



بسم الله الرحمن الرحيم

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Biosychosocial and Educational Needs of Patients with Burn Injuries

Thesis

*Submitted for Partial Fulfillment of Master Degree
in Medical Surgical Nursing*

Submitted By

Hanaa Seliman Zakeria seliman

B.Sc. Nursing Science, 2011

Faculty of nursing, Damanhur University

**Faculty of Nursing
Ain Shams University
2022**



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Under Supervision

Prof. Dr. Kamelia Fouad Abd-Allah

*Professor of Medical Surgical Nursing
Faculty of Nursing, Ain Shams University*

Dr. Dina Mohamed Maarouf

*Lecturer at Medical Surgical Nursing
Faculty of Nursing, Ain Shams University*

**Faculty of Nursing
Ain Shams University
2022**

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قالوا

لَسْبَدَانِكَ لَا نَعْلَمُ لَنَا
إِلَّا مَا عَلَّمْتَنَا إِنَّكَ أَنْتَ
الْعَلِيمُ الْعَظِيمُ

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✍ **Hanaa Seliman Zakeria**

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List of Abbreviations

<i>Abbr.</i>	<i>Meaning</i>
ABA	American Burn Association
ABGs	Arterial blood gases
BP	Blood Pressure
Covid-19	Corona-virus Disease-2019
CBC	Complete Blood Count
ECG	Electrocardiograms
GI	Gastrointestinal
ICU	Internal Care Unit
IV	Intravenous
IM	Intramuscular
OR	Operating Room
PTG	Post Traumatic Growth
PH	Power of Hydrogen
PCO₂	Partial Carbon dioxide
PO₂	Partial Oxygen
QoL	Quality of Life
ROM	Range of motion
RBCS	Red blood cells
R/S	Religion and Spirituality
SPSS	Statistical Package Social Science

TBSA	Total Body Surface Area
UV	Ultraviolet
USA	United State Association
WBCS	White Blood Cells
WHO	World Health Organization

Biosychosocial and Educational Needs of Patients with Burn Injuries

**Hanaa Seliman Zakeria¹, Kamelia Fouad Abdalla²,
Dina Mohamed Maarouf³**

¹B.sc. Nursing Science, Faculty of Nursing, Damanhur University²Professor of Medical Surgical Nursing, Faculty of Nursing, Ain Shams University³Lecturer of Critical Care Nursing, Faculty of Nursing, Ain Shams University

Abstract

Burn injuries are considered worldwide one of the leading causes of injury morbidity and mortality. Burn affect patient's physically, psychologically and socially. **Aim:** This study aimed to assess biopsychosocial & educational needs of patients with burn injuries **Design:** A descriptive exploratory study was utilized to conduct the study. **Setting:** This study was conducted at inpatient burn care unit at Kafr El-Dwwar General Hospital. **Sample:** A convenience sample of all available adult patients(n=104) from both gender with 2nd and 3rd degree burns, **Tools:** four tools used to collect data **I:** Patients interview questionnaire. **II:** physical needs assessment sheet. **III:** Psychological needs assessment sheet & **IV:** Social needs assessment sheet. **Results:** the study results showed that, 37.5% of the studied patients their age ranged between 20-<30, 71.2% of them had unsatisfactory level of knowledge, 68.3 % of the them had high total physical need level, 69.2% of them had high total psychological need level & 72% of them had high total social need level. Also, there was highly significant correlation between the studied patients' total knowledge level and their physical, psychological and social needs levels at p value <0.01**. **Conclusion:** Based on findings of the current study, it can be concluded that: Less than three quarters of the studied sample had got total unsatisfactory level of knowledge regarding burn injury and its management which reflecting their high educational need level. Also, more than two thirds of them had high total physical & psychological needs levels and less than three quarters of them had high total social need level. Additionally, there were highly significant correlation between patients' total physical, psychological and social needs levels. Also, there were highly significant correlation between patients' knowledge total need level and their physical, psychological and social total needs levels. **Recommendation:** Based on the results of the current research, Future research study should be done to implement and investigate the effect of the suggested program based on the studied biopsychosocial needs of patients with burn injuries on decreasing the incidence of morbidity & mortality among such group of patients.

Keywords: Biosychosocial, Educational Needs, Burn Injuries

Introduction

Burn is one of the most common health problems around the world. It includes 5 to 12% of trauma cases and event of the world (**Albornoz et al., 2017**). Burn injuries are considered one of the most serious and stressful injuries affecting all age groups. A burn is an injury to body tissue caused by direct contact or exposure to a thermal source, produced by chemicals, electrical current, radiation and friction (**Mehta & Tudor, 2021**).

Burning is a major cause of injury and it is one of the worst destructive conditions. There are about 2.4 million burn cases per year worldwide that 650,000 of them need treatment, 75,000 are hospitalized and 8,000 to 12,000 are exposed to burn injuries. It is estimated that the incidence of severe burns in the lifetime to be around 1% and more than 300,000 deaths occur due to burns annually, worldwide (**Abd Elalem et al., 2018**).

A major burn injury can impair skin integrity, sensation and may lead to hyper-trophic scarring. In addition to changes in appearance and function brought about by scarring, deeper burns may result in damage to, or complete loss of, functionally or cosmetically important body parts. Furthermore, many forms of psychological

disturbance have been noted including body image dissatisfaction, depression, and post traumatic distress that often may take years to recover (**Sahin et al., 2020**).

The physical and psychological consequences of a major burn injury can interfere significantly with social and occupational performance, which may be exacerbated environmental barriers or lack of social support. The psychological well-being of patients seen in an adult burns clinic becomes an important consideration not only because of the recent disfigurement, functional losses, and trauma, but also because of the psychological components involved along with maintenance of compliance with the long treatment and recovery process (**Pallua et al., 2019**).

It is difficult to comprehend all needs of the patients with burns. Caring for these patients can be a daunting task because the psychological demands of the patient remain long after the physical aspects of the burn are resolved. The challenge comes in developing a plan of care to address the complex psychological needs of each patients with burns. Nurse must venture into resources that may not be readily available to apply therapeutic intervention (**Gastana et al., 2018**).

Nurses play a vital role in facilitating the involvement of family and friends in the recovery and rehabilitation of burn survivors. Nurses in burn units, have an important role in dealing with patients not only during the acute phase, but also during rehabilitation phase. Patients need physical, psychological and social support for weeks or even months after their exposure. The core of nursing interventions can help patients return to the highest possible level of independence and quality of life (**Chazi et al., 2019**).

Significance of the study:

Burn is a serious public health problem worldwide accounting for an estimated 265.000 deaths annually from fire alone. The vast majority 96% of deaths from fire-related burns occur in low- and middle-income countries. Burn is one of the leading cause of disability adjusted life-years in the developing world (**WHO, 2020**).

In the USA, burn is the 4th cause of mortality necessitating medical attention for about 2.5 million patients each year. Annually, more than 100,000 of burn patients are hospitalized. About 6000 of burn patients may die annually and permanent disability occurs in 50% of these patients (**Mckibben et al., 2021**).