

**The 1st ICSD Conference on
“Globalization, Development, and Human Security in the Asia-Pacific Region”
Thammasat University ’s Learning Resort, Pattaya Campus, Chonburi, Thailand
18-20 October 2006**

Mental Health Interventions by *Bharatiya Stree Shakti* After the Floods of 2005, in Santacruz, Mumbai.

Nandini Deshmukh and Manjula Nair

Abstract. *Social organization working in Santacruz(east), Mumbai(India) was instrumental in arranging the mental health intervention at five different localities in worst affected parts due to floods in Mumbai in July 2005. It was a joint endeavour of social workers, volunteers, counsellors and psychiatrists to help the flood victims to gain their spirits back. The social and psychological support given to the traumatized people helped them to come back to normal within a span of few months.*

Keywords: Mental Health Interventions, Flood Victims, Role of NGOs

Sub theme: Social work with victims of natural disaster

1] Introduction

Bharatiya Stree Shakti (BSS) is a women’s organisation an NGO operational within the state of Maharashtra in India and other states of Delhi, Madhyapradesh, Kerala and Goa. Women in Indian society face several problems, mostly arising from the social structure in India. BSS believes in empowerment of women through education, economic independence, health, self-respect and equality.

On 26th July 2005, the Mumbai metropolis was lashed by the eighth heaviest ever recorded 24-hour rainfall (944mm or 37.2inches). The ensuing floods devastated many lives and caused severe trauma. During these floods, BSS took initiative in tackling the problem of psychological trauma caused to the citizens of Mumbai, especially women.

There has been a general tendency in the past to mitigate the needs of a disaster struck populace essentially by providing shelter, food, sanitation and

immunization. However, psychosocial needs are seen as something too secondary to deal with. The ill effects of mental trauma have become evident in recent times. This makes it important that victims of calamities, such as the Mumbai floods, are provided with psychological help and counselling in the post-disaster period.

In an attempt to offer some help to affected people, BSS arranged mental health camps in Santacruz (East) at 5 locations. Three slum pockets and two middle class areas, consisting of more than five thousand households were covered. This area was one of the most severely affected with waters of floods. At each of the mental health camps, a team of BSS volunteers along with psychiatrists, counsellors, professionals from various fields and social workers were present. Free medicines were made available through pharmaceutical companies. People were asked to answer questionnaires tailored to reflect their psychological state and emotional needs. About 300 questionnaires were answered. The answers clearly indicated the impact and extent of emotional trauma felt by the respondents. It was found that irrespective of their social stratum, 90% of the respondents had a feeling of uncertainty, intrusive thoughts and/or insecurity. In the early post-traumatic phase, anxiety and fear were leading to somatic symptoms, false alarms, and physical illness. Increase in alcohol intake, drug abuse and a withdrawal from society were also observed. Based on the PTSD (Post Traumatic Stress Disorder) reactions, the extent of mental disturbance in individuals was understood and accordingly addressed by counsellors and psychiatrists.

It was then observed that under the guidance of an experienced psychiatrist, the team could play a very productive role in helping the fellow victims verbalize their feelings without being judged. Common people became aware about the symptoms of severe stress. Early intervention at the community level helped to prevent and minimize the possibility of the mental health problems. General physicians in the area were upbeat about the updated information provided to them for observing the symptoms and dispensing of the medicines.

2] Effects of Flooding

The 26th July 2005 rains came as a rude shock to the people of Mumbai, who are usually accustomed to heavy rains and the ensuing flooding. However, the mere volume of water poured onto the city, and the massive flooding that followed was catastrophic. Several people drowned and lifelong possessions were destroyed or washed away by the deluge. Overflowing sewage canals (locally known as *nalas*) and rivers like '*Mithi*' and '*Dahisar*' inundated the streets, causing a complete stoppage of traffic. People suffered not only from physical injuries during the flooding, but were also exposed to extreme dangers following it. Many had witnessed mass death and injuries of close ones. Hundreds of animal carcasses floated in floodwaters, raising concerns about the possibility of disease. Diseases such as *diarrhoea*, *leptospirosis*, *dengue* and *malaria* were imminent owing to the unhygienic conditions that prevailed once the waters had

receded. These factors added to the fears and trauma of the citizens. Sudden exposures of victims to an extreme situation made them vulnerable, like panic reactions following tsunami rumors resulted in stampede deaths.

