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Gender Differences in Psychological Adjustment to Development Induced Displacement: An Indian Case Study

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Abstract – Mega-development projects often result in massive displacement and maladjustment of the indigenous groups. The purpose of the present study is to investigate gender differences in psychological adjustment to development induced displacement in Shivamogga district in the Karnataka state of India. The sample comprised of 120 middle-aged individuals, including 30 men and 30 women each in the displaced and non-displaced categories. The Shamshad-Jasbir old age adjustment inventory and a semi-structured interview schedule were used to assess the adjustment and to gather focused and qualitative data, respectively. The findings of the study revealed that gender has significant effect on the adjustment to forced displacement. Importantly, our results showed that women had greatly reduced total adjustment scores post-displacement, compared to men, suggesting disproportionate impact of displacement. Gender disparities in adjustment sub-categories were also observed, with females exhibiting poor health and marital adjustment and, in contrast, males showed poor financial adjustment. Data also revealed significantly lower emotional and social adjustment scores for both genders, post-displacement. We conclude that forced displacement affected adjustment in men and women in quite different ways. Thus, the gender bias and a male-centered vision of the resettlement policies requires to be readdressed, and more inclusive programs and policies should be formulated to help both genders effectively cope with displacement and resettlement.

Key Words – Development-Induced Displacement, Resettlement, Gender, Female, Adjustment.

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INTRODUCTION

Development induced displacement and resettlement (DIDR) refers to involuntary or forced displacement of people from their native settlements and insertion into new areas due to mega-development projects such as the construction of dams and large industries (1-3). DIDR is an emerging problem in developing nations such as India that leaves local populations, mainly from the rural, tribal, food-gathering, and agrarian communities, permanently displaced, disempowered, distressed, and destitute (4-5). Studies have shown inadequacy of rehabilitation packages and poor implementation of resettlement plans in India (6). As per an estimate, approximately 1 million people each year are forced to leave their homes in India due to big development projects (7). However, there is scarce evidence on the displacement experiences and impact in the Indian scenario pointing to the need for greater research and systematic studies on this topic. In this case study, we focus on how gender interacts with the determinants and consequences of psychological adjustment and maladjustment to forced displacement in Shivamogga district in the Karnataka state of India, with a discussion on how gender awareness is essential for appropriate and sustainable resettlement. In short, the difference between gender and sex is that gender refers to socio-cultural-economic differences, whereas sex refers to the biological differences, between males and females (8). Given that men and women have different traditional roles in families and societies, they are also likely to be differently affected by stress following any traumatic event impacting the family dynamics such as forced displacement.

Displaced population, being a non-native and vulnerable population, is susceptible to multiple stressors arising from displacement and resettlement into new areas and are also sometimes exposed to double or multiple rounds of

displacement due to continued expansion of the development projects (7). During displacement, families experience fear and uncertainty and following resettlement, they face concerns about their safety and isolation (9). Studies have shown that forced migration due to man-made causes are more traumatic than migration due to a natural disaster (10). Women bear a major brunt of negative outcomes of forced displacement. One of the most important risk factors influencing the psychological health and security in forced displacement is female gender (11-12). Strong evidence exits to link insecurity and distress associated with forced displacement and poor physical and mental health (13-14). Displaced individuals are frequently exposed to a range of gender based violence and exploitation (15-16). In the recent past, a few studies in India have been conducted in the area of gender and forced displacement, particularly focusing on women discrimination and disempowerment (17-21). Given that land ownership, property rights, and household decision making are largely in the hands of men, resettlement programs have largely been biased towards them, and differential experiences of women are often not considered during policy formulation and implementation. This is true for developing nations including India, where women and children form overwhelming majority of people who have been displaced by development projects such as dams and large-scale industries (17-18). As per the breadwinner model prevalent in India, the family is centered on a male breadwinner, and a woman is considered as a dependent and server (18). It is important to note that even the laws, such as the Indian Land Acquisition Act, are largely biased towards males and assumes that compensation and resettlement benefits given to men will be automatically transferred to all family members (18). Thus, women often find themselves at the receiving end of the forced migration and are not able to actively participate in the compensation and resettlement procedures. Furthermore, given that displaced women have less social support, they often lose their land rights and have to rely on themselves to cope and adjust with the distress caused by forced displacement (17-18).

