

Flood affected women not engaged into paid work are likely to develop severe emotional problems in contrast to those engaged in paid work

Abstract:

Following research article is an attempt to systematically examine and analyse the emotional issues developed among flood affected women particularly making comparison among those earning and those not earning and evaluate various social factors in aggregate multiply the complexities in the aftermath of the floods. The research is focussed over ten villages of district Sujawal those severely affected by 2010 floods. Retrospective cohort study approach adopted recalling past experiences respondent women went through. The theoretical framework of the study rests over the “theoretical indicators of social vulnerability”, which underlines health as one the major thematic indicator among seven indicators presented by Rufat et.al. (2015). Study has observed variables along with social and cultural aspects attributed as influential aspects. It has been concluded that although women with paid work are far more susceptible to emotional issues, however there are various external social factors including displacement, sexual and physical violence and health issues seriously bring psychological effects. Aid providers needs to familiarize themselves about psycho-social support along with other palpable support items.

Key Words: Floods, emotional issues, domestic violence, earning women, livelihoods.

INTRODUCTION:

Pakistan ranks 7th amongst the most vulnerable countries with 30.50 Climate Risk Index (CRI) scores followed by Bangladesh with 25.00 (CRI) scores standing on 6th position and Philippines with 21.33 CRI scores ranking on 5th position. Due to climate change Pakistan has experienced some of the deadliest hydro-metrological disasters in the shape of floods. More specifically from 1950 to 2012 around 21 devastating floods strike the country, while 2010 floods also called “Super Floods” pronounced as most devastating floods in the history of Pakistan. 2010 floods claimed 1,645 souls, in addition 17 million people

were affected by floods. Flood swath wiped out all standing crops, road infrastructure, irrigation system, schools and health facilities and smashed thousands of villages. According to damage and needs assessment survey jointly conducted by Asian Development Bank and World Bank (2010) in terms of economic losses Pakistan incurred losses of around \$ 9.7 billion. According to the assessment around 1.5 million houses were partially or completely damaged due to flood.

Sindh province was worst affected which is evident from figures. About 4.7 million people were affected including 151 people perished, 845 injured, 470,000 houses were damaged. In terms of agriculture and livestock losses 998 thousands hectors standing crops were affected, 233 livestock washed away (OCHA, 2010). Back in 2010, reverence flood water mounted pressure on fragile dykes of the Indus River. District Sujawal was severely affected particularly its Union Council (UC) Ali Bahar where total population of 18,467 was affected, UC Jaar (20,256), UC Keenjher (22,514), UC Bejora (20,504) and UC Belo (22,272) were affected most. Indus River had breach near Surjani embankment and tehsil Sajawal was completely inundated affecting population of 450,000 souls. About 378,000 people displaced and relocated around Makli hills where government and local, national and international NGOs established relief camps. People lost their valuables including standing crops were flushed, livestock was perished, infrastructure including roads, houses, shops, health and education facilities were badly damaged.

According to Pakistan Labour Force Survey women’s labour force participation is 9.5% in comparison to men which is 49.6% (PLS, 2015). Since there aren’t alternate sources to verify data provided, still there are concerns that women’s participation rate mentioned above is grossly under reported for the reasons being majority of the women are either engaged into agricultural work or informal sector, which is not factored into Gross National Product (GNP) estimates. Due to patriarchal system in Pakistan women are not empowered for decision making. They are more vulnerable to be impacted because of the economic inequalities and quite few decent employment opportunities (Cannon, 2002). UNFPA (2015) highlighted inequities in employment opportunities have entangled them into vicious poverty cycle. Other factors include social and religious restrictions about mobility and access to opportunities and resources. There are also evidences, since they are not in bargaining position, major chunk of women’s earnings

are taken by middleman or suppliers. According to Roots for Equity (2011) there are approximately 11.56 million women home-based workers (HBWs) in Sindh. Amongst them 748,056 (24.6% of the total) are engaged in urban Sindh, whereas 1,925,477 million (22.4% of the total) are engaged in rural Sindh. Women in the rural areas are engaged in farming activities, livestock, skilled and unskilled wage labor, dairy products trade and handicrafts (UNIFEM, 2010). During disaster women irrespective of income source option, either domestic or commercial disrupts their formal production system, and its duration exacerbates the situation further (ECLAC, 2003).

