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Document heading doi: 10.21276/apjhs.2019.6.1.15 **Research Article**

Assessment of nutritive status and basic hygiene practices followed by workers of Manav Rachna university, Faridabad

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Abstract

Malnutrition is the most common cause of many disorders among workers at different places of work in developing countries due to their cultural, economic, demographic and social background. This cross-section study was carried out among randomly selected 51 workers (grade IV employees) in the age group of 20 to 40 years of Manav Rachna University, Faridabad to explore & assess their nutritive status and also to understand their awareness towards health and healthy dietary habits. The study showed that out of 51 respondents of Manav Rachna (MR) workers selected as sample, 59% were in the age group of 25-29 years. 66% had monthly income less than Rs 10000 per month. 78 % belonged to joint family and more than 80% of workers were not aware about the importance of health and healthy dietary habits. This study provided important information about the dietary intake and their nutritive status among the grade IV employees of Manav Rachna University, Faridabad. After understanding their behavioral pattern, efforts were made to counsel and motivate them towards the fitness, healthy dietary habits and healthy environment.

Keywords: Nutritive status, Hygiene, Cleanliness, Disease.

Introduction

Hygiene is a group of practices perform to conserve health. Hygiene refers to conditions and practices that help to maintain health and prevent spread of diseases. The health care seeking behavior is always related with cultural, economics & social factors[1].Some different factors like age, sex, marital status, caste, religion, state, family size and parity, level of education, occupation of the head of the family, household wealth, women's autonomy also affect the health seeking behavior[2-7].Personal hygiene is to maintain body's cleanliness. Many people misunderstand hygiene with term cleanliness. Hygiene is a very broad term as compared to cleanliness. Personal hygiene includes personal habits and choices such as frequency of taking bath, wearing clean clothes and also maintenance of one's health in every possible manner. It includes attention towards general cleaning in home and work places including bathroom facilities which should be kept clean and pathogen free since most of the harmful diseases are acquired from there. According to Christman NJEtae and Ward H , Mertens T, Thomas C Etae - The health seeking behavior is actually a particular sequence of curative action that an individual seeks to cure perceived ill health[8-9].

Medical hygiene means hygiene practices related to the administration of medicine and medical care that prevents or minimizes the spread of diseases. It includes the isolation or quarantine of infectious persons or material to prevent spread of infections, sterilization of instruments used in surgical procedure, safe disposal of medical wastes, disinfection of reusables (linen, pads, uniform). A women's health is determined in her total well-being by biological factors, reproduction, work load, nutrition, stress etc [10].

Nutrition is the science that interprets the interaction of nutrients and other substances in food in relation to maintenance, growth, reproduction, health and disease of individuals. It includes food intake, absorption,

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assimilation, biosynthesis, catabolism and excretion. Nutrients are components of food that are essential for human health, but other compounds continue to be identified in foods & their health properties are now being understood in a better manner[11].The diet of an individual is largely determined by the availability and palatability of foods that is available around him. For humans, healthy diets include preparation of food and storage methods that preserve nutrition by oxidation, heat or leaching and that reduce risk of foodborne illnesses. In humans, an unhealthy diet can cause deficiency-related disease such as blindness, anemia, scurvy, premature birth, still birth and cretinism, excess health-threatening conditions such as obesity and metabolic syndrome; and common chronic systemic diseases such as cardiovascular disease, diabetes and osteoporosis. Malnutrition can also lead to death in acute cases. Poor nutrition is major factor for developing obesity, NIDDM, atherosclerosis, hypertension, osteoporosis, stroke and some cancers[12-15].

Problem faced due to intake of incomplete nutrition has become a measure health concern, both because of its impact on childhood health and its potential effect on the development of chronic diseases in adulthood. Relation between the risk of heart disease & dietary fat such as nuts & olive oil & dietary pattern rich in fat such as the Mediterranean or western diets[16]. Obesity status is usually indicated by the body mass index (BMI). Protein-energy malnutrition (deficiency of proteins/fats/carbohydrates) causes kwashiorkor or marasmus. Body mass Index (BMI) is the standard population-based measure of overweight & obesity status. For adults, the cut offs used to delineate obesity are less than 18.5 for thinness (chronic disease deficiency), 18.5 to 24.99 for normal, 25 to 29.99 for overweight grade I, 30.0 TO 39.99 for overweight grade II, & 40.0 & above for overweight grade III[17]. Calcium deficiency causes osteoporosis, rickets, tetany. Iodine deficiency caused goiter. Selenium deficiency causes keshan disease. Iron deficiency cause anemia. Zinc deficiency cause growth retardation. Thiamine (vitamin B1) deficiency causes beriberi. Niacin (vitamin B3) deficiency causes pellagra. Vitamin-C deficiency causes scurvy. Vitamin-D deficiencycauses osteoporosis or rickets[18].The epidemiological transition moves from high prevalence of infectious disease and malnutrition for one in which chronic & degenerative disease predominate[19].

