



Working together
www.rcis.ro

Revista de cercetare și intervenție socială

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

Selected by coverage in Social Sciences Citation Index, ISI databases

COMMUNICATION STRATEGY ON ORAL HEALTH EDUCATION FOR ADOLESCENTS

Alexandra Sabina PODARIU, Angela Codruta PODARIU, Ramona Amina POPOVICI

Revista de cercetare și intervenție socială, 2017, vol. 58, pp. 68-80

The online version of this article can be found at:

www.rcis.ro, www.doaj.org and www.scopus.com

Published by:

Expert Projects Publishing House



On behalf of:

„Alexandru Ioan Cuza” University,

Department of Sociology and Social Work

and

Holt Romania Foundation

REVISTA DE CERCETARE SI INTERVENTIE SOCIALA

is indexed by ISI Thomson Reuters - Social Sciences Citation Index

(Sociology and Social Work Domains)



Working together
www.rcis.ro

Communication Strategy on Oral Health Education for Adolescents

Alexandra Sabina PODARIU¹, Angela Codruta PODARIU²,
Ramona Amina POPOVICI³

Abstract

60-90% of children globally have gingivitis and dental caries which are the most frequent oral diseases among children. Dental caries is progressive and cumulative in nature and becomes more complex over time. Is necessary to have guidelines for Oral Health Strategy's in Romania because in last twenty years oral health treatment is made in most of the time in the private healthy system and scholars dental offices almost disappeared. The study took place over a 2-year period. Enrolled students from three secondary schools from Timisoara who strictly applied our oral health education program with our four goals: to reduce the number of carries, to reduce the gingivitis incidents, to reduce mucosal problems and to reduce the orthopedic problems. 739 patients (378 girls and 361 boys) with a mean age of 13.46 (SD 2.81) years were evaluated before application of the oral health education lessons, which contained more forms of communication for the presence of caries, gingivitis, diseases of the oral mucosa, and malocclusion. All patients were reevaluated after application of the oral health education lessons. After two follow-up collected data, underlined a statistically significant decrease in the incidence of dental caries, gingivitis and oral mucosal diseases after implementation of our oral health program. Adolescents prefer the debates to be informed about oral health and of course the modern technology. Adolescents are open mind when we speak about personal information's, they prefers modern technology for information about health, but when they have oral cavity problems they have thrust more in dental doctors, school and family. They also are enthusiastic for group debates on a known theme.

Keywords: adolescents, communication strategy, health education, oral health, health promoting.

¹ "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Dental Medicine, ROMANIA. E-mail: alexandrasabina@yahoo.com

² "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Dental Medicine, ROMANIA. E-mail: podariuangela@gmail.com (*Corresponding author*)

³ "Victor Babes" University of Medicine and Pharmacy Timisoara, Faculty of Dental Medicine, ROMANIA. E-mail: ramona.popovici@umft.ro

Background

For understanding the adolescent profile in health education is essential (Chapman & Kirby, 1999). During adolescence period of life, is essential to adopt healthy behaviors, for understanding the principles of social interaction, communication method and age-specific developmental processes (Inglehart *et al.*, 1995). Is necessary to have guidelines for Oral Health Strategy's in Romania because in last twenty years oral health treatment is made in most of the time in the private healthy system and scholars dental offices almost disappeared. In Italy exist Guidelines for Oral Health at adolescents, "National guidelines for the promotion of oral health and prevention of oral diseases in developmental age" from 2013, which following four topics: prevention of carious lesions, prevention of gingivitis, prevention of diseases of the oral mucosa, prevention of orthopedic problems of the jaws. 60-90% of children globally have gingivitis and dental caries which are the most frequent oral diseases among children (Jurgensen & Petersen, 2013; Petersen, 2003; Petersen & Kwan, 2010; WHO/CAPP, 2013b). Dental caries is progressive and cumulative in nature and becomes more complex over time. If untreated it can affect children's quality of life, e.g. ability to eat and chew, the food they choose, how they look and the way they communicate. Pain from teeth or mouth can compromise their concentration and their participation in school, thereby hampering not only their play and development but also denying them the full benefit of schooling (Petersen *et al.*, 2005).