During 2010 floods thousands of facilities relocated to safer places, exposing them to various risks and hazards. More than 100 million women and adolescent girls requires humanitarian assistance (UNFPA, 2015). Gender-blind and poorly managed humanitarian response further proliferate their miseries. Taking instance every day during child birth 507 women die because of complications in emergency situations (UNFPA, 2015). Since women are affected most, they become victim of various problems, such as their mental and physical health is seriously affected. There has been less focus to factor in emotional health of the flood affectees and its impacts on them. The research considered as moderate effort to understand nexus between emotional problems and women's earning options. The research has also further explored other relevant factors which influence emotional problems among women. Undeniably both genders are affected by psychological distress, interestingly in contrast to men, women recognize, acknowledge and raise their voice to report those symptoms (Nolen-Hoeksema, 1990).

LITERATURE REVIEW:

Floods cause extensive human, material and economic losses and further cripple feeble economies. Women because of their socio-economic vulnerabilities went through traumatic situations, while they lose their homes and valuables, they experience immense psychological suffering. According to Pambe, Gnoumou & Kabore (2013) observed that during survey physiological issues are widely reported among crisis stricken women i.e. 61% while sexual violence and physical violence remained at the lower ebb on the list. In the rural Sindh women plays pivotal role and contribute substantially into household

income. Unfortunately women's psychological health issues are never factored in during disaster response. Majority of the rural women are engaged into informal sector doing patch-work, embroidery, Sindhi cap making etc. on the top of this, they are primarily responsible for all household chores, including fetching water, rearing children, feeding livestock and supporting their male counterparts in agricultural labour. Since culturally landholders engage male members as sharecropper and whole family support labor work without any compensation, hence women's contribution remain discounted (Aurat Foundation, 2011).

After floods thousands of families compelled to move to relief camps. Both men and women lost their jobs, women due to limited skills and education lost their meagre income sources. People took heavy debts to repay their loans. Families lost dowries for their grown young girls, their homes were damaged, they lost their jewelry, savings, livestock, grain and other valuable items. In results of flood affected women developed multiple stress conditions such as emotional problems including depression, sadness, anger, resentment, anxiety, hopelessness and swings. In addition they experience anxiety, panic attacks, fearfulness, and obsessive behaviors, irritation, anger and resentment, emotional numbness and cognitive problems (Abbasi, 2012) (Wiest, E. Raymond et.al., 1994) (IRIN, 2010).

Plethora of research concluded that females are more emotionally affected by disasters (Fothergill, 1996). Those women who don't have paid work are likely to be affected by psychological problems in contrast to those women don't have paid work (Pambe, Gnoumou, & Kabore, 2013). Unfortunately, due to cultural practices they are also excluded from emergency planning hence they lack relevant skills to respond crisis situation. Since women are not mainstreamed in decision making, which consider root cause for their vulnerability. In addition, economic insecurities among women i.e. their access to credit facilities, limited income sources, feminization of poverty further marginalize women folk (Enarson, 2000). These all factors tag them as the most vulnerable segment of the society.

LIVELIHOODS IMPLICATIONS:

Due to displacement women lose their livelihoods options. Berar-Awad (1984) reported that displaced women due to limited op-

portunities and skills end-up with inappropriate professions including prostitution and other vulnerable jobs (Hossen, 2008). Loss of livelihood options and productive means brings slow-onset economic impacts with the protracted displacements as families have to feed their kids without having any concrete source of income (Wiest, E. Raymond et.al., 1994). Dunn & Hayes (2000) argues that poverty-stricken women having unstable income sources are more likely to develop health problems than women with sound sources of income. Lacking funds required for the treatment of their health problems further expose them to health complications, and due to poor health conditions even women could not continue to maintain their jobs (Renzetti, 2009). Hossen (2008) postulated that in search of jobs men migrates to urban areas, leaving women behind to take care of their kids which brings additional workload over women. Wealthy men materialize opportunity to marry destitute women and take them as second or third wife.

