

Assessment of Nutritional Status of Young Adult Women Living in Slum Area of Indore City

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Abstract - Introduction: women health is greatly influenced by the nutritional intake, throughout the life cycle good nutrition plays important role for proper physical growth and good health. **Aim:** The aim of the study is to assess the nutritional status of young adult women who are more than 18 years of age, non-pregnant and unmarried. **Method:** by random purposive sampling method of data collection, all women of age 19-23 years were collected with their consent. **Result:** it is clearly shown from obtained results that the eating habits of women is not good and their nutritional status was also poor. **Conclusion:** with the consent of young adult women a proper nutrition and health education program is to be planned that would help them to become aware of their personal nutritional needs. Their knowledge regarding good nutrition and health will carry forward to the next generation that would help to build a healthy individual as well as a healthy nation.

Keywords - Good Nutrition, Nutritional Status, Eating Habits.

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INTRODUCTION

Good nutrition in women is necessary for their physical, emotional as well as mental wellbeing. It is seen in women reproductive age healthy balanced diet plays very important role to keep them healthy and to carry out all the vital functions and it is also required for women to give birth to a healthy child. But as per NFHS 2015-2016 a quarter of women of reproductive age in India are undernourished with BMI less than 18.5 kg/m. Keeping in mind that fact a survey of assessment of nutritional status of women along with the eating habits has been carried out in this study. As a healthy women can give birth to a healthy child and also she can take care of her family if she is in good health. Undernutrition during pregnancy affects fetal growth and development that women will give birth to an unhealthy, undernourished child which impacts child growth and even it may cause the child mortality. If the undernourished child may survive, he or she may enter in adolescent age with remarkable nutritional deficiencies and it may affect their physical, emotional as well as mental health. Nutritional deficiencies during adolescence affects abnormal hormonal secretion and thus affects child's reproductive health. Entering in such deficit condition to the pregnancy may repeat this cycle that would ultimately repeat the same cycle of undernourishment and thus it would become difficult to achieve good health.

ASSESSMENT OF NUTRITIONAL STATUS OF WOMEN

The Nutritional need of women are specific as per their age, BMI & physical activity. It should be met to maintain, good nutritional status and a healthy motherhood for women. Nutritional status depends on eating habits from childhood, adolescence, adulthood till elderly age group. Since the proper growth demands, regular balanced diet which comprises of good amount of cereals, pulses, milk & milk products, green leafy vegetables, roots & tubers, other vegetables, seasonal fruits, water, fats and sugars. In present study, by means of seven day dietary recall, food group intake on weekly basis have been assessed. Eating habits of studied group of young adult women indicates that out of 120 women - 33 were vegetarian, 46 were non-vegetarian and 41 were ova vegetarian.

METHODOLOGY

By using random sampling method of selection, 120 women of age 19-23 years have been selected for the same study with their consent. Assessment of nutritional status has been carried out by taking seven days dietary recall method with anthropometry and biochemical assessment (hemoglobin) has been done. By using interview method, all the required information have been gathered through a self-designed questionnaire.

RESULT

From the above study it was analyzed that women are not taking proper diet as per their requirement and their eating habits shows that they are not

consuming enough proteins and calories in daily diet. Meal timings are not fixed and number of meals per day is also improper. Lack of nutritional knowledge and lack of resources and because of low economic status they are not getting good nutrition.

Table 1 – Eating Habits of Women

Eating Habits	Response Result %		
	Vegetarian	Non Vegetarian	Ova Vegetarian
	28%	38%	34%

It is clearly seen from the above table that out of total selected samples 28% were vegetarian, 38% were non vegetarian and 34% were ova vegetarian. Frequency of egg consumption by Ova vegetarian (34%) women among the study group is only 17% women were having egg daily, 3% were eating thrice in a week, 45 were taking eggs twice in a week and 49% were taking once in a week. Similarly the group of women who are non-vegetarian (38%), mean those who are eating sea food, chicken and meet, beef but as per recommended allowances (60 gm) two servings of pulses or non-vegetarian food is recommended per day, or they have one serving from pulses and legumes and one serving from egg or non veg but in the present study no one found to consume egg or non-vegetarian food serving daily to full fill protein Requirements. 1% were taking thrice in a week, 8% were taking twice in a week and 30% were consuming once in a week.

Table 2 – Meals Frequency of Women

Number Of Meals Per Day	Response Result %			
	2 Times	3 Times	4 Times	5 Times
	44%	31%	14%	11%

As shown in the above table the frequency of meals depicts clear picture of number of meals per day consumption. Table 2 shows that only 11% women were consuming 5 meals in a day, 14% women were consuming 4 meals in a day, 31% were consuming three meals in a day and 44% were consuming two meals in a day. As per NIN women need to divide their meals in three major and three minor meals in a day so that they can consume all the food groups with the amount of all the nutrients needed as per recommended dietary allowances, but it is not seen in the study group.

