

NURSES' KNOWLEDGE ABOUT HEALTH PROMOTION IN THE INTENSIVE THERAPY UNIT

Conhecimento de enfermeiros sobre promoção da saúde na unidade de terapia intensiva

Conocimiento de los enfermeros sobre promoción de la salud en unidad de cuidados intensivos

Juliana Macêdo Magalhães¹, Laudiane Fernandes de Mesquita², Ana Carolina Vasconcelos Carvalho³, Delmo de Carvalho Alencar⁴, Larissa Vanessa Machado Viana⁵, Cynthia Maria Santiago Ribeiro⁶

How to cite this article:

Magalhães JM, Mesquita LF, Carvalho ACV, Alencar DC, Viana LVM, Ribeiro CMS. Nurses' knowledge about health promotion in the intensive therapy unit. 2020 jan/dez; 12:999-1003. DOI: <http://dx.doi.org/0.9789/2175-5361.rpcfo.v12.7196>.

ABSTRACT

Objective: To evaluate the knowledge of intensive care nurses on health promotion in the Intensive Care Unit.

Methods: This is a descriptive, exploratory, retrospective study with a quantitative approach performed at a teaching hospital located in the city of Teresina-PI. The data collection took place from January to February 2015. Data analysis was performed using Microsoft Office Excel 2007 software to obtain frequency, average and percentage. **Results:** There is still much to be done in order to achieve the development of health promotion in the hospital context, particularly in the context of the Intensive Care Unit, mainly because the health practices instituted in client care are hegemonically focused on the physical aspects of the disease and is not unanimously adopted by nurses. **Conclusion:** Nurses understood the importance of health promotion to avoid complications in the health status of the clients they attend.

Descriptors: Health promotion; Intensive care units; Nursing care.

RESUMO

Objetivo: Avaliar os conhecimentos de enfermeiros intensivistas sobre a promoção da saúde em Unidade de Terapia Intensiva. **Métodos:** Estudo descritivo, exploratório, retrospectivo, com abordagem quantitativa, realizado em um Hospital de ensino localizado na cidade de Teresina-PI. A coleta de dados ocorreu no período de janeiro a fevereiro de 2015. A análise dos dados ocorreu por meio do software *Microsoft Office Excel 2007* para a obtenção de frequência, média e percentual. **Resultados:** Ainda há muito a avançar para alcançar

- 1 Nursing Graduate, PhD Student in Biomedical Engineering by the *Universidade do Vale do Paraíba (UNIVAP)*, Professor at *Centro Universitário UNINOVAFAP*. E-mail: julianamdem@hotmail.com
- 2 Nursing Graduate. E-mail: laudianemesquita@outlook.com.br
- 3 Nursing Graduate. E-mail: sistercarolin@hotmail.com
- 4 Nursing Graduate, PhD Student in Public Health by the *Fundação Oswaldo Cruz (FIOCRUZ)*. E-mail: delmo-carvalho@hotmail.com
- 5 Nursing Graduate, MSc in Biomedical Engineering by the *UNIVAP*. E-mail: laris_machado@hotmail.com
- 6 Nursing Graduate, Specialist's Degree on Health Regulation in the Brazilian United Health System by the *Sírio Libanês Hospital*. E-mail: cynthiafnt@hotmail.com

o desenvolvimento da promoção da saúde no contexto hospitalar, particularmente, no contexto da Unidade de Terapia Intensiva, sobretudo, porque as práticas de saúde instituídas no cuidado ao cliente são centradas hegemonicamente nos aspectos físicos da doença e não é adotada de forma unânime pelos enfermeiros. **Conclusão:** Os enfermeiros entenderam a importância da promoção da saúde para evitar complicações no estado de saúde dos clientes que assistem.

Descritores: Promoção da saúde; Unidades de terapia intensiva; Cuidados de enfermagem.

