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Analysis of FHS community health agents knowledge about oral health

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ABSTRACT. The community health agents (CHA) are considered health promoters in Brazilian communities teaching them about health promotion and disease prevention, including oral health. According to the Ministry of Health, CHAs must know about seven major oral health issues in Brazil. Thus, the objective of this study was to evaluate the oral health knowledge level of CHAs in the city of Belem, Pará State, Brazil. The study was based on a self-guided script, through a pre-prepared questionnaire containing 16 multiple-choice questions related to oral health knowledge. The survey was conducted with 94 agents from seven Family Health stations featuring oral health teams in Belem. It was concluded that community agents should be better prepared about oral care, as not all oral health issues were known by the CHAs oral health teams in Belem.

Keywords: oral health, health services, family health, qualitative research.

Análise do conhecimento sobre saúde bucal de agentes comunitários de saúde da ESF

RESUMO. Os agentes comunitários de saúde (ACS) são considerados promotores de saúde nas comunidades brasileiras instruindo-as sobre promoção de saúde e prevenção de doenças, inclusive em saúde bucal. De acordo com o Ministério da Saúde, os ACS's devem conhecer sete principais agravos bucais no Brasil. Dessa forma, o objetivo deste trabalho foi avaliar o nível de conhecimento dos ACS's em Belém, Estado do Pará, Brasil sobre saúde oral. O estudo foi baseado em um roteiro auto gerenciado, por meio de um questionário pré-elaborado, contendo 16 questões objetivas referentes ao conhecimento sobre saúde bucal. A pesquisa foi realizada com 94 agentes em sete Unidades de Saúde da Família com equipes de saúde bucal do município de Belém. E concluiu-se, portanto, que os agentes comunitários devem ser melhor preparados acerca dos cuidados bucais, pois não são todos os agravos em saúde bucal que são conhecidos pelos ACS's das equipes de saúde bucal em Belém.

Palavras-chave: saúde bucal, serviços de saúde, saúde da família, pesquisa qualitativa.

Introduction

The Family Health Program (FHP), according to Bombarda-Nunes et al. (2008), was created by Brazil's Ministry of Health in 1994, as a model offering integral health services to the population, replacing the traditional assistance model given at the existing basic health units. The mission of the program is to provide health actions in a practical and ongoing manner, bringing them closer to families and improving the quality of life of the population.

In that context, Koyashiki et al. (2008) affirm that Community Health Agents (CHAs) play an important role in the implementation and operation of the program, serving as the links between health services and the community, bringing comfort and assurance to users seeking their due aid at health units.

According to Santos et al. (2011), community health agents have proven to be the most intriguing characters with the team, often regarded as protagonists in the exchange of experiences, such as between popular wisdom and medical/scientific knowledge. CHAs promote a strengthening of the bond with families, bringing health actions closer to the domestic context.

Thus, community health agents are responsible for uniting two distinct universes – scientific and popular – by being in permanent contact with the community and thereby contributing with surveillance and health promotion actions (OLIVEIRA et al., 2003).

According to the Ministry of Health (BRASIL, 2004), with regard to oral health actions, the following activities are duties of CHAs: develop actions on oral health and prevention of the most relevant diseases, through domestic or community actions, individual or collective, developed according to the rules of Brazil's universal healthcare system and under the supervision of local management. This profession was legally created through law no. 10507, on July 10, 2002. To Pires et al. (2007), the

work of CHAs must be integrated with other team members, from the identification of individuals/families/areas exposed to risk situations and guidance for use of health services to referral and scheduling of appointments/exams.

In order to exercise the CHA profession, certain requisites must be met, such as: residing in the community, having completed the basic qualification course, and having a primary education degree. It is up to the Ministry of Health to establish the curriculum of the basic qualification course for CHAs, as well as the necessary units required to properly adapt educational backgrounds (BOMBARDA-NUNES et al., 2008).

