REVISTA ONLINE DE PESQUISA

CUIDADO É FUNDAMENTAL

Universidade Federal do Estado do Rio de Janeiro • Escola de Enfermagem Alfredo Pinto

RESEARCH DOI: 10.9789/2175-5361.2019.v11i3.627-633

Bed-Bath: The Care-Omitting Behavior of the Nursing Team

Banho no Leito: Cuidados Omitidos pela Equipe de Enfermagem

Baño en Cama: Cuidados Omitidos por el Personal de Enfermería

Sara Rellin Borges Bastos[1]; Fernanda Alves Ferreira Gonçalves[2]; Bárbara Ribeiro Miquelin Bueno[3]; Gérsica Sampaio Silva[4]; Kaiomakx Renato Assunção Ribeiro[5]; Virginia Visconde Brasil[6]*

How to quote this article:
Bastos SRB, Gonçalves FAF, Bueno BRM, *et al*. Bed-Bath: The Care-Omitting Behavior of the Nursing Team. Rev Fund Care Online.2019. Apr./Jul.; 11(3):627-633. DOI: http://dx.doi.org/10.9789/2175-5361.2019.v11i3.627-633

ABSTRACT

Objective: The study's goal has been to assess the completion of the bed-bath procedure and the main care provided by the nursing team before, during and after it. **Methods:** It is a cross-sectional and observational study that was carried out in the Intensive Critical Unit of a teaching hospital with the participation of eight nurse technicians. Data collection was performed through an instrument structured type checklists over 30 times of observation from 1,080 actions. **Results:** There were observed 10 care before and 28 during and after bed-bath procedures. The bath was carried out technically without prior notice, without considering the individuality and privacy of patients, especially those undergoing mechanical ventilation. There was no participation of nurses and most of the actions taken by the nursing staff did not meet the literature recommendations. **Conclusions:** There is need to improving the quality of bed-bath procesdures performed by the nursing team and adoption of evidence-based practices in the care process.

Descriptors: Bath, Nursing Care, Critical Care, Intensive Care Unit, Personal Hygiene.

[1] Nursing Graduate, Residency student in Intensive Therapy by the Multiprofessional Residency Program in Health. E-mail address: sararellin@hotmail.com

[2] Nursing Graduate, PhD student enrolled in the Nursing Postgraduate Program at *Universidade Federal de Goiás*, Nurse at *Hospital das Clínicas de Goiás-HC/UFG*. E-mail address: fernandanurse31@hotmail.com

[3] Nursing Graduate, MSc student enrolled in the Nursing Postgraduate Program at *Universidade Federal de Goiás*, Nurse at *Hospital das Clínicas de Goiás-HC/UFG*. E-mail address: barbaramiquelin@hotmail.com

[4] Nursing Graduate, Residency student in Intensive Therapy by the Multiprofessional Residency Program in Health. E-mail address: gersica_sampaio@hotmail.com

[5] Nursing Graduate, Specialist's Degree in Cardiology and Hemodynamics, Residency student in Intensive Therapy by the Multiprofessional Residency Program in Health. E-mail address: kaiomakxribeiro@hotmail.com

[6] Nursing Graduate, PhD in Nursing, Adjunct Professor of the Nursing Postgraduate Program at *Universidade Federal de Goiás*, Nurse at *Hospital das Clínicas de Goiás-HC/UFG*. E-mail address: virginia@fen.ufg.br

RESUMO

Objetivo: Avaliar o processo de realização do banho no leito e os cuidados realizados pela equipe de enfermagem antes, durante e após o banho no leito. **Métodos:** estudo transversal e observacional, realizado na Unidade de Terapia Intensiva de um Hospital/Escola, com oito técnicos de enfermagem. Para a coleta de dados foi utilizado instrumento estruturado tipo checklists em 30 momentos de observação de 1080 ações. **Resultados:** foram observados 10 cuidados antes e 28 durante e após o banho no leito. O banho foi realizado de forma automática sem comunicação prévia, sem considerar a individualidade e privacidade do paciente, principalmente naqueles submetidos a ventilação mecânica. Não houve participação do enfermeiro e a maioria das ações realizadas pela equipe de enfermagem não atendeu às recomendações da literatura. **Conclusões:** há necessidade de melhoria da qualidade do banho no leito realizado pela enfermagem e adoção de práticas baseadas em evidências no processo de cuidar.

