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**SYSTEMATIC REVIEW ON WOMEN HEALTH AND NUTRITION WITH
SPECIAL REFERENCE TO PROGRAMMES AND POLICIES OF
GOVERNMENT OF INDIA**

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ABSTRACT

The health of a woman directly impacts the health and well-being of the entire family. Maternal morbidity and death impact the entire family, not just the mother. In addition to managing the home and taking care of the children, women typically actively participate in outside-the-home, financially rewarding jobs or even make substantial contributions to the family enterprise, whether it be in industry or agriculture. They have a major impact on the rural economy. It suggests that their nutritional status and general health are crucial for both the advancement of the country and their families. Poor health diminishes both their economic potential and their ability to care for family members. In this article, systematic review on women health and nutrition with special reference to programmes and policies of government of India has been discussed.

Keywords: Women, Health, Nutrition, Programmes, Policies.

INTRODUCTION

Health, according to the World Health Organization, is a condition of whole physical, mental, and social well-being rather than just the absence of illness or disability. This idea of health is utopian. Practically speaking, we can observe that health is a dynamic state, with the majority of people existing somewhere between total illness and optimal health. The prerequisite for optimal health is proper nutrition. The science of foods, nutrients, and other substances, their action, interaction, and balance in relation to health and disease, as well as the process by which the organism ingests, digests, absorbs, and uses nutrients and gets rid of their byproducts, is the most commonly accepted definition of nutrition. To be healthy and active, people require various nutrients. A society's growth is reflected in the health level of its women, which is a crucial aspect of their entire social standing. The health of women influences the health of their children, the family, the community, and the nation as a whole. In actuality, a malnourished mother gives birth to a child who is also malnourished, thereby continuing the cycle of under nutrition across generations. Maternal morbidity and death not only affect the mother but also the entire family. In addition to managing the home and taking care of the children, women typically actively participate in profitable jobs outside the home or even make substantial contributions to the family business. Whether in industry or agriculture, they are vital to the rural economy. Their ability to carry out their responsibilities both inside and outside the family is impacted by poor health. Health and nutrition play a crucial role in each other.

REVIEW OF LITERATURE

Hazra, A. et al. (2025). The health and health-related behaviours of women prior to conception greatly influence maternal and child health outcomes. Data on the execution of associated policies and programs is still scarce, despite mounting evidence in favour of preconception nutrition treatment. Targeting married pre-pregnant women between the ages of 15 and 49, this research examines governmental policies and programs that provide preconception nutrition treatments in eight South Asian nations and pinpoints systemic implementation difficulties. With the exception of Sri Lanka, the majority of nations lack national programs for screening for health and nutrition issues, providing important micronutrients, counselling on healthy eating, and treating women who are at risk. Implementing comprehensive nutrition services for pre-pregnant women faces major

obstacles across six health system building blocks, even in nations with supporting policies. Improving program execution, informed decision-making, and the efficacy of interventions all depend on removing these obstacles. We need to further test a suggested comprehensive algorithm for prenatal nutrition in various contexts across South Asia.

Lentz, E. et al. (2025). Food insecurity and malnutrition disproportionately affect women. Women's empowerment can protect them against nutritional issues, according to research. With an emphasis on the recently created Women's Empowerment in Nutrition Index (WENI), this article adds to continuing attempts to assess women's empowerment in a way that is both universal and context-sensitive. Previous studies have demonstrated that it is a legitimate construct that has a good correlation with the nutritional and dietary results of South Asian women. We demonstrate that WENI may be applied to pastoral and agropastoral Kenya, a region that differs significantly from South Asia in terms of norms, institutions, food systems, and means of subsistence. We discover that women's body mass index, dietary diversity, and food insecurity at the household level are all highly correlated with a regionally contextualized WENI. We also provide results for two condensed forms of WENI: a cross-context WENI (CC-WENI) and an abbreviated WENI (A-WENI). A-WENI is context-specific since it only includes a small sample of WENI indicators that were found by machine learning utilizing data from South Asia. There are no validation context-specific indicators in CCWENI. With caveats, we find that they function similarly well. So, we suggest changing WENI to better assess women's nutritional empowerment as it becomes more popular, using CC-WENI for comparing different contexts, and using A-WENI for quick checks on community progress in a specific area.

