



Impact of House Hold Food Insecurity on Health and Nutritional Status of Women in Wadhwan city, Surendranagar.

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Abstract: Women in many developing countries face social and cultural disadvantages in terms of health, nutrition, education and economic status compared to women in developed countries, as well as, men in their own society. Women's health and well being in the low income families are seriously affected by too many pregnancies, prolonged lactation, long hour of work, poor diet repeated exposure to disease and limited access to adequate health care. A woman prepares herself to meet the nutritional demand by increasing her own body fat deposits during pregnancy. In India it is observed that diets among women from the poorer groups are essentially similar during pre pregnant, pregnant and lactation periods. In the present study 25 women of 20-40 years of age were selected by random purposive sampling method. The data was collected by questionnaire cum interview method. The results of the study revealed that majority of the respondents were belonging to 20-29 year of age while 36% were 30-40 years of age and all of them belong to low income group. 68% respondent belongs to joint family. 20% respondent were illiterate, 68% were educated up to 10th standard. Income of 72% respondent family was 3000-5000 per month. Only 16% respondent gets adequate food to eat. Out of 25 only 2 respondents eat sabji or dal in their meal while other just have chutney, onion or any other substitute. 96% respondent buys cheap quality food. Out of 25 only 4 families are there in which all family members eat their food together. No respondent take extra food during pregnancy and lactation period. Diets of the respondents were found to be dominated by cereals, roots and tubers, sugar and fats. Pulses, green leafy vegetables, milk and milk products, meat, fish and egg were found to be less in their diet in comparison to RDA. Thus it can be concluded that the community need women education to improve their health status by wise use of available food stuffs and government should provide good quality of supplementary food to meet the dietary intake of women.

Introduction

Food: Food, substance consisting essentially of protein, carbohydrate, fat, and other nutrients used in the body of an organism to sustain growth and vital processes and to furnish energy.[1] Food makes your body work, grow and repair itself. The kind of food you eat can affect the efficiency of these processes. Body function and the food that sustains it is infinitely complex. [2]

Food Insecurity: Food insecurity refers to a lack of access to enough good, healthy, and culturally appropriate food. Food insecurity is socio-economic (financial and cultural) aspect, while hunger is physiological (physical) sensation. We measure food security at the household level and hunger at the individual level. A family experiencing food insecurity may have some members that go hungry and others who do not.

Why is it important? Food insecurity measurement allows community organizers, non-profit leaders, policy makers, and government officials to talk with each other and work together to create plans that will improve overall access to food, health, and wellness. Because even as we dive into definitions, studies, and statistics, the overall goal is to secure everyone's right to eat well and be well. [3]

Women's health and nutritional status: The health of women and girls is of particular concern because, in many societies, they are disadvantaged by discrimination rooted in socio cultural factors. For example, women and girls face increased vulnerability to HIV/AIDS. While poverty is an important barrier to positive health outcomes for both men and women, poverty tends to yield a higher burden on women and girls' health due to, for example, feeding practices (malnutrition) and use of unsafe cooking fuels (COPD).[4]

Adequate nutritional status of women is important for good health and increased work capacity of women themselves as well as for the health of their off spring. [5] Keeping these facts in mind the present research is designed to study the "Impact of House Hold Food Insecurity on Health and Nutritional Status of Women in Wadhwan city, Surendranagar". The objective of the study were

- To study socio economic profile of respondents.
- To assess actual food and nutrient intake of the respondents in comparison to RDA.
- Family income and effect on nutritional status of the women.
- Food habits of respondents.

Research Methods: The study was carried out in Wadhwan city, Surendranagar. 25 women were selected for the present study by random purposive sampling method of 20-40 years of age group. The data was collected by questionnaire cum interview method in local language (Gujarati) with the help of pretested and predesigned questionnaire in order the elicit information regarding socio economic profile, food adequacy, balanced diet, food habits, lack of food, dietary habits of women etc. the information on dietary intake of women was collected by 24 hour recall method. The collected data were analyzed with the help of MS Excel.