Material & Methods

We conducted across sectional survey on 4th grade workers of Manav Rachna University. The target population consisted of randomly selected 51 workers of university in the age group of 20-40 years.

The following aspects were also taken into consideration: -

- Permission from Head of the institute was taken.
- Consent was taken from the subjects after explaining the purpose of study and its usefulness.
- Relevance and importance of study was explained to each respondent.
- The performa was filled-in in front of the research team to avoid any partial answering of questions.
- The respondents were motivated for answering the question after thinking.
- Sufficient time was given to each worker for answering/filling up the questions.
- Statistical analysis was carried out, descriptive variable were explained with mean values

Results

Table 1:Assessment of demographic conditions of Manav Rachna (MR) workers

Table 1 shows demographic distribution of Manav Rachna workers among the studied population (n=51).

Age group of respondents in year	**Respondents**	
	Percent	**Frequency**
Age between 20-24	19.60%	10
Age between 25-29	58.82%	30
Age between 30-39	21.56%	11
Monthly Family Income	**Respondents**	
More than 10,000	35.29%	18
Less than 10,000	64.70%	33
Religion of Respondents	**Respondents**	
Hindu	31.30%	16
Muslim	27.45%	14
Sikh	17.64%	9
Christian	23.52%	12
Types of Family	**Respondents**	

Joint	78.43%	40
Nuclear	21.56%	11

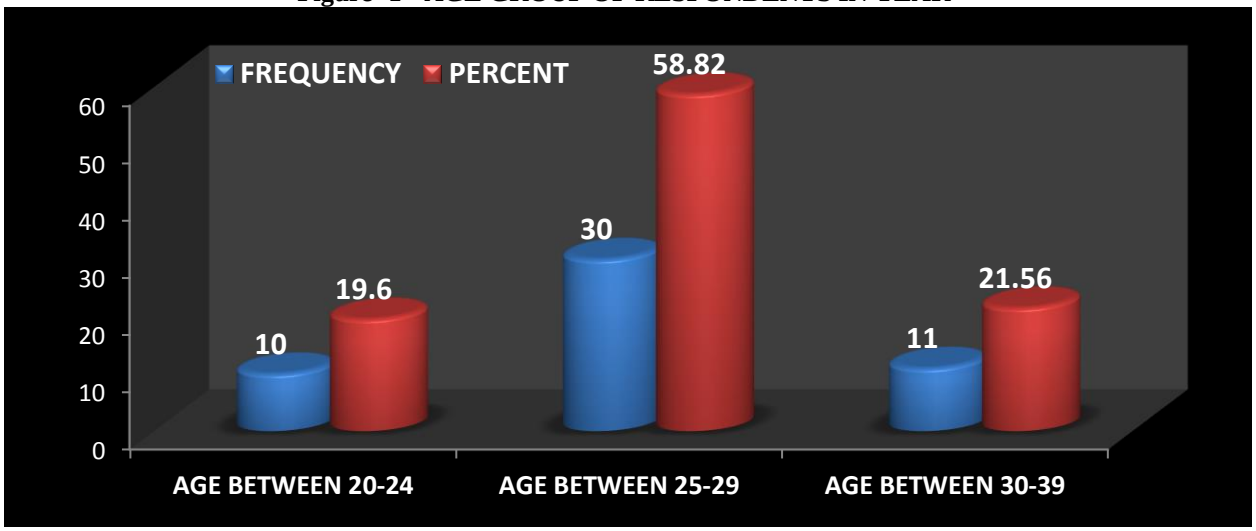
Table 2: Assessment of nutrition status and related condition among the Manav Rachna workers

Table 2 shows eating habits, Nutritivestatus and hygiene practices of MR workers among the studied population (n=51).

