health is a common condition whereas the utilisation of dental health services is fairly low in Turkey (Mumcu et al. 2004:90-96). There are many causes that account for this situation. First of all, preventative health care services related to oral health have not been given sufficient attention by health authorities. Secondly, people who use oral health care services do not have enough awareness of preventative oral health applications. The utilisation of dental services could be related to perceived dental health, people's health beliefs, their attitudes towards dental problems and dental anxiety (Mumcu et al. 2004:90-96; Topaloğlu-Ak et al. 2009:32).

In the present study, it was found that communication strategies and tactics were the most frequently used in the campaigns of the study. Face to face communication and education, training seminar, and oral health record cards were used by 27 of the 35 campaigns.

According to Buchthal et al., (Buchthal et al. 2011:314-327) social marketing campaigners should select the most suitable communication instrument for the target group during the formative research and campaign design process (Buchthal et al. 2011:314-327; McCormack et al. 2004:38). In this study, media tools such as brochures, billboard posters, TV programmes and CD for oral health education were used to reach the target groups as they have the potential to create the desired behavioural change (Donovan 2011:23-40). A study conducted in Brazil concluded that a mass-media TV campaign is

---

essential in increasing people's perceptions (Torres-Pereira 2010:37-42). In Japan where media use during a campaign has been given much attention, an oral health week is held every June every year, during which newspapers are used to inform people about oral health problems (Abe 2005:17).

It is also advisable that slogans developed according to the socio-demographic features of target group should be used in oral health campaigns (Dodd et al. 2008:684-692). An awareness of specific slogans is important, and using more than one slogan that supports the same aim is essential in determining the most effective. This reveals which target group is affected by which slogan (Buchthal et al. 2011:314-327). In addition, consistency between targeted behavioural change and the slogan is necessary to increase the effectiveness of the campaigns (Bayraktaroğlu and İltter 2007:126). 17 campaigns of the 35 campaigns used slogans, but only one slogan was used twice in two different campaigns. Therefore, it is not certain which slogan was more effective. Furthermore, a mixture of communication instruments such as television and radio advertisements, newspapers, posters and so on can be used (Buchthal et al. 2011:314-327; Jedele and Ismail 2010:371-382).

In the present study, the main stakeholders of the campaigns were Municipalities, the Turkish Dental Association, the Turkish Ministry of Health and the Turkish Periodontology Society. Those stakeholders, which are government agencies, have more opportunities than others to bring about behavioural change by their political decisions (Wymer 2010a:97-98). Twenty-five of the thirty-five campaigns had stakeholders which have a governmental identity. In addition, these stakeholders provided campaigns which were applied properly. Additionally, essential dental care services can be organised effectively, such as those carried out in Portugal. There, the political authorities have determined that there is increased need for preventative application in children. Hence, preventative oral health care has been included in the dental care service schemes to improve the oral health of children (De Almeida et al. 2003:211-216). In the first step for controlling dental caries, a national health programme including promotional, preventative and minimal intervention approaches for managing dental health problems, can be proposed (Topaloğlu-Ak et al. 2009:32).

However, product companies were also stakeholders in ten campaigns and in these cases, toothbrushes and toothpaste were distributed as promotional products. Such promotional activities make it possible to sustain the intended behaviour change (McCormack Brown et al. 2004:8), however during the implementation of campaigns, conflicts may emerge because of diverse implementations of the stakeholders' aims (Smith 2001:125). Hence, it may be questioned whether these campaigns were conducted in order to produce behavioural change or if they were done on the behalf of the product companies to increase usage of their products.

According to the research report of the Turkish Ministry of Health, the frequency of dental visits was 4,651,716 in 2002, and increased to 25,177,013 in 2010 (Quinn et al. 2007:357-366). This increase in dental visitation is due to the service provided by oral and dental healthcare centers. These centers offer therapeutic oral healthcare services as well preventative oral healthcare services. These campaigns have an active role in encouraging people to use preventative oral healthcare services more frequently. Thus, oral and dental healthcare centers give priority to preventative oral healthcare services. On the other hand, the increase of dental visits is not only in relation to the campaigns, they also depend on people being able to reach oral healthcare services easily. This was an important limitation of the study, as there is no information relating to the effectiveness of the campaigns in this regard.

