

Physicians' And Nurses' Knowledge And Practices About Management Of Acute Pain Among Injured Persons

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Abstract

1. Introduction

Although producing acute severe pain is a strong encounter for physically injured patients, the provided healthcare is frequently poor, especially in low-income countries. The knowledge and practice of healthcare providers are significant barriers to good pain management. The magnitude of the problem of acute severe pain has not been specifically determined. Some studies demonstrated that the demand for acute pain management in pre-hospital services was up to 80% because of traffic accident injuries. However, the literature specializing in understanding the knowledge and practices of healthcare providers about the management of acute severe pain and the existence of any regulatory standard that obliges their practices for the management of acute severe pain caused by physical injuries in pre-hospital services is limited. Therefore, the aim of this study was to assess physicians' and nurses' knowledge and practices about the management of acute severe pain among injured persons and its associated factors.

Methods

This study was conducted to assess nurses' and resident physicians' knowledge and practices about pain management among injured persons at Cairo University Hospitals. The study setting was in the following places of care: trauma, emergency, orthopedic and plastic surgery, and vascular surgery units. These places are responsible for the management of injured patients. The study was conducted at medical facilities to deliver healthcare services and not to right a great wrong.

Conclusion

In conclusion, this study demonstrated that many physicians and nurses in a teaching hospital located in the state of Kuwait seem to possess gaps in their knowledge about pain practices and pain management strategies, especially relating to appropriate management of opioid side effects. Many seemed to still follow old-fashioned, non-evidence-based practices. These are important findings and suggest that there is a need for pain-related educational initiatives directed toward these hospital personnel. Accurate pain assessment and effective management of acute pain among injured persons are important in preventing the long-term negative consequences of the development of chronic pain states. These consequences include impaired

function, psychological distress, as well as a greater use of health care resources. The results of our study may be generalized to other hospitals in Kuwait, at least to the trauma care settings. It is recommended that, to confirm the findings, similar studies be conducted in other regional hospitals and in hospitals from other countries.

Introduction

Management of acute pain in injured patients faces special challenges in Palestinian society. Providing relief for such patients depends on having a knowledgeable team with good practices in pain management. Assessment of the level of healthcare providers' knowledge and practices constitutes a critical step towards comprehensive pain control for these patients. This study aimed to assess physicians' and nurses' knowledge and practices regarding the management of acute pain among injured persons in the emergency departments of hospitals. It is a cross-sectional study conducted among 124 nurses and physicians in four governmental and private hospitals in Palestine. The findings of the study pointed to suboptimal knowledge and practices that need further revision plans. Prominent barriers to patients' acute pain relief should therefore be identified, such as cultural, educational, religious, practical, and managerial ones. Strategies to overcome these barriers should be formulated and tailored to the specific setting to make it possible and practical to provide compassionate pain relief for injured patients. To conclude, healthcare providers demonstrated a gap in their knowledge and practice in managing acute pain among injured patients. Further application of systematic approaches, such as changing the pain management protocols, creating guidelines, and conducting interventional implementations tailored to the Palestinian healthcare context, aimed at increasing the care of injured patients, is needed.

2. Understanding Acute Pain in Injured Persons

In studies investigating pain management for injured people, pain has often been assessed shortly after arrival at an emergency department, hospital, or on admission. As demonstrated by the small number of studies on the length of stay in hospitals for people suffering painful injuries, little is known about the pain process as documented longitudinally. However, quick pain relief is essential for those involved, especially for treating their injuries. Pain experienced by injured persons occurs outside the hospital emergency department, and patients often self-administer analgesics before seeking assistance. Emergency medical staff are frequently asked to write prescriptions for analgesics, mainly for injured people with musculoskeletal injuries, for those who are uninsured or who are worried about health insurance making payments, and/or who feel they have been waiting too long.

