Health education practices for dental caries prevention: a qualitative study with dental surgeons

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ABSTRACT

The objective of this study was to identify the perception of dental surgeons on public services of Primary Care at Regional Health Service, in Paraná, regarding health education practices for dental caries prevention, through a qualitative research. Interviews were conducted, based on semi-structured script. Recordings transcription was manually performed. The content was categorized according to the Method of Content Analysis proposed by Bardin. The results pointed out that, in this context, dentists perform health education practices through information transmission, demonstration, motivation, monitoring and communication. It is concluded that the studied professionals demonstrated to understand the importance of motivation and persistence for an educational process effective result, however it was possible to perceive different education to process of understanding.
Descriptors: Health Education. Dentists. Qualitative research.

1 INTRODUCTION

Dental caries is a disease of great prevalence worldwide, affecting between 60% and 90% of school children and almost all adults. In Brazil, despite a significant reduction in the number of decayed, missing and filled teeth (CPO-D) at twelve years of age, 53.4% of five-year-old children had some caries experience, and almost all elderly people have missed most of their teeth[1]. The results, presented by the 2010 National Oral Health Survey, are alarming and fall short of the goals set by the World Health Organization (WHO), whose target for 2010 was 90% and by 2020, 100% of children free of caries[2].

Dental caries has potential to negatively

impact individuals' life quality, leading to a loss of daily activities due to the occurrence of pain, loss of sleep, difficulty for eating, interference with social relationships and decreased self-esteem[3]. It is argued that the high cost of dental treatments could be avoided, as well as the reduction of caries prevalence, by adopting preventive measures and health promotion[4]. In a recent systematic review, by Qualitative Metasummary Method and opinion survey, were evaluated some factors, which drive dentists (DS), throughout the whole world, towards dental caries preventive measures. It was verified that professional's preventive awareness, acquired during graduation and post-graduation, namely the communication skills for practicing of health education, besides teamwork and the financial incentive to prioritize prevention were the most relevant factors[5]. Thus, there is a need of services' organization, prioritization of prevention and health promotion, given that professionals still work within the dominant biomedical model[6].

A greater understanding of the reasons that lead the DS to implement preventive measures could contribute to the implementation of dental caries prevention strategies, intending to reduce the prevalence of diseases and their sequelae. Research has shown that health education reflects positively on the oral health of individuals, being an effective preventive method[7-11]. Thus, the objective of this study was to identify the perceptions of DS about health education practices for the prevention of dental caries.

2 METHODS

This is a qualitative study, carried out with 18 DS's linked to a Primary Care of municipalities at a Regional Health Service of Paraná. In order to carry out the research as well its report, It was followed the guidelines of Consolidated Criteria for Qualitative Research Reports (COREQ)[12].

The sample group consisted of convenience (Snowball sampling) and were excluded those subjects who had worked less than one year at the service. Initially, a roadmap was elaborated, consisting of topics on the DS vision regarding health education practices, experiences during the undergraduate course, relationship with the health team, their perspectives on how collective actions would influence caries prevention and if there were financial resources, from the municipality, to acquire educational materials and physical structure improvements.

The initial contact with the professionals was carried out by telephone or e-mail. The subjects were interviewed after signing the Informed Consent Term. The interviews were conducted at DSs' workplace, by a single interviewer, male, graduated in Dentistry, who is taking his Master in Integrated Dentistry, and received previous training about this research subject and communication semiotics, for the proper conduct of this work. The interviews lasted from 20 to 40 minutes and were recorded, using portable equipment. New interviews were conducted until data's saturation point. Transcription was performed manually, by the interviewer, and later reviewed by a researcher with experience in qualitative research, with expertise in the transcription of interviews. The confidentiality of the data was protected and interviewees' anonymity was guaranteed, getting a code to identify their speech (E01 to E018).