In psychology, adjustment refers to the continuous process wherein one balances personal needs, competing interests, and challenges from the environment (22). Gender play an important role in the adjustment process and as well as in the use of coping strategies, aimed at mitigating or neutralizing a stressor (23-25). Nevertheless, gender differences in adjustment to development induced displacement is an understudied topic of research. Most research on gender bias or blindness in displacement has been focused on politics and financial economies of forced migration (26-27). It is important to note that poor adjustment and coping may adversely impact quality of life and well-being (28), but little is known about the gender differences in it that could contribute to negative outcomes in the displaced population. Furthermore, the different dimensions or determinants of adjustment could have gender differentiated impacts, requiring a better understanding of how different subcategories of adjustment process are differently affected in men and women.

In the Indian scenario, there is a lack of systematic body of knowledge and quantitative studies on gender and forced displacement, although there is a sizable literature emerging from qualitative, descriptive and ethnographic studies on gender and displacement (17-21). This paper builds on our recent report on adjustment issues among the middle-aged development-induced displaced population (29), by examining to what extent gender impacts adjustment to forced displacement. The gender differences in six different dimensions of adjustment, including health, home, marital, social, emotional and financial, were examined to determine how gender interacts with these determinants and produces different consequences for males and females. It also draws out conclusions regarding gender and adjustment by discussing the different roles and status of men and women in the household and community, and social and cultural norms affecting gender equality in the society. Identification of gender-specific potential unmet needs in the adjustment process could be useful in framing inclusive policies and strategies for action and providing more relevant information and opportunities for peer support in the form of self-help and stress coping groups.

METHODOLOGY

Aim and Objectives:

The aim of the present study is to evaluate gender differences in adjustment to development induced displacement in Shivamogga district in the Karnataka state of India. The objective of the study is to assess adjustment in six different dimensions, including health, home, marital, social, emotional and financial, in displaced and non-displaced men and women, in order to determine how gender interacts with these dimensions and produces different outcomes for males and females.

Operational definitions:

Biological time-span of an individual as measured from birth to a given date is considered as chronological age of a person. The chronological age of a person between 45-65 years is considered as middle-aged for the purpose of the current study. Adjustment is defined as the behavioural process wherein an individual balance his or her needs, competing interests, and circumstances or challenges from the environment.

Study population:

The study sample comprised of 120 middle-aged individuals, including 30 men and 30 women each in the displaced and non-displaced categories, selected with the help of purposive sampling method. The population included in this study were displaced as a result of two development projects: Varahi Yojana, a hydro-electric project in Theerthahalli taluk and Sharavathi (Linganamakki dam) hydro-electric project in Sagara taluk in Shivamogga district in the Karnataka state of India. Both Varahi Yojana and Sharavathi hydro-electric projects are two major power plants serving the Karnataka state with installed capacity of 469 and 1306 Megawatt, respectively (30).

Inclusion and exclusion criteria:

The displaced population included in the study were people in the age group between 45-65 years, who were forced to migrate from their permanent place of residence for two developmental projects, Varahi Yojana and Sharavathi hydro-electric power plants, in Shivamogga district in the Karnataka state of India. People from other age groups and those who were inhabitant and continue to live in the same location were excluded from the study. The non-displaced population included in the study were people in the age group between 45-65 years, who are inhabitants of their permanent place of residence since birth and reside in the same geographical location near developmental projects. People who are not inhabitants of their permanent place since their birth and those who do not reside in the same geographical location near developmental projects and those from other age groups were excluded from the study.

RESEARCH TOOLS:

1. Semi structured interview schedule

A semi structured interview schedule was designed to gather focused and qualitative data regarding economic status, family and social support, and other important socio-demographic details needed for current research.

2. Shamshad-Jasbir Old age Adjustment Inventory

The Shamshad-Jasbir old age adjustment inventory was used to assess gender differences in the adjustment in six major areas, including health, home, social, marital, emotional and financial dimensions. The questionnaire was developed by Shamshad Hussain and Jasbir Kaur in 1995 and contains 125 statements to measure the level of adjustment. The adjustment scores tend to be higher with better adjustment, and vice versa. The inventory has shown adequate reliability and validity for use in middle-aged and older Indian population (31-32).