Saeed, A., Khan, M. N. & Saeed, S. (2025). The most common cause of non-communicable diseases is cardiovascular disease. The primary cardiovascular disease entities that pose a hazard to population health are atherosclerotic and hypertensive diseases, primarily ischemic heart disease and stroke, as well as heart failure. In Pakistan, women are more likely than men to suffer from cardiovascular disease. There are 1.3 male patients for every 3 female patients. Heart disease development and prevention are significantly influenced by nutrition. to assess rural women's knowledge of nutrition in relation to cardiovascular disease. To evaluate rural women aged 35 to 45's dietary knowledge and health-related behaviors surrounding cardiovascular disease, a

descriptive cross-sectional study was conducted. Data for the study was gathered by a survey using a well-known interview-based questionnaire. There were 300 responders in the sample, which was chosen by random sampling. According to the findings, rural women were not well-informed on the ways that heart disease can be caused by eating a diet high in fat, low in fibre, high in red meat, full-fat milk, and low in fruits and vegetables. It was determined that statistical evidence of increasing risks for heart disease was provided by a study of rural women aged 35 to 45's nutritional knowledge related to cardiovascular disease. The findings were helpful in creating gender-specific messaging to raise awareness of heart disease and encourage risk-reducing lifestyle choices.

Yang, J. et al. (2025). With an emphasis on the roles of received public services and policy awareness, this study assesses how well rural maternal health services in northwest China improve pregnant women's health knowledge, practices, and outcomes. Using multistage cluster random sampling, 1,152 pregnant women from 85 townships participated in baseline surveys in rural Shaanxi Province in 2021 and 2023. We used structured in-person interviews to gather data on health behaviours and knowledge. Statistical studies evaluated the impact of maternal health services. Public services and policy awareness did not significantly affect prenatal exams or health outcomes, but they did improve nutrition and health knowledge and boost the uptake of free folic acid. To promote consistent health habits and enhance maternal health outcomes in rural areas, more focused initiatives are required.

Bhandari, S. et al. (2024). Tribal women's health and nutritional status are crucial elements that affect global economic growth in addition to preserving a healthy family and children. Numerous significant issues, including poverty, early marriage, domestic abuse, inadequate nutrition, education, access to healthcare facilities, and a lack of knowledge or awareness, are impacting the health of tribal women. The current study attempts to comprehend the nutritional and health conditions of tribal women in two blocks of West Bengal's Paschim Medinipur region. Twelve villages in the Debra and Dantan-II blocks of the Paschim Medinipur district in West Bengal, India, were the sites of the current cross-sectional study. According to several studies, Scheduled Tribe women's nutritional condition varies greatly based on several variables, including living in rural areas, being illiterate, and having a low income. According to the current study, women in

the Dantan-II block had a higher prevalence of undernutrition than those in the Debra block. Given that nearly one-third of the study participants were undernourished, addressing the issue of malnutrition among the tribal community requires a carefully thought-out and organized effort.

Bhowmik, S. & Khatun, A. (2024). The adolescent stage lies between childhood and adulthood. According to studies, socioeconomic disparities, inadequate food consumption, and inadequate healthcare facilities cause more suffering for rural teenage girls than for their urban counterparts. The goal of the current study was to examine the current state of malnutrition among Bengalee Muslim teenage girls living in the Cooch Behar area of West Bengal, India. From April to May 2023, a community-based, cross-sectional survey was carried out among Muslim teenage girls in the Cooch Behar region of West Bengal, India, who are rural and between the ages of 10 and 14. The researchers gathered data after notifying and explaining the current study's goal to parents, students, and school administrators. Using normal protocols, three anthropometric measurements were recorded, including height, weight, and MUAC. Using height for age and BMI for age, the derived variable BMI was computed and nutritional status evaluated. Based on the plot's location, the degree of stunting and thinness was categorized. The mean and standard deviation for each age group were calculated. To determine age-specific mean differences in the anthropometric variables, a one-way ANOVA was performed. The current study found that there is a double burden of malnutrition among Muslims living in rural Bengal.

