

Long Term Psychological Effects of Earthquake

Earthquakes are natural disasters that not only result in physical destruction but also psychological destruction to individuals, families, and communities. There is a significant effort towards rescue operations, and psychological consequences may get overlooked in the disaster moments. Addressing the long-term psychological effects is just as crucial. The purpose of this project proposal is to examine the long-term psychological impacts of earthquakes and provide practices that will help.

Indeed, some demographics would be particularly vulnerable, such as the elderly and children. A challenge is determining the specific needs of each demographic, and providing care that caters to them, another is logistical. The task of transferring physicians to the scene of the disaster alone might prove difficult in the case of damage to roads, as apparent in last year's earthquake. Therefore we should act according to a hierarchy of services, and provide the best care possible.

Since the majority of victims seek shelter in tent cities near the affected area, the hubs will be located according to the population density. The allocation of physicians from city centres to hubs periodically resembles The Multiple Travelling Salesperson Problem (mTSP). Facilities to be established should be located simultaneously close enough to both city centres and tent cities. This positioning of centres relates to the Maximal Coverage Capacitated Facility Location Problem.

Just as typical physical injuries of patients in the hospital setting are taken care of after a triage phase so that they are better redirected to the necessary departments depending on the level of emergency, the channelling of those who seek psychological help to the centres could be done in the same fashion. While immediate care is crucial for certain demographics, it might not be as vital for other groups in the community, so they could as well receive psychological support later in the long term.

Children can be an example of the demographics that need urgent help. It may be beneficial to put them in game and art therapies where they are with their peers and to provide them a space they can escape from the severity of the circumstances temporarily, providing them personal care in the case of their parents' specific request. This would also be assuring for their parents. A support group for children's mothers could be established alongside the play groups with ease. This implies locating the hubs nearby tent cities.

Support groups should be established in a demographically appropriate way. The reason for such a partition is that the people who suffer from similar traumas could benefit from knowing that they are not alone. In these sessions not only they can share their own experiences but also empathise with those who are in the same situation.

It is not possible for help centres to exist in the disaster areas for long periods of time, in the long term there is a need to establish a different support system. For instance as part of this new system a support hotline can be operated for longer years since it could be maintained with lesser resources. Establishing a support hotline would also assist reaching a wider pool of counselees. This process could further be streamlined with a mobile application.

A gradual normalisation should happen while transitioning from the state of crisis to normal life. In order to ensure that the process runs smoothly, the psychological support will be provided to those who still seek it. Alongside with psychological support social activities and vocational training can be advantageous. The facilities that were previously allocated for mental support can be transitioned into community centres.