بسم الله الرحمن الرحيم

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بقسم التوثيق الإلكتروني بمركز الشبكات وتكنولوجيا المعلومات دون أدنى مسئولية عن محتوى هذه الرسالة.

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Risk Factors Associated With Intra-Hospital Transportation among Critically Ill Patient

Thesis

Submitted for partial fulfillment of master degree in Nursing Science

(Critical Care Nursing)

By

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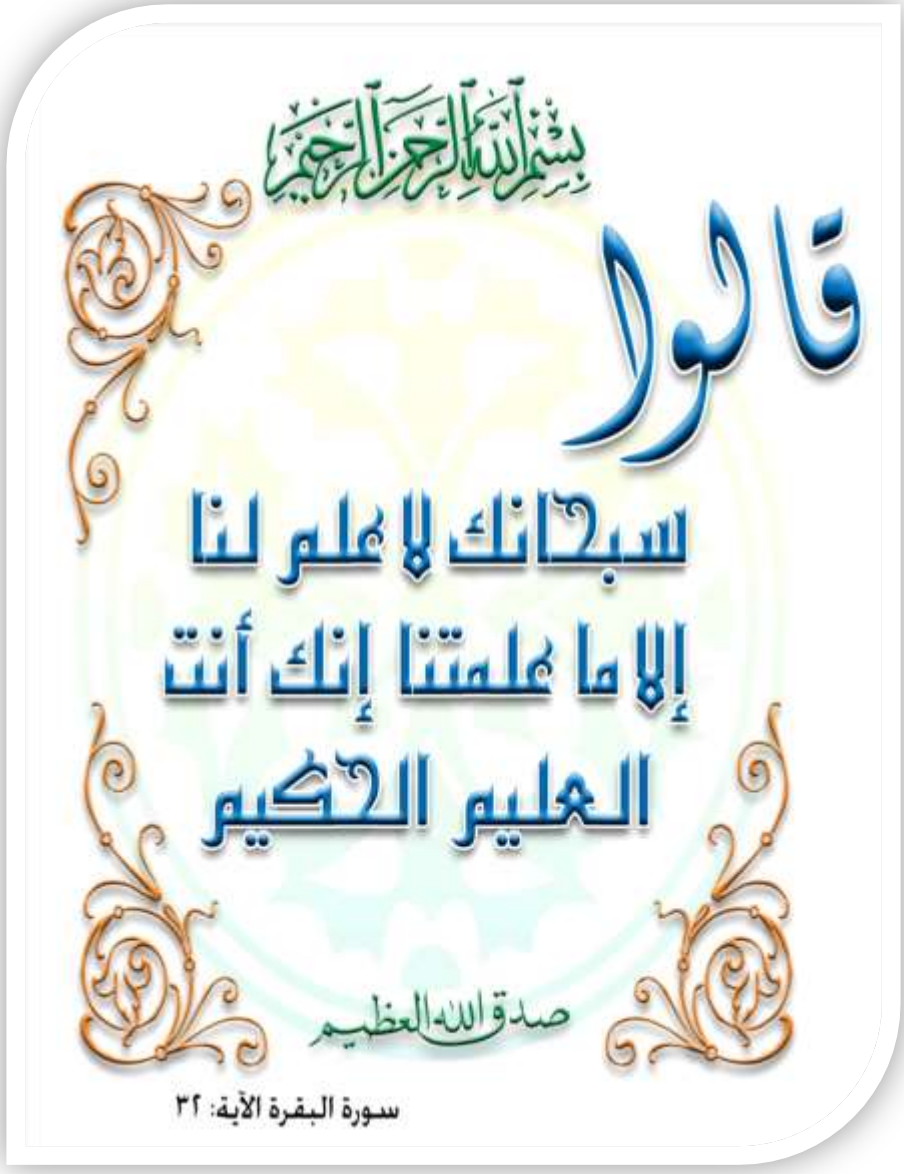
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صدق الله العظيم
سورة البقرة الآية: ٣٢

