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THE UTILIZATION OF ALTERNATIVE THERAPIES IN PAIN CONTROL BY NURSES

Ghroop Yahia Ahmad Mobtti , Khalid Safaq Swait Alenezi , Layan Ayed Alamri , Khulood Eissa Aswani , Huda Misaeed Alrhaily , Khaled Matoog Algashmari , Emad Faisal Shabander , Qubyl Nasser Al-Saran ,Rasha Yati Othman Alkhaibari , Ageela Mohmed Mosa Safhi, Shagra Saeed Albashr , Salman Raja Al-Sahli, Halah Rashed Aldosari , Randa Najeeb Almasoud , Mohammed Yahya Abdullah Fagih , Fatimah Abdrabali Albahlool , Fullah Ahmed Alhamali

Abstract

Severe discomfort is regarded as one of the most distressing recollections among those who are really sick. Nevertheless, the pain experienced by these individuals is not well addressed owing to many obstacles that hinder the implementation of appropriate treatment. Hence, it is essential to tackle the perceived obstacles and enablers to pain assessment management among critical care nurses. The obstacles and facilitators were classified into four distinct categories: nurse-related, patient-related, physician-related, and system-related. The primary obstacles identified in this study were nurses' insufficient understanding of pain assessment tools, patients' inability to communicate, physicians' prescribing analgesics without considering pain scores, and the absence of standardized guidelines and protocols for pain evaluation and management. The most commonly reported facilitators for pain assessment and management include continuous education and professional training, patients' capacity to self-report pain, efficient collaboration between physicians and nurses, and meaningful discussion of patients' pain scores during nurse-to-nurse handovers. This study identified and investigated many obstacles and factors that either hinder or assist in the evaluation and treatment of pain. Nevertheless, further study is required to thoroughly explore these obstacles and enablers, as well as to scrutinize any other possible related aspects among critical care nurses. The results of our research should assist hospital administrators in creating ongoing education and professional development initiatives focused on evaluating and addressing pain in critically ill patients. Furthermore, our discoveries might be used to create a scientifically supported pain management approach that is customized to accurately evaluate and swiftly address pain in patients receiving critical care.

Keywords: critical care nurses, pain assessment, pain treatment, obstacles, facilitators, supporters, difficulties.

Introduction

Pain experienced by patients in the intensive care unit (ICU) is a distressing memory. According to Puntillo et al, more than half of ICU patients in 28 European countries and about 60% of ICU patients in the United States reported experiencing pain during their stay and even after discharge. Apart from various physiological sources of pain, routine nursing care procedures like position-changing and endotracheal suctioning contribute significantly to the pain experienced by ICU patients. Untreated pain in critical care patients has numerous negative effects, including serious physiological and psychological complications, as well as longer stays in the ICU. For instance, unrelieved pain can lead to hemodynamic instability, such as elevated blood pressure, rapid heart rate, increased breathing rate, and high blood sugar levels. Additional adverse physical effects include heightened catecholamine release, immunosuppression, urinary retention, and increased metabolic rate (2). Moreover, patients experiencing pain may also experience psychological and emotional distress due to their inadequate ability to effectively manage the pain. Consequently, patients' quality of life may be diminished. This may occur due to the presence of pain symptoms, which often hinder patients from performing certain work responsibilities and assignments, ultimately resulting in job loss. This could have various adverse effects on the psychological well-being of patients.

Additionally, unmitigated pain can also have a negative impact on patients' social interactions, as the deterioration in physical and mental functioning resulting from persistent pain significantly impairs social relationships and interactions. Consequently, pain diminishes individuals' quality of life and significantly deteriorates their mental and physical health. Hence, it is imperative to ensure that ICU patients receive proper pain assessment and management. Nevertheless, there exist various obstacles to achieving efficient evaluation and treatment of pain in intensive care unit (ICU) patients. One such obstacle is the fact that pain is a profoundly subjective sensation, but ICU patients' impaired level of consciousness and intubation restrict their capacity to communicate, thereby complicating the process of assessing and managing their pain.

Aside from obstacles related to patients, there are additional barriers associated with healthcare providers and systems that complicate the assessment and management of pain in adult critical care patients. Research has shown that nurses and physicians often possess limited knowledge, negative attitudes, and insufficient training when it comes to assessing and managing pain in these patients. Moreover, factors such as heavy workloads, high patient-provider ratios, tight work schedules, and the absence of standardized pain protocols in adult critical care units contribute to the problem of untreated pain.