According to Rodrigues (2010), the ease in approaching oral health issues is due to a process of continuing education through activities conducted by local oral health coordinators and dentists at Family Health Units who, while working in the health units, guide the agents and other members of the Family Health Team (FHT) on different topics related to oral health care and attention. This permanent health education process allows a combination of learning, critical reflection on the work process, clinical thoroughness and promotion of collective health.

Moura et al. (2010) demonstrated through a study in small towns in Piauí state that most health agents working in oral health in that region (79.8%) were not trained and did not attend educational lectures on the subject (59.6%). Training (20 hours) took place in only two of the surveyed municipalities, but the agents did not feel prepared to inform the population on oral health.

According to Andrade and Ferreira (2006), despite extensive literature on the role of CHA in broader terms of the strategy, few works deal with the issue of oral health. This lack of literature may result from specific problems in the dental field with regard to the Family Health Strategy, as some authors affirm that the inclusion of dentistry may have occurred on paper, but not in practice.

The objective of the present work was to analyze the knowledge on oral health of the community health agents in Family Health Units that have oral health teams, while also analyzing team integration by the exchange of knowledge between FHP dentists and CHAs.

Material and methods

The survey involved 94 participants, who were studied according to the precepts of the Helsinki Declaration and Nuremberg Code, abiding by the Norms for Research Involving Human Beings of Brazil's National Council of Health (CNS 196/96) following approval of the project proposal by the Ethics Committee for Research in Human Beings of the Health Sciences Institute at the Federal University of Pará, Brazil, under document no. 158/08.

The survey was based on the use of a descriptive method culminating in a census within a universe of 94 community health agents belonging to seven oral health teams within the Family Health Strategy in the city of Belém, Pará State, Brazil.

The study was carried out using a self-guided script through a pre-prepared questionnaire containing 16 multiple-choice questions regarding knowledge of aspects related to oral health.

According to the classification of Trad et al. (2002), the following dimensions were considered in the analysis: cognitive, interpersonal, organizational and professional. To analyze variation factors, three approaches were identified: structure, process and results.

The data were initially applied in a sample of 10 community health agents (pilot study) to adjust the collection instrument, observing for any difficulties in applying the questionnaire and regarding the previously devised questions. This made it possible to alter the vocabulary when necessary; according to Leão and Dias (2001), in certain cases this works to facilitate comprehension by respondents and increases the reliability of the collection instrument.

With no other challenges in obtaining responses in the pilot study, the final questionnaire was applied by researchers previously calibrated by the advisor, at the Family Health Units where the professionals worked, taking care not to unsettle the respondents or interfere in the results.

An informed consent form was given to survey subjects to authorize the release of the obtained data, with two copies – one for the researcher, and the other for the respondent.

After the data were obtained, they were tabulated and stored in a pre-set form for later analysis. Data were tabulated and analyzed using an Excel 2007 electronic spreadsheet (Microsoft Office 2007, São Paulo, São Paulo State, Brazil), in which they were subjected to statistical treatment by descriptive and percentage quantitative analysis, and the results were represented as figures and tables.

Results and discussion

The final survey sample consisted of 94 community health agents from oral health teams in the municipality of Belém, Pará State, Brazil. It was observed that those professionals are informed on certain aspects of oral health out of the seven oral issues analyzed – which the community agents should know, as they are established by the Ministry of Health

(BRASIL, 2004). The best known topics were: tooth decay, gum disease, infant oral health and mouth cancer. Most do not know about dental trauma, or the knowledge they have on what to do when it occurs is not correct. With regard to tooth loss, most respondents considered it normal.

Table 1 shows how CHAs obtained information on oral health, showing that oral health teams fulfill their role of qualifying professionals to exercise their activity in most answers. In second place is the media, which also favors the dissemination of information on oral care.

Table 1. Sources of information on oral health and attendance of CHAs from oral health teams in the municipality of Belém, Pará State, Brazil, in qualification courses – 2008.