The decline in dental caries of children is most likely the result of a combination of factors such as improvement of living conditions, widespread use of fluoride, better oral health behavior, and the establishment of prevention oriented school health programs (Downer *et al.*, 2005; Marthaler *et al.*, 1996). In Romania increase of dental caries incidence is doubtless due to a complicated causal web related to the economic, demographic and nutritional transitions, low tradition of oral health care, limited use of fluoride, and lack of oral health services. Disparities in oral health status and in use of services exist for population groups at all ages and among adolescents they are found universally (Petersen, 2005). In Romania a significant proportions of children are underserved and they are not adequately targeted by oral disease prevention and health promotion in the context of public health programs (Kwan & Petersen, 2010).

Health education is one key element in health promotion and requires sound planning based on theories of health related behavior. Oral health has shown to be easily integrated into such school health activities. A manual on how to incorporate oral health in schools as well as recommendations on how to evaluate community-based oral health promotion and disease prevention has been developed by the WHO (Petersen & Kwan, 2004; Kwan *et al.*, 2005; WHO, 2003).

Oral health education is provided in numerous ways using a wide range of techniques and material approaching oral health related topics ranging from diet, oral hygiene, tobacco, oral structures, benefits of oral health, to oral piercing. Diet and oral hygiene and its impact on oral health are likely to be the topics covered most broadly. Oral health education should be based on principles of active involvement and reinforcement. Oral health education should be based on principles of active involvement and reinforcement. A lot of study's' shows that oral health education for children may have limited impact on its own (Honkala, 1993). If oral health education is combined with additional activities and provided on a regular basis health education is likely to have a positive impact on oral health behavior as well as oral health status (Biesbrock *et al.*, 2004; Frencken *et al.*, 2001; Friel *et al.*, 2002; Hawkins *et al.*, 2000; MacNab *et al.*, 2010; Petersen & Lennon, 2004; Sri Wendari, Lambri, & van Palenstein, 2002; Tai *et al.*, 2009; Vanobbergen *et al.*, 2004; Worthington *et al.*, 2001).

Oral diseases qualify as major public health problems owing to their high prevalence and incidence in all regions of the world, and as for all diseases, the greatest burden of oral diseases is on disadvantaged and socially marginalized populations. The purpose of the study was to discover an efficient communication methods strategy to create some criteria for guidelines on oral health educations at adolescents in Romania.

Material and methods

The project was divided into 3 stages: (1) Stage 1 Designing an oral health promotion program that includes the four fundamental principles: prevention of carious lesions, prevention of gingivitis, prevention of diseases of the oral mucosa, prevention of orthopedic problems of the jaws, specifically designed and adapted to the communication methods of present adolescents; (2) Stage 2, enrollment of the adolescents, first evaluation (T0) and oral health program implementation; (3) Stage 3 evaluations of the results. During the first stage dental students and dental doctors and teachers joining the project were trained on the oral health program. Formative development was carried out by dental doctors and dental students through a series of specific events. Aim of the events was to display advices on evaluation rising from combined evidence based observations and experts opinion.

Guidelines for prevention of carious lesions

The use of fluoride in caries prevention is necessary for all children. Fluoride supplements are to be prescribed by the family doctors in agreement with the dental doctors (Ferro *et al.*, 2014). Dental caries can be prevented by reducing the sugar consumption, by adopting an adequate oral hygiene and emphasizing the

benefits of fluorides (Moynihan & Petersen, 2004). This preventive effect has been acknowledged by four World Health Assembly resolutions, the first of which was endorsed over 40 years ago (World Health Assembly 1969; 1975; 1978, 2007). To promote a healthy alimentation by eliminate food and beverages rich in simple carbohydrates away from the main meals (Karjalainen, 2007; Bahuguna *et al.*, 2013) and discouraging consumption of juices or other sugary liquids without a nutritional purpose (Bishara *et al.*, 2006).

The program recommend also the correct tooth brush and usage the toothpaste with fluor, which is demonstrated to be a good solution for carries prevention (Jones *et al.*, 2005, Al-Jundi *et al.*, 2006; Curnow *et al.*, 2002; Jackson *et al.*, 2005; Petersen & Phantumvanit, 2012; Zero, Marinho, & Phantumvanit, 2012). The tooth brushing exercise does, if performed correctly, benefit not only the dentition status but also the periodontal health throughout life. Implementing regular school based fluoride rinsing is another accepted way to expose children to fluoride as the regular exercise can easily be conducted or assisted by school teachers (Levin *et al.*, 2009; Ohara *et al.*, 2000). This is especially effective in areas with high caries burden and little natural fluoride exposure (Centers for Disease Control and Prevention, 2001).

