

Health Status of Women in India and Assam: A comparative Study

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ABSTRACT

Women's status in society has an impact on their health. Female infanticide, a higher death rate, a lower sex ratio, poor literacy rates, and a lower level of work for women in the non-agricultural sector as opposed to men are only a few examples of how the demographic consequences of women manifest themselves. The degree of women's nutritional status is typically determined at the home level by socioeconomic circumstances, cultural norms and practices, and other factors. The study discusses about the nutritional status of women in India using the National Family Health Survey (NFHS-5), 2019-21. The study sets the objectives of the paper as the prevalence of anemia in women, understanding the pattern of food consumption of women in India and a comparative analysis of health status of women between India and Assam. The paper finds out some significant conclusions such as low nutritional status, poor diet among the women in India and later suggesting some ways to improve the health status.

Keywords – Nutrition, anemia, health, women

INTRODUCTION

There are a number of markers that may be used to assess the health of Indian women, and they differ depending on geography, socioeconomic status, and culture. In order to appropriately improve women's health in India, several aspects of wellness must be examined in relation to men's health in India as well as global health averages. A key element of both human well-being and economic growth is health. Women in India currently experience a wide range of health issues, which ultimately have an impact on the output of the whole economy. Through the development of skilled human capital and higher levels of saving and investment, addressing gender, class, and ethnic gaps in healthcare and improving health outcomes can help the economy. One of the key socioeconomic determinants of health—along with social, economic, and political factors—that significantly affects women's health outcomes and access to healthcare in India is gender. As a result, India's high level of gender disparity has a negative effect on women's health. When SES level is taken into account, studies have shown that boys are more likely than girls to receive treatment from healthcare institutions. India is ranked as the middle income country by the United Nations. In Gender Inequality Index, India ranks 127 out of 146 countries. The value of the Gender Inequality Index (GII), a multidimensional indicator, is influenced by a number of variables, such as the rate of maternal mortality, the rate of adolescent fertility, educational attainment, and the rate of labour force participation. Women in India are less likely to be literate, to continue their education, and to be employed, which is an example of gender inequality in the country. By looking at how resources are allocated in the domestic and public spheres, it is possible to establish the role that gender plays in gaining access to health care. The most prevalent sex to be aborted in India is a female, hence gender inequality starts even before birth. Due to her family's wish for a son, the mother's pregnancy may be difficult if a female foetus is not aborted. Once they are born, females are more likely to receive less food than sons, especially if there are already a lot of girls living in the home. The low status of women and girls in Indian society, particularly in the rural and poor areas, is a major cause of the obstacles that adult women face in obtaining fair levels of health. Poor health outcomes for women are directly correlated with gender inequality. According to numerous studies, men tend to visit hospitals more frequently than women, with the rates of admission varying drastically by gender. Because women often receive a smaller percentage of household

resources than men do and use healthcare resources to a lesser extent, there is differential access to healthcare. Women's literacy levels can have an impact on their usage of contraceptives, reproductive behaviour, children's health and upbringing, good hygiene habits, career opportunities, and general position in society. An important factor in determining women's health is early marriage and childbirth health and is also accountable for the current situation large disparities in socioeconomic level inappropriate and inadequate use of health widespread anemia among all the facilities and pregnant mothers, which results in a high maternal death rate. A woman's poor health affects not just her but also her family. Unhealthy and malnourished women are more likely to become pregnant low-weight babies. Further, they are less inclined to be able to feed and properly care for their offspring. Lastly, a woman's health has an impact in the financial stability of the household, and because women in poor health will be less productive in a person's employment. Increased risk of low birth weight or premature birth, prenatal and neonatal death, insufficient iron storage for the baby, increased risk of maternal morbidity and mortality are just a few of the effects of anemia for women decreased mental focus, productivity, and physical activity (Gillespie & Johnston, 1998; Stoltzfus, 1997; Allen,1997). Even slight anemia might cause symptoms in women lower labour capacity and weariness (Gillespie, 1998). Weakness is one of the most prevalent themes found in qualitative studies on women's sickness and health-seeking behaviour across various socio-cultural contexts in India weakness and signs of illness they are experiencing (typically attributed by women to a bad diet and lack of resources) frequently placed first among diseases of concern (Patel,1994; Amin, 2000; Kielmann, 2000; Kanani et al., 1994).