Bardin's content coding and analysis[13] were performed by the following steps: pre-analysis, material exploration and treatment of results, using the software, The Qualitative

Data Analysis & Research Software 7.0 (Atlas.ti® Scientific Software Development, Berlin, Germany). It assists qualitative analysis of textual data, speech codifying, organization of codes and families, management facilitating of substantial amount of additional qualitative data. Four categories of analysis were predefined, based on the objectives of this study: information transmission, demonstration, motivation and communication (figure 1).

Data analysis process was done by reading the transcribed interviews, Paulo Freire's theoretical followed as reference. Key expressions and central ideas, designated as registration units, identified according to entered context, called context unit. The registration units were grouped into categories or families according to the same meaning, equivalent meaning or a complementary sense of categories (or codes).

The study was submitted to the Standing Committee on Ethics in Research Involving Human Beings (COPEP) of the State University of Maringá, following guidelines and norms of research involving human beings, resolution nº 466/2012 of the National Health Council and approved, obtaining the CAAE Nº. 0299.0 933-11-11.

Data Category	Reference	Constitutive Definition
Educational practices by transmitting information	(Silva et al., 2015)[21]	Teaching by the transmission of information.
Eucational practices by demonstration of brushing techniques	(Garcia et al., 2004)[9]	Teaching by demonstration of brushing techniques.
Educational process based on motivation and persistence	(Ferreira et al., 2004)[10]	Educate the individuals through motivation and persistence, understanding the process as slow and progressive.
Educational process based on effective communication with the individual and community	(Silva et al., 2015)[21]	To educate the individual, and the community, through horizontal interaction, qualified listening and intervention according to identified needs.

Figure 1: Organization and definition of data categories (codes).

3 RESULTS AND DISCUSSION

Among all of 18 DSs, there were 8 men and 10 women, average age of 39 years, were interviewed. Data related to the form of hiring, training (graduation), post-graduation (lato sensu) and professional performance are presented in table 1.

It was observed that most of the DSs reported carrying out educational practices by information

transmission and demonstration. The patient's monitoring and motivation were scored several times and pointed out as an important practice in prevention actions.

Table 1. Characteristics of the research subjects (n = 18).

Characteristics	Research Subjects (n)
Form of Hiring	
Dental surgeon (ESF - 40 hours)	7
Dental Surgeon not employed (Contracted - 20 hours)	6
Dental Surgeon (40 hours) and Oral Health Coordinator	4
Dental Surgeon (20 hours) and Oral Health Coordinator	1
Training (graduation)	
Public institution	12
Private Institution	6
Post-graduation (lato sensu)	
Public health	7
Clinical Areas	11
Professional performance	
Private clinic and SUS	12
Exclusive dedication to SUS	6

ESF: Family Health Strategy.

Information Transmission Educational Practices

The transmission of information as a routine practice to the education process in oral health was reported by professionals, the following statements can be observed:

> *"[...]In the screening all the patients go through a lecture with the DS or with the Oral Health Technician (OHT), and within this lecture there is a slide presentation with photos. In the preventive part we talked about the composition of caries, origin and prevention of the disease [...]" (E09).*

> *"[...] We give a lot of lectures with hypertensive and diabetic groups, lectures for pregnant women, directing how her oral hygiene procedure should be, the importance of oral health for both her and her baby, for his whole family [...]" (E011).*

For most of the interviewees, the strategy of information transmission has been the main education activity carried out. However, professionals who have limited the transmission of information as the sole, or main activity of education in their prevention practice, have demonstrated a restricted understanding of

educational process. Paulo Freire[14] states that teaching goes far beyond depositing, transferring or transmitting knowledge. In this type of education based on narrative, which only the educator is its protagonist - kind of banking education - the more one exercises the deposition of information, the less it develops critical awareness, the more its naivety is stimulated, which contributes to the formation of beings passively adapted to the world they live in. This lack of criticality impairs man's insertion as potential transformer, as subject. It is important to encourage professionals to broaden this vision, understanding the social, political and environmental context, because for education to be effective, it is necessary to go beyond superficial concepts and recommendations.