Guidelines for prevention of gingivitis

For preventing gingivitis is recommended the correct use of toothbrush, at least twice a day (Honkala, 1984; Scorzetti *et al.*, 2013).

Guidelines for prevention of diseases of the oral mucosa

For preventing the oral mucosa diseases' we recommend an adequate dietary and pharmacological supervision at students which have affected by systemic diseases involving the oral mucosa, either directly or through therapeutic side effects (GERD, celiac disease, asthma, nephropathy, primary and secondary immunodeficiency, epilepsy and other). Patients undergoing inhaled steroids treatment must rinse their mouth after each dose (Ellepola *et al.*, 2001). In presence of systemic diseases, psychomotor disorders, mental illnesses, syndrome diseases and disabilities, domestic oral hygiene has to be increased with the informed involvement of parents and support staff, together with periodic checkups with the dentist and/or the dental hygienist (Bessa *et al.*, 2004; Faulks & Hennequin, 2000; Almomani *et al.*, 2006). Oncological patients are recommended dental advice prior, during and after therapy (Epstein & Schubert, 2003). In failed regression of ulcerative or white lesions of the oral mucosa after therapy or removal of local causes, patients must be referred to the dental practitioner, after a 14-day attentive monitoring.

Guidelines for prevention of orthopedic problems of the jaw

To prevent the orthopedic problems we recommended and encourage: (1) Breastfeeding for when they will be parents, and explained them about the correct maxillary development (Vazquez-Nava *et al.*, 2006); (2) Orthopedic treatment if they have Oral-breathing, Class II malocclusion, contraction of the transverse diameter of the upper maxilla, augmented anterior facial height, and wide mandible angle (Pirelli *et al.*, 2005).

Data were collected at two different times: Time 0: Initial data collection at the time and Time 1: Final data collection at about two years from the first evaluation (Time 0). During the third stage comparisons were made between the same age groups at a distance of two years in order to evaluate any changes in lifestyle and in oral health conditions, before (Time 0) and after (Time 1).

Material and communication methods

In these two years we had a permanent relationship with the students from the study by oral health education lessons, using different methods of communication: (1) Power Point 2007 from Microsoft, were we presented the tooth morphology, the oral cavity morphology and correct teeth development, the correct nutrition and the correct tooth hygiene steps; (2) Debate by teams with theme “Healthy life style versus modern life style”, “Oral cancer risk factors”, “Importance of breastfeeding in our life”, Importance of a correct hygiene and the consequence of a bad one”; (3) Oral cavity evaluation with showing the teeth problems from their mouth; (4) Tooth brushing at school two or three times a week; (5) Distribution in school flyers and other posters; (6) Oral Health lesson were we exercised the correct tooth brushing and the correct tooth flossing; (7) Sending by email: oral health theme articles, videos; (8) Oral health debate with the parents of the students.

Statistics

Descriptive statistics were performed. Qualitative variables were summarized in terms of absolute frequencies or percentages, and quantitative variables were summarized in terms of mean $\pm$ standard deviation. A comparison of frequencies was performed by the Chi-square test or by the Fisher Exact test (in case of expected frequencies less than 5). All tests were two-sided and a Chi square test analysis was performed to evaluate a statistically significant decrease in the incidence of caries, gingivitis and diseases of the oral mucosa and for analyze the communication methods preferred by adolescents.

Results

At Time 0 were enrolled: 739 patients (378 girls and 361 boys) with a mean age of 13.46 (SD =1.32) years were evaluated for the presence of caries, gingivitis, diseases of the oral mucosa, and malocclusion. Only patients above 12 years at T0 were taken into consideration. All students were reevaluated after application of the oral health education lessons T1 and the mean age was 15.47(SD= 1.32).