Descritores: Banhos, Cuidados de Enfermagem, Cuidados Críticos, Unidade de Terapia Intensiva, Higiene Corporal.

RESUMEN

Objetivo: Evaluar el proceso de finalización del baño de la cama y los principales cuidados que proporciona el personal de enfermería antes, durante y después del baño en la cama. **Métodos:** Transversal, observacional realizado en la UCI de un hospital / escuela con ocho técnicos de enfermería. Para la recolección de datos se utilizó instrumento de tipo estructurado listas de control 30 veces observación de 1080 la acción. **Resultados:** en el 10 y 28 de atención médica antes durante y después del baño en la cama. El baño se llevó a cabo técnicamente sin previo aviso, sin tener en cuenta la individualidad y la privacidad de los pacientes, especialmente aquellos sometidos a ventilación mecánica. No hubo participación de las enfermeras y la mayoría de las acciones llevadas a cabo por el personal de enfermería no cumplía con las recomendaciones de la literatura. **Conclusiones:** Existe la necesidad de mejorar la calidad de baño de la cama llevada a cabo por la enfermería y la adopción de prácticas basadas en la evidencia en el proceso de atención.

Descriptores: Baño, Cuidados de Enfermería, Cuidados Intensivos, Unidad de Cuidados Intensivos, Higiene Pessoal.

INTRODUCTION

The degree of dependence for care related to personal hygiene is directly related to the severity of the patients.[1-4] In the Intensive Care Unit (ICU) individuals may present the deficit in self-care and need assistance from the nursing team for various activities due to physical or pathological restriction, and the bed-bath is an example.1 Patients with high dependence are often diagnosed by nurses with "Self-care deficit for bathing (00108)" and "Self-care deficit for intimate hygiene (00110)."[5]

Bed-Bath (BB) can be performed in a traditional way with soap and water or with disposable towels, the latter being more efficient and less harmful to the skin, from the perspective of professionals and patients, although both have similar costs.[6]

In addition to a nursing routine, BB is a therapeutic care, because it is associated with the best results of the patient during the hospitalization period, such as, facilitating the weaning process of mechanical ventilation.[7] Another positive aspect of this care is the greater approximation of the contact between the professional and the patient, besides being an opportune moment for the physical evaluation of the patient, due to the body surface exposure. The procedure allows the reduction of colonization by multiresistant microorganisms, and is useful to prevent and control infections.[8-10]

Nonetheless, the team does not seem to take advantage of BB, either because of overwork, because it is exhausting due to physical effort, structural and organizational problems of the unit, or simply because the BB is considered a minor care.[4,11] The BB accomplishment is associated with improvisation, lack of maintenance of patient's privacy, and generally low satisfaction for patients and nursing staff.[11-13] Loss of privacy is considered an additional condition of stress and suffering during hospitalization.[14]

The nurse plays a fundamental role in the conduct of this procedure, needs to be involved and demonstrate their availability in front of this care and not only value the execution of the technique. Patients should be advised by nurses before and during care, as bathing can cause anxiety.[15]

The proximity of the nurse can improve the quality of BB performed by the team members regarding technique and human interaction, since BB can be a difficult experience for the patient. It is necessary for the nurse to analyze the patient regarding the psychic and clinical conditions during the accomplishment of the BB by the nursing team.[15]

In Intensive Therapy as the BB is usually performed by the nurse technician, it is up to the nurse to supervise the nursing team during this care in order to evaluate when it will be appropriate to perform the BB, how many members are needed to perform this care and what are the essential materials to maintain the quality of care, aiming at the preservation of human integrity.[16] Given the aforementioned, this study aimed to assess the completion of the bed-bath procedure in the Intensive Care Unit, and also the main care provided by the nursing team before, during and after it.

METHODS

It is a cross-sectional and observational study that was carried out during May 2016 in the clinical ICU from a large teaching hospital, located in *Goiânia* city, *Goiás* State. The ICU is small, has five beds and one isolation room.

The ICU team consists of 19 nurse technicians, though 05 of them were on medical leave or vacations. In this ICU, most hospitalized patients are undergoing invasive mechanical ventilation, hemodynamically unstable and require high complexity care and require greater nursing team care time.