The other limitation was the time constraint of the study. Consequently the interval from 2003 to 2010 was used because earlier data is not available. In addition, the most important limitation of this research was that many important questions are unanswered due to a lack of detailed information relating to the campaigns. Therefore, future research should contain answers to questions such as how the market segmentation was done, what kind of messages or contents were preferred, the reception of the messages and the outcomes of the campaigns (currently, there is no information relating to the outcomes of the campaigns). Prospective research should seek to clarify these limitations.

Finally, the results of this study are important for the future planning of campaigns relating to oral health in Turkey. However, in the majority of countries there is a need to establish national oral health systems that are effectively oriented towards health promotion and integrated disease prevention (Petersen 2010:129-136). As our results can be used to assist the planning of oral health campaigns by using a social marketing process, social marketing professionals could help health professionals in planning in new campaigns. Thus, the effectiveness of new campaigns will be increased.

### **Conflict of Interest**

The authors declare that they have no conflict of interest.

### **References**

ABE Satoshi et al. (2005), "Coverage by Japanese Newspapers of Oral Health Messages on the Prevention of Dental Caries", **Journal of Medical and Dental Sciences**, 52(1): 17.

AL-DAKKAK Imad (2010), "Public Awareness of Oral Cancer and Associated Risk Factors is Low", **Evidence-Based Dentistry**, 11(4): 106-107.

---

BAYRAKTAROĞLU Gül and İLTER Burcu (2007), "Sosyal Pazarlama: Engeller ve Öneriler", **Ege Akademik Bakış**, 7(1): 117-132.

BELLOWS Laura et al. (2008), "Formative Research and Strategic Development of A Physical Activity Component to a Social Marketing Campaign for Obesity Prevention in Preschoolers", **Journal of Community Health**, 33(3): 169-178.

BENNETT Roger and SARGEANT Adrian (2005), "The Nonprofit Marketing Landscape: Guest Editors' Introduction to a Special Section", **Journal of Business Research**, 58(6): 797-805.

BETHUNE Graham and LEWIS Hazel (2009), "Let's Talk About Smear Tests: Social Marketing For The National Cervical Screening Programme", **Public Health**, 123, E17-E22.

BRENNAN Linda and BINNEY Wayne (2010), "Fear, Guilt, and Shame Appeals in Social Marketing", **Journal of Business Research**, 63(2): 140-146.

BUCHTHAL, O. Vanessa et al. (2011), "Avoiding A Knowledge Gap in a Multiethnic Statewide Social Marketing Campaign: Is Cultural Tailoring Sufficient?", **Journal of Health Communication**, 16(3): 314-327.

BULL Sheana S. et al. (2008), "Power For Reproductive Health: Results From a Social Marketing Campaign Promoting Female and Male Condoms", **Journal of Adolescent Health**, 43(1): 71-78.

BURROUGHS Ericka et al. (2006), "Using Focus Groups in the Consumer Research Phase of a Social Marketing Program to Promote Moderate-Intensity Physical Activity and Walking Trail Use in Sumter County, South Carolina", **Preventing Chronic Disease**, 3(1): 1-13.

CAIRNS Georgina and STEAD, Martine (2009a), "Session 5: Nutrition Communication Obesity and Social Marketing: Works in Progress", **Proceedings Of The Nutrition Society**, 68(01): 11-16.

CAIRNS Georgina and STEAD Martine (2009b), Symposium on "The Challenge of Translating Nutrition Research into Public Health Nutrition", Session 5: Nutrition Communication: Obesity And Social Marketing: Works in Progress, **The Proceedings of The Nutrition Society**, 68(1): 11.

CHOO Audrey et al. (2001), "Oral Hygiene Measures and Promotion: Review and Considerations", **Australian Dental Journal**, 46(3): 166-173.

CLAESSEN Jean-Paul et al. (2008), "Designing Interventions to Improve Tooth Brushing", **International Dental Journal**, 58(S5): 307-320.

COHEN Leonard A. (2009), "The Role of Non-Dental Health Professionals in

Providing Access to Dental Care for Low-Income and Minority Patients", **Dental Clinics of North America**, 53(3): 451-468.