Furthermore, there is still no agreement on the most efficient pain assessment techniques and pain treatment strategies for adult critical care patients. The American Society for Pain Management Nursing recommends relying on pain-related behaviors to evaluate and treat pain among intubated patients or patients with communication deficits. 4 Several nonverbal scales

have been approved as valid tools for pain assessment among adult critically ill patients, such as the Behavioral Pain Scale (BPS) and Critical-Care Pain Observation Tool (CPOT). 7

However, such tools have been limited by their low specificity and sensitivity for pain indicators, particularly in nonverbal patients, as well as nurses' misunderstanding, misinterpretation, and underestimation of pain behaviors and nurses' poor knowledge and attitudes related to the use of such tools. 7 Physiological measures, such as blood pressure, heart rate, and respiratory rate, are sometimes used as alternative pain indicators and can provide important clues for proper pain assessment. 8 However, the 2012 Society of Critical Care Medicine (SCCM) guidelines do not recommend the use of these measures alone for pain evaluation in critically ill adult patients; rather, these measures should be used in combination with the evaluation of behavioral indicators of pain. 2

1. Pain management

Pain management for critically ill adult patients in ICUs is divided into two categories: pharmacologic and non-pharmacologic treatments. The primary treatment for pain is the use of analgesics. However, it is important to note that analgesics can have numerous adverse effects, such as dizziness, physical dependence, vomiting, intolerance, respiratory depression, delayed extubation, induced bowel dysfunction, increased length of hospitalization and healthcare costs, and increased morbidity and mortality. According to Gaskin and Richard, the additional annual costs of pain management on the healthcare system in the US ranged from $261-$300 billion in 2010. Multiple nonpharmacological pain remedies are both cost-effective and devoid of harmful effects, while also being user-friendly. The Prevention and Management of Pain, Agitation/Sedation, Delirium, Immobility, and Sleep Disruption (PADIS) guidelines suggest using nonpharmacological approaches, like music therapy or calming voice and massaging, to address pain in critically ill adults. This can help reduce the negative effects of using pain-relieving medications repeatedly and for extended periods. (11)

Pain assessment and management in adult ICU patients has been the subject of research for more than 25 years. However, pain continues to be a significant global health issue and is often not adequately addressed in adult ICU patients. Regrettably, the pain experienced by these patients is frequently overlooked and not effectively treated due to various obstacles. Additionally, there is a substantial disparity between the results of previous research and the actual implementation of pain management strategies in clinical practice. Furthermore, the nursing literature lacks information on the obstacles and factors that aid in the evaluation and treatment of pain in adult critical care patients, as seen by nurses. Hence, it is necessary to condense and integrate the current body of research on pain evaluation and treatment in adult critical care patients in order to provide guidance for clinical practice and future investigations. This research seeks to determine the obstacles and factors that nurses see as hindrances or aids to the evaluation and treatment of pain in adult critical care patients.

2. Factors that assist patients in their healthcare journey

Although there have been several research studies investigating obstacles faced by patients in regards to pain evaluation and treatment, only eight of the articles evaluated specifically addressed these barriers from the viewpoint of critical care nurses. The primary obstacle commonly reported was the patients' incapacity to communicate 13, 18, 22. This was closely followed by hemodynamic instability 18, 29. Additionally, it was discovered that patients with a history of substance abuse, alcoholism, or suicidal attempts hindered proper pain management 20, 23. Only five out of the 20 studies provided examples of patient-related factors that facilitated pain assessment and management 13, 20, 22, 24, 28. The self-reporting of pain by the patient is considered the gold standard for pain assessment. Three studies have found that patients' self-reporting of pain is the most accurate measure of pain and helps in effectively managing pain. 20, 24, 28. Additionally, the study conducted by Alasiry et al. (13) highlights the significance of using subjective assessment for critically ill conscious patients. In the context of evaluating pain in critical care patients, the primary behavioral indicators frequently observed were motor activity (e.g., involuntary movements) and facial activity (e.g., facial grimacing) (13). Even when patients were unable to communicate verbally, nurses employed alternative approaches, such as assisting patients in writing or drawing their needs on paper, in addition to relying on behavioral indicators. Furthermore, according to the research conducted by Pollmann-Mudryj (22), the nurses who took part in the study said that if they just relied on behavioral signs to understand patients' discomfort, it would hinder effective communication between nurses and patients.

Obstacles and factors that are related to physicians

Out of the studies that were analyzed, only eight of them specifically addressed the obstacles and facilitators that physicians encounter when it comes to managing pain. The primary obstacle that was commonly reported is the lack of reliance on pain scores by physicians when prescribing analgesics 18, 19, 22. Additionally, Deldar et al. (14) found that inadequate communication between physicians and nurses regarding the pain of nonverbal patients hinders effective treatment. Furthermore, Subramanian et al 16 identified the insufficient experience of young physicians and the excessive workloads of senior doctors as major obstacles to the successful evaluation and treatment of pain. The most often cited facilitator for pain evaluation and treatment in critically sick adult patients is the cooperation between doctors and nurses 13, 17, 18, 30.