The sample was chose by convenience, non-probabilistic and consisted of 8 nurse technicians with duration of more than six months, who performed the BB during the period of data collection. The nurses were not included

because this care in this service is routinely performed by nurse technicians.

The responsible researcher addressed the participants individually and explained the objectives and method of data collection and then was invited to participate and signed the Free and Informed Consent Term prior to the observations initiation.

The characterization of the patients under the care of the nursing team during BB was not performed in this study. The focus of this study was the actions of the nursing team during the care procedure. In this service, there is no specific BB protocol performed in the ICU.

The unit organizes its baths in turns; four of them are performed by nurse technicians during the day and two at night. In the period in which the patient is not submitted to this procedure, the intimate hygiene and oral hygiene are performed. All observations were made during the daytime period. Often the baths were started simultaneously, which reduced the number of observations. The bath time was measured from its preparation to completion with a digital timer.

Data collection was performed through non-participant observation. There were 30 moments of observation of 1080 actions performed before, during and after the BB.

For data collection, a structured instrument with two parts was used. The first part contained data related to the sociodemographic characteristics of the professionals (age, sex, working time in the ICU, working time in the profession and professional training).

The second part consisted of 36 items, like checklists, describing the care taken before, during and after the BB:

Care taken before the procedure - Assessment of the patient's condition (level of consciousness, vital signs, pulse oximetry, use of sedative and/or vasoactive drugs, use of orotracheal tube or tracheostomy, invasive Mechanical Ventilation (MV) or non-invasive MV, need for airway aspiration, use of oxygen therapy under catheter or facial mask, in hemodialysis or peritoneal dialysis).

- Care taken prior to the procedure - organization of necessary materials (bath jar and basin, soapy or drying fabrics, patient protective sheet, mattress protector sheet, waterproof, hamper, screen, toothbrush, tongue cleaner, filtered water, chlorhexidine 0.12% or toothpaste, disposable mouth sucker, lip moisturizer, aspiration probe, liquid or bar soap, chlorhexidine 2%, shampoo, conditioner, comb/brush, shaver, body moisturizer, deodorant, nail clipper, disposable diapers, electrodes, adhesive tape, bag collector, tube fastener and probes), number of either nurse technicians or nurses to perform the BB, communication with the patient, preparation of the environment (picking up the Mayo table and the hamper, closing the windows), to maintain privacy (use of screens), hand hygiene and disinfection of surfaces, careful with water temperature and environment (there is no use of thermometer in the unit), use of Personal Protective Equipment (PPE), care to avoid micro and macropiracy bronchial and maintenance of respiratory comfort.

- Observed care during the procedure - eye, nose and oral hygiene, cephalocaudal technique, privacy protection, complete rinsing, skin drying and moisturizing, removal of excess feces and urine and exchange of gloves after intimate hygiene, inspection of skin and attachments, and assessment of pain.

- Observed care after the procedure (change of bed linen, concurrent disinfection of the mattress, exchange of anchorages, maintenance of the patient in an anatomical and comfortable position, hydration of the skin and lips).

The instrument was performed by the researchers based on evidence from the literature[1,4,14-15,17-20] and used after validation by three judges regarding clarity, objectivity, ease of reading and comprehension of the content. It was carried out a pilot test that consisted of five observations and allowed adjustments regarding non-pertinent items and inclusion of others. The data collected during the pilot test were not analyzed.

The collected data were entered in the program Statistical Package for Social Science (SPSS), version 11.5 for Windows and checked by two researchers and the descriptive analysis was carried out using measures of central tendency.

The study was approved by the Research Ethics Committee from the *Hospital das Clínicas of the Universidade Federal de Goiás (CEP/HC/UFG)*, under the Legal Opinion No. 1.523.207/2016. The participants were informed about the objectives and procedures of the study and were informed that they would be observed. The observations were only initiated after the registered consent through the signing of the Free and Informed Consent Term. All requirements were followed according to the Resolution No. 466/12, *Certificado de Apresentação para Apreciação Ética (CAAE)* [Certificate of Presentation for Ethical Appreciation] No. 52899316.6.0000.5078

RESULTS AND DISCUSSION

The participants had an average age of 48 years old, the standard deviation of 8.43. The majority was female (75%); average time of profession and working in the ICU from 14 to 19.8 years, respectively; 62.5% had a lato sensu postgraduate degree.

