How to Build Neurosurgery Centers in War-Wrecked Countries?

Muhammad Hussam A. Alothman¹, Nabeel S. Alshafai¹
1Alshafai Neurosurgical Academy (A.N.A), Toronto, Ontario, Canada
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Introduction

Rebuilding neurosurgery in war-torn countries has not been discussed before. This paper investigates a theoretical model that outlines the key points that should be considered to create a well-established methodology to rebuild neurosurgery in those war-devastated countries.
Methods

This paper presents a narrative literature review to analyze the points which health care planners should take into considerations when they are building health care centers post-war. Published studies were sought using the following search terms: health care, post-conflict, reconstruction, war, and neurosurgery.
Results

we have identified 10 key-point factors that are essential to rebuild an admirable neurosurgical center to serve an emotionally and physically injured population.
1- Demographics: The demographic distribution of the local population will be altered in compared to prior war. The need of the neurosurgical centers should be determined depending on new demographic studies not on the old one.

2- Security: Security is of paramount importance to be able to create a functional neurosurgical practice. This is an issue during the war, but a reality even post war when there is a nation in the building and rules are being re-enforced post un-stable period.

3- Geography: It’s of high importance to build up neurosurgical platforms in accessible geographic places so that one center may service two or more regions.

4- Man Power: From a human resource viewpoint, brain drain is very problematic in war and post war affected states; especially in the developing countries. Up-to-date statistics are much needed to assess the number of residual experience lift in the nation’s health care professionals whom will form the new nucleus.
5- Psychosocial self-perception: In war, some inexperienced health care workers may be forced to practice surgery without experience. Their suboptimal practices will have a great deal of negative psychological impact on the perception and expectations especially those related to head injuries.

6- Economy: Neurosurgery is very expensive when compared to other medical and surgical sub-specialties. Determining the financial aspects is a huge challenge and require ample preparation and strategic planning.

7- Ethical and religious factors: It is essential when we nation build to consider thoroughly the differences in medical ethics keeping in mind cultural and religious factors which might differ significantly from the helping or donating countries.
8- **Training**: Setting up a training platform to cover a wide sector of neurosurgery health care requires strategic effective planning from within the country such as bigger centers or non-war affected zones or neighboring countries or even foreign health care experts to repair the shortage in human resources temporarily.

9- **Advancement in Technology**: Information technology is a very fast evolving field and it is of paramount essence to include it right from the starts of rebuilding the health care system. This might be much more cost effective for the nation in the long run.

10- **Feasibility study**: This helps link the above points and assess its effectiveness from different angles specially from the cost effectiveness point of view. When planning, we need to bear in mind the challenges associated with restrictions and sanctions that such countries might still be under.
Discussion

This paper provides a theoretical methodology and we should, when applying it on the reality, anticipate that difficulties might emerge. However, serving people in need is the utmost purpose of our career and difficulties are made to be overcome.
10 key essential factors to rebuild neurosurgical centers in war countries