Chakraborty, S. et al. (2024). A prerequisite for sustainable development, women's empowerment is a multifaceted and intricate idea that is frequently summed up in three interconnected parts: achievement, agency, and resources. Women's empowerment is not a universal concept; rather, it has been evaluated according to the situation. In rural West Bengal, it had barely been investigated. The purpose of this study was to develop a women's empowerment index (WEI) for rural West Bengal and evaluate the index's dependability. In a West Bengal community development block, a community-based cross-sectional study called WE-CHANT—Women's Empowerment, Child Health, and Nutrition—was carried out. Two-stage sampling was used to choose mother (of reproductive age)—child pairings (6–59 months) from 20 communities (n = 268). Interviews were conducted with mothers. The WEI was constructed using exploratory factor analysis (EFA) with oblique rotation and 25 measurement variables. Researchers used Cronbach's alpha, item-rest,

average inter-item, inter-domain, and domain-to-index correlation to evaluate the internal consistency. With adequate internal consistency, a 12-item WEI was developed that included three domains: decision-making power, attitude toward gender-based violence (GBV), and social independence. Additionally, the index's multidimensionality was noted. Decision-making authority was examined as the primary domain in a succinct agency-based WEI. This index could be used further to evaluate women's empowerment and see how it relates to resources and accomplishments in rural West Bengal.

Majumdar, S. et al. (2024). Adolescent undernutrition is a major public health issue in developing nations like India, according to a body of evidence. Adolescents are generally regarded as having a low risk of illness and frequently receive little attention and resources from the medical community. Their strategy, however, ignores the reality that adolescent adoption of healthy lifestyle behaviors can improve a number of health issues later in life. The purpose of this study was to evaluate the prevalence of nutritional status and related characteristics among adolescents living in rural parts of West Bengal's Birbhum district. Between March 2023 and September 2023, a cross-sectional study was conducted in two blocks of Birbhum district, West Bengal, with 630 sample population members aged 10 to 19 years, consisting of 327 male and 303 female adolescents. Weight and height measurements were made and documented. The answers were compared to abnormal risk factors and the body mass index after the questionnaire was completed. Odds ratio (OR), with a 95% confidence interval, was used as a test of association for nominal variables. According to the report, teenagers continue to struggle with hunger, particularly under nutrition, which is more common in boys. To address teenage under nutrition in the research area, nutrition education might be implemented through a better school curriculum, healthy policies, and messages targeted at adolescents through the various media.

Mishra, A. (2024). For women's total development and well-being, diet and health are crucial. This report offers a thorough analysis of a few government initiatives aimed at improving women's and children's nutrition and overall health. The Rashtriya Swasthya Bima Yojana, the Women Health and Development Program, the Family Planning Program, the National Health Mission, the Food Fortification Initiative, the Mid-Day Meal, and Integrated Child Development Services are the main subjects of this study. According to the study, the main barriers to the effective

implementation of these programs include social and cultural factors, religious convictions, geographical differences, and a lack of financing.