Ten care procedures were performed prior to the BB (**Table 1**), and 28 care procedures during and after bathing (**Table 2**) were evaluated. The average time spent from the preparation of the bath until its end was 48 minutes, being the shortest time of 27 minutes and the highest of 70 minutes.

Before the beginning of the bath, the nurse technicians evaluated the conditions of the patients and established the order of execution of the baths, the available materials and the temperature of the water to be used.

Communication to the patient before performing the procedure occurred in 56.7% of the cases (**Table 1**), but in an imperative way, without previous authorization in those patients who were oriented. In the intubated or tracheostomized patients in Mechanical Ventilation (MV) this communication did not occur.

The need for either upper or lower airway aspiration was performed by the nurse technicians prior to the bath, without the nurse's previous assessment (**Table 1**).

Table 1 - The care procedures performed by nurse technicians prior to the BB of patients hospitalized in the ICU from a teaching hospital. *Goiânia* city, *Goiás* State, Brazil, 2016 (n=30).

Care procedures	n	%
Gathered all necessary material	28	93.3
Picked up water close to the bath time	27	90.0
Assessed the conditions for initiating the bath	26	86.7
Performed lower airways aspiration when necessary	11	73.3
Closed windows and shut down the air conditioning	18	60.0
Performed upper airways aspiration when necessary	12	57.1
Communicated to the patient about the bath	17	56.7
Prepared the environment and kept the patient's privacy	07	23.3
Hygienized hands before the procedure	05	16.7
Performed the Mayo table disinfection	02	6.6

Aiming to maintain privacy, before the bath were used screens, and as support for sheets were used chairs but were not subjected to prior disinfection. In those patients who were in MV, there was less concern about privacy, and bathing was predominated by only one nurse technician. The control of the water temperature was done by the tact of the professional without the previous evaluation of the temperature by using a thermometer.

The care procedures provided by the nurse technicians during and after the bath are highlighted in **Table 2**.

Table 2 - The care procedures performed by nurse technicians during and after the BB of patients hospitalized in the ICU from a teaching hospital. *Goiânia* city, *Goiás* State, Brazil, 2016 (n=30).

Care procedures	n	%
Performed the bath alone	14	46.7
Performed the bath alone in patients under MV	05	23.8
Maintained high head until change of position	08	26.6
Performed oral hygiene	14	46.7
Performed hair care	06	20.0
Protected and kept protected the body parts that were not being manipulated	12	40.0
Dried ventral region after rinsing	26	86.6
Dried dorsal region after rinsing	23	76.6
Properly manipulated the mechanical fan circuits	11	36.7
Maintained patient in comfortable position	24	80.0
Hydrated the ventral region	11	36.7
Hydrated the lips	02	6.7
Exchanged probes and tubes	05	20.0
Disinfected the Mayo table after the bath ending	04	13.3

There were considered as correct manipulation of the MV circuits when they were not handled or handled properly in order to ensure that they were not contaminated during BB. The skin hydration was inadequate because in 36.7% of the time it was performed only in one part of the body (**Table 2**).

Regarding the participation of the patient during the bath, there was no previous evaluation about their capacity of aid; the decision was taken by the nurse technician, considering the availability or physical capacity of the professional himself to make such an effort.

Fifty percent of the time the nurse technician waited for the other colleague with the patient wet, so he could assist him.

Among the associated intercurrences, sudden turning (16.7%), traction of the central venous catheter (10%) and bladder catheter delay (6.7%) were identified, as well as a drop of the collection bag on the floor (3.3%). Disconnection of the ventilator circuit (3.3%) and of the urine collection bag (3.3%) with immediate urinary catheter reconnection (3.3%) were also observed, without communication to the nurse. In 6.7% of the time, the nurse technician visualized that the dressing with a central venous catheter was wet during the bath and communicated to the nurse who later changed it. In no case was the patient monitored during the bath.

Some actions are related to the prevention of infections; the head was kept elevated in 26.6% of the time and only once the head of the patient in MV was kept elevated until the moment of turning it. Measurement of the cuff pressure of the tracheal cannula before performing this care has not been performed.

