

The importance of oral hygiene in patients with mechanical ventilation

A importância da higiene oral em pacientes com ventilação mecânica

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RESUMO

A importância da higiene oral em pacientes com ventilação mecânica foi a temática do estudo, tendo como linha de pesquisa, a educação em enfermagem e área predominante, a enfermagem no cuidado ao cliente crítico adulto/ emergência. O objeto do estudo foi o enfermeiro e o objetivo era identificar a necessidade de aprimoramento dos profissionais de enfermagem na importância da higiene oral diária na terapia intensiva. Metodologia de abordagem bibliográfica, descritiva e qualitativa. Foi realizada uma pesquisa na biblioteca virtual em saúde, nas bases MEDLINE, LILACS e BDEF, utilizando os descritores: Equipe de enfermagem, Unidade de terapia intensiva e Cuidados de enfermagem. Após a busca, teve como resultado o quantitativo de dez artigos, onde foi realizada a leitura na íntegra. O desenvolvimento e o ideal do trabalho foram voltados para a melhoria na assistência da enfermagem ao paciente, o foco maior do trabalho está nos pacientes impossibilitados de exercer esse autocuidado, garantindo conforto e evitar complicações, afim de minimizar o tempo de internação. O risco de infecções em um ambiente hospitalar existe, porém, cabe ao profissional atentar-se aos cuidados e manuseio do paciente. A importância da equipe multidisciplinar faz toda a diferença no que diz a respeito do cuidado, traçando metas e diretrizes eficazes a assistência.

Descritores: Equipe de enfermagem, Unidade de terapia intensiva e Cuidados de enfermagem

ABSTRACT

The importance of oral hygiene in patients with mechanical ventilation was the subject of the study, having research education in nursing and nursing care predominantly critical customer adult/emergency. The object of study was the nurse and the goal was to identify the need for improvement of nursing professionals the importance of daily oral hygiene in intensive therapy. Methodology of bibliographic, descriptive and qualitative approach. A research on the virtual health library in the bases MEDLINE, LILACS and BDEF, using the key words: nursing, intensive care and nursing care. After the search, has resulted in the amount of ten articles, where the reading in full. The development and the ideal of work were aimed at improving nursing care to the patient, the increased focus of work is in patients unable to exercise that self-care, ensuring comfort and avoid complications, in order to minimize the length of hospitalization. The risk of infections in a hospital environment exists, however, it is up to the professional trying to care and patient handling. The importance of multidisciplinary team makes all the difference in the respect of care, tracing goals and guidelines effective assistance.

Keywords: Nursing Team, Intensive Care and Nursing Care.

NOTA

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INTRODUCTION

Oral hygiene is one of the basic conditions for the maintenance of the health and comfort of patients, as the pathologies that affect teeth and gums can lead to loss of elements, other changes in the digestion of food, which lead to the emergence of bacterial infections. Oral hygiene consists in the conservation and cleaning of the oral cavity with the objective of preventing dental caries and oral, digestive and respiratory infections¹.

Oral health care is an essential nursing intervention. In order for the oral hygiene technique to result in an effective removal of food debris and bacterial plaque, its purpose is to prevent not only changes in the oral cavity but also to prevent these microorganisms from becoming complicating agents of the general condition of the patient².

The intensive care unit (ICU) is a hospital setting where patients are critically ill and usually have poor oral hygiene. The proliferation of bacteria can make responsible for complications that raise the mortality rate in these patients³.

As the theme of nursing care in oral health in intensive care patients, having a predominant area of adult / emergency critical care is likely to acquire infections in the hospital environment. Therefore, as a research line nursing education, which involves a better understanding of the team on the daily practices of oral hygiene, it is up to complicity and commitment of all the team for a satisfactory result, and to provoke a reflection on the behaviors of the professionals involved in the care.

The object of the study was the nurse related to the oral health activities of the patient in the intensive care unit. The nurse oversees the nursing team, where it has as one of its attributions the care with oral hygiene of the patient and it is also the responsibility of the nurse to plan, organize, coordinate, execute and evaluate the care services of the seriously ill patients at risk of life⁴.

To have theoretical and practical knowledge with oral health care, which goes beyond comfort and should be adopted techniques and products, which must be shared with all nursing staff so that care with oral cavity has its importance also associated with prevention of infections. Nurses should elaborate protocols that may be feasible and promote training for the other nursing categories⁵.

As questioning: Does the nursing team seek mechanisms and knowledge about the importance of oral hygiene for the patient's comfort and well-being in order to avoid complications?

The objective of the study was to identify the need for improvement of nursing professionals by adding and emphasizing the importance of daily oral hygiene in intensive care.

