Communication between the user critically ill adult and the nursing professional: an integrative review

Comunicación entre paciente adulto críticamente enfermo y el profesional de enfermería: una revisión integrativa

Comunicação entre paciente adulto crítico e enfermeiro: uma revisão integrativa

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Abstract: Introduction: The communication between nurse and user that is in critical units with vital commitment is limited by sedation, mechanical ventilation, and presence of endotracheal tube, interfering in the delivery of care. Aim: analyze in the published scientific literature how communication is carried out between nursing professionals and the critically ill adult patient. Methodology: Integrative review in various databases were made, 13 articles fulfill the inclusion criteria and were analyzed. As exclusive criteria articles developed in pediatric users and other hospitalization services were considered. Results: From the selected articles arose three topics: (a) Methods of communication critical user-nurse, (b) User’s perception of the communication nurse-user, (c) Limiting factors in the communication nurse-critical user. Conclusions: The assistance activities of the nursing in the units of critical care are centered almost entirely in the actions derived from the diagnostic and medical treatment, relegating the emotional aspects to the background. It exists a need of training in communication abilities to guarantee that every nurse working with users critically ill is able to establish an effective communication with the patient and his environment, because the nurses should be agents to potentiate changes and generate humanized care.

Keywords: health communication; nursing; critical care; patients.
Resumen: Introducción: La comunicación entre enfermero y paciente que se encuentra en unidades críticas con compromiso vital está limitada por la sedación, ventilación mecánica, y presencia de tubo endotraqueal, interferiendo en la entrega de cuidados. Objetivo: analizar en la literatura científica publicada cómo se efectúa la comunicación entre el paciente adulto críticamente enfermo y profesionales de enfermería. Metodología: Revisión integrativa de diversas bases de datos. En el análisis crítico, 13 artículos cumplieron los criterios de inclusión. Como criterio de exclusión se consideraron los artículos desarrollados en usuarios pediátricos y otros servicios de hospitalización. Resultados: de la revisión surgieron tres temáticas, a) Métodos de comunicación paciente crítico-enfermero b) Percepción del paciente sobre la comunicación enfermero-paciente c) Factores limitantes en la comunicación enfermero- paciente crítico. Conclusiones: Se concluye que las actividades asistenciales de enfermería en estas unidades se centran casi en su totalidad en acciones biomédicas, relegando a un segundo plano aspectos emocionales. Existe una necesidad de desarrollar habilidades de comunicación para garantizar que todo enfermero que trabaja con pacientes críticamente enfermos, sean capaces de generar una comunicación efectiva con el paciente y su entorno, actuando como agentes de cambio para fortalecer el cuidado de manera holística y humanizada.

Palabras claves: comunicación en salud, enfermería, cuidados críticos, pacientes.

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Introduction

The term communication comes from the Latin *comunicare*, which means to share. Communication is understood as the complex process that involves the exchange of information, data, ideas, opinions, experiences, attitudes and feelings between two or more people, playing an important role in the development of any human interaction. (1) For nurses, interaction is essential, and one of its essential tools is communication. (2) To achieve interaction, several types of communication are known; the most used is verbal communication, since it allows immediate feedback. However, it is also important that the communication not only consists of words or tone of voice, but also body language, known as nonverbal communication, which corresponds to approximately 70% of the language used; and it is there where the observation capacity of the nursing professional acquires a prominent role. It is made explicit that health care in critical units does not only consist of observing signs and symptoms caused by a given health alteration, but is also based on recognizing the response to the different actions performed by the health team, (3-4) by means of both verbal and nonverbal communication.

Thus, nurses working in such units face very difficult situations in their health care work, such as the delivery of care in patients whose life is at risk, contact with patients who died, and suffering of family members and loved ones of the patients admitted to an intensive care unit (ICU), among others. (5)

This highlights the importance of communication which improves the effectiveness and safety of health care, in which nursing professionals should communicate adequately, in order to assertively and safely work during their workday. (6) The nursing professional provides continuous care to patients and assists their needs of biological, technical, psychological, social and spiritual nature considering the needs of the patient and family. The complication that exists with critical patients is that, in most cases, they are with some degree of alteration of their state of consciousness, either pathophysiological or induced, so that their communication is limited, making the nurse-patient interaction difficult. (7)

For this reason, an integrative literature review was carried out with the purpose of analyzing how communication between critically ill adult patients and nursing professionals is carried out in the scientific literature that was reviewed.