After a 2-year follow-up collected data underlined, and the efficiency of our program (see *Table 1*) were evidenced by the significant statistical decrease of carries Incidence ($p= 0.001$), gingivitis incidence ($p= 0.0033$), and malocclusion incidence ($p< 0.0001$). Using twice a day of fluoride toothpaste > 500 ppm were increase from 568 to 663 ($p= 0.013$). Is observed also an increase of dental sealants from 182 to 514 ($p= 0.0002$), a decrease in consumption of high sugar food from 418 to 279 ($p= 0.052$) and drinks from 464 to 413 ($p= 0.78$) away from the main meals. The oral hygiene was better applied; the correct tooth brush technique was increase from 482 to 578 ($p= 0.137$) and the correct flossing usage from 268 to 568 ($p=0.0003$). Oral breathing and narrow maxilla who were reduce statistically significant from 303 to 182, $p=0.0101$. The identification by the dental doctors students with a low and forward tongue posture, and their constant monitoring by the paedodontist in order to prevent overbite and excessive growth of the mandible, showed a statistically significant increase from 406 to 289, $p<0.00001$.

Adolescents prefer to receive information about oral health from dental doctors 25.28%, family and schools 22,09%, modern technology like (social networks, internet, email) 18.06%, radio or TV oral health promotion spots or shows 10,47% (see *Figure 1*). It was observed a statistical significant difference by sex ($p=0.003$) when we speak about modern technology usage for information (See *Figure 1*).

Information about Oral Health information's the adolescents prefers group debates by a specific theme 68.6%, information received by email or social networks 45.35%, and web pages 31.4%. Modern technology is closer for adolescents than traditional form of communication (See *Figure 2*).

When we speak about preferred theme about Oral Health received 63.95% considered useful the correct flossing usage, 56.98% liked that now they know the correct hygiene steps, 51.15% were interested about risk factors and carries methods prevention (See *Figure 3*).

Table 1. Oral condition at T_0 and T_1

	T_0		T_1	
	YES N (%)	NO N (%)	YES N (%)	NO N (%)
CARRIES PREVENTION				
Tooth paste containing fluoride >500 ppm	568 (76.81%)	171 (23.19%)	643 (86.95%)	96 (13.05%)
Dental sealants	182 (24.64%)	557 (75.36%)	514 (68.56%)	225 (30.43%)
Sugar away from the main meals	418 (56.52%)	321 (43.48%)	279 (37.68%)	460 (62.32%)
Without juice and sweetness	464 (62.79%)	275 (34.92%)	413 (68.12%)	226 (31.88%)
Carries incidence	418 (56.56%)	321 (43.43%)	279 (37.68%)	460 (62.32%)
GINGIVITIS PREVENTION				
Correct tooth brushing	482 (65.22%)	257 (34.78%)	578 (78.26%)	161 (21.74%)
Correct flossing	268 (36.23%)	471 (63.77%)	568 (76.81%)	171 (23.18%)
Gingivitis incidence	300 (40.59%)	439 (58.41%)	375 (50.725%)	364 (49.275%)
MUCOSITIS				
Rinsing after inhaled steroid therapy	86 (11.64%)	653 (88.36%)	64 (8.69%)	675 (91.31%)
Checkup by the paedodontist if at risk	263 (35.59%)	476 (64.41%)	279 (37.68%)	460 (62.32%)
Mucositis incidence	303 (41%)	436 (59%)	182 (24.64%)	557 (75.36%)
MALOCCLUSIONS				
Oral breather and contracted maxilla	303 (41%)	436 (59%)	182 (24.64%)	557 (75.36%)
Low and forward tongue position	406 (54.94%)	333 (45.06%)	289 (39.1%)	450 (60.87%)
Malocclusions incidence	407 (55.08%)	332 (44.92%)	289 (39.1%)	450 (60.87%)

