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Review Article

Critical care

Communication difficulties and alternative ways for effective communication in the critically sick patient in ICU

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Inability to communicate can be a distressing problem for the patient who may be unable to speak because of the use of the paralyzing drugs or the endotracheal tube. Communication is the essence of human life. Communication difficulties in intensive care units (ICU) with critically ill patients have been well documented for more than three decades. Critical care nurses provide a high level of skilled nursing for total patient care and often facilitate communication between all of the people involved in the care of the patient. As part of any procedure, the nurse should explain what will happen to the patient when the patient cannot speak. The nurse should explore alternative methods of communication including the use of devices such as picture boards, note pads, magic slats, or computer keyboards when speaking with the patient. The nurse can assist the patients and family with their feeling of anxiety by encouraging them to express concerns, ask questions, and state their needs. **Methods:** For the present review article collected a database from studies that reported communication difficulties with patients admitted in intensive and critical care units because of mechanical ventilation, tracheostomy, paralyzing drugs or invasive procedures, and studies related to methods of improving communication strategies for the patient in the critical care unit. **Result:** Results suggests that most alternative methods of communication were effective in improving patient satisfaction, decreasing patient frustration and facilitating communication. This review article is aimed that critical care nurses assessing communication needs; identifying appropriate alternative communication strategies; create a customized care plan with the patient, the patient's family, and other health care team members. The present review article focuses on the importance of effective communication between critical care nurses and patients and between all of the people involved in the care of the patient.

Keywords: Critical care unit, Critical care nurse, Communication difficulties

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Introduction

Critical care is also known as intensive care is the multi-professional health care speciality that cares for patients with acute, life-threatening illnesses or injuries. The intensive care unit is a potentially hostile environment to the vulnerable critically ill patient. In addition to the physical stress of illness, pain, sedation, interventions, and mechanical ventilation, there are psychological and psychosocial stressors perceived by these patients. Other special problems for intensive care unit patients include anxiety, dependency, impaired communication sensory-perceptual problems, and sleep difficulties. Critical care is provided by a team of highly experienced and professional physicians, nurses, respiratory care technicians, pharmacists and other allied health professionals who use their unique expertise, ability to interpret important therapeutic information, access to highly sophisticated equipment and the service of support personnel to provide care that leads to the best outcome for the patients [1].

A patient is generally admitted to the critical care unit for one of three reasons. First, the patient may be physiologically unstable, requiring advanced and sophisticated clinical judgments by the nurse or physician. Second, the patient may be at risk for serious complications and require frequent and often invasive assessments. Third, the patient may require intensive and complicated nursing support related to the use of intravenous poly-pharmacy (e.g., neuromuscular blockade, sedation, thrombolytics, drugs requiring titration) and advanced biotechnology (e.g. mechanical ventilation, intracranial monitoring, continuous renal replacement therapy, hemodynamic monitoring). Nurses need to assess the severity of illness, patient's level of consciousness and degree of responsiveness, to assess communication needs; identify appropriate alternative communication strategies; create a customized care plan with the patient, the patient's family, and other team members [2].

Critical care nurses provide a high level of skilled nursing for total patient care and often facilitate communication between all of the people involved in the care of the patient. Their expertise and continuous presence allow early recognition of subtle, but significant,

Changes in patients' conditions, thereby preventing worsen conditions and minimizing complications that arise from critical illness. Because of their close contact with the family and patient, critical care nurse often serves as the patient's advocate and become integral to the decision-making process of the patient, family and critical care team. Communication is the essence of human life. Interacting with those who have conditions that impair communication requires special thought and sensitivity. Such patients benefit greatly when the nurses adapt communication techniques to suit their unique circumstances [2].

