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Oral Health in Intensive Care Units: Level of Information, Practices and Demands of Health Professionals

Saúde Bucal em Unidades de Terapia Intensiva: Nível de Informação, Práticas e Demandas de Profissionais de Saúde

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Abstract

Oral care in critically ill patients is essential to avoid systemic complications and to promote their recovery. Considering the above, this study aimed to verify the level of information of health professionals, practices and oral health demands in Intensive Care Units (ICU) of a reference hospital in Southern Brazil. Questionnaires were applied to 87 professionals, including doctors, nurses, nursing technicians and physiotherapists. There was a limited level of information on the relationship between oral and systemic health, lack of knowledge about hospital dentistry, and lack of oral health training in hospitalized patients. Fragilities were identified in the dental evaluation routines and in the oral hygiene protocol. However, availability of materials and the performance of oral hygiene of the patients were verified. There was no unanimity regarding the great importance of the patients' dental evaluation, about the offer of dental care service or about the inclusion of the dental surgeon in the multidisciplinary team, despite the relevance of these actions. The results point to the need for investments in permanent and continuous education with a view to improving the work processes in ICUs. Thus, they reinforce the precepts of the insertion of the dentist in the hospital full scope is the attention to the hospitalized patients.

Keywords: Inpatients. Health Personnel. Health Human Resource Training.

Resumo

A realização de cuidados bucais em pacientes internados em estado crítico é fundamental para evitar complicações sistêmicas e para favorecer sua recuperação. Considerando o exposto, este estudo teve por objetivo verificar o nível de informação dos profissionais de saúde, as práticas e as demandas de saúde bucal em unidades de terapia intensiva (UTI) de um hospital de referência do Sul do Brasil. Foram aplicados questionários a 87 profissionais, incluindo médicos, enfermeiros, técnicos de enfermagem e fisioterapeuta. Constatou-se limitado nível de informação sobre a relação entre saúde bucal e sistêmica, desconhecimento sobre Odontologia Hospitalar e carência de treinamentos sobre saúde bucal para os pacientes internados. Identificaram-se fragilidades nas rotinas de avaliação odontológica e no protocolo de higiene bucal. Contudo, verificou-se disponibilidade de materiais e a realização de higiene bucal dos pacientes. Não houve unanimidade quanto à grande importância da avaliação odontológica dos pacientes, sobre o oferecimento de serviço de atendimento odontológico e nem sobre a inclusão do cirurgião-dentista na equipe multidisciplinar, apesar da relevância dessas ações. Os resultados apontam para a necessidade de investimentos em educação permanente e continuada com vistas à melhoria dos processos de trabalho nas UTIs. Assim, reforçam os preceitos da inserção do cirurgião-dentista em âmbito hospitalar para a atenção integral aos pacientes internados.

Palavras-chave: *Pacientes Internados. Pessoal de Saúde. Capacitação de Recursos Humanos em Saúde.*

1 Introduction

The oral cavity has a complex microbiota that is associated to the main oral diseases and the development and aggravation of systemic diseases[1,2]. Therefore, the oral health care must often be performed by all individuals, especially for those in hospital and in critical condition[3,4].

Most of the times, the hospitalized patients are partly or totally dependent on care and have their oral hygiene impaired, aspects that can aggravate their state of health, hindering their recovery and increase their stay in hospital[4,5]. Given the association between oral microorganisms and systemic complications[6], individuals hospitalized in intensive care units (ICU) must have special attention[7,8].

Whereas the dental condition of the individual can harm their development and decrease the response to medical treatment[9], the presence of dental surgeons able to act in the hospital environment can bring benefits such as the aid in oral hygiene, providing guidelines for escorts and to the realization of dental procedures, contributing to the recovery of patients[4,5,10]. Even though the demands for oral health care in the hospital environment are not new, for a long time the presence of dental surgeons in hospitals was limited to operations in surgery and buccal Maxillo facial traumatology, in units where there were such services[11].

Today called Hospital Dentistry (HD), this area of activity has origins in America in the mid-20th century from the work of professionals as Simon Hullien and James Garretson,

who drove the creation of the Department of Dentistry in the Hospital of Philadelphia, by the Committee of dental service of the *American Dental Association* (ADA). In Brazil, the area gained momentum from 2004 with the creation of the Brazilian Association of Dentistry Hospital (ABRAOH)[7].

