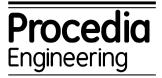




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Staff Stress: The Sleeping Cell of Healthcare Failure

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Abstract

Much research has been conducted to increase the resilience of healthcare service to major hazards; however, every time a major hazard takes place we discover that this critical service is yet to reach the anticipated resilient state. This paper reports an ongoing research work that looked at: the resilience of the structure of healthcare facilities, equipment stability, lifeline (utility) supplies, the interaction between hospitals and emergency agencies and the support the latter can provide during major emergencies. This paper presents findings on the ability of human resources to deal with the stress associated with major hazards. A mixed research method was adopted, including a systematic literature review followed by a survey to gather evidence about the stress level amongst healthcare staff in hospitals and their motivation. The literature review was conducted to find information about the level of stress healthcare staff experience with during major emergencies. Findings suggest that healthcare staff remain at high risk of stress and thus represent a major weakness of healthcare service resilience. The research concludes with a set of recommendations to address this issue.

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1. Introduction

It is very hard to argue the criticality of healthcare pre, and post disasters. Many articles have been written emphasizing the role of healthcare facilities during disasters and a significant number of tools have been developed to evaluate the resilience of healthcare and facilitate the development of resilience strategy. So why, following a disaster, do we start talking again about vulnerabilities and challenges preventing a smooth healthcare? Have we understood how these facilities operate? Are we lacking understanding of the nature of hazards and the way they affect healthcare? Or is it something else that we still need to discover? This study complements the body of knowledge by arguing that the resilience of healthcare service can be compromised if staff members are under excessive pressure beyond their coping ability from their day to day duties.

1.1. Understanding the resilience of healthcare

Resilience is defined as "the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of the hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions" [1];. Achour et al. [2] and Alexandre [3] suggest that resilience needs to take a holistic view of the system and its physical, technical social and/or psychological components. The rationale behind this view is the complexity of healthcare service where systems heavily depend on each other to operate. For example, the loss of electric power, water supply, gas or staffing could render the hospital in a useless entity, let alone if you lose two or three of these components at the same time. In order to ensure that this scenario does not happen healthcare facilities are often equipped with alternative sources to provide a certain level of redundancy in the system and increase the chance of continuous operation.

Whilst healthcare facilities can secure some independency from power, gas and water, it remains dependent on other entities (e.g. suppliers and roads) to continue providing healthcare. The recent WHO Hospital Safety Index [4] succeeded in capturing some of this complexity and started 'building the jigsaw'. Such a tool [4] requires assessors to check the condition of detailed components such as beams, joints and cables and to ensure that facilities have coordination mechanisms and cooperative arrangements with the wider healthcare networks.

Substantial amount of research has been conducted to improve the structural and non-structural performance of healthcare and some of these have turned into guidance and codes. Similarly, the disaster response and emergency planning systems have been widely published. In addition, the WHO and UNISDR campaigned to increase awareness and emphasize the criticality of healthcare resilience; and many case studies have also been published providing implementation models. So why do we still see interruption of healthcare every time a disaster takes place? Implementation is perhaps one of the key areas that need to be investigated as it might reveal new resilience gaps. The implementation we refer to in this study is the ability of staff to transfer these guidance and codes into reality. The major question asked in this study is 'do staff have the capacity to engage in improving the resilience of healthcare?'

1.2. Healthcare staff

The operation of a healthcare facility is secured by a multi-disciplinary team playing clinical and non-clinical roles. Clinical roles include doctors and nurses whose responsibility is managing treatment and providing necessary clinical care, managing clinic-operational process (e.g. triage), and running wards. Treatment could also be provided by a non-clinical allied health professionals who assess, diagnose and treat individuals with specific health conditions (e.g. speech difficulty, obesity etc.). They also play a role in preventing diseases and disability and include pharmacist, dieticians, and occupational therapists. The non-clinical role involves administrators and clerk who look after the administrative and organizational side of the healthcare facility. Engineers and technicians are those equipped with the knowledge and skills to run and maintain the technical functionality of the facility (e.g. lighting, IT, water and gas supplies). Others members are in charge of maintaining the hygiene, safety and comfort of the residents and visitors of the facility. Each of these staff categories plays a major role in the day to day and perhaps even greater role in major emergencies when demand increases and resources/supplies decrease.

This study focuses on the capacity of clinical staff members as they play a direct and leading role in dealing with casualties. They are often required to work beyond their daily capacity due to the relatively larger number of 'service

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