Table 3 - Preference of Food Group Intake of Women

Variable	Response Result %				
	Nil	Once	Twice	Thrice	Daily
Green Vegetables	0%	24%	53%	16%	8%
Pulses	0%	9%	25%	56%	10%
Seasonal Fruits	62%	11%	21%	0%	7%
Milk	50%	42%	4%	4%	0%
Egg	28%	49%	4%	3%	17%
Non Veg	62%	30%	8%	1%	0%
Tea	0%	2%	3%	95%	0%

Furthermore, from the following **Table 3** it is clearly observed that preference for green leafy vegetable was only 23%. As per NIN, 7 servings per week is recommended but it is not observed in group studied. Intake of Cereals recommended for young adult women is 10 servings per day. Which should be distributed in 3 major meals & 3 minor meals, i.e. Break-fast, Lunch, Dinner, Mid-morning snack, evening snack and bed time. Green leafy vegetable consumption as per the observed result was only 8% were taking daily, 16% were taking thrice and 53% were taking twice in a week and 24% were taking once in a week. Similarly, consumption of pulses daily is 10%. As per RDA, 2 servings of pulses per day is recommended for young adult women. Which means 14 servings in a week, but it is not observed in group studied. As per ICMR, one serving (100 gm) of seasonal fruits is recommended for young adult women. But only 7% women were consuming fruits at daily basis which was not fulfilling the daily requirement as per standard guideline.

Milk & Milk products recommended for young adult women is 300 ml per day i.e. 3 servings per day. But it was not observed. 4% were taking thrice in a week, 4% were taking twice in a week and 42 % were having once in a week. As the studied group belongs to low socio economic group so their intake was poor. Heavy Tea consumption with minimal use of milk was noticed in few cases. Instead of having glass of milk, women are consuming milk component through Tea only, which was insufficient to fulfilling the daily requirement as per standard guideline. From the above study 95% women were taking tea thrice in a week, 3% thrice and 2% twice in a week.

Table 4 - Nutrient Intake Status of Women

Variable	ResponseResult %		
	>66%	66-50%	<50%
Carbohydrates (gms)	24%	55%	21%
Fats (gms)	0%	0%	100%
Protein (gms)	10%	81%	9%
Energy (gms)	17%	58%	26%
Iron (gms)	32%	46%	23%

Furthermore, the above **Table 4**, makes it evident that the majority of the women in the study group consumed less than 50% of the nutrients. In case of carbohydrate consumption of women is as follows, 24% women were consuming more than 66% of RDA, 55% were consuming 66-50% of RDA and 21% were consuming less than 50% of RDA. The fat consumption of women was 100% were consuming less than 50% of RDA. In case of protein consumption only 10% of women were consuming more than 66% of RDA, 81 % were consuming 66-50% of RDA and 9% were consuming less than 50% of RDA. In case of energy consumption only 17% were consuming more than 66% of RDA, 58% were consuming 66-50% of RDA and 26% were less than 50% of RDA, as far as the consumption of iron is concerned, only 32% women were consuming more than 66% of RDA, 46% were consuming 66-50% of RDA and 23% women were consuming less than 50% of RDA.

Table 5- Body Weight of Women

BODY WEIGHT	ResponseResult %		
	Normal	Under Wt.	Over Wt.
	42%	38%	21%

Body weight is the major indicator of individual's overall health as well as of nutritional status. For women, it is important to have normal body weight status for a healthy reproductive life ahead. BMI is a common tool that measures an individual's body weight in relation to their height. In the present study, only 42% women were having normal body weight, 38% women were under weight and 21 % women were observed over weight.

Table 6 - Hemoglobin Level of Women

Hemoglobin	ResponseResult %			
	Normal	Mild	Moderate	Severe

	32%	46%	23%	0%
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Anaemia is a condition in which the number of red blood cells or the Hemoglobin concentration within them is lower than normal. Hemoglobin is needed to carry oxygen and if you have too few or abnormal red blood cells, or not enough Hemoglobin, there will be a decreased capacity of the blood to carry oxygen to the body's tissues. This results in symptoms such as fatigue, weakness, dizziness and shortness of breath, among others. [WHO]Women are more affected by iron deficiency anemia as compared to men, because they loss iron during their periods and need more iron during pregnancy or breast feeding duration. In the present study, only 32% women were observed having normal hemoglobin levels, 46% falls under mild anaemia , 23% were having moderate anaemia and no case of severe anaemia is observed.

CONCLUSION

Lack of knowledge about good nutrition, unhealthy lifestyle and low economic status are the major cause of ignorance towards good health and good nutritional status of women. So a need of proper nutrition intervention program is needed to enhance nutritional awareness and nutritional knowledge which may help them to get benefit from low cost recipes, innovative healthy cooking methods and to understand the need of balanced diet for the young adult women. This would definitely help them to improve their nutritional status as well as our future generation. Healthy eating practices will help them to cope up with the nutritional deficiencies. Proper nutrition knowledge would be helpful for self-care and care of other members in the family. A healthy women can built a healthy family and healthy families may built a healthy nation.

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