**Natural Disasters, Key Populations and HIV Prevention: A Case Study: The Kurnool Floods - the first six weeks.**

**The Andhra Pradesh Floods**

In early October 2009, massive floods on the Krishna and Tungabhadra rivers wreaked havoc across several districts of Andhra Pradesh. Water overwhelmed dams and rushed through more than 400 villages. Over two and half million people were affected. The Kurnool district in western Andhra Pradesh was among the worst hit areas. The floods took the people of Andhra Pradesh by surprise. Along the Ganges Delta, experience has taught Indian communities to anticipate and prepare for floods, but in Andhra Pradesh, floods of this magnitude had not been seen for over a hundred years. Lack of preparation meant people had less time and less capacity to save their livelihoods.

Yet while this rareness may indicate an exception rather than a pattern for Andhra Pradesh, there is a pattern that around the world more erratic and unpredictable weather is affecting growing numbers of people. \(^1\) Climate change will increase the vulnerability of the world to disasters, and the impact of these disasters will need to be prepared for and understood from numerous perspectives, including that of HIV prevention.

**Natural Disasters and HIV**

A number of agencies have speculated about or reported linkages between natural disasters and heightened risk of HIV transmission. \(^2\) Among the chief concerns has been the increased vulnerability of women and girls. The World Health Organisation (WHO) has warned that emergencies can lead to the breakdown of social norms and stable relations, and that in such circumstances, women can be forced into having sex for food or security. \(^3\)

The most recent, extensive study in India on the relationship between humanitarian emergencies and HIV was conducted by Swasti and Oxfam, looking into the impact of the Tsunami on coastal communities. Of 30 sites that were studied, 20 were found to have heightened vulnerability to HIV as a result of the Tsunami, with the major factors being the high prevalence of unprotected non-regular partner sex and untreated STI. Close proximity caused by temporary shelters was found to be the main contributor to vulnerability to HIV. Other factors included access to empty and abandoned spaces, family disruptions, poor health seeking behaviour for STI treatment and low condom use. \(^4\)

Despite this understanding that emergencies can increase the vulnerability of women to exploitation and that emergencies can influence changes in sexual behaviour, there appears to have been little specific study on the impact of disasters on populations key to effective HIV prevention: female sex workers (FSW) and men who have sex with men (MSM). \(^5\) There are some good reasons for this, including that key populations can be difficult to find and interview in an emergency situation. Yet it seems fair to hypothesize that these key populations could face additional pressure for transactional sex during and post emergencies as their vulnerability is heightened, and that more difficult access to condoms could result in greater amounts of unprotected sex.

**Action Research with Key Populations**

The India HIV/AIDS Alliance, together with Alliance for AIDS Action, and with support from the Bill and Melinda Gates Foundation's Avahan Project, oversee an HIV prevention programme reaching out to over 70 000 Key Population (KP) members in Andhra Pradesh. In order to understand how the October 2009 floods may have affected KP, a small piece of action research was conducted to discuss changes in sexual behaviour that may have resulted from sudden changes in access to shelter, food, medical care, protection, regular

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\(^1\) http://msi.wordpress.com/2007/11/27/500-weather-related-disasters-a-year/


\(^4\) Swasti and Oxfam International. 2009, Did the Tsunami increase the vulnerability of coastal communities to HIV?

clients, places of work and condoms, in the flood affected district of Kurnool. It was hypothesized that the impact of the flood on KP may require adjustments in HIV prevention work in the short and long term, given that new environmental and economic circumstances may alter the geography, data base and behaviours that have guided the prevention work of the last four years in Kurnool. It was intended that the research be divided into two stages. The first stage, covered in this briefing, describes changes in sex work during, and in the immediate aftermath, of the flood. The second stage will be conducted in the second quarter 2010, to understand the longer term impact of the flood.

In order to access information quickly, the action research consisted of focus groups and one-to-one interviews with KP in flood affected areas. Ninety four KP participated over two days (consisting of 25 male sex workers and 69 female sex workers) from November 16-17th 2009. Participants were asked to discuss their experiences in temporary shelters, their access to health care, the effect of the floods on their livelihoods, the effect of the floods on practicing sex work and access to condoms. Particularly, participants were asked to discuss changes in sex work before, during and after the flood.

**Sex Work during and after the floods**

The research did not reveal any increase in high risk sexual behaviour in paid sex work as a result of the flood in the first four weeks after the flood. All participants agreed that the amount of sex work significantly decreased in that time period.

Participants claimed that there was no sex work in the first 20 days after the flood. The priority was saving lives, property and cattle. The population took shelter in temples and churches in crowded conditions. One shelter was designed to hold a maximum of 30 000 people and yet 80 000 were crowded into it. Participants said the atmosphere was just not right for sex. From there some moved to make shift tents, with little hygiene, and they claimed that when a few clients did propose sex, they felt too unclean to agree. From these statements, it appears that there was no relationship between temporary shelters and increased pressure for sex or high risk sex.

