# Effect of Secondary Level of Burn Injuries on Body Image and Self Esteem of Adolescents

## Thesis

Submitted for Partial Fulfillment for Requirements of Master Degree in Pediatric Nursing

## By

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## List of Abbreviations

Abb. **Full Terms ABA** American Burn Association. **ABCDE** Airway, Breathing, Disability, Circulation, Exposure. Blood Pressure. BP GI Gastro Intestinal. IV Intravenous. Self-Esteem Inventory. SEI **SPSS** Statistical Package of Social System. **TBSA** Total Body Surface Area. UTI Urinary Tract Infection. WBCs White Blood Cells. WHO World Health Organization.

### Abstract

Background: Burns are the second most common injury for adolescents in families of low socioeconomic status moreover burns and related injuries are still the major cause of mortality and disability around the world. Aim: This study aimed to assess the effect of secondary level of burn injuries on body image and self-esteem of adolescents. **Design:** A descriptive analytical design was used. **Setting:** This study conducted at the Burn Unit for both of El-Demerdash Hospital affiliated to Ain Shams University and Al-Ahrar Zagazig General Hospital affiliated to Ministry of Health. **Subject:** A purposive sample composed of 120 adolescents who were suffering from second degree of burn and admitted to the previously mentioned setting. Tools: Three tools used for data collection: A Structured Interview **Ouestionnaire Format** characteristics to assess adolescents and history of burn, Body Image Scale to assess body image of the studied adolescents Coopersmith Self-Esteem Inventory Scale to assess selfesteem of the studied adolescent. Results: the results of the study illustrated that, there was a positive correlation between total body image of the studied adolescents and their total self-esteem and a negative correlation between total burn ratio and total body image and total self-esteem. **Conclusion:** Based on the findings of the current study, the study was concluded that, more than two thirds of the studied adolescent with secondary burn had moderate body image and the majority of them had moderate self-esteem. **Recommendations:** Develop a program to empower adolescents' for overcoming the effect of secondary level of burn injuries on body image and self-esteem.

**Key words:** Burn injury – body image – self–esteem – adolescents.

### Introduction

Burns are forms of traumatic injuries occur when energy from heat sources is transferred to the tissues of the body. Injuries that result from direct contact or exposure to any thermal, chemical, electrical or radiation source. In addition to disrupt skin, which leads to increased fluid loss, infection, hypothermia, scarring, compromised immunity and changes in function, appearance, body image and selfesteem (*Alfes et al.*, 2018).

Burns and related injuries are still the major cause of mortality and disability around the world always causing physical, psychological and economic loss in different societies; therefore, it is considered as one of the major health complications. Every year, approximately 2.4 million cases of burn injury occur in the world 1.5 million of which require treatment 750,000 are hospitalized and 170,000 die annually due to burn injuries (*Partridge*, 2017).

Partial thickness (second degree) of burn injuries involves the epidermis and the dermal layer disrupted of the skin. Wounds are painful, moist, red and blistered. Keratinocyte at the wound edge loose adhesion to each other, develop flexibility, migrate over the wound bed. Wound should heal in approximately 14 days with variable amounts of scarring. Wound is extremely sensitive to temperature

changes, exposure to air and light touch (*Hockenberry et al.*, 2019).

Adolescent is a period of transition between childhood and adulthood a time of rapid physical, cognitive, social and emotional maturing as the boy prepares for manhood and the girl prepares for womanhood. Beginning with the gradual appearance of secondary sex characteristics at about 11 or 12 years of age and ending with cessation of body growth at 18 to 20 years (*Forster & Fraser*, 2018).

Burn unit nurses play a key role in helping to guide adolescents' reactions in a manner that will assist dealing with the many challenges face in recovery process and adapt to new body image, self—esteem and the processes that lead to changes in lives due to the injuries. Burn care is a multidisciplinary approach; the burn nurse will spend the greatest amount of time with adolescents during the physical and emotional healing process (*Minimas*, 2017).

Body image is a multidimensional, subjective and adolescent's dynamic concept that encompasses perceptions, thoughts and feelings about his or her body. Body image is not limited to the aesthetic characteristics of the adolescent; taking also into consideration adolescent's state of health, skills and sexuality. Receptions of idealized body images in western society challenge adolescents grow up with and adapt to disfigurement from burns (*Keltner & Steele*, 2019).

Self-esteem is commonly conceptualized as the "feeling that one is good enough" and consequently, adolescents with high self-esteem do not necessarily believe are superior to others. Thus, self-esteem involves feelings of self-acceptance and self-respect, in contrast to the excessive self-regard and self-aggrandizement that characterized narcissistic individuals of adolescent moreover, subsequent challenge to one's self-esteem is one of the most devastating consequences of a burn injury (*Clifton & Hemingway, 2018*).

#### **Significance of the Study:**

Childhood burn injuries in Egypt are a significant problem especially during adolescent hood. Hence, burn victim increasingly focuses on the changes of body image one of the main problems of burned adolescent is disfigurement of body appearance and body dissatisfaction related to loss of normal tissue and its replacement with scar tissue which this truth is associated with low of self–esteem. Therefore, this study intended to describe the effect of secondary level of burned adolescents on their body image and self–esteem.

### Aim of the Study

The aim of the study was to assess the effect of secondary level of burn injuries on body image and self–esteem of adolescents.

### **Research Question:**

What is the effect of secondary level of burn injuries on body image and self-esteem of adolescents?

# Part I An Overview about Burn Injury

#### **Burn Injury:**

Burns are the most common cause of serious injuries and accidental deaths next to traffic road accidents in adolescent. Burn incidence in adolescent is much higher in low socioeconomic classes where poor housing conditions. Burn is caused by exposure to fire, hot liquids chemicals, electrical current and radiation. Flame burns are the most serious where smoke inhalation, the main cause of death (*Palmer*, 2019).

#### Anatomy and Physiology of the Skin:

The anatomy of the skin is complex and there are three layers (Fig.1): 1. Epidermis, the outer layer of the skin composed of five layers from outside to inside (dermis): Stratum corneum, Stratum lucidum, Stratum granulosum, Stratum spinosum and Stratum basale, 2. Dermis, formed by connective tissue where nerves, blood and lymph vessels, sebaceous and sweat glands and hair follicles reside, 3. Hypodermis or subcutaneous tissues, where larger blood vessels and nerves are located (Amerman, 2018).

The skin is the elastic, self-generating waterproof covering of the body. Skin played an important role in the