Case Report

Management on Tsunami Causing Posttraumatic Stress Disorder: A Case Report

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On December 26, 2004, tsunamis hit Southeast Asia and caused serious damage and loss of lives. In Thailand, six provinces (Ranong, Phang-Nga, Phuket, Krabi, Trang, and Satun) were impacted. The present study reports the psychiatric assessments such as Thai GHQ-60 and IES. It also reports management techniques of both cognitive behavior therapy and medication. Those were provided to a Thai female patient who was 54 years old. The patient responded to treatment quickly because of early management. The tsunami victim with Posttraumatic Stress Disorder (PTSD) is not an individual. A mass of people who faced or witnessed the tsunami are vulnerable to get PTSD any time during 6 months after trauma. These early management techniques are useful and practical for a mass of victims and survivors.

Keywords: *Tsunami, PTSD, CBT, GHQ, IES*

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Corresponding to serious earthquakes with epicenters off the Northern Sumatra which took place at 00:58 hours GMT on December 26, 2004, there were serious tsunamis. The resultant tsunamis hit southeast Asia causing serious damage and loss of life. The first strongest quake had the magnitude of 8.9 on the Richter scale. The number of persons confirmed dead from the Indian Ocean tsunami exceeded 174,000 as of March 31, 2005[1]. In Thailand, six provinces (Ranong, Phang-Nga, Phuket, Krabi, Trang, and Satun) were impacted, including prominent international tourist destinations. The Thai Ministry of Public Health (MOPH) responded with rapid mobilization of local and nonlocal clinicians, public health practitioners, and medical supplies; assessment of health-care needs; identification of the dead, injured, and missing; and active surveillance of illness[2]. The disaster victim identification (DVI) of Thailand continued with identifying. Approximately 1,800 persons were identified among the 5,395 persons confirmed dead; of the dead, approximately 50 % were not citizens of Thailand[3].

Posttraumatic stress disorder (PTSD), long known to be caused by battlefield combat, had in the past been called "soldier's heart" (during the American Civil War), "shell shock"(World War I) and "battle fatigue"(World War II). PTSD is characterized by the onset of psychiatric symptoms immediately after exposure to a traumatic event. Such a traumatic event involves either witnessing or experiencing a threat to physical integrity. There is evidence of a dose-response relationship between the degree of trauma and the likelihood of symptoms. The greater the proximity and intensity of the trauma, the greater the probability of developing symptomatology[4]. The symptoms of PTSD can be grouped into three categories: a) re-experiencing the trauma via intrusive thoughts and memories; b) avoidance and numbing, whereby the victim attempts to avoid situations that prompt memories; c) hyperarousal with insomnia, an exaggerated startle reflex[5]. Most survivors from a tsunami might become PTSD. The early management (intervention) techniques are able to reduce the number of patients who go on to develop full-blown acute PTSD[6]. The present study reports the management techniques that might be useful and practical for a mass of victims and survivors.

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Case Report

A 54 year old married Thai woman, who lives in Ranong province was brought to the emergency room of Bangkok Phuket hospital because of palpitation. She was examined and investigated. Her EKG was normal. However, she felt tightness of breathing, vertigo and also agitation. Therefore, she was an admitted. She was inpatient for six days. For the first few days, she complained much about palpitation, headache, fear to stay or be alone, and had insomnia. So, she was investigated by echocardiography and CT brain. The results were normal. Moreover, other investigations such as thyroid function test and routine laboratory investigations were done. All of them were normal. Then, her primary doctor consulted a psychiatrist.

The patient had history of facing the tsunami on December 26, 2004. She was an eyewitness. She ran to escape sea water flooding into her house. She didn't have any physical trauma. She lost some properties, however. Since that day she often had nightmares. She said that she had to spend so much energy and time to get rid of memories of the tsunami which intrusively got into her mind. She avoided talking, watching, or hearing about the tsunami. She said that she became a person who was very easy to get frightened. Although she felt insecurity while she stayed alone, she still avoided connecting with people. She suffered from these symptoms for longer than one month.