State and non-state relief workers provided relief and organized food, shelter and medicine for the population. None of the participants experienced any sexual pressure or exploitation from them. Two participants claimed that the exception was autorickshaw drivers. Some of whom hiked up prices during the flood to transport people and goods, and demanded payment in sex when cash was not available.

Participants explained that one of the reasons that they were not forced into transactional sex for food, clothes or shelter, was that the relief operation was well managed. The government, temples, churches, NGOs and the private sector provided essential relief, and ration cards entitled low income families and individuals to double rations after the flood. Medical camps too were set up in the vicinity, and KP accessed them without discrimination. None reported needing STI treatment during the flood or in the immediate aftermath.

Yet the FSW participants were particularly hard hit by the flood. All belonged to caste groups that excluded them from living in the centre of villages, and instead they had houses on the outskirts, in low lands close to the water. Five out of 18 women in one focus group used to have alternative income sources apart from sex work, through sowing, selling sarees and running a small hotel, but these livelihoods were destroyed in the flood. Several had received relief support in the form of a 7000 rupee grant to rebuild houses or a 10 000 rupee microfinance grant, but these were being spent on survival not on reinvestment and therefore are not likely to have long term income generating potential.

Twenty days after the flood, the participants claimed to start receiving clients again, but in much smaller numbers. Before the flood, the average number of clients was 10 – 15 per week, and since the flood, it has been around five. Condom boxes were washed away in the flood, but participants claimed that use of condoms had not been affected, as clients had started bringing them themselves. The women explained that before the flood, around two to three clients per week would refuse to use condoms, and now around one in five refuses, so proportion wise, there has been no significant change.4

The price for sex has been forced down. Before the flood, sex workers could expect 100 – 150 rupees for sex, but now, the cost has come down to 30 – 50 rupees. This, combined with the reduced number of clients, has significantly impacted on KP income.

The former “hot spots” where sex work used to be offered have been destroyed, but new ones have yet to emerge with any permanence. Sex workers have gathered in various new locations, but there have been negative reactions from the local communities, and none of these new sites have become regular.

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4Experience has taught us to be cautious in interpreting self reporting of condom usage. Condom usage is at the heart of prevention campaigns and participants have learned to give fixed responses to questions on this topic.
Conclusion

The findings from stage one of this action research on the short term impact of the floods on the behaviour and vulnerability of Key Populations did not reveal that the floods had resulted in heightened vulnerability to HIV in the short term. The numbers interviewed were relatively small and therefore these findings probably do not cover the range of experiences faced by all sex workers. However, the reasons why these enhanced vulnerabilities seem to have been avoided may be due to the fact that the flood water passed quickly through the towns and villages and the stay in temporary shelters was short, and that the relief operation seems to have been well organized and to have addressed emergency needs.

The short term impact of the flood on sex work seems to have been three fold: firstly, a reduced demand for sex workers; secondly, fewer clients; and thirdly, less money being paid for sex. This has meant that the income for Key Populations engaged in sex work has significantly reduced.

The longer term impact will have to be studied at a later date, but it seems fair to speculate that the economic pressures caused by loss of property and alternative livelihoods, combined with a significantly reduced income from sex work, may force sex workers to proactively seek more clients once demand increases, and to compromise on client pressure not to use condoms. Prevention work should anticipate this by intensifying support and dialogue with sex workers in flood affected areas over the coming year.

Additional influences may also come to bear on sex work in flood affected areas. Around 50% of the population in villages where these focus groups took place had migrated to stay with friends and relatives. Many of them will return to find destroyed homes and lost livelihoods. In this action research there was no reference to any women having engaged in sex work as a result of becoming impoverished by the flood. But when the relief ends and the long haul to recovery begins, lack of economic alternatives may drive some women to accept paying clients, and prevention work should be alert to possible changes in the make up of the populations they work with.

The government does have a relief and rehabilitation programme that will require labour and building sites, and prevention work should anticipate the concentration of these bridge populations and target them for information work.

Recommendations:

- The loss of livelihoods and reduced income from sex work during and after the flood may influence sex workers to increase the number of clients and to compromise on pressure not to use condoms. Prevention communication with sex workers should intensify over the next six months.
- Economic vulnerability caused by the flood may pressure some women to enter sex work. Prevention projects should be alert to the possibility of new home and street based sex workers that need support.
- Construction work will involve inward migration and the setting up of construction sites. These are likely to be focal points for sex work and prevention projects should target these areas.
- A second stage of this research should be conducted in 2010 to understand the longer term impact of the flood on Key Populations.

Research team: Alexander Matheou, Pankaj Anand, Raghu Kumar MS, Praween K. Agrawal, Satish Kumar, Tanu Chhabra