Milori et al.[7] evaluated the behavior of different preventative plaque control programs. The study emphasized that there is a need to combine strategies to achieve satisfactory results and denounced the ineffectiveness of such programs when practices are supported by transmission of information away from the problem of oral health. Queluz[15] also points to information transmission as a limited model for health education programs. Sinkoç[16] emphasizes the need for prudence in educational approaches, so that there is no disrespect to the values of each being, especially with regard concepts' imposition. The transmission of information according to Couto et al.[17] should be done through indirect guidelines, in a discreet manner, without discrimination so results are expressive.

Isolated, information transmission does not present good results, and may not generate changes in the population's behavior that are significant for the diseases' control. The use of this method as only education strategy in oral health may be related to deficient academic education, in relation to the disciplines that work in the social and preventive aspects. The curriculum still retains the influence of the Flexner Report, which values mechanicism, biologicism, individual care, highly technical treatments and a curative approach. On the other hand, more recently, the National Curricular Guidelines aimed at reformulating undergraduate health curricula intending a professional formation more suitable to Unified Health System demands, towards greater understanding of social, behavioral and cultural factors and economic[18].

Educational practices by demonstration of brushing techniques

In addition to the practice of transmitting information, DSs have been shown to attach importance to oral health education actions and preventive activities, such as supervised brushing, which can be observed in the following statements:

> *"[...] Even supervised brushing in a school is very different, if you tell the children to brush and drop them there, or when you tell them to do and watch who is doing it, who is doing it right, who is doing it wrong, who can not do it"(E08).*
>
> *"[...] I spend a lot of time there at the sink, orienting, explaining how is the best way to do or how they can do it better, explaining how circular movement is done, where it is smaller, like a smaller ball" (E015).*

Among the interviewees, the demonstration was attributed like an important educational strategy and resulted in the incorporation of healthy habits. It assists the gain of motor and cognitive skills from the exchange of experiences and information between the professional and the patient,

enriching the interaction moment. Supervised brushing is part of the practical activity of education process, which enables development of motor skills.

The biofilm control by the mechanical procedure is considered an important resource to combat an important etiological agent of caries and periodontal diseases. Several authors affirm that, in order to be effective, toothbrushing must be oriented and supervised by the professional, intending to motivate the patient[19-21].

Results found in the study by Garcia et al.[9] corroborate the findings, since when evaluating an education program about oral hygiene knowledge and behavior, they identified that patients who received hygiene instructions and supervised brushing obtained a positive behavioral change related to oral hygiene habits. There was also an increase in the number of patients who started brushing and flossing correctly and more frequently. Kunert et al.[22] described a program directed to the students of the Police Academy of the Military Brigade in Rio Grande do Sul, where evidence of bacterial plaque with dye proved to be of great value, improving oral hygiene without using techniques brushing. Brushing is easy to apply because it requires few resources, besides being easy to perform. Frazão[23] evaluated the performance of the supervised brushing and the result showed a great cost-benefit.

Educational process based on motivation and persistence

It was reported the importance of repetition in educational approaches, motivation and monitoring of the results obtained, seeking effectiveness in the construction of knowledge, which happens slowly, progressively and in the development of hygiene skills, as can be seen in the following excerpts:

> *"What does not work, for example, is to teach to how do just once, without repetition, because changing the habit is complicated, it is not one time or twice that it will change [...] Every time he (patient) comes back, it has to use plaque disclosing products to make the plaque evidence associated wiuth supervised brushing. So it is not effective to do it once and think that he has learned, he may even learn, but he will not be able to assimilate and will not be able to change his habit" (E08).*
>
> *"[...] For you to change your thinking is not two years, [...] you have to do a lot of work, with the whole population and for a long time" (E02).*
>
> *"[...] So what I realize is that it does not work only isolated jobs, as if you go to that school only once, if you do an activity on that day and never appear again, [...] which guarantees the control of the disease, what brings result in the activities of education and prevention, is the long-term treatment, with continuity [...]" (E010).*
>
> *"[...] Prevention is a seed you do not know when it will sprout [...]" (E15).*

By reporting that one-off activities do not deliver long-term results, they demonstrate to understand education as a slow process, both at the individual and collective levels. This awareness of the DS's role as responsible for planning, coordinating, implementing and encouraging health education activities aimed at preventing oral diseases was not found in most interviews.