Source of information on oral health	n	%
School	5	3.7
Family	10	7.4
Health teams	83	61.5
Media	31	23
Others	6	4.4
Attended introductory course?		
No	50	53.2
Yes	44	46.8

Analyzing Table 1, it can be seen that more than half of the sample did not attend the mandatory introductory course, which qualifies agents to interact with the community in order to promote health and prevent issues in overall and oral health. The data are in agreement with the assessment by Barcellos et al. (2006) in Vitória, Espírito Santo State, Brazil, which showed that most professionals do not receive any type of qualification (introductory course) when they begin work in oral health promotion.

With regard to lectures given by the health teams, the data presented in the abovementioned study do not agree with the present work, which observed that 69.1% of agents were qualified by the oral health teams.

Thus, it is important to observe that there is knowledge on oral health by part of the community health agents in Belém, Pará State, Brazil, as they are trained to achieve accurate performance of their oral health duties. That is in agreement with a study performed by Oliveira and Saliba (2005), in which 86.7% of agents who were part of oral health teams in Campos dos Goytacazes, Rio de Janeiro State, Brazil, demonstrated knowledge on the subject.

Tooth decay is the most prevalent oral disease in Brazil, according to data from the SB Brasil 2003 assessment (BRASIL, 2004). According to the abovementioned data and other related works, it is the most widely known condition by CHAs. The development of tooth decay and the use of dental floss are factors known on a satisfactory level by community health agents – according to the data analyzed in Table 2, 76.6% of community health agents correctly related poor oral hygiene and diet with the onset of tooth decay, and 46.8% attributed the correct use of dental floss to daily removal of plaque and food particles. That is in agreement with the study by Oliveira and Saliba (2005), who reported that 96.7% of CHAs knew how to use and indicate the use of dental floss. Nevertheless, the present survey showed a small margin of difference with regard to the knowledge of professionals on dental floss use, contrasting the 46.8% who know the real notion and need for dental floss use to 34% of agents who believe that it is used only to remove food particles between teeth daily.

Table 2 corroborates the study by Frazão and Marques (2006), in which they observed that 40.6% of agents knew that tooth decay is caused by poor hygiene and increased eating frequency. After being trained, that rate rose to 90.6%. Thus, it is possible to consider that the agents meet the requirements of the Basic Care Manual of the Ministry of Health, which mandates that CHAs must know about oral health (BRASIL, 2006).

Table 2. Factors related to the onset of tooth decay and the use of dental floss, according to CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

Factors that lead to the onset of tooth decay	n	%
Tooth malformation	3	3.2
Constant antibiotic use	18	19.1
Poor hygiene and diet	72	76.6
Low saliva in the mouth	1	1.1
Does not know	0	-
The use of dental floss promotes:		
Only daily removal of food particles between teeth	32	34
Removal of food particles between teeth, when any	7	7.5
Daily removal of plaque between teeth	9	9.6
Weekly removal of plaque between teeth	2	2.1
Daily removal of plaque and food particles	44	46.8
Does not know	1	1.1

The data shown in Figure1 reveal the knowledge of community health agents regarding dentition changes. For 61.7% of respondents, it happens only once, which indicates knowledge on dentition change by CHAs; that is, those professionals have some knowledge on oral health. This is in agreement with the work by Oliveira and Saliba (2005), in which 86.7% of community agents confirmed having knowledge on oral health.

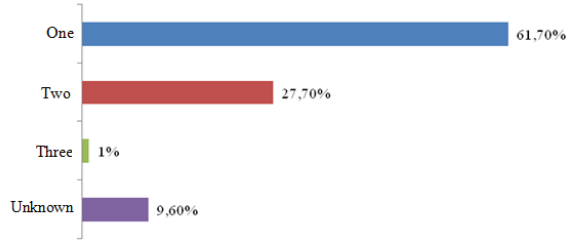

Figure 1. Number of lifetime dentition changes, according to CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

The results corroborate the work by Frazão and Marques (2006), who also analyzed perceptions by agents on lifetime dentition changes, achieving a 90.6% rate of CHAs who knew of the single lifetime change in dentition, after being trained and qualified; previously, that percentage was 43.8%.