"Poor hygiene of the oral cavity is the factor that favors local infections and serves as a gateway to systemic

infections, compromising the general state of the patient and increasing the length of hospital stay"⁶.

"It is of the utmost importance that patients hospitalized in ICU receive enough oral hygiene care during their stay in the unit to avoid the manifestation or complication of pathologies associated with oral health"⁷.

Comfort and oral hygiene are paramount in patient recovery because they help prevent possible diseases that can be triggered by hygiene inefficiency, so it is very important to educate the society about this issue, from hospitalization to discharge.

Therefore, it is of paramount importance to alert nursing professionals to the benefits of oral hygiene to the patient, such as: quality of life, promotion, prevention of pathologies and good recovery. The daily oral hygiene is effective in the health / disease process, being relevant the debates and questionings, that aims at improvements, growth and valorization of all the care by the health professional.

METHOD

The study evidences the importance of oral hygiene as a means to prevent various pathologies, to perform infection control of the oral cavity in order to reduce the mortality of the patients and the period of hospitalization. The importance is to know the practice of oral hygiene among the nursing team aiming to improve the quality of care and the knowledge of the professionals of the team.

The study is a bibliographical, descriptive approach with a fundamental character in a qualitative study, because it is through it that the data are collected.

The bibliographical research tries to explain a problem from theoretical references published in articles, books, dissertations and theses. It can be performed independently or as part of descriptive or experimental research. It is important to describe the experiment step by step in detail so that other colleagues see exactly how the researcher came to conclusions. The idea is to allow others to repeat the experiment along the same path. In this way, the scientific community can see if the conclusion of the research is replicable, that is, if the same answer is obtained when the same circumstances are maintained and repeated the same procedures^{8,9}.

In principle the description constitutes the ability to make the other mentally see what the researcher has observed. In other words, the description must be sufficiently precise for the interlocutor or reader to be able to visualize exactly what the researcher observed. The description also lends itself to methodologically describing each of the steps taken in the conduct of research and in the application of research techniques⁸.

We use qualitative research when we want to describe our object of study in more depth. This is why it is

very common in studies on the behavior of an individual or a social group⁹.

A survey was conducted in the virtual health library at the bases, Medline, Lilacs and Bdenf, in April 2015, using the descriptors: Nursing team, intensive care unit and nursing care.

Initially, after searching the descriptors separately the following numbers were obtained:

Due to the large number of articles found, an initial refinement was performed, using the double descriptors and are presented in the table

With a large number of articles found, a new refinement was made with the trio descriptors and are presented in table 3:

By reading the summary of articles found in the database, discarding those of another language, the articles that meet the objective of the study were selected and are presented in table 4.

RESULTS AND DISCUSSION

The importance of oral hygiene in patients with mechanical ventilation was the subject addressed and based on the deficiency of oral hygiene procedures performed by health professionals aiming to provide the patient with adequate oral hygiene avoiding secondary complications.

The aim was to improve the knowledge of the appropriate techniques to perform oral hygiene. The nurse as educator has the duty to seek mechanisms of theoretical and practical knowledge in order to maintain a continuing education within his team aiming at the quality of care.

In order to meet the objective, a search was per-

formed in the virtual health library, where 10 articles were selected, which are presented in table 4 in the methodology. After the selection of the articles, the main ideas of these authors were divided into three categories: Oral hygiene care, complications due to lack of oral hygiene and education in nursing.

Categoria I – Cuidados de higiene oral.

The nurse besides dealing with the administrative activities of supervision and training of the team, it is also necessary to consider the mechanisms of prevention of pathologies resulting from ineffective oral hygiene. Establishing daily goals for patient assistance with mechanical ventilation¹⁰.

It is known that dirt in the oral cavity facilitates the installation of opportunistic infections, where complete oral hygiene should be performed including tongue, teeth, palate, gums, etc. Observing the salivary flow and attending to the aspiration, avoiding that the patient broncoaspire, with the purpose of prevention of infections¹¹.

The hospital environment is conducive to various types of infections, it is up to the health professional to establish ways to minimize these possible complications. One of the ways to reduce the risk of infection is to provide the patient with adequate daily oral hygiene, thus also promoting their comfort and decreasing their hospital stay¹².

It is of vital importance to promote the prevention of pathologies related to the precariousness of oral hygiene. Considering that the nurse has the responsibility to perform it effectively, in order to avoid complications that may aggravate the clinical picture of the

TABLE 1 – Results of Importance of Oral Hygiene with descriptors in separate

Descriptors	Medline	Lilacs	BDEF
Nursing assistance team	53743	2355	1269
Intensive care unit	38014	3711	1238
Nursing care	216641	11607	7060

Source: Databases, 2015.