Materials and Methods

An integrative review was conducted, using the structure proposed by Souza (2010), which proposes six phases: a) research question, b) literature search, c) information gathering, d) critical assessments, e) discussion of results, and f) presentation of the integrative review (8). The guiding question of this review was: How do critically ill patients communicate with nursing professionals for the delivery of care? This question emerged using an adaptation of the PICOT structure (9), which is explained in the table.
Table 1 – PICOT Structure

<table>
<thead>
<tr>
<th>P: Patient or Problem</th>
<th>Critically ill patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>I: Intervention</td>
<td>Communication</td>
</tr>
<tr>
<td>C: Comparison</td>
<td>Nursing professionals</td>
</tr>
<tr>
<td>OT: Outcomes (Results)</td>
<td>Care delivery</td>
</tr>
</tbody>
</table>

*Source: Own development*

The literature search was performed in several databases such as CINAHL complete and PubMed, using health sciences descriptors (DeCs): nurse communication, patients, critical care, ICU and intensive care, combining them with the help of the Boolean operators AND and OR. A total of 1724 publications were found. Subsequently, the following criteria were used to choose the proper publications that were published in recent years (2016-2019), of full-text articles written in English, Spanish, and Portuguese. After evaluating duplication of articles, those that met inclusion criteria were selected, namely, critically ill adult patient on mechanical ventilation, communication with the adult patient with altered level of consciousness, communication skills of the nursing professional and students; however, studies in pediatric population, non-critical patient-nurse communication, communication with other health professionals, communication, nurse and health team were excluded. For data collection, an instrument prepared by the authors of the document was used, which was comprised by 6 variables, described in Table 2. With the purpose of answering the guiding question of the review, 11 articles were selected and 2 were added by manual search, as shown in Figure 1. It should be noted that for the development of the three categories of arguments, a critical assessment of the evidence found was performed, according to Souza (2010), which is described in Table 3 and discussed in the discussion section of the results.
Figure 1 - 2016-2019 scientific literature review flowchart

Source: Adapted from PRISMA, 2009

Results

Of the total number of studies, 53.9% correspond to the quantitative approach (10, 13, 14-17, 21) and a 46.1% report using the qualitative approach (8-9, 11-12, 18, 22), which shows an homogeneous distribution in the research approach, reflecting levels, experiences, lived experiences, attitudes and needs of the patients and the nursing professionals from an integral point of view. Regarding the place where the studies were performed, 30.8% were conducted in Europe (9, 12-13, 15), the same percentage of the studies were conducted in North America (11, 12, 21, 22). Latin America is the only continent that does not report studies on this subject. Regarding the communication between the critically ill patient and the nursing professional, the following assessment of the research previously described in Table 2 is obtained, so it is possible to classify the communication between the nurse and the critically ill patient.
Table 2 - Articles selected for the assessment

