WOMEN HEALTH AND THE ROLE OF INTERNAL ENVIRONMENT: EVIDENCE FROM INDIA'S NATIONAL FAMILY HEALTH SURVEY-II (1998-99)

By

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Abstract:

The health status of an individual is evidently the consequence of the interplay and integration of two major ecological considerations, the internal environment and the external environment. The residential environment is a very crucial universe not only for physical development but also for psychological and social behaviour. A Woman plays a vital role towards the promotion of environmental behaviour in the residential setting but at the same time she is the most affected victim in this environment. This paper highlights the health needs of women in the Indian society. Analysis shows that women are at a greater risk of a number of health problems related to reproductive roles. Some of the environmental factors affecting women's health are malnutrition, pollution at home, and strain due to multiple roles and incompatibility. These factors have been taken into account for the analysis and findings.

Keywords: Women; health; responsibility; malnutrition; environment.

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Introduction

A family is the backbone of any society. Family is focused around a woman who is often taken for granted. She has a lot more responsibility for the way the world is growing than a man does. A culture remains stable if the women in the society remain stable. She is believed to have the ability to handle more pain, to absorb more sorrow, a lot more hurt that eventually leads her to greater growth and makes her stronger. She is also commended to process the ability to support more, to love more and to strengthen the bonds of membership around her. Hence, it is essential for all to be concerned about the health of women and their role in the family and society.

According to World Health Organization *(WHO)* Expert Committee report on early detection of health impairment in occupational exposure to health hazards, "*Health cannot rather a way of functioning within one's environment*". Health develops and is maintained towards interception between the genotype and the total environment.

Environment is the ensemble of all those external and internal conditions and influences, which affect life and the development of any organisation. In this sense, it is that whole outer physical and biological system in which humans and other organisms live together. The health status of an individual is evidentially the consequence of the interplay and integration of two major ecological considerations – the internal environment and external environment. The residential environment is a very crucial universe not only for the physical development but also responsible for psycho – social behaviour. Woman plays a vital role in the promotion of environmentally responsible behaviour in the residential setting but at the same time she is the most affected victim in this environment.

Several measures have been taken to control environmental pollution and to protect our environment, but very little has been studied with reference to the residential environment and how a women is affected in it. A Chinese proverb says, "*A thousand miles walk starts with the first step*". In the same way, environmental control starts with women in the residential environment. Keeping this into view, an attempt has been made to focus mainly an women's health by identifying the internal residential factors and also to suggest some means to integrate these concerns into all aspects of sustainable development.

The overall health needs of men and women are same but women are relatively more vulnerable on account of a number of health problems, in addition to special health problems related to reproductive roles. Some of the residential environmental factors affecting women's health are malnutrition, pollution at home, stress due to multiple roles and strain due to incompatibility. These factors have been take into account for this paper.

Objectives:

The objectives of this study are:

1. To examine the health status of women using indices such as BMI, anaemia, height and weight.
2. To examine the pollution at home of selected background characteristics in India.
3. To examine the stress of women by different background characteristics.

Material and Methods:

The present study is based on data from National Family Health Survey –II (NFHS-II) 1998-99. In India NFHS-II data have been collected from 91,196 households in 25 states by interviewing 89,199 eligible women in the age group of 15-49 years. NFHS-II measures the malnutrition status, height and weight of all eligible women. The ever-married women ages of 15-49 were weighed using a solar-powered digital scale with an accuracy of $\pm$ 100 grams. Their heights were measured using an adjustable wooden measuring board especially designed to provide accurate measurements of women. The weight and height have been taken to several indicators of women's nutritional status. Also pollution and stress data of different background characteristics of women are taken.

Discussion:

Malnutrition:

Malnutrition is a major nutrition affliction of Indian population of all age groups. Malnutrition affects the physical growth of the individuals in varying degrees besides severely affecting their physical work capacity. Most often, malnutrition is associated with iron deficiency and anemia as a co-occurrence and that is a sinister combination. Each one aggravating the other malnutrition during infancy and early childhood culminates into reduced physical growth, which is more likely to be carried during the adolescence and adulthood. A number of studies across the world, more so in the developing countries, have documented the effect of malnutrition on the work capacity of the individuals besides their general well-being. Evidence from many sources demonstrates that malnutrition, while still unacceptably high, has declined substantially in the past two decades. For example, National Nutrition Monitoring Bureau (NNMB) data for eight states shows that severe protein-energy malnutrition declined from 15 percent in 1975 to less than 7 percent in 1996 among 1-5 years old children, an severe and moderate malnutrition combined among there children decline from about 63 to 49 percent in the same period (*Anthony R. Measham and Meera Chatterjee*).

