



## A Pilot Study of Malnutrition in Women of Gandhinagar Gujarat

Jaishree S Mehta<sup>1</sup> and Pinal K Dave<sup>2\*</sup>

<sup>1</sup>Associate Professor, Home Science Department, (B. Voc. Food Processing Technology), Gujarat Vidyapith, Sadra, Gandhi Nagar, Gujarat, India

<sup>2</sup>Assistant Professor, Home Science Department, (B. Voc. Food Processing Technology), Gujarat Vidyapith, Sadra, Gandhi Nagar, Gujarat, India

\*Corresponding Author: Pinal K Dave, Assistant Professor, Home Science Department, (B. Voc. Food processing Technology), Gujarat Vidyapith, Sadra, Gandhi Nagar, Gujarat, India.

Received: April 01, 2019; Published: May 23, 2019

### Abstract

To get rid of hunger and malnutrition is one of the greater challenges facing humanity. Malnutrition and its connected disease conditions can be caused by eating too little, eating too much, or having unbalanced diet that lacks necessary nutrients. Malnutrition adverts to non-availability due to inaccurate planning of meals or faulty utilization of nutrition in the body. Under nutrition on the other hand is origin due to insufficient intake of food. Some most common conditions caused night blindness, beri beri, scurvy, ricekts etc. Subordinate nutrients, characterized as failure to consume sufficient energy, protein, and micronutrients to convene basic requirements for body maintenance, growth, and development extinguish hunger and malnutrition is one of the most prime challenges facing humanity. Malnutrition and its associated disease conditions can be caused by eating too little, eating too much, or eating an unbalanced diet that lacks necessary nutrients. Under nutrients, defined as failure to consume adequate energy, protein, and micronutrients to meet basic requirements for body maintenance, growth, and development. Malnutrition is one of the most devastating problems worldwide and is inextricably linked with poverty. The present study has been carried out in the Gandhinagar city. The samples sizes of 100 subjects were chosen randomly for questioning regarding the different aspects of the study. It was calculated by dividing your weight in kilograms by your height in meters squared. The body mass index is a useful tool in both clinical and public health practice for assessing the nutritional status. In this paper, only malnutrition in women is discussed. For analyze the obtained data standard statistical method were used. Overweight/obesity and other diet related not-communicable diseases it is observed that many factors have been associated with malnutrition of women in the literature. It therefore, can be concluded that the present study is representative which shows prevalence of malnutrition in women of Gandhinagar city. It is suggested that wide range of programs are need to tackle in women mal- nourishment in women.

**Keywords:** Malnutrition; Humanity; Deficiencies; Growth

### Introduction

Nutritional problem are common throughout the country. To overcome the problem of malnutrition WHO has emphasized that the mass information and awareness programmes should be organized. Thus the present study was conducted with following objectives: to study profile of rural women, to find level of nutritional awareness among rural women and to assess impact of nutritional training on rural women. Present study was conducted in randomly selected three villages of Dahgam Taluka. Randomly selected 120 respondents were considered as sample for the study. Personal, socio-economic characteristics of respondents were considered as independent variable and Nutritional Awareness was studied as dependent variable. Three days training was given to rural women. Statistical analysis was done by computing frequencies, percentages and z test. Age, education, family type and occupation have positive and significant association with nutritional awareness.

There is significant difference in nutritional awareness after training. Training improved dietary choice among respondents.

To get rid of hunger and malnutrition is one of the most superior challenges facing humanity. Malnutrition and its connected disease conditions can be caused by eating too little, eating too much, or eating an unbalanced diet that lacks necessary nutrients. Malnutrition adverts to non-availability due to inaccurate planing of meals or faulty utilization of nutrition in the body. Under nutrition on the other hand is origin due to insufficient intake of food. Some most common conditions caused night blindness, beri beri, scurvy, ricekts etc.

Malnutrition is one of the most destructive difficulties worldwide and is inextricably coupled with poverty. The average of under nutrition has also been designed among other populations and age groups, such as pregnant and lactating women. The study mainly

focuses on malnutrition in women in Gandhinagar District. The subjection of women communally means they have less access to everything including food, resources, health care, community support and information. The problems arise from cultural, political and worldly that be addressed in placement. However, significant steps should be taken to instruct and to make them aware contribute to struggle against terrible problem of malnutrition. Malnutrition among women has long been recognized as a stern problem in the country.

Mainly malnutrition in women is because of poor maternal nutritional and health status, low birth weight infants (33%), low income, and education and micronutrient deficiencies. The main objective of the present study is to find out the ratio of malnutrition in women in Gandhinagar district.

In malnutrition in women in Gandhinagar district. Mainly women are involved in food preparation for the family thus, nutrition awareness among them is must so that they can choose best, cook right and serve healthy food to their family. Thus the present study is conducted with following objectives:

- To study profile of women
- To find level of Malnutritional awareness among women
- To assess impact of nutritional training women

**Methodology**

The present study has been carried out in the Gandhinagar city. The samples sizes of 100 subjects were selected at random for questioning regarding the different aspects of study. On the basis of the criteria decided by World Health Organization (WHO) for body mass index, malnutrition among subjects was calculated. Body mass index (BMI) is used to estimate your best weight range for your health. It is calculated by dividing your weight in kilograms by your height in meters squared (Equation 1). The body mass index is a useful tool in both clinical and public health practice for assessing the nutritional status. In this paper, only malnutrition in women was discussed. To analyze the obtained data standard statistical method were used.

$$BMI = \text{Weight in Kg} / \text{Ht (m}^2\text{)} \dots\dots\dots(1)$$

**Independent variables**

Personal, nutritional characteristics of respondents Dependent variables: Nutritional Awareness was studied as dependent variable.

