

# **Burnout syndrome among intensive care units staff**

*Essay*

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*By*

**Hossam Alsayed Ahmad**

M. B. B. Ch. Tanta University

Supervised by

***Prof. Madiha Metwaly Zidan***

*Professor of Anaesthesiology and ICU, Faculty of Medicine,  
Ain Shams University*

***Prof. Mohamed Anwar Elshafei***

*Assiss. Professor of Anaesthesiology and ICU, Faculty of Medicine,  
Ain Shams University*

***Dr. Manal Mohamed Kamal Shams Eldine***

*Lecturer of Anaesthesiology and ICU, Faculty of Medicine, Ain  
Shams University*

*Faculty of Medicine,  
Ain Shams University*

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# الإحباط المهني لدى العاملين بوحدات العناية المركزة

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من الطبيب

حسام السيد أحمد

بكالوريوس الطب والجراحة

تحت إشراف

الاستاذة الدكتورة

**مديحة متولى زيدان**

أستاذ التخدير والعناية المركزة - كلية الطب - جامعة عين شمس

الاستاذ الدكتور

**محمد أنور الشافعى**

أستاذ مساعد التخدير والعناية المركزة - كلية الطب - جامعة عين شمس

الدكتورة

**هنال محمد كمال شمس الدين**

مدرس التخدير والعناية المركزة - كلية الطب - جامعة عين شمس

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## **ABSTRACT**

**Objectives:** Review on burnout syndrome prevalence in physicians and nurses working in intensive care units and discuss the consequences and management of the syndrome.

**Methods:** The articles were selected from the Pubmed, MedLine, LILACS and Sci-Elo data base using the key words: stress, burnout, physicians, nursing, consequences, management, pediatric and neonatal intensive care unit, medical intensive care unit and surgical intensive care unit.

**Results:** Researches on this subject showed that the ICU is a workplace fraught with a multitude of stressors, which can take a toll on the staff. Health professionals who work in intensive care units are strong candidates for developing burnout syndrome. Staff burnout appears a particularly important issue for critical care, as along with having serious consequences for individual caregiver well-being, burnout may also have serious implications for quality of care and patient safety within the ICU.

**Conclusions:** Professionals, who work in intensive care units, due to the specificity of their job, are liable of developing occupational stress, and consequently burnout. These results suggest the need to research the matter further, with the objective of developing preventive measures and intervention models.

**Keywords:** Burnout, professional; Intensive care units; Nursing; Stress; Physicians

# List of Contents

	<i>Page</i>
<b>Introduction .....</b>	1
<b>Aim of the work .....</b>	3
WHAT IS BURNOUT SYNDROME? .....	
♦ <b>Stress at work .....</b>	5
♦ <b>Burnout syndrome .....</b>	10
CAUSES AND PREVALENCE OF BURNOUT SYNDROME AMONG ICU STAFF .....	19
♦ <b>Factors that cause burnout syndrome in ICU.....</b>	20
♦ <b>Prevalence of burnout syndrome among ICU staff .....</b>	33
CONSEQUENCES OF BURNOUT SYNDROME	41
PREVENTION AND MANAGEMENT .....	56
♦ <b>Prevention of burnout syndrome .....</b>	57
♦ <b>Recommendations for treatment .....</b>	74
<b>English Summary.....</b>	80
<b>References.....</b>	83
<b>Arabic summary.....</b>	

## List of Tables

<i>Table</i>	<i>Comment</i>	<i>Page</i>
<b>Table 1-1</b>	: Different definitions of Burnout Syndrome.....	12
<b>Table 1-2</b>	: Three Components of Burnout.....	13
<b>Table 1-3</b>	: Maslach Burnout Inventory (MBI) Scoring.....	17
<b>Table 2-1</b>	: Stress factors in the intensive care units mentioned by the on-duty adults intensivists.....	26
<b>Table 2-2</b>	: Burnout and demographic factors .....	30
<b>Table 3-1</b>	: Important personal and professional consequences of burnout.....	47
<b>Table 4-1</b>	: Strategies to prevent staff burnout.....	63

## List of Figures

<i>Figure</i>	<i>Comment</i>	<i>Page</i>
<b>Figure 1-1</b>	Proposed relations between persistent fatigue among employees, burnout, and CFS.....	7
<b>Figure 2-1</b>	Maslach Burnout Inventory (MBI) subscales.....	34
<b>Figure 2-2</b>	Physicians wish to leave the job and burnout....	35
<b>Figure 3-1</b>	Clinical impact of severe burnout syndrome (BOS) in respondents.....	49

## List of Abbreviations

<b>BOS</b>	: Burnout Syndrome
<b>CES-D</b>	: Centers of Epidemiologic Studies Depression
<b>CFS</b>	: Chronic fatigue syndrome
<b>CME</b>	: Continuous Medical Education
<b>DFLSTs</b>	: Decisions to Forgo Life-Sustaining Therapies
<b>HPA</b>	: Hypothalamic-Pituitary-Adrenal
<b>ICU</b>	: Intensive Care Unit
<b>ICUs</b>	: Intensive Care Units
<b>IQR</b>	: Interquartile Range
<b>MBI</b>	: Maslach Burnout Inventory
<b>ME</b>	: Myalgic Encephalomyelitis
<b>MEMO study</b>	: Minimizing Error, Maximizing Outcome study
<b>MICU</b>	: Medical Intensive Care Unit
<b>PNICU</b>	: Pediatric and Neonatal Intensive Care Unit
<b>PTSD</b>	: Post-traumatic stress disorder
<b>SAPS II score</b>	: Simplified acute physiology II score
<b>SD</b>	: Standard Deviation
<b>SICU</b>	: Surgical Intensive Care Unit
<b>SMBM</b>	: Shirom-Melamed Burnout Measure
<b>TV</b>	: Television



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## *Aim of the assay*

**T**he aim of this assay is to review the prevalence of burnout syndrome among staff of intensive care units and show consequences of the syndrome and methods of prevention.