Women's Food Consumption

Table 1 indicates two-third of women consume vegetables every day and 93 percent eat vegetables at least once a week. Pulses and beans, as well as green, leafy vegetables are also important part of their diet. About half of the women (47 percent) eat pulses or beans everyday and (42 percent)

green, leafy vegetables everyday. Milk or curd is a common part of the diet for a majority of the women, but (34.1 percent) of women consume milk or curd occasionally and (11percent) never consume them. Fruits are eaten daily by only eight percent of the women and only one-third of the women eat fruits at least once a week. About one third of women in India never eat chicken, meat or fish and few women (6 percent) eaten chicken, meat or fish every day.

Table 2 shows that the index that relates to women's weight to her height. The Body Mass Index (BMI) can be used to assess both thinness and obesity. The mean BMI for women in India is 20.3 (varying within the narrow range 19.23 for the different groups). The chronic energy deficiency is usually indicated by a BMI of less than 18.5. More than one-third (36 percent) of women have a BMI below 18.5, indicating a high prevalence of nutritional deficiency. Nutritional problems are particularly more acute in rural women, especially uneducated women, women as followers of religious dogmas, scheduled caste and scheduled tribes' women who are not self-employed or employed and women who live in households with a low standard of living (SLI). Obesity is becoming a substantial problem among several groups of women in India, particularly women living in urban areas, women who are both educated, and women from households with a high standard of living. Approximately one-quarter of women in each group have a BMI of 25 or more, and six to seven percent have a BMI of 30 or more. In addition to being relatively tall, Sikh and Jain women are more likely than other women in any other group to be obese.

Table 3 states that the differences in the mean height of women are not large, but women in the northern region are a few centimeters taller than average. The shortest women are found in the eastern region, as well as Uttar Pradesh and parts of the northeast. A similar pattern is evident for the percentage of women below 145 centimeters. The mean Body Mass Index (BMI) also varies within a narrow range from 19.2 in Orissa to 23.7 in Delhi. Arunachal Pradesh, Sikkim and Delhi have a lowest percentage of women with a low BMI (11 to 12 percent) and Orissa is the highest Percent age (48 percent). The level of obesity is much higher in Delhi (33.8 percent) and Punjab (30.2 percent) than any other states of India. Over 30 percent of the women in the two states have a Body Mass Index at least 25, and 9 percent have a Body Mass Index at least 30. Other states with high levels of obesity are Goa (21.2 percent) and Kerala (20.6 percent). Obesity is least common (less than 10 percent) in all parts of central and eastern India like; Madhya Pradesh (1.2), Uttar Pradesh (1.5) Bihar (0.5) Orissa (0.6) and West Bengal (1.3) and most states in the northeast and Rajasthan.

According to **table 4** anaemia is characterized by a low level of hemoglobin in the blood. Haemoglobin in necessary for transporting oxygen from the lungs to tissues and organs of the body. Anaemia usually results from a nutritional deficiency of iron, folate, vitamin $B_{12,}$ or some other nutrients. Table 4 examines the levels of anaemia among women by different background characteristics. Anaemia is such a serious health problem in India which may have detrimental effect on the health of women and

children. It may become underlying cause of maternal mortality and pre-natal mortality. Anaemia also results in an increased risk of premature delivery and low birth weight (Seshadri, 1997).

According to table 4, in India 52 percent of women have some degree of anaemia, 35 percent of women are mildly anaemic, 15 percent are moderately anaemic and 2 percent are severely anaemic. The prevalence of anaemia is slightly higher in younger women i.e. less than age 25. In older women, it is also higher in women who are not currently married than for currently married women. It is considerably higher for rural women (52 percent) than for urban women (46 percent). Anaemia decreases steadily with increases in the level of educational attainment, from 56 percent among illiterate women to 40 percent among women who have completed higher education. Anaemia decreases steadily with increases in the standard of living index (SLI). About half of Hindu, Muslim and Buddhist women are anaemic, but women belonging other religion are prone to highest level of anaemia. By caste, scheduled tribe women have highest level of anaemia (65 percent) followed by scheduled caste women (56 Percent) and other backward caste classes (51 percent). The prevalence of anaemia does not vary much by work status, but women who do not work have slightly less anaemia than working women. The prevalence of anaemia slightly higher for breastfeeding women than other groups, but there is no difference in the prevalence of anaemia between pregnant women and non-pregnant women, who are not breastfeeding. However, by far, the highest levels of moderate anaemia are experienced by pregnant women (25 percent) and pregnant women also are subject to a somewhat higher level of severe anaemia. Shorter women and women with a low Body Mass Index (BMI) have a higher prevalence of anaemia than other women. The diet of women plays a vital role in their likelihood of heavy anaemia. Women who eat fruit at least once a week are less likely to be anemic than women who eat fruit less often or not at all. The consumption of green leafy vegetables however does not appear to have any protective effect against anaemia. It is pertinent to note that women who regularly consume green leafy vegetables but not fruits have the highest prevalence of anaemia (55 percent).

