Rate and Reasons of Minor Injuries Patients' Attendance at Surgical Emergency Departments, Ain Shams University Hospitals

Thesis

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بسم الله الرحمن الرحيم
وَمَا أُوتِيتُم
مِّن الْعِلْمِ
إِلاَّ قَلِيلاً
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List of Abbreviations

Abb.	Full term
ASUH	*Ain Shams University Hospital*
BBP	*Basic Benefits Package*
CCO	*Curative Care Organizations*
CDC	*Centers for Disease Control*
ED	*Emergency Department*
ER	*Emergency Room*
FHC	*Family Health Center*
FHM	*Family Health Model*
FHU	*Family Health Unit*
GH	*General Hospitals*
GP	*General Practitioner*
HIO	*Health Insurance Organization*
HSRP	*Health Sector Reform Program*
ICPC	*International Classification of Primary Care*
NHS	*National Health Service*
PHC	*Primary Health Care*
PHCCS	*Primary Health Care Centers*
SA	*Saudi Arabia*
THO	*Teaching Hospitals and Institutes*
WHO	*World Health Organization*
WICC	*WONCA International Classification Committee*
WONCA	*World Organization of National Colleges, Academies and Academic Associations of General Practitioners/Family Physicians*

ABSTRACT

Rate and Reasons of Minor Injuries Patients' Attendance at Surgical Emergency Departments, Ain Shams University Hospitals

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Introduction: Minor injuries contribute to the majority of injuries presenting to medical facilities, contributing globally to 37.3% of disability adjusted years. treatment of minor injuries places an enormous burden on hospital emergency departments and trauma care systems. **Objectives:** To measure the rate of attendance of minor injuries attendance at surgical emergency departments and to describe their characteristic, to identify the reasons for minor injuries patients attendance at ED rather than PHC. **Methodology:** Data were extracted from hospital medical records for one year duration to measure the rate, a structured interview questionnaire was applied to 345 minor injuries patients to know their reasons of ED preference rather than PHC.**Results:** The rate of attendance of minor injuries patients for one year duration at 2017 was 24.1%.The majority of minor injuries cases were males (67.2%), young adults (59.7%) with mean age (27.65±17.71), contusions were the most common cause for attendance (51.6%), most common reasons for ED preference were that the ED doctors are more experienced than any other place (79.7%), ED is free of charge (73.6%), the ability to get the diagnosis and investigations in one place (73%). As regards barriers to PHC (65.5%) didn't know if the PHC are capable of dealing with their injuries, (50.7%) lack of the specialty they needed, (47.5%) lack of PHC availability all the time. **Conclusion:** Overcrowding of EDs is a major health problem, minor injuries play a significant role as the study showing that minor injuries represent nearly one quarter of the total attendees of the ED, efforts should be targeted to increase utilization of PHC services regarding minor injuries. **Recommendations:** Establishment of a triage area or minor injury unit near the emergency department will help in better management of ED cases; public awareness to the community about different levels of health care system will provide better utilization of health resources. **Key words:** Minor injuries, emergency department, records.

INTRODUCTION

Injuries are a public health problem and considered to be one of the major preventable causes of mortality and morbidity globally, with injuries causing almost 5.1 million deaths and 278 million disability adjusted years annually ***(Lozano et al., 2012).***

Minor injuries are defined as ″ injuries requiring simple medical intervention, quickly managed, likely to be discharged home, self referral and can be managed in the primary care″ ***(Lutze et al., 2015).*** Added to that, minor injuries were defined as injuries not requiring hospital admission or surgery ***(Lee et al., 2015).***

Minor injuries can have physical, psychological disabilities and financial consequences that impact the quality of life of the individuals and their families ***(Ong et al., 2016).***

Most studies focus on severe injuries as they have more serious impacts on health with high mortality rates and worse disability outcomes ***(Jacoby et al., 2017).*** On the other hand, minor injuries contribute to the majority of injuries presenting to medical facilities, contributing to 37.3% of disability adjusted years compared to only 33.3% for severe injuries ***(Polinder et al., 2012).*** In 2013, based on an analysis of **i**ncidence, mortality and global burden of injuries, 973 million

people sustained injuries that required medical treatment, with 75.2% consisting of minor injuries with only 5.8 % of them requiring inpatient treatment ***(Haagsma et al., 2016).***

In Egypt alone, according to a surveillance done by the WHO, injuries account for 20 % of total deaths (30, 000 deaths annually). Minor injuries account for 2, 100, 000 injuries every year, with a substantial expense for the majority of injured patients to meet the direct and indirect cost of injuries. Increased emergency department (ED) registration for injuries in all governments was increased from 446, 605 to more than one and half (779, 837) in only 6 years (2001-2006). However the burden is expected to be higher in the future specially with absence of injury information system ***(WHO, 2009).***

