



Impact of The Nurses on Maintaining Oral Health in Institutionalized Elderly

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Abstract

Dental and oral care are important for institutionalized elderly because oral diseases can have a negative impact not only on quality of life but also on general health. Maintaining adequate oral hygiene among the institutionalized elderly is most important, especially on patients that need help for basic or additional oral and dental care. Most often responsible for maintaining oral hygiene are the persons responsible for long-term care of the institutionalized elderly - nurses and paramedics. The education of staff responsible for institutionalized elderly includes the usage of appropriate lectures with adequate audiovisual effects, appropriate presentations and exercises and discussions among the participants. For adequate dental care of the institutionalized elderly, it is necessary for the elderly, as well as the staff responsible for their care, to be highly aware and motivated to pay enough attention to oral health and hygiene, as well as wearing dentures. Oral health programs and protocols can also be used to educate institutionalized elderly, as well as non-dental staff caring for the institutionalized elderly such as GPs, nurses, nutritionists, and social workers, to change the approach to oral health and its promotion. When the patient is unable to maintain oral hygiene on his / her own, it is necessary to educate the family members and the staff responsible for them regarding their knowledge and training in maintaining oral hygiene.

Keywords: Institutionalized Elderly; Long Term Care Institution; Oral Health; Oral Hygiene

Introduction

The establishment of a protocol for the promotion of oral health and hygiene among institutionalized elderly should be of specific interest not only to dentists, but also to all professionals involved in the care of these people. Institutionalized people have a strong need for oral care and treatment, although they are extremely rarely aware about it and very rarely aware for the need. The institutions for long-term care of the elderly meet most of the medical, social and personal needs of those elderly who cannot take care of themselves [1]. Dental and oral care is important for institutionalized older people because oral diseases can have a negative impact not only on quality of life but also on general health. Also some diseases can influence on the oral health. Characteristics of the oral health among institutionalized elderly are presence of a small number of remaining teeth, problems with teeth and periodontal tissues and xerostomia. These conditions can greatly affect the feeding process, the diet and food selection, the elderly do not take essential nutrients and are prone to malnutrition and hypovitaminosis, psychological state and interpersonal communication [2]. Maintaining adequate oral hygiene among the institutionalized elderly is most important,

especially on patients that need help for basic or additional oral care. Staff primarily responsible for caring for institutionalized seniors need to be aware about the fact that oral diseases are more complex over time [3]. Main goals for adequate maintaining of oral hygiene among institutionalized elderly people are in context of:

- a) Regular removal of dental from teeth and prosthetic devices
- b) Cleansing of the oral mucosa from debris
- c) Regular dental check-ups
- d) Constant oral hydration due to the high prevalence of xerostomia

According to this, there is necessary for development of the high-quality prevention program.

Influence of nurses in maintaining oral health in institutionalized elderly

Due to the fact that there are not always opportunities for obtaining adequate dental care in the institutions by a dentist,

the people responsible for their care are ideal candidates for implementation of these activities. The staff responsible for institutionalized elderly plays a huge role in the dental care of the institutionalized elderly within the institution. This is due to the fact that they come into direct contact with the elderly and know their needs and opportunities for performing daily oral hygiene [4]. Elderly population institutionalized in long-term care institutions mainly has inadequate or insufficient oral health and hygiene. This condition is especially characteristic of people who need help to maintain adequate oral hygiene. Activities for regular maintenance of oral hygiene should be related to the use of appropriate toothbrushes, manual or electric, using additional techniques for maintaining oral hygiene, toothpaste, which should be fluoridated as with chlorhexidine-containing agents. For proper oral hydration it is necessary to use mouthwashes or gels [5]. The activities for adequate oral hygiene can be undertaken by the staff responsible for the care of the elderly, by the elderly themselves or by both groups. Maintaining adequate oral hygiene among institutionalized elderly is main responsibility of the staff for long-term care of the institutionalized elderly - nurses and paramedics. The need for training related for adequate oral hygiene activities for institutionalized elderly of this stuff is necessary. One of the reasons why nurses are avoiding activities related to oral care for the elderly is associated with insufficient recognition of oral hygiene proprieties among institutionalized elderly. Nurses have deficient knowledge about oral hygiene and oral diseases. Problems related to maintaining oral hygiene among caregivers are:

- a) Shortage of time
- b) Inadequate knowledge about techniques for maintaining oral hygiene
- c) Non-communicative and inappropriate patients [6].

