

## Psycho-Physiological Turmoil Coupled with Eating Behavior among Women of Uttarakhand, India

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**Abstract:** Though meager, but studies are indicative of psycho-physiological turmoil of women in Uttarakhand, a northern state in India. Women perform tons of chores in the house as well as field, in hilly areas. The positive statistical data for women in terms of literacy rate cannot hide the grimmer condition of women in relation to poor nutritional status, poor psychological health, poor financial independence, poor decision making power etc. The current situation of women aggravates when it is further accompanied by introduction of eating disorders. The problem of eating disorder has a direct impact on nutritional and psychological health. The dearth of literature in this arena leaves the problem unrecognized and thus unaddressed.

**Keywords:** Eating disorder, Nutritional health, Psychological health, Women in Uttarakhand

### Introduction:

Uttarakhand- a northern state of India is primarily a mountainous state with 87 per cent of area in hilly terrain and 65 percent of land as forest. 74 per cent population resides in rural area and practice agriculture for livelihood. The lifestyle of the women in Uttarakhand state in India has always been influenced by their never ending list of chores, which, obviously overburdens them. Women of rural hills of Uttarakhand Himalayas perform agricultural practices and contribute a major share in family economy in terms of food grains, fruits, milk etc. [1]. Nautiyal in her work revealed that agricultural work in hills is quite time consuming, increasing women's workload and men do not show much interest in routine agricultural work because it requires hard labor and is less productive, therefore, instead of sharing the work with women, they prefer to migrate to urban areas [2] for employment.

Women in the urban regions of Uttarakhand have a pretty different nature of workload but the socio-cultural expectations remain the same as from rural women. Comparing the data of rural and urban women obtained from census it was revealed that the literacy rate of women in Uttarakhand is 70.70%, with 66.79% women in rural and 80.02% women in urban areas as literate [3]. They informed that percentage working women in urban areas is 11.29% and working women in rural areas are 32.94%. Further providing comprehensive information, it was revealed that female main workers in urban areas are 8.7% and in rural areas are 19.18%, female marginalized workers in rural areas are 13.76% and urban areas are 2.5%. The difference

between the percentages of literate women and working women in the state somewhere appears as a gap between education and its implementation especially in terms of economic independence. NFHS-IV [4] factsheets of Uttarakhand state revealed that 89.8% (92.6% urban and 88.2% rural) married women participated in household decisions but 15.5% (14% urban and 16.4% rural) suffer from unmet needs of family planning and 12.7% (12.1% urban and 13.1% rural) ever married women experienced spousal violence. This data reflect the impressive percentage of women who has an opportunity to take household decisions, but, at the same time, it is also visible that conspicuous percentages of women still undergo pressures regarding some vital issues in marriage, like, inability to take decisions about family planning, establishing self identity in the marriage, etc. Being able to take part into the family decisions is not the only parameter which should be considered while understanding the development of women in the state because in present times, the holistic view on the issue considers the multidimensional involvement of women in socio-economic activities.

Amidst this situation, where, on one hand, there are struggles for survival and drudgery, there, on the other hand, financial and existential dependency even after being educated may affect health. In this situation, eating disorders may walk unnoticed beside the well recognized problems of disturbed eating behaviors of the women in Uttarakhand.

As in many other developing countries, in Uttarakhand also cooking less than required meals, eating cold and leftover food or sometimes even skipping meals has been reported as a fuel saving strategy by women [1] which, affect their health adversely. The eating behaviors of women are to be further analyzed as gradually urbanization has also brought changes in the eating behaviours. In a review study it was emphasized that there is a rapid nutritional transition in Uttarakhand which is the result of urbanization, high income growth, changes in the population structure as well as changes in the food systems (marketing, processing and distribution systems). Nutritional transition is also accompanied by the transition towards more sedentary lifestyles which is driven by urbanization and changes in the food distribution (supermarkets) and processing (convenience food) systems [5].