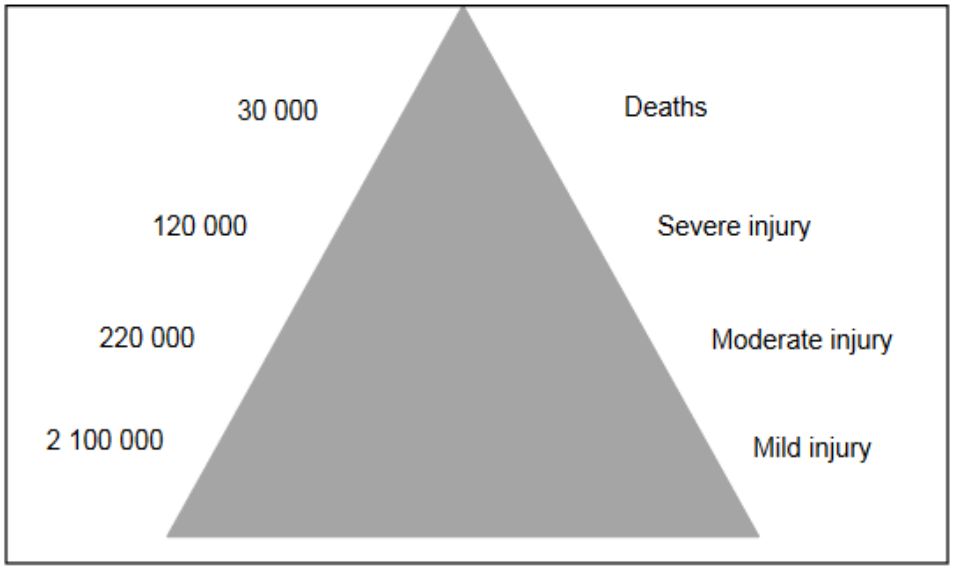

Figure (1): Injury Pyramid, Egypt, 2007 ***(WHO, 2009).***

Emergency Departments (EDs) worldwide are facing a crisis from overcrowding ***(Breen and McCann, 2013; Durand et al., 2012)*** and across the globe, pressures and crowding at EDs are resulting in increasingly strained and inefficient ED services, leading to increased waiting times and treatment delays, impaired access, financial losses for providers, and ethical consequences ***(Moskop et al., 2009; Hoot and Aronsky, 2008).***

Most of the patients, who attend EDs with non-urgent problems, didn't try to consult their general practitioner before they decide to go the ED although most of their complaints could be dealt with by a general practitioner at primary care units ***(Thompson et al., 2013).*** Many studies also showed that barriers to PHC is contributing to ED overcrowding. In a Bahraini study, the researchers found that 30% of the patients attending the ED had minor illness and were categorized as primary care patients ***(Sharaf and Brakat, 2013).*** Such patients use time and resources of the health care system inappropriately, increasing stress to health care providers that could eventually hinder quality of care for true emergency cases ***(Young-Harry et al., 2015).*** ln addition, the treatment of injuries places an enormous burden on hospital EDs and trauma care systems ***(Villaveces et al., 2010).***

On the other hand, paying attention to patients going to the appropriate level of health care will not only provide them the chance to relieve their symptoms but also will also enhance

the bond of ongoing health care by providing them health education sessions, good follow up and potentially preventing future complications ***(Carret et al., 2009).***

Studies specifically conducted on minor injuries can serve as a marker of future hazardous situation as many studies showed that persons who experience minor injuries are more susceptible for severe one. So, studying the epidemiology of minor injuries may be useful to the severe one also. Additionally, focusing on data extracted only from severe injuries will underestimate the total burden of injuries at any health care system ***(Lang et al., 2014).***

By reviewing the literature there was no available published research about patients' preferences concerning the use of the EDs rather than the primary health care in Egypt for minor injuries.

This study measured the magnitude of attendance of minor injuries at EDs at Ain Shams University Hospital as an example of tertiary University Hospital and described the reasons of patients' preference to utilize EDs instead of primary health care (PHC) centres.

AIM OF THE WORK

Research questions:

1. What is the rate and the characteristics of minor injuries patients' attendance at surgical emergency department Ain Shams University Hospitals (ASUH)?

2. What are the reasons for the patient's preferences to attend the ED rather than the primary health care (PHC) centres?

Goal:

To decrease overcrowding at the emergency departments (EDs) through better utilization of primary health care services

Objectives

1. To measure the rate of minor injuries patients' attendance at surgical emergency departments- Ain Shams University Hospitals.

2. To describe the characteristics of minor injuries patients' attendance at surgical emergency departments- Ain Shams University Hospitals and stratify them by age and gender.

3. To identify the reasons for minor injuries patient's preferences to attend the surgical EDs rather than the (PHC) centres.