CRAVEN R.C. et al. (1994), "A Campaign Encouraging Dental Attendance Among Adolescents In Scotland: The Barriers To Behaviour Change", **Community Dental Health**, 11(3): 131.

CUGELMAN Brian (2010), "Online Social Marketing: Website Factors in Behavioural Change", PhD Thesis, Wolverhampton University.

ÇINARLI İnci (2008), **Sağlık İletişimi ve Medya**. Ankara, Nobel.

DE ALMEIDA Cesar Mexia et al. (2003), "Changing Oral Health Status of 6-And 12-Year-Old Schoolchildren in Portugal", **Community Dental Health**, 20(4): 211-216.

DEARING James W. et al. (2006), "A Convergent Diffusion and Social Marketing Approach for Disseminating Proven Approaches to Physical Activity Promotion", **American Journal of Preventive Medicine**, 31(4): 11-23.

DODD Virginia Jones et al. (2008), "Oral Cancer in African Americans: Addressing Health Disparities", **American Journal of Health Behavior**, 32(6): 684-692.

DONOVAN Rob J. (2011), "The Role For Marketing in Public Health Change Programs", **Australian Review of Public Affairs**, 10(1): 23-40.

EADIE Douglas et al. (2009), "Development and Evaluation of an Early Detection Intervention for Mouth Cancer Using a Mass Media Approach", **British Journal of Cancer**, 101, S73-S79.

EDMUNDS Margo and FULWOOD Charles (2002), "Strategic Communications in Oral Health: Influencing Public and Professional Opinions and Actions", **Ambulatory Pediatrics**, 2(2): 180-184.

EVANS Douglas W. (2006), "How Social Marketing Works in Health Care", **BMJ: British Medical Journal**, 332(7551): 1207.

EVANS Douglas W. (2008), "Social Marketing Campaigns and Children's Media Use", **The Future of Children**, 18(1): 181-203.

FITZGERALD Ruth P. et al. (2004), "An Exploratory Qualitative Study of Otago Adolescents' Views of Oral Health and Oral Health Care", **New Zealand Dental Journal**, 100, 62-71.

FUTTERMAN Donna C et al. (2001), "The Access (Adolescents Connected to Care, Evaluation, and Special Services) Project: Social Marketing to Promote HIV Testing to Adolescents, Methods and First Year Results From a Six City Campaign", **Journal of Adolescent Health**, 29(3): 19-29.



---

GALLOPEL-MORVAN Karine et al. (2011), "The Use of Visual Warnings in Social Marketing: The Case of Tobacco", **Journal of Business Research**, 64(1): 7-11.

GALLOPEL-MORVAN Karine et al. "The Use of Visual Warnings in Social Marketing: The Case of Tobacco", **Journal of Business Research**, in Press, Corrected Proof, Doi:10.1016/J.Jbusres.2009.09.012

GORDON Ross et al. (2006), "The Effectiveness of Social Marketing Interventions for Health Improvement: What's The Evidence?", **Public Health**, 120(12): 1133-1139.

GRANT E. et al. (2010), "The Experiences of Young Oral Cancer Patients in Scotland: Symptom Recognition and Delays in Seeking Professional Help", **British Dental Journal**, 208(10): 465-471.

GREGSON Jennifer et al. (2001), "System, Environmental, and Policy Changes: Using The Social-Ecological Model as a Framework for Evaluating Nutrition Education and Social Marketing Programs With Low-Income Audiences", **Journal of Nutrition Education**, 33, S4-S15.

GRIER Sonia and BRYANT Carol A. (2005), "Social Marketing in Public Health", **Annual Review Public Health**, 26: 319-339.

HERRICK Clare (2007), "Risky Bodies: Public Health, Social Marketing and The Governance of Obesity", **Geoforum**, 38(1): 90-102.

HIIRI Anne, "Community-Wide Oral Health Promotion in the Pitkäranta District of Russian Karelia-A Case Study", **Medica**, 500, 978.

HILL Railton M. HILL Anne C. and Bell George, "Health Promotion Meets Social Marketing: The Monash Preschool Dental Program (Mpdp)".

JAMIESON Lisa M. and Thomson Murray (2002), "Dental Health, Dental Neglect, and Use of Services in an Adult Dunedin Population Sample" **New Zealand Dental Journal**, 98: 4-8.