<table>
<thead>
<tr>
<th>Code</th>
<th>Authors/ Country/Year</th>
<th>Objective</th>
<th>Method</th>
<th>Main results</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.1</td>
<td>Dithole K, et.al (10)</td>
<td>Describe the experience of nurses in a communication skills training intervention.</td>
<td>Qualitative Study</td>
<td>Nurse-patient communication is deficient during the critical period due to connection to mechanical ventilation (MV), and the therapeutic effort prioritizes saving life. The implementation of training in communication skills improves clinical performance and reduces the level of stress and anxiety of patients.</td>
</tr>
<tr>
<td></td>
<td>Botswana/2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.2</td>
<td>Schandl A, Falk AC, Frank C (11)</td>
<td>Explore the perceptions of nurses in intensive care about the involvement of critical patients.</td>
<td>Qualitative Study</td>
<td>Nurses indicated that communication with the patient in the ICU depends on their health condition and state of consciousness. They are classified into passive communication, unidirectional communication, and nurse-patient interaction. The nurse has a primordial role, communicating with the patient about his/her therapeutic plan, with the aim of involving him/her in his/her care, for greater satisfaction and better results.</td>
</tr>
<tr>
<td></td>
<td>Sweden/2017</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.3</td>
<td>Thakur P, Venkateshan M, Sharma R, Prakash K. (12)</td>
<td>Assess the level of communication between ICU nurses and patients with unstable level of consciousness.</td>
<td>Descriptive exploratory study with a quantitative approach</td>
<td>Nurses show no interest in communicating with critically ill patients with unstable state of consciousness, possibly due to lack of knowledge regarding nonverbal communication with this type of patient, the therapeutic approach and the life threatening situation of the patient. Therefore, it is necessary to create a communication protocol for patients.</td>
</tr>
<tr>
<td></td>
<td>India/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E.4</td>
<td>Dithole K, et. al (13)</td>
<td>Identify the communication challenges that exist between nurses and mechanically ventilated patients in intensive care units (ICUs).</td>
<td>Qualitative Study</td>
<td>There are problems in nurse-patient communication with MV. Nurses are aware of nonverbal communication methods, but lack the skills to apply them. Effective communication is important for conveying the psychological and physiological needs of patients and making an appropriate care plan. Training on applicable methods and developing a plan for effective communication interventions is needed.</td>
</tr>
<tr>
<td></td>
<td>South Africa/2016</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Cont. Table 2 - Articles selected for the assessment

<table>
<thead>
<tr>
<th>E.5</th>
<th>Tolotti A, et.al (14)</th>
<th>Italy/2018</th>
<th>Describe the experience and sources of comfort and discomfort in tracheotomy patients when communicating with nurses in the ICU.</th>
<th>Qualitative approach phenomenologic study</th>
<th>The experience is described as difficult, due to the lack of understanding of nurses when interacting with patients. This situation generates feelings of helplessness and frustration in patients and nurses. In addition, they verbalize feeling isolated and invisible when they are not informed of their health status, procedures, and incorporation in the treatment decision. Three sources of comfort are described: Presence of family members, the nursing call bell, and feeling comforted by the presence of the nurse.</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.6</td>
<td>Sánchez-Expósito J, et. al (15)</td>
<td>Spain/2018</td>
<td>Assess the communication skills of students enrolled in their final year of undergraduate nursing degree with simulated critically ill patients.</td>
<td>Cross-sectional quantitative approach</td>
<td>Students scored low on patient communication skills, providing evidence of a lack of skills when communicating with critically ill patients in simulated scenarios.</td>
</tr>
<tr>
<td>E.7</td>
<td>Langlume S, Labro G, Puyraveau M, Capellier G, Piton G.(16)</td>
<td>Australia/2017</td>
<td>Assess the ability of families of critically ill patients and the critical care team caring for the patient to accurately communicate and identify patient complaints.</td>
<td>Descriptive quantitative approach</td>
<td>The most frequent complaints are insomnia, inability to speak, and the presence of a tracheal tube, thirst and pain. The level of communication with the patient is evaluated as suboptimal, due to lack of time, workload, and lack of communication tools.</td>
</tr>
<tr>
<td>E.8</td>
<td>Van Mol MM, et. al (17)</td>
<td>Holand/2017</td>
<td>Assess the impact of supportive interventions perceived by ICU patients' family members and health care providers, such as deferred interviews.</td>
<td>Quantitative approach correlational study.</td>
<td>The results suggest that the additional support offered to patients and family members improved the perception of quality of care, particularly with respect to information needs. A change of mindset is needed to improve communication with the patient and gradually incorporate family members.</td>
</tr>
<tr>
<td>E.9</td>
<td>Dithole KS, et. al (18)</td>
<td>Africa/2016</td>
<td>Determine the existing knowledge and skills of intensive care nurses working with mechanically ventilated patients in Botswana.</td>
<td>Retrospective, exploratory-descriptive with a quantitative approach.</td>
<td>For the nurses, the communication with ventilated patients is difficult; there is a training need in this skill so that all nurses are able to communicate effectively.</td>
</tr>
</tbody>
</table>
### Cont. Table 2 - Articles selected for the assessment