Biswas, S. et al. (2023). For generations, India's historically underprivileged SC and ST people have faced social and economic persecution. These populations experience systemic exclusion and discrimination in many facets of their lives, even in the face of affirmative action regulations. Under nutrition and associated health problems are the result of SC and ST women consuming inadequate amounts of nutrient-dense food. This study compares the BMI of SC and ST women in West Bengal and looks at the factors influencing their BMI to fill in the gaps in the literature about their nutritional health. The results of the study can guide focused initiatives to enhance the nutritional status of West Bengali SC and ST women and lessen the differences in their health outcomes. This study looked at the distribution of underweight and non-underweight SC and ST women in West Bengal using data from the National Family Health Survey (NFHS-5). The sample included 1,496 non-pregnant reproductive-aged ST women and 5,961 non-pregnant reproductive-aged SC women. We used a binary logistic regression model to see how the background of the respondents affected their nutritional status (BMI), and we identified the factors that contribute to the nutritional status differences between SC and ST women using a multivariate decomposition analysis. We mapped the spatial distribution of underweight and non-underweight SC and ST reproductive-aged women using QGIS 2.18.25 software. The nutritional condition and varying background factors of SC and ST women in West Bengal, India, are investigated in this study. The ST population is more affected by under nutrition than the SC population, according to the results, and the quintiles of wealth, age, marital status, religion, place of residence, and educational attainment all have a substantial impact on nutritional status. Nutritional status is also influenced by food and dietary practices; foods such as dark green leafy vegetables, eggs, fish, pulses or beans, and milk or curd are linked to lower rates of underweight. Binary logistic regression analysis reveals a significant correlation between sociodemographic characteristics and underweight status among SC and ST women. Sociodemographic factors primarily cause the discrepancy between SC and ST women, with dietary and food factors following closely behind. The study emphasizes the necessity of focused interventions to raise the nutritional condition of women from underprivileged groups, such as SC and ST communities in West Bengal.

Mridha, S. et al. (2023). Chronic energy shortage and body mass index are major problems in tribal societies in India. Facilities separate tribal members from the general public. The health structure of adult males and females from Munda tribes is examined in this research. The Munda tribe of Gram Panchayat Lahiripur, Sundarban, Block Gosaba, 24 Parganas (South), and Southern Bengal were the subjects of a cross-sectional community-based study. The percentage of malnourished Munda people was quite low. Men have a lower incidence than women in both categories. Compared to the other tribes in the country's eastern region, this group has a good nutritional status.

Paul, D. et al. (2023). In underdeveloped countries like India, adolescent malnutrition is a serious public health issue that has numerous negative long-term effects. Adolescent girls in rural regions are more susceptible to severe malnutrition. We do not fully understand the fundamental causes of their malnutrition. As a result, it appears that the policies, scholarly research, and intervention efforts have mostly ignored the underlying problems. This study aims to fill these gaps by investigating the causes of rural teenage girls' malnutrition in a few districts in West Bengal, India. To accomplish the study's goals, binary logit and probit models are estimated using household-level data from the Government of India's fifth round of the National Family Health Survey (NFHS 5). Reports indicate that stunting and anaemia affect more than one-third of the state's rural adolescent girls. Additionally, from 2015–2016 to 2019–2021, the prevalence of anaemia rose in practically every area. According to the regression results, dietary diversity, the socioeconomic position of the homes, the sex and educational level of the household heads, and other factors all contribute to a decrease in malnutrition among these girls. However, several of these results run counter to the body of current research. This study found that visits to primary healthcare practitioners do not effectively reduce teenage malnutrition. Single adolescents are also more prone to anaemia and stunting than those who are married. However, to build more effective intervention tactics, more study is required to confirm the same. Gaining deeper insights in this area would require a more thorough examination of the fundamental issues using primary data and information.

Ragasa, C. (2023). The COVID-19 epidemic negatively impacted nutrition and strained household relationships, particularly in lower-income households. To lessen these effects, social protection programs mostly distributed cash or in-kind goods to homes that were at risk. However, a gender-

and nutrition-focused social and behavior change communication (SBCC) intervention can be an additional choice. In the first year of the COVID-19 pandemic, we evaluate the effects of a gender and nutrition SBCC intervention that was carried out as a cluster-randomized controlled trial in 30 communities in Myanmar's Central Dry Zone. We utilize data from a phone survey that took place between February and March 2021, as well as a baseline survey from February 2020. Two measures of women's empowerment—access to and participation in credit decisions as well as input in productive decisions—improved, suggesting that SBCC treatments can help alter gendered attitudes and actions. It might take longer to alter deeply rooted gender norms, such as tolerance for intimate partner abuse, as several empowerment indicators remained unchanged. Women in treatment villages scored half a food category higher on the dietary diversification scale. Compared to control villages, more women in treatment villages consumed foods high in vitamin A, milk, almonds, and meat or fish on a daily basis.