Oral hygiene was performed in 46.7% of the time and occurred differently in several observations; toothpaste was frequently used (80%) and 0.1% (20%) was used when chlorhexidine was not available. The same water used in the bath, sterile distilled water, or saline solution, which was normally used for dressing or tracheal aspiration, was used to rinse the buccal cavity, especially in MV patients.

The total change of bed linen occurred 96.6% of the time and the sheets were stretched. In none of the observations were found concurrent disinfection of the mattress. The bath was carried out in the cephalopodal direction in 93.3% of the time. The total rinsing of the soap occurred 100% of the time, with preference for the use of only water (53.3%), water and wet compresses - mainly in face hygiene (36.6%), and 10% of the time used only wet compresses.

In 13.3% of the observations, the professionals used the complete Personal Protection Equipment (PPE); apron - 81% of the time; gloves - 100% of the time; mask - 80% of the time; cap - 60% of the time; goggles - 16.7%; exchange gloves to continue bathing after removal of excess stool and urine - 13.3% of the time.

It was observed in this study that there was no participation of the Nurse in the planning and execution of the bath in the bed. Participation in BB is an essential part of their work,[11] and contrasts with the implementation of Nursing Care Systematization (NCS), which directs care and ensures quality and safety in its execution.[21] This distance can be

caused, among other problems, by the nurse's work overload and her continued distancing from the practice of this care.

There was no concern of the nursing team prior to caring for those patients with impaired communication,[5] especially in those under MV, who even sedated the team need to recognize the importance of communication since BB is uncomfortable and generates anxiety in patients.[15]

The unsatisfactory communication evidenced with the patients can affect the patient-professional approach and generate patient dissatisfaction.[22] Orienting the patient in relation to the bed-bathing procedure prior to its completion is effective in reducing anxiety.[15] This fact reaffirms the predilection of nursing by biological care, ignoring needs related to human interaction during such care.[4,21]

The patient's privacy must be maintained, either with the protection of the environment (curtains, partitions, screens) or directly to him,[23] keeping discoveries only the manipulated part and also, prior guidance to the bath, to ensure a better quality of the procedure.[14] Professionals associate the organizational environment, the structure of the ICU and the way they deal with the protection of patients' privacy and report that the reduced level of awareness justifies the achievement of less protection of privacy,[23] which is reinforced by the fact that the bath in the bed increases in working hours.[11]

Professionals and patients in the ICU have different purposes and perspectives with regards to the care. Professionals feel empowered to manipulate the patient's body, perform care mechanically as a task and so patients feel their privacy invaded.[23] Respect for life, dignity and human rights in all its dimensions are part of the fundamental principles of the profession, article 19 of the nursing ethics code, emphasizes that the professional of the nursing team must "respect the modesty, privacy, and intimacy of the human being throughout his life cycle, including death and post-death."[24]

There is a lack of literature that addresses the issue of invasion of patient privacy. The Nursing profession often comes across this issue in their work routine, but there is little discussion about it. There is a feeling of depersonalization by the patients during their hospitalization, they lose their identity, intimacy, and privacy, but little question because they find it necessary for their recovery, a fact that does not exclude embarrassment and shame. Some attitudes on the part of the nursing team can minimize the embarrassment and stress of hospitalization such as respect for individuality, humility, tolerance, tranquility, and solidarity.[25]

Concerning the time spent by the professionals to carry out the bath in the bed, the data highlight even more the unconcern with the exposure of the patient. It is noteworthy that the literature indicates that a time greater than 20 minutes is a risk factor for oxihemodynamic repercussions.[19] However, in 50% BB was performed by only one professional, which may have influenced the time spent.