STUDY PROCEDURE:

Researcher approached each study participant individually and data is collected through one-to-one interviews. The purpose and procedure of the study were clearly explained, and informed consent was obtained from every participant. The semi-structured interview schedule and the Shamshad-Jasbir old age adjustment inventory were administered to every participant and their responses were obtained. Interviews of participants were often taped for future ethnographic analysis in order to gain deeper insight into experiences of the displaced population.

STATISTICAL ANALYSIS:

Data obtained were computed, tabulated and presented with the help of descriptive statistics. Mean and standard deviation of the adjustment scores were calculated. Two types of analysis were performed to determine gender difference in adjustment scores in the displaced and non-displaced: (i) between gender and (ii) within gender analysis. In the first case, the comparison was performed between displaced and non-displaced individuals in the male and female categories. On the other hand, in the second case, the comparison was performed between males and females in the displaced and non-displaced categories. The *t* test statistic was used to determine if there is any significant difference between the two groups and a *p*-value less than 0.05 was considered statistically significant.

Table 1: Scores on the adjustment inventory for non-displaced male and female middle-aged population.

Non-displaced male and female population	Size	Mean	SD	*t* test	Level of significance
Health adjustment					
Non-displaced male	30	21.20	1.98	0.95	NS
Non-displaced female	30	21.80	2.72		
Home adjustment					
Non-displaced male	30	21.40	1.62	1.05	NS
Non-displaced female	30	20.73	2.97		
Social adjustment					
Non-displaced male	30	18.70	1.61	0.29	NS
Non-displaced female	30	18.80	1.77		
Marital adjustment					
Non-displaced male	30	14.40	1.28	1.86	NS
Non-displaced female	30	13.80	1.30		
Emotional adjustment					
Non-displaced male	30	18.53	1.14	1.02	NS
Non-displaced female	30	18.13	1.76		
Financial adjustment					
Non-displaced male	30	11.36	1.47	0.58	NS
Non-displaced female	30	11.16	1.12		
Total adjustment					
Non-displaced male	30	105.63	3.30	0.83	NS
Non-displaced female	30	104.46	6.67		

Abbreviations: SD=Standard deviation; NS=Not significant

Table 2: Scores on the adjustment inventory for displaced male and female middle-aged population

Displaced male and female population	Size	Mean	SD	*t* test	Level of significance
Health adjustment					
Displaced male	30	21.50	1.50	2.88	Sig **
Displaced female	30	20.10	2.13		
Home adjustment					
Displaced male	30	21.06	1.80	1.61	NS
Displaced female	30	19.90	3.43		
Social adjustment					
Displaced male	30	13.90	2.76	4.51	Sig **
Displaced female	30	10.46	3.01		
Marital adjustment					
Displaced male	30	14.56	1.62	3.16	Sig **
Displaced female	30	13.30	1.41		
Emotional adjustment					
Displaced male	30	13.20	2.92	4.97	
Displaced female	30	9.63	2.52		Sig **
Financial adjustment					
Displaced male	30	10.50	1.76	0.43	
Displaced female	30	10.70	1.75		NS
Total adjustment					
Displaced male	30	94.73	6.24	5.24	Sig **
Displaced female	30	84.10	8.94		

Abbreviations: SD=Standard deviation; NS=Not significant; Sig **=Significant at 0.01 level