According to Pakistan Bureau of statistics male labor participation rate in Pakistan is around 48% whereas female labor participation rate is around 15.8% (PBS, 2015). Majority of them are engaged into informal sector or familial agriculture labor (Soroptimist International, 2011), supporting their male family members. In Muslim majority countries, like Pakistan, women are restricted to work outside the household. (Wiest, E. Raymond et.al., 1994). Whereas particularly in Sindh, rearing and caring of livestock is considered women's liability. Although women do not earn much from the informal sector, nevertheless their meagre income positively contributes to meet routine familial needs.

In the wake of floods, women lost all their income generation options mainly due to protracted displacement. When water receded, families returned to their damaged houses and immediately started reconstruction. Women those already were engaged in income generation activities, immediately resumed their work (Chanthy & Samchan, 2014). This engagement and earning bestowed them ample relief in contrast to those who were occupied in routine household chores including cattle raising, collecting fodder, firewood, cooking and other regular tasks. Enarson (2000) argued that destitute, low-income, economically insecure women and unemployed women are hard-hit by disaster.

Moreover, families were badly sunk into heavy debts. Huge majority borrowed to get agriculture input for the next season. Floods

flushed away standing crops, hence first priority for the returning villagers was to revive economic activities soonest possible. Resultantly, they borrowed loans from the professional money lenders on huge interests. Families where women were contributing into activities along with men felt themselves in better position to return their loan in parallel to routine expenditures. In traditional societies, women having male members as collateral could secure credit facility, whereas women-headed household were denied to access credit (Wiest, E. Raymond et.al., 1994).

DOMESTIC VIOLENCE (DV) & PROTECTION IMPLICATIONS:

After the immediate strike of the disaster, families moved to safe places, resultantly both men and women lose their income generation options. Families within days ran out of their savings and sell their belongings particularly livestock, women's jewelry and household utensils to survive (Sultana, 2010). Women's vulnerability particularly increased while they migrate results their increased exposure to sexual and physical violence (Soroptimist International, 2011). Since majority perceive domestic violence as "personal matter" nobody intervenes into the matter, which radically increase during disaster situation (Chew & Ramdas, 2005). In certain cases men adopted drugs to get relieve from the stress and beating their spouses (Chanthy & Samchan, 2014) (Fothergill, 1996). Women after returning back to their homes confronted multiple hardships, and economic revival for the top most priority for every house that was damaged. However, those who resumed their employment options immediately after floods, have strong resilience power to surmount psychological problems developed through domestic violence (Brush, 2003).

Another major reason that those women engaged in income generating activities were less affected by the emotional issues the reason as they returned back embarked to resettle their houses and re-establish their business and routine life, this engagement did not give them much time to think and develop stress conditions. Instead due to productive engagement their vulnerabilities towards emotional problems were substantially decreased (Bukhari & Rizvi, 2015).

Displacement badly affect people's routine life, income options and expose them to enormous threats and risks. This rapid changing scenario negatively affect mental health of the women, ascending

sense of insecurity. For instance, according to study conducted after 2010 floods in Pakistan it revealed that about 5.8% women experienced sexual harassment issues, 2.4% women reported that they were forced for sexual services, 3.4 % women were pushed for forced marriage, 2.6% rape cases were reported, 10.3% experienced physical assault whereas 61.3 % experienced domestic violence after floods (Bukhari & Rizvi, 2015). Women due to cultural barriers are restricted to interact with male of other clans; in certain communities even interaction with male members of the similar clan is even restricted. Incidents reported are only friction of what actually happened on ground. Bukhari & Rizvi (2015) have further highlighted that during 2010 floods, in the month of August only 108 cases of rapes were reported, 19 cases of sexual harassment, 81 cases of domestic violence and 75 cases of honor killing were reported. Above reported figures clearly indicates the gravity of the situation and trauma women would have experienced. Since women lost their homes, possessions, increased domestic violence, unemployment and due to displacement huge majority developed Post-Traumatic Stress Disorder (PTSD) problems (Wiest, E. Raymond et.al., 1994). PTSD is psychological condition that could be indicated when person recalls traumatic event through flashback or nightmares (Nasir, Zainah & Khairudin, 2012).