Tables 5 depicts in detail anaemia in women of different States of India. According to this table, anaemia is prevalent in every State of India. The lowest prevalence of anaemia is in Kerala (23 percent), Manipur (29 percent), Goa (36 percent) and Nagaland (38 percent). The majority of women are anaemic in 10 states and anaemia is particularly pronounced in the eastern region and in may of the states in the northeastern region. More than one-quarter of the women suffer from moderate to severe anaemia in the states of Meghalaya and Assam.

Pollution at home:

High Morbidity and Mortality rates in infancy and childhood in the developing countries are often considered to be largely due to poor environmental conditions. Diarrheoa, a disease highly influenced by poor environmental sanitation including water and sanitation facilities *(Stephens, Mason and Isely, 1985)*,

is one of the major killers of children in developing counties *(UNICEF, 1988)*. The World Health Organisation (WHO, 1995) estimated that each year in developing countries acute respiratory infections primarily pneumonia, are responsible for 4.1 million deaths of children under the age of five years. The major cause of these deaths is environmental factors such as crowding and pollution at home *(Pio, Leowski and Ten Dam, 1984, Miller, 1985)*.

Table 6 shows the proportion of households with electricity - 91 percent in urban areas and 48 percent of rural areas. Water sources and sanitation facilities have an important influence on the health of household members, especially children. 38.7 percent of household in India use pipe drinking water and 39.2 percent from hand pumps, 18.7 percent drink water from wells and 2.6 percent drink surface water. In urban areas 74.5 percent households use pipe drinking water as compared to only 25 percent in rural areas. The medium time to get drinking water is 4.9 minutes in rural areas. Only one –third of households in India get pure water by any means. The most important methods of water purification is straining and boiling water.

Regarding sanitation facility only 24 percent of households have a flush toilet and 11.9 percent have a pit toilet or latrine and 64 percent have no facility. Again here is a large urban and rural difference: 63.9 percent of urban households have a flush toilet compared with 8.8 percent of rural households. A majority of 81.8 percent of rural households doesn't have toilet facility at all.

For cooking several types of fuels are used by women in India. The most common type of fuel is wood 59.3 percent of households rely mainly on wood, 16.7 percent of liquid petroleum gas, 13 percent on either crop residues or dung cakes, 7.9 percent kerosene and rest of other fuels. 68 percent of urban households rely mainly on liquid petroleum gas or kerosene, while 73 percent of rural households rely mainly on wood. Regarding type of households one-third of households in India is kachha, one-third live in semi-pucca and one third live in pucca houses. By residence wise - 66 percent of households in urban areas live in pucca compared with 19 percent households in rural areas. Crowded housing conditions also affect health as well as quality of life. In India 37 percent of households live in houses with 3 or more persons per room.

Conclusion:

The National Family Health Survey -II has played a pioneering role by expanding the demographic and health survey beyond the environmental demographic variables to estimates of the nutritional status of the population in India. The National Family Health Survey-II data on the prevalence of iron deficiency, anaemia and malnutrition in the country as a whole clearly indicate that the last two conditions were of severe grade in the public health problems, as the prevalence of both conditions in the population was higher than 40 percent.

The National Family Health Survey-II data have brought out very clearly that a large section of women in their reproductive phase in India face the gravest disadvantage of the risk involved in reproduction as they represent such an important phase of life in a state of iron deficiency and malnutrition, which will increase the range of untoward outcome. Inadequate access to food poor environmental sanitation and inaccessible health care and the large adversities further aggravate their plight. The results of this study provide empirical evidence of linkages between different household environmental factors. From policy points of view, this study suggested that personal hygiene behaviours, poverty and governmental policies and programmes had affected the women health to a substantial extent. Dumping refuse in the living areas reflects lack of awareness of hygiene. Crowded poor housing, lack of separate space for cattle and kitchen require focused attention in the government policies and programmes. This study also demonstrated that the personal practices could significantly reduce women health problem. Hence, it concludes that specific hygiene informations should be disseminated to motivate people to bring out changes behaviour in their and habits.

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