Survey Site: Padang, West Sumatra, Indonesia

Focus of the Study: Effect of the injury on the disability and quality of life of the injured survivors after Padang earthquake

After it suffered from an earthquake in 2007, regions in West Sumatra especially in the coast of Padang were stricken by strong earthquake on 30 September 2009 with magnitude of 7.6 Richter scale. The initial shock was followed by an aftershock 6.8 RS, on October 1, 2009. As per from 28 October 2009, an estimated 1,117 people had been reported dead and another 3,515 people injured. Padang city and Padang Pariaman District were the most affected.

Summary Statistics

The objective of this cohort and longitudinal study was to measure the effect of injury on the disability and quality of life of the injured survivors after the Padang earthquake. We interviewed 275 respondents consisting of 182 injured survivors and 93 non-injured survivors.

Concerning demographic characteristics, there were more older injured respondents as compared to non-injured (e.g. of 60+ year-old respondents, 17.4% were injured, while 8.6% non-injured respondents).

Types of injuries suffered were mainly mild injuries, such as bruise (41%). Three top moderate/severe injuries were broken bones, open wound and sprained ankle/ wrist (wrench).

More than a half of injured respondents reported that leg/foot was dominant part of injured body. About one out of five respondents had experienced injuries on their arm/hand, head/neck and back bone.

71.2% of injured survivors reported that they were struck down by falling objects (concrete, rocks, wood, etc) as a major cause of injury, followed by being thrown, punctured by sharp material, wedged, falling down, bumped, and burns.

Regarding the health status of respondents, hypertension was the main chronic disease, followed by hearth, and lung diseases. Same pattern was observed among both injured and non-injured respondents.

Almost half of injured survivors reported joint pain as the main acute sign and symptoms they experienced after the earthquake, while only about one-fifth non-injured respondents reported the same complaint. Interestingly, non-injured survivors experienced more fever and flu/cough, as compared to injured survivors.

Quality of life (QoL) scores of non-injured survivors was significantly higher than scores of the injured survivors. Further more, the injured survivors were significantly more disabled than non injured survivors.

The significant differences of disabilities and QoL between injured and non-injured population did not depend on the socioeconomic and level of house damage, since the characteristics of these variables were similar between injured and non-injured people.

Figure 1: Age Group of Respondents

Figure 2: Body position during the earthquake struck

Figure 3: Type of injury

Figure 4: Body Injured

Figure 5: Cause of Injury

Figure 6: Top Chronic Diseases

Figure 7: Top Acute Signs and Symptoms

Figure 8: Comparison of Total Score of Attributed Quality of Life

Figure 9: Comparison of Total Score of Disabilities