Chapter 7

Summary and Conclusions
7.1 SUMMARY

Women’s position in society and the relationship between women and men affect their lives before, during and after a natural disaster. Gender is one of the main factors, which determines the capacity and vulnerability to disasters (Childs, 2006). Apropos, it has been illustrated that women are more vulnerable to disasters than men due to their social values (UN/ISDR, 2002). In particular, women are more affected by disasters. Experience shows that natural disasters affect women and men in different ways.

With the above backdrop, in the present study “Women in Disaster: Case Study of Kosi Flood in Bihar” I have tried to locate women in the wake of devastating Kosi flood, having focus on women’s health and the issue of domestic violence. In this study, DV was used more in a sense of descriptive category as it not only includes different form of violence but also includes certain parameters for example financial autonomy, partner’s behaviour like alcohol consumption and controlling behaviour, childhood experience of violence, which at times can be the promoter of DV especially after the disaster situation. Additionally, data pertaining to disaster experiences and losses, general and reproductive health, psychiatric symptoms and quality of life assessment of respondent was collected. An insight into respondents’ perception and behaviour towards her community was also gained in order to get a more holistic picture.

The Kosi Flood of Bihar, 2008: On the fateful day of 18th August, 2008, Bihar faced a major disaster which according to some is worst in last hundred years and many others claim it to be worst in the history (Roy, 2008). The incident was so devastating that it was declared as national calamity, in which millions of people were left homeless along with huge loss of lives and property in parts of Bihar that were already marginalized (Mishra, 2008b). All these happened when river Kosi, known as “Sorrow of Bihar” was diverted from its regular path as it eroded its embankment in
Nepal about 12km upstream of the barrage. As a result of breakage near Kushaha in Supaul district, river started flowing in an entirely new course (BGVS, 2008). Supaul which shares a boundary with Nepal was the first district to be flooded. Other than Supaul, Madhepura, Araria, Purnea and Saharsa were among the worst affected districts. As per the initial assessment, around 10,000 people are missing or dead (BGVS, 2008). According to International Federation’s Disaster Relief Emergency Fund, 4.7 million people have been affected in 18 districts spread across 2,528 villages (Lambay and Singh, 2008). Due to the breach in the embankment in Kusaha, four districts of north Bihar - Supaul, Araria, Madhepura and Purnea - were being ravaged.

In order to understand how adversely women’s health is affected in the wake of disaster, the aspect of general and reproductive health, mental health problems and overall quality of life were assessed. Additionally domestic violence was studied with the focus on intimate partner violence (IPV). In researching women in disaster situation, the theoretical and methodological orientation is guided by the vulnerability theory to disaster which according to Blaikie et al., is the key concept in predicting and understanding the existence of differentiated impacts on the various groups in a society (Blaikie et al., 1994) and gender being one of them. In this study, I used mixed method approach which combines both the qualitative as well as quantitative methods. The usefulness of the combined approach especially in the field of gender studies is widely acknowledged. For the purpose of the study two high floods affected areas i.e. Hridyanagar and Bhawanipur including some part of Mansi Piprahi and two unaffected areas from village Fatehpur and Bhimnagar was selected. During the period, cross-sectional survey was conducted with the total sample size of 250. 125 from high flood affected areas where populations were displaced for longer period of time (at least more than a month) from their original homeland and the same from the unaffected/low-affected areas without displacement with the help of purposive sampling. Ever-married women aged 17-49 were eligible for the study that were recruited after informed consent.

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[^13]: This area was severely affected by Kosi flood, 2008 and was devastated.
Further, findings of this thesis were discussed in two chapters; first one on health issues was divided into three and second on violence issues in two broad sections. In the findings of health and disaster, the overall health status were assessed by examining and comparing general and reproductive health, mental health and quality of life assessment among both affected and unaffected group.