Another problem observed is the ignorance or inability of the aid providers to understand intangible issues such as mental health problems, they emphasis more on palpable things including food, water, shelter and medical health (Jackson & Faulcon, 2008). Absence of psychosocial support further exacerbate the situation. Apart, aid is normally distributed by and to men, and women is provided aid as "single adult", ironically mothers have to rely and feed her children whatever she receives from aid providers (Chew & Ramdas, 2005).

HYPOTHESIS:

Flood affected women engaged into income generation activities are likely to be less affected by emotional problems in comparison to those flood-affected women who are not engaged into income generation activities.

METHODOLOGY:

Research article was drafted employing quantitative methodology in 10 villages of District Sujawal (previously sub-district of district Thatta). The villages are located in Union Councils Ghotano of District Sujawal. Data from the field was collected in early 2016 covering a sample of 372 flood affected women. Close-ended questionnaire was developed to gather information from the respondents through face-to-face interviews. For data collection experienced enumerators particularly girls were engaged, as due to cultural barrier interaction with men is restricted and there was possibility to get incomplete information in case of male enumerators. These enumerators have prior experience of working with communities and also remained engaged in humanitarian response along NGOs. Under the direct supervision of the lead researcher quality of the data was ensured. Gathered data was later analyzed through feeding into SPSS software. Worth to mention that information about the floods in Sindh is quite scarce. Hence in order to find relevant literature internet based search engines, online journals, websites and databases were heavily relied to gather relevant information.

DATA ANALYSIS:

Sample of 372 flood affected women through snowball sampling which is also called chain sampling techniques. Snowball samplings is primarily non-probability sampling techniques, where future subject is identified from the currently identified subject. In this case subjects were identified based on the households either fully or partially damaged during 2010 floods.

Total of eight multiple options were asked from each of interviewee to evaluate the emotional problem they were affected with. The responses were later measured through scale. According to the responses 61% respondents opted for depression, 59% sadness, 12% anxiety, 13% fear and 40% opted for hopelessness. Whereas none of the respondents opted for anger, resentment, unpredictable mood and swings. This was later compared among women earning and not earning women. It is also worth to mention that 54% among respondents were illiterate, whereas 46% of the respondents were educated. Number of responses were later scaled classifying two categories, i.e. women engaged in income generation activities and women who are not.

An independent-samples t-test is used when researcher wants to compare the mean score, on some *continuous* variable, for two different groups of participants.

This hypothesis compare intensity of emotional issues along women's employment status. The two variables used are Earning status (with NO earning coded as=1 and Earning coded as=2) and Total Emotional problems in numbers.

| Group Statistics | | | | | |
|------------------|---------------|-----|--------|----------------|-----------------|
| | Income_Yes_No | N | Mean | Std. Deviation | Std. Error Mean |
| Emo_Pro_Counting | No Earning | 82 | 2.1220 | 1.17998 | .13031 |
| | Earning | 287 | 1.6411 | 1.13130 | .06678 |

Table Group Statistics simply explains the descriptive statistics of the variables. In achieved sample for this hypothesis there are 82 female those not engaged in income generation activities and their emotional problems mean score is 2.12 and total females who are earning money in sample is 287 and their emotional problems mean score is 1.64. Apparently, mean value among not earning women is relatively high. This needs revalidation through employing independent t-test.

| Independent Samples Test | | | | | | | | |
|--------------------------|-----------------------------|---|------|------------------------------|--------|-----------------|-----------------|-----------------------|
| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | |
| | | F | Sig. | t | Df | Sig. (2-tailed) | Mean Difference | Std. Error Difference |
| Emo_Pro_Counting | Equal variances assumed | .453 | .501 | 3.36 | 367 | .001 | .48084 | .14303 |
| | Equal variances not assumed | | | 3.28 | 126.65 | .001 | .48084 | .14642 |

The first section of the **Independent Samples Test** output box gives you the results of Levene's test for equality of variances. This tests whether the variance (variation) of scores for the two groups (earning and not earning females) is the same.

In the hypothesis given in the output above, the significance

level for Levene's test is .501. This is more than the cut-off of .05. This means that the assumption of equal variances has not been violated; therefore to report t-value, we will use the one provided in the first line of the table.