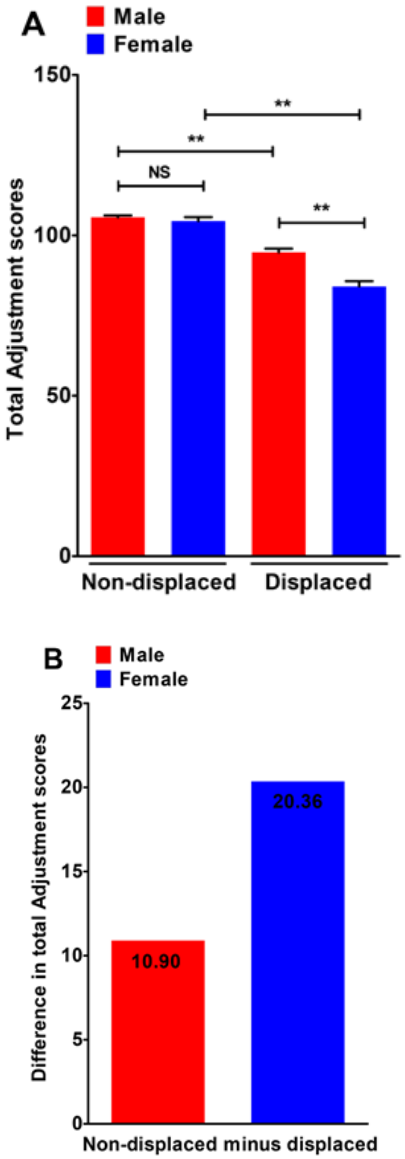
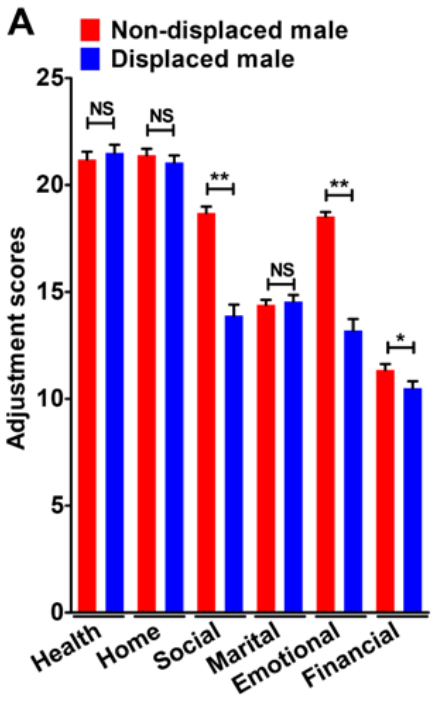
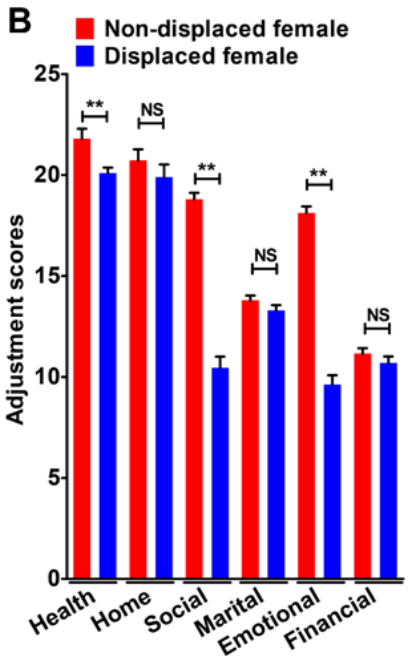


Figure 1: A. Bar-graph depicting total mean adjustment scores between middle-aged males and females in the displaced and non-displaced categories. Sample included 30 men and 30 women each in the displaced and non-displaced categories. **B.** Bar-graph depicting difference in mean total adjustment scores post-displacement in men and women. The bar heights illustrate the reduction in mean total adjustment scores in the displaced population, which is an indicator of poor adjustment to displacement. Note greatly reduced total adjustment scores in women post-displacement, compared to men, suggesting disproportionate impact of displacement. **, $p<0.01$. *NS*, not significant. *Error bars*, S. E.