Oral health education is an important action in the process of health promotion, requiring practice and knowledge[24]. It arises as a challenge to DSs, considering the need to

replace a curative care model, with high cost and low epidemiological impact, which is still valid in several Brazilian municipalities[25]. However, oral health education work needs to be expanded so that awareness reaches all social groups. According to Sheiham[26] such practice should be integrated with general health education, requiring that the DS recognize its role beyond its specificity.

Motivation is a necessary factor to stimulate the patient to modify his behavior, instituting long enough habits to control the biofilm[18]. Health professionals should be flexible in demonstrating educational practices. If the limits of perception and appropriation are exceeded, the population may react negatively[10]. For this, it is necessary to have methods and strategies of motivation, seeking to reinforce the information, which will be fixed and incorporated into the daily life through the continuity of actions[27].

Results of a study carried out by Garcia et al.[9] shows that after a certain period of time without monitoring, there is a tendency to less rigor about oral hygiene, arguing that education and motivation should be reinforced periodically. A similar result was found by Ferreira et al.[10] in an educational program developed in a Basic Health Unit, which, when discussing the topics related to oral health education for adults, concluded that continuous motivation is more effective than the imposition of standardized techniques.

In a qualitative study conducted with Oral Health Technicians, it was demonstrated that patient monitoring and evaluation are important strategies for analyzing learning and emphasize the need to reinforce previously established oral hygiene guidelines[28]. In this way, patient monitoring acts as a fundamental factor in the educational process, necessary for changing habits related to oral health, besides helping to evaluate their level of understanding of the basic oral hygiene issues.

Educational process based on effective communication with the individual and community

Finally, the last category analyzed concerns the need to open dialogue with the community, through educational practices based on interactive communication.

> *"[...] Groups usually congregate in churches, in places where is not possible to do brushing. They are Yarning circles and I think it is even more effective than a lecture, because they participate, they talk about their difficulties, so do not stay like that from the top down, it's a real conversation [...]"* (E08).

Only a report, by one professional, pointed to an open mind for experiences exchange and perceptions linked to the community of practice in health and education. This practice is important to understand life experiences of each individual, as well as each one's values and beliefs, enhancing individual and group growth. This strategy can be more effective than transmission of information during a speech when it does not promote an interaction with the public and is limited to one speaker's speech with a greater scientific knowledge.

Professionals' difficulty to try unusual strategies and to innovate in educational process represents challenges to be overcome in Dentistry. According to Cohen et al.[29], the profession presents limits to oral health problems, since the DS is over-trained for repairing treatments and little for prevention, control of disease progression and health maintenance, defending that these professionals should be rewarded for helping to maintain health and not for performing invasive procedures.

Among different work patterns in education, communication stands out as an interpersonal process, which involves verbal and non-verbal exchanges of information and ideas. Effective communication refers not only to content; it is not based solely on complaints and behaviors, but also on feelings and emotions that people can convey in an interpersonal relationship. It is considered one of the most important factors used to establish a trust-professional-patient relationship, which will have an impact on the quality of patient care[30-32].

In agreement with the results presented here, Moimaz et al.[33] carried out a study with DSs of the public and private network, demonstrating that most of the professionals have used satisfactory preventive measures, however, health education has not been performed in a systematic way. In addition, the time allocated to this activity is considered insufficient (20 to 25 minutes), making it impossible for effective communication to promote reflection and result in knowledge construction and change of habits.