Importance of health	**Respondents**	
	Percent	**Frequency**
Aware	19.60%	10
Not Aware	80.39%	41
Lunch at Workplace	**Respondents**	
Yes	70.58%	36
No	29.42%	15
Meals per day	**Respondents**	
More than 2 time	43.13%	22
Less than 2 time	56.86%	29
Eating Habits	**Respondents**	
Balanced diet	49.01%	25
Diet containing protein	72.05%	37
vegetarian	94.11%	48
Fried food	29.41%	15
Milk consumption	**Respondents**	
	Percent	**Frequency**
Yes	29.41%	15
No	70.58%	36
Liters of water per day	**Respondents**	
More than 4L	19.60%	10
Less than 4L	80.39%	41
Rice replaced with chapattis	**Respondents**	
Yes	49.01%	25
No	50.98%	26
Alcoholconsumption	**Respondents**	
Yes	58.82%	30
No	41.17%	21
Tobacco Consumption	**Respondents**	

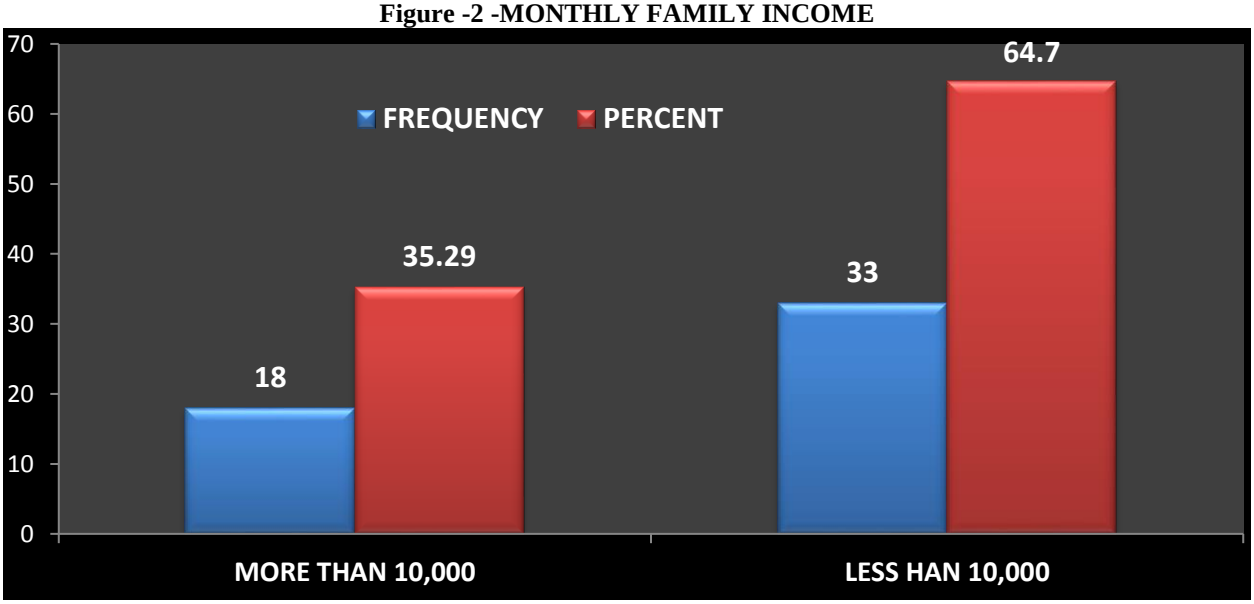
Yes	39.21%	20
No	60.78%	31
Healthy habits in last 1 years	**Respondents**	
Improved	33.33%	17
Not Improved	66.67%	34

Figure -1 - AGE GROUP OF RESPONDENTS IN YEAR



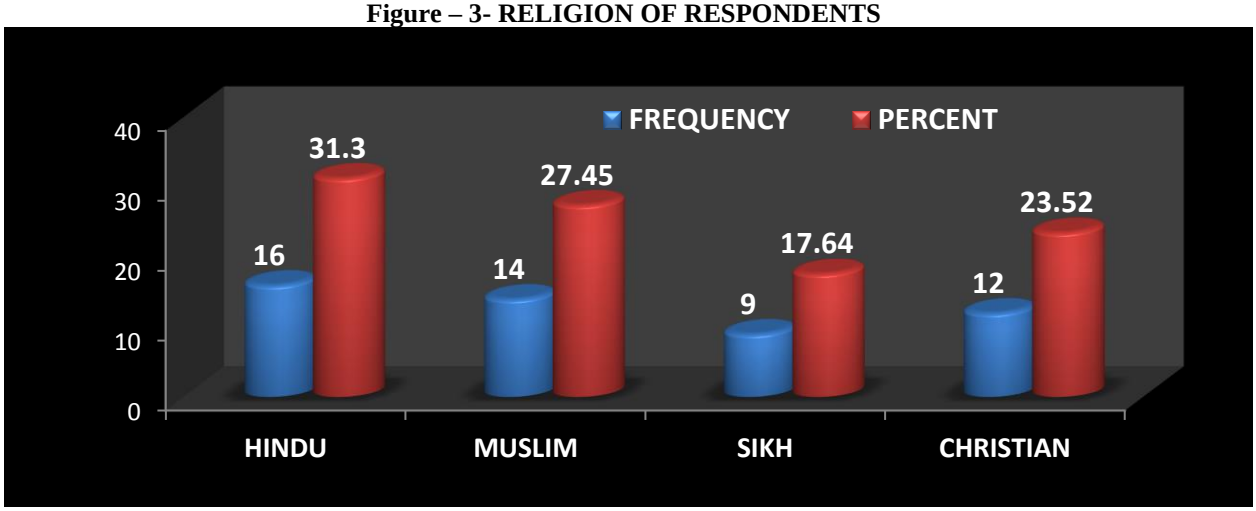
- It is clear from the figure-1that maximum workers of Manav Rachna Universityof sample population were in age group 25-29 years and they constituted 59% of total workers in the age group of 20 to 40 years