3] The role of BSS

Santacruz (East), situated near the 'Mithi' river, was among one of the most highly affected areas. On one hand, the government, municipality, the medical fraternity and several NGOs were doing their jobs of distributing money, food, medicines, *etc.*, on the other hand, 'Bharatiya Stree Shakti' unit at Vakola Santacruz focused extensively on mental health intervention, for nearly 12 weeks.

Volunteers of BSS, Vakola, Santacruz (E), themselves being victims of the flood, had also undergone a traumatic experience during the deluge of 26th July 05. However, they personally invited people who would be interested in contributing towards mental health camps for *orientation*. The group thus included BSS volunteers, professionals from various fields, doctors, counsellors, professors and social workers.

A four-pronged strategy was adopted:

1. Mental Health Assessment and intervention camps.
2. Family visits, counselling, psychological and psychiatric interventions as per requirement
3. Indirect mental health interventions through community activities.
4. Mental health orientation to medical personnel, local community based organizations, schools and others.

Orientation of volunteers:

In the first phase of the orientation, the group was asked to focus on the following aspects:

1. To review the volunteer's role.
2. To verbalise the traumatic feelings.
3. To explore particular problems faced and solutions found
4. To identify those at risk

5. To provide education about symptoms of normal reactive processes to acute stress.
6. To explain how to cope stress adaptively
7. To identify positive gains if any.

Skill building of volunteers

In the second phase of orientation, counsellors and social workers were provided with training, which emphasized the following points:

- Counsellors should not have their own agendas.
- They should give people opportunity to talk and share their feelings.
- They should not act as experts.
- They should have a face-to-face talk and should not discuss irrelevant matters.
- Counsellors should have good listening skills. Power of silence should be used.
- Counselling should be largely unidirectional. It was stressed that there is no need to answer all their questions.

4] Community Interventions

The volunteers of Bharatiya Stree Shakti who are women from Santacruz itself noticed that after floods men had started going to work and almost all of them had resumed their duty. It was largely the women folk who were left back in their homes to cope with their fear and apprehensions; the ones who had witnessed the devastating power of water on the fateful day. This was mainly the thought that motivated the volunteers to do something that would help the victims for lifetime.

Each group met local citizens in the flood-affected areas, who helped the counsellors to carry out various activities. The volunteers arranged house visits for the counsellors. The volunteers also worked through the emotional disaster experiences by sharing their feelings with others.

Prior to these visits, the volunteers had apprehensions about the acceptance of the counsellors by the people. But during these visits, it was observed that people wanted and needed help and treatment on the mental plane. Handouts were distributed among the common people, counsellors and doctors that gave the information about behavioural symptoms to watch out for, and then the measures to deal with the trauma.

Mental health camps:

Mental Health Camps were conducted in the affected areas to provide “emotional first aid”. In these camps the victims were scrutinised and as per their symptoms they were directed to counsellors, psychologist or psychiatrist who were present in the camp. Free medicines were made available through pharmaceutical companies.

The camps were arranged at three communities, *Agripada*, *D'mello* compound and *Davrinagar*, two colonies and one School in Santacruz east area. Preliminary meetings were held with the active members of the local committees, local *anganwadi* (*courtyard nursery school*) workers to orient them about Mental Health Issues and work on the details of the Mental Health Camps. The response to the mental health camps was good. As time passed many people participated with greater enthusiasm. At some places, BSS social workers went from door to door to inform people about the camps. Women were especially enthusiastic in their participation.

The volunteers deployed a carefully tailored questionnaire among the flood victims. The three-page questionnaires were crafted with the purpose of getting an indication of the post-traumatic stress levels among the people. It took about 20 to 30 min. to fill in. The responses to SRQ (self regulating questionnaire) were collected and those people who had their score above eight out of twenty were called for a follow-up camp. A total of 267 people filled up the forms, of which 85% were women and rest were either men or children. Lesser number of men attended the camp because they thought it was their weakness to accept that they were scared. This absence was also attributed to the fact that they had to join their duties on those days.

5] Analysis of the Mental Health status

Though people were largely traumatized, some had feelings of elation since they survived the disaster. Insomnia and startling reactions was commonly observed among the victims. Memories and disturbing images intruded minds of victim, which hampered their routine functioning. Flashback memories were more disturbing since they would incapacitate people. These observations can be identified as common PTSD symptoms. Additionally, other emotional reactions such as anger, irritability, sadness, frustration and crying were also observed. Long conversation and dissociative symptoms were also seen. Children had stopped playing and staying out late. People had become emotionally vulnerable, as they subconsciously expected the disaster to repeat. This phenomenon is known as *anniversary reaction*. Even after a month after the floods, 90% of the people were still traumatized, with their fear increasing every time it rained.

