

## PATIENT SAFETY IN AN INTENSIVE CARE UNIT ACCORDING TO WANDA HORTA'S THEORY

Odisséia Fátima Perão<sup>1</sup>, Giseli Cristina Zandonadi<sup>2</sup>, Anita Hernández Rodríguez<sup>3</sup>, Moisés dos Santos Fontes<sup>4</sup>, Eliane Regina Pereira do Nascimento<sup>5</sup>, Evangelia Kotzias Atherino dos Santos<sup>5</sup>

**ABSTRACT:** The aim of this study was to reflect about patient safety in intensive care units in the light of Wanda Aguiar Horta's Theory of Basic Human Needs. The investigation used the 10-Step Booklet on Patient Safety and the psychobiological, psychosocial and psychospiritual dimensions of the theory. The choice of this theoretical framework can be explained by the fact that its elements provide meaning to nursing care in different contexts, such as the critical care environment. The research resulted in the design of a chart exhibiting the relation between the 10-Step Booklet on Patient Safety and Horta's Theory of Basic Human Needs. After a theoretical reflection, it was concluded that there is a connection between Horta's basic needs and the 10 steps, which implies that an appropriate implementation of this theory could support risk-free care.

**DESCRIPTORS:** Nursing theory; Patient safety; Intensive care unit; Nursing care.

### SEGURANÇA DO PACIENTE EM UNIDADE DE TERAPIA INTENSIVA DE ACORDO COM A TEORIA DE WANDA HORTA

**RESUMO:** Este artigo objetivou refletir sobre a segurança do paciente em Unidade de Terapia Intensiva associada à Teoria das Necessidades Humanas Básicas de Wanda de Aguiar Horta, realizado em dezembro de 2015. Utilizou-se para o estudo a Cartilha dos 10 Passos para a Segurança do Paciente e as dimensões psicobiológicas, psicossociais e psicoespirituais da teoria. A escolha da Teoria se justifica pelo fato de seus elementos darem sentido ao cuidado de enfermagem em diferentes contextos como no ambiente crítico de cuidado. Resultou na elaboração de um quadro contendo a relação da Cartilha 10 Passos para Segurança do Paciente com a Teoria das Necessidades Humanas Básicas de Wanda Horta. Após a reflexão teórica, concluiu-se que existe conexão entre as necessidades básicas de Wanda Horta com os 10 Passos para a Segurança do Paciente, o que nos leva a inferir que a implementação adequada desta teoria sustenta um cuidado livre de riscos.

**DESCRIPTORES:** Teoria de enfermagem; Segurança do paciente; Unidade de Terapia Intensiva; Assistência de enfermagem.

### SEGURIDAD DEL PACIENTE EN UNIDAD DE TERAPIA INTENSIVA ACORDE CON LA TEORÍA DE WANDA HORTA

**RESUMEN:** Estudio objetivando reflexionar sobre seguridad del paciente en Unidad de Terapia Intensiva asociada a Teoría de las Necesidades Humanas Básicas de Wanda de Aguiar Horta, realizado en diciembre de 2015. Se utilizó Cartilla de los 10 Pasos para la Seguridad del Paciente y dimensiones psicobiológicas, psicossociales y psicoespirituales de la teoría. La elección de la Teoría se justifica en que sus elementos dan sentido al cuidado de enfermería en diferentes contextos, como en el ambiente crítico de cuidado. Resultó en la elaboración de un cuadro incluyendo la lista de la Cartilla 10 Pasos para Seguridad del Paciente con la Teoría de las Necesidades Humanas Básicas de Wanda Horta. Después de la reflexión teórica, se concluyó en que existe conexión entre las necesidades básicas de Wanda Horta y los 10 Pasos para la Seguridad del Paciente, infiriéndose que la implementación adecuada de esta teoría respalda un cuidado libre de riesgos.

**DESCRIPTORES:** Teoría de Enfermería; Seguridad del Paciente; Unidades de Cuidados Intensivos; Atención de Enfermería.

<sup>1</sup>Nurse. Doctoral student in Nursing. Nursing professor at University of Vale do Itajaí. Itajaí, SC, Brazil.

<sup>2</sup>Nurse. Specialist in Family Health Strategy, Occupational Health Nursing and Oncology Nursing in Network Systems. Occupational health nurse at Unimed Litoral. Balneário Camboriú, SC, Brazil.

<sup>3</sup>Nurse. Master of Nursing. Home care nurse. Florianópolis, SC, Brazil.