Figure -2 -MONTHLY FAMILY INCOME



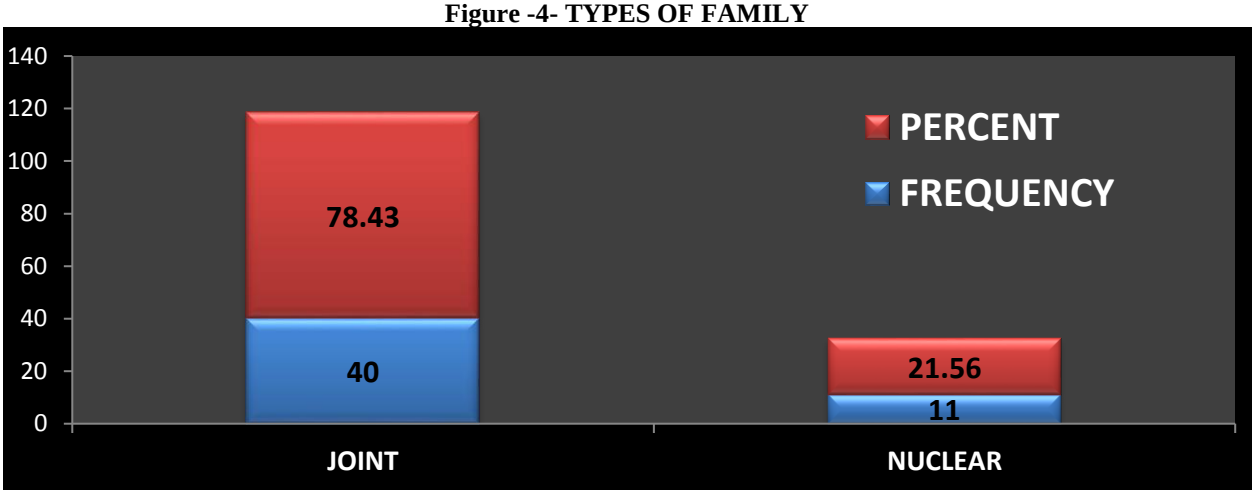
- Majority of respondents out of total population as per figure 2 showsthat 65.70% had monthly income less than Rs 10,000 per month.

Figure – 3- RELIGION OF RESPONDENTS



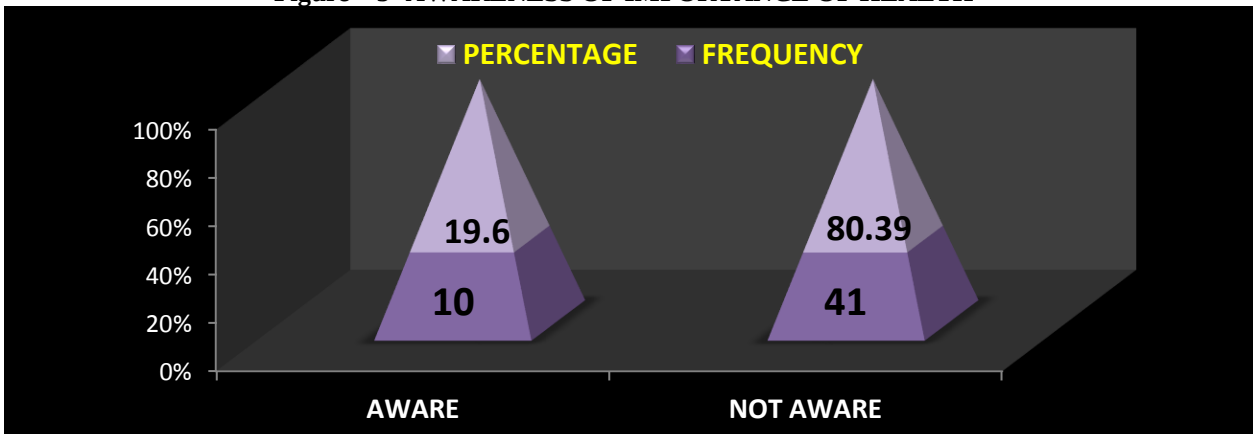
- Figure Graph 3 showsthat workers from all religion work in the University and data has been collected in non-partial manner.