OBJECTIVES

1. To study the nutritional status of women in India.
2. To understand the prevalence of anemia in Indian women
3. To understand women's food consumption pattern
4. To draw a comparative analysis of health status of women of Assam with India

METHODOLOGY

The study uses secondary data and the information was gathered solely from official government source. It sheds light on the fifth round of the National Family Health Survey conducted by Ministry of Health and Family Welfare, Government of India on a regular basis to analyze the health status of women in India and in Assam. For this purpose this paper tries to study the nutritional status of women, prevalence of anaemia in women and their food consumption pattern. Through this paper, a comparative picture between health status of women in overall India and in Assam is tried to shown in a very brief manner.

This study is descriptive in nature and the data are depicted in tabular forms and in diagrams. To understand the nutritional status of women, Body Mass Index (BMI) is used for the women of the age group 15 to 49. By dividing a person's weight in kilograms by their height in square meters (kg/m^2), the BMI is calculated.

Status	BMI (kg/m^2)
Too thin for their height	<18.5
Normal	18.5-24.9
Overweight	25.0-29.9
Obese	≥ 30.0

In the age group 15 to 40, while calculating the BMI, women who are not pregnant and who have not had a birth in the two month before survey are included.

For studying the prevalence of anaemia in women, women having anaemia are categorized in three groups on the basis of anaemia status. Hemoglobin (Hb) levels of at least two standard deviations (13 g/dL for males and 11 g/dL for women) below the mean for age and sex are considered anemic person.

Status (only for women)	Haemoglobin level in grams/decilitre
Mild	(11.0-11.9 g/dl)
Moderate	(8.0-10.9 g/dl)
Severe	(<8.0 g/dl)

RESULT AND FINDINGS

Women's social standing and health are inextricably intertwined and so study of their health status is very important. Thus, nutritional status of women of age 15 to 49, prevalence of anaemia among them and their food consumption patterns are presented in tabular forms and comparative analysis of women in India and in Assam are showed graphically as below.

Nutritional Status of Women

Table 1.1: Nutritional Status of Women in India

Mean body mass index (BMI) of women, and percentage of women with specific BMI levels, India, 2019-21)

Age	Mean BMI	Body Mass Index ¹ (BMI)				Number of women
		<18.5 Too thin	18.5-24.9 Normal	25.0-29.9 Overweight	≥30.0 Obese	
15-19	19.6	39.7	54.9	4.2	1.2	112,223
20-29	21.7	21.2	61.9	13.2	3.7	201,518
30-39	23.5	11.4	56.7	23.4	8.6	184,949
40-49	24.1	9.3	53.7	26.1	10.9	160,206
Total	22.4	18.7	57.3	17.6	6.4	658,896

Source: National Family Health Survey (NFHS-5), India, 2019-21

¹Excludes pregnant women and women with a birth in the preceding 2 months

Table 1.1 reveals about mean BMI of Indian women of age groups from 15 to 49 excluding the pregnant women. Women from age group 40-49 have the highest average body mass index and women from age group 15 to 19 have the lowest average body mass index. The table categorizes the BMI levels for too thin, normal, overweight and obese, and states the percentage of women according to the respective BMI levels. Among the four age groups, 15 to 19, 20 to 29, 30 to 39 and 40 to 49, more percentage of underweight women falls in the 15 to 19 group. That is, younger women are more affected by underweight and have

low BMI levels compared to the older women. However, 26.1% and 10.9% women of age group 40-49 are overweight and obese which means that older women are suffered more from high body mass index. This is because older women are less concerned about their health and have higher levels of sex hormone present in their bodies. In an overall, 18.7 percent women in India are underweight with less than 18.5 BMI, 57.3 percent of women are with normal BMI from 18.5 to 24.9, 17.6 percent of women are overweight with BMI from 25.0 to 29.0 and 6.4 percent of women are obese with more that equal to 30.0 BMI level.