<sup>4</sup>Nurse. Specialist in Family Health Strategy and Nursing Pedagogical Action. Itajaí, SC, Brazil.

<sup>5</sup>Nurse. Ph.D. in Nursing. Nursing professor at Federal University of Santa Catarina. Florianópolis, SC, Brazil.

#### Corresponding author:

Odisséia Fátima Perão  
Universidade Federal de Santa Catarina  
Av. Mário Uriarte, 599 - 88310-697 - Itajaí, SC, Brasil  
E-mail: odisseiaperao@gmail.com

Received: 01/03/2016

Finalized: 30/06/2017

## ● INTRODUCTION

Intensive care units (ICUs) are places intended to assist critically ill and high-risk patients that need continuous medical and nursing care, specialized human resources, specific equipment and access to diagnostic technologies<sup>(1)</sup>.

This care must be free of adverse events. The World Health Organization (WHO) emphasizes that one in ten patients worldwide is a victim of avoidable mistakes and adverse events during care<sup>(2)</sup>.

This scenario rose the need to reflect upon patient safety having Wanda Horta's theoretical framework as a reference. This theory addresses basic human needs and its elements explain, support and provide meaning to the realities in the environment of healthcare institutions. The study was carried out in December 2015.

Horta classifies basic human needs in three main dimensions – psychobiological, psychosocial and psychospiritual – and establishes a relationship between the concepts of human being, environment and nursing<sup>(3)</sup>. The theory describes nursing as an element of a healthcare team and states that it can act efficiently through a scientific method. Horta named this method nursing processes, which can be defined as the dynamics of systematic and interrelated actions oriented to assist human beings. It is characterized by six phases: nursing history, nursing diagnosis, assistance plan, care plan or nursing prescription, evolution and prognosis<sup>(3)</sup>. It is possible to develop nursing care to provide patient safety through the application of these steps.

The concept of patient safety, according to a document issued by WHO in 2010, refers to reduction of risks of unnecessary harm related to health care to an acceptable minimum level. These unintentional harms are known as adverse effects and are consequences of the care given to patients; they are not associated with the natural evolution of the underlying disease and may cause measurable injuries, longer hospital stays or death in affected patients<sup>(4)</sup>.

According to the Patient Safety Project from the Regional Council of Nursing of the State of São Paulo (COREN-SP), human factors that contribute to mistakes have an institutional, environmental, knowledge/skill, psychological and physiological nature. The project describes the situations that affect the quality of nursing practice and patient safety: satisfaction with work, quantity of professionals in each category, teamwork, extended working hours, occupational injuries and violence against professionals<sup>(5)</sup>.

Patient safety is an ethical issue in nursing care; the role of nurses is to promote it by helping decrease the incidence of mistakes<sup>(5)</sup>.

The present study aimed at reflecting on the association of patient safety in intensive care units with Wanda de Aguiar Horta's Theory of Basic Human Needs.

## ● 10-STEP BOOKLET ON PATIENT SAFETY RELATED TO WANDA HORTA'S THEORY

The design of the present reflection study was based on the Theory of Basic Human Needs, described in the book *Processo de Enfermagem (Nursing Process)* by Wanda Horta, and the concepts of patient safety presented in a booklet written by COREN-SP, which adapted WHO's 10 Steps to Patient Safety to encompass the main points that have a direct impact on nursing care and that can be implemented in a variety of care environments<sup>(6)</sup>. The authors related the theory to the booklet to design Chart 1.

Chart 1 – Relationship of the 10-Step Booklet on Patient Safety to Wanda Horta's Theory of Basic Human Needs. Florianópolis, SC, Brazil, 2015