Figure -4- TYPES OF FAMILY



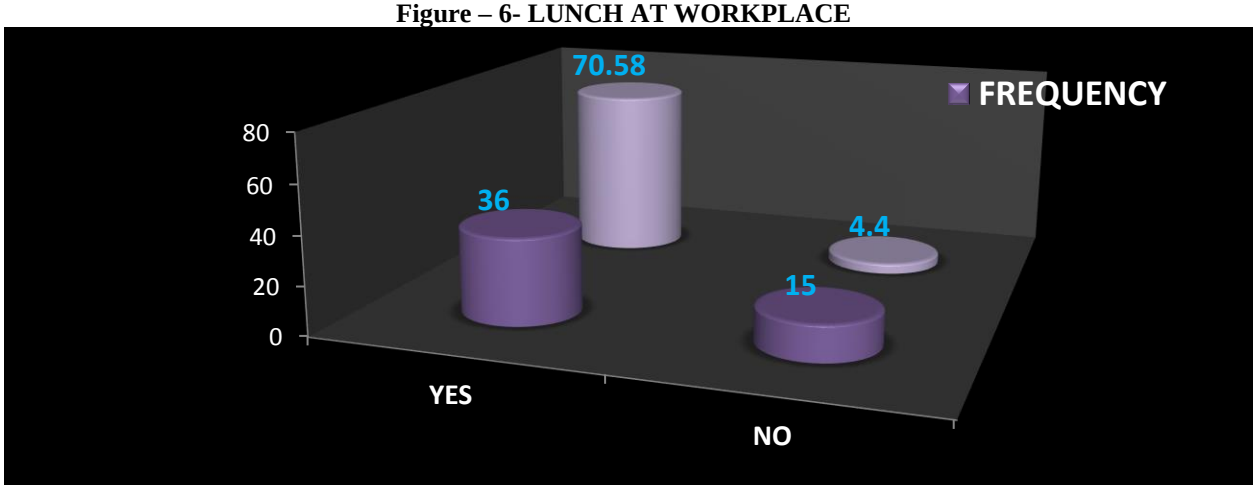
- Figure 4 shows that among the selected respondents, majority i.e79.43% lived in joint family and very few i.e21.56% lived in nuclear family.

Figure – 5- AWARENESS OF IMPORTANCE OF HEALTH



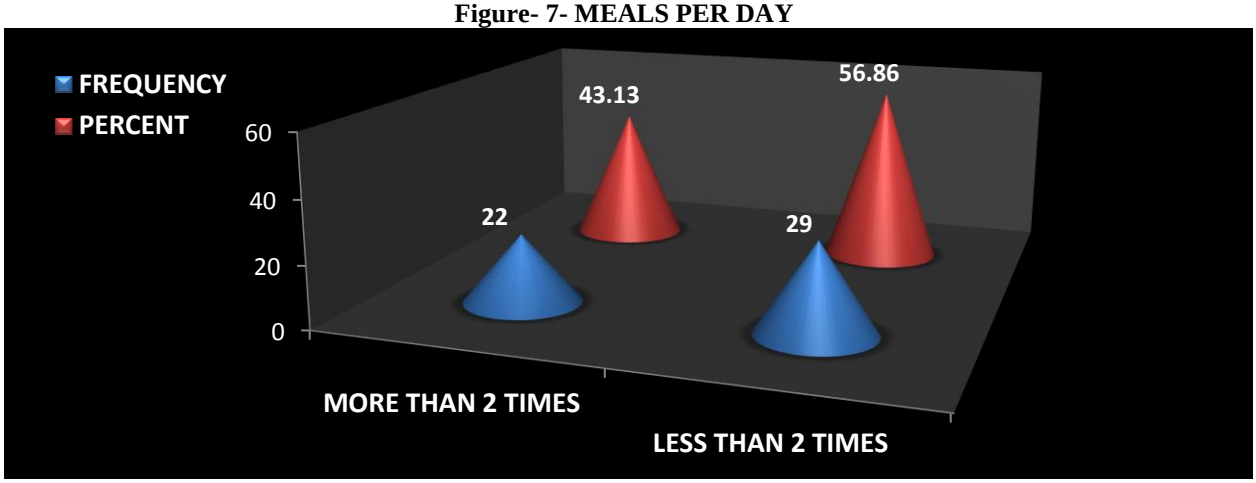
- It is clear from Figure 5 that about 80% of respondents were not awarethat malnutrition is the major cause of many disease and the implied importance of nutrition.