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Mona salama

Abstract

Background: Critically ill patients admitted to ICUs need to be transported according to their condition through hospital departments. Such transport is known as intra-hospital transportation (IHT) and classified as temporary or permanent. A nurse has a great role in this procedure especially in assessment of IHT risk factors, to prevent further complications. **Aim:** to assess risk factors associated with IHT among critically ill patients. **Design:** A descriptive exploratory study was utilized. **Setting:** Intensive care units in Tanta university hospitals. **Study subject:** A convenience sample of all available nurses (n=60). **Tools** for data collections: tool **I:** self-administration questionnaire including: demographic characteristics of nurses, nurses knowledge, nurses awareness, and the nurses risk factor expectations, tool **II**: nurses practice observational checklist used to assess nurses practice regarding IHT of critically ill patient. **Results**: The majority of the studied nurses (93.3%) had unsatisfactory level of knowledge about IHT of critically ill patient**,** 70% had low cognitive awareness about IHT of critically ill patients**,** the expected risk factors of the studied nurses were related to patients (78.3%), tool & equipment risk factors (64.4%), environmental risk factors (60.7%) and finally medical team risk factors (49.3%). 50% of studied nurses disagreed with the expectation of risk factors associated with IHT of critically ill patient, 75% had incompetent practice before, during, and after IHT of critically ill patients. **Conclusion**: according to this study patient related risk factor is the main risk factor associated with IHT. This study **recommended** that: nurses should use standardized systems of care (including checklists, staffing and equipment) when transferring critically ill patients within hospital.

Keywords: critical illness**;** intra-hospital transportation**;** risk factors - patient.

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List of Abbreviations

Abbr.	Full-term
A, B, Cs	**:** Airway, breathing, circulation approach**.**
AEs	**:** Adverse events.
ED	**:** Emergency department.
IHT	**:** Intra-hospital transportation.
ICUs	**:** Intensive care units.
MV	**:** Mechanical ventilator.

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Introduction

Critical illness is a life-threatening multisystem process that can result in significant morbidity or mortality. In most patients, critical illness is preceded by a period of physiological deterioration. All clinical staff have an important role to play in implementing an effective 'Chain of Response' that includes accurate recording and documentation of vital signs, recognition and interpretation of abnormal values, patient assessment and appropriate intervention. Good outcomes are related to rapid identification, diagnosis and definitive treatment and all staff should possess the skills to recognize the critically ill patient and instigate appropriate initial management **(Khan et al., 2021).**

Intra-hospital transport (IHT) consists of the movement of a patient from one physical location within the hospital to another. Such transfers may be temporary (e.g., to obtain diagnostic imaging) or for a longer term (e.g., transfer from inpatient ward to an intensive care unit), and are critical transitions in which complications and death may occur. Risks associated with IHT have been suggested to be independent of the duration of hospitalization; the distance travelled between

locations may affect care delivery, quality and outcomes **(Salt et al., 2020).**

The benefits of IHT must outweigh the risks, and a triage-like process should be instituted and followed in order to optimize the risk-benefit ratio for each IHT. No patient should be transported for a test or procedure that is unlikely to alter care **(Deacon et al., 2017).**

Presence of specially trained personnel may predict and decrease risk factors of transportation and improve outcomes. **(Cantarella et al., 2020).** Physicians must be aware that such transfers require significant skillful team effort and specific knowledge. Nurses play an important role in close observation and assessment of the critically ill patient (pre, during, and post)the process of transportation and record results **(Parveez et al., 2020).**

Many issues related to IHT can be attributed to difficulties with equipment and/or clinical management of patients **(Sakshi and Vinay ., 2021).** These factors combine with environmental factors related to IHT origin and destination settings, contributing to a unique and difficult to predict risk profile**.**

A concise review of common physiologic insults arising during IHT is lacking and would be of value for implementation of targeted strategies to ameliorate IHT related complications including loss of intravenous access), traumatic injury, nosocomial infections, acid-base homeostasis, glucose regulation, among other aspects **(Matos et al., 2021).**

Significance of the study

Patients admitted to Intensive Care Units, these cases needs intra–hospital transportation for different causes such as (follow up and diagnostic procedure - transfer to another department …etc.) adverse events occur in 6% to more than 70% of IHTs performed. When limiting the definition of adverse events to changes in vital signs, unplanned extubations or cardiorespiratory arrests, this rate approaches 8% **(Akrami et al ., 2019),**

Although good practice or expert consensus has been published about mitigating risks in IHT, it is important to examine the risk situation in individual institution for the reason that procedures, facilities and staffing may vary from one institution to another, and the tolerance of the risk conditions also varies among the healthcare staff. Adverse