<b>Patient safety</b>	<b>Theory of Basic Human Needs</b>
Identification of the patient	<ul style="list-style-type: none"> <li>· Emotional safety</li> <li>· Communication</li> <li>· Self-image</li> <li>· Attention</li> </ul>
Clean and safe care – hand hygiene	<ul style="list-style-type: none"> <li>· Physical safety/environment</li> </ul>
Catheters and probes – correct connections	<ul style="list-style-type: none"> <li>· Oxygenation</li> <li>· Hydration</li> <li>· Feeding</li> <li>· Elimination</li> </ul>
Safe surgery	<ul style="list-style-type: none"> <li>· Physical safety/environment</li> <li>· Therapeutics</li> <li>· Health education/learning</li> <li>· Emotional safety</li> </ul>
Blood and blood components – safe administration	<ul style="list-style-type: none"> <li>· Vascular regulation</li> <li>· Therapeutics</li> <li>· Religiosity/spirituality</li> <li>· Freedom and participation</li> </ul>
Patients involved in their own safety	<ul style="list-style-type: none"> <li>· Perception of the sense organs</li> <li>· Physical activity</li> <li>· Body care</li> <li>· Communication</li> <li>· Emotional safety</li> <li>· Health education/learning</li> <li>· Freedom and participation</li> </ul>
Effective communication	<ul style="list-style-type: none"> <li>· Communication</li> <li>· Self-esteem, self-confidence, self-respect</li> <li>· Freedom and participation</li> </ul>
Fall prevention	<ul style="list-style-type: none"> <li>· Neurological regulation</li> <li>· Perception of the sense organs</li> <li>· Physical safety/environment</li> <li>· Space</li> </ul>
Pressure ulcer prevention	<ul style="list-style-type: none"> <li>· Hydration</li> <li>· Feeding</li> <li>· Physical integrity</li> <li>· Physical activity</li> <li>· Body care</li> <li>· Regulation: cell growth</li> </ul>
Safe use of technologies	<ul style="list-style-type: none"> <li>· Oxygenation</li> <li>· Space</li> <li>· Therapeutics</li> <li>· Physical safety/environment</li> </ul>

Identifying patients strengthens their identity; being called by their names provides emotional safety, improves communication and, most importantly, may prevent adverse events when the patients' identification is not correct. Patient identification must be included in bracelets, bed signs, medical records, labels, exam requests and involves the active participation of patients and their families during the confirmation of their identity<sup>(6)</sup>.

The correspondent item for clean, safe care and hand hygiene in Horta's theory is physical safety/environment, because the use of aseptic techniques in invasive procedures and hand hygiene can guarantee the control of infections and is universally known as a robust and essential basis for patient safety for being directly related to infections developed during hospital stay<sup>(7)</sup>.

Several models of catheters and probes are used for diagnostic and therapeutic purposes. The connections of these devices must be carefully observed after their use. To avoid contamination of intravenous catheters, it is indispensable to guarantee antisepsis during punctures and to pay attention during preparation and administration of medication; these practices help prevent infections.

COREN's booklet also addresses safe surgery. Patients need guiding on the procedures, emotional safety and the assurance that the environment is free of agents that may harm them physically, psychologically and morally. For these reasons, safe surgery was associated with emotional safety, physical safety/environment, therapeutics and health education/learning.

Nurses must know the consequences of administering blood and blood components in the body and pay attention to detect complications and reactions that may occur and confirm the correct identification of patients, which can prevent many incidents<sup>(8)</sup>. It is necessary to take into account the patients' autonomy and respect their decision regarding blood and blood components transfusion if their religion does not allow it. Science progress has provided a few therapeutic alternatives to blood transfusion, but in some cases it is indispensable.

It is fundamental that professionals are qualified to perform therapies other than blood transfusion. This guarantees a treatment free from the risks inherent to this practice and allows the implementation of therapeutic strategies based on the singular clinical condition of each patient<sup>(9)</sup>.

However, ICUs receive critically ill and high-risk patients, and it is important to encourage them, as far as possible, to perform body care and physical activities and to improve communication and the perception of sense organs. It is known that patients in the ICU communicate in several ways: some can talk, some express themselves through a look or a gesture. Nurses must pay attention to every sign given by patients, because this recognition can improve self-esteem, self-confidence and self-respect. This reality rises the need to adopt new strategies to refine the team's capacity to communicate. These strategies pose a challenge that demands changes in the patient safety culture and in health institutions<sup>(10)</sup>. Communication is a path to detect patients' and their families' needs, wishes and conflicts and helps demystify the ICU environment<sup>(11)</sup>.

Psychomotor agitation and neurological disorders can cause falls from the bed, defined as the unintentional displacement of the body to a level inferior to the one observed in the initial position, induced by multifactorial circumstances, resulting or not in harm<sup>(12)</sup>. Nursing professionals have the responsibility to assure patients a care free of imprudence, malpractice or negligence.

The type of the care delivered in ICUs favors the development of pressure ulcers in some patients. These are injuries on the skin or subjacent tissues provoked by pressure and friction<sup>(13)</sup>. Prophylaxis against these lesions includes stressing the importance of decubitus changes, proposing a diet rich in vitamins and proteins, encouraging hydration, observing the integrity of the skin, encouraging physical activity and executing body care by keeping patients clean and dry to stimulate cell growth.