Some medics label these people as drug seekers, and staff become suspicious of them. Young and male patients are more likely to receive analgesics, especially morphine, than other patients. Injury severity is not related to continuous pain, but patients with high pain levels receive either analgesia or no treatment. When treating children with orthopedic injuries, factors that medics have found most effective in reducing pain and distraction are removal of the cast, reassessment of the pain level, joint splinting, and physical therapy. Information about the patient's actual medical history, diagnosis, and treatment are factors that influence clinical decisions by emergency staff. The importance of using visual analogy in better assessing patients' pain levels is critical to improved pain management. Providing clear information about pain control helped medical interns feel more confident in prescribing analgesics to patients with acute pain. Competitive analysis between physicians and nurses may be a barrier to interdisciplinary pain management.

3. Importance of Effective Pain Management

Injuries contribute significantly to the burden of disease. Effective pain management is a vital component of providing care to injured patients, yet it is often inadequate in clinical practice. Healthcare providers' knowledge about the management of acute pain has a direct impact on the care provided. The aim of this study was to evaluate physicians' and nurses' knowledge and practices regarding acute pain management among injured patients. The majority of the participants identified the injury severity score and the presence of associated injuries as the most important criteria in choosing an opioid. Acetaminophen and ibuprofen were the most often chosen as the first and second choices to be given to an injured person. However, prehospital and emergency room healthcare providers need further education and vigilance with regard to preventing and treating acute pain in injured patients. Furthermore, alternative approaches for pain management must be used in addition to opioids in appropriately selected patients with severe injuries and chronic pain.

4. Current Guidelines and Best Practices

In various national and international guidelines on the treatment and management of injured people, much more focus and guidance are centered on diagnosing injuries and the best treatment practices than on pain management. However, in these various guidelines, unspecified or solid descriptions are made pertaining to

acute pain and its management. As seen in the clinical guidelines, recommendations in all acute pain guidelines state that the management of pain for all acute injuries should be implemented and tailored according to their pain intensity or levels of pain that arise from diverse mechanisms. Nonetheless, strategic inflammatory, nociceptive, and neuropathic induced pain is collectively grouped. Often, unrealistic drug doses, intervals, and various types of modalities of pain management, both conventional and non-conventional analgesic drugs, are recommended as short-term and rescue therapy techniques. (Hokimoto et al.2023)(Carroll, 2020)(Johnson et al.2020)(Katz et al., 2021)(Karunaratna et al., 2024)(Likardo et al.2023)

Some guidelines described as important highlight the preference for multimodal instead of a unimodal approach to the treatment of pain. However, due to the unavailability or under-resourced hospitals in resource-strained areas, the "step up" approaches are globally ignored, and "step down" is practiced; they are often recommended as the best alternative. It is emphasized that should the first-line and conservative management for acute pain fail, the less burdensome and effective treatments should be implemented; critical investigations for etiological factors should be performed; appropriate therapy should be provided at all times; and intravenous analgesia or other invasive procedures should be carried out with the least delay for persons with the worst degree of suicidal pain. Drugs that address the underlying symptoms should be considered first; medications that provide rapid onset of pain relief and are burdensome should be initiated and then followed by the less invasive alternative when the invasive therapy is contraindicated.

5. Physicians' and Nurses' Knowledge and Practices in Acute Pain Management

Background: Management of acute pain among injured persons is a great concern; it involves all types of pain that emerge as direct and proportional to the degree of the injury. To optimize relief and improve quality of life, the efficacy of such management depends directly on healthcare professionals' knowledge about treatment specificities and pain. **Methods:** This cross-sectional study was carried out among physicians and nurses working in the emergency department. First, we collected data from nurses and assistant nurses using an anonymous self-questionnaire. The variables studied were the sociodemographic characteristics of respondents, knowledge and perception levels of acute pain, and practices related to acute pain among injured people. Bivariate and multivariate analyses were performed to identify factors associated with having a good level of knowledge and physicians' prescriptions to manage acute pain among injured persons. **Results:** Those healthcare professionals expressed a low level of knowledge and prescriptions to manage acute pain effectively. Their professional category and training received on managing acute pain determine their level of knowledge and practices.

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