Self-assessment of respondents on their health, in general indicates a striking difference between the two areas. None of the respondent in affected areas was found to be in good or excellent health condition. In both flood affected areas and unaffected areas the common health problems which emerged out is having backache, body ache, leg pain, headache, weakness, chest pain, cough, dizziness and stomach ailments. While cases of stone in stomach, appendicitis and piles were found only in affected areas, no such case was found in the least affected areas. Stomach ache, acidity was a common problem found among women in both the areas. Overall in the unaffected areas there were 32 respondents (25.6%) claimed to have no problems, while in affected areas it was only 3 respondents (2.4%). Also, in the affected areas most of the respondents experienced limitation in their daily activities as a result of their physical health problem and a great majority of them reported to be in severe pain and discomfort. Many of the respondents were under medication and have consulted their local doctors for their suffering and were anxious about their ill health. Women’s concern about their physical health were largely associated with the perceived health risk from contaminated drinking water, lack of proper food leaving them malnourished, lack of money and also overburdened by the work, both household works as well as outside work which they have to do for sustaining their family. However, many such problems and concerns were minimized in the unaffected areas, thus showing clear differences in the general or physical health impact of disaster. To assess the reproductive health condition of women in both affected and non affected areas, variables such as having still birth, abortion, and miscarriage in last one year, pregnancy history, knowledge and use of contraceptives, health care facilities were included. In the affected areas numbers of pregnant women were found to be more and only few respondents were using any method to delay pregnancy. A slight but not statistically significant (p=.44) case of male child dying in last one year was found.
Whereas, statistically significant relation (p = .02) was found in case of death of a female child in last one year between affected and unaffected areas, due to the preference of male child. In both flood affected and least affected areas, ill health, miscarriage, abortion, death of child after birth was attributed to inadequate nutrition and health services by the respondents. Other factors identified were cultural barrier and women autonomy in decision making.

While examining the mental health problems among women in form of anxiety, depression and PTSD it was found that there was an increase in mental distress among affected population. There were large differences between the affected group and unaffected group in terms of anxiety and depression. In establishing the possible case ness of PTSD among the affected group, it was found that scores of intrusion, avoidance, arousal and overall PTSD falls in the average range in scoring scheme shown in the result. But PTSD could not be established, as according to the criteria for PTSD (APM & DSM-IV-TR) the symptoms should be present for at least one month. Overall, it may be summarized that symptoms of PTSD in one way or the other pose as a disturbance among the affected population. Further, a negative association between mental health outcomes with age of the respondents was established and also high level of anxiety and depression was found among those respondents who were working as compared to non working. It was found that the supplementary and magnified responsibility in the aftermath of disaster leads to negative mental health among women.

Quality of life was assessed using SF-12 Questionnaire in form of mental health outcome and physical health outcome. When comparing quality of life, among affected and unaffected group, a highly significant difference was found between the groups, on both the subscales, physical health summary score and mental health summary score. Kosi flood, being unpredictable in nature due to its changing course, also brought huge damage to people’s life and property, thereby affecting overall quality of life. A highly significant association was found between quality of life and respondents’ literacy status with p value .001 by student t-test, probably due to more personal control over their life. Similarly, financial crisis in form of loan burden was found to be statistically highly significant with p value .01 using student t-tests. The
stress of financial burden in form of loan was causing decline in respondents’ health status and health related quality of life. In need assessment, need for alternate employment opportunity within their own community, health and educational facilities were emphasized by the respondents.

Findings of the section Domestic Violence and Disaster was summarized in six categories; comparative account of socio-demographic profile of the respondents with that of the husband, type of violence (physical, sexual and emotional) experienced by the respondent and its prevalence in both the affected and least affected areas, demographic factor associated with violence which also ascertain the vulnerability factor associated with the experience of violence, childhood experience of violence women’s attitude towards violence including sexual autonomy and finally controlling behaviour of husband and its relation with the experience of violence by the respondents. Based on the findings, whether or not domestic violence has increased in post disaster context was argued. By comparing the data from the affected and unaffected areas, occurrence of violence in past one year and causes and context of violence it may be concluded that the increase in the certain cases of emotional violence may be triggered due to flood disaster. However, this may not hold true in case of physical and sexual abuse where no such increase was found in this study.

In this connection, the reason for low reported rate of violence was also identified by presenting two sets of argument. First, considering that domestic violence cases is not so prevalent in the areas, as reported by the respondents and prominent reasons for this lied in low dowry demand and social support in form of neighbors’ and native family help.

Another set of arguments which is worth mentioning here is that there is very likelihood that domestic violence is present but actual reporting is low and reason lied in the belief that disclosing family matters in front of others will only bring bad names to the family, so respondents try to report the behavior that is believed to be ideal and consistent with their culture rather than the actual, realization on the part of the respondents as well as their husband that it is not something unusual and finally, underreporting is more likely in the aftermath of disaster, as women were having the
double dose of disaster, the flood as well as DV. Under such traumatic conditions, intruding into one’s private matter is highly sensitive endeavor.

In order to find how alcohol is related with the disaster as well as domestic violence, causes of alcohol consumption in the aftermath of disaster and relationship of alcoholism and domestic violence was discussed. Although the number of person consuming alcohol was more in the affected areas, the difference was not found to be statistically significant. In causes of alcohol consumption in the aftermath of disaster it was found that unemployment, disruption of social fabric in form of out-migration was the main cause of alcoholism among the people. Alcohol abuse and DV was related in some or the other way, however the relation is of cause and effect is a debatable issue.