Some of the mental health problems seen after disaster can be classified under primary and secondary risks

Among primary risks, following phenomena were observed:

- PTSD- Post Traumatic Stress Disorder
- Disturbed sleep, loss of appetite, headache
- Grief, anger, irritability,
- Vigilant and hyper- arousal state of mind.
- Flash back or intrusive memory
- Alcohol consumption
- Drug Abuse
- Social Withdrawal, loss of meaning of life

Secondary risks included:

- Stress
- Unemployment
- Lack of Recreational Activity
- Dependency
- Vulnerability

Salient issues highlighted by the responses to the questionnaires are as follows:

- About 10% people believed that the floods had occurred, as God was angry. 80% people from D'mello compound and Davrinagar felt that the floods occurred because water was released from dams in the Mithi River while majority of people of Agripada believed that the floods occurred due to the collapse of the security wall of the airport. Only 10 % said that the main cause is that the Mithi River was choked with plastic bags.
- When asked for the solution, 95% of people had no say, but 5% said that if use of plastic bags is curtailed and if the river is regularly cleaned up, the problem could be solved. Thus only about 5% of people understood the problems caused by non-biodegradable plastics.
- Rumours about a tsunami, news in the print media and TV channels made 80% of people believe that floods of such a dimension will occur again; 10% believed that the floods might occur again because God was annoyed, while 10% believed that it would never happen again.

Analysis of PTSD (Post Traumatic Stress Disorder) reactions revealed that each victim was affected irrespective of the stratum of society s/he belonged to. Feeling of uncertainty, intrusive thoughts and insecurity were evident in their conversation and actions. Anxiety and fear reactions were leading to somatic symptoms, false alarm, and physical illness, increase in alcohol intake, taking drugs and social withdrawal. These are symptoms of an *early post-traumatic phase*.

Trauma was caused by helplessness, hopelessness and fear of separation. Having to choose between helping others and oneself, created confusion among the minds of the victims. Palpitations due to fear were the most commonly observed physical signs. This was accompanied by sweating and abdominal sensations and tingling numbness.

Further statistical analysis revealed the following results:

- 60% of the people got recurrent, distressing recollections of the event.
- 39% got distressing dreams of the event.
- The sound of water or any noise easily startled 57%.
- 62% suffered from insomnia.
- 44% got flashbacks of the event.
- 46% avoided the thoughts, place, objects, conversations, *i.e.*, all cues, which reminded them of the incident.
- 51% found difficulty in concentrating.
- 55% experienced outbursts of anger.
- 65% got easily aroused by sound and had a constant feeling of being on the alert.
- 40% felt numb, detached and experienced lack of emotional responsiveness.

Networking with family physicians

The volunteers of BSS also decided to network with practising doctors, gynaecologists and family physicians, from the flood-affected areas. To get the general physicians (GPs) involved, invitations were sent to all the 78 GPs in the Santacruz (E) area for a meeting. The meeting was themed: *Update on Current Psychiatric illnesses after flood.*

The key idea in this endeavour lay in the fact that people are more comfortable with their family physician. However, due to lack of updated information, family physicians may ignore paying heed to the mental health of the patients. Moreover, 33% to 43% of disaster victims suffer chronic mental health problems. Current scientific research indicates that early intervention helps in preventing long-term emotional disabilities in 57 % of the people. Thus there was a need to create awareness among family physicians about the techniques to diagnose and heal the mental health of disaster victims. Hence, symptoms such as *hyper-arousal, hyper-vigilance, startle reaction, fear, palpitations, insomnia, intrusive memories, flashbacks, avoidance* etc. were

discussed in detail during the meeting. Helping people come together in small groups, revisiting the place of disaster and re-experiencing the disaster, was formulated as a good intervention strategy.