RESUMEN

Objetivo: Evaluar los conocimientos de enfermeros intensivistas en la promoción de la salud en Unidad de Terapia Intensiva. **Métodos:** Estudio descriptivo, exploratorio, retrospectivo, con abordaje cuantitativo, realizado en un Hospital de enseñanza ubicado en la ciudad de Teresina-PI. La recolección de datos ocurrió en el período de enero a febrero de 2015. El análisis de los datos ocurrió a través del software Microsoft Office Excel 2007 para la obtención de frecuencia, media y porcentual. **Resultados:** Todavía hay mucho que avanzar para alcanzar el desarrollo de la promoción de la salud en el contexto hospitalario, particularmente, en el contexto de la Unidad de Terapia Intensiva, sobre todo, porque las prácticas de salud instituídas en el cuidado al cliente se centran hegemonicamente en los aspectos físicos de la enfermedad y no es adoptada de forma unânime por los enfermeros. **Conclusión:** Los enfermeros entendieron la importancia de la promoción de la salud para evitar complicaciones en el estado de salud de los clientes que asisten.

Descriptores: Promoción de la salud; Unidades de cuidados intensivos; Cuidado de enfermería.

INTRODUCTION

The Intensive Care Unit (ICU) aims to treat and assist critically ill and at-risk patients who require continuous medical and nursing care, in addition to having specialized equipment and human resources.¹

The ICU is the hospital sector that most generates emotional and psychological disorders in patients, families, and professionals. The disease for the patient in the ICU remains present and, the struggle for life, leads to an intense and exhausting process, both for the patient and their families, as well as for the professionals who work there. The nursing team stands out for being present, due to the large dimension and complexity of care required in this framework.^{2,3}

Ideas on health promotion were introduced in Brazil in the mid-1980s, when the Health Reform was debated. Furthermore, it also influenced some movements such as the VIII National Health Conference; the Brazilian Constitution of 1988; and the creation of the *Sistema Único de Saúde (SUS)* [Brazilian Unified Health System]. Nowadays, it also contributes to (re)structuring the Family Health Strategy, where its bases represent the ideal of the health promotion practices.⁴

Therefore, the health promotion practices are inserted in the perspective of a care model that seeks the quality of life of the populations, leading to the need for actions aimed at the different areas of health care, including those developed within hospital institutions.

Nevertheless, it is common to associate health promotion strategies with the context of public health, because at this level

of care, these activities are more evident, especially because the main focus is the family, or the individual inserted in the environment where they live. In the hospital environment, where the nurses' care is more directed to the curative or preventive aspect of the disease, health promotion actions often become limited or little valued. Inserted in this theme, there is a scarcity of research on how the health promotion practices could be successfully incorporated into the performance of nursing, and how nurses perceive their role.⁵

The hospital, as part of health services, must be an institution committed to the planning of assistance for health promotion to occur. However, the practice within these institutions needs to be rethought, due to their complex organizational structure, both with regard to the roles of professionals, the division of labor, the hierarchy, and concerning the rules that govern them.

Considering this background, working on Health Promotion in the ICU is of prominent importance. Promoting health goes beyond the absence of disease, it must be understood as a transversal, multi and interdisciplinary strategy. Given this conception, it cannot be limited to issues related to the prevention, treatment and cure of diseases.^{5,6}

Regarding the ICU, the nurse's role consists of investigating the patient's history, taking a physical exam, performing treatment, counseling and teaching health maintenance, guiding the patients to continue treatment and measures, and should take care of the individual in different situations. criticisms within the ICU, in an integrated and continuous way with the team members.^{1,2}

Given the aspects inherent to the ICU framework, they can contribute towards health promotion practices in the care of the patient assisted in this unit, becoming little valued, disconnected from professional practice or even implicit in the act of caring, passing, and sometimes unnoticed. Based on this, the study aims to contribute to reflection and the formation of a professional practice aimed at promoting health in its broadest sense.