JEDELE Jenefer M. and ISMAIL A.I. (2010), "Evaluation of a Multifaceted Social Marketing Campaign to Increase Awareness of and Screening for Oral Cancer in African Americans", **Community Dentistry And Oral Epidemiology**, 38(4): 371-382.

JOHNSON K.M. et al. (2009), "Guidelines for the Development of Social Marketing Programmes for Sun Protection Among Adolescents and Young Adults", **Public Health**, 123, E6-E10.

KATARIA Mitesh and LARSÉN Karin (2009), "Effects of Social Marketing on Battery Collection", **Resources, Conservation And Recycling**, 53(8): 429-433.

KOHR J.M. et al. (2008), "The Use of Programme Planning and Social Marketing

Models By a State Public Health Agency: A Case Study", **Public Health**, 122(3): 300-306.

KOLODINSKY Jane and REYNOLDS Travis (2009), "Segmentation of Overweight Americans and Opportunities for Social Marketing", **International Journal of Behavioral Nutrition and Physical Activity**, 6: 13.

KOTLER Philip et al. (2002), **Social Marketing: Improving the Quality of Life**: CA, Sage Publications, Inc.

KOTLER Philip and ZALTMAN Gerald (1971), "Social Marketing: An Approach to Planned Social Change", **The Journal of Marketing**, 3-12.

KUNZE Michael and KUNZE Ursula (2003), "Social Marketing and the Establishment of the Isw-Tbe", **Vaccine**, 21: 62-65.

LOWRY Ray et al. (2009), "Social Marketing Approach to a Successful Oral Cancer Case-Finding Pilot", **Social Marketing Quarterly**, 15(4): 99-110.

LOWRY Ray et al. (2004), "Using Social Marketing to Increase Recruitment of Pregnant Smokers to Smoking Cessation Service: A Success Story", **Public Health**, 118(4): 239-243.

LUCK Jeff et al. (2009), "Implementation Science", **Implementation Science**, 4, 64.

MACDONALD Gordon and BUNTON Robin (1992), **Health Promotion: Disciplines and Diversity**, London, Routledge.

MACPHERSON L.M.D. et al. (2010), "Childsmile: The National Child Oral Health Improvement Programme in Scotland", Part 1: Establishment And Development, **British Dental Journal**, 209(2): 73-78.

MARTHALER T.M. (2005), "Increasing the Public Health Effectiveness of Fluoridated Salt", **Schweizer Monatsschrift für Zahnmedizin=Revue Mensuelle Suisse d'odonto-Stomatologie**, 115(9): 785.

MCCORMACK Brown K. et al. (2004), "Obesity Prevention Coordinators' Social Marketing Guidebook: Tampa, Florida Prevention Research Center at the University of South Florida".

MCKIE David and TOLEDANO Margarit (2008), "Dangerous Liaison or Perfect Match? Public Relations and Social Marketing", **Public Relations Review**, 34(4): 318-324.

MEEKERS Dominique and RAHAIM Stephan (2005), "The Importance of Socio-Economic Context for Social Marketing Models for Improving Reproductive Health: Evidence From 555 Years of Program Experience", **BMC Public Health**, 5(1): 10.