Research findings and discussions: The results of the study are presented below;

Socio economic profile of respondents:

Table 1 show that majority of the women are from age group of 20-29 years and 36% are from the age group of 30-40 years. 68% women live in joint family. 32% are living in nuclear family.

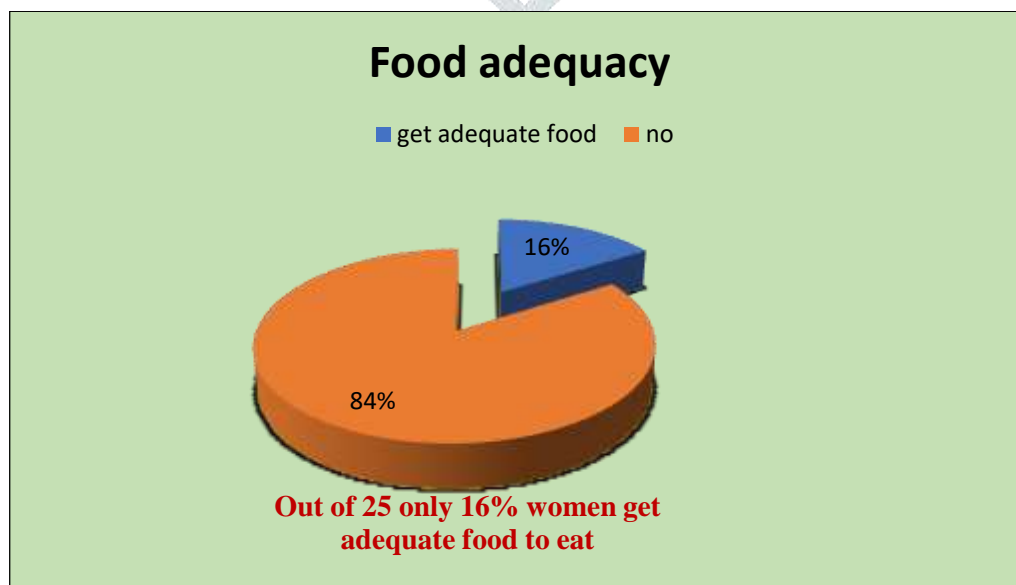
Out of 25, 20% women are illiterate or below 5 standards passed. 68% women are literate and have studied up to 10th grade.

72 % women are from family where monthly income is below than 5000 which is very low. Only 28% family monthly income is 7000 and above.

Socio economic variable	Characteristics	Percentage%
Age	20-29 age	64%
	30-40 age	36%
Type of family	Nuclear	32%
	Joint	68%
Education	Illiterate	20%
	Below 5 class	---
	5-10 class	68%
	Above 10 class	12%
Income(per month)	3000-5000	72%
	5000- 7000 and above	28%

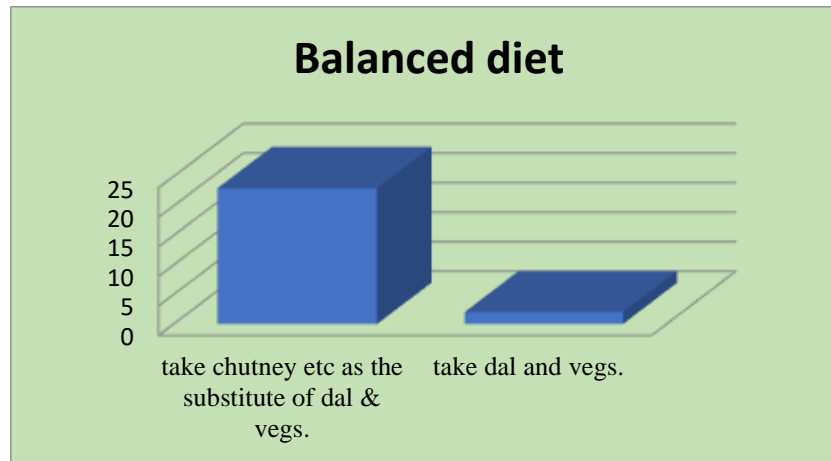
Food adequacy: chart 1 shows that out of 25 respondents only 16% women get adequate food to eat, which shows the low level of nutrition in rest women most of the women don't get vegetables, milk, fruits etc. which is the reason of low nutrition level in women.