Regarding the absence of control of the water temperature and the environment and the prolonged exposure of the wet patient to the environment, it is necessary to remember that the temperature of the environment during bath in the bed influences positively or negatively in the clinical conditions of the patient, being evidenced the reduction of partial oxygen saturation (SpO_2) in proportion to the ambient temperature. To minimize and prevent complications, it is necessary to monitor the temperature and SpO_2.[20] Maintaining the water temperature at 40°C is a protective factor for the patient.[19]

The fact that patients are not monitored during bathing might mean that BB is a neglected care in research and nursing work routines.[19] If the BB can lead to oxihemodynamic changes, the evaluation of the parameters in the monitor is essential.[19-20]

It is also a key factor, before and after bathing, hand hygiene. It is less executed before the contact with the patient, in relation to the other moments where it is indicated, 11; 26-27 but when done before bathing, it can reduce Healthcare-Associated Infections (HAI).[28]

Furthermore, ICU surfaces, materials, and equipment are colonized by highly pathogenic microorganisms. The correct cleaning and disinfection of tables, screens, and chairs promote the control of microorganisms in the environment and, if they are associated to other measures such as hand hygiene, they can be effective in reducing HAI.[4,9,22,29]

The risk of device displacement and risk of infection was also verified. These risks may be associated mainly with work overload and the unavailability of technical staff to assist colleagues, being requested only for patient mobilization. The nurse's exemption from such care may compromise patient safety,[11] but nurses also face limitations in terms of infrastructure, human and material resources.

Moisturizing the skin has occurred partially, in only part of the body, the use of moisturizers after bathing avoids dryness of the skin.[12] Cutaneous hydration with oils such as essential fatty acids and olive oil are effective in preventing skin lesions by pressure, which is the most frequent health problem in ICU.[30-33]

Considering the susceptibility of critically ill patients to Ventilator-Associated Pneumonia (VAP), the lack of indicated behaviors for its prevention was alarming. In order to prevent VAP, care should be taken to keep the head elevated above 30°C; evaluate the cuff pressure; aspirate the subglottic secretions; perform oral hygiene with 0.12% chlorhexidine; such care reduces the risk of macro and microaspirations.[34-35]

The oral hygiene should not be underestimated, as was evidenced in the present study since it prevents VAP.[17-18,36-37] Oral rinsing performed with potentially contaminated and inadequate fluids such as distilled water already opened and saline droplets the mucosa. It is necessary to use a toothbrush, sterile water for oral rinsing and exclusive materials for this purpose,[38] the products used must be standardized in an institutional protocol, based on evidence.[17,39]

The use of PPE was low. Non-adherence to the use of standard precautions is directly related to the availability of appropriate materials, professional culture and organizational climate that favor this attitude, as well as its safety.[40]

CONCLUSIONS

Despite the BB being a nursing care commonly performed in the routine of intensive care, part of the actions were omitted by the nurse technicians. It must be stressed how important these actions are in patients with self-care deficits hospitalized in the ICU who require bed-bath. There is a need to improve the quality of the bath in the bed made by the nursing team and adoption of practices based on evidence in the care process.

The importance of the nurse's settlement with the team during this care is here emphasized. Furthemore, it is necessary to implement the care standardization in orde to improve the clinical practice.

The limitations of the study were the time of collection, the reduced number of observations and the lack of characterization of the patients, which made it impossible to associate care and severity of the patient.

Hence, it is suggested new studies aiming to evaluate the infrastructure, the nursing team dimensioning, the material resources and the patients's clinical data as factors that influence the BB.