TABLE 2 – Results of the Importance of Oral Hygiene with combined descriptors

Descriptors	Medline	Lilacs	BDEF
Nursing assistance team / intensive therapy unit	1351	118	74
Nursing / nursing care team	3075	341	292
Unit of intensive therapy / nursing care	3142	707	575

Source: Databases, 2015.

TABLE 3 – Research Results Importance of oral hygiene with combined descriptors

Descriptors	Medline	Lilacs	BDEF
Nursing assistance team / intensive therapy unit / nursing care	100	201	157

Source: Databases, 2015.

TABLE 4 – Selection of Research Papers Importance of Oral Hygiene

YEAR	AUTHOR	TITLE	BASE
2006	Freire, I.L.S.; Farias, G.M.; Ramos, C.S;	Preventing nosocomial pneumonia: care of the health team to the patient on invasive mechanical ventilation	BDENF
2006	Oliveira, A.C; Clemente, W.T.; Lucas, T.C.; Martinho, G.H.;	Hospital infections and microbial resistance in an Intensive Care Unit of a University Hospital	BDENF
2008	Santos, P.S.S.; Mello, W.R.; Wakim, R.C.S.; Paschoal, M.A.G.;	Use of oral solution with enzymatic system in patients totally dependent on care in an intensive care unit	LILACS
2009	Azambuja, P.M.; Neto, E.C.; Santos, L.R.C.; Knibel, M.F.;	Pneumonia associated with mechanical ventilation: epidemiology and impact on the clinical evolution of patients in an intensive care unit	LILACS
2010	Pombo, C.M.N.; Almeida, P.C.; Rodrigues, J.L.N.;	Knowledge of health professionals in the Intensive Care Unit on the prevention of ventilator-associated pneumonia	LILACS
2010	Kahn, S.; Mangialardo, E.S.; Garcia, C.H.; Namen, F.M.; Júnior, J.G.; Machado, W.A.S.;	Oral infection control in hospitalized patients: an approach directed to intensive care physicians and cardiologists	LILACS
2011	Oliveira, T.F.L. ; Filho, I.S.G.; Passos, J.S.; Cruz, S.S.; Oliveira, M.T.; Trindade, S.C.; Machado, A.S.; Coelho, J.M.F.; Santos, C.M.L.; Cerqueira, E.M.M.;	Factors associated with nosocomial pneumonia in hospitalized individuals	LILACS
2012	Aguiar, A.S.C.;Mariano, M.R.; Almeida, L.S.; Cardoso, M.V.L.M.L.; Pagliuca, L.M.F.; Rebouças, C.B.A.;	Nurses' perception about health promotion in the Intensive Care Unit	LILACS
2012	Souza, A.F.; Guimarães, A.C.; Ferreira, E.F.;	Evaluation of the implementation of a new oral hygiene protocol in an intensive care unit for the prevention of ventilator-associated pneumonia.	LILACS
2013	Dereli, N.; Ozayar, E.; Degerli, S.; Sahin, S.; Koç, F.;	Three years of evaluation of nosocomial infection rates in ICU	LILACS

Source: Databases, 2015.

patient, which can lead to death. It is important to emphasize that the oral cavity undergoes continuous bacterial colonization, and that concomitantly to this process, a natural cleansing takes place through the movements of the chewing of hard foods, the movement of the tongue and cheeks by the speech, which diminish this colonization. However, when talking about the critical patient in an intensive care unit, we are faced with another reality, where this cleansing does not occur effectively because of sedation and invasive procedures. Therefore, with the impossibility of this natural cleaning, due to ventilatory prosthesis, some ducts can avoid complications and promote the patient's well-being, such as oral hygiene.

The patient under mechanical ventilation, hospitalized in an intensive care unit, is unable to perform

self-care. In addition, with the use of the orotracheal tube, the patient's mouth remains open and the use of sedatives leads to a decrease in the salivary flow, that is, the xerostomia, accumulating bacteria that must be removed mechanically by the brushing performed by the nurse.

It is up to the nurse to provide all assistance to patients with ventilatory prosthesis. It is necessary to establish daily goals of care with oral hygiene, guiding the whole team and emphasizing the importance of avoiding complications and infections and thus promote the well-being of the patient, who is unable to carry out his own hygiene.

It is fundamental that the nursing team becomes aware that the greater and more effective the patient care, the shorter the time spent in the hospital environment.

Categoria 2 – Complicações decorrentes da falta de higiene oral.

It is of the utmost importance to be careful when handling patients with invasive devices because they are susceptible to infection. It is necessary to use the appropriate paramentation, perform sterile techniques, hand hygiene in order to reduce the index of hospital infection¹³.