HD is defined as the area of Dentistry that works in conjunction with a multidisciplinary team with the goal of providing full and humanized care to patients within the hospital, performing educational actions, preventive, diagnostic, therapeutic and palliative in oral health. It has its focus of action, therefore, in the care of the patient's oral amendments, either admitted or in domicile [9,10,12,13].

With this perspective, the surgeon dentist becomes a part of the multidisciplinary team, with the doctors, nurses, physiotherapists, dieticians and technicians/assistants in nursing, assuming the responsibilities of the treatment and acting so that the oral health care can help in the patients' recovery, within a holistic vision of health[7]. This presence assumes greater importance in the ICU, in view of the specificities and needs of patients in more serious situation[8,14].

The insertion of the dental surgeon in the hospital environment has its bases in different instruments: The Dental Code of Ethics, which defines the competence of professionals in hospital and assist patients in hospitals[15]; in the resolution of the Federal Council of Dentistry (CFO)#. 162/2015, which recognizes the HD; in the Resolution CFO#. 163/2015 which conceptualizes the HD and defines the performance of the surgeon-dentist enabled to exercise it[13,16]; as well as in the Project of Law N. 2.776/2008 (conduct) which provides for the compulsory presence of dental professionals in the ICU and in medium and large hospitals to keep patients under conditions of admission[17].

Despite this, the presence of dental professionals in a hospital environment is restricted[10] and most of the population/ health professionals has no information about the performance of the surgeon-dentist within the hospital[11]. It is believed, therefore, that these aspects reveal weaknesses in the offer of shares of oral health care, in recognition of its importance in the sector and in their own training in health.

In view of the growing discussions around HD, fostered by the recognition of professional qualifications by the CFO in 2015, the objective of this study was to verify the level of information from health professionals, the practices and the demands of oral health in the ICU of a reference hospital in the South of Brazil.

2 Material and Methods

It is cross-sectional descriptive study, conducted in a large hospital in the Southern Region of the country, chosen for being a reference for various medical specialties and the ease of access to research. At the time of the survey, the unit had more than 700 beds and 3 thousand employees, providing services through the Unified Health System (SUS), covenants, and private plans.

All the 20 on-duty doctors, 20 nurses, 10 physiotherapists and 90 nursing technicians were invited to participate i (totaling 140 eligible professionals) who acted directly on attention to patients in cardiac ICU" and "ICU", having as inclusion criteria: Individuals of both sexes; regardless of age, education, training time and areas in the hospital. Individuals not located in their place of work after three attempts, and those who refused to respond to the survey were excluded.

All ethical precepts laid down in the Resolution CNS/MS N°. 466/2012 were respected. The research was approved by the Research Commission of the Hospital and the research project was approved via *Plataforma Brasil* under the Opinion N°. 1.858.654. The professionals received a Free and Informed Consent Form (ICF) which contained all the information about the research, so that they could evaluate and issue their consent regarding the participation.

The data collection occurred through a self-administered questionnaire completed by contemplating sociodemographic variables and 26 multiple choice questions about level of information, practices and demands for oral health actions, as well as on the opinion of the importance of the presence of dental surgeon in the care of hospitalized patients.

The questionnaire was developed by the researchers themselves, having questions based on other studies[18,19] and other built specifically for this research, because there no validated instruments were located that beheld all the variables that were intended to be investigated.

It was previously tested with five health professionals who worked in the hospital environment (but that did not meet the inclusion criteria). Small adjustments were performed on the instrument with a view to clarity of issues.

The data collection was performed by the same person, previously trained, through 20 visits to the hospital, between the months of January and February 2017. In case of unavailability of time of participants, the questionnaire was left under the responsibility of the nurse manager of the sector and collected at another time. The obtained data were transferred to the program *Microsoft Excel* (2016) and analyzed by means of descriptive statistical analysis procedures in the program itself.

3 Results and Discussion

Of the initial sample of survey (n=140), nine professionals were not located (because they acted in shifts) and 44 chose not to participate. Therefore, there was a final response rate of 62.1%, when 87 professionals answered the questionnaire, being 68 women (76.0%). Ages range from 22 to 53 years, with an average of 34 years. As to the place of work, 47 professionals (54.0%) worked in the ICU and 40 (46.0%) in the Cardiology ICU. There was a predominance of nursing technicians (65, 74.7%), followed by nurses (15, 17.2%), physicians (6, 6.9%), and physiotherapist (1, 1.1%). Five

professionals were specialists: four doctors and a nurse.