| E.10 | Rodriguez C, Rowe M, Thomas L, Shuster J, Koeppel B, Cairns P. (19) United States/2016 | Determine the impact of technology-based communication intervention on patients’ perception of communication difficulties, satisfaction with communication methods, and frustration with communication. | Quasi-experimental study with a quantitative approach. | Compared to participants in the control group, participants in the intervention group reported lower levels of frustration and higher levels of satisfaction with the use of the communication intervention. Participants in the intervention group reported a steady increase in perceived ease of communication during the hospital stay. |
| E.11 | Clark K, Milner K, Beck M, Mason V. (20) United States/2016 | Implementing a sustainable measure for family satisfaction in a 12-bed medical and surgical intensive care unit. | Descriptive study with quantitative approach | Families reported that the nurses made them feel relaxed and provided understandable explanations. Inclusion of families in clinical discussions and timely information about changes in the patient's condition is the goal for quality improvement, thus, they will use a written communication system. |
| E.12 | Antonacci R, Fong A, Sumbly P, Wang Y.F, Maiden L, Doucette E, Gauthier M, Chevrier (21) Canada/2018 | Encourage nurses to reflect on how they communicate with patients in their current practice. | Qualitative approach study | This study concluded that communication plays a key role as it is highly interrelated with many other aspects of care. One of the main findings is that nurse-patient communication is inadequate in the critical care environment for a variety of reasons. |
| E.13 | Gropp M, Johnson E, Bornman J, Koul R. (22) United States/2019 | Determine the perspectives of the nurses regarding communication with critically ill patients and communication needs in critical care before and after a training session. | One-quasi-experimental group, pre- and post-test study. | The participants indicated that communication is essential in critical care, and that a communication panel can be used successfully. However, only limited success with the intervention was observed over time, possibly due to the brief training provided. Therefore, it is necessary that nurses and speech and language therapists work together to provide medical care to ICU patients through the implementation of innovative communication strategies. |

*Source: Own development*
Discussion

To facilitate the understanding of this section, we developed a table that makes visible the three argument categories (Table 3), which emerged from the critical assessment conducted by the authors of the document, according to Souza (2010).

<table>
<thead>
<tr>
<th>Critical patient-nurse communication category</th>
<th>Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical patient-nurse communication methods</td>
<td>E.1, E.4, E.5, E.8, E.10; E.13</td>
</tr>
<tr>
<td>Patient perception of nurse-patient communication</td>
<td>E.1, E.4, E.6, E.7, E.10, E.11</td>
</tr>
<tr>
<td>Limiting factors in nurse-critical patient communication</td>
<td>E.1, E.2, E.5, E.6, E.7, E.8, E.9, E.12</td>
</tr>
</tbody>
</table>

Source: Own development

Critically patient-nurse communication methods

As the first element of study in this category, we want to highlight the importance of communication between nursing professionals and the critically ill patient, who is unable to communicate verbally either because of his status of gravity, consciousness, sedation, endotracheal intubation, mechanical ventilation (10, 12-13, 23), or the use of physical restraint measures, for his safety and treatment. Thus, nonverbal communication is the communication methods most used by nursing professionals in these cases. Other articles report the importance of gaining the trust of the patient previous to the communication; then, as main nonverbal communication methods are indicated, namely, eye contact, gestures, sounds, interpretation of lip reading or touch, and verifying all patient responses (24-25), regarding the latter, studies show that some nurses are able to interpret vital signs, such as increased heart rate or blood pressure in response to verbal stimuli. (12-14)

Another important aspect that appears when analyzing the articles is how the need for communication changes when the patient is stabilized and comes out of life threatening status. At this moment, the ill person encounters barriers of communication, such as invasive devices, throat discomfort, fear, among others, and it is here when communication deficiencies become more critical. Most studies agree that there is a lack of tools, skills, and training opportunities for the personnel (8-10, 16, 22), which will make possible to identify the communication limitations and analyze the most efficient communication method for them in this stage of greater connection with the environment.
Studies not only focus on nonverbal communication, but some of them mention as communication tools or methods the use of chalkboards and alphabet charts (13, 22), nursing call bell and presence of family members. (14) However, these are pilot or individual evidences, and they are not standardized to be replicated in the different ICUs. Therefore, it is necessary to elaborate evidence-based practice guidelines, highlighting the importance of using tools for critical patient-nurse communication, which can be adapted to the local context, achieving greater adherence and acceptance with respect to the communication tools will be visible in clinical practice. (26)

