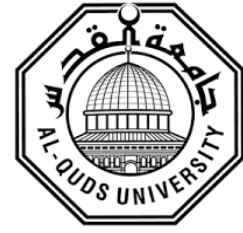


**Deanship of Graduate Studies
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**Compliance with Burn Pain Management Protocol in
Governmental Hospitals – Gaza Strip**

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Compliance with Burn Pain Management Protocol in Governmental Hospitals – Gaza Strip

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Dedication

I dedicate this work to the sake of Allah, my Creator and my master.

To my parents whose affection, love, encouragement and prays day and night make me able to get such success and honor.

To my dear wife, for her understanding, support and encouragement.

To my children; Ibrahim, Ismael, Rima, Lana and Mahmoud

To my brothers, sisters, friends and colleagues.

To everyone who contributed to getting this study a reality, thank you.

Yousuf Ismael Al Shami

Declaration

I certify that this thesis submitted for the master's degree is the result of my own research, except where otherwise acknowledged, and that this thesis or any of its parts has not been submitted for a higher degree to any other university or institution.

Signed:**Yousuf Ismael Al Shami****Date:..... /..... /.....**

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Abstract

Adequate pain management is a compelling and universal requirement in health care. Poor pain management can lead to a marked decrease in physical and psychological outcomes, lower patients' overall quality of life, addiction, poor healing process, long hospitalization period, increased expenses and the cost of health services. Effective management of pain results in improved patient outcomes and increased patient satisfaction. In 2012, the Palestinian National Protocols for Burns Care and Management was established, where standards and mechanism of action have been developed to deal with the pain caused by burns.

This study aimed to assess the compliance with burn pain management Palestinian protocol in the governmental hospitals in Gaza Governorates in order to enhance the quality of burn care and quality of patient's life.

The study is triangulated, descriptive and cross-sectional one. All health care providers, doctors and nurses, who are working at the Adnan Alalami Burn Center in Al Shifa Medical Complex and burn department in Naser Medical Complex were included in the study and they are 59 participants, with a response rate of 89.8%. Four tools were used to collect the data. The quantitative data were represented by three tools: the first one is interviewed questionnaire to study participant's level of knowledge, the training about the protocol, and the socio-demographic factors that affect the participant's level of knowledge, also the barriers to pain management protocol application. The second tool is the compliance checklist of health care providers through reviewing of 89 medical files to assess how the pain management protocol was implemented and the level of compliance. The assessment checklist of the physical environment was the third measurement tool. The qualitative data included 5 in-depth key informant interviews of medical staff to find out the barriers behind the non-adherence to pain management protocol.

The results of the study revealed that there are gaps and barriers facing burn pain management and protocol implementation in the Gaza Strip. About forty-seven percent of the participants are aware of the presence of Palestinian national protocols for burns care and management. Also, the knowledge level about pain management protocol is 44.9%, and the compliance level is 12.8%. Furthermore, eighty percent of participants didn't receive or didn't remember if they had any training course about the protocol. Sixty-eight percent of the study participants answer that there is no follow-up by the management to ensure the implementation of the protocol, and 16% of the study participants didn't know if the management follow-up or not. Moreover, there is a severe shortage of most specialties required in the multidisciplinary medical team. Only three specialties are present in the burn units; plastic surgeon, a nurse, and a physiotherapist. Also, there is a severe shortage of medical supplies and medications necessary for controlling burn pain. There are underutilization of non-pharmacological methods of pain management. There are no statistical differences between knowledge and demographic data (age, marital status, work place, academic qualification, and experience), while there are statistical differences between knowledge and gender and job title.

The study revealed critical low levels of compliance among health staff with burn pain management protocol. There is an urgent need to adopt managerial policies and to activate the monitoring and supervision role of auditing system in both hospitals to improve health care providers' compliance with the protocol. Continuing education and training programs for the burn team are crucial steps to promote compliance. Urgent need of a multidisciplinary team to deal with burns patients, especially anesthesiologists.

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List of Abbreviation

ABA	American Burn Association
ANOVA	One-way Analysis of Variance
APS	American Pain Society
BSC	Bachelor of Science Certificate
GG	Gaza Governorates
GS	Gaza Strip
ICU	Intensive Care Unit
JCAHO	Joint Commission Accreditation of Healthcare Organization
KII	Key Informant Interviews
Km	Kilometer
Km²	Kilometer square
MAP-UK	Medical Aid for Palestine - United Kingdom
MD	Median
MOH	Ministry of Health
NGOs	Non-governmental Organizations
No	Number
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
PADP	Pain, Agitation and Delirium Protocol
PCBS	Palestinian Central Bureau of Statistics
Ph.D.	Doctor of Philosophy
PHC	Primary Health Care
PTSD	Post-Traumatic Stress Disorder
SD	Standard Deviation
SPSS	Statistical Package for Social Sciences
TBSA	Total Body Surface Area
UNRWA	United Nations Relief and Works Agency for the Refugees of Palestine in the Near East
USA	United States of America
VAS	Visual Analogue Scale
WB	West Bank
WHO	World Health Organization
Y/N	Yes/ No

Chapter One

Introduction

1.1 Background of the study

Burn injury is the most painful and disfiguring forms of trauma, as it affects the skin, that is the largest and most visible organ. Burn injury is classified from the most damaging of all injuries; hence a good pain control is necessary for more than simply humane reasons. Despite major improvements in burn wound management and survival, the burn pain management is inadequately treated globally (Richardson & Mustard, 2009).

The International Association for the Study of Pain (IASP) defined the pain as “*an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage*” (Loeser & Treede, 2008, Page 475).

The patients with burns suffers from severe pain at the time of the burn (acute phase) and during subsequent treatment and rehabilitation. Pain has adverse physiological and emotional effects. Also, the occurrence of neurological shock is one of the most serious complications that may occur due to the lack of control of pain, as well as delay of the wound healing process, disturbances of sleeping pattern, fear and anxiety and lack of participation in daily activities.

Burn pain can last for a long period (chronic pain) and have a negative impact on a person's quality of life and impede recovery from injury. Unrelieved pain can become a syndrome in its own right and cause a downward spiral in a person's health and outlook (Solaro et al., 2013).

Also, the complications results from poor pain management are wide-ranging; poor submission with rehabilitation therapies, increased pain sensitivity and loss of trust in the burn team. Uncontrolled burn's pain increases the incidence of chronic pain associated with depression, Post Traumatic Stress Disorder (PTSD), and poor wound healing (Rimaz et al., 2012).

So pain management is an important factor in better outcomes that facilitate recovery, prevents additional health complications, improves an individual's quality of life and can influence a person's participation in family life and work and affect mood.