REFERENCES

1. Gvozd R, Oliveira WTd, Jenal S, Vannuchi MTO, Haddad MdCL, Fortes FC. Grau de dependência de cuidado: pacientes internados em hospital de alta complexidade. Esc Anna Nery Rev Enferm. 2012; 16(4):775-80.
2. Inoue K, Matsuda L. Dimensionamento da equipe de enfermagem da UTI-adulto de um hospital ensino. Rev eletrônica enferm. 2009; 11(1):55-63.
3. Urbanetto JdS, Marco R, Carvalho SM, Creutzberg M, Oliveira KF, Magnago TBdS. Grau de dependência de idosos hospitalizados conforme o sistema de classificação de pacientes. Rev bras enferm. 2012; 65(6):950-4.
4. Fonseca EF, Penaforte MHdO, Martins MMFPdS. Hygiene care - bath: meanings and perspectives of nurses. Referência. 2015; Série IV(5):37-44.
5. North American Nursing Diagnosis Association -NANDA International. Diagnósticos de enfermagem da NANDA: definições e classificação 2015- 2017. Porto Alegre: Artmed; 2015.
6. Schoonhoven L, van Gaal BGI, Teerenstra S, Adang E, van der Vleuten C, van Achterberg T. Cost-consequence analysis of "washing without water" for nursing home residents: A cluster randomized trial. Int j nurs stud. 2015; 52(1):112-20.
7. Sereika SM, Tate JA, DiVirgilio-Thomas D, Hoffman LA, Swigart VA, Broyles L, et al. The association between bathing and weaning trial duration. Heart Lung. 2011; 40(1):41-8.
8. Sievert D, Armola R, Halm MA. Chlorhexidine gluconate bathing: does it decrease hospital-acquired infections? Am j crit care. 2011; 20(2):166-70.
9. Donskey CJ. Does improving surface cleaning and disinfection reduce health care-associated infections? Am j infect control. 2013; 41(5):12-9.
10. Viray MA, Morley JC, Coopersmith CM, Kollef MH, Fraser VJ, Warren DK. Daily Bathing with chlorhexidine-based soap and the prevention of Staphylococcus aureus transmission and infection. Infect control hosp epidemiol. 2014; 35(3):243-50.
11. Möller G, Magalhães AMM. Nursing staff workload and patient safety. Texto & contexto enferm. 2015; 24(4): 1044-52.
12. Chiang C, Eichenfield LF. Quantitative assessment of combination bathing and moisturizing regimens on skin hydration in atopic dermatitis. Pediatr dermatol. 2009; 26(3):273-8.
13. Maciel SSA, Bocchi SCM. Understanding the gap between practice and the technical-scientific evolution of the bed-bath. Rev Lat Am Enfermagem. 2006; 14(2):233-42.
14. Baggio MA, Pomatti DM, Bettinelli LA, Erdmann AL. Privacidade em unidades de terapia intensiva: direitos do paciente e implicações para a enfermagem. Rev bras enferm. 2011; 64(1):25-30.
15. Lopes JdL, Barbosa DA, Nogueira-Martins LA, Barros ALBLd. Orientação de enfermagem sobre o banho no leito para redução da ansiedade. Rev bras enferm. 2015; 68(3): 437-43.
16. Marins IF, Cruz ICFd. Patient safety in personal hygiene of ICU patients: systematic literature review for a clinical protocol. J spec nurs care. 2016; 8(1):1-1.
17. Atay S, Karabacak Ü. Oral care in patients on mechanical ventilation in intensive care unit: literature review. Int J Res Med Sci. 2014; 2(3): 822-9.
18. Cutler LR, Sluman P. Reducing ventilator associated pneumonia in adult patients through high standards of oral care: A historical control study. Intensive crit care nurs. 2014; 30(2):61-8.
19. Lima DVMd, Lacerda RA. Repercussões oxi-hemodinâmicas do banho no paciente em estado crítico adulto hospitalizado: revisão sistemática. Acta paul enferm. 2010; 23(2):278-85.
20. Oliveira APd, Lima DVMd, Lacerda RA, Nascimento MAdL. O banho do doente crítico: correlacionando temperatura ambiente e parâmetros oxihemodinâmicos. Referência. 2009; série II(1):61-8.
21. Freitas JSd, Silva AEBdC, Minamisava R, Bezerra ALQ, Sousa MRGd. Quality of nursing care and satisfaction of patients attended at a teaching hospital. Rev Lat Am Enfermagem. 2014; 22:454-60.
22. Moraes C, Ribeiro N, Costa D, Furlan V, Palos M, Vasconcelos L. Contaminação de equipamentos e superfícies de Unidades de Terapia Intensiva de uma maternidade pública por Staphylococcus coagulase negativa. Rev patol trop. 2013; 42(4): 387-94.