Geetha, K. et al. (2023). Women's health and nutrition are crucial since other family members are impacted by their nutritional state. Mothers are able to care for other family members when they are well and eating well. The current study was conducted to evaluate the nutritional status and dietary habits of rural women in Shidlaghatta taluk in Chikballapur district, taking into account the specific research need in the area. Data about rural women was gathered via a questionnaire. To collect data on the individuals' socioeconomic situation, somatic measures, and food consumption, a well-designed questionnaire was created. Additionally, the nutritional status was evaluated using WHR and BMI. The majority of respondents, according to the results, were middle-aged and had completed high school. The average height and weight of rural women were 155.60 cm and 58.30 kg, respectively. The BMI guidelines revealed that 10.50 percent of the women were obese, 35.50 percent were normal, and 10 percent were undernourished. The women's intake of iron (14.80 mg), fibre (17.60 g), and energy (1629 kcal) fell short of the recommended daily allowance (RDA). While the subjects' consumption of all other nutrients was found to be insufficient, their percentage adequacy for fat and calcium was found to be greater than suggested. The study's findings suggest that rural women should increase their intake of meals high in protein, fibre, and energy to enhance their nutritional condition.

Parvati, P. et al. (2022). A woman's health state significantly influences her achievement throughout all aspects of life. It is essential to enhance women's health by confronting biased societal conventions and cultural traditions that impact their well-being. The study area comprised three villages: Ramnagar, Badipatiya, and Chittupur, in the state of Varanasi, Uttar Pradesh. This study primarily concentrated on examining the awareness of health and nutritional issues among women in rural communities. Data was gathered using a questionnaire for information acquisition. We obtained the study's results using the percentage approach. This study found that a lack of understanding led to insufficient food consumption across all age groups. The study's results indicate that this population experienced nutritional issues stemming from both under nutrition and over nutrition.

Ghosh, J. & Pal, B. (2022). Women are a vital component of society; nonetheless, they lack adequate healthcare and nourishment, rendering them increasingly vulnerable. This research utilizes secondary data sourced from the National Family and Health Survey (NFHS-4, 2015-2016 & NFHS-5, 2019-2021). The study seeks to analyze the variations in health status among women aged 15–49 years across several districts of West Bengal by comparing health indices (BMI, obesity, anaemia, hyperglycaemia, and hypertension) across two rounds of the NFHS. The incidence of underweight women has diminished from the 4th to the 5th round of NFHS, but the prevalence of obesity has escalated in most districts of West Bengal, excluding the southern region. Rising trends of obesity, anaemia, diabetes, and hypertension in women pose a significant threat to women's health, development, and societal well-being. The dietary and health status of women need increased attention and concern. The campaign should aim to educate women on nutrition, nutritional deficiencies, health, and public healthcare services.

Singh, J. & Khare, S. (2022). This study evaluates the nutritional and therapeutic attributes of daily meals consumed by women in rural regions. Women in rural regions encounter numerous health-related challenges that eventually impact the family's economic productivity. The health and nutrition of women are integrally connected to their responsibilities in home management. Women have a key role in the rural economy. This indicates that their health and nutritional quality are of utmost importance for both their family and development. Women ought to be cognizant of the appropriate methods of consuming meals. Daily meals they carry must be nutritionally comprehensive. Consequently, the current study has been conducted in Pratapgarh district, Uttar

Pradesh. Nutrition is the biochemical and physiological process through which an organism utilizes food to sustain its life. It supplies organisms with nutrients that can be digested to generate energy and structural components; insufficient nutrient intake results in malnutrition, as nutrition is essential for health and development. Enhanced nutrition is associated with enhanced women's health, fortified immune systems post-pregnancy and childbirth, and a reduced risk of non-communicable diseases such as diabetes and cardiovascular disease. The results indicate that, as illustrated in Figure 2 of this study, 70% of the women were homemakers. Fifty-three percent of rural women were anaemic; nonetheless, certain signs of nutritional deficiencies include weight loss, hypertension, and thyroid disorders. Consequently, there is a pronounced emphasis on nutrition, necessitating the immediate creation of awareness and the implementation of interventions to enhance the nutritional quality of women's health in rural communities.