Chart 1



Balanced diet: Chart 2 revealed that out of 25 only 2 women get dal or sabji in their diet, rest women eat their chapatti with chutney, onion or other available food as the substitute of dal and sabji. As we can see by these results they have very low immunity due to lack of vitamins and minerals in their diet.

Chart 2



Out of 25 only 2 women take dal and vegetable in their meal.

Lack of food: chart 3 shows that out of 25, 18 women get less food due to less food or unavailability at home. They reduced their meal size and get less nutrition so that other members of the family get proper meal.

Chart 3



Quality of food: Diets of the poor will continue to be grossly inadequate for long time to come unless there is phenomenal improvement in their economic status to afford an adequate diet. Even then, availability of protective foods may still be a bottleneck. (Nutritive value of Indian foods by C. Gopalan, B.V. Rama Shastri and S.C. Balasubramanian)

Out of 25, 96% women buy cheap quality food due to lack of money and knowledge. Most of the women are illiterate and did not have enough knowledge about food and nutrition value. **Kristen Wiig Dammann, Chery Smith (2009)** did a study on 92 low income women and found that most of them would like to regularly consume healthful food (eg, fresh fruits and vegetables), such food was perceived as unaffordable.

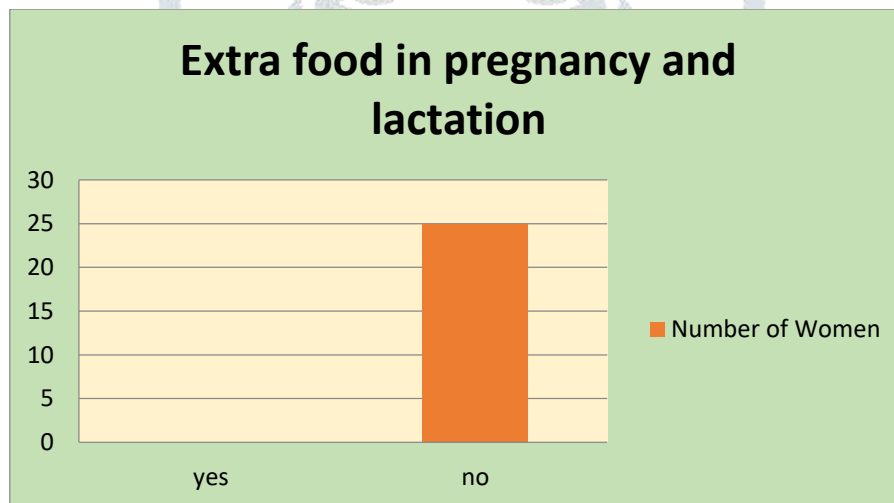
Chart 4



Extra food in pregnancy and lactation: Chart 5 shows that out of 25 no women take extra and special food during their pregnancy and lactation period due to lack of money and knowledge. Most of the women belong to low income family which is below 5000 per month so they cannot afford good quality food, also most of the women did not have know about importance of food in pregnancy and lactation.