According to Freire[14], the problematizing education breaks with vertical schemes, characteristic of banking education, being committed to freedom, with criticality, stimulates creativity and reflection and has, in dialogue, an indispensable relationship. In it, the capacity to learn outweighs authoritarianism and false world consciousness. Dialogic communication can be used as a therapeutic resource to deal with patients' insecurity and lack of knowledge through interaction and bonding with health professionals. Professionals develop listening, observing, asking, and responding skills[32]. According to Sousa et al.[34], health education seeks to improve care for health and well-being through a dialogical process. When done with collective groups, it facilitates a critical awareness of individuals in their exchanges of experiences, perceiving their limitations and possibilities, in the social context, favoring the organization and accomplishment to actions of change.

The interaction of these identified methods in the categories could provide results of greater relevance, as presented in the study by Tomita et al.[8], when an educational program was developed for adolescent students from different social background, performing a lecture, biofilm screening, brushing, dynamic educational activities with games in the form of gymkhana, competitions and a pedagogical workshop. The authors concluded that programs composed by different methods and participatory activities have fundamental importance in changing oral hygiene habits in adolescents, regardless of their social insertion.

For Pauleto et al.[35] there is a theoretical and practical lack of preparation of dental professionals related to oral health education measures, and it is important to highlight the need of professional training restructuring, better aligned with National Curricular Guidelines for Undergraduate Dentistry Course. Santos et al.[36] analyzed perceptions of undergraduate students of a course in Dentistry on the topic "Education in Oral Health", who considered that participation in health education activities in other work settings had a positive impact on their education and also on the personal life, but the students also presented a reductionist view of the concept of health education. In another study, conducted by Guterman[37], for most of researched, DS and undergraduate students in Dentistry, health education is understood as prevention. Both studies concern university education that needs investments to a broader understanding of health education.

If the understanding of the concept is limited, it is possible that the actions carried out by these professionals in relation to health education are inadequate. In addition to training

restructuring, it is important that active professionals can be already able to adopt the perspective of integrality of attention. There is a need of new strategies formulation for workers' training, articulated in the context of services, aiming at a humanized and qualified management[38].

Regarding this theme, the Ministry of Health, through the Department of Health Education Management, instituted the National Policy on Health Education, as an ethical-political-pedagogical proposal that intends to transform and qualify health care, formative processes, health education practices and encouraging organization of actions and services as an intersectoral perspective[39]. However, studies such as those by Silva et al.[40] and L'abbate[41] point to an inadequacy of methodologies used in training, needing an urgent review on policies that attenuate those moments, before, during and after the courses, aiming at the qualification and workers' understanding about the complexity of caring, with competence and citizenship towards the integrality and humanization in services.

The Oral Health Guide, developed by the Health Department of the State of Paraná, aims at changing the behavior of the subject by transforming it into an active actor in the health-disease process, through encouragement and strengthening of individuals' autonomy, instrumentalising them to change their habits, as well the control and maintenance of their health. The guide mentions self-care supported, which goes beyond saying what each individual should or should not do but to be recognized by these people their centrality in their health care and develop a sense of self-responsibility. Self-care supported does not begin and end in a classroom, but it is continuous, focusing on cooperation between health professionals and users, so that, together, they can define problems, find solutions, set goals and elaborate plans of care and monitoring of results.

All perceptions and experienced shared by the research subjects show that health education practices for caries prevention still fall short of assumptions of Expanded Clinic (EC). The proposal of this work model aims to transpose the traditional clinic, focusing on the disease, to performance beyond the diagnosis and treatment of clinical manifestations in the oral cavity. For EC to make it works is necessary to strengthen the bond with the user to understand how he and his family live, understanding the context of their community. Thus, the development of competence in communication is necessary to establish a healthy and enriching exchange process for both. The objective is to value self-care with the body and with life, helping them to make viable changes in healthier habits incorporation such as a diet rich in natural products, regular physical activities, social, spiritual and intellectual activities[42-44]. It is important that the professionals, who make up the health teams, work based on interprofessional approach, based on an expanded vision of health community, families and individuals who become ill, contributing to the improvement of people's quality of life, not only interfering on discomfort and in sequelae that the diseases present.