Nosocomial pneumonia is one of the most developed infections in patients with mechanical ventilation because of the lack of oral hygiene where it facilitates the colonization of bacteria. The negligence of oral hygiene is the main factor of infection during the hospitalization period¹⁴.

“The medication has a direct connection with the decrease of the salivary flow, that is, the xerostomia that added to the fact that the patient is with the mouth open in the tube contributes to the proliferation of bacteria causing infections”¹⁵.

“When the patient is induced the ventilatory prosthesis, whatever the pathology, one of the determining factors for the reduction of the hospitalization time is the correct oral hygiene, because through it we prevent infections”¹⁶.

Since the oral cavity is a gateway to microorganisms, the oral hygiene performance has a significant value, since the deficient or lacking of the same facilitates the colonization of pathogens in the oral cavity, favoring the installation of infections, such as nosocomial pneumonia.

There are several oral hygiene products on the market today, it is up to the nurses to choose which generates more benefit for the patient. It is important that the product of choice for oral hygiene is the most appropriate, in order to promote an oral environment “immune” to the affections, reducing the risk of local and systemic complications.

The hospital environment is contaminated. Other aggravating factors are low immunity, invasive procedures, use of medications, lowering of the level of consciousness, among others. These factors may increase hospitalization time, leading to a vicious cycle: invasive procedures, exposure to microorganisms and longer hospitalization.

The main route of installation of nosocomial pneumonia is the oral cavity, characterized by the colonization of bacteria that proliferate due to lack of oral hygiene and with aggravation of xerostomia, occurring the installation in the lungs.

Categoria 3 – Educação em Enfermagem.

“It is important in a multiprofessional team to include dental team in critical patient care, for a set to establish guidelines in care, in order to reduce possible complications of lack or inefficiency of oral hygiene”¹⁷.

The education of health professionals and the population about the importance of oral hygiene is essen-

tial. The population should be aware that effective oral hygiene prevents infections, thus charging professionals involved in assisting the correct technique when their relatives are hospitalized¹⁸.

“The knowledge of the team contributes, therefore, the exchange of knowledge together with the continued education are fundamental to contribute in the prevention of infections that are related to the knowledge of the professionals”¹⁹.

Education and knowledge are mechanisms that are obtained throughout the professional life, it is necessary to understand the real need of a problem and to put into practice all its knowledge, guaranteeing the immediate result. It is through studies, qualifications and improvements that one can establish guidelines in certain situations.

Every team needs to be informed about the importance of daily care to the patient, that as simple as the assistance, in the end one has the result. There are many pathologies, and when you realize it, it turns out that sometimes many of them could be prevented if a proper plan of care was established.

It is essential to establish daily goals of a plan of care, to create and develop care plans and protocols in conjunction with the team, thus seeking to reduce the patient's stay in the hospital environment, with these goals in practice also reduce infection statistics.

Continuing education is one of the health promotion activities carried out by the nurse in order to prevent diseases, reduce infections and promote humanization in care.

The role of the nurse in the intensive care unit should go beyond performing invasive procedures and paying attention to the signs and symptoms presented by the patient. The nurse should assist the individual as a whole, identify problems and risks of complications, guide the team on how best to meet the needs of patients seeking effectiveness in recovery.

FINAL CONSIDERATIONS

When talking about the nursing team's performance regarding the oral health of inpatients in intensive care units, there was a shortage of materials, scientific articles and protocols that addressed this issue. Being the majority of the existing studies, directed to the dental area.

Regarding the commitment to carry out the research, it can be affirmed that the searches were incessant and it was observed the need of publications to be divulged by nurses regarding oral hygiene as a general care and not only in patients hospitalized in an intensive care unit.

It is very limited any type of information or clarification in the concept of oral hygiene in intubated patients. The importance of oral hygiene that is effective in the daily routine of the patient using ventilatory prosthesis is visible, since oral hygiene promotes comfort, avoids

complications, infectious conditions and even reduces hospital stay.

The precariousness of information exists, however, it is up to nurses to guide their staff, to research methods and plans of care, to inform the family about the importance of the procedure and to place all the interventions in the nursing routine, thus guaranteeing a complete assistance and value. To improve the practice of oral hygiene, it is of great relevance to implement an appropriate behavior, through the use of care protocols, highlighting the value of information and nursing records..

It is noteworthy that through the study carried out, we can show how much the nurse's role contributes to the promotion of critical client health, thus minimizing the index of related complications, the precariousness of the correct oral hygiene performance.

The study recommendation certifies the improvement of the nurse regarding the oral hygiene assistance to the patient in intensive care. It is relevant to create programs, training and specializations in intensive care units, aiming at improving care and professional growth.

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