## Introduction

In the early 1970s Herbert Freudenberger, a New York psychoanalyst coined the term “burnout syndrome” which linked signs and symptoms characterized by loss of energy and feelings of life being broken into pieces that remain after fire wreckage (*Freudenberger, 1974*).

The most widely accepted concept of burnout was found in the work of Maslach and Jackson. They defined burnout as three-dimensional syndrome consisting of emotional exhaustion, low personal accomplishment, and depersonalisation (*Maslach and Jackson, 1986*).

Burnout is a psychological term (concept) for the experience of long-term exhaustion and diminished interest (depersonalization or cynicism), usually in the work context. Burnout is often construed as the result of a period of expending too much effort at work while having too little recovery (*Embriaco et al., 2007*). The term *Burnout*, has moved from colloquial speech into the social and psychological terms to describe this phenomenon (*Spickard et al, 2002*).

There is a growing awareness within medicine that physicians and other health care professionals are at risk for burnout, which threatens the sustainability of the health care enterprise (*Spickard et al, 2002*).

A number of stress involving factors exist in the intensive care units; the demoralizing situation of patients not getting better despite best efforts of intensive care staff, unrealistic expectations of families, lack of hospital beds, necessity to make everyday critical decisions, various conflicts, poor supportive hospital services, ethical dilemmas, and everyday dying and death (*Cubrilo-Turek et al., 2006*).

Approximately one-half of the intensivists presented a high level of burnout (*Embriaco et al, 2007*). Severe symptoms of “burnout syndrome” affects around a third of ICU nurses (*Poncet, et al. 2007*). So it may be important to give more attention to the ICU staff, because their well-being may influence the quality of care (*Verdon et al., 2008*).

Staff burnout appears a particularly important issue for critical care, as along with having serious consequences for individual caregiver well-being, burnout may also have serious implications for quality of care and patient safety within the ICU (*Reader et al., 2008*).

In addition to the impact on patients, the physician-patient relationship, and professional practice, burnout also may affect the emotional and physical health of the person and his or her family, increasing the risk for divorce, (*Rollman et al., 1997*) alcoholism, drug abuse, (*O'Connor and Spickard 1997*) and early retirement (*Sibbald et al., 2003*).

Early recognition of burnout is important, because it enables the staff to adjust their own feelings more successfully, to meet the criteria of professional behaviour and to improve their care for ICU patients (*Cubrilo-Turek et al., 2006*).

Stress and burnout are complicated constructs with multiple cause and consequences, there are no straightforward answers to the problem. However, the solutions can be in combining preventive measures – including changes to the work environment and management systems – with programmes to manage burnout in those who already experience it or who are at risk of developing it (*Maurice De Valk and Lotte Oostrom, 2007*).

*“Intensive-care settings reveal humanity at its best and at its worst. This is as true for the staff as it is for the patients. We who serve in intensive care settings in a true sense risk our own lives in these setting, our feelings, our self-esteem and our self-respect. By risking these daily we grow; by avoiding the risk we must face the dehumanization of ourselves or of our patients.”*

***Cassem and Hackett, 1975***

## A) Stress at work

Changes in the work environment have led to a change in the balance between physical and mental activity. Technological developments have reduced the amount of heavy physical work. Mental and emotional strain have increased in new working environments that are characterised by lack of time, more uncontrollable factors, background distractions, lack of space, general uncertainty, and more administrative work (*Onciul, 1996*).

Work stress continues to interest researchers (*Bonnie, 2007*). Various definitions for *stress* have been offered that rely on principles derived from cognitive theory and measurements of physiologic and biochemical (e.g., endocrine) parameters (*Mikkael et al., 2003*).

Medical encyclopaedia defines stress as a physical or mental reaction of an organism to depressing situations causing danger to well-being, health or life of an individual. Stress is harmful; it wears the organism down and evokes various diseases. Whereas moderate nervous tension seasons the organism, promotes vital actions. “Stress studies define it as emotional condition (or mood) the reason for which is contradiction between job requirements and the ability of a person to perform them. “Stress is mental and physiological condition, the whole of organism’s protective reactions caused by harmful factors of the environment or inner conditions” (*Medical encyclopaedia, part 2. 1993*).

Selye, a pioneer in stress research, defined *stress* as the nonspecific (i.e. common) result of any demand on the body -be the effect mental or somatic. Selye divided stress into *eustress*, which is the pleasant stress of

fulfilment, and *distress*, which has the harmful consequences of damaging stress. When work provides more distress than eustress, burnout occurs (*Selye, 1982*).

## **Stress related disorders**

Acute, or short-term, stress causes an immediate reaction in the body. If the threat or demand passes quickly, the body generally returns to normal. However, with prolonged stress, many health problems can develop. Some of the early symptoms of stress-related problems include:

**A- Physical Symptoms:** Headache, stomach problems, eating disorders, sleep disturbances, fatigue, muscle aches and chronic mild illnesses.

**B- Psychological and Behavioral:** Anxiety, irritability, low morale, depression, alcohol and drug use, feeling powerless and isolation from co-workers.

If exposure to stressors continues for a longer period of time, chronic health problems can develop, such as:

**A- Physical Conditions:** High blood pressure, heart disease, stroke, spastic colon, immune system dysfunction, diabetes, asthma and musculoskeletal disorders.

**B- Psychological and Behavioral problems:** Serious depression, suicidal behaviour, domestic violence, alcohol abuse, substance abuse, general adaptation syndrome, Chronic fatigue syndrome “CFS” and Burnout syndrome “BOS”

*(Kenneth, 2004).*