Table 1.2: Nutritional Status of Women in India and Assam

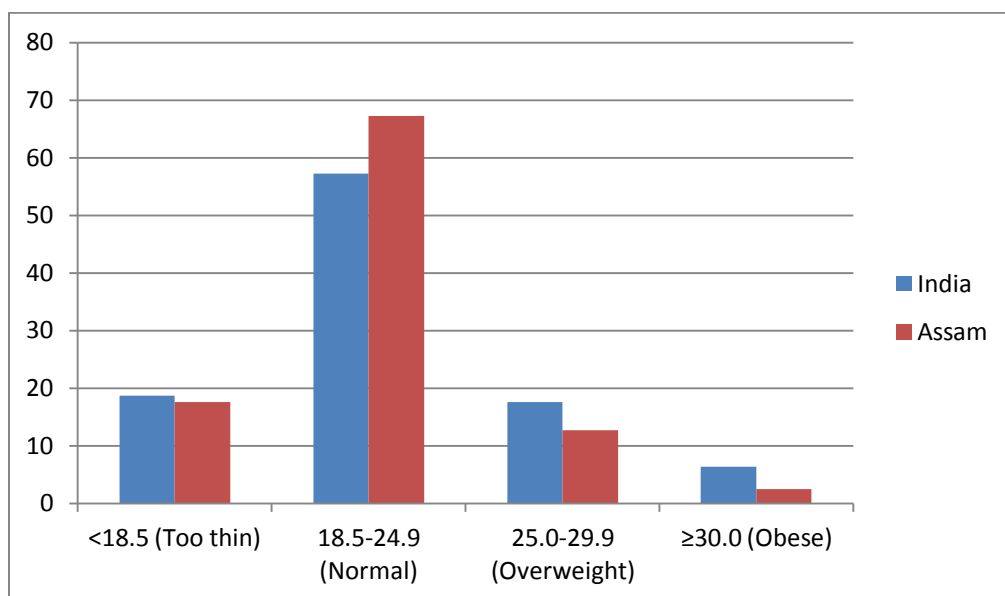
(Mean body mass index (BMI), and percentage of women with specific BMI levels, India, 2019-21)

	Mean BMI	Body Mass Index ¹ (BMI)				Number of women
		<18.5 Too thin	18.5-24.9 Normal	25.0-29.9 Overweight	≥30.0 Obese	
India	22.4	18.7	57.3	17.6	6.4	658896
Assam	21.7	17.6	67.2	12.7	2.5	34979

Source: National Family Health Survey (NFHS-5), India, 2019-21

¹Excludes pregnant women and women with a birth in the preceding 2 months

Table 1.2 and diagram 1 describes a comparative analysis between the nutritional status of Indian women and women in Assam. As per the data, 2.5 percent women in Assam were obese; that is $BMI \geq 30.0 \text{ kg/m}^2$ whereas in overall India the number is 6.4 percent, which is more than Assam. Similarly, in Assam 17.6 percent women have nutritional status below normal level and for overall India that is 18.7 percent. Thus, the nutritional status of women in Assam is better than overall India.

Diagram 1: Percentage of women age 15-49 with specific BMI levels

Source: National Family Health Survey (NFHS-5), India, 2019-21

Table 2.1: Prevalence of anemia in Women**Percentage of women age 15-49 with anaemia, India, 2019-21**

Age	Mild (11.0-11.9 g/dl) ¹	Moderate (8.0-10.9 g/dl) ²	Severe (<8.0 g/dl) ³	Any anaemia (<12.0 g/dl) ⁴	Number of women
15-19	26.4	30.1	2.6	59.1	114,624
20-29	26.0	28.6	2.2	56.8	223,334
30-39	25.5	28.0	2.8	56.3	187,116
40-49	24.7	28.8	3.2	56.7	156,961
Total	25.6	28.7	2.7	57.0	682,035