From the above mentioned scenario, one can also assume that though the nature of struggles for women in rural and urban areas is different but the amount of psycho-physiological turmoil for women from both the areas must be more or less the same. This situation raises some thought churning questions regarding the influence of this situation on the women. Firstly, observing the disturbed eating patterns the question arises what is the nutritional status of the women in Uttarakhand? Secondly, what is the influence of nutritional status on the psychological condition of women in the state? Lastly, whether the other problems, like, eating disorders are being recognized and addressed in Uttarakhand or not?

#### **Present scenario of nutritional status of women in Uttarakhand**

The nutritional status of women in the state has been a matter of research attention. After analyzing National Family Health Survey-IV [4] fact sheets of 13 districts of Uttarakhand it was revealed that percentage of women (15-49 years) who have BMI below normal was highest in district Almora and lowest in rural areas of District Dehradun. Percentage of women whose BMI was above normal was highest in urban areas of District Udham Singh Nagar and lowest in District Uttarkashi. Percentage of anemic pregnant women was highest in rural areas of District Hardwar and lowest in rural areas of District Dehradun. Percentage of anemic non-pregnant women was highest in rural areas of District Hardwar and lowest in District Almora. In a study of farm women (age group 31-45 years) of an area adopted village by Vivekananda Parvatiya Krishi Sansthan (VPKS) for promoting off-season vegetable production and farm women from a non adopted village in Almora District were compared for their nutritional status. It was found that the average energy consumption per capita per day in adopted and non-adopted village was 2054 and 1739 kcal which was 7.7 and 21.8% less than the recommended levels and Chronic Energy

Deficiency was higher among farm women of non-adopted village. Average energy and protein consumption levels,  $\beta$ -carotene, niacin and riboflavin in women from non-adopted were lower than in women from adopted village. Average iron consumption was less in women from both the villages and intake of calcium and ascorbic acid was higher [6].

Women from urban and rural regions of Uttarkashi district of Uttarakhand were compared and it was found that though the Body Mass Index (BMI) of urban women was better than rural women but more urban (87.8%) than rural women (82.2%) were anaemic [7]. In a study it was revealed that the nutritional status and nutritional knowledge in hill women is unsatisfactory and needs intervention.

The poor nutritional status has been revealed in the studies done so far but the complete understanding requires an insight into the psychological status of the women in the state.

#### **Influence of nutritional status on psychological health of the women in Uttarakhand**

The associations between the nutrition and psychological status has been highlighted in some of the researches done earlier, like, positive and significant associations were found in nutritional assessment and geriatric depression in 184 urban free living elderly in Tabriz [9], decrease in nutritional status has been found with increase in depression in 169 elderly women in Kolkata [10] and poorer Thiamine nutritional status and higher depressive symptoms were found in Chinese adults [11].

In Uttarakhand, where, the nutritional status of the women has been observed to be unsatisfactory, there, the paucity of researches exploring psychological status of the women in reference to their nutritional status seems to be a gap in the knowledge of their holistic health scenario. A few researches conducted in Uttarakhand have made exploratory attempts to gain insight in this arena, like, increasing trend in stress with BMI in women at the risk of obesity having maximum stress have been observed [12] and females suffering from various levels of stress were found to have significant lower levels of energy, protein and zinc than males [13].

#### ***Eating disorders synergistic to psycho-physiological health***

The changing patterns of eating behaviors influencing the nutritional status and the possible association of the nutritional status and psychological health have to be explored more in Uttarakhand. Also, along with the concerns expressed above, it has to be considered that there may be other problems, like eating disorders, co-existing.

Eating disorders are fatal illnesses which lead to chronic nutritional deficiencies. There may be a range of factors which may work underneath, like, biological, psychological, family, social, cultural pressures and media factors [14]. There is a pivotal role of psychological status, like, self-esteem and depression in influencing eating disorders. In an exploration, it was revealed depression was higher in rural girls than their urban counterparts of Uttarakhand and also, as the levels of depression increased, there was a decrease in body mass index (BMI) [15]. McCarthy [16] in 1990 drew attention towards five unintegrated trends (twice as many women as men are likely to be depressed, sex differences emerges at puberty, this sex difference is reported only in western countries, the rate of depression has been increasing, especially in young females and the age of onset of depression is younger in present generation than in older generation) of epidemiology of depression and four of these trends are parallel to the trends in eating disorders (majority of eating disorder patients are females, eating disorders emerge at puberty, eating disorders are present in western but absent in non-western countries and incidence of eating disorders have risen in past 20 years) might not be merely coincidence. It was suggested that one factor which may contribute strongly to both is women's pursuit to thinness and hence, the view incorporated in the given model was that the eating pathology occurs as a result of, and as a strategy to deal with depression and it therefore predicts the trends. If we analyze, it can be said that this dissatisfaction with the body also influences the self-esteem of the individual. In a study it has been suggested that enhancement of self-esteem is a way to reduce eating disorders [17].