Bearing in mind the aforementioned, the following question was raised as a guiding question: Do nurses act intending to provide health promotion practices in the Intensive Care Unit? To answer such question, the objective was outlined: to assess the knowledge of intensive care nurses concerning the health promotion practices in the Intensive Care Unit.

METHODS

It is a descriptive, exploratory, and retrospective research with a quantitative approach, which was performed in three Intensive Care Units from a teaching hospital located in Teresina city, Piauí State, Brazil. In the three units mentioned, 19 nurses work in the day and/or night shifts.

The study population consisted of all nurses (n=19) who work in Intensive Care Units from that hospital and who freely accepted to participate with authorization and signature of the Informed Consent Form. Exclusion criteria for the study were nurses who were on leave of absence from work or during the data collection period.

To collect the data, a questionnaire with questions directed to the professional nurse was used. Nurses were personally invited to participate in the study. On this occasion, the objective and methodology of the study were presented with the clarification of doubts, and a date was agreed for the application of the instrument, according to the availability of each professional.

In order to maintain the interviewees' individuality and the confidentiality of the information provided, the questionnaire was applied in a private room, with good lighting. The data collection instruments were applied with an average duration of 15 minutes.

Data collection took place from January to February 2015. A pilot study was carried out for refinement, understanding test of the questions and the final questionnaire, therefore, changing the instrument was not needed.

The organization and analysis of the data by quantitative nature had its results grouped and organized using Microsoft Office Excel 2007 software to obtain frequency, average, and percentage. Thus, the results were described containing information about the participants' sociodemographic profile and distributed in a table containing information about the knowledge of the intensive care nurse regarding the health promotion practices in the ICU.

The study was approved by the Research Ethics Committee from the *Universidade Paulista (UNIP)* under the Legal Opinion No. 899,211 on December 4th, 2014. The study followed the ethical precepts of the Resolution No. 466/2012 from the National Health Council, then meeting all national and international standards of ethics in research involving human beings.

RESULTS

Considering the 19 participating nurses, 17 (89.0%) were female and two (11.0%) male.

Regarding the higher degree of these professionals, 10.0% held only graduation degree, 80.0% held at least one graduate degree, 5.0% held one residency and 5.0% held one master's degree.

The participants' professional practice time ranged from six months to twenty-five years (average of five years). Regarding the age, the general average was approximately 29 years old. At the time of the survey, 10 interviewed professionals were married, six were single, only one was in a common-law marriage and two did not report it.

Participants were asked about taking care to avoid complications in the health status of the patient admitted to the ICU, whether they considered it important to avoid complications in these patients, difficulties in carrying out promotion activities, whether there was work overload that made these activities impossible, and if there was encouragement on the part of the team to provide patient care to promote health.

It was found that 19 (100.0%) of nurses performed care in order to avoid complications in the health status of ICU patients; 19 (100.0%) considered that health promotion care leads to improvements in the patient's health; 19 (100.0%)

reported the existence of encouragement by team members to promote health to patients. They also pointed out that there were no difficulties in carrying out health promotion activities, as well as stressing the non-overload of work that made it impossible to carry out health promotion care in the ICU context.

The health promotion actions carried out by nurses in patient care in the Intensive Care Unit are diverse and focused on the care indicated in the most recent studies on health promotion, thus raising the frequency of the following care, as shown in **Table 1**: decubitus position change (18), medication check before administration (7), talking to patients during procedures even if they do not demonstrate to understand (4), quiet environment (11) and oral health care (18).

Table 1 - Health promotion care performed at an Intensive Care Unit by the study's participating nurses.

Activity	Yes n(%)	No n(%)	95% Confidence Interval
Decubitus position change	18(94.7)	1(5.3)	0.90-1.00
Medication check before administration	7(36.8)	12(63.2)	0.14-0.60
Talking to patients during procedures even if they don't seem to understand	4(21.1)	15(78.9)	0.05-0.37
Quiet environment	11(57.9)	8(42.1)	0.34-0.82
Oral health care	18(94.7)	1(5.3)	0.90-1.00

Source: Direct research.