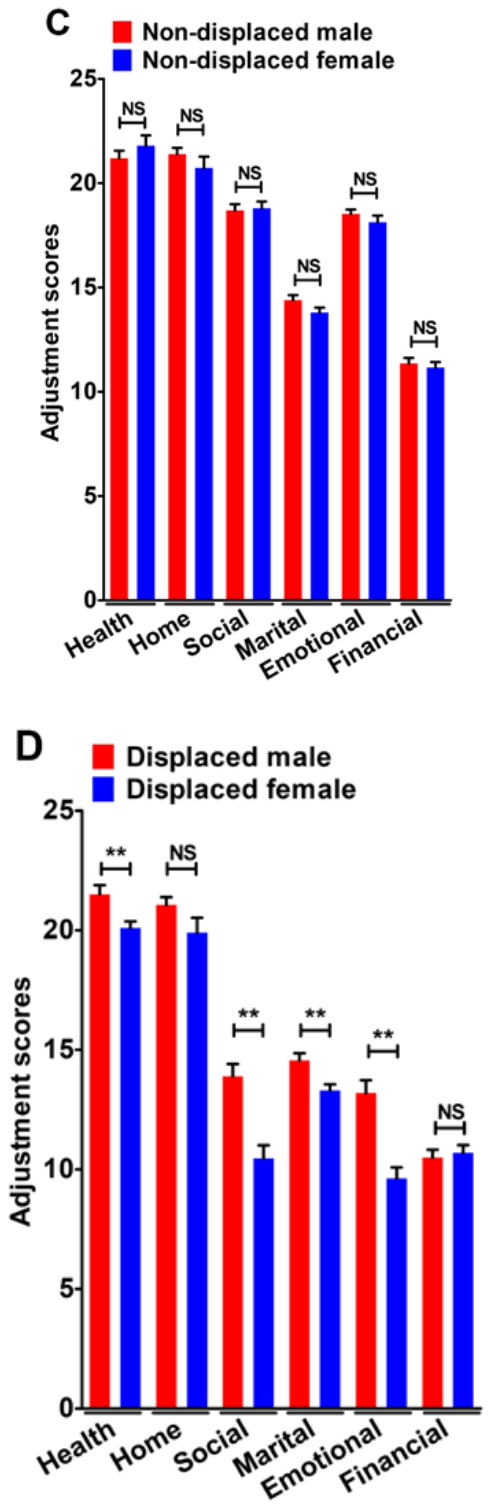


Figure 2: (A-D) Bar-graphs depicting the level of adjustment in six major areas, including health, home, social, marital, emotional and financial, in men and women, in the displaced and non-displaced categories. First, adjustment scores across these six areas were compared between displaced and non-displaced individuals in the male **(A)** and female **(B)** categories. Next, adjustment scores across these six areas were compared between men and women in the displaced **(C)** and non-displaced **(D)** categories. *, $p<0.05$. **, $p<0.01$. *NS*, not significant. *Error bars*, S. E.

RESULTS

Identifying gender differences and addressing gender-specific needs of the displaced population is important for successful rehabilitation programs. So, it is imperative that the resettlement policies be driven by systematic gender research and assessment. However, there exists serious information gaps and weak evidence on gender differences in displacement experiences and impact in the Indian population. The case study presented in this paper sought to address this information gap by investigating gender differences in adjustment to development induced displacement and discuss how our findings can help plan inclusive resettlement programs.

The study was conducted in the geographical locations of population displaced for the Varahi Yojana and Sharavathi hydro-electric projects in the Shivamogga district in the Karnataka state of India. The sample consisted of 120 middle-aged participants, including 30 men and 30 women each in the displaced and non-displaced categories. The Shamshad-Jasbir old age adjustment inventory was used to assess the level of adjustment in different sub-categories. To begin with, we analyzed total adjustment scores, which gives an overall picture of psychological adjustment of men and women, in the displaced and non-displaced categories. In this context, it is worth noting that our findings showed no significant difference in total adjustment scores between men and women in the non-displaced population (Non-displaced men: 105.63 ± 3.30; n=30, Non-displaced women: 104.46 ± 6.67; n=30; Table 1 and Figure 1A), suggesting no gender difference in baseline adjustment in the non-displaced or native population. Importantly, both men and women showed significantly lower total adjustment scores, when the displaced population was compared with the non-displaced population, suggesting that both genders show poor adjustment to forced displacement (Displaced men: 94.73 ± 6.24; n=30, Non-displaced men: 105.63 ± 3.30; n=30; $p<0.01$) (Displaced women: 84.10 ± 8.94; n=30, Non-displaced women: 104.46 ± 6.67; n=30; $p<0.01$) (Figure 1A). Next, to determine the extent of impairment in adjustment for men and women post-displacement, we compared total adjustment scores for men versus women in the displaced population. In contrast to no differences in the adjustment scores observed in the non-displaced population, we found statistically significant lower total adjustment scores in the displaced women, relative to displaced men (Displaced men: 94.73 ± 6.24; n=30, Displaced women: 84.10 ± 8.94; n=30; $p<0.01$; Table 2 and Figure 1A). For better representation of the observed gender differences in adjustment, we calculated the difference in mean total adjustment scores in the displaced and non-displaced populations. As shown in Figure 1B, striking impairment, that would represent