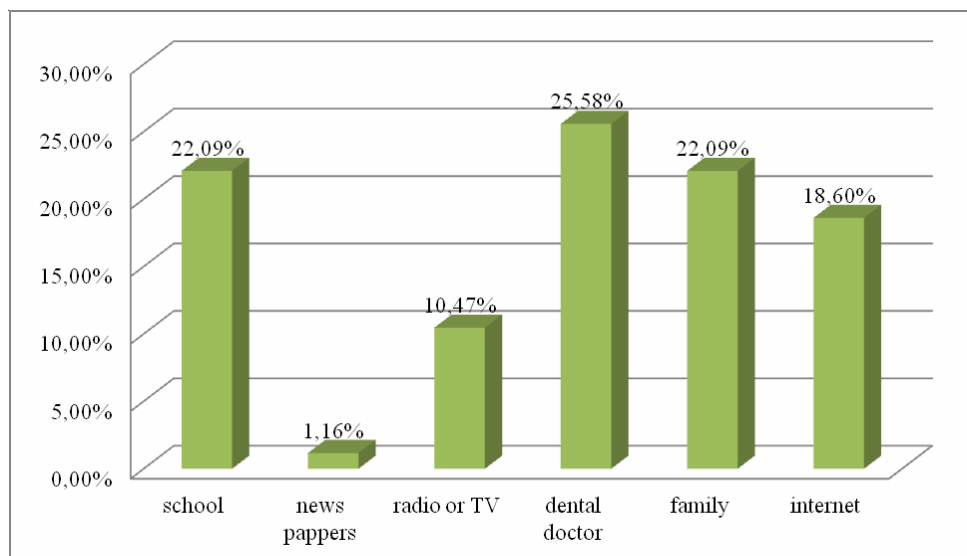


Figure 1. Information source for Oral Health questions preferred by adolescents

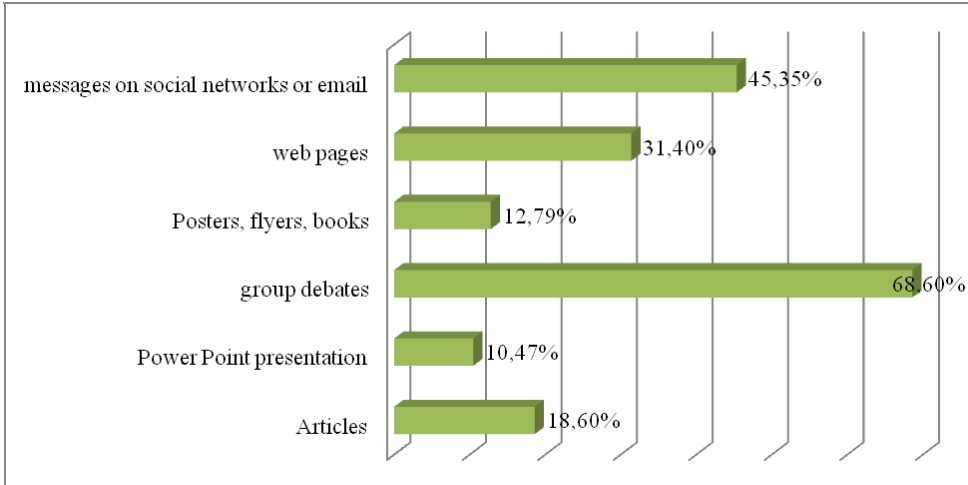


Figure 2. Information material for oral health preferred by adolescents

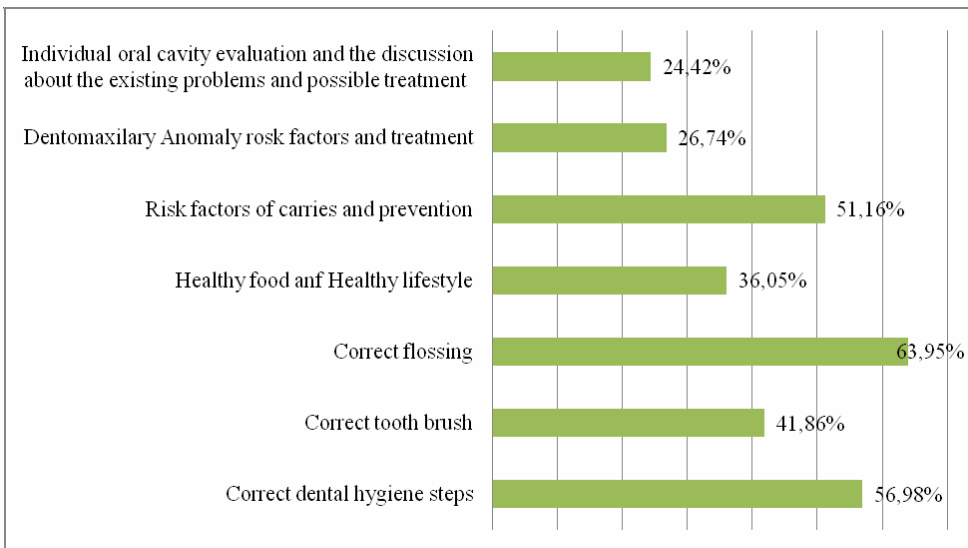


Figure 3. Preferred Oral Health themes for adolescents

Discussions

This qualitative study provided an elaborate description of the influences on adolescents' oral health behaviors one oral health program in schools combining social media, traditional and modern educational techniques. These program which include barriers of and facilitators to the adherence of twice daily tooth brushing with fluoride toothpaste and controlling the consumption of sugary foods and drinks (Duijster *et al.*, 2015).