DISCUSSION

Herein, it was found that nurses provide health promotion practices towards patients admitted to an intensive care unit because they consider it important. Among the nurses participating in the research, all responded to develop some health promotion strategy and believe that they imply an improvement in the patient's health.

The broader concept of the individual's health cannot be limited to issues related to the prevention, treatment, and cure of diseases. It covers all actions directed to the care itself, regardless of the environment where this care is performed.⁶

In the ICU, the health care focused on the diseases' physical aspects predominates, such as controlling and maintenance of vital functions. Nonetheless, it is also essential that the nurse's role in the ICU transcends the performance of therapeutic procedures and the care of physical signs and symptoms presented by the patient. It is essential to identify broader problems, assist the individual to the fullest, with a view to meeting the demonstrated needs, evaluating the assistance provided and ensuring the effectiveness of his recovery.^{7,8}

The nurses stated that they did not have difficulty in carrying out health promotion activities, as well as there is no work overload that makes it impossible to carry out this

care. All nurses affirm the existence of encouragement by team members to carry out health promotion to patients. According to the literature, this is common, since the Intensive Care Units represent places that have the purpose of treating patients considered to be serious and of high risk, and must have material and human resources that allow constant surveillance, fast and effective care, based on the common objective which is the recovery of individuals.^{9,10}

The importance of teamwork of both nursing and healthcare professionals, who work in the ICU, is essential for the effective quality of care for patients and their families. Workers are used to daily facing the various difficulties related to the technical complexity of the assistance to be provided, to the demands and demands of patients, family members, often doctors, the institution, among others.^{11,12}

Aiming not to turn work into a mechanized and inhumane a process, which leads to a low quality of care, it is necessary to equipping professionals to deal with everyday situations, receiving psychological help and learning to manage feelings experienced in care practice.^{11,12}

Considering this framework, it is essential that the team is encouraged and valued as biopsychosocial beings, because when they feel more respected, valued and motivated as people and professionals, they can establish healthier interpersonal relationships with patients, family members and the multidisciplinary team.^{11,13}

During hospitalization, the safety of patients has received increasing attention from nurses in the search for assistance that ensures maximum quality and minimum risks for the patient. In this sense, with regard to medication administration, the occurrence of errors during any stage of this process is not only undesirable for achieving the quality of services, but also harmful to the patient, multidisciplinary team and hospital.¹⁴

Herein, it was noticed that 12 nurses, of the 19 interviewees, did not appoint the medication check before administration. The repercussions for patients are the most worrying, since they can aggravate their clinical conditions and cause temporary, permanent injuries and even death, thus reflecting in a health promotion measure the checking of medication in any health environment.¹⁵

Because of the severity and complexity that involves iatrogenic occurrences with the medications usually used, it appears that little is known about what nurses do in these situations, what they feel when they experience these events, and to what factors attribute such occurrences in the ICU. It is not even known how often these events are experienced in professional practice by intensive care nurses.¹⁵

Concerning the practice of talking to patients during procedures, even if they do not demonstrate understanding, it was a care that only four of the 19 interviewees have performed. Most patients are sedated, and consequently with their level of consciousness altered, so, communication is difficult. The mechanization of technical procedures, the lack of dialogue and the absence of empathy often happen because the patient is unconscious.¹⁶

Taking into consideration the quiet environment, most of the interviewees stated that it is a practice they perform.

