KNOWLEDGE IS THE ENEMY OF DISEASE: AN EVIDENCE BASED APPROACH TO THE EARTHQUAKE IN PAKISTAN

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The 8/10 earthquake is the most devastating calamity to hit the Pakistan. According to the World Bank assessment 5.8 million people have been affected, leaving 2.8 million people without shelter[1]. While the immediate response to this disaster by the mental health professionals has been swift and effective, the situation needs a long term commitment. The most important phase of reconstruction and rehabilitation has started new and we need to define our strategies clearly.

As professionals trained in scientific method it is our utmost duty to base our response to this challenge on the best available evidence. This is even more important in view of the limited resources and enormous demand for providing the health care to a large population. We will always be facing this dilemma: should this Rupee be used in providing the shelter or a costly intervention when no intervention is needed or a cheaper alternative is available? The need for the evidence based response in this situation is highlighted by the evidence that has evaluated the use of psychological debriefing in traumatic situations like these. The psychological debriefing has been mainstay of early interventions for the trauma and millions of Dollars were spent on this especially after the 9/11. However there have been at least two systematic reviews which have shown that single session psychological debriefing when applied to individuals with moderate to severe exposure to potentially traumatizing events is not useful in reducing PTSD symptoms to a greater extent than would occur with the passage of time. In fact there is some evidence that Psychological Debriefing may hinder recovery from trauma[2,3].

Evidence-based medicine (EBM) is the process of integrating individual clinical expertise with the best available external clinical evidence from systematic research[4]. The EBM approach requires healthcare decisions to be made on the basis of strong evidence generated by high-quality research studies[4,5]. Increasingly there is now emphasis on evidence based practice which requires all the health practice, not merely the individual clinical decisions to be based on the high quality evidence. It is commonly thought that in developing countries like Pakistan we can't afford to base our practice on evidence. This is unfortunately based on many wrong assumptions about the evidence based practice. In fact, there is some evidence that, the evidence based practice in developing countries could save millions of dollars in health expenses, with the ultimate beneficiary being neither the government nor the physicians but the patients themselves, who could then spend their hard earned money on more immediate needs, such as food, shelter, and education[6].

How can we incorporate the evidence in our action to cope with the present situation? I believe that our response to the present situation should be based on the following principles, which ensures looking for evidence where it is readily available and conducting our own studies in areas where it is lacking:

1. **T**raining in interventions for the disorders related to trauma for which there is clear evidence of effectiveness.
2. **R**esearch in the relevance and outcome of the interventions which we know can be effective but have limited evidence at present.
3. **A**pply the evidence based interventions for the disorders such as depression and anxiety as there are already a number of evidence based interventions for these disorders.
4. **U**nderstand the local context and the limitations
5. **M**odify the interventions in the light of our local context and limitations.
6. **A**pply again after modifications.

This can easily be summed up in one acronym TRAUMA i.e, train, research the relevance and outcome, apply, understand the local context, modify in the light of context and limitations and apply again. These principles will be elaborated further in the following paragraphs.

While there is little evidence for the effectiveness of the interventions which can be applied in the early phases of the disaster such as Debriefing there is abundant evidence that interventions to cope with for the late consequences of the disaster. In case of PTSD for example, Trauma-Focused Cognitive Behavioral Therapy can be effective in the treatment[7]. In Pakistan the number of trained professional in is very limited. Therefore we need to have our professionals trained in this intervention.

It is very important that we conduct research to test the relevance of interventions for our culture. A research agenda outlining the major areas which could be focus of attention for the researchers has already been described[8].

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This provides the challenging opportunity for the mental health professionals not only in Pakistan but world wide.

The importance of what we already know and can apply in a situation like this must not be underestimated. The concept of PTSD has been controversial in general[9]. The validity of its clinical construct has been questioned in non-Western cultures particularly[10]. Despite this, in the traumatic situations like the present one, the role of PTSD and other disorders which are peculiar to the trauma is too much highlighted often at the expense of other psychiatric disorders. In fact there is some evidence that this disorders may be one of the least common psychiatric diagnosis[11]. The common psychiatric disorders still form one of the most formidable challenges we face in these areas. If we take a very conservative estimate of common psychiatric disorders occurring at a rate of 10%, there would be 0.57 million people in the earthquake effected who will need help for these disorders. These common psychiatric disorders are not unusual. These are the disorders like depression, panic disorder, phobia, acute psychotic disorder, generalized anxiety disorder, conversion disorder which we normally see in our routine psychiatric practice. There are evidence based interventions available for all of these disorders. One of the resources for these evidence based practice is the NICE (National Institute of Clinical Excellence, UK) guidelines. These guidelines are available for example for depression and panic disorders. (For further details visit, www.nice.org.uk.)

The guidelines will however need to be modified in the light of context and limitations we face in present situation. The article on tele-psychiatry in this journal provides a good example of modifying in the light of our local context and limitations which is characterized by a disaster spread across a very wide geographical area and inadequate manpower. It is an encouraging and innovative approach to the problem and we need more innovative approaches like this.

An important gap in our knowledge is mainly responsible for the mammoth destruction resulting from earthquake. We do not have the knowledge of timing of natural disasters like present earthquake. However, we do have knowledge to fight the consequences of earthquake. Knowledge is enemy of disease and is the only partner we need to trust. An evidence based approach ensures that we look for the best available knowledge and apply it in our fight against the disease. The disaster is not preventable but we will invite another catastrophe if our response is not based on the knowledge.

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