Oral health care needs to be integrated in primary health and to be recognized as a potential model to reduce inequalities in the access and utilization of dental care to all Romania population. (Musgrove *et al.*, 2000). Ignoring the socio-economic contextual characteristics, such as living conditions of the family, when planning oral health care for children and adolescents is a serious limitation, especially in deprived communities due to the limited resources and barriers for the utilization of dental health services, so that why is very important like the dentists to be very careful with their attitude and their communication mode to encourage the increase of the addressability of the adolescents for dental care.

Numerous strategies and activities are applied to improve oral health of adolescents through schools on the world, but in Romania these kinds of activities are almost ignored. The study indicates that the majority of school oral health interventions that are implemented at adolescents in schools, which is in line with the idea of the Health Promoting School concept (Jurgensen & Petersen, 2013).

The limitation of the study: As the qualitative method used was not designed to produce data to be extrapolated to the population, a limitation might be whether these findings represent the average views of. The participants in this study came from mixed urban /rural community, from different socio-economical families, from Timisoara and periurban area for Timisoara, which cannot be specific for the entire Romania, because this part of the country is richer than other parts

Conclusions

Adolescents are open mind when we speak about personal information's, they prefers modern technology for information about health, but when they have oral cavity problems they have thrust more in dental doctors, school and family. They also are enthusiastic for group debates on a known theme. Our oral dental health prevention program was efficient by decreasing incidence of carries, gingivitis and malocclusions.

References

- Al-Jundi, S. H., Hammad, M., & Alwaeli, H. (2006). The efficacy of a school-based caries preventive program: a 4-year study. *International Journal of Dental Hygiene*, 4, 30-34.
- Armfield, J. M., & Spencer, A. J. (2007). Community effectiveness of fissure sealants and the effect of fluoridated water consumption. *Community Dental Health*, 24, 4-11.
- Bahuguna, R., Younis Khan, S., Jain, A. (2013). Influence of feeding practices on dental caries. A case-control study. *Eur J Paediatric Dent*, 14(1), 55-58.
- Bessa, C. F., Santos, P. J., Aguiar, M. C., do Carmo, M.A. (2004). Prevalence of oral mucosal alterations in children from 0 to 12 years old. *J Oral Pathol Med*, 33, 17-22.
- Bishara, S. E., Warren, J.J., Broffitt, B., Levy, S. M. (2006). Changes in the prevalence of nonnutritive sucking patterns in the first 8 years of life. *Am J Orthod Dentofacial Orthop*, 130, 31-36.
- Centers for Disease Control and Prevention (2001). Recommendations for using fluoride to prevent and control dental caries in the United States. *Morbidity and Mortality Weekly Report (MMWR)* 50(RR14), 1-42. [www.cdc.gov/mmwr/ preview/mmwrhtml/rr5014a1.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5014a1.htm)
- Chapman, H. R., & Kirby, N. C. (1999). Dental fear in children: a proposed model. *British Dental Journal*, 187(8), 408-412.
- Curnow, M. M., Pine, C. M., Burnside, G., Nicholson, J. A., Chesters, R. K. & Huntington, E. (2002). A randomised controlled trial of the efficacy of supervised toothbrushing in highcaries-risk children. *Caries Research*, 36, 294-300.
- Downer, M. C., Drugan, C. S., & Blinkhorn, A.S. (2005). Dental caries experience of British children in an international context. *Community Dental Health*, 22, 86-93.
- Duijster, D., de Jong-Lenters, M., Verrips, E., & van Loveren, C. (2015). Establishing oral health promoting behaviours in children – parents’ views on barriers, facilitators and professional support: a qualitative study. *BMC Oral Health*, 15, 157.
- Ellepola, A. N., & Samaranayake, L. P. (2001). Inhalational and topical steroids, and oral candidosis: a mini review. *Oral Dis*, 7, 211-216.
- Epstein, J. B., & Schubert, M. M. (2003). Oropharyngeal mucositis in cancer therapy. Review of pathogenesis, diagnosis, and management. *Oncology*, 17, 1767-1779.
- Faulks, D., & Hennequin, M. (2000). Evaluation of a long-term oral health program by carers of children and adults with intellectual disabilities. *Spec Care Dentist* 2000; 20: 199-208.
- Ferro, R., Besostri, A., Giuca, M.R., Docimo, R., Gatto, R., & Marzo, G. (2014). The Italian perspective on fluoride intake in children and adolescents. *Eur J Paediatric Dent*, 15(1), 55-58.
- Frencken, J. E., Borsum-Andersson, K., Makoni, F., Moyana, F., Mwashaenyi, S. & Mulder, J. (2001). Effectiveness of an oral health education programme in primary schools in Zimbabwe after 3.5 years. *Community Dentistry and Oral Epidemiology*, 29, 253-259.