Source: National Family Health Survey (NFHS-5), India, 2019-21

¹ For pregnant women, the value is 10.0-10.9 g/dl

² For pregnant women, the value is 7.0-9.9 g/dl

³ For pregnant women, the value is <7.0 g/dl

⁴ For pregnant women, the value is <11.0 g/dl

Table 2.1 shows the prevalence of anaemia in Indian women for the different age groups from 15 to 49. 59.1 percent of women of the age group of 15 to 19 are suffering from anaemia which is the highest among all the age groups. Out of the total, 25.6 percent of women are suffering mild anaemia (11.0-11.9 g/dl)¹, 28.7 percent of women are suffering moderate anaemia (8.0-10.9 g/dl)² and 2.7 percent of women are suffering severe anaemia (<8.0 g/dl)³ in overall India.

If we compare the prevalence of anaemia in women in India and Assam, we can see a very clear picture from table 2.2 and diagram 2. It shows that prevalence of anaemia in women in Assam is more than overall India. 28.8 percent of women in Assam suffer mild anaemia while it is 25.6 in overall India. Similarly, 34.4 percent Assamese women suffer moderate anaemia and in overall India it is 28.7 percent. However, the percentage of women suffering from severe anaemia in India is slightly more than in Assam. It's 2.7 percent for India and 2.3 percent for Assam.

Table 2.2: Prevalence of Anaemia in Women of India and Assam
Percentage of women age 15-49 with anaemia for India and Assam

	Mild (11.0-11.9 g/dl) ¹	Moderate (8.0-10.9 g/dl) ²	Severe (<8.0 g/dl) ³	Any anaemia (<12.0 g/dl) ⁴
India	25.6	28.7	2.7	57.0
Assam	28.8	34.4	2.3	65.9

Source: National Family Health Survey (NFHS-5), India, 2019-21

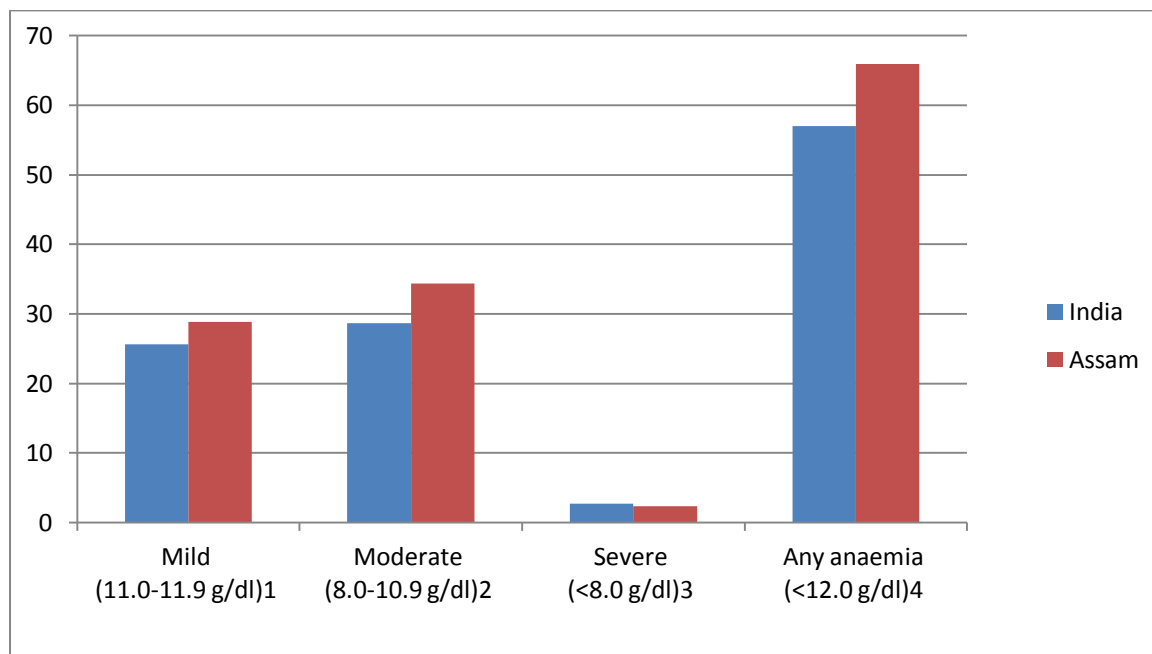
¹ For pregnant women, the value is 10.0-10.9 g/dl