Pain tolerance varies across individuals. Patients' pain tolerance is influenced by several elements, such as emotions and lifestyle factors (Saifan et al., 39). Nurses, according to Saifan et al. (39), hold certain ideas and misunderstandings about patients' pain tolerance, which hinder efficient pain management. For instance, they hold the belief that those experiencing intense agony are unable to be diverted. These results corroborate our review's conclusion that using both verbal and nonverbal pain assessment instruments for critical care patients is crucial for achieving the best possible pain evaluation. This approach facilitates a full and all-encompassing assessment of pain, empowering nurses with increased confidence. Nurses can accurately assess

pain in critical care patients by utilizing both verbal and nonverbal pain assessment tools. This allows them to capture both the emotional and physical aspects of the pain experience, providing certainty in identifying suspected pain. Several studies support our findings, indicating that a significant obstacle to pain relief is nurses' lack of understanding on how to effectively use these assessment tools. For instance, a literature review on pain in patients with cognitive impairment revealed that nurses often have inadequate knowledge and practices when it comes to utilizing pain assessment tools.

Proper use of drugs, particularly opioids, is crucial for effectively managing pain. However, out of the studies examined, only three reported that nurses had enough knowledge about drug management to help provide adequate pain relief. Several published studies have found that nurses often lack knowledge about how to effectively manage pain with medication, which can be a significant barrier to providing adequate pain relief. This includes a lack of understanding about how to use opioids, proper dosages, and different ways to administer them. Additionally, there is limited evidence about nurses' knowledge of pharmacological pain management and how it impacts their ability to assess and treat pain in critical care patients in a timely manner.

The long-term use of analgesics has numerous detrimental effects on the health of patients. Therefore, nonpharmacological interventions can be a viable alternative for managing pain in critically ill patients. However, there is limited evidence regarding nurses' knowledge and attitudes towards the utilization of nonpharmacological interventions in adult critically ill patients. Only one study was identified in the current review that examined this matter. This study revealed a lack of knowledge among nurses regarding the utilization of nonpharmacological interventions. Despite the scarcity of evidence in existing literature, there are contradictory findings concerning nurses' knowledge and attitudes towards nonpharmacological interventions as a whole. Puntillo et al. found that nurses working in medical and surgical wards have an acceptable degree of expertise about nonpharmacological pain therapies. In contrast, the research done by Munkombwe et al. (41) aimed to examine the palliative care practices of nurses. The study revealed that nurses had insufficient knowledge and unfavorable views towards nonpharmacological therapy.

The attitudes and beliefs of nurses about pain may have an impact on their ability to provide effective pain management. According to 2, over half of the research analyzed found that these attitudes and beliefs can either facilitate or hinder the evaluation and treatment of pain. Despite the limitations of behavioral pain assessment tools, it is crucial to regularly observe and monitor pain behaviors using validated and reliable assessment tools for patients who have difficulty reporting their own pain. This practice is particularly important in critical care settings. However, some studies have found that critical care nurses do not frequently use behavioral pain assessment tools when caring for nonverbal patients. Similarly, Samarkandi 42 discovered that ICU nurses had negative opinions regarding behavioral pain evaluation. Nevertheless, these unfavorable sentiments were discovered to ameliorate subsequent to the instruction of nurses on the use of the Critical-Care Pain Observational Tool (CPOT) for patients who are unable to

communicate verbally. A scoping review was conducted to investigate the issue of pain management in pediatric intensive care units. The review found that nurses had unfavorable attitudes towards the use of valid nonverbal pain assessment tools. (43) Additionally, various studies conducted in different countries and settings reported negative attitudes among nurses towards pain assessment and management. (42) Furthermore, Devlin et al. (11) examined the beliefs of nurses regarding sedation and identified the misconception that sedated patients do not feel any pain as a significant obstacle to proper pain management. This discovery corroborates the results of around 33% of the research that were examined.

3. Conclusion

The study on pain management obstacles and facilitators among critical care unit nurses is still inadequate. Nurses' proficiency in pain evaluation and alleviation is crucial for achieving effective pain management in critical care units. The evaluated research identified and investigated several factors that either hinder or aid in achieving adequate pain treatment. These factors include those connected to the patient, nurse, physician, and healthcare system. The primary barriers identified in this study were nurses' insufficient understanding of pain assessment tools, patients' inability to communicate, physicians prescribing analgesics without considering pain scores, and the absence of standardized guidelines and protocols for pain evaluation and management. The most commonly reported facilitators for pain assessment and management include continuous education and professional training, patients' capacity to self-report pain, efficient collaboration between physicians and nurses, and meaningful discussion of patients' pain scores during nurse-to-nurse handovers.

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