- MEYER Karen et al. (2010), "An Early Oral Health Care Program Starting During Pregnancy", **Clinical Oral Investigations**, 14(3): 257-264.
- MORRIS Zoë et al. (2009), "Does Social Marketing Provide a Framework for Changing Healthcare Practice?", **Health Policy**, 91(2): 135-141.
- MUMCU Gonca et al. (2004), "Utilisation of Dental Services in Turkey: A Cross-Sectional Survey" **International Dental Journal**, 54(2): 90-96.
- NISHTAR Sania et al. (2008), "Social Marketing Leverage for Heart Health: The Ekaterinburg Experience", **Cvd Prevention and Control**, 3(2): 61-68.
- JUNHIE OH et al., "Primary Care Physicians 'Role in Promoting Children's Oral Health", **Medicine and Health**, RI, 94(1): 20-22.
- ÖZDOĞAN Zeliha ve ESER Bahar F. (2006), **Sosyal Pazarlama Toplumun Refahı ve Kaliteli Yaşamı İçin**, Ankara, Siyasal Yayınevi.
- PAPAS Rebecca K. et al. (2004), "Effectiveness of a Community-Based Oral Cancer Awareness Campaign (United States)", **Cancer Causes and Control**, 15(2): 121-131.
- PEATTIE Ken and PEATTIE Sue (2009), "Social Marketing: A Pathway to Consumption Reduction?", **Journal of Business Research**, 62(2): 260-268.
- PETERSEN Poul-Erick (2010), "Improvement of Global Oral Health-The Leadership Role of the World Health Organization", **Community Dental Health**, 27(4): 194-198.
- PETERSEN Poul Erick and KWAN Stella (2010), "The 7<sup>th</sup> Who Global Conference on Health Promotion-Towards Integration of Oral Health (Nairobi, Kenya 2009)", **Community Dental Health**, 27(Suppl 1): 129-136.
- PIRANI Sylvia and REIZES Tom (2005), "The Turning Point Social Marketing National Excellence Collaborative: Integrating Social Marketing into Routine Public Health Practice", **Journal of Public Health Management and Practice**, 11(2): 131.
- QUINN G.P., et al. (2007), "Adolescent Perceptions of Violence: Formative Research Findings From a Social Marketing Campaign to Reduce Violence Among Middle School Youth", **Public Health**, 121(5): 357-366.
- RICHARDS J. et al. (2009), "An Evaluation of an Attempt to Change the Snacking Habits of Pre-School Children Using Social Marketing", **Public Health**, 123: E31-E37.
- ROTHSCHILD Michael (2010), "Using Social Marketing to Manage Population Health Performance", **Preventing Chronic Disease**, 7(5): A96.

ROTHSCHILD Michael et al. (2006), "Reducing Alcohol-Impaired Driving Crashes Through the Use of Social Marketing", **Accident Analysis & Prevention**, 38(6): 1218-1230.

SCHELLENBERG J.R.M. et al. (1999), "Kinet: A Social Marketing Programme of Treated Nets and Net Treatment for Malaria Control in Tanzania, With Evaluation of Child Health and Long-Term Survival", **Transactions of the Royal Society of Tropical Medicine and Hygiene**, 93(3): 225-231.

SERRAT Olivier, "The Future of Social Marketing", Washington DC, Asian Development Bank.

SHANG Jingzhi et al. (2010), "Using Social Marketing to Enhance Hotel Reuse Programs", **Journal of Business Research**, 63(2): 166-172.

SMITH Craig N. (2001), "Social Marketing and Social Contracts: Applying Integrative Social Contracts Theory to Ethical Issues in Social Marketing", **Ethics in Social Marketing**, 125.

SUN Xinying et al. (2007), "Social Marketing Improved the Consumption of Iron-Fortified Soy Sauce Among Women In China", **Journal of Nutrition Education and Behavior**, 39(6): 302-310.

TOPALOĞLU-AK Aslı et al. (2009), "Managing Dental Caries in Children in Turkey-A Discussion Paper", **BMC Oral Health**, 9(1): 32.

TORRES-PEREIRA Casslus (2010), "Oral Cancer Public Policies: Is There Any Evidence of Impact?", **Brazilian Oral Research**, 24: 37-42.

VAN ROSSEM Ronan and MEEKERS Dominique (2007), "The Reach and Impact of Social Marketing and Reproductive Health Communication Campaigns in Zambia", **BMC Public Health**, 7(1): 352.

WARNAKULASURIYA, K. et al. (1999), "Oral Cancer: An Alarming Lack of Public Awareness Towards Oral Cancer", **British Dental Journal**, 187(6): 319-322.

WATSON Jennefier M. et al. (2009), "Effectiveness of a Social Marketing Media Campaign to Reduce Oral Cancer Racial Disparities", **Journal of the National Medical Association**, 101(8): 774-782.

WEINREICH Nedra Kline (1999), **Hands-On Social Marketing: A Step-By-Step Guide**, CA, Sage Publications, Inc.

WYMER Walter (2010a), "2008 World Social Marketing Conference: Introduction To Special Issue", **Journal of Business Research**, 63(2): 97-98.

WYMER Walter (2010b), "Rethinking the Boundaries of Social Marketing: Activism or Advertising?", **Journal of Business Research**, 63(2): 99-103.