As to the level of information, it was found that 91.9% of health professionals believed that oral diseases could interfere with systemic conditions of hospitalized patients, 77.0% believed that medications used by the patient could change your oral health and 80.4% believed that dental treatment contribute to medical treatment. However, 54.1% had already heard of HD and 97.7% had never received training within the hospital on oral health of hospitalized patients (Table 1).

Table 1- Level of information of health professionals working in ICUs on the relationship between oral health and systemic health, OH - 2017

Variable	N	%
Do you believe that periodontal diseases can interfere in systemic conditions of a hospitalized patient?		
Yes	80	91.9
No	07	8.1
Do you believe that the medications used by the patient can change the oral health?		
Yes	67	77.0
No	20	23.0
Do you consider that the dental treatment will contribute to medical treatment?		
Yes	70	80.4
No	03	3.5
I do not know	14	16.1
Have you ever heard in hospital dentistry?		
Yes	47	54.1
No	40	45.9
Have your ever received any training within the hospital on oral health of the hospitalized patient?		
Yes	02	2.3
No	85	97.7

Source: The research data

As regards the practice of dental assessment performed in the ICU, 56.3% indicated that the patients had never received dental assessment, 85.1% indicated that there was in the hospital a protocol to request dental assessment for hospitalized patients and 77.0% believed that patients needed the evaluation of a dental surgeon. Even understanding the importance of dental monitoring, only 55.2% used to always observe the oral health conditions of hospitalized patients, and the teeth of the aspects most commonly observed (96.5%) (Table 2).

Table 2- Dental evaluation practices according to health professionals working in ICUs - 2017

Continua...

Variable	N	%
In general, to what extent is the dental evaluation carried out of the hospitalized patients?		
Always	03	**3.5**
Sometimes	35	**40.2**
Never	49	**56.3**
Is there any protocol at the hospital to request the dental evaluation of hospitalized patients?		
No	74	**85.1**
Yes	13	**14.9**
Do you consider that patients hospitalized in your sector of activity in the Hospital need dental assessment?		
Yes	67	**77.0**
No	20	**23.0**
To what extent do you observe the oral health conditions of hospitalized patients?		
Always	48	**55.2**
Sometimes	36	**41.3**
Never	03	**3.5**
What do you usually observe in the oral cavity of hospitalized patients? *		
Teeth	84	**96.5**
Halitosis	74	**85.0**
Mouth sores	66	**75.9**
Gums	57	**65.5**
Dryness of mouth	54	**62.1**
Presence of spots in the mouth	27	**31.0**

* More than one alternative might be ticked

Source: The research data

However, 74.7% answered that they always performed the patients' oral hygiene and 96.5% reported that there is material available for the sanitization of the oral cavity of hospitalized patients, being the oral chlorhexidine 0.12% the most commonly used material (86.2%). The nursing technicians were professionals who most practiced the patients' oral hygiene (95.5%). Of the total number of participants, 78.1% reported that always performed the oral hygiene and 14.9% reported always perform oral hygiene instruction to the patients' caretakers (Table 3).

Table 3- Oral hygiene practices performed in the ICU according to health professionals - 2017

Continua...

Variable	N	%
Is there any protocol at the hospital to perform the buccal hygiene of hospitalized patients?		
No	47	54.0
Yes	40	46.0
In general, to what extent is the buccal hygiene performed of the hospitalized patients?		
Always	65	74.7
Sometimes	17	19.6
Never	05	5.7
Are there materials available to the oral hygiene of patients?		
No	03	3.5
Yes	84	96.5
What materials does the hospital make available to perform the buccal hygiene of hospitalized patients?		
Chlorhexidine 0.12%	75	86.2
Oral hygiene package (gauze + tweezers + basin)	58	66.6
Cetylpyridinium chloride	06	6.9
Dental swabs	06	6.9
Toothbrush and toothpaste	04	4.6
What professionals usually perform the buccal hygiene of hospitalized patients?		
Nursing Technicians	83	95.5
Family members	02	2.3

Continuação.