The training of these staff can improve the quality of oral hygiene among institutionalized elderly. Guidelines for educational programs for improving oral health and hygiene for caregivers are targeted to:

- a) Importance of daily maintenance of oral hygiene among institutionalized elderly.
- b) Theoretical bases and practical improvement of the techniques for maintaining oral hygiene among institutionalized elderly.
- c) Recognition of clinical signs and symptoms of the most common oral diseases [6]

According to these facts, educational programs must include activities mainly targeted to:

- a) oral health evaluation of institutionalized elderly
- b) education of staff for maintain oral hygiene
- c) education of institutionalized elderly

- d) prevention of oral diseases [7].

The role and attitude of long-term care staff can influence on understanding and improving of oral health. It can be easily noticed that the management of the institutions for long-term care of the elderly indicate that oral health and hygiene is better than it is in reality [8]. The education of staff responsible for institutionalized elderly includes the use of appropriate lectures with adequate audiovisual effects, appropriate presentations and exercises and discussions among the participants. Also, it is important to adapt the educational program according to their prior knowledge.

The goals of the educational program of the professionals responsible for the care of the elderly are aimed to

- a) Obtaining information about oral conditions and diseases as well as the possibilities for their prevention
- b) The importance of regular maintenance of oral hygiene, as well as the negative effects of not maintaining oral hygiene on oral and general health
- c) The impact of xerostomia on oral health, nutrition and general health
- d) Detection of changes in the oral mucosa caused by improperly dentures
- e) The importance of tooth replacement especially in chewing and nutrition
- f) Introduction to the positive effects of the use of fluoride toothpastes and mouthwashes [9].

Working with the elderly is not just a waste of time and it is always necessary to consider their needs as well as their health. Based on the high percentage of institutionalized people who are medically compromised, it is necessary for the staff to be familiar with the characteristics of their oral health and oral hygiene depending on the present diseases. Patients with mobility impairment or inability to understand the instructions for maintaining oral hygiene need to be properly cared by the staff responsible for them. A special problem are people with cerebrovascular diseases or arthritis, in which there is a predominantly reduced manual activities, is necessary if they are able to be trained for independent oral hygiene using a regular toothbrush. People with higher physical disabilities are among those who need help with regular oral hygiene. Professionals responsible for caring of institutionalized elderly in many cases need to make some adjustments to the toothbrushes to facilitate oral hygiene. Such adaptations are increasing the length or changing the angulation of the brush handle. Today, some manufacturers of products for maintaining oral hygiene in daily production have released such brushes. Oral hygiene activities can be performed in the baths from the hospital rooms or in the beds among the patients with disabilities. It is best for these patients to be in a sitting position. The importance of the training of this type

of staff is especially important in the cases when the activities for maintenance of oral hygiene among the institutionalized elderly people who are „tied to the bed”. In such persons, the position in which the person should be is the lateral decubitus position [10]. Brushing the teeth of people who need help is best to be done at bedtime, but due to the shortage of staff in night shifts, brushing their teeth at least once a day, sometime after breakfast or lunch is also satisfactory. The average time it takes for a patient is 2 minutes, with small variations in people who have small number of natural teeth. The use of an electric brush in such persons is important in saving both the time and the physical condition of the persons responsible for maintaining oral hygiene. Additionally, it is necessary to use 0.12% chlorhexidine solution in patients who don't have problems with swallowing and spitting [11].

