

mental health services will be possible despite substantial under-investment in such services by governments. Conclusion: Mental health system development efforts need to be substantially increased if improved population mental health is to be achieved in low- and middle-income countries.

SY16-02

Mental Health and Suicide after Natural Disaster

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Objective: The purpose of this study is to clarify the issue concerning mental health and suicide after natural disaster. Earthquakes, floods, tsunamis cause deaths and injuries of many people around the world every year, which subsequently result in mental health problems, such as depression, post-traumatic stress disorder. However, whether or not mental health problems would exaggerate suicide remained uncertain. Using earthquakes as the example, we address the question: do suicide rates increase after natural disaster?

Methods: Using earthquake and suicide as the keywords, we searched Medline from 1980 to 2008 to identify relevant articles. Only those studies which were dealing with suicide mortality rate were included in our analysis.

Results: Seven papers were included in this analysis, namely, 4 papers related to 1999 Nan-tou earthquake in Taiwan and 2 papers were regarded to 1995 Kobe earthquake in Japan. One paper reported by US CDC. Most of Taiwanese studies reported increased suicide rate after Nantou earthquake, except study by Lu, who found no association between the degree of damage and the increase in suicide rate. Otherwise, Chou et al found that victims were 1.46 times more likely than non-victims to commit suicide following earthquake. Yang reported higher suicide rates were observed over a 10-month period following disaster. Liaw reported that suicide rate for all age groups all increased, but only group of age 45-64 reached statistically significant. The studies from Japan and US did not support that suicide rates increase after earthquake.

Conclusions: In Taiwan, the suicide rate increased since 1994, and further became one of the leading causes of mortality in 1997 that was reported by Department of Health, Executive Yuan (the Cabinet). The suicide rate escalated persistently and reached the peak in 2006 by 19.3 per 100 thousands people. Not only earthquake in Nantou in 1999, but also tremendous impact of socioeconomic and political events, precipitated suicide rate increased during this period. For example, migration-out of traditional industries to foreign countries since early 1990, and amendment of the Labor Standards Act in 1996 and 1998, which causes drastically increased unemployment of many working labors. It is already known that the unemployment rate is closely related to suicide rate. We concluded that

natural disaster may raise mental health problems among the affected people, but may not directly cause increased suicide rate. We highly agree that diverse contextual effects should be taken into consideration when issue of suicide rate after natural disaster is dealt with.

SY16-03

Prevalence of Mental Disorders in the General Population: Is there A Gender Difference?

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Objective: This paper examined the gender differences in common mental disorders in the general population in Malaysia.

Methods: This population-based household study utilized a multistage cluster sampling based on ethnicity and geographical location in Malaysia, covering 5 states. A male and a female, were chosen in each household with the aid of random selection tables. A one-to-one structured interview was carried out in homes using the iPAQ or pocket computers. Diagnoses of common mental disorders were made based on the Clinical Interview Schedule-Revised (CIS-R). A cut-off score of 12 indicates the presence of a mental disorder. A score of 2 or more for each of the CIS-R 14 symptoms indicate the presence of prominent symptoms.

Results: 3666 respondents (89% response rate), consisting of 61% females and 39% males, above 16 years old participated. There was a significant difference in gender in the prevalence of common mental disorders ($p < 0.001$). 208 (6%) met the criteria for ICD-10 diagnosis of mental disorders with the CIS-R. The primary CIS-R diagnoses were: mixed anxiety and depressive disorder-mild (54.3%, $n=113$); mixed depressive episode (8.2%, $n=17$); generalized anxiety disorder (8.6%, $n=18$); mixed anxiety and depressive disorder (19.7%, $n=41$); social phobia (7.7%, $n=16$); social (isolated) phobia (1%, $n=2$); agoraphobia (0.5%, $n=1$). Females were 1.8 times more likely to have common mental disorders than males.

Conclusion: Knowledge on the prevalence of mental disorders and the gender group, who are at risk, would be essential for clinical management, policy decisions and mental healthcare utilization.

Lunch Symposium

JECM and 21st Century Medicine

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