Variable	N	%
Nurse	01	1.1
Own patient	01	1.1
Do you usually perform the buccal hygiene of hospitalized patients?		
No	03	3.5
No, but I ask another professional to do it.	18	20.4
Yes	68	78.1
Are the family members and caretakers guided about how to perform the buccal hygiene of the hospitalized patient?		
Always	13	14.9
Sometimes	35	40.2
Never	39	44.9

* More than one alternative might be ticked

Source: The research data

Regarding the demands for oral health actions in ICUs, 83.9% of professionals believed that the hospitalized patients needed dental treatment. Nevertheless, in case they realized it was necessary, only 27.6% always directed the patients for dental treatment. According to 63.2% of the hospital offered no specific service for the implementation of dental treatment (Table 4).

Table 4 - Demands for oral health in relation to the needs of dental treatment in the ICU, responsible for actions and evaluation of insertion of the dental surgeon in the hospital environment - 2017

Continua...

Variable	N	%
Do you consider that patients hospitalized in your sector/unit of the Hospital need dental treatment?		
No	14	**16.1**
Yes	73	**83.9**
If you observe that patients need dental treatment, to what extent do you refer them to such services?		
Always	24	**27.6**
Sometimes	26	**29.9**
Never	37	**42.5**
Does the Hospital provide any service of dental treatment to hospitalized patients?		
No	55	**63.2**
Yes	32	**36.8**
Who should be responsible, in Hospital, for observing the oral health conditions of the hospitalized patient? *		
Nursing Technicians	58	**66.6**
Nurse	52	**59.8**
Doctor	51	**58.6**
Dental Surgeon	32	**36.8**
Family members	26	**29.9**
Technician in oral health	18	**20.7**
Assistants in oral health	12	**13.8**
Who should be responsible, in Hospital, for performing the oral hygiene of the hospitalized patient? *		
Nursing Technicians	75	**86.2**
Family members	32	**36.8**
Nurse	14	**16.1**
Technician in oral health	14	**16.1**
Assistants in oral health	05	**5.7**

Continuação.

Variable	N	%
How important do you consider the evaluation of a surgeon dentist in hospitalized patients?		
Very Important	46	**52.9**
Important	31	**35.6**
Neither important, nor so important	07	**8.0**
Not Important	0	**0.0**
Little important	03	**3.5**
How important do you consider be offered services of dental treatment within the Hospital for hospitalized patients?		
Very Important	47	**54.0**
Important	31	**35.6**
Neither important, nor so important	04	**4.6**
Not Important	0	**0.0**
Little important	05	**5.8**
How important do you consider the inclusion of dental surgeon as a member of the hospital teams?		
Very Important	49	**56.3**
Important	29	**33.3**
Neither important, nor so important	03	**3.5**
Not Important	0	**0.0**
Little important	06	**6.9**

* More than one alternative might be ticked

Source: The research data

For 66.6% the nursing technician should be responsible for observing the oral health conditions and higher percentage (86.2%) believed that these professionals should be responsible for the oral hygiene of patients (Table 4).

A little over half (52.9%) said it is very important that a surgeon dentist evaluate the patients. A similar percentage (54.0%) reported being very important to offer a service of dental care and 56.3% considered very important the inclusion of dental surgeons in multidisciplinary teams of the hospital (Table 4).

The importance of the inclusion of oral health care in the hospital environment and in ICUs has been highlighted in various national and international publications[2,6,8,18-24] and was present in the recognition of professional qualifications in HD by the CFO[13,16].

Although these aspects contribute to the dissemination of information and the consolidation of the field in the country, they represent important challenges regarding the recognition of HD as dental specialty by the CFO, which could increase and qualify the presence of these professionals in hospitals; and the approval of the Project of Law No. 2.776/2008, under consideration by the Federal Senate, which establishes the obligation of the presence of dental professionals in the ICU and in other public and private institutions that keep patients under conditions of admission[17].

To analyze the formation of health professionals of the ICU in this study, a greater participation of nursing technicians (n=65), followed by nurses (n=15) and physicians (n=6) was observed. Attention was drawn to the fact that there is not a dental surgeon as effective member of the teams.

The lack of dental surgeon in hospital units is common and

has been reported in the literature[14,18,20,21], falling responsibility for oral care for nurses and nursing technicians[19]. It is observed, especially in the ICU, that the complete oral care is often overlooked or not provided to the patient, enabling the development of respiratory infections, such as ventilator-associated pneumonia (VAP), a source of complications and deaths [8,21,22,25,26].