Malakar, B. & Roy, S.K. (2021). Nutritional status is crucial for enhancing productivity and the overall health and well-being of both individuals and the nation as a whole. A significant portion of workers, especially in developing nations, continues to fall short of adequate dietary standards that require attention. The objective of the study was to examine the nutritional status and its associated factors between two distinct occupational groups. Cross-sectional data on certain anthropometric and socioeconomic factors, as well as energy intake and expenditure, were gathered from 204 adult Santal participants involved in stone mining and agricultural labor. The majority of anthropometric characteristics were comparable between the two groups, regardless of sex, except for MUAC, WC, and HC, which were elevated among stone mine workers in comparison to agricultural workers. Approximately 27% of male stone mine workers and 60% of female stone mine workers, as well as around 40% of male agricultural workers and 34% of female agricultural workers, experience chronic energy insufficiency. Education and caloric expenditure influenced the nutritional status of stone mine workers. Economic conditions and caloric consumption influenced the nutritional status of agricultural labourers. The study found that a significant number of participants, irrespective of their career, face a persistent energy deficit. We expect the educational background, economic position, and calorie expenditure of participants to influence the nutritional state of both labourer populations.

Narayanan, S. et al. (2021). Under nutrition continues to be a pervasive issue, particularly affecting women and their children. A substantial amount of research has recognized women's

empowerment as a factor influencing nutritional outcomes for children and, to a lesser degree, for women themselves. However, the research is inconclusive, partly due to the challenges associated with quantifying empowerment, both in general and in relation to nutrition. Comprehensive interviews with women from rural South Asia indicate that their capacity to attain satisfactory nutritional outcomes frequently includes elements neglected in current empowerment assessments. By integrating empowerment theories and nutritional determinants with comprehensive case studies from Bangladesh and India, we establish the notion of women's nutritional empowerment. Subsequently, we establish a framework, the Women's Empowerment in Nutrition grid, to assess and implement nutritional empowerment. Our work fills the gap in nutrition research by creating a clear way to measure empowerment focused on nutrition. Our conceptual framework provides a foundation for various instruments to guide the design and execution of effective policies intended to enhance nutrition, particularly for rural women.

Gupta, D. & Sharma, U. (2020). India is characterized by its villages, with 70 percent of its population residing in rural areas. Rural India faces numerous challenges, including reliance on monsoons, agricultural issues, insufficient employment opportunities, inadequate incomes, distress migration, malnutrition, ineffective execution of government programs, and limited access to quality education, transportation, and healthcare services. According to rural tradition, a woman's role has always been confined to the house, and a decade ago, societal attitudes regarded women's jobs outside the home with disdain. The situation has now altered. Empowering rural women has become essential for societal advancement and the sustainable development of the nation. Rural women are increasingly pursuing employment outside their homes due to economic necessity, aspirations for improved economic status, the desire for independent income, the utilization of education, and the pursuit of careers. To facilitate this empowerment, the government has enacted numerous bills and policies. The prevailing conditions clearly demonstrate the active involvement of women in rural economic development. The empowerment of rural women signifies both the economic advancement of the rural populace and a more profound social shift.

Lakshmi, B.H. & Sivasree, C.H.V. (2020). Empowerment of women fundamentally entails enhancing the social, political, and economic position of women, particularly those who are traditionally marginalized. It entails establishing an atmosphere in which women are liberated from all forms of physical and mental abuse, exploitation, and discrimination, recognizing that they

represent the most vulnerable segment of society. The Government of India, in conjunction with state governments, has been implementing several initiatives since the post-independence era to enhance the status of women, acknowledging their significance in the nation's economic development. The government endeavoured to resolve the concerns via employment, empowerment, labor force participation, education, gender equality, and entrepreneurship. The government's emphasis is increasingly directed towards fostering women's entrepreneurship to encourage their engagement in economic activities.