Thus, it is verified that in Brazil DSs have great challenges to face and consequently great responsibility for this reality transformation, considering the high epidemiological indices of oral diseases. The creation of strategies to prioritize the control of dental caries in order to reduce early dental losses is an example that can have a very positive impact on children's lives, as well young people and adults. New work processes, new user flowcharts, new intersectoral and interprofessional partnerships are necessary so that the clinic can expand and

the learning becomes collective and continuous for all involved.

Although DSs often find difficult to find their role in addressing social determinants of health, which are the "conditions in which people were born, grow, live, work and grow old"[45] researchers, educators, professionals and academics improve their look and their performance beyond the biological involved process, integrating them to social space where they live[46].

4 CONCLUSION

The DSs demonstrated oral health education practices aimed at dental caries prevention through several strategies, they also demonstrated an understanding of the importance of motivation and persistence for an effective outcome and used interactive methods to improve communication with the community. However, it is possible to perceive the need to overcome the hegemonic model limited to information transmission, suggesting a better development of communication skills at undergraduate and postgraduate levels, as well training of professionals in health services.

RESUMO

Práticas de educação em saúde para a prevenção da cárie dentária: um estudo qualitativo com cirurgiões-dentistas

O objetivo do trabalho foi identificar a percepção de cirurgiões-dentistas de serviços públicos da Atenção Básica de uma regional de saúde do Paraná, quanto às práticas de educação em saúde para a prevenção da cárie dentária, por meio de uma pesquisa qualitativa. Foram realizadas entrevistas, baseadas em um roteiro semiestruturado. A transcrição das gravações foi realizada de forma manual e o conteúdo categorizado segundo o método da análise de conteúdo proposta por Bardin. Os resultados apontaram que, nesse contexto, os cirurgiões-dentistas realizam práticas de educação em saúde por meio de ações de transmissão de informação, demonstração, motivação, monitoramento e comunicação. Conclui-se que os profissionais pesquisados demonstraram entendimento da importância da motivação e da persistência para um resultado eficaz do processo educativo, porém foi possível perceber diferentes graus de entendimento do processo educativo.

Descritores: Educação em Saúde. Odontólogos. Pesquisa Qualitativa.

REFERENCES

1. Brasil. SB Brasil 2010- Pesquisa Nacional de Saúde Bucal. Resultados Principais. Brasília: Departamento de Atenção Básica, Secretaria de Atenção Básica, Ministério da Saúde; 2011.
2. World Health Organization. Oral Health Fact Sheet. n. 318, April 2012. [Acesso em 01 fev. 2016].
3. Patel RR, Tootla R, Inglehart MR. Does oral health affect self perceptions, parental ratings and video-based assessments of children's smiles? Community Dent Oral Epidemiol. 2007; 35(1):44-52.
4. Petersen PE. The World Oral Health Report 2003: continuous improvement of oral health in the 21st century – the approach of the WHO Global Oral Health Programme. Community Dent Oral Epidemiol. 2003; 31(1):3-24.
5. Suga USG, Terada RSS, Ubaldini ALM, Fujimaki M, Pascotto RC, et al. Factors that drive dentists towards or away from dental caries preventive measures: Systematic Review and Metasummary. PLoS ONE. 2014; 9(10). DOI: 10.1371/journal.pone.0107831.
6. Lima JPG, Uchida TH, Pavanello RM, Terada RSS, Pascotto RC, Pietrobon R, Fujimaki M. Exploring factors influencing dental caries preventive measures by general dental practitioners in the public oral health care service in Paraná State. Rev ABENO. 2018;