The last step consisted of verifying safety in the use of technology. This safety variant was related to the need of oxygenation, considering that most patients in ICUs use mechanical ventilation. The nursing staff must be trained to handle respirators; this measure minimizes complications to patients. Equipment is part of an ICU, from a simple pulse oximeter to multiple-parameter monitors. The use of this apparatus is essential to treat patients, but it requires ability to handle and maintain and must be tested before use to avoid risks and damages to patients.

## ● FINAL CONSIDERATIONS

Relating safe care to a nursing theory reinforces the scientific nature of nursing as a profession. The design of the present comparative reflection relating the 10 Steps to Patient Safety to patients' basic psychobiological, psychosocial and psychospiritual needs allowed the verification of a connection between these needs and safe care to patients. The theoretical reflections discussed in the present study will contribute for the implementation of safe care supported by Wanda de Aguiar Horta's Theory of Basic Human Needs, which reveals an association with real care needs.

**● REFERENCES**

1. Ministério da Saúde (BR). Agência Nacional de Vigilância Sanitária. Resolução n. 7, de 24 de fevereiro de 2010. Dispõe sobre os requisitos mínimos para funcionamento de Unidades de Terapia Intensiva e dá outras providências. Diário Oficial da União, [Internet] 24 fev. 2010 [acesso em 19 jan 2016]. Disponível: [http://bvsms.saude.gov.br/bvs/saudelegis/anvisa/2010/res0007\\_24\\_02\\_2010.html](http://bvsms.saude.gov.br/bvs/saudelegis/anvisa/2010/res0007_24_02_2010.html).
2. Mendes W, Martins M, Rozenfeld S, Travassos C. The assessment of adverse events in hospitals in Brazil. *Int J Qual Health Care*. 2009;21(4):279-84.
3. Horta WA. *Processo de enfermagem*. 1ª ed. Rio de Janeiro: Guanabara Koogan; 2011.
4. World Alliance for Patient Safety Forward Programme 2008-2009. Geneva: World Health Organization; 2010.
5. Conselho Regional de Enfermagem do Estado de São Paulo. Seminário Paulista de Gestão SEPAGE/ 2011. Segurança do Paciente. Diferencial na imagem institucional. COREN/SP. [Internet] 2011 [acesso em 19 jan 2016]. Disponível: [http://www.coren-sp.gov.br/sites/default/files/3\\_sepaga\\_seguranca\\_paciente.pdf](http://www.coren-sp.gov.br/sites/default/files/3_sepaga_seguranca_paciente.pdf).
6. Avelar AFM, Salles CLS, Bohomol E, Feldman LM, Peterlini MAS, Harada MJCS, et al. Conselho Regional de Enfermagem do Estado de São Paulo; Rede Brasileira de Enfermagem e Segurança do Paciente. 10 Passos para a Segurança do Paciente. São Paulo: COREN/SP; 2010.
7. World Health Organization (WHO). Multimodal Hand Hygiene Improvement Strategy- patient. Guide to implementation. Geneva: WHO; 2004.
8. Hb Bolton-Maggs P. Blood transfusion safety: patients at risk from human errors. *Br J Hosp Med (Lond)*. 2013;74(10):544-5.
9. Pereira AL, Ribeiro MCP. Terapias alternativas às transfusões de sangue. *RUVRD*. 2014;12(2):566-79.
10. Nogueira JWS, Rodrigues MCS. Effective communication in teamwork in health: challenge for patient safety. *Cogitare Enferm*. [Internet] 2015;20(3) [acesso em 12 fev 2016]. Disponível: <http://dx.doi.org/10.5380/ce.v20i3.40016>.
11. Bordinhão RC, Almeida MA. Instrumento de coleta de dados para pacientes críticos fundamentado no modelo das necessidades humanas básicas de horta. *Rev. Gaúcha Enferm*. 2012;33(2):125-131.
12. Ministério da Saúde (BR). Programa Nacional de Segurança do Paciente: protocolo de prevenção de quedas. PROQUALIS. [Internet] 2013 [acesso em 19 jan 2016]. Disponível: [http://www.saude.mt.gov.br/upload/controle-infecoos/pasta12/protocolos\\_cp\\_n6\\_2013\\_prevencao.pdf](http://www.saude.mt.gov.br/upload/controle-infecoos/pasta12/protocolos_cp_n6_2013_prevencao.pdf).
13. Institute for Healthcare Improvement. How-to-Guide: Prevent Pressure Ulcers. [Internet] Cambridge (MA): Institute for Healthcare Improvement; 2011 [acesso em 20 dez 2015]. Disponível: <http://www.ihl.org/resources/Pages/Tools/HowtoGuidePreventPressureUlcers.aspx>.