

Geographic Accessibility of Burn Care Centres; A Battle of Life in Pakistan

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Introduction

Burns; is a serious yet neglected global health problem in developing as well as developed nations all around the globe, though more commonly seen in low and middle-income countries like Pakistan. According to the World Health Organization (WHO), 11 million burn injuries require medical intervention annually worldwide.¹ In Pakistan, which is the 6th highly populated country with the total population of more than 220 million; the notion of burn care setups has always been forsaken, rendering a death rate of 6.7% per year.²

This grim situation is attributed to several multifaceted issues including (but not limited to) the lack of awareness, poor literacy rate and the meagerness of functional burn centers in Pakistan. According to the data reported in 2019, there are 1,282 public hospitals in Pakistan.³ while just eleven burn care intensive units functional in a country with an area of 796,095 sq. km.⁴ The province of Punjab has seven operational burn centers that too are located in big cities of the province. Khyber Pakhtunkhwa, Sindh, Balochistan and the federal capital of Pakistan have one burn care unit each. This alone shows that the burn centers grooving over patient load and the dire need for establishing new ones. Though this measure is a difficult one due to the scarcity of financial resources, measures should be taken to reduce occurrences of such incidents in the near future.

The presence of 'golden hour' in burn care like in other types of trauma, start of resuscitation and early care is essential to get satisfactory outcomes.⁵ Patients transferred over long distances have a high probability of developing bacterial infections causing sepsis and they lack timely resuscitation which should be given within the first 8 hours of burn leading to conditions like reduced cardiac output,

acute renal failure, hypoglycemia, hypothermia and ultimately multi-organ failure with the end results being permanent disability or death.

Though the establishment of a new burn center in every district health unit is inevitable to this aggravating problem yet measures can be undertaken to minimize incidents as the majority of these burns are accidental that can be reduced by drawing preventative measures as being done in developed countries. The most important measure that is not yet practiced is that the first aid of burns should be taught to the first responders like Punjab Emergency Service (Rescue 1122) and Edhi Ambulance Service whose services operate throughout Pakistan from primary care to quaternary care hospitals. Basic lifesaving programs similar to Emergency Management of the Severe Burn Course (EMSB), originally developed in Australia and now practiced in numerous European countries including the United Kingdom, and Advanced Burn Life Support (ABLS) in the United States of America should be taught to these emergency care providers so early management and burn resuscitation can be given to a burn patient. Courses like these should also be taught to medical and nursing practitioners working at tehsil and district level hospitals who might be required to provide initial management to patients with severe burns.

Emergency Management of the Severe Burn (EMSB) training program is already being practiced since 2008 in Bangladesh, an emergent nation like ours and the outcomes of this are satisfactory. The course not only provided them with knowledge on emergency management of burns but also made them confident to manage such life-threatening situations. According to a report, 32 participants who completed the interview, majority of them (87.5%, n=28) had training of emergency

burn management only through EMSB. About 50% (n=16) doctors mentioned that the EMSB course helped them treat burn patients in their facility whereas according to 25% (n=8) doctors the knowledge and skill gained through this course helped them daily during managing burn patients.⁶

As there are few centres within large geographic area so this will not only solve the problem at grass root level but also establish an excellent example of practicing such international lifesaving courses in developing countries like Pakistan. Burn trauma early management and timely referral from periphery to the specialized health care centers can reduce mortality due to burn injuries and limit excess use of hospital resources in Pakistan. Development of local Burn Emergency/ First Aid course at par with international standards is need of the hour.

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