

Abstract

Sri Lanka was hit by the Asian Tsunami in December 2004. A giant tidal wave destroyed widespread coastal areas throughout Sri Lanka including the Eastern province. Kinniya is one of the worst affected areas in the District of Trincomalee of Eastern Province. This area had also being affected by war. Major natural disasters like tsunamis can be extremely stressful for the population and cause immense mental health effects as wars and children are particularly vulnerable.

The objective of the present study was to study, posttraumatic stress disorder (PTSD) among children aged 10-18 years in a Muslim community (as the selected community was Muslim) affected by the tsunami around one year of occurrence of tsunami in the Kinniya Divisional Secretariat.

In the present study, an instrument (Children's Posttraumatic Stress Disorder Inventory or Children's PTSD Inventory) was translated into Tamil and validated in a Muslim community to identify children with PTSD in the age group of 10 -18 years. Another questionnaire was prepared to identify the protective and risk factors for the development of PTSD. Both of the questionnaires were applied to a cohort of children affected and non-affected by tsunami. Then the factors, associated with presence/absence of PTSD in the community affected by tsunami were studied. Multivariate analysis was performed to identify the risk and protective factors for PTSD.

The Tamil translation of the Children's PTSD Inventory was found to be valid and reliable. Parameters for criterion validity and reliability of the Inventory were high ((i.e. sensitivity = 0.94, specificity = 0.96, positive predictive power 0.89, negative predictive power = 0.98). Internal consistency was high (Cronbach alpha = 73 to 88) and inter-rater reliability was also high (kappa coefficients for each section ranged from 0.89 to 0.96 and for overall diagnosis it was 0.95).

The results showed that the rate of PTSD among the children in the tsunami affected area was 36.6% and for the non-affected area it was 16.4%. The findings were almost similar to the findings in other national and international studies.

Father's availability, mother's availability and supportive programmes were found to be protective/beneficial factors for PTSD (RR=0.449, CI=0.346-0.581; RR=0.593, CI=0.346-0.581; RR=0.334, CI=0.184-0.604 respectively).

Being a female child (RR=11.21 , CI= 5.943-21.143), mother's education (RR=1.140, CI=1.047- 1.241), number of siblings (RR=1.345 , CI=1.047-1.241), presence of major illnesses of the child (RR=2.963 , CI=1.237-7.096), current living location (RR=2.832, CI=1.503-5.336), age of father (RR=1.058, CI=1.015-1.103) and exposure to other types of trauma (RR=83.756, CI=35.725-196.365) were risk factors for PTSD identified in the present study.