Additionally, the following literature was also distributed to the GPs during the meeting:

1. General awareness pamphlets prepared by BSS on *Symptoms of Stress After Disaster*,
2. Psychosocial consequences of disaster – prevention and Management, a WHO publication,
3. *Floods and the family physicians: Do's and don'ts*, by Dr. Harish Shetty
4. *Symptoms among children after flood*, By Dr. Harish Shetty
5. *Scoring secrets (academic): Tips for flood affected families*, by Dr. Harish Shetty

Work with flood affected school teachers

In addition to the medical assistance from doctors, help was also sought from schoolteachers at the *Indian Airlines School*. During the floods, the ground floor of the school building was under water for almost a week. On the night of 26th July, around 150 children of primary school were in the school for the whole night with the teachers, as they could not return home due to the floods. For the entire night there was no electricity, no drinking water and nothing to eat. The next day, army boats rescued these children. Parents as well as children had spent a very restless night. The school reopened almost after 2 weeks. These events caused severe trauma in the children.

The BSS volunteers targeted this school, and a teachers meeting was organized in the school. Initially, most of the teachers were reluctant to attend the meeting. However, later they took part in this social endeavour. All the teachers were given some questionnaires to fill up. They were requested to give information about: the nature of the children in their class and the techniques used by them to lower the fear levels of the children in their classes. Finally, they were encouraged to ask questions to the BSS volunteers.

The teachers from primary section (Standards I to IV) were more sensitive to their pupils as compared to teachers from secondary section (Standards V to X).

Following observations made by the teachers about their pupils are interesting:

1. Children were hyper sensitive to noise,
2. Complains about headache, illness, and vomiting were commonly seen.
3. Children were not participating in outdoor games near their housing colonies or in the school.
4. Enthusiasm among children was perceptibly low.
5. Many children were experiencing insomnia and bad dreams, and were frequently waking up in the night. Some children slept in the class.
6. The academic performance of children was affected; attendance in the class was also affected.
7. If it rained heavily, children would get scared and would want to go home to be with their parents. Many felt that the school was not a safe place. Some children urged others to say prayers.
8. Some children became restless and could not pay attention in the class.
9. Even with little rains, children sitting in rows close to windows shifted to other rows.
10. More children in the school took half a day off to visit doctors. Absenteeism in school rose to 20 to 25 %.
11. Headaches, stomachache and complaints of giddiness among girls were more common.
12. Lack of concentration was markedly seen.

About the techniques used to allay their pupils' fears, teachers from the primary section said that they tried to divert their pupil's minds by encouraging them to play games, drawing, and painting. They often reassured the children that the disaster would not recur.

During these investigations, it was found that teachers had asked children primarily about what the pupils lost during the floods. They had never talked about the children's fears following the disaster due to the notion that the children would get more scared.

Following the meeting, tips, such as the following, were given to teachers to assist their pupils:

1. Don't worry about covering the entire planned curriculum.
2. Let children talk about flood, if they want to. Allow them to repeat.
3. Physical Training (P.T.) is an important class period; since research proves that play helps alleviate fear.
4. Teachers can eat lunch with children.
5. *Pranayam* (a slow breathing exercise), Yoga etc. can be useful.
6. Most scared children need mental and emotional counselling.

By the end of the meeting most of the teachers were very much interested and wanted to share and learn some of these techniques. They also expressed their wish to get trained as counsellors.

Work with flood affected school parents

Some days later, a parents' meet was also organized to understand trauma better, among the young minds. It was realized that the parents needed to be helped to deal with their parental anxieties along with the flood related stress. This would help them; in turn help their children. Parents were explained that it is important to give their child a positive atmosphere for studying along with the basic opportunity to study.

Psychiatrists helped the parents deal with their own anxieties. Parents confided that they were trying to hide their fears from their children, since they didn't want their children to get more disturbed seeing they stressed. Parents were actively counselled by the psychiatrists, and were suggested they practice of the following:

1. Positive talk or thinking positive before sleep
2. *Pranayam* (a slow breathing exercise) before sleeping, since it helps relaxing the muscles and calms down the body.
3. Keeping a dim light on at night.
4. Recitation of comforting prayers before sleeping.

5] Conclusion

This relief work is a work in progress. This paper is the result of the dedicated work that involved many individuals from a variety of backgrounds bound with a common goal of giving love and support to a group of people who needed to know that good mental health is one of the bases for all healing processes.

The unconditional help that *Bharatiya Stree Shakti* got from professionals and local residents also helped the volunteers grow personally and made them more confident in order to carry out the follow-up work, which becomes a necessity in this type of a situation.

Positive results of the camps started becoming apparent. The victims could verbalize their feelings without being judged; they had interpersonal contacts with social workers, counsellors, psychiatrists, and with their own people. This helped people develop better control over their minds and thought, and helped them cope with the disaster.