Staff which is taking care of the oral hygiene of institutionalized elderly people needs to be trained for hydration of the oral mucosa of people with severe xerostomia who are unable to take care of themselves. It can be used a gauze (preferably sterile) that is immersed in saline, and their lips should be coated with neutral cream. People who have xerostomia are also advised to use sugar-free chewing gum or gums with artificial sweeteners, non-alcoholic solutions and gels, and in the most severe cases after the recommendation of dentist artificial saliva can be used [3]. Caries reduction and the number of extracted teeth as a result of caries, reducing the number of teeth lost due to periodontal disease, reducing the number of people who use tobacco due to its side effects, reducing the number of toothless individuals, increasing in the number of natural teeth, as well as increasing of the percentage of persons who meet the criterion of optimal oral health are the long-term aims of geriatric preventive dental medicine. Guidelines for regular screening for oral cancer and xerostomia among the elderly aged 65-74 are also provided in the most developed countries [12]. For adequate dental care of the institutionalized elderly, it is necessary for the elderly, as well as the staff responsible for their care, to be highly aware and motivated to pay enough attention to oral health and hygiene, as well as wearing dentures. Activating the elderly in performing various activities for maintaining oral hygiene is aimed to restore their self-confidence, as well as to enable physical and muscular activity and coordination. This is also an important role of the nurses in the long-term care institutions.

The basic activities for implementation of oral health and hygiene protocols among institutionalized elderly aimed for solving the following problems

a) Improving and maintaining adequate dental hygiene, by brushing all teeth sides with the use of fluoride paste. Mobile prosthodontic appliances, before undertaking such activities, it is necessary to be removed from the mouth. This is based on fact that fluoride dental pastes have been scientifically proven to be effective in reducing coronary and root caries. Institutionalized elderly with mobile prosthetic appliances

should know that prostheses need to be removed from the mouth overnight. If there are financial possibilities, additional chemical solutions can be used for additional denture hygiene.

- b) Rinsing the oral mucosa with chlorhexidine. Daily rinsing of the mouth with this solution for at least one minute is recommended. Usage of chlorhexidine is due to its scientifically proven role against bacteria.
- c) Solving the xerostomia. It is necessary to educate the staff who takes care for the institutionalized elderly as well as the institutionalized elderly for proper nutrition, rich with fresh vegetables and fruits, rinsing with mouthwashes that can regulate the xerostomia [6].

Oral health programs and protocols can also be used for education of institutionalized elderly, as well as non-dental staff caring for the elderly such as GPs, nurses, nutritionists, and social workers, to change the approach to oral health and its promotion. The knowledge, attitudes and habits they will acquire and develop can have long-term implications for the oral health of the elderly.

Most often the goals of such prevention programs are:

- a) Understanding the importance of reducing carbohydrate intake between meals, due to the fact on reducing the prevalence of dental caries
- b) Understanding the meaning of having bigger number of natural teeth in the mouth
- c) Increasing the percentage of the elderly population that makes regular dental check-ups
- d) Ideal or optimal oral health is imperative for institutionalized elderly. The need for the staff caring for the institutionalized elderly to get acquainted with the optimal oral health and to understand the role of the oral health and hygiene.

And maybe the most important is when the patient is unable to maintain oral hygiene on his / her own, there is necessary to educate the staff responsible for them regarding their knowledge and training in maintaining oral hygiene. Institutionalized elderly people have a lot of oral changes and disorders such as: caries and periodontal disease, xerostomia, inadequate restorations, bruxism, tooth loss, as well as other general factors that may affect the oral health of these individuals. Therefore, when performing dental interventions, during each visit before the intervention, it is necessary to go through the medical history again, due to the possibilities of changes in the health condition of the elderly [12]. Psychological and economic moments influencing poor oral health and hygiene can have a negative effect on quality of life should be also taken as the basis of any oral health improvement protocol. Hence the importance of a multidisciplinary approach is to meet the health needs of the elderly.

Conclusion

Based on the fact that the oral health and hygiene among institutionalized elderly are poor and inadequate, a proper protocol for education of the staff responsible for them is more than needed. Educational activities of this protocol should be based on the evidence-based facts and on their prior knowledge. The staff must be aware and should perform activities targeted to improve the oral health and hygiene among institutionalized elderly.

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