18(2):72-84.
7. Milori AS, Nordi PP, Vertuan V, Carvalho J. Answers a preventive program dental plaque. Rev Odontol UNESP. 1994; 23(2):325-31.
8. Tomita NE, Pernambuco RA, Lauris JRP, Lopes ES. Educação em saúde bucal para adolescentes: uso de métodos participativos. Rev Fac Odontol Bauru. 2001; 9 (1/2):63-9.
9. Garcia PPNS, Campos FP, Rodrigues JA, Santos PA, Dovigo. Avaliação dos efeitos da educação e motivação sobre o conhecimento e comportamento de higiene bucal em adultos. Ciênc. Odontol Bras. 2004; 7(3):30-9.
10. Ferreira RI, Morano Jr. M, Meneghim MC, Pereira AC. Dental health education for adult patients: report of an experience. Rev Odontol UNESP. 2004; 33(3):149-56.
11. Silva JRA, Lemos EC, Hardman CM, Santos SJ, Antunes, MBC. Educação em saúde na Estratégia de Saúde da Família: Percepção dos profissionais. Rev Bras Prom Saúde. 2015; 28(1):75-81.
12. Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus group. Int J Qual Health Care. 2007; 19(6):349-357.
13. Bardin L. Análise de Conteúdo. São Paulo: Edições 70, 2011.
14. Freire P. Pedagogia do oprimido. 43ª ed. São Paulo: Paz e Terra; 1999.
15. Queluz DP. Cárie e conhecimento do flúor "na prevenção de escolares". Rev Gaúcha Odontol. 1995; 43(3):167-70.
16. Sinkoç C. Educação em Saúde Bucal e a motivação do paciente. Rev Odontol Universid Santo Amaro. 2001; 6(1/2):40-3.
17. Couto JL, Couto RS, Duarte CA. Motivação do paciente. Rev Gaúcha Odontol. 1992; 40:143-50.
18. Fonseca, EP. As Diretrizes Curriculares Nacionais e a formação do cirurgião-dentista brasileiro. J Manag Prim Health Care. 2012; 3(2):158-78.
19. Saliba, CA, Saliba NA, Almeida AL, Freire M, Moimaz SAL. Estudo comparativo entre a eficácia da escovação orientada e supervisionada e a profilaxia profissional no controle da placa bacteriana dentária. Rev Odontol UNESP. 1998; 27(1): 185-92.
20. Moreira SG, Hahn MA. A importância dos hábitos de higiene bucal em programas que visam a promoção de saúde. Rev Gaúcha Odontol. 1994; 42:161-3.
21. Silva CMC, Meneghim MC, Pereira AC, Mialhe FL. Educação em saúde: uma reflexão histórica de suas práticas. Ciênc Saúde Colet. 2010; 15(5) 2539-50.
22. Kunert IR, Alves OP, Muller JO, Ott HA. Motivação em saúde bucal: programa "Saúde pela Boca". Rev Gaúcha Odontol. 1990; 38: 450-6.
23. Frazão, P. Custo-efetividade da escovação dental supervisionada convencional e modificada na prevenção da cárie em molares permanentes de crianças de 5 anos de idade. Cad Saúde Pública. 2012 28(2):281-90.
24. Pinto VG. Saúde bucal coletiva. 4ª ed. Santos, São Paulo; 2000.
25. Cangussu MCT, Magnavita R, Rocha MCBS. Educação e construção da cidadania em um programa de saúde bucal em Salvador – Ba. Rev ABOPREV. 2001; 4(1):15-20.
26. Sheiham A. Public health approaches to promoting periodontal health. Rev Bras Odontol Saúde Coletiva. 2001; 2(2):61-82.
27. Santos PA, Rodrigues JÁ, Garcia PPNS. Conhecimento sobre prevenção de cárie e doença periodontal e comportamento de higiene bucal de professores de ensino fundamental. Ciênc Odontol Brasil. 2003; 6(1):67-74.
28. Martins BP, Uchida TH, Terada RSS, Pascotto RC, Fujimaki M. Análise Qualitativa