After analyzing the findings from the present study and also looking at the trends of disaster research certain issues emerges out which needs to be addressed in more depth.

- The greater challenge in the way to fight VAW is underreporting of the cases of violence. In order to encourage women to speak out, there is a need for providing the respondent with multiple opportunities to disclose their sufferings and pains. Also building rapport with the respondent and maintaining the ethical issue is very much a need of the time. Researches and other service providers working with the victims need to be sensitive enough to handle the issue properly. It has been also seen that instead of providing appropriate emotional support structures to the victims of violence, the authorities and major stakeholders often try to ignore the abuse. Such an act makes women further vulnerable to violence. Thus, promoting women for reporting of violence is very necessary.

- Violence, especially domestic violence not only affects women, but it has a long lasting affect on the upcoming generation. As violence prospers within household core and that the perpetrators are the family members or more often the husbands, the children living in that environment suffer from daily disaster of indirect violence. Therefore inter generational effect of violence especially domestic violence, how and why it occur becomes and important area for investigation.
The critical analysis of the data collected on VAW is necessary. Additionally, we should try our level best to communicate all that we learn from the data to policy makers & other stakeholders.

Further there should be an attempt to bring out women’s voices regarding their experiences and understandings of the violence perpetrated against them in the aftermath of disaster. Few steps have been taken in this direction and a lot more is required. Good research and analysis can reveal the full extent of the problem. Violence cannot be seen as an isolated event rather it impacts and interacts with all aspects of women’s life and it has profound implications on the overall well being of women, her family, community, state and nation. Therefore, the issue of violence need to be extensively examined and for this women’s awareness is a must. Only then a clear sketch of violence can be drawn so that to allow decision makers and service providers to plan for future and possibly adjust current policies and services as required.

Demand of the time is to raise awareness regarding the need of the victims. Apart from the basic needs such as safe house, economic assistance; legal assistance is also needed, so that to prevent and reduce acts of violence. To the great surprise, there are no specific laws, policies or institutions to address the exacerbation of VAW after disaster (People’s Report, 2007). Social service provider in the affected area should also think for providing proper counseling, both for the victims as well as abusers as the abusers in one way or other may be the victim of circumstances which forces him to act in a particular abusive way.

Finally, a closer examination of violence in the aftermath of disaster reveals that apart from the unequal status position of men and women in society, which makes women vulnerable to violence, the disaster response agencies also make discrimination across gender. This discrimination denies women’s post disaster recovery and deprives women to live life with dignity and security. One should not only think in the line of violence being only physical, sexual, social, economic and emotional rather denial of women to access their rights is also a form of violence. Such violence should also an issue of concern and we must try our level best to overcome this.
7.2 WAYS OUT TO COMBAT VIOLENCE AGAINST WOMEN:

To address the problem of VAW and to eliminate it from society, we need multidimensional and holistic approach. We’ll have to proceed with egalitarian approach, not only in text but also in practice. There is an urgent need to take initiative both at community and at national level by carrying out extensive study. In some countries, Reproductive Health Programs have already taken the lead in addressing VAW but effort must go beyond the health sector. This can only be done when we start from the grass root level which includes spreading awareness among youths, making strict laws and policies against abusers, providing women psycho-social support and solidarity, creating healthy and co-operative institutional atmosphere to address their problem, wide spread media and cultural programs to change the community mindset, providing empowerment to women and job opportunity for men and awareness regarding women’s rights and entitlements:

Spreading Awareness among Youths: It is a very key aspect of dealing with this problem of VAW because at this early age, values and attitudes are learned. It is very important to mould the thinking of youth in the positive direction so that no biasness creeps in mind in terms of one being superior and other being inferior. For this many countries in the world are carrying out awareness programs to encourage non-violent forms of conflict resolution and to create a new model of healthy relationship.

Making Strict Laws and Policies against Abusers: In recent years researches have shown that, strict laws and policies in western countries have been able to achieve success in reducing interpersonal violence. In response to this women activism, many developing countries have followed the same suit. Most of these laws include some combination of protective or restraining orders, increased penalty for offenders. Besides these there are many communities, which have sought other means to punish the offenders of their violent behavior, such as community punishment in the form of public shaming or taking community services from them. Such initiatives at community level have helped a lot in minimizing violence especially domestic violence.