The ICU environment has potentially harmful characteristics for both patients and family members and the team. This hostile environment can have short- and long-term consequences, such as stress, delirium, burnout, and post-traumatic stress syndrome. Among the main environmental components, noise is one of the most remarkable.¹⁷

The World Health Organization, in 2014, recognized that noise can damage the health of people exposed to it, such as disturbing work, rest, sleep, human communication, impairing hearing and causing psychological reactions, physiological and pathological in exposed individuals. Among various physiological damages, noise can cause cardiovascular disorders, reduced arterial oxygen saturation, hearing loss, increased gastric secretion, pituitary, and adrenal stimulation, altered physiological sleep, immunosuppression and reduced healing.¹⁷

Noise (from people and devices) is the most important factor to be controlled in an ICU, in order to promote patients' mental and physiological health. Given its technical construction specifications, the ICU has a restricted physical area, which allows the person interned to see or perceive everything around him. It is also noteworthy that the physical environment is considered to trigger psychological disorders, due to disorientation in time and space, plus sleep deprivation motivated by constant noise.¹⁸ Maintaining the ICU environment with the minimum possible noise is an extremely important measure. important for promoting health to patients undergoing treatment.

The care with oral health is another essential promotion measure, in the study, it was found that of the interviewees only one mentioned not doing it. The mouth undergoes continuous colonization with a vast microbiota, negligence with oral hygiene makes the biofilm (bacterial plaque) and the oropharynx a favorable reservoir of microorganisms, including those that do not belong to the oral flora, installing or aggravating infections at a distance. Patients hospitalized in the ICU should receive special and constant care in relation to the oral cavity. Care practices target to prevent the development of pathological conditions harmful to recovery and good prognosis.¹⁹

It is indispensable for every health professional to acquire knowledge about what it is, and how to promote health within the scope of the Intensive Care Unit. The practice of measures aimed at avoiding complications in the patient, under intensive care, can provide effective assistance.²⁰ Hence, it is essential to encourage nursing professionals to participate in activities that favor the acquisition of new knowledge, in order to improve and optimize this practice.

The study was limited by the sample size, which prevents the results generalization. The fact that this study reveals a locoregional reality, also suggests the necessity to investigate the theme in other scenarios.

CONCLUSIONS

The results showed that the participants understood the importance of health promotion practices meant to avoid complications in the health status of the clients they assist.

When analyzing the presence of difficulties such as, for instance, work overload that could make it impossible to carry out care for health promotion in the Intensive Care Unit framework, it was unanimous that there was no difficulty from this point of view. It was found that the team had team members themselves as a stimulus to health promotion practices.

The study also contributes to provoke reflections in nurses who work in ICUs, as well as in the managers of these services and future professionals regarding the implementation of skills to work in this sector, because for health services to promote health, multidisciplinary work is required and professionals understand and expand their vision of health promotion, including themselves as critical authors and participants in the process of building and reformulating this system.