Communication between health care providers, patients and families has been identified as the most important and least accomplished factor in the quality of care in the intensive care unit (ICU). Effective communication for patients in the ICU improves clinical decision-making and contributes to patient and family satisfaction as well as their psychological well-being [3]. Good, effective communication among critically ill patients, their families, and providers are often challenging and complex. The concerns and dissatisfaction about poor communication with providers from patients facing a life-limiting illness and their families are well known. Often, patients cannot speak for themselves; thus, family members become the surrogate spokesperson for the critically ill patient [4].

Method

For this review article performed a systematic review through Pub med, Cochrane and Google scholar. Collected database from studies that reported communication difficulties with patients admitted in intensive and critical care units because of mechanical ventilation, tracheostomy, paralyzing drugs or invasive procedures, and studies related to methods of improving communication strategies for the patient in the critical care unit.

The rationale for writing a review: The intensive care unit is a potentially hostile environment to the vulnerable critically ill patient. A patient is generally admitted to the critical care unit for one of three reasons [1]. Inability to communicate can be a distressing problem for the patient who may be unable to speak because of the use of paralyzing drugs or the endotracheal tube [2]. Nurses are the key person between patients, patients' families

And health care providers, especially physicians. It is a major responsibility of the critical care nurse to communicate effectively. Their expertise and continuous presence allow early recognition of subtle, but significant, changes in patients' conditions, thereby preventing worsen conditions and minimizing complications that arise from critical illness. Effective communication enables critical care nurses to assess patients' priority needs, make a correct nursing diagnosis based on present complaints, plan interventions accordingly, implement care and finally evaluate the effectiveness of interventions. The present review article focuses on the importance of effective communication between critical care nurses and patients and between all of the people involved in the care of the patient.

Aims and Objectives

This review article is aimed that critical care nurses assessing communication needs; identifying appropriate alternative communication strategies; create a customized care plan with the patient, the patient's family, and other health care team members. Objectives are:

- Discuss communication difficulties in patients in the critical care unit.
- Explore different alternative methods of effective communication for patients in the critical care unit.

Communication difficulties in patients in the critical care unit: Mechanical ventilation is indicated for numerous clinical and physiological reasons. Ventilator-dependent patients in the ICU often experience difficulties with one of the most basic human functions, namely communication, due to intubation. Although various assistive communication tools exist, these are infrequently used in ICU patients [1].

Inability to communicate can be a distressing problem for the patient who may be unable to speak because of the use of the paralyzing drugs or the endotracheal tube. Communication difficulties in intensive care units (ICU) with critically ill patients have been well documented for more than three decades. The nurse should explain what will happen to the patient when the patient cannot speak. The nurse should explore alternative methods of communication including the use of devices such As picture boards, note pads, magic slats, or computer keyboards when speaking with the patient. Non-verbal communication is also important [2].

Communication difficulties are a source of great stress for mechanically ventilated patients, often leading to feelings of vulnerability and powerlessness. Every patient who has communication impairment is provided with a means to effectively communicate with their family and providers on their time, in their preferred language, demonstrating understanding, not withheld from resources that would allow this vision to be made possible. The nurse can assists the patients and family with their feeling of anxiety by encouraging them to express concerns, ask questions, and state their needs [5].

Communicating effectively with ventilator-dependent patients is essential so that various basic physiological and psychological needs can be conveyed and decisions, wishes, and desires about the plan of care and end-of-life decision making can be expressed. Numerous methods can be used to communicate, including gestures, head nods, mouthing of words, writing, use of letter/picture boards and common words or phrases tailored to meet individualized patients' needs. High-tech alternative communication devices are available for more complex cases. Various options for patients with a tracheostomy tube include partial or total cuff deflation and the use of a speaking valve. It is important for nurses to assess communication needs; identify appropriate alternative communication strategies; create a customized care plan with the patient, the patient's family, and other team members; ensure that the care plan is visible and accessible to all staff interacting with the patient, and continue to collaborate with colleagues from all disciplines to promote effective communication with non-vocal patients [6]. Patients in intensive care units are generally more conscious and alert when they are on mechanical ventilation than in previous because of the many potential benefits of being under less sedation. The endotracheal tube blocks the vocal cords when patients are on ventilation, thus making it impossible to speak. Many patients report that they struggle to make themselves understood [7].