da percepção dos técnicos em saúde bucal sobre o desenvolvimento do papel do educador. Arch Health Invest. 2015; 4(5):28-35.
29. Cohen L, Dahlen G, Escobar A, Fejerskov O, Johnson NW, Manji F. La Cascada Declaration. DOI: 10.1111/adj.12546
30. Potter PA, Perry AG. Fundamentos de enfermagem. 5ª ed. Rio de Janeiro: Guanabara Koogan; 2004.
31. Linard AG, Rodrigues MSP, Fernandes AFC. Comunicação na consulta ginecológica de enfermagem. Rev Tend Enferm Prof. 2009; 1(2):89-92.
32. Chiesa AM, Veríssimo MDLR. A educação em saúde na prática do PSF. Manual de enfermagem, 2001.
33. Moimaz SAS, Saliba NA, Saliba O, Almeida JCF. Educação para saúde bucal e prevenção. Avaliação entre cirurgiões-dentistas de serviço público e particular. Rev Gaúcha Odontol. 1994; 42(2):71-4.
34. Sousa LB, Aquino PS, Fernandes JFP, Vieira NFC, Barroso MGT. Educação, cultura e participação popular: abordagem no contexto da educação em saúde. Rev Enferm UERJ. 2008; 16(1):107-12.
35. Pauleto ARC et al. Saúde bucal: uma revisão crítica sobre programações educativas para escolares. Ciênc Saúde Colet. 2004; 9(1):121-30.
36. Santos KT, Pacheco F, Antonio C, Garbin CAS. Educação em saúde bucal na visão de acadêmicos de Odontologia. Arq Odontol. 2012; 48(2):96-101.
37. Guterman N. O cirurgião-dentista como educador em saúde bucal: explorações em torno de uma prática. Rev ABENO. 2005; 5(2):115-24.
38. Nunes TCM, Martins MICM, Sório RER. Proposições e estratégias de transformação dos recursos humanos em profissionais de saúde comprometidos com um sistema de saúde acessível, qualificado, sensível e humanizado. Cadernos da 11ª Conferência Nacional de Saúde, Brasília: Ministério da Saúde 2000; 313-31.
39. Brasil. Ato Portaria n.198/GM, de 13 de fevereiro de 2004. Institui a Política Nacional de Educação Permanente em Saúde como estratégia do Sistema Único de Saúde para a formação e o desenvolvimento de trabalhadores para o setor e dá outras providências. Brasília: Ministério da Saúde; 2004. p. 49.
40. Silva JAM, Ogata MN, Machado MLT. Capacitação dos trabalhadores de saúde na atenção básica: impactos e perspectivas. Rev Eletr Enferm 2007; 9(2):389-401.
41. L'Abbate S. Educação e serviços de saúde: avaliando a capacitação dos profissionais. Cad Saúde Pública. 1999; 15(2):15-27.
42. Pucci GCMF, Rech CR, Fermino RC, Reis RS. Associação entre atividade física e qualidade de vida em adultos. Rev Saúde Pública. 2012; 46(1):166-79
43. Stringheta PC, Oliveira TT, Gomes RC, Amaral MPH, Carvalho AF, Vilela MAP. Políticas de saúde e alegações de propriedade funcionais e de saúde para alimentos no Brasil. Rev Bras Ciênc Farm. 2007; 43(2):181-194.
44. Panzini RG, Rocha NS, Bandeira DR, Fleck MPA. Qualidade de vida e espiritualidade. Rev Psiq Clín. 2007; 34(supl1):105-115.
45. World Health Organization (WHO). A conceptual framework for action on the social determinants of Health. 2007. [Cited Oct. 19, 2017]. Available at: http://www.who.int/social_determinants/resources/csdh_framework_action_05_07.pdf.
46. Hayacibara MF, Lolli LF, Terada RSS, Hidalgo MM, Bispo CGC, Terada HH, Padilha LS, Rodrigues JK, Vicente AJ,

Medeiros ACR, Calazans CM. Experiência de Clínica Ampliada em Odontologia na Universidade Estadual de Maringá. Rev Bras Educ Méd. 2012; 36 (1, Supl. 2):178-183.

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