- Friel, S., Hope, A., Kelleher, C., Comer, S., & Sadlier, D. (2002). Impact evaluation of an oral health intervention amongst primary school children in Ireland. *Health Promotion International*, 17, 119-126.
- Hawkins, R. J., Zanetti, D. L., Main, P. A., Jokovic, A., Dwyer, J. J. & Otchere, D. F. (2000). Oral hygiene knowledge of high-risk Grade One children: an evaluation of two methods of dental health education. *Community Dentistry and Oral Epidemiology*, 28, 336-343.
- Inglehart, M. R., Tedesco, L. A., Gift, L. K., Munksgaard, H. C. (1995). The role of the family in preventing oral diseases. *Disease Prevention and Oral Health Promotion*. Copenhagen, 1995, 271-306.
- Jackson, R. J., Newman, H. N., Smart, G. J., Stokes, E., Hogan, J. I., & Brown, C. (2005). The effects of a supervised toothbrushing programme on the caries increment of primary school children, initially aged 5-6 years. *Caries Research*, 39, 108-115.
- Jones, S., Burt, B. A., Petersen, P. E., & Lennon, M. A. (2005). The effective use of fluorides in public health. *Bulletin of the World Health Organization*, 83, 670-676.
- Jurgensen, N., & Petersen, P. E. (2013). Promoting oral health of children through schools - Results from a WHO global survey 2012. *Community Dental Health*, 30, 204-218.
- Karjalainen, S. (2007). Eating patterns, diet and dental caries. *Dent Update*, 34, 295-298.
- Kwan, S., Petersen, P. E., Pine, C., & Borutta, A. (2005). Health Promoting Schools: An opportunity for oral health promotion. *Bulletin of the World Health Organization*, 83, 677-685.
- Kwan, S., & Petersen, P. E. (2010). Oral health: equity and social determinants. In *Equity, social determinants and public health programmes*. Blas, E. and Sivasankara Kurup, A. (eds.). Geneva: WHO
- Levin, K. A., Jones, C. M., Wight, C., Valentine, C., Topping, G. V., & Naysmith, R. (2009). Fluoride rinsing and dental health inequalities in 11-year-old children: an evaluation of a supervised school-based fluoride rinsing programme in Edinburgh. *Community Dentistry and Oral Epidemiology*, 37, 19-26.
- MacNab, A. J., Radziminski, N., Budden, H., Kasangaki, A., Zavuga, R., Gagnon, F. A., & Mbabali, M. (2010). Brighter Smiles Africa – translation of a Canadian community-based health-promoting school program to Uganda. *Education for Health*, 23, 241.
- Marthaler, T. M., O'Mullane, D. M., & Vrbic, V. (1996). The prevalence of dental caries in Europe 1990-1995. *Caries Research*, 30, 237-255.
- Moyrihan, P.; & Petersen, P. E. (2004). Diet, nutrition and the prevention of dental diseases. *Public Health Nutrition*, 7, 201-226.
- Musgrove, P., Ceehse, A., Preker, A., Baeza, C., Anell, A., & Prentice, T. (2000). Health systems: improving performance. *The World Health Organization Report*. Geneva: World Health Organization; 2000
- Ohara, S., Kawaguchi, Y., Shinada, K., & Sasaki, Y. (2000). Evaluation of school-based dental health activities including fluoride mouth-rinsing in Hiraizumi, Japan. *Journal of Medical and Dental Sciences*, 47, 133-141.