The mechanically ventilated patient has more communication difficulties. Inability

To communicate can be a distressing problem for the patient who may be unable to speak because of the use of paralyzing drugs or an endotracheal tube. Nonverbal communication is important the ICU is characterized by high levels of procedure-related touch and decreased affection related or comfort-related touch patients have different levels of tolerance for being touched, possibly related to cultural background and personal history. It may be appropriate to provide comforting touch with ongoing evaluation of the patient response often the ICU nurse encourages the family to touch and talk with the patient. Nursing interventions include; developing open, trusting relationships with patients and relatives so that they feel free to ask questions and doubts, rearrange routine activities, assess the family's ability to grasp the information, repeat and reinforce the information, and interpret the medical and technical language, prepare the family for visiting and demonstrating their care and concern to the patient through verbal and nonverbal communication, assess the ability of the family to deal with the crisis and in assisting with a plan of care. As part of any procedure, the nurse should explain what will be happening to the patient when the patient cannot speak the nurse should explore alternative methods of communication including the use of devices such as picture boards, note pads magic slats, or computer keyboards when speaking with the patient the nurse should look directly at the patient and use hand gestures when appropriate [2].

Alternative methods of effective communication for patients in the critical care unit: Sten Hoorn, P. W. Elbers, A. R. Girbes & P. R. Tuinman, performed a systematic review. The search yielded 9883 publications, of which 31 articles, representing 29 different studies, fulfilled the inclusion criteria. Studies that reported a communication intervention with conscious nonverbal mechanically ventilated patients in the ICU aged 18 years or older were included. The overall methodological quality varied from poor to moderate. Identified four communication intervention types: (1) communication boards were studied in three studies—they improved communication and increased patient satisfaction, but they can be time-consuming and limit the ability to produce novel utterances; (2) two types of specialized talking tracheostomy tubes were assessed in eight studies—audible voicing Was achieved in the majority of patients (range 74–100 %), but more studies are needed to facilitate safe and effective use; (3) an electrolarynx improved communication in seven studies—its effectiveness was mainly demonstrated with tracheostomized patients; and (4) "high-tech" augmentative and alternative communication (AAC) devices in nine studies with diverse computerized AAC devices proved to be beneficial communication methods—two studies investigated multiple AAC interventions, and different control devices (e.g., touch-sensitive or eye/blink detection) can be used to ensure that physical limitations do not prevent use of the devices. Results suggest that most communication methods may be effective in improving patient–healthcare professional communication with mechanically ventilated patients [8].

Patak, L. et al. conducted a descriptive study on twenty-nine critically ill patients who were extubated within the past 72 hours. Subjects participated in a 20- to 60-minute audiotape interview consisting of questions about their perceived level of frustration when communicating with and without a communication board and their thoughts about the appropriate content and format of aboard. Transcripts were analyzed by questions for meaning and overall themes. Sixty-two percent (n = 18) of patients reported a high level of frustration in communicating their needs while receiving mechanical ventilation. Patients judged that their perceived level of frustration in communicating their needs would have been significantly lower (P < .001) if a communication board had been offered (29.8%) than if not (75.8%). Most patients (69%; n = 20) perceived that a communication board would have been helpful, and they also identified specific characteristics and content for a communication board. A communication board may be an effective intervention for decreasing patients' frustration and facilitating communication [9].

Helen Carruthers, Felicity Astin, Wendy Munro, assessed the effectiveness of Augmentative and Alternative Communication (AAC) strategies to enable people who are temporarily voiceless due to medical intervention, to communicate. Twelve studies met the inclusion criteria and were included in the review reporting outcomes from 1981 patients and 454 health professional participants. The qualities of included studies were moderate

To weak. AAC communication strategies increased the number of communication interactions, improved patient satisfaction with communication and reduced communication difficulties [10].