In the present study, 91.9% of the professionals were found to understand that the oral diseases could interfere in the systemic conditions and 80.4% believed that dental treatment contributed to medical treatment. These results are similar to those found in a study conducted with nurses and nursing technicians of Campina Grande/PB[18]. However, they differ from the findings of research with nurses and nursing technicians of the city of Porto Alegre/RS, which showed that only 50% of the nurses and 28.2% of the team of technicians believed that oral hygiene is important for the prevention of VAP or another infection[19].

In a study with cardiologists and Intensive Care Units doctors working in hospitals of Rio de Janeiro showed limited knowledge about periodontal medicine and about the importance of the control of oral biofilm in the maintenance of systemic health[25], showing that the lack of knowledge about the relationship between oral and systemic conditions are transversal to different professional categories.

It is known that the maintenance of oral health directly influences the patients′ recovery, since the oral cavity is port of entry for pathogenic microorganisms associated to systemic infections[2,4,7,14], which may have an important role in the pathogenesis of coronary heart disease, cerebrovascular accidents, bacterial endocarditis, diabetes mellitus, and respiratory infection[25]. As the patient′s oral condition may change and decrease his or her response to medical treatment, it is important that he or she receives routinely dental assessment[9].

Another aspect that drew attention was the fact that only 54.1% of the professionals of ICUs have already heard of HD, corroborating the findings of other publications[11], which may be explained by the fact of being a recent qualification in the field of dentistry and by training in graduate level offered until then.

A study conducted with dental surgeons of Araraquara/SP also showed limited knowledge about HD, denoting strangeness of the own class operating in hospitals[27]. This ignorance has also been highlighted at the population level, when most of the population does not know what it is, how it works and what are the procedures performed by the surgeon-dentist in hospital[11]. Thus, one should move on improvements in vocational training, in the dissemination of academic-scientific publications and in actions of social communication in health, which can be performed even by their own hospitals.

According to the results of this survey, 97.7% of the participants have never received training in hospital on the oral health of hospitalized patients, highlighting gaps in the level of information and in the practices of professionals.

These findings were higher than those found by Oliveira et al.[18], when they identified that 80.5% of nurses and nursing technicians said they would not have done any course or training to perform the oral hygiene of patients hospitalized and those of Orlandini and Lazzari[19] when 50% of the nursing technicians and nurses reported that they had not taken continuing education activities.

In a study with Intensive Care Units doctors and cardiologists, it was found that only 11.80% of the professionals reported having received training to assess the oral condition of their patients[25], denoting that the lack of training on oral health is common in the hospital environment.

The importance of training (continuing education/permanent) about oral care in patients under intensive treatment is supported by the findings of studies on the relationship between oral biofilm and systemic conditions of hospitalized patients[6,18,22]. But, for that to happen, health professionals, including nurses, need to be instructed about the practices and how to accomplish them[14.19].

More than half of the respondents (56.3%) reported not existing dental evaluation in hospitalized patients, although 77.0% realize that patients needed the same. These aspects illustrate, on the one hand, limitations in the care offered and, on the other hand, the prejudice regarding dental practice in a hospital environment. Added to this is the fact that the own dental surgeons are trained to work in offices or in public health, leaving to the hospital, only the buccal-maxillo-facial[7] services.

According to 54.0% of professionals there is a protocol of the hospital for the oral hygiene of hospitalized patients. The lack of control protocols of oral infection or their ignorance by health professionals in hospitals is commonly observed[22.25], despite the perception of their importance for professionals who work in treatment units of critical patients[19].

It is understood that the existence of a protocol of oral hygiene would bring greater knowledge to nursing professionals and, consequently, improve the quality of care and comfort for patients[6], especially those at high risk, in intensive therapy[2]. This neglect with the oral hygiene of hospitalized patients reveals flaws in the assistance and the practices of health education[19].

In addition, it is recommended to adopt mechanisms so that the content and dissemination of protocols, such as key messages and form of presentation, encourage favorable attitudes and behaviors, facilitating the adoption of recommendations by health professionals[22]. This understanding is consistent with the importance of instructing the caretakers of patients about how to make oral hygiene[10], reinforcing that the hospital can also be educational[9].

It was found in this study, that 74.7% indicated that the oral hygiene of patients hospitalized in the ICU was always

held and that there is material available for this practice to be exercised. As not all professionals agreed in this respect, it is understood that there is lack of information, which may have implications for the way the procedures of oral hygiene are carried out.