- Petersen, P.E. (2003). The World Oral Health Report 2003: Continuous improvement of oral health in the 21st centurythe approach of the WHO Global Oral Health Programme. *Community Dentistry and Oral Epidemiology*, 31(Suppl 1), 3-23.
- Petersen, P. E., & Kwan, S. (2004). Evaluation of community based oral health promotion and oral disease prevention- WHO recommendations for improved evidence in public health practice. *Community Dental Health*, 21(Suppl), 319-329.
- Petersen, P. E. & Lennon, M. A. (2004): Effective use of fluorides for the prevention of dental caries in the 21st century. *Community Dentistry and Oral Epidemiology*, 32, 319-321.
- Petersen, P. E. (2005). Sociobehavioral risk factors in dental caries – international perspectives. *Community Dentistry and Oral Epidemiology*, 33, 274-279.
- Petersen, P. E., & Kwan, S. (2010). The 7th WHO Global Conference on Health Promotion towards integration of oral health (Nairobi, Kenya, 2009). *Community Dental Health*, 27 (Suppl 1): 129-136
- Petersen, P.E. & Phantumvanit, P. (2012). Perspectives in the Effective Use of Fluoride in Asia. *Journal of Dental Research*, 91, 119-121.
- Pirelli, P., Saponara, M., Attanasio, G. (2005). Obstructive Sleep Apnoea Syndrome (OSAS) and rhinotubular dysfunction in children: therapeutic effects of RME therapy. *Prog Orthod*, 6, 48-61.
- Scorzetti, L., Marcattili, D., Pasini, M., Mattei, A., Marchetti, E., Marzo, G. (2013). Association between obesity and periodontal disease in children. *Eur J Paediatric Dent*, 14(3), 181-184.
- Sri Wendari, A. H., Lambri, S. E., & van Palenstein, W.H. (2002). Effectiveness of primary school-based oral health education in West Java, Indonesia. *International Dental Journal*, 52, 137-143.
- Vanobbergen, J., Declerck, D., Mwalili, S., Martens, L. (2004). The effectiveness of a 6-year oral health education programme for primary schoolchildren. *Community Dentistry and Oral Epidemiology*, 32, 173-182.
- Vazquez-Nava, F., Quezada-Castillo, J. A., Oviedo-Trevino, S., Saldivar-Gonzalez, A. H., Sanchez-Nuncio, H. R., Beltran-Guzman, F. J., Vazquez-Rodriguez, E.M., Vazquez Rodriguez, C.F. (2006). Association between allergic rhinitis, bottle feeding, non-nutritive sucking habits, and malocclusion in the primary dentition. *Arch Dis Child*, 91, 836-840.
- World Health Assembly (1969). Resolution WHA 22.30 Fluoridation and dental health. In: *Twenty-second World Health Assembly*, Geneva. Geneva: WHO.
- World Health Assembly (1975). Resolution WHA 28.64 Fluoridation and dental health. In: *Twenty-eighth World Health Assembly*, Geneva. Geneva: WHO.
- World Health Assembly (1978). Resolution WHA 31.50 Fluorides and the prevention of dental caries. In: *Thirty-first World Health Assembly*, Geneva. Geneva: WHO.
- World Health Assembly (2007). Resolution WHA 60.17 Oral health: action plan for promotion and integrated disease prevention. In: *Sixtieth World Health Assembly*, Geneva. Geneva: WHO.

- World Health Organization (2003). WHO Information Series on School Health – Document 11 – *Oral Health Promotion: An Essential Element of a Health-Promoting School*. Geneva: WHO. www.who.int/oral_health/media/en/orh_school_doc11.pdf
- World Health Organization (2013). *Oral Health Surveys - Basic Methods*. Geneva: WHO.
- Worthington, H. V., Hill, K. B., Mooney, J., Hamilton, F. A., & Blinkhorn, A. S. (2001). A cluster randomized controlled trial of a dental health education program for 10-year-old children. *Journal of Public Health Dentistry*, 61, 22-27.
- Zero, D. T., Marinho, V. C., & Phantumvanit, P. (2012). Effective Use of Self-care Fluoride Administration in Asia. *Advances in Dental Research*, 24, 16-21.