Psycho-Social Support & Solidarity: Providing social support will strengthen women not only physically but emotionally. They will come to the forefront for their
rights and entitlements. In recent years various non-governmental agencies and welfare society like AIDWA (All India Democratic Women’s Association) & various other international agencies like WHO, UNFPA, UNDP have succeeded in their effort and have shown their solidarity with women to make their voices heard and get their perceptions validated. Social support and solidarity are critical in providing the victim with an alternate way of perceiving the situation.

**Healthy and Cooperative Institutional Atmosphere:** It is essential to create healthy and cooperative institutional atmosphere to fulfill and adequately responds to the needs of women. Women feels deprived of institutional facilities and they hesitate to express their problem because of the hostile attitude of people towards them. There are various institutional barriers, which prevent women to avail the facilities, and they remain victimized. There is little coordination among institutions with which women interact such as health-care, child welfare and law enforcement agencies. Therefore, it is the utmost concern of the government and policy makers to promote healthy functioning of all institution. People not only in health care, but in other areas as well including community religious leader, the mass media and parents can also promote the non-violent relationship.

**Widespread Media and Cultural Programs to Change the Community Mindset:** It is the community’s way of life, which reinforces inequality among men and women by its traditional norms, values and beliefs. Therefore, it is very important to begin from here, where women’s everyday life is affected. In this, the role of media and various cultural programs can be very effective. It is the media, which has wide coverage, and it has the potential to change the mindset and attitude of people. In this, various local T.V. channels, print media can be used. Even cultural programs can be shown in the public like nautanki, drama, play, emphasizing the importance of women in making society prosperous. In other words, these programs will help in gaining respect for the position of women in society and thus reducing VAW.

**Empowering women as Well as Providing Job Opportunity for Men Especially in the Aftermath of Disaster:** Empowerment has not only political connotation but it should be seen in a broader canvas, i.e., shouldering women with wider
responsibilities, giving them scope of earning, allowing the space in decision making and also the democratic atmosphere where they can freely and rationally choose any course of action which according to them suits their interest. This goal can only be accomplished if women are having equal representation in all sphere of society. Unless we have this egalitarian approach, we can’t think of society where women are free from the threats of violence. Additionally, men should be provided with job opportunity, so that they are engaged in work and will also be capable of fulfilling their responsibility towards their family, which otherwise create annoyance among them, resulting into IPV. (One of the causes of domestic violence in post disaster situation, found in this study).

**Awareness Regarding Women’s Rights and Entitlements:** Development of communication strategies and appropriate materials to inform the community of the rights and entitlements of women to security, protection, compensation and service can influence effectively the post-disaster recovery of women from violence.

### 7.3 OUTLOOK FOR FUTURE

In this section certain suggestions are provided in order to meet the required health needs within the community. It is necessary at this juncture to mention those aspects which require urgent attention in the near future. This vision for the future is necessary for an overall development in the health condition of the community especially in the hard hit areas. Some of these issues can be counted under following points:

1. Creating awareness regarding maternal and child health is needed.
2. Making anganwadi and other health centers functional and strengthen in the locality and also promote discussion on health issues.
3. Creating awareness regarding family planning method and adoption of such method especially among men folk.
4. Importance of sanitation in improving health condition of people and particularly women.
5. Mobile health facility is needed in case of post-disaster context, to ensure maximum coverage even in remote areas and difficult to reach population.

6. Availability of doctors must be ensured in the health centers.

7. Skilled and specialized professional to cater the emergency cases and address mental health needs during and after the disaster.

8. Recruitment of more and more female health worker and doctors, to especially address the need of women in distress.

For Violence

1. Most of the studies of DV rely upon women’s experiences rather than men’s report on their experiences. (Heise, Morre and Toubia, 1995). So in order to ensure maximum reporting, one must collect experiences of both men and women.

2. Respondent should be provided with adequate social space in order to express themselves freely.

3. Additionally, data should not only be collected from the primary sources, rather compiling data from several secondary sources, if available, is very much a need of time.

4. Last decade till present there has been great progress in getting valuable information and measurers of violence rate. But need of the time is to think beyond the measurement of prevalence and think to build up appropriate method and strategies to bring about change. For this proper coordination and national & international alliances are very necessary, so that to arrive at better understanding of the issue as well as build up an agenda for changes.

5. Psycho-social networks should be created so that problem of stress, anxiety, fear, mental problems occurring after the disaster can be dealt within the community. These problems identified as causative factor for increase alcohol consumption is also precursor of DV. Cases have been reported where women are forced into sex with their husbands against their will, and this is also a form of DV (UNFPA, 2005). Under the influence of alcohol husband also force their
wives into sex with unknown person to get money. In these situations, proper psycho-social networking can take care of the sufferings of men and women.