Most of the professionals interviewed (86.2%) reported using chlorhexidine 0.12% for the patients' oral hygiene. It is well known that oral chlorhexidine has efficiency in biolfil chemical control, through the reduction of oral bacteria with potential colonization of the oropharynx, being its use associated with a reduction in the rates of VAP[26]. However, it is important that professionals are updated and seek information about the effectiveness, indication and dosage of the products available for oral hygiene[25].

Although the need for dental treatment of patients who are hospitalized has been identified by 83.9% of professionals, 63.2% stated that the hospital did not offer any specific service for dental treatment. In addition, it becomes imperative to expand the supply of dental services in hospitals, given the restricted provision of dental surgeons in these spaces[10].

In this study, it was observed that 66.6% of the participants stated that the responsibility for observing the oral health conditions of patients is the nursing technician and 86.2% felt that the oral hygiene should be carried out by the same professional. However, in accordance with Godói et al.[7] the responsibilities must be shared among doctors, dentists and the entire assistance team. It should be emphasized that training in HD, according to the guidelines of the CFO provides disciplines of hospital routine, which assumes importance of multiprofessional work[16].

The inclusion of the surgeon-dentist as a member of the hospital teams was seen as very important by 56.3% of the participants of this study. It is argued, however, that the performance of this professional is of great importance for the attention and care of patients in ICUs[18,28]. As the oral hygiene can become precarious in a hospital environment, it is necessary to provide qualified monitoring in health promotion and treatment of oral diseases[4,5,10]. One should then proceed in the holistic concept of health, breaking the bounds of the specializations that characterize the formation and classic operation in health[25].

Among the advantages of the presence of the surgeon-dentist in hospitals teams include: request for examinations; easy access to the patient who is unable to attend the clinic; integral relationship among team, patient and institution; completion of procedures with greater security; reducing the time of hospitalization; reduction of the risk of infection and the aggravation of diseases; and aid in medical treatment[12]. When there is integration among the teams, the treatment becomes more effective for the patient, for the team and for the hospital institution itself.

These points indicate for the acquisition of different skills and abilities on the part of the surgeon-dentist in a hospital environment, in addition to those strictly to dentistry services. It is necessary to know the management and medical terminology, to know how to interpret examinations and observe the technical and administrative standards of the institution[29]. Thus, improvements are needed in the formation of dental students and the qualification of the professionals.

At the undergraduate level, this can be done through the insertion of the discipline of HD in the syllabus[8,27], preferably through experiences in the reality of different sectors, especially the ICU. It stands out, however, that training in oral care should also be included in the training of doctors, nurses and nursing technicians[19,25].

This study had as its main limitations the fact of having been carried out in a single institution and the size of the sample. It is believed that the rate of response (61.2%) is due to the factors related to the routines of work in the ICU. Even so, the findings are relevant because they brought information about potentialities and fragilities of oral health care in the ICU at the hospital researched, confirming findings in the literature and bringing variables still unexplored in other publications.

4 Conclusion

This study identified a limited level of information of the health professionals working in the ICUs on the relationship between oral and systemic health, lack of knowledge about HD, and lack on oral health training in hospitalized patients.

As the practice of oral health, the main weaknesses were the routines of dental assessment in the ICU, the frequency and form of observation of the oral health conditions of patients, the protocol of oral hygiene and the supply of oral hygiene instructions to family and caregivers. However, the availability of materials and the practice of performing oral hygiene of patients ranked as potential of care provided.

Concerning the demands for buccal hygiene, there was no unanimity regarding the great importance of the patients' dental evaluation, about the offer of dental care service or about the inclusion of the dental surgeon in the multidisciplinary team, despite the relevance of these actions.

The findings of this study indicate mismatches among level of information from health professionals, the practices and the demands of oral health in the ICU, which presuppose the need for improvements of work processes and of oral health care to hospitalized patients. Thus, the achievement is stimulated regarding the permanent and continuing education actions on oral diseases, ways of prevention and oral hygiene with the professionals of the ICUS.

In addition, having as its horizon the advances in the field of HD in the country, it is reiterated the importance of changes in the formation of future dental surgeons, through the inclusion of knowledge and practices of oral health in the hospital environment in undergraduate courses. After all, more than ensuring oral health professionals in hospitals, one must qualify their praxis, in order to offer benefits for the patients' health, to the work of teams and for the quality of the services

rendered by the institution itself.

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