It is indicated that by having nonverbal communication methods, nursing professionals develop more tools to be able to care for patients (19), establishing better communication and including the patient, empowering him/her in the decision making process and in the application of the therapeutic plan. (10)

**Patient perception of nurse-patient communication**

Patients in the ICU, due to their life threatening situation and pathology, often experience communication difficulties, which are generally associated with mechanical ventilation and the presence of the endotracheal tube, making them unable to speak (16), which is a major limitation when communicating, causing psychological problems such as anxiety, fear and depression. (10)

As for the patients' perception, they report feeling helpless and frustrated for not being able to use their voice; many stated having tried to shout to call the nursing professional, even though they knew they could not, which causes them feelings of frustration. The inability to speak was experienced as “not being able to do anything,” as if the absence of voice blocked other human actions of communication. This continuous frustration produces feelings of resignation, abandonment, invisibility (14), and anger in the patients. (15) Moreover, they express that the intention to make gestures, use eyes and head movements was often a complex consequence of reduced mobility, restraint and sedation. This inability to communicate, in turn, generates feelings of isolation in the patient. Among the potential factors of nurse-patient communication described here, the following are considered: The presence of a family member, the help of the family member who acts as an interpreter between the patient and the nursing professional, the presence of a hand-help bell and a nurse at the bedside. (15, 19-20)

**Limiting factors in nurse-critical patient communication**

The assessment of the articles found showed the lack of time generated by the workload, according to the nursing professionals (16, 21), associated to the limited participation of the patient in the ICU, due to his health condition, inability to speak, sedation, motor disability, among others (14, 16, 19), and the status of consciousness of the patient (10-11). In addition to this background, in all the contexts reviewed, the main concern for the nursing professional in these units is to maintain the patient's life, therefore, emphasizing clinical parameters and the manifestations of the patient, through hemodynamics, concentrating much of his time on actions resulting from the diagnosis and medical treatment (8), which postpone or minimize the communication with the patient.
Additionally, studies have suggested the need for regular training in communication skills for nurses in the ICU, establishing that patients who are seriously ill generally remember very clearly the communication with the nursing professional, even if they were unconscious most of the time. (11) The lack of communication and skills from the nurses to socialize with mechanically ventilated patients (10-12, 18) is often related to lack of knowledge. (15) In this regard, it is possible that nursing professionals have had little training in communication skills at undergraduate level, so it may be necessary to review the training curricula in Latin America, to develop these skills in future professionals, and, also, to prepare training programs to provide support to these professionals (13, 17-18), in addition to the implementation of workshops to improve these skills to apply the use of alternative communication devices and to promote nurse-patient communication and interaction. (10, 22)

Another limitation evidenced in the review is the inclusion of the family throughout the hospitalization process. Although this review is focused on communication between the nursing professional and the patient, the latter cannot be separated from his/her environment. (27) Just as the articles evidenced fear and anxiety, their family members or close acquaintances require contact with the patient's healthcare givers to inform about health care actions. Evidence indicates that the family is the best link for interpretation of the patient's needs, being an ally for a good nurse-critically ill patient communication. (14, 17)

**Conclusions**

This document allows us to conclude that at the Latin American level there is no published scientific evidence on the communication between nurse and critically ill adult patients, which opens a gap to be researched for this type of professionals. The barriers that exist in the Latin American population, population who has its own idiosyncrasy, are unknown; thus, it is necessary to make more research and publications on the subject.

Moreover, it is evident that nursing professionals in ICU focus almost entirely on actions resulting from the diagnosis and medical treatment, putting on a second plane the aspects of interrelation with the patient and his family. This highlights the importance of the need of training on communication skills to improve the nurse-patient relationship, strengthening the participation of the patient and family in making care decisions, allowing nursing professionals to be active agents of change within the ICU, therefore, enhancing a humanized health care.

Finally, nursing professionals should consider family members or the patient's environment in their health care scheduling, given their importance for the recovery and communication of the critically ill patient.

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References


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M. E-C. has contributed in a, b, c, d; P. B-D. in a, b, c, d; F.R-R. in d, e; P. C-V. in a, c, d, e.

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