Figure – 6- LUNCH AT WORKPLACE



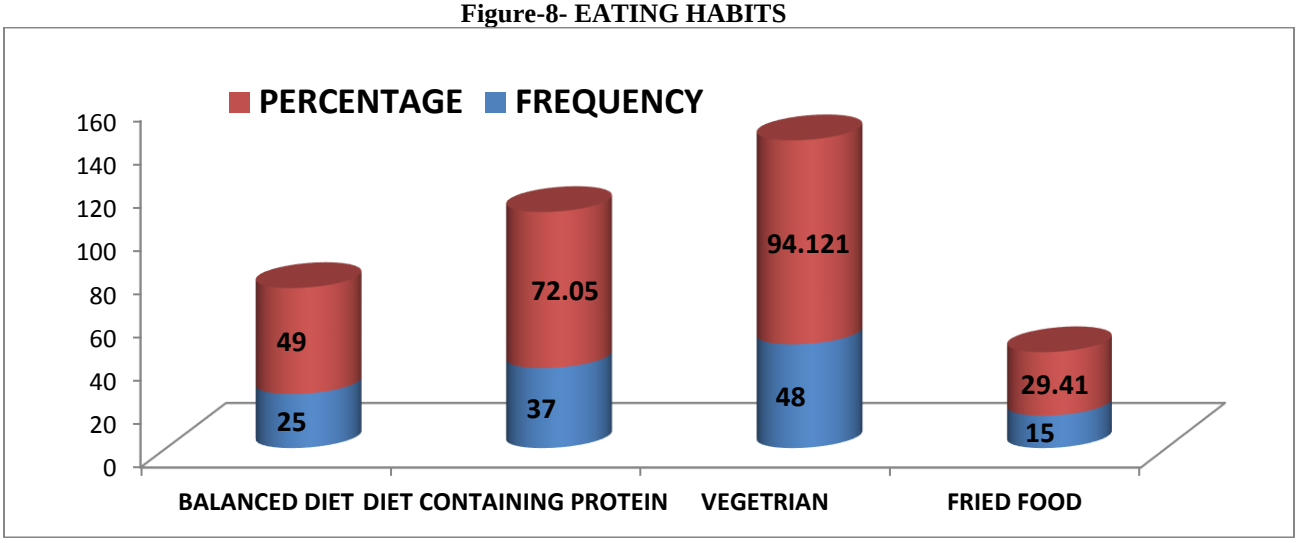
- Figure 6 shows that approximately 30% of worker did not take lunch in working hours, which might hamper their health and cause various diseases.

Figure- 7- MEALS PER DAY



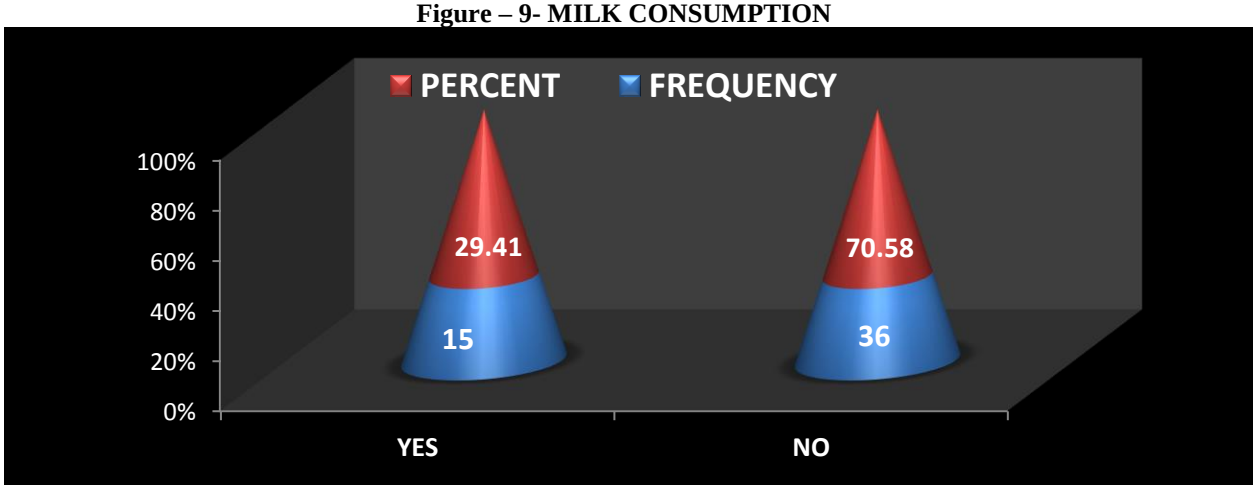
- Figure 7 shows that 43.13% of workers were taking more than 2 major meals and 57% were taking less than 2 times per day.