A pre-structured and pre-tested interview schedule was developed for collecting data on personal, nutritional characteristics of respondents and as well as for dependent variables.

To measure nutritional awareness a 3 point scale was developed i.e. Aware, Somewhat Aware and Not Aware. For positive statement it was coded as 3, 2 1. Data was collected by personal interview technique both before and after training.

**Training**

Malnutrition Related Awareness, Three days training was given to women. Nutrition training was imparted through lecture method by using chart posters leaflets etc.

The level of awareness regarding nutrition was adjudged both before and after imparting nutrition training.

**Statistical analysis:** Statistical analysis was done by computing frequencies, percentages and z test.

**Results and Discussion**

As presented in Table 1, 25.2% females were noticed malnourished in the Gandhinagar city value for BMI >30 Kg/m<sup>2</sup> is 10.08%. About 55% were found to be normal. Most of the women were observed illiterate and housewives are suffering from malnutrition worldwide includes a spectrum of nutrient related disorders. The conditions such as, intrauterine growth retardation, Protein energy malnutrition, Iodine deficiency disorders, Vitamin A deficiency, Iron deficiency anemia. And overweight/obesity and other diet related not-communicable diseases it is observed that many factors have been associated with malnutrition of women in the literature. This includes the social and economic (e.g. occupation, education background and the standard of living), cultural (e.g. religion and caste), the demographic (e.g. age and marital status) and dietary characteristics. It is suggested from the results of the study that nutrition goals that need to be focus are reduce stunting in children reduce proportion of low birth and eliminate the vitamin deficiency and reduction of anemia in women.

No	BMI	Status of Female	Percentage
1	>20	Malnourished	25.2%
2	20-24.9	Normal	54.3%
3	25-29.9	Over weight	10.7%
4	30-40	Pre-obese	0.6.5%
5	<40	Obese	0.4.3%

**Table 1:** Malnutrition in Women of Gandhinagar.

Level of Awareness before Malnutrition in women and after imparting nutrition training Nutritional awareness was adjudged with following points i.e. Balanced Diet, Nutrients present in food, Dietary Choice and Disease and diet associated.

	Before Training		After Training	
	Frequency	%	Frequency	%
Low (32-53)	73	60.83	49	40.83
Medium (54-75)	42	35.00	63	52.50
High (76-97)	05	04.18	08	06.67

**Table 2:** Distribution of respondents according to their Level of Awareness Malnutrition in women before and after imparting nutrition training. (n=120).

It is evident from below table that before nutrition training 60% of the respondents had low level of nutrition awareness and after nutrition training there was increase in percentage i.e. 52 percent of nutrition awareness up to medium level.

The paired t-test was used for test of significance. The result was found significant and have been shown in Table 3. The result revealed that there is significant difference in nutritional awareness after training. The findings are supported by the studies of Foods and Nutrition News 2005 that women can influence the nutritional status of individual household as a unit. Regular and frequent nutrition and health education resulted in striking improvement in the nutritional status of women [1-10].

	Mean	SE (d)	t-calculated	Table value	Result
Pre-training	43.87	1.719	2.696	2.001	*
Post-training	48.50				

**Table 3:** t-value for nutrition awareness (before and after nutrition training) n=120.  
\*=significant at 5% level

**Conclusion**

The chief requirement for a country to be developed is to main health in society. There was significant improvement in the nutritional awareness of the respondent after nutrition training. Hence, we can conclude from the present investigation that nutrition training is an important measure to improve dietary habits and food choices. Poor dietary habits and ignorance are the main reason for poor nutritional status. Educating women with Balanced Diet, Nutrients present in food, Dietary Choice and Disease and diet associated will not only help to improve their nutritional status but future generation will also be influenced, as educating women means educating family as a whole.

From the results of the study it may be conclude that, the study will become representative study which shows prevalence of malnutrition in women of Gandhinagar city. We need to redefine our roles. It is imperative we work closely with the primary health care programmers in our own areas. The ones that offer the greatest promise are the linkages between ICDS, NGOs and academic institutions. We can help in strengthening the nutrition surveillance, spreading nutrition and health education and bringing about appropriate behavior changes. Within this broad framework, each institution will have to establish its own partnership and manner of functioning. It is suggested from the study that wide range of women orientation programs like ICDS and rural health welfare centers etc. may be useful to tackle malnourishment in women of this city.

**Scientific Recommendation**

Imparting training for Balanced Diet, Nutrients present in food, Dietary Choice and Disease and diet association improves nutritional awareness among women. Thus nutrition training should be given to rural women in all over India.

**Bibliography**

1. Britannica Student Encyclopedia. Malnutrition.
2. Encyclopedia: Britannica Premium Service.
3. Chattergee Meera. Indian Women: Their Health and Economic Productivity. World Bank (1990).
4. Desai Sonalde. Gender Inequalities and Demographic Behavior, India (1994).
5. Transition is Underway in India. Journal of Nutrition.
6. Subadra S. "Nutrition for health and development: Challenges in the 21st century". *The Indian Journal of Home Science* 26 (2000): 46-54.
7. Anonymous. "Women in Dynamics of nutrition and health behaviour". *Foods and Nutrition News* (2005): 1-2.
8. Engell D., et al. "Effects of information about fat content on food preferences in pre-adolescent children".
9. Kolodinsky J., et al. "Knowledge of current dietary guidelines and food choice by college students: better eaters have higher knowledge of dietary guidance". *Journal of the American Dietetic Association* 107.8 (2007): 1409-1413.
10. National health and nutrition examination survey (NHANES 2005-6) Diet Behavior and Nutrition.

**Volume 3 Issue 6 June 2019**

© All rights are reserved by Jaishree S Mehta and Pinal K Dave.