6. Women may be denied adequate relief aid or compensation for their loses (Chew and Ramdas, 2005). Government compensation for loss often completely excludes women in societies where only male is recognised as heads of household. Here men have their upper hand exercise their will over women, making her vulnerable. Demand of the time is to make assistance program to focus on women, involving women and considering their needs according to the situation.

7. In order to ensure women safety from DV, relief agencies, women organisation must listen to women’s voices so that their need do not remain hidden and unaddressed and also support them economically, emotionally and legally.

8. Relief efforts must include long term income generating projects or jobs for women and men too, to support themselves and their dependent family members. Women should be provided with the training necessary for engagement in the rebuilding process, so that they may earn wages and does not depends on husband / relatives for their needs and become self sufficient.

9. Equal aid distribution should be ensured so that men and women both have access to it. For this coordination between donors and distribution system is needed. UNFPA, 2005 reports that aid is often distributed without any discussion with those receiving it, especially women. The advantaged men use money given as assistance to cope up with extreme situation, in purchasing alcohol. To avoid such situation, better communication, coordination and supervision must be established by authorities in the disaster affected area. More over disaster agencies, NGOs, and other women organizations involved in humanitarian assistance must be sensitive enough to deal with the women related issues and provide adequate welfare benefits to women.

10. Ensuring jobs within survivors own community also prevents forced migration, especially among youths. Further, families members especially elderly must have check on younger or even juveniles’ income so that to avoid the misuse of money for e.g. in purchasing alcohol or other addiction material.
7.4 CONCLUSIONS

The study provides valuable information on the general and reproductive health problems, mental health problems, quality of life assessment and issues of domestic violence among the survivors of Kosi flood disaster. The health problems were strongly associated with traumatic experiences during and after the disaster. Poverty, malnutrition, access to health care facilities and power inequalities typical of the role of women, results into poor reproductive health among women. Better interventions prepared for women and institutional help are needed to provide psycho-social support and also to improve mental health after a disaster, which will help them in preparing and mitigating the affect of disaster. Also we should promote women to share their voices and experiences, and provide them with multiple opportunities to disclose their sufferings and pains. Also needed is the enhanced assessment, with a follow up study to address the mental health needs of women in post disaster context. The stress caused by personal and financial loses in the aftermath of flood results in poor quality of life among affected groups. Additionally, literacy came handy as it provide with self control and problem solving skill at the time of disaster. The findings are important because it provides significant relation between that of education and quality of life. Further there is a need for a detail study in order to identify the mechanisms by which education affects psychological well being. Economic needs in form of alternate employment options, restoring the social fabric by checking out- migration and adequate health and educational facilities were the main concern among the respondents. Thus, following a major disaster, there is a need to specifically address the problems of women, empower them and provide adequate financial and social support to enhance the overall well being.

Studying DV was found to be a challenging area of enquiry as the real information on this subject matter is generally covert and hidden. This situation is further strengthened in the aftermath of disaster where women in a recovery phase have to come out of their own psychological trauma and fulfill the additional role expectations. Due to the sensitivity of the topic, backed by the disaster induced trauma, respondent did not express their views adequately. They opined that their responses may damage the reputation of themselves and their families. Further, I have
tried to delineate possible relation between alcoholism and DV with a purpose to find out probable causes of alcohol consumption in the aftermath of disaster. Unemployment, disruption of social fabric, role of certain opportunistic factor like earning quick money and behavioral changes was found to be the leading factor for consuming alcohol in the aftermath of disaster. Alcohol was also used to cope up or run away from the situation created by disaster. In the connection of DV and alcoholism, few researches in this direction have suggested a strong link between the two especially among the disaster exposed communities. Alcohol and other drugs may contribute to violent behaviour as; a drunken person will be less likely to control his or her violent impulses. However, whether drinking alcohol has a cause and effect relationship with DV is doubtful but alcohol may for sure act as a precursor or fuel to DV, as the factor was present in every family suffering from violence. Additionally, the findings must be viewed in the light of certain limitations which is underreporting of the incidence as well as biases prevailing in such kind of researches.

Further, with the few reported cases of violence, it may be concluded that the deep rooted patriarchy in society, coupled with the vulnerability due to disaster is most significant social structure which results in the prevalence of domestic violence. Looking from the vulnerability theory, disasters are social phenomenon and so is the domestic violence and its varying impact on particular section of society make the relationship between the two, bit complex.