² For pregnant women, the value is 7.0-9.9 g/dl

³ For pregnant women, the value is <7.0 g/dl

⁴ For pregnant women, the value is <11.0 g/dl

Diagram 2: Percentage of women age 15-49 with anaemia in India



Source: National Family Health Survey (NFHS-5), India, 2019-21

Table 3.1: Women's food consumption for overall India

Percentage of women age 15-49 consuming specific foods at least once a week

Age	Food										Number of Women
	Milk or curd	Pulses or beans	Dark green, leafy vegetables	Fruits	Eggs	Fish	Chicken or meat	Fish, chicken or meat	Fried foods	Aerated drinks	
15-19	69.8	91.9	89.4	47.0	43.1	32.8	33.7	42.1	45.6	16.9	122,544
20-29	72.6	93.1	91.3	51.9	46.0	35.7	36.8	45.4	44.0	16.3	236,584
30-39	72.4	93.3	91.1	49.7	46.0	36.8	36.7	46.2	42.4	15.2	197,936
40-49	73.3	93.0	90.7	48.4	44.2	36.5	35.4	45.7	40.6	14.3	167,051
Overall	72.2	92.9	90.8	49.7	45.1	35.7	35.9	45.1	43.0	15.6	724,115

Source: National Family Health Survey (NFHS-5), India, 2019-21

Women's food consumption pattern is highlighted in the above table 3.1. We can see that more than 90 percent women in India consume pulses or beans and dark green leafy vegetables at least once a week. Approximately 72 percent women consume milk or curd,

45 percent consumes eggs, fish, chicken or meat and 50 percent women consume fruits in the same manner. In case of consumption of fried foods and aerated drinks once in a week, the percentages of women in India are 43 percent and 15.6 percent.

Table 3.2: Women's food consumption for India and Assam

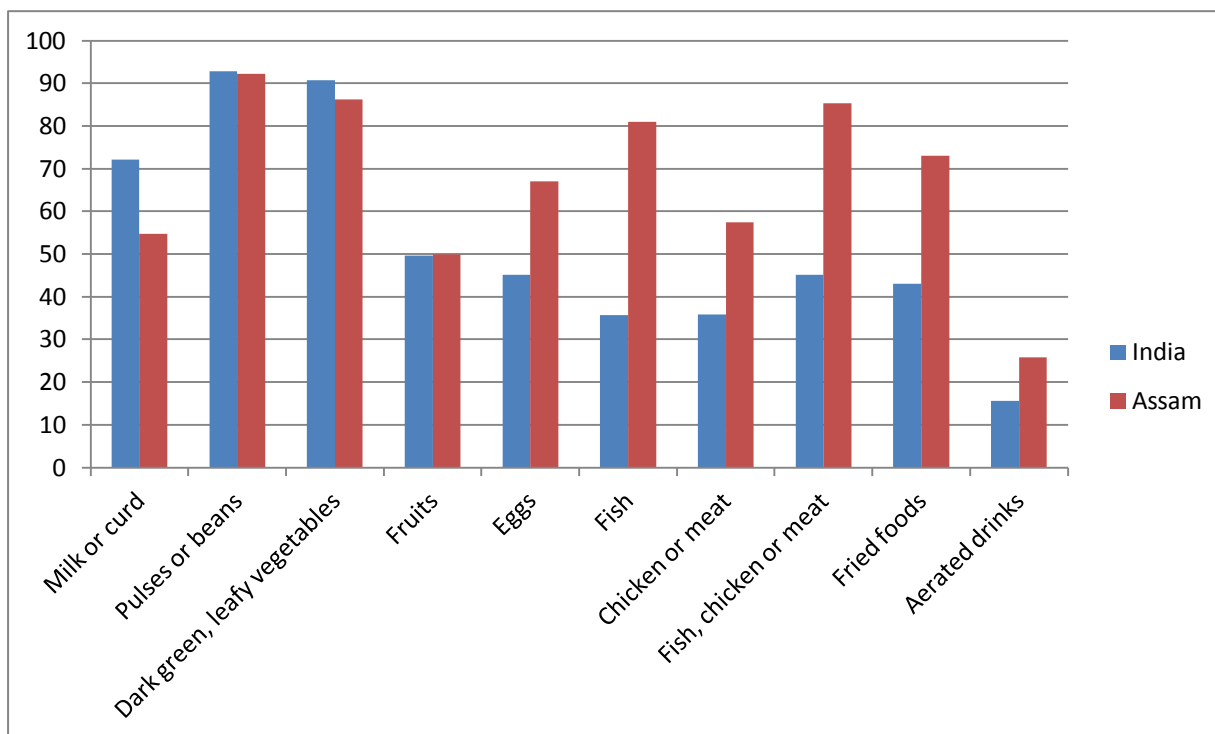
Percentage of women age 15-49 consuming specific foods at least once a week for India and Assam

