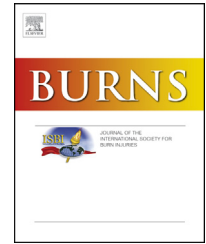


Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/burns

Review

Education in burns: Lessons from the past and objectives for the future

Ruth Tevlin ^{a,*}, Luke Dillon ^b, A. James P. Clover ^{*,a}

^a Department of Plastic and Reconstructive Surgery, Cork University Hospital, Cork, Ireland

^b Department of Public Health and Primary Care, School of Medicine, Trinity College, Dublin, Ireland

ARTICLE INFO

Article history:

Accepted 8 March 2017

Available online xxx

Keywords:

Global crisis

Simulation

Patient awareness

Population engagement

Specialty training

Emergency burn management

ABSTRACT

Burns are devastating to the individual and society, representing a huge biomedical burden. Improved education in burns has however ignited a revolution in high-income countries—burn mortality is reducing. Education in burns is far-reaching. For the purpose of this concise review, we focus on four categories: education of both (1) emergency and (2) specialist physicians, and the general population, both at a (3) societal and (4) individual level. Tragically, the global burns picture is bleak with burns representing a neglected but solvable health crisis. Ninety-five percent of burns occur in low-income countries, causing enormous suffering, death and disability. Here, we examine the literature detailing burn education with a focus on past lessons, current trends and future objectives. We have identified key educational objectives to revolutionise burn care on a global perspective. Now is the time to build on promising educational strides to reduce the global burns burden.

© 2017 Elsevier Ltd and ISBI. All rights reserved.

Contents

1. Introduction	00
2. Methods	00
3. Results	00
3.1. Burns education for the emergency physician	00
3.1.1. Burns education for the emergency physician: starting at the very beginning—burns education for the medical student	00
3.1.2. Burns education for the emergency physician: continuing burns education and keeping doctors up to date	00
3.1.3. Burns education for the emergency physician: adjuncts for continued training	00
3.2. Burns education for the specialist	00
3.2.1. Burns education for the specialist: staying abreast of research advances	00
3.2.2. Burns education for the specialist: technology and innovation	00
3.3. Burns education for the general population	00

Abbreviations: UK, United Kingdom; ATLS, Acute Trauma Life Support; EMSB, Emergency Management of Severe Burns; ABLS, Acute Burn Life Support; TBS, The Burn Suite; BBA, British Burn Association.

* Corresponding author.

E-mail address: j.clover@ucc.ie (A. J.P. Clover).

<http://dx.doi.org/10.1016/j.burns.2017.03.008>

0305-4179/© 2017 Elsevier Ltd and ISBI. All rights reserved.

3.3.1.	Burns education for the general population: educating government health-care policy for population burn prevention	00
3.4.	Burns education for the individual	00
3.4.1.	Burns education for the individual—engagement and health awareness	00
3.4.2.	Burns education for the individual—burns prevention and health literacy	00
4.	Conclusion	00
	Conflict of interest	00
	References	00

"I did then what I knew how to do. Now that I know better, I do better."

Maya Angelou

1. Introduction

Currently, 1 in 200 people in the United Kingdom (UK) will suffer a burn per annum [1]. Fifty percent of burn patients will endure a restriction in their activities of daily living, ten percent will require hospitalisation and ten percent will have a life threatening burn [1]. Simply put, burns are devastating to the individual and devastating to society. Burn care is expensive—one of the costliest areas of healthcare notwithstanding the additional societal cost of rehabilitation and loss of earnings [2–4]. Improved education in burns has ignited a revolution in high-income countries. Burn mortality is reducing.

Burn care involves almost every facet of patient care: ranging from emergency and specialist burn physicians, to primary care, nursing and allied health practitioners. Patients with burns often receive their initial care by non-burn specialists in local hospitals and primary care, prior to definitive specialised care. Morbidity and mortality is reduced in burns patients with optimal acute treatment [5,6].

As inattention and carelessness have classically contributed to burn causation, education of the general population is also paramount in burn prevention. The role of legislation in reducing high-risk practices has played an important role in burn prevention also. As contributors to burn treatment, it is prudent that healthcare workers inform governmental spending in order to plan, fund and implement the most effective burn management and prevention systems.

Ninety-five percent of burns occur in low-income countries and over seventy percent affect children, causing significant suffering, death and life-long disability [7,8]. Half of the world's population still use open fires for cooking, heating and lighting. In low to middle income countries, burns represent a neglected health crisis. Death and disability result from inadequate resuscitation, infection and burn contractures that could otherwise be avoided through safe, cheap and effective treatments including early skin grafting and antiseptics. Long-term consequences of inadequate or inappropriate treatment can have devastating consequences, leading to a lifetime of disability, disfigurement and exclusion.

Much of the suffering, disability and mortality of burns is preventable with improved burns education. This is a complex and wide-ranging topic and outside the scope of a single review. We have therefore narrowed the focus to two

physician groups (1) non-burns specialist emergency and (2) specialist physicians, and the general population, both at a (3) societal and (4) individual level. There is great disparity between both the outcome and incidence of burn injuries in the developed and developing world, but with better education we may have the opportunity to narrow this gap. Educational strategies, which have been tried and tested in the developed world, can revolutionise burn care and outcome in the developing world.

Globally burns are preventable and far too frequent. In order to reduce burn incidence and improve burn care worldwide, continued education is paramount. We examine the literature detailing past and present burn education with a focus on current trends and objectives for the future.

2. Methods

A PubMed search was utilised to identify available literature up to February 2016. Search criteria included burns education, education in burns, surgical burns education, global burns and patient awareness of burns. Additional search criteria included surgical training, surgical residents, simulation, and modern educational tools. Search criteria were restricted to the English language, but acceptable English translations were sought for inclusion. Original articles (observational, cohort, cross-sectional, case-control, longitudinal and experimental), systematic reviews, and meta-analyses were included for review. Eligible papers were first identified by the title and abstracts and then the full-text papers were retrieved. Additional studies were found after reviewing the related citations and references of the included papers.

3. Results

Education in burns is far-reaching. For the purpose of this concise review, we focus on only four target groups: (1) emergency physicians, (2) specialist physicians, (3) the general society, and (4) individuals (Fig. 1).

3.1. Burns education for the emergency physician

Patients with severe burns are ultimately managed in specialised burn units under the care of specialised teams, but emergency doctors are more frequently involved in the acute management of patients with burns. Appropriate initial management of burns limits the progression of burn depth and has a positive impact on patient outcomes [9]. The provision of

Download English Version:

<https://daneshyari.com/en/article/5636051>

Download Persian Version:

<https://daneshyari.com/article/5636051>

[Daneshyari.com](https://daneshyari.com)