

Summary

The cross-sectional design with prospective follow-up study was carried out on disaster victims affected by flash flood in the year 2013; a “multi-stage probability sampling technique (Systematic random sampling with appropriate sampling interval) was used”. The sampling was carried out in *three stages*, at 1st stage-01 Block (Ukhimath) was selected out of 03 blocks. At 2nd stage -04 Grampanchayats were sampled out of **07** Grampanchyats of the selected Block with a SI of 2 (30%). At stage 3rd: all *fourteen* Villages were selected from four Grampanchyats. “Considering the Head and Next to Head of the family all the households (1129) to be 2258 i.e. (02×1129) and assuming 50% of the sampled households i.e.564 households with at least one injured person at home the baseline observation was conducted on **2667** individuals and End Line observations were conducted on **1719**”. (Mahalingam V & Roy D, 2017)

The present study observed that One third (32%) of the study participants were aged between 25-34 years. Gender wise both male (50.5%) and female (49.5%) participants were almost equal. Both gender Females (53.4%) and males (49.3%) were found more or less equal chances to develop PTSD symptoms if exposed to disaster. The association between gender and PTSD symptoms shows statistical significant at the $p \leq 0.05$ level. The results also shows that the significant determinants of Health related QOL of disaster victims were Gender (74.8 ± 26.0), where Females victims are more susceptible to losing the Health related QOL.

Every fifth (20%) study participant was not educated formally and had (61.28%) significant ($p \leq 0.05$) chances to develop PTSD. Victims educational status

showed people with formal education had poorer Health related QOL. The disaster victims who had no occupation (59.5%) were significantly afflicted more with PTSD, Occupation victims were reported not good as well in Health related QOL. Approximately half (54%) of the study participants were non skilled inhabitants, the disaster victims who had no occupation (59.5%) were also significantly suffer with PTSD symptoms.

Disaster victims with monthly family income <5000 had significantly developed PTSD compared to income those who earn 10001-20000 rupees monthly. The Greatest (84%) number of the study participants fell into category of family income of <5000. Most (92.7%) of the participants were married and only (6.9%) were found living single. Non marital disaster victims had higher probability to develop PTSD than the separated and married at the significantly level.

Each subsequent study participant grieved water associated disaster, Victims exposed to disasters involving land (56.8%), compared to water had more chances to developed PTSD. Participants exposed twice or more (57%) to a disaster have significant risks to developed PTSD, compared to those who were exposed ≤ 2 (47.6%) times. The victims who had experienced 3 times exposure to disaster (73.0 \pm 28.2) were significantly had low Health related QOL.

Duration of exposure in terms of weeks, almost half (46%) of the study participants reported one week continuous exposure and more than half (54%) reported more than two weeks continuous exposure to a disaster events. The victims who had exposed one week (53%), two week, three week and four week to a disaster more or less equally chance to develop PTSD at the significant level. In duration of exposure the researcher couldn't find any statistical evidence relate with Health

related QOL of the Disaster victims. Potentially life threatening situations experienced victims significantly found to be developed lesser Health related QOL

Approximately two third (64%) experienced ‘non-life threatening’ situations and remaining one third (36%) participants reported ‘life threatening experience’ during disaster events. Disaster victims who experienced ‘life threatening’ situations (93.8%), approximately three times has added risk to develop PTSD than those who were not exposed to ‘non-life threatening’ conditions (27.6%) at the significant level $p \leq 0.05$. Study also concludes that more the exposure to disaster and life threatening situations and loose of property, the more are the chances of experiencing low Health Quality of life among disaster victims.

Type of loss during disasters showed 44% of the study participants suffered impairments and lost property’ and remaining (56%) reported no property loss. Those victims with any type of impairments (96.3%), and property loss (93.5%) during disaster have greater risk to develop PTSD more than six times compared to those who had not suffered any loose of property’(17.6%) at the significant level $p \leq 0.05$.

Each second (51%) disaster victims experienced symptoms of Post-Traumatic Stress Disorder (PTSD-S) at six month of the Disaster event. And at eighteen month after the disaster event prevalence showed that every fifth (22%) disaster victim met the criteria of PTSD (PTSD-S) symptom.

Baseline PTSD means score (51.02 ± 18.8) was higher among disaster victims with post disaster stress symptoms. On the other side, end line post stress symptoms mean score (38.9 ± 18.2) declined among disaster victims. Hence it could be

interpreted that the base line PTSD mean score is significantly higher than the end line PTSD mean score at the level of significance $p \leq .05$.

Total Health related QOL was found to be better-quality from the baseline. This could be taken as disaster victims are refining in all aspects of their life with the time. Other domains like physical ($3.02 \pm .06$), Social ($3.7 \pm .71$) showed improvement. The far-reaching improvement was seen in environmental ($4.1 \pm .05$) domain. Even though psychological aspect was also found to be improved which suggests that time is a great healer even the healing is on-going but surely it supports.

Difference between baseline and end line Health related QOL among disaster victims across all domains indicates significant improvement in symptoms at the end line ($2.53 \pm .43$) at the significant level of $p \leq .05$ as compared to the time when the exposure was recent and the wounds were novel. Each domain improved with time passing by which may possibly be concluded that every domain allied with each other.

The ratings among PTSD and QOL turned into found negatively correlated i.e. – “0.91 at the level of significance $p \leq 0.05$. The rating (-1.259) in correlation shows that a rise of a one unit of PTSD rating results in a fall of QOL rating through 1.259 units a number of the catastrophe victims”. “The beta score (-2.213) in correlation shows rise of a one unit of PTSD rating results in fall of social wellbeing score by way of 2.213 units many of the catastrophe sufferers”.

Scores for specific domains of wellbeing associated with “QOL i.e. physical, psychological, Social and environmental also correlated negatively with PTSD

rating at the level of significance $p \leq 0.05$ ". These scores identify the relation between two variables which were statistically found to be negatively correlated.

Analysis regarding ongoing Disaster preparedness and mitigation measures was taken and the SWOT analysis shows the strength was NGO's came upfront and played a vital role in rehabilitation activities, support from community was also granted. The weakness was weak institutional capacity for disaster victims, also inadequate human resource available for providing needed care.

This disaster event has given the opportunity and warning too, for further preparedness and framing lifesaving technologies and to enhance the financial support as well as the resources in times of need. The threats are growing day by day as the global warming and manipulation with the environment has made human race to face consequences. Inadequate budget framework, allocation among community stakeholders is essential to get corrected with in time space.