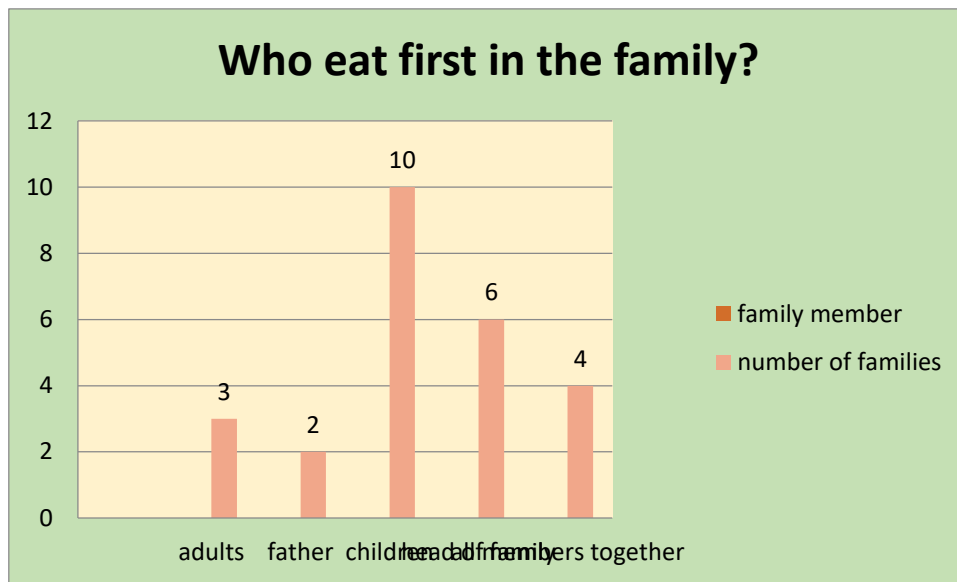
Diets of poor income groups are deficient in several nutrients, namely energy, vitamin A, calcium, riboflavin, iron. Dietary deficiency of these nutrients occurs more frequently in children, pregnant and lactating women whose requirement of nutrients is higher than others. (Nutritive value of Indian foods by C. Gopalan, B.V. Rama Shastri and S.C. Balasubramanian)

Chart 5



Preference of eating food in family: As we can see from chart 6, in most of the family children eat food first, out of 25 only 4 families are there in which all family member eats together so that women can get complete meal.

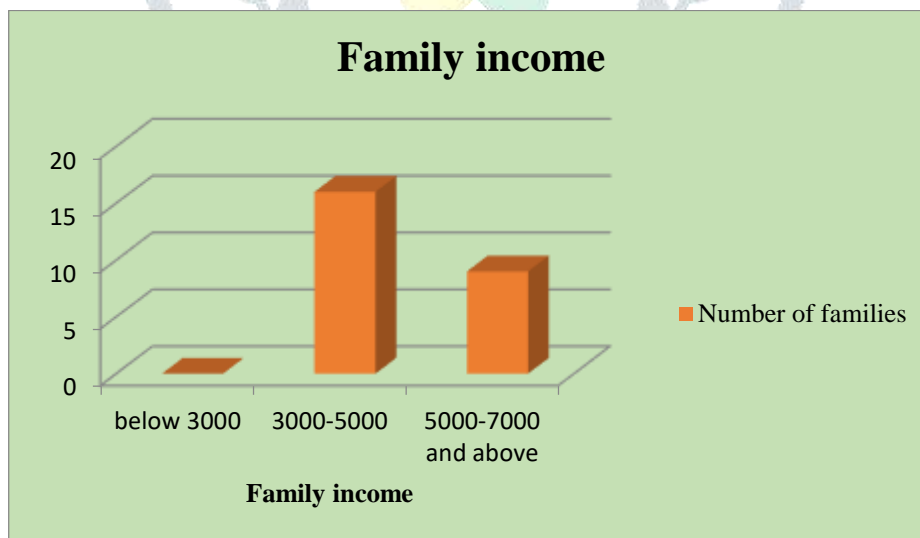
Chart 6



Family income and effect on nutritional status of the women:

Out of 25 , 16 families belong to 3000-5000 income per month which shows less income is associated with a poor quality dietary intake, Compared to those with higher income. Lower income family members consume fewer fruits and vegetables, more sugar-sweetened beverages and have lower overall diet quality. It affects mostly women of the family as they eat last in the family and always compromise in their diet. **Shiva Raj Acharya, Jeevan Bhatta, Diwash Prasad Timilsina (2017)** found that there is a significant positive relationship between income and the nutritional status (P-value 0.002). 24.8% of women who had poor nutritional status had a family income of less than Rs. 10000 per month compared to 7.4% of women who had family income of more than Rs. 10000 per month.

Chart 7



Actual food and nutrient intake of the respondents in comparison to RDA: Results of table 2 reveals that diet of women of Wadhwan city was found to be dominated by cereals, roots and tubers, sugar and fats. 19.71% and 6% excess intake of cereals and roots and tubers were found in their diet respectively. The consumption of pulses, green leafy vegetables and milk and milk products were found to be very less in comparison to RDA i.e.