According to Reed, C., the role of education and innovative communication tools in improving non-verbal communication among nurses and patients. University of Texas Health science centre surveyed nurses and patients regarding methods used for communication. Pre-intervention assessments reported 60% of mechanical ventilation patients were extremely frustrated with their inability to communicate and 75% of nurses perceived their methods and resources to be inadequate. The post-intervention assessment reported 51% of patients preferred the EZ Board as their best method compared to other communication aids and basic methods, and 58% of nurses reported the EZ Board as the most beneficial method [11].

Mary Beth Happ, et al. conducted a descriptive observational study of the non-intervention/usual care cohort from a larger clinical trial of nurse-patient communication in a medical and a cardiothoracic surgical intensive care unit. Video-recorded interactions between 10 randomly selected nurses (5 per unit) and a convenience sample of 30 critically ill adults (15 per unit) who were awake, responsive, and unable to speak because of respiratory tract intubation were rated for frequency, success, quality, communication methods, and assistive communication techniques. Patients self-rated ease of communication. Nurses initiated most (86.2%) of the communication exchanges. The mean rate of completed communication exchange was 2.62 exchanges per minute. The most common positive nurse act was making eye contact with the patient. Although communication exchanges were generally (>70%) successful, more than one-third (37.7%) of communications about pain were unsuccessful. Patients rated 40% of the communication sessions with nurses as somewhat difficult to extremely difficult. Assistive communication strategies were uncommon, with little to no use of assistive communication materials (e.g., writing supplies, alphabet or word boards). Study results highlight specific areas for improvement in communication between nurses and nonspeaking patients in the intensive care unit, particularly in communication about pain and in the use of assistive communication strategies and communication Materials. In general, study results suggest that communication interactions between ICU patients and nurses are influenced by the patient's severity of illness, level of consciousness, and degree of responsiveness [12].

Kiran Bhardwaj, Mini George, conducted a study to evaluate the effectiveness of the Communication Board on Communication Difficulty among Mechanically Ventilated Patients in ICUs. This study adopted Quantitative Approach with a post-test only design and was conducted in three ICUs. 50 patients were selected and randomly allocated into two groups. A Communication Board was used on the Experiment group during their weaning period. For evaluating an effect of Communication Board on Communication Difficulty, Independent 't-test was computed and found significant (t= -27.855, p-value < 0.001), it means Experiment group of Mechanically Ventilated patients has significantly less Communication Difficulty than the Comparison group and finally concluded that the communication board is effective in reducing communication difficulties in mechanically ventilated patients [13].

Faruk Cicekci, et al. analyze the attitudes displayed by the relatives of patients and the physician to determine the communication between the two parties. Methods For data collection, two similar survey forms were created in the context of the study; one for the relatives of the patients and one for the ICU physicians. The questionnaire included three sub-dimensions: informing, empathy and trust. The study included 181 patient relatives and 103 ICU physicians from three different cities and six hospitals. Based on the results of the questionnaire, identification of the mutual expectations and substance of the messages involved in the communication process between the ICU patients' relatives and physicians was made. The gender and various disciplines of the physicians and the time of the conversation with the patients' relatives were found to affect the communication attitude towards the patient. Moreover, the age of the patient's relatives, the level of education, the physician's perception, and the contact frequency with the patient when he/she was healthy were also proven to have an impact on the communication attitude of the physician. This study demonstrates the mutual expectations and substance of messages in the informing, empathy and trust sub-dimensions of the communication process between patient relatives and physicians in the

ICU. The communication between patient relatives and physicians can be strengthened through a variety of training programs to improve communication skills [14].