approximately 200% greater reduction, in the mean total adjustment score post-displacement was observed in women, relative to men, suggesting disproportionate negative influence of displacement in women (Reduction in mean total adjustment scores post-displacement: Men: 10.90; Women: 20.36; Figure 1B). Taken together, our findings thus far suggests that development induced displacement and resettlement increase the risk of maladjustment in both genders, but they have significantly greater impact in women than they do in men.

To look more closely at the gender differences in adjustment to development induced displacement, we aimed to evaluate adjustment across its different dimensions or determinants. The importance of this investigation is that it will address the question of how different dimensions of adjustment contribute to gender differences in overall adjustment observed in our study population. In a growing population of individuals displaced by developmental projects, this information is rather important in identifying gender-specific potential unmet needs and unveiling inclusive resettlement policies and strategies that could lead to better psychological adjustment and better outcome across different dimensions. The assessment instrument used for adjustment in this study enabled us to analyze gender differences in six major sub-categories of adjustment, including health, home, marital, social, emotional and financial, and identify how gender interacts with these determinants of psychological adjustment. To our knowledge, this study is the first of its kind to measure adjustment across different subcategories by using a specific tool among men and women in the displaced and non-displaced populations.

Do men and women affected differently by forced displacement? Do displaced men and women adapt differently to their new resettlement areas and livelihood? These are essentially the two key questions raised in gender studies in displacement. In this study, we attempted to answer these questions by two types of analysis of our data. First, to understand if men and women are affected differently by forced displacement, we compared scores obtained in different adjustment subcategories between displaced and non-displaced individuals in the male and female categories (Figures 2A and 2B). Second, to get an idea if displaced men and women adapt differently to their new resettlement areas and livelihood, we compared scores in different adjustment subcategories between males and females of displaced and non-displaced categories, separately (Figures 2C and 2D).

One main finding of our study was that both genders had worse social and emotional adjustment to displacement. Social and emotional adjustment refers to our ability to respond to internal and external stressors and achieve social and emotional equilibrium (22). Men exposed to displacement stressor showed lower levels of social adjustment (Displaced men: 13.90 ± 2.76; n=30, Non-displaced men: 18.70 ± 1.61; n=30; p<0.01) and emotional adjustment scores (Displaced men: 13.20 ± 2.92; *n=30,* Non-displaced men: 18.53 ± 1.14; *n=30;* p<0.01) than non-displaced men (Figure 2A). Similarly, displaced women showed lower levels of social adjustment (Displaced women: 10.46 ± 3.01; n=30, Non-displaced women: 18.80 ± 1.77; n=30; p<0.01) and emotional adjustment scores (Displaced women: 9.63 ± 2.52; n=30, Non-displaced women: 18.13 ± 1.76; n=30; p<0.01) than non-displaced women (Figure 2B). The interaction between social and emotional determinants of adjustment is important when studying gender differences in adjustment. A closer inspection of our data showed that displaced females had almost double impairment in social and emotional adjustment than males (Figures 2A and 2B). Our findings also suggests that individuals with worse social adjustment are likely to have poor levels of emotional adjustment, and vice versa. Displaced women with poor peer and social support are likely to have higher rates of internalizing symptomatology (33). This could explain worse social and emotional adjustment of women to displacement compared to men.