REFERENCES

1. Sousa AFL, Oliveira LB, Guimaraes MSO, Batista OMA, Magalhães RLB, Neta FLA. Seroconversion to anti-hepatitis b vaccine in nurses of intensive care unit. *Rev Enferm UFPE on line* [Internet]. 2015 [acesso em 2016 ago 16]; 9(9):9994-9. Available at: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/8744/pdf_8957.
2. Santana RS, Brito BAM, Ferreira JLS, Sousa ÁFL, Cunha MB, Viana LVM. Influência do trabalho noturno na qualidade de vida da equipe de enfermagem da UTI. *R Interd* [Internet]. 2015 [acesso em 2016 aug 16]; 8(2):25-34. Available at: http://revistainterdisciplinar.uninovafapi.edu.br/index.php/revinter/article/view/699/pdf_208.
3. Fumis RRL, Ranzani OT, Martins PS, Schettino G. Emotional disorders in pairs of patients and their family members during and after ICU stay. *PloSone* [Internet]. 2015 [acesso em 2016 aug 16]; 10(1):e0115332. Available at: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0115332>.
4. Ministério da Saúde (BR). Secretaria de Políticas de Saúde. Projeto Promoção da Saúde. As cartas da Promoção da Saúde. Brasília: Ministério da Saúde; 2002.
5. Leal LA, Camelo SHH, Rocha FLR, Vegro TC, Santos, FC. A promoção da saúde da equipe de enfermagem no âmbito hospitalar. *Rev RENE*. 2015; 16(5):762-72.
6. Pereira FGF, Matias EO, Caetano JA, Lima FET. Segurança do paciente e promoção da saúde: uma reflexão emergente. *Rev baiana enferm*. 2015; 29(3):271-77.
7. Campbell, D. Spirituality, stress, and retention of nurses in critical care. *Dimens Crit Care Nurs*. 2013; 32(2):78-83.
8. Haraldsson L, Christensson L, Conlon L, Henricson M. The experiences of ICU patients during follow-up sessions – A qualitative study. *Intensive Crit Care Nurs*. 2015; 31(4):223-1.
9. Khalafi A, Elahi N, Ahmadi F. Holistic Care for Patients During Weaning from Mechanical Ventilation: A Qualitative Study. *Iran Red Crescent Med J* [Internet]. 2016 [acesso em 2017 jan 22]; 18(11):e33682. Available at: <file:///C:/Users/Usuario/Downloads/ircmj-18-11-33682.pdf>.
10. Ministério da Saúde (BR). Política Nacional de Promoção da saúde. Brasília (DF): Ministério da Saúde; 2002.
11. Farias FBB, Vidal LL, Farias RAR, Jesus ACP. Cuidado humanizado em UTI: desafios na visão dos profissionais de saúde. *J Res Fundam Care Online* [Internet]. 2013 [acesso em 2016 aug 16]; 5(4):635-42. Available at: http://www.seer.unirio.br/index.php/cuidadofundamental/article/view/2283/pdf_962.
12. Matlakala MC, Bezuidenhout MC, Botha AD. Challenges encountered by critical care unit managers in the large intensive care units. *Curationis*. 2014; 37(1):1-7.
13. Matlakala MC, Bezuidenhout MC, Botha ADH. Strategies to address management challenges in larger intensive care units. *J Nurs Manag*. 2015; 23(7):945-53.
14. Waring J, Currie G, Crompton A, Bishop S. An exploratory study of knowledge brokering in hospital settings: Facilitating knowledge sharing and learning for patient safety? *Soc Sci Med*. 2013; 98:79-86.
15. Magalhães AMM, Moura GMSS, Pasin SS, Funcke LB, Pardal BM, Kreling A. The medication process, workload and patient safety in inpatient units. *Rev Esc Enferm USP*. 2015; 49(spe):43-50.
16. Duarte ST, Matos M, Tozo TC, Toso LC, Tomiasi AA, Duarte PAD. Praticando o silêncio: intervenção educativa para a redução do ruído em Unidade de Terapia Intensiva. *Rev Bras Enferm*. 2012; 65(2):285-90.
17. Organização Mundial da Saúde. Ruído ocupacional e para comunidade. Luxemburgo: Biblioteca da Organização Mundial da Saúde; 2014.
18. Brown B, Rutherford P, Crawford P. The role of noise in clinical environments with particular reference to mental health care: A narrative review. *Int J Nurs Stud*. 2015; 52(9):1514-24.
19. Scannapieco FA, Shay K. Oral health disparities in older adults: Oral bacteria, inflammation, and aspiration pneumonia. *Dent Clin North Am*. 2014; 58(4):771-82.
20. Pereira PSL, Neto AMC, Moreira WC, Carvalho ARB, Frota BC, Lago EC. Repercussões fisiológicas a partir dos cuidados de enfermagem ao paciente em unidade de terapia intensiva. *Rev Prev Infec Saúde*. 2015; 1(3):55-66.

Received in: 12/02/2018

Required revisions: 20/08/2018

Approved in: 13/12/2018

Published in: 07/08/2020

Corresponding author

Delmo de Carvalho Alencar

Address: Rua Josias Antão de Carvalho, 103, Centro

Pio IX/PI, Brazil

Zip code: 64.660-000

Telephone number: +55 (89) 99984-8504

Email address: delmo-carvalho@hotmail.com

Disclosure: The authors claim to have no conflict of interest.