According to Anna Holm, Pia Dreyer, due to mechanical ventilation, patients are unable to communicate verbally and may feel frustrated. Communication tools may help; however, they are not used systematically in clinical practice. Based on "complex interventions" and a qualitative approach, a communication tool was modified, tested, and evaluated in this study. The tools consisted of a tablet with communication software and a laminated "communication book" with an identical structure. Seven non-sedated, mechanically ventilated patients tested the tools and were observed in field studies. Findings show that challenges in using communication tools may be related to the patient, nurses, and/or technology. Patients may experience difficulties in using the tools, especially if they are extremely fatigued or have cognitive impairments and/or reduced muscle strength. Communication tools were not always necessary; however, some found them very helpful and the only way of conveying a message. Findings also show that the best way to facilitate communication is through a systematic communication strategy initiated by the nurse [15].

Discussion

Communication difficulties in intensive care units (ICU) with critically ill patients have been well documented for more than three decades. The present review article discussed the importance of communication between critical care nurses, patients and health care team members [3, 4]. Database regarding methods of effective communication, in which effectiveness of communication board reported in three studies [9, 11 and 13]. In one study, assess the effectiveness of Augmentative and Alternative Communication (AAC) strategies to enable temporarily voiceless people. AAC communication strategies increased the number of communication interactions, improved patient satisfaction with communication and reduced communication difficulties [10]. In one study of assistive communication techniques, study results highlight specific areas for improvement in communication between nurses and nonspeaking patients in the intensive care unit, particularly

In communication about pain and in the use of assistive communication strategies and communication materials [12]. In one study the tools consisted of a tablet with communication software and a laminated "communication book" with an identical structure. Findings also show that the best way to facilitate communication is through a systematic communication strategy initiated by the nurse [15].

Results

Based on the collected database regarding methods of effective communication, a result suggests that most alternative methods of communication were effective in improving patient satisfaction, decreasing patient's frustration and facilitating communication.

- Interacting with those who have conditions that impair communication requires special thought and sensitivity. Such patients benefit greatly when the nurses adapt communication techniques to suit their unique circumstances [2].
- Numerous methods can be used to communicate, including gestures, head nods, mouthing of words, writing, use of letter/picture boards and common words or phrases tailored to meet individualized patients' needs. High-tech alternative communication devices are available for more complex cases. Various options for patients with a tracheostomy tube include partial or total cuff deflation and the use of a speaking valve. Nurses need to assess communication needs and identify appropriate alternative communication strategies [6].
- Most communication methods may be effective in improving patient–healthcare professional communication with mechanically ventilated patients, but the study was limited to conscious nonverbal mechanically ventilated patients in the ICU aged 18 years or older [8].
- Patients rated 40% of the communication sessions with nurses as somewhat difficult to extremely difficult. Communication interactions between ICU patients and nurses are influenced by the patient's severity of illness, level of consciousness, and degree of responsiveness [12].
- Communication tool best

- way to facilitate communication. Patients may experience difficulties in using the tools, especially if they are extremely fatigued or have cognitive impairments and/or reduced muscle strength [15].

Summary: Present review article summarized under two main headings in terms of objectives of review article. First, studies related to communication difficulties in patients admitted to intensive and critical care units [2, 5, 6, and 7]. Second, studies related to methods of improving communication strategies for patients in critical care units [9, 10, 11, 12, 13 and 15].

Conclusion

Inability to communicate can be a distressing problem for the patient who may be unable to speak because of the use of the paralyzing drugs or the endotracheal tube. Communication difficulties in intensive care units with critically ill patients have been well documented for more than three decades. The nurse should explain what will happen to the patient when the patient cannot speak. The primary methods of communication used by nonspeaking intensive care unit patients were head nods, gestures, mouthing words, and, writing. The nurse should assess the severity of illness, patient's level of consciousness and degree of responsiveness and explore alternative methods of communication including the use of devices such as picture board, note pads, magic slats, or computer keyboards when speaking with the patient to reduce anxiety and frustration and improve patient satisfaction.

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