Displacement as such did not show any impact in home adjustment implying flexible adjustment of both gender to their new homes (Figure 2A and 2B). When it comes to health and well-being, displaced women reported worse health adjustment when compared with non-displaced women (Displaced women: 20.10 ± 2.13; n=30, Non-displaced women: 21.80 ± 2.72; n=30; p<0.01; Figure 2B). No differences were found when analyzing health adjustment in men in the displaced and non-displaced populations (Displaced men: 21.50 ± 1.50; n=30, Non-displaced men: 21.20 ± 1.98; n=30; Figure 2A). In the context of financial adjustment, it is important to note that in contrast to studies reporting improvement in financial status due to compensation in forced displacement (34), we observed lower financial adjustment scores in men following displacement (Displaced men: 10.50 ± 1.76; n=30, Non-displaced men: 11.36 ± 1.47; n=30; p<0.05; Figure 2A). No differences were found when analyzing financial adjustment in women in the displaced and non-displaced populations (Displaced women: 10.70 ± 1.75; n=30, Non-displaced women: 11.16 ± 1.12; n=30; Figure 2B). These findings may indicate inadequacy of financial compensation and rehabilitation packages and poor implementation of resettlement plans (35). It is important to note that men often value money more than women and consider it as a symbol of success (36). Thus, males seems to be more sensitive to changes in cash flow and savings in the family.

Resettlement is an important stressor associated with the displacement process (9). Gender assessment of adjustment in the non-displaced

population, as shown in Table 1 and Figure 2C, revealed no differences between men and women in all adjustment dimensions, suggesting no gender difference in any of the adjustment sub-categories in the native population. When analyzing resettled individuals according to gender, females show worse marital adjustment, when compared with males (Displaced women: 13.30 ± 1.41; *n*=30, Displaced men: 14.56 ± 1.62; *n*=30; *p*<0.01; Table 2; Figure 2D). Marital adjustment refers to complementarity among couples to attain and maintain mutually satisfying intimate relationships (37). Proper marital adjustment is essential for a good and stable marital relationship and satisfaction. The importance of marital adjustment in the context of displacement and resettlement will be discussed later. Finally, similar to findings in our comparisons between displaced and non-displaced females, we observed significantly lower health adjustment (Displaced women: 20.10 ± 2.13; *n*=30, Displaced men: 21.50 ± 1.50; *n*=30; *p*<0.01; Table 2; Figure 2D), social adjustment (Displaced women: 10.46 ± 3.01; *n*=30, Displaced men: 13.90 ± 2.76; *n*=30; *p*<0.01; Table 2; Figure 2D), and emotional adjustment (Displaced women: 9.63 ± 2.52; *n*=30, Displaced men: 13.20 ± 2.92; *n*=30; *p*<0.01; Table 2; Figure 2D) scores in displaced females as compared to displaced males. It is important to note that although both genders are exposed to the same resettlement stressor, displaced women showed significantly worse health, social and emotional adjustment. This may be related with the fact that displacement and adaptation to new areas is a long process that results in loss of contact with peer groups in the native location and women particularly might face greater difficulties for integration in the new locations causing their social isolation and maladjustment.

Taken together, our findings on adjustment are consistent with several studies that report differences between genders, with females showing poor adjustment when facing negative life events than males (38-39). Studies show that individuals with poor adjustment have greater likelihood of showing anxiety/depression and somatic complaints (28, 38-39). Displaced women are more prone to face a number of psychosocial stressors and have a higher need for support for healthy resettlement. Participation in self-health groups and social and cultural activities can be a contributor to a better social outcome.

DISCUSSION

In the recent years, there has been major trends in family structures and changes in gender roles, particularly in the urban setting, with an expansion of female role to provide economic support to the family and a concurrent expansion of male role to provide household support (40). Nevertheless, the breadwinner model centered on a male breadwinner is still prevalent in most parts of India that results in differences in roles men and women play in domestic and public spheres. In the context of development induced displacement, studies have shown that these distinctions in gender roles cause differential impact to forced migration (18). Unlike with displacement due to conflict or disaster, gender issue associated with development induced displacement, although an equally important humanitarian and social issue, often receives less local and global attention and assistance (41-43). Previous ethnographic research from India of gender differences in impact of forced displacement argue that women discrimination and disempowerment are closely linked to poor outcomes (17-18).

The results of our present study clearly demonstrate how gender has an important influence on different determinants of psychological adjustment patterns and hence, on health and psychological outcomes in the displaced population. Both displaced men and women had significant impairment in the psychological adjustment. However, women had significantly lower total adjustment score than men, which contrasts with the findings reported by studies in cancer survivors wherein women showed better adjustment than men (44). More precisely, the analysis of adjustment subcategories also showed gender disparities in adjustment to forced displacement. For instance, although our results showed reduction in social and emotional adjustment scores for both genders post-displacement, the impact was disproportionately greater for women. It is important to note that women tend to seek emotional and social support for coping more than men (25). The lack of social support, social cohesion, social networks, and social capital in the displaced population are likely possible determinants of poor social and emotional adjustment (45-47). Women are less likely to receive these supports, leading to less positive coping to displacement.

