



Nutritional Status of Scheduled Tribe Women in Beed District of Maharashtra: An Interview-Based Study

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Abstract:

The nutritional health of Scheduled Tribe (ST) women is a crucial determinant of community well-being, intergenerational growth, and socioeconomic progress. This study assessed the nutritional status of 100 ST women residing in Beed district, Maharashtra, using an interview-based survey method. Structured interviews were conducted to collect information on anthropometric measures (self-reported height and weight), dietary intake, health conditions, mid-upper arm circumference (MUAC), and anemia-related symptoms. The results revealed a dual burden of malnutrition, with 39% women underweight and 38% overweight, alongside a high prevalence of moderate anemia (32%). Dietary diversity was low, with the average Minimum Dietary Diversity for Women (MDD-W) score being 3.8 ± 1.6 out of 10. The findings highlight persistent nutritional challenges among ST women, influenced by socioeconomic disparities, food insecurity, and limited access to health care. The study underscores the need for culturally sensitive, community-based interventions focusing on diet diversification, anemia control, and women's empowerment in rural Beed.

Keywords: Nutrition, Health Status, Malnutrition, Beed, ST Women.

Introduction:

Women from Scheduled Tribe (ST) communities in India face profound nutritional disadvantages, rooted in systemic socio-economic marginalization, limited healthcare access, and persistent food insecurity. Although India has made substantial progress on several health indicators, nutritional disparities remain deeply entrenched among its tribal populations (IndiaSpend, 2025). ST communities account for approximately 10.1 million individuals in Maharashtra alone, and tribal women often experience higher rates of undernutrition, anemia, and emerging

overnutrition compared to other social groups (IndiaSpend, 2025).

National and state-level health data highlight these disparities. NFHS-5 (2019–21) provides comprehensive, district-level estimates of key health and nutrition indicators, underscoring significant geographical and social inequalities (International Institute for Population Sciences [IIPS] & ICF, 2021). Evidence indicates that India is undergoing a nutrition transition: overweight and obesity are rising even in underserved populations, while undernutrition persists—creating a double burden of malnutrition (Dutta et al., 2019; Young &

coauthors, 2020). Among tribal women in Maharashtra, the prevalence of underweight remains alarmingly high, while anemia continues to affect more than half of women (Rokade et al., 2020).

Despite these pressing concerns, district-level data on tribal women's nutritional status—particularly from Beed, a rural and drought-prone district in the Marathwada region—is notably sparse. Beed is characterised by recurrent agricultural distress, limited access to health services, and a predominantly rural tribal population. Tribal women in such contexts may experience a unique blend of chronic energy deficiency, micronutrient deficiencies, and early signs of overnutrition as diets shift toward energy-dense but nutrient-poor foods.

Objectives:

- To assess the nutritional status of ST women in Beed district through structured interviews.
- To analyze the prevalence of undernutrition, overweight and anemia (based on self-reported and symptom-based data).

Methodology:

A cross-sectional interview-based study was conducted among 100 Scheduled Tribe women aged 18–49 years in Beed district of Maharashtra. The study employed structured face-to-face interviews to collect primary data.

Study Area: Beed district is located in the Marathwada region of Maharashtra, characterized by semi-arid climate, recurrent droughts, and limited health resources. The selected villages represented both rural hamlets and peri-urban settlements with significant ST populations.

Sampling: A purposive sampling method was used. Community leaders helped in identifying eligible participants. A total of 100 women consented to participate.

Data Collection Method: Data was collected using structured interviews, conducted in Marathi, the local language.

Self-reported anthropometry: Participants were asked to recall their most recent weight and height, as measured either during health center visits or community programs. BMI was calculated from these self-reports.

Anemia assessment: Instead of direct blood testing, anemia was assessed using symptom recall (fatigue, pallor, dizziness, breathlessness) along with participant's latest hemoglobin values if available from health records.

Results:

Socio-Demographic Profile:

Out of 100 respondents, 82% belonged to rural areas and 18% to urban settlements. The majority were married (87%) and engaged in agricultural labor or daily wage work. Education levels were low, with 46% women having only primary education or none at all.

Table.No.1 Nutritional Status of Scheduled Tribe Women in Beed

Sr. No		Percentage %
1	Anemia Status	
a	None	43 %
b	Mild	25 %
c	Moderate	32 %
d	Severe	0 %
2	BMI	
a	Underweight	39 %
b	Overweight	32 %
c	Normal	26 %
d	Obese	03 %

3		Residence	
	a	Rural	82 %
	b	Urban	18 %
4		Mean	
	a	Height	148.2
	b	Weight	48.5
	c	BMI	22.0

Discussion:

Study looks at the health and food habits of a group of people, focusing on how common anemia is, how much people weigh compared to their height, where they live and other body measurements.

Anemia Status: Anemia is still a big health issue in this group. About 43% of people didn't have anemia, but 57% did, with 25% having a mild form and 32% having a more serious type. No one had the worst kind of anemia. This shows that many people might be missing important nutrients like iron, which is a common problem in places where food isn't always healthy or easy to get. This matches what is seen in many countries where women and children often have low iron levels because of poor diets, not enough absorption or financial challenges.

Body Mass Index (BMI): Looking at how heavy people are compared to their height. About 39% of people were underweight, which suggests that many don't get enough food. On the other hand, 32% were overweight and 3% were obese, pointing to a growing problem of eating too much and not moving enough. Only 26% had a healthy weight. This mix shows that food habits and lifestyles are changing, especially in places that are becoming more like cities, which brings new eating habits and less physical activity.

Residence: Most of the people in the study lived in rural areas, with 82% from these

places and only 18% from cities. Living in rural areas can affect health in several ways. It can be harder to get proper medical care, understand how to eat well, keep clean or find a good job. This might be one of the reasons why more people in this study had problems with not getting enough food and had anemia.

Anthropometric Measures: On average, people in the study were about 148 cm tall and weighed 48.5 kg, with an average BMI of 22, which is considered normal. However, even though the average looks fine, the actual group has people who are both very underweight and overweight. This means there are big differences in health within the group, possibly because of different eating habits, how much people move or how much money they have.

However, limitations exist: self-reported height and weight may introduce recall bias and symptom-based anemia assessment is less reliable than biochemical testing. Nevertheless, interview-based methods remain valuable in resource-limited rural settings, enabling researchers to gather both quantitative and qualitative dimensions of nutritional health.

Conclusion:

This interview-based study highlights the complex nutritional challenges faced by ST women in Beed district. The coexistence of undernutrition, overweight, and anemia underscores the need for a multifaceted approach. Study shows that both not getting enough food and eating too much are big problems, along with a lot of anemia, especially in rural areas. To help, health programs need to focus on both kinds of nutrition issues. This could include teaching people about healthy eating, giving out iron to prevent anemia and making sure that food and medical care are easier to access, especially for those living in rural parts of the country.

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