Figure-8- EATING HABITS



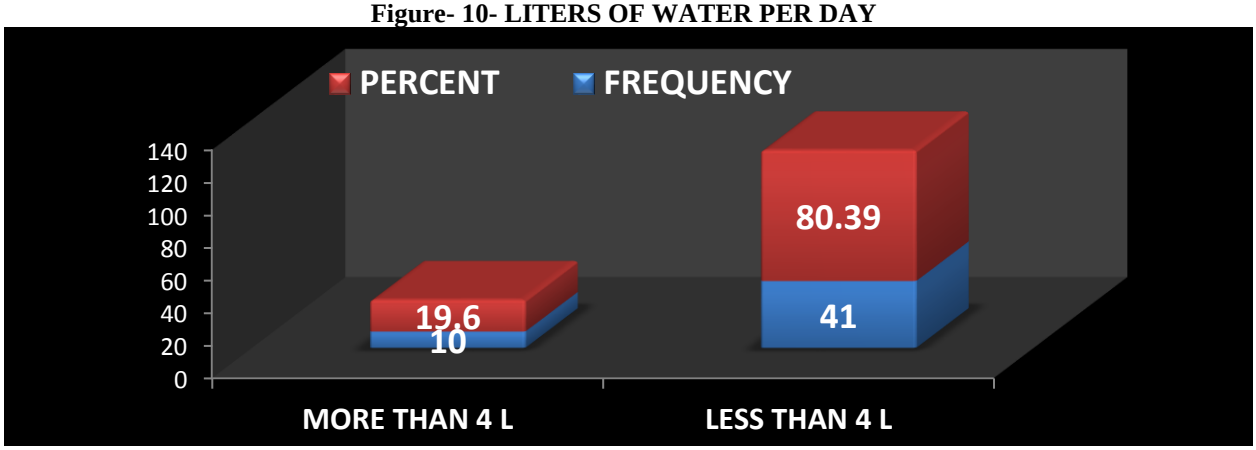
- From the above figure, it is clear that about 50% workers had the habit of eating balanced diet and about 30% of workers preferred fried food (junk food) rather than healthy food. About 72% workers consumed protein based diet daily in form of mostly vegetables and pulses.

Figure – 9- MILK CONSUMPTION



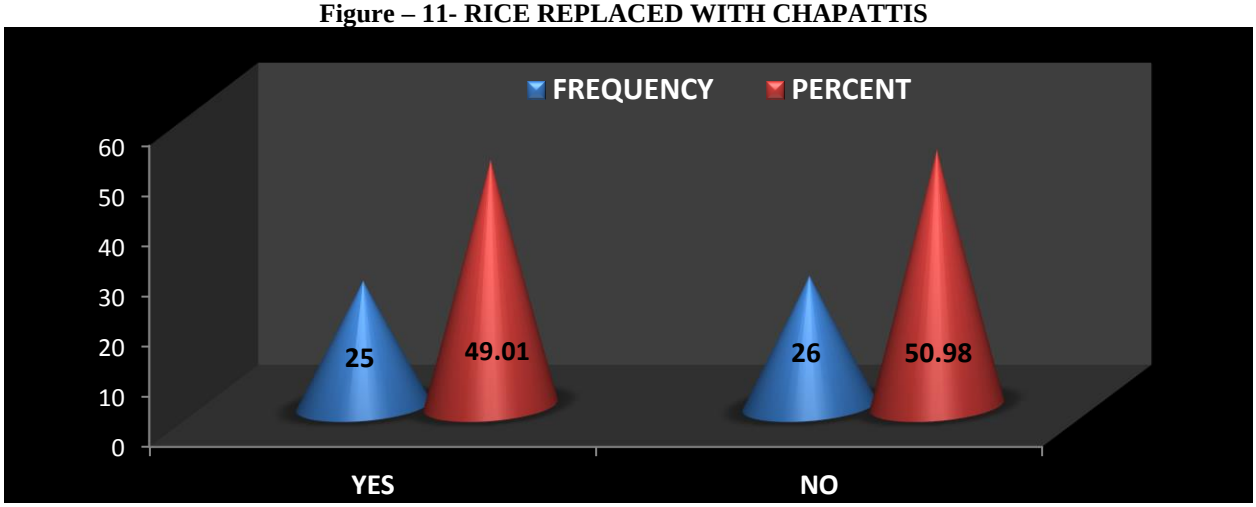
- Figure 9 indicates that only 29% of workers used to take milk daily.