#### **Researches on eating disorders in Uttarakhand**

##### **A) Vulnerabilities acknowledged but not yet addressed:**

Earlier eating disorders were considered as culture bound disorders. Two trends reported by McCarthy [16] especially attract attention. Firstly, that the rate of depression and eating disorders is increasing and secondly, in case of depression sex difference is reported in only western countries and eating disorders are present in western but absent in non-western countries. Both the epidemiological trends are greatly influenced by the time frame as we see that the prevalence of depression and eating disorders has risen. In a review on the rise of eating disorders in Asia, it was unveiled that prior 1990s, only handful of cases were reported in selected countries, including Malaysia, Singapore, India and among Chinese in Hong Kong (then under British sovereignty) except Japan but as Asian countries have grown more industrialized and globalised, eating disorders have followed. Countries in Asia are experiencing a rise in eating pathology as a result of multifaceted and profound cultural transformations. Transformations include changes in

population demographics, food supply, global economies, gender roles and the traditional family structure [18]. In a review the presence of limited researches in non western countries has been pointed out as well as, still, it was concluded that the survey findings indicate the rise in the number of subjects with eating disorders and abnormal eating behaviors [19].

In specific Indian context, eating disorders present a complex picture due to the huge diversity in its populace and trends may vary among district segments of the Indian population which requires further research [18]. Recently, studies in India have focused on eating disorders, somewhere, acknowledging the presence or may be rise of the problem which is a matter of concern. A study found eating disorder pattern and depression common in lean individuals (BMI less than 23) [20]. Sharan & Sundar [21] while summarizing the studies on Anorexia Nervosa in India reported that the clinical presentation of eating disorders is similar to that of other developing nations, but with the absence of concern of weight in most of the reported cases and suggested that diagnostic and treatment models which focus on weight concerns may not be applicable on this population. The presence of Non fat phobic Anorexia Nervosa (NFP-AN) (a variant of typical anorexia nervosa) in India was also discussed in the review by Pike and Dunne [18]. In a study eating disorder patients in India and Australia were compared and it was found that Indian and Australian eating disorder patients scored similarly on the global Quality of Life and engaged in similar behaviors, type and frequency, but, they differ in eating disorder related thoughts [22]. There is a need to address the issue in Uttarakhand because merely observing the rise in the problem in India and not checking its status in the state will ignore many vital health issues of the women in the state.

##### **B) Is it a knock unheard in Uttarakhand?**

Uttarakhand is a state which possesses varied demographic profiles. People reside in 13 districts ranging from tarai to middle Himalayan regions. Development and urbanization has touched all the districts differently. Here, the unsatisfactory nutritional status of women has been revealed in various studies but still, no significant research works are available which reveal the probable linkages of eating disorders, nutritional deficiencies or psychological problems among the individuals of the state. Nutritional deficiencies may be just a part of a problem which is yet to be explored and understood. There is a lack of epidemiological data on eating disorders of the state which can help in exploring various aspects of the problem.

#### **Conclusion**

Women are the backbone of economy of Uttarakhand hills, a Northern State of India. The

literacy rate of women in state is quite appreciable but it is not at parity with the employment status, decision making processes. Also, the overburden of physical workload influences the physiological and psychological health of women in the state. Moreover, recently a very few researches are indicating that the psycho-physiological turmoil of the women in Uttarakhand is being coupled with the eating disorders which is actually not well recognized and addressed in the state. The authors conclude that there is a need of identification of the eating disorders and psycho-physiological health of women in the state and intervention of the same by the policy makers, so as to improve the health status of the women.

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