The patient met DSM-IV-TR criteria for Post-traumatic Stress Disorder[7]. Two psychiatric measures were used. They were the General Health Questionnaire[8,9], Thai version (Thai GHQ-60) and Impact Event Scale (IES). Thai GHQ-60 is the clinical psychiatric interview by psychiatrists used as a gold standard. It assesses the well-being and quality of life[10]. The IES is a self-report measure designed to assess current subjective distress for any specific life event. The IES reflects the intensity of the post-traumatic phenomena[11]. Both psychiatric measures were first done a few days after admission. Then the patient was measured with Thai GHQ-60 one more time at 4 weeks after the first (usually questions asked over the past two weeks). She was measured with IES another three times at 1, 2, and 4 weeks after the first.

Psychological interventions are widely used in the treatment of PTSD. Besides, there is insufficient evidence to determine whether psychological treatment is harmful[12]. Therefore, cognitive behavioral therapy was started since she was an inpatient. It focused on stress management, stress inoculation, gradual exposure. Furthermore, therapists talked with her directly about traumatic experiences in a supportive environment where she could become less fearful, less avoidance, and more able to tolerate trauma-related thoughts and feelings. Therapists also provided relaxation and deep-breathing techniques. Medication prescription was diazepam 2 mg oral three times a day and temazepam 20 mg oral bedtime. They controlled patient's hyperarousal and insomnia symptoms.

First assessment, baseline, with Thai GHQ-60 was 49. Whereas, the result at 4 weeks was 8 (cut off point is 12). First assessment with IES was 58 (intrusion subscale score = 22, avoidance subscale score = 36). Whereas, results at 1, 2 and 4 weeks were 33 (intrusion subscale score = 11, avoidance subscale score = 22), 29 (intrusion subscale score = 11, avoidance subscale score = 18), and 17 (intrusion subscale score = 5, avoidance subscale score = 12), respectively (mean of intrusion subscale = 21.4, and avoidance subscale = 18.2).

Discussion

Within 4 weeks, general clinical symptoms were improved when measured with Thai GHQ-60. The serial decreased scales of IES by time showed that the intrusive thoughts and avoidance were reduced. The patient responded very well to the treatment with the combination of medication and cognitive behavior therapy. The important factor was early management either investigation or treatment. However PTSD is persistent or chronic in approximately 10 percent of patients with the disorder[4]. The study showed that avoidance subscales of IES were slowly decreased. Thus, major depression had to be concerned. Because major depression and PTSD are independent sequelae of traumatic events, have similar prognoses, and interact to increase distress and dysfunction. Both depression and PTSD should be targeted by early treatment interventions and by neurobiological research[13]. Further researches might answer the question why some patients become persistent.

Conclusion

The presented patient responded to treatment quickly because of early management. The tsunami victim with PTSD is not usual as an individual. A mass of people who faced or witnessed of tsunami event are vulnerable to get PTSD any time during 6 months after traumatic event. The authors could reduce the number of patients who go on to develop full-blown acute and chronic PTSD by early management. Therefore, this

cognitive behavioral therapy combined with medication is very convenient and practical.

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รายงานผู้ป่วย: การรักษาผู้ป่วยโรคเครียดภายหลังเหตุการณ์สะเทือนขวัญอันเนื่องจากสึนามิ

งามวงศ์ จรัสอุไรสิน, กัญช์ เกสรสุคนธ์

รายงานผู้ป่วยฉบับนี้แสดงให้เห็นถึงวิธีการรักษาทั้งจิตบำบัดชนิด cognitive behavior และการใช้ยา และแสดงเครื่องชี้วัดอาการทางจิตเวช ได้แก่ Thai GHQ-60 และ IES ในผู้ป่วยหญิงไทยอายุ 54 ปี ผู้ป่วยรายนี้มีอาการทุเลาและดีขึ้นอย่างรวดเร็วเนื่องจากได้รับการรักษาโดยเร็วเมื่อเริ่มป่วย การป่วยด้วยโรคเครียด ภายหลังเหตุการณ์สะเทือนขวัญจากสึนามินี้ มิใช่เป็นโรคที่พบในผู้ป่วยเพียงรายหนึ่งรายเดียว แต่เป็นโรคที่พบใน คนกลุ่มใหญ่ อาจเกิดอาการขึ้นในช่วงเวลาใด ๆ ก็ได้ใน 6 เดือนหลังเผชิญเหตุ การรีบประเมินและให้การรักษาโดย วิธีการนี้จะเป็นประโยชน์และเป็นไปได้ง่ายในเวชปฏิบัติในการดูแลรักษาผู้ประสบภัยและผู้รอดชีวิตที่ยังมีอีก จำนวนมากจากเหตุร้ายนี้