Figure- 10- LITERS OF WATER PER DAY



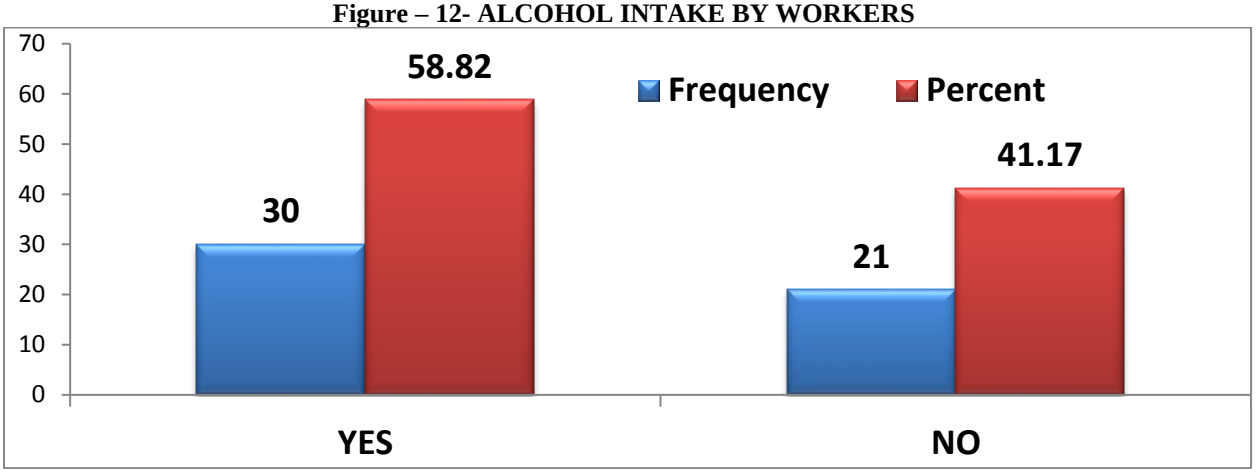
- Figure 10 shows that about 80% workers were consuming less than 4liters of water per day.

Figure – 11- RICE REPLACED WITH CHAPATTIS



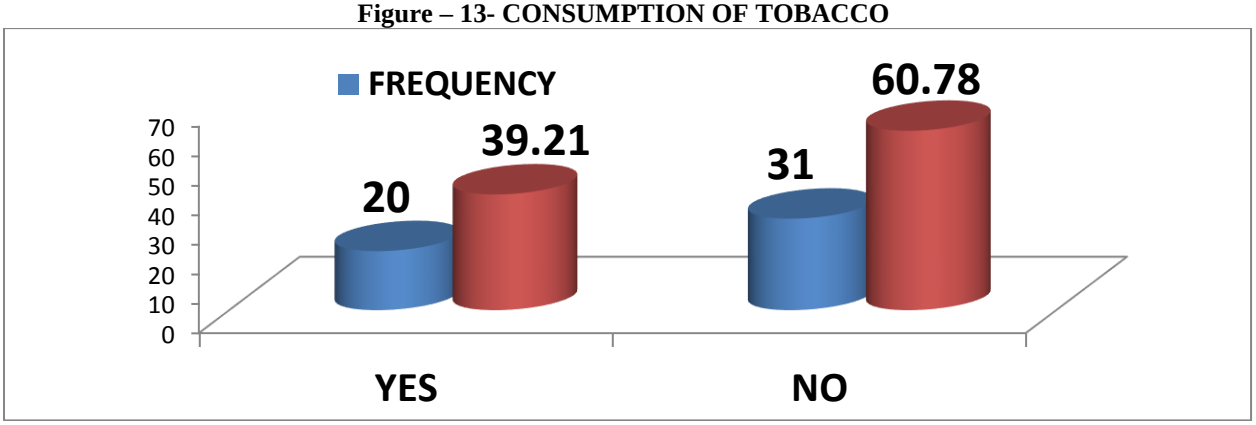
- According to Figure 11, about 50% workers were aware about the importance of nutrition and had replaced rice with chapattis in their diet.

Figure – 12- ALCOHOL INTAKE BY WORKERS