Roy, M.R. (2020). This paper intends to present the findings of an assessment regarding the health and nutritional status of educated women engaged in university studies amidst challenging socio-economic conditions. The researcher plans to implement a health awareness program in collaboration with a consortium of specialists, including medical practitioners, nutritionists, and psychoanalysts, in the semi-urban, semi-rural, and rural regions of South 24 Parganas. The comprehensive health assessment program aims to incorporate a three-tiered health scheme. The participating university students undergo health assessments. The health awareness initiative is predicated on the health evaluation report and nutritional education, emphasizing knowledge dissemination regarding dietary practices, accessibility, and the utilization of affordable, community-based nutritious food. The primary objective of this research is to demonstrate the impact of health and nutrition on the education of women from reserved category groups enrolled in postgraduate courses at Diamond Harbor Women University in South 24 Parganas, West Bengal, India.

Sabud, P. et al. (2020). The goal is to assess how women's sanitation and hygiene practices affect the nutritional health of mothers and pre-schoolers in the Lodha tribal tribe across two districts in West Bengal. A cross-sectional study was performed from November 2014 to December 2018 with 941 Lodha mothers and 1,043 of their preschool children in the Paschim Medinipur and Jhargram districts. All data was gathered utilizing a KAP questionnaire subsequent to interviews and group discussions. The mid-upper arm circumference (MUAC) and body mass index (BMI) were used to assess the nutritional status of the mother. A child was categorized as underweight, stunted, and wasted due to weight-for-age, height-for-age, and weight-for-height Z-scores falling below the -2-standard deviation of the WHO standard. A strong correlation exists between inadequate home WaSH practices and child under nutrition and morbidity. Therefore, there is an

immediate necessity to formulate thorough knowledge, attitude, and practice (KAP) guidelines in their language to instruct people on suitable water storage, retrieval techniques, sanitation, and hand washing procedures.

Agrawal, A.G. (2019). In poorer countries, malnutrition is most prevalent, adversely affecting nutritional intake necessary for physical and mental development. The health and nutritional status of women of reproductive age in developing countries such as India is exacerbated by inadequate resources and prevailing cultural and traditional practices. Other poor resources also render women vulnerable to under nutrition due to social and biological factors throughout their lives. The World Health Report ranks the top 10 dangers, both globally and regionally, based on the disease burden they impose. The 10 predominant global risk factors are alcohol consumption, tobacco use, hypertension, inadequate water, sanitation and hygiene, underweight, unprotected sex, iron deficiency, indoor pollution from solid fuels, hypercholesterolemia, and obesity. Globally, these factors may account for over one-third of all fatalities. Inadequate nutrition signifies an elevated health risk for both women and their offspring. In India, women simultaneously experience both over nutrition and under nutrition, resulting in a dual burden of malnutrition.

Banerjee, S. et al. (2018). The study aims to evaluate the nutritional status of women aged 15-49 years and provides a comparative analysis of food consumption and BMI among women living in West Bengal. It also seeks to comprehend the impact of dietary consumption, wealth index, education, and occupation on anaemia and BMI. Logistic regression, Pearson's chi-square test, and t-tests were employed to analyze the data from NFHS 3 (2005-2006). It was revealed that 45.3 percent of rural women and 19.7 percent of urban women were classified as underweight. The prevalence of anaemia was elevated in rural regions. Regarding food consumption, economic standing, and education, urban women are in a superior position compared to rural women. Women's health in rural West Bengal is thus confronting a significant dietary problem. The study advocates for the prompt enhancement of food consumption and nutritional well-being among women, particularly in rural regions.