23. Bettinelli LA, Pomatti DM, Brock JB. Invasão da privacidade em pacientes de UTI: percepções de profissionais. Rev Bioethikos. 2010; 4(1): 44-50.
24. Conselho Federal de Enfermagem (COFEM). Resolução Nº 311 de 08 de janeiro de 2007. Revoga a resolução COFEN Nº 240/2000 e aprova a reformulação do código de ética dos profissionais de enfermagem. Rio de Janeiro: COFEN; 2007.
25. Pupulim J, Sawada N. O cuidado de enfermagem e a invasão da privacidade do doente: um questão ético-moral. Rev Lat Am Enfermagem. 2002; 10(3):433-8.
26. Souza LMd, Ramos MF, Becker ESdS, Meirelles LCdS, Monteiro SAO. Adesão dos profissionais de terapia intensiva aos cinco momentos da higienização das mãos. Rev gaúch enferm. 2015; 36(4): 21-8.
27. Salmon S, Pittet D, Sax H, McLaws ML. The 'My five moments for hand hygiene' concept for the overcrowded setting in resource-limited healthcare systems. J hosp infect. 2015; 91(2):95-9.
28. Kirkland KB, Homa KA, Lasky RA, Ptak JA, Taylor EA, Splaine ME. Impact of a hospital-wide hand hygiene initiative on healthcare-associated infections: results of an interrupted time series. Qual saf health care. 2012; 21(12):1019-26.
29. Cordeiro ALAO, Oliveira MMC, Fernandes JD, Barros CSMA, Castro LMC. Contaminação de equipamentos em unidade de terapia intensiva. Acta paul enferm. 2015; 28(2):160-5.
30. Campanili TCGF, Santos VLCDG, Strazzieri-Pulido KC, Thomaz PDBM, Nogueira PC. Incidência de úlceras por pressão em pacientes de unidade de terapia intensiva cardiopneumológica. Rev Esc Enferm USP. 2015; 49(Esp):7-14.
31. Rogenski NMB, Kurcgant P. Avaliação da concordância na aplicação da Escala de Braden interobservadores. Acta paul enferm. 2012; 25(1):24-28.
32. Díaz-Valenzuela A, Valle Cañete MJV, Carmona Fernández PJ, García-Fernández FP, Pancorbo-Hidalgo PL. Eficacia en la prevención de úlceras por presión del aceite de oliva virgen extra frente a los ácidos grasos hiperoxigenados: resultados intermedios de un estudio de no inferioridad. Gerokomos (Madr Ed impr). 2014; 25(2):74-80.
33. Medrano JCR, Rojas JG, Gómez MAG. Uso de ácidos grasos en la prevención de úlceras por presión y de extremidad inferior. Av enferm. 2015; 33(1):133-41.
34. Blot SI, Poelaert J, Kollef M. How to avoid microaspiration? A key element for the prevention of ventilator-associated pneumonia in intubated ICU patients. BMC infect dis. 2014; 14(119):1-6.
35. Zolfaghari PS, Wyncoll DLA. The tracheal tube: gateway to ventilator-associated pneumonia. Crit care. 2011; 15(5):1-8.
36. Shi Z, Xie H, Wang P, Zhang Q, Wu Y, Chen E, et al. Oral hygiene care for critically ill patients to prevent ventilator-associated pneumonia. Cochrane Database Syst Rev. 2013; (8):1-125.
37. Gupta A, Gupta A, Singh TK, Saxsena A. Role of oral care to prevent VAP in mechanically ventilated Intensive Care Unit patients. Saudi J Anaesth. 2016; 10(1):95-7.

38. Par M, Badovinac A, Plancak D. Oral hygiene is an important factor for prevention of ventilator-associated pneumonia. Acta Clin Croat. 2014; 53(1):72-8.
39. Bagheri-Nesami M, Amiri-Abchuyeh M, Gholipour-Baradari A, Yazdani-Cherati J, Nikkhah A. Assessment of Critical Care Provider's Application of Preventive Measures for Ventilator-Associated Pneumonia in Intensive Care Units. J Clin Diagn Res. 2015; 9(8):5-8.
40. Quan M, Wang X, Wu H, Yuan X, Lei D, Jiang Z, et al. Influencing factors on use of standard precautions against occupational exposures to blood and body fluids among nurses in China. Int j clin exp med. 2015; 8(12):22450-9.

Received on: 07/08/2017
Required Reviews: None
Approved on: 11/03/2017
Published on: 04/02/2019

***Corresponding Author:**
Kaiomakx Renato Assunção Ribeiro
Rua 03 Norte, lote 04
Águas Claras, Brasília, Brasil
E-mail address: kaiomakxribeiro@hotmail.com
Telephone number: +55 62 9 9320-5105
Zip Code: 71.928-720

The authors claim to have no conflict of interest.