To find out whether there is a significant difference between suggested two groups, we need to refer to the column labelled **Sig. (2-tailed)**, which appears under the section labelled **t-test for Equality of Means**.

In the hypothesis presented in the output above, the **Sig. (2-tailed)** value is .001. As this value is *less than* the required cut-off of .05, we conclude that there is a statistically significant difference in the mean Emotional Problems scores for Female not earning and female earning money. The total difference between emotional problems of both groups is 0.48.

An independent-samples t-test was conducted to compare the emotional problem scores for female earning and female not earning. There was significant difference in scores for not earning (*Mean*= 2.12, *SD* = 1.77) and female earning (*Mean* = 1.64, *SD* = 1.13; *t* = 3.3, *p* = .001, two-tailed). The magnitude of the differences in the means = 0.48.

FINDINGS:

The responses gathered concluded that women irrespective of their earning status have developed emotional problems. It has been established that women irrespective of their social and economic condition, marital, ethnic and religious affiliations were grossly affected by emotional problems. Substantial difference observed between the mean values (.48084) obtained through statistical analysis among earning and not earning women. Above stated figure reinforces the hypothesis that women those are not engaged into income generation activities are impacted more with emotional problems. The above discussion stem links to some other factors which escalates emotional problems for flood affected women. In the aftermath, after returning back to their homes, those already engaged in income generation activities resumed to normalcy faster than other women. On the flip side, women with unstable earning options remained disturbed and developed multiple psychological complications. Their inability to contribute

into household income and recovery from the disaster impacts augmented their worries and deteriorated their mental health conditions. Comparatively self-employed women, since they had hopes and bit control over income found more confident about revival of their economic activities and speedily recovered from the stress conditions.

Emotional problems also coincides due to domestic violence, sexual abuse and physical violence. Absence of social protection support system and women's continued humiliation demoralize their self-esteem, affecting their productivity level. Interestingly, 100% sample interviewed affirmatively responded about the emotional issues they developed- although severity level was reasonably different among them, however response was not surprising as logically it sounds obvious. Whereas from the aid providers psycho-social support was not reflected in the list. Although data shows huge number of rape, domestic violence and physical violence cases were reported by women, still due to cultural limitations there are fears that number remained under-reported.

Women despite of engaged into paid jobs also develop emotional problems since they were displaced and lost their market connections. This depressingly impacted their earning options. Due to patriarchal society, women's mobility is restricted inside household compound. Restricted external exposure also limit employment options. In addition, wage rate inequalities, continued contribution into unpaid agriculture work and loss of assets are some of the triggering factors. Livestock and jewelry are considered her social collateral, and their loss intensify their concerns. On the top of this, increased debt borrowed on high interest rate complicates situation.

Also, women's inability to acquire health services to cure complications developed during disaster also impacts their efficiency and contributed to their emotional problems. There had been evidences that after floods while women moved to overstressed filthy camps there had been increased incidences of water-borne diseases, vector-borne disease, and complications during pregnancy and delivery issues. Women despite of having sound income sources could not afford to get quality healthcare and develop psychological problems. It is understandable that intensity among those with unstable paid work goes higher.

CONCLUSION:

Scope of the discussion observed relationship between the paid and unpaid work done by flood affected women and its implications in relation to emotional issues developed among them. There are numerous other features which still needs to be re-examined to understand impacts over vulnerable groups classifying them further through age, disability, marital status, ethnic and religious affiliation lens. It is believed that abovementioned approach will bestow deeper understanding about the impacts and would help to develop specific response strategies. Generalized approach may potentially undermine the authenticity of the conclusion. The major challenge for women to recover from the disaster rests on their ability to overcome their challenges including revival of economic activities. Women either engaged in paid work or not confront insurmountable array of challenges as their responsibilities increase manifold. Irrespective of women's economic options, study observed that all women were affected by emotional problems, this further shoulder responsibility over aid providers both government and humanitarian organizations to include psycho-social support as integral part of their assistance along with other tangible support. Sooner women will rebuild their houses and return to normalcy, better they will recover from emotional problems.

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