The knowledge of community health agents regarding the development of tooth decay during pregnancy can be also regarded as satisfactory (Table 3) as most agents (66.2%) agree that the onset of tooth decay in pregnant women occurs due to more frequent eating without the corresponding frequency in oral hygiene. Also positive is the fact that 82% of CHAs recommended moist gauze or diaper for infant oral hygiene.

Table 3. Factors that influence the onset of tooth decay during pregnancy and infant oral health, expressed as percentages, according to CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

The onset of tooth decay during pregnancy is due to:	n	%
Weaker teeth due to calcium loss	3	3.75
Medication use	5	6.25
More frequent eating without more frequent adequate oral hygiene	53	66.2
Does not know	19	23.8
Infant oral hygiene should be:		
Toothbrush only	4	4.2
Toothbrush and fluoride toothpaste	7	7.5
Moist gauze or diaper	77	82
No cleaning necessary	1	1
Does not know	5	5.3

The results corroborated the data obtained by Frazão and Marques (2006), in which most agents in Rio Grande da Serra, São Paulo State, Brazil, recommend the use of moist gauze or diaper for infant oral hygiene. It also confirms the proposal by the Ministry of Health within the context of knowledge on oral health by community health agents in oral health teams (BRASIL, 2004; BRASIL, 2006).

One of the main oral health issues in Brazil is gum disease – second nationwide – and its concept must be understood and communicated by community health agents (BRASIL, 2004; BRASIL, 2006). The survey showed in Figure 2 that most professionals correctly state that gum bleeding is indeed a gum-related disease. It corroborates another study performed by Frazão and Marques (2006), in which 71.9% of agents in Rio Grande da Serra, São Paulo State, Brazil, are in agreement with those in Belém, PA, Brazil. This proves that the proposal offered by Brazil's universal healthcare system is being fulfilled uniformly by community health agents (BRASIL, 2006).

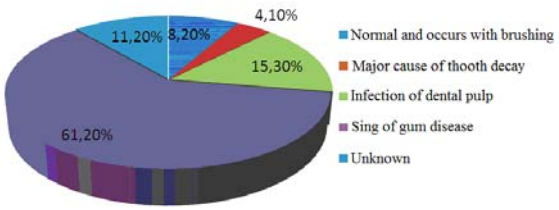

Figure 2. Occurrence of gingival bleeding, expressed as percentages, by CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

Tooth loss as people age still seems normal for a large part of the population, including CHAs from oral health teams. Figure 3 shows two opinions with practically similar percentages regarding tooth loss. It is also observed that only 1% above half of surveyed agents do not regard tooth loss as normal with age. That is an alarming and worrying statistic; if health promotion agents in direct contact with the population find this normal, people who suffer from tooth loss with age will not be informed that they need help.

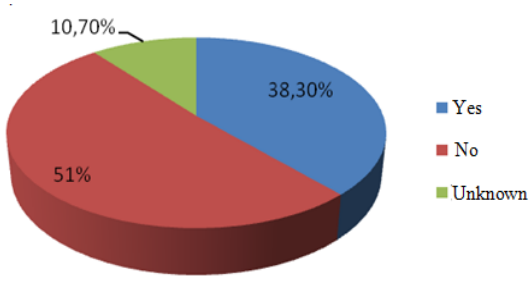

Figure 3. Acceptance of tooth loss at old age, expressed as percentages, by CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

Therefore, it can be noted that agents are not properly trained by oral health teams to that understand edentulism during old age is a pathological process; in other words, the requirements of the Basic Care Manual of the Ministry of Health, which shows that CHAs should understand oral, are not being properly met (BRASIL, 2006).

Another oral issue considered by the Ministry of Health is dental trauma. In the present work, dental avulsion was regarded as trauma, and it can be noted that according to Table 4, less than half of interviewed agents (48.9%) give correct information to the public in the case of that event, compared to 51.1% who do not guide the population towards appropriate action or do not know what to do in case of dental avulsion. This denotes a lack of information with regard to this disorder in the qualification of health agents.