Research on gender and health and illness is relatively scarce, especially in the development induced displaced population (48). The results of our present study demonstrate that women show poor health adjustment post-displacement. Given that psychological adjustment has direct implications with health outcomes (28), overall poor adjustment scores seen in the displaced women might be also reflected in the health adjustment scores. In addition, menopausal transition seen in middle aged women might aggravate the maladjustment to displacement. Another potential explanation for gender differences in health adjustment in the displaced population could be that men, by virtue of greater purchasing power, are more likely to consult health centers and medical clinics for illness, whereas women are more likely to self-treat or rely on traditional and faith healers and might thus be more exposed to poor medical and reproductive healthcare (8).

Much little is known about the impact of forced displacement and resettlement on marriage and marital relationships. One of the important findings of our study is poor marital adjustment in displaced women compared with displaced men. Applying a gender lens to the issue of marital adjustment is useful in determining the impact of displacement. Studies have reported domestic violence, sexual harassment, exploitation, child marriages and bad marriages in the displaced population (15-17, 49). Failed relationships and marriages of the displaced women with migrant workers, who lived together till the completion of work of establishing development projects and then left to find a new job at a different location abandoning their wives and children behind, was frequently observed in our displaced population. More research into the effect of displacement on the quality of marital relationships is needed. Taken together, our results in this study demonstrate that gender matters in terms of adjustment outcomes, but, at the same time, generalizations as to only women get impacted by displacement can be misleading. The complexity of gender roles must be taken into account to fully understand the impact that gender has on adjustment to forced displacement. For instance, with regard to financial adjustment, the displaced men scored significantly lower than women. The traditional role of men is to support the family financially and provide housing and other securities (40). Thus, the economic vulnerability resulting from displacement might put a much greater financial burden on men and this could explain, at least in part, lower financial adjustment score in displaced men, compared to women. Interestingly, similar gender difference in perception was observed in a study on Syrian refugees, wherein male participants were found to be more concerned about financial security, whereas female participants stressed on the need for marital security and education (49).

The involvement of both men and women in resettlement policies and programs is key to their successful and sustainable implementation (26). Unfortunately, in most displaced populations, men are selected by the authorities for displacement and resettlement procedures because they are largely responsible for the household decision making (17-18). Socio-cultural-economic factors, such as exclusion of women from land ownership and property rights, or from participation in the compensation and resettlement procedures, could affect their knowledge about problems arising from development induced displacement and how to adjust and solve them. Traditionally, women participate in unpaid reproductive labor that includes daily household work (50). More opportunities for income-generating productive labor and skill development for displaced women is needed, which in turn will increase their earning and provide greater autonomy, social status and decision-making power. We suggest that when women get equal participation and control over all decisions pertaining to displacement and resettlement, the entire family will have significantly positive outcomes. Inclusive programs and formation of self-help and stress coping groups which received relevant information and opportunities are needed. These groups, in turn, will turn out to be resources for peer support for the whole community.

CONCLUSIONS

The present research highlights the importance of addressing gender issues in relation to development induced displacement. Displaced men and women have remarkable psychological adjustment issues; however, they significantly vary in different sub-categories. Both men and women showed profound impairment in social and emotional adjustment to displacement. This signifies the importance of social support and peer support to improve adjustment in both dimensions. Notably, consistent with gender roles and disparities, females exhibited poor health and marital adjustment, and, in contrast, males showed poor financial adjustment. Although women make up half the displaced population, most resettlement plans are not gender sensitive and women are not able to participate in the decision-making process. Government and local authorities should recognize the role of gender, highlight voices and concerns of both men and women, and design and implement inclusive resettlement programs taking gender differences into account. Finally, since gender studies form the basis for formulation of policies and successful implementation of resettlement programs, more systematic and quantitative approach to studies in this area are needed.

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