Joshi, P. (2018). Women in India have numerous health-related challenges that eventually impact the nation's economic productivity. Indian women's societal status fundamentally influences their well-being. Haryana and Uttar Pradesh are among the few Indian states in the Indo-Gangetic

Plains, where a significant proportion of rural women have consistently participated in the active workforce in agriculture, forest conservation, livestock management, and dairy production. The present study aims to examine the food consumption and dietary intakes of agricultural women in the rural sectors of Uttar Pradesh and Haryana. The collected data were examined using appropriate statistical methods. The variables of education, energy consumption, and protein consumption exhibit a considerably positive correlation with the nutritional status of respondents, while family size demonstrates a significantly negative correlation.

Kumari, R. (2018). The field of nutrition research is consistently advancing in its pursuit of human welfare. Extensive research, investigations, and explorations in nutrition science are broadening the boundaries of knowledge in the discipline, while its foundational understanding deepens progressively. The life expectancy of individuals in advanced and civilized nations is perpetually rising due to ongoing discoveries.

Manjunath T. L. et al. (2017). Adults in India experience a dual burden of malnutrition, encompassing both over nutrition and under nutrition. Research indicates that merely 52% of women and 57% of men maintain a normal weight relative to their height. To assess the nutritional status of women of reproductive age in rural Kolar and to evaluate the various socio-demographic parameters linked with their nutritional status. A community-based cross-sectional study was done in the rural field practice areas of the medical college over a duration of six months. One hundred eighty women of reproductive age, between 15 and 49 years, residing in Devarayasamudra village were included. The chi-square test and multiple logistic regression were employed as significance tests. Among 180 women, 49 (27.2%) were classified as overweight, while 26 (14.4%) were deemed underweight. 36.67% of women exhibited a waist-to-hip ratio exceeding 0.85. Multivariate logistic modelling indicated that age and educational status were independent risk factors for an elevated waist-to-hip ratio among women of reproductive age. A greater prevalence of overweight and abdominal obesity was noted among women of reproductive age in rural areas. Therefore, initiatives to enhance the nutritional status of women in rural regions must be prioritized.

Pal, A. et al. (2016). Malnutrition constitutes a silent emergency and ranks among the predominant causes of illness and mortality in children and adolescents globally. This study aimed to examine

the prevalence of malnutrition among adolescents aged 10 to 17 and its correlation with sociodemographic parameters. This community-based cross-sectional descriptive study was conducted from May 2014 to April 2015, with 839 individuals. Anthropometric measurements were conducted on 560 adolescents in rural West Bengal, India, utilizing standardized techniques. Various sociodemographic characteristics were examined using a questionnaire method. Adolescents with employed mothers had a higher prevalence of stunting and thinness compared to those whose mothers did not work outside the home. The offspring of women with higher education were less prone to undernourishment compared to those of impoverished and illiterate moms. Poverty is identified as a significant contributor to under nutrition in adolescents. There is a necessity to execute well-considered poverty alleviation measures alongside offering widespread education on nutrition and health, particularly targeting economically and socially disadvantaged segments of society.

Maiti, S. et al. (2013). Anaemia is a prevalent health issue among women globally, with the majority of cases occurring in developing nations. This study aims to assess the prevalence of anaemia among adult women living in five rural blocks of Paschim Medinipur, West Bengal, India. Consequently, correlations between haemoglobin concentration and anthropometric measurements were assessed. This study has shown that anaemia is prevalent at significant levels among adult women in our study area, indicating that active strategies are necessary to address this issue within the population.

CONCLUSION:

Maintaining the health of women who support the national economy is facilitated by proper eating. In India's economy, which is centered on agriculture, rural women play an even bigger role. Everyone has the fundamental right and need to be healthy, but for women, this is especially important. Women make up more than one-third of the workforce and nearly half of the population. Women hold the primary responsibility for bearing and raising children. Their health directly impacts the health and well-being of children. Malnutrition and deficiency illnesses may result from consuming insufficient amounts of nutrients. Malnourished women are more likely to suffer from specific illnesses. Reduced life expectancy, increased rates of sickness and mortality,

decreased productivity, and a diminished capacity to work and provide for oneself are all signs of poorer health.

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