Age	Food										Number of women
	Milk or curd	Pulses or beans	Dark green, leafy vegetables	Fruits	Eggs	Fish	Chicken or meat	Fish, chicken or meat	Fried foods	Aerated drinks	
India	72.2	92.9	90.8	49.7	45.1	35.7	35.9	45.1	43.0	15.6	724,115
Assam	54.8	92.3	86.3	49.9	67.0	81.0	57.5	85.4	73.1	25.8	34979

Source: National Family Health Survey (NFHS-5), India, 2019-21

The comparison of food consumption between Indian women and women in Assam is depicted by the table 3.2 and diagram 3. Higher percentage of women in Assam consume eggs, fish, meat and fried foods and aerated drinks more than the percentage of women in India once in a week. But in case of consumption of milk or curd, pulses or beans, dark green leafy vegetables, percentage of women in India is higher than the percentage of women in Assam. In case of fruits consumption once in a week, the percentage of women in Assam and overall India are almost same.

Diagram 3: Percentage of women age 15-49 consuming specific foods at least once a week in India and Assam



Source: National Family Health Survey (NFHS-5), India, 2019-21

CONCLUSION

The study reveals that the young women from the age group 15-19 suffer the problem of underweight and their BMI levels stand below 18.5. On the contrary the women in the older age group 40-49 are more obsessed and overweight. This happens because they are comparatively less health conscious and the sex hormone level often seems to remain high. The most significant influence on lowering anemia in India, in our opinion, will come from enhancing women's access to resources (income) and their general nutritional status. The high rate of anemia among Indian women is a hardship for them, for their families, and for the country's productivity and economic growth country. The severe rate of anemia among women is seen in the age group with 3.2% rate. For a variety of reasons, iron supplementation programmes have not been successful in lowering anemia prevalence and hence operational research is required to determine how to best improve current iron

supplementation programmes. Prior to the start of their reproductive years, adolescent girls' overall health and nutritional status must be improved. New and creative solutions are especially needed in this regard. This will call for specially designed programmes that target women across all socioeconomic classes, in both rural and urban settings. The pattern of food consumption among the Indian Women is disappointing. Almost 90% women consume pulses, beans, green vegetables, 70% Indian women consume milk, curd and 45% women consume meat or egg etc only once in a week. This actually shows the low nutrition among the females that later becomes the reason to many health problems among them. The comparative analysis of the health status of pan India and Assam highlights the fact that the nutritional status of women in Assam is at a good position in comparison to India. The percentage of women in Assam is less obese and overweight. But in case of the prevalence of anaemia among the women, the percentage of women in Assam is high in comparison to Indian women. The pattern of food consumption among the women in Assam is supposed to be more fried food, aerated drinks, fish, meat and low quantities of vegetables, pulses and dairy products in comparison to India. The study emphasizes the necessity of taking the appropriate steps to increase community involvement in various developmental programmes for eradicating poverty and raising female literacy rates. To raise awareness and modify behaviour for better health and nutrition practices to enhance the nutritional status of mother and child, the Department of Health and ICDS must strengthen health and nutrition education.

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