Table 4. Guidance given by CHAs from oral health teams in Belém, Pará State, Brazil, expressed as percentages, to the community regarding trauma with dental avulsion – 2008.

In case of trauma resulting in dental avulsion, one should:	n	%
Rinse the fallen tooth with water and soap	11	11.7
Keep the tooth in liquid and seek a dentist	46	48.9
Discard the fallen tooth	15	16
Does not know	22	23.4

Mouth cancer is becoming a more frequent pathology among Brazil's population according to data from the Ministry of Health (BRASIL, 2006). The knowledge condition on the subject by agents is satisfactory in Belém, Pará State, Brazil, expressed in Table 5: 67% of surveyed CHAs report alcohol and tobacco abuse as risk factors for mouth cancer. These numbers are in agreement with the results found by Frazão and Marques (2006), who reported that 65.6% of respondents from a municipality in São Paulo state, Brazil, cited the same risk factors for the onset of mouth cancer prior to receiving training. After being trained, those rates increased by 31% and surpassed the numbers from Belém agents. Thus, the knowledge of CHAs within oral health teams in the state of Pará can be deemed satisfactory, but requires further education.

Table 5. Risk factors related to mouth cancer, according to CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

Risk factors related to the development of mouth cancer	n	%
Medication intake	7	7.45
Alcohol and tobacco abuse	63	67
Salt- and sugar-rich diet	6	6.4
Loss of permanent teeth	7	7.45
Does not know	11	11.7

Community health agents develop actions of oral health promotion and prevention of the most prevalent diseases within their area of service, and are responsible for the link between health units and the community (SANTOS et al., 2007). Prevention is valued as the proposal with regard to oral health as well. According to Table 6, it can be observed that CHAs from oral health teams in Belém, Pará State, Brazil, are committed to this proposal, as 92.5% have very good knowledge regarding the use of fluoride and its correct prescription (83%), agreeing with 96.9% of surveyed agents in the work by Frazão and Marques (2006) who acknowledged the importance of fluoride in oral health.

This work assessed the knowledge level of community health agents assigned to oral health teams regarding oral health, and it can be seen that information is passed on to agents by dentists, but should be done more extensively, as it became evident that the most comprehensive knowledge by community health agents is on tooth decay, gum disease, cancer and infant oral health. There are three other conditions (dental trauma, edentulism and malocclusion) on which CHAs must receive training to alert the public to the fact that their occurrence is not normal (BRASIL, 2006; KOYASHIKI et al., 2008).

Table 6. Knowledge on the importance of fluoride against tooth decay, according to CHAs from oral health teams in the municipality of Belém, Pará State, Brazil – 2008.

Do you know the importance of fluoride?	n	%
Yes	87	92.5
No	7	7.5
Do you know the purpose of fluoride?		
Avoid mouth lesions	7	7
Improve breath	8	8
Prevent tooth decay	84	83
It has no importance	0	-
Cannot say	2	2

Thus, the knowledge level of the agents interviewed in this survey proved acceptable, despite the fact that the information provided to them did not encompass all issues that must be known. That is in agreement with the study by Bombarda-Nunes et al. (2008), who believe that the information needed to qualify health agents must be passed on more effectively, and that this either does not occur or must be done differently by the dentists within oral health teams.

It should be emphasized that CHAs who do not have knowledge regarding a given health issue or have erroneous knowledge will either not provide that information to the public or will do so incorrectly. Given that each CHA visits an average of eight families per day, a total of 40 families a week will miss information or receive inaccurate knowledge. Therefore, it is essential that community health agents are properly trained in order to minimize that effect as much as possible, and that they can properly perform the duties attributed to them.

Conclusion

CHAs are informed regarding knowledge on oral health. Even if that knowledge is considered satisfactory, these agents need better training to fully learn about oral issues in order to then satisfactory serve the community in the municipality of Belém, Pará State, Brazil.

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