66.34%, 59.99% and 82.53% respectively. Similarly meat, fish and egg consumption were found to be 68.25 less than RDA. Even if various type of green leafy vegetables are easily available and cheap in price they did not take it because of less knowledge. Sugar and oil consumption were found to be excess in comparison to RDA as they only concentrate on the taste of the food not nutritional value. **Manika Sharma, Avinash Kishore, Devesh Roy & Kuhu Joshi (2020)** in their study found that Indian diets, across states and income groups, are unhealthy. Indians also consume excess amounts of cereals and not enough proteins, fruits, and vegetables. Calorie share of whole grains is significantly higher than the EAT-Lancet recommendations while those of fruits, vegetables, legumes, meat, fish and eggs are significantly lower. The share of calories from protein sources is only 6–8% in India compared to 29% in the reference diet.

Chart 8

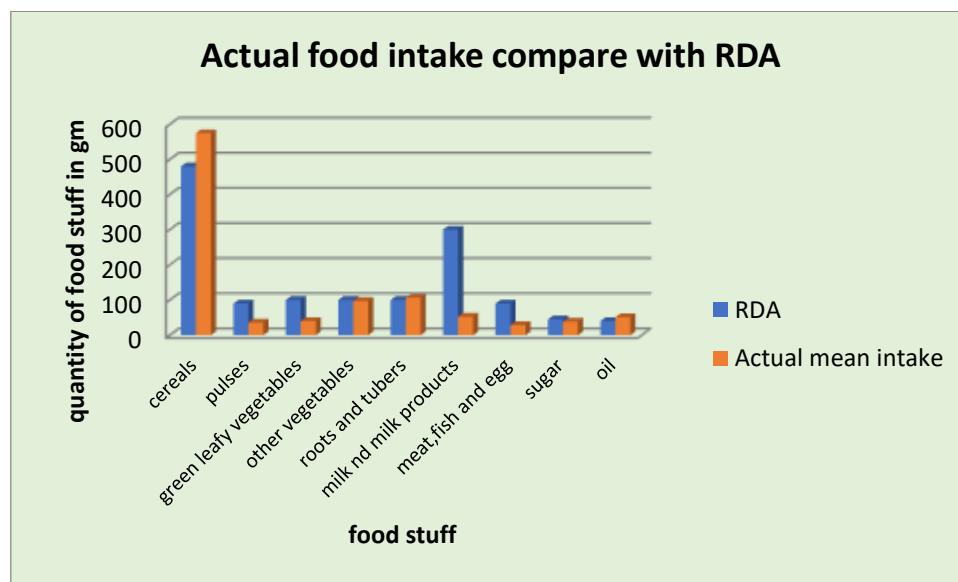


Table 2

Actual food intake of women in comparison to RDA(ICMR)			
Food Stuff	Actual mean food intake	RDA(ICMR) standard	% of deficiency/Excess
Cereal	574.65 ± 94.65	480	+19.71
Pulses	35.29 ± 59.71	90	-66.34
Green leafy veg.	40.01 ± 59.99	100	-59.99
Other vegetables	97.2 ± 2.8	100	-2.8
Roots and tubers	106 ± 6	100	+6
Milk and milk products	52.4 ± 247.6	300	-82.53
Meat, fish and egg	28.57 ± 61.43	90	-68.25
Sugar	45.6 ± 0.6	45	+1.33
Oil	50.8 ± 10.8	40	+27

Conclusion: Dietary intake of women of age 20-40 years is very important for their children and other family members. During this age women gets pregnant and they need more nutritious balanced diet and for lactating period for their infant too. But women who are less educated or illiterate and belong to low income family

group, are not aware about it. In the present study it was observed that the diet of the women was cereal based with excess intake of roots, tubers, sugar and fats. There was low intake of functional foods like pulses, green leafy vegetables, milk and milk products. Most of the women were lived in joint family and less educated and did not afford nutritional food for all family members and purchase cheap quality food. Due to lack of knowledge and money they did not take any extra food during pregnancy and lactation period. Thus it can be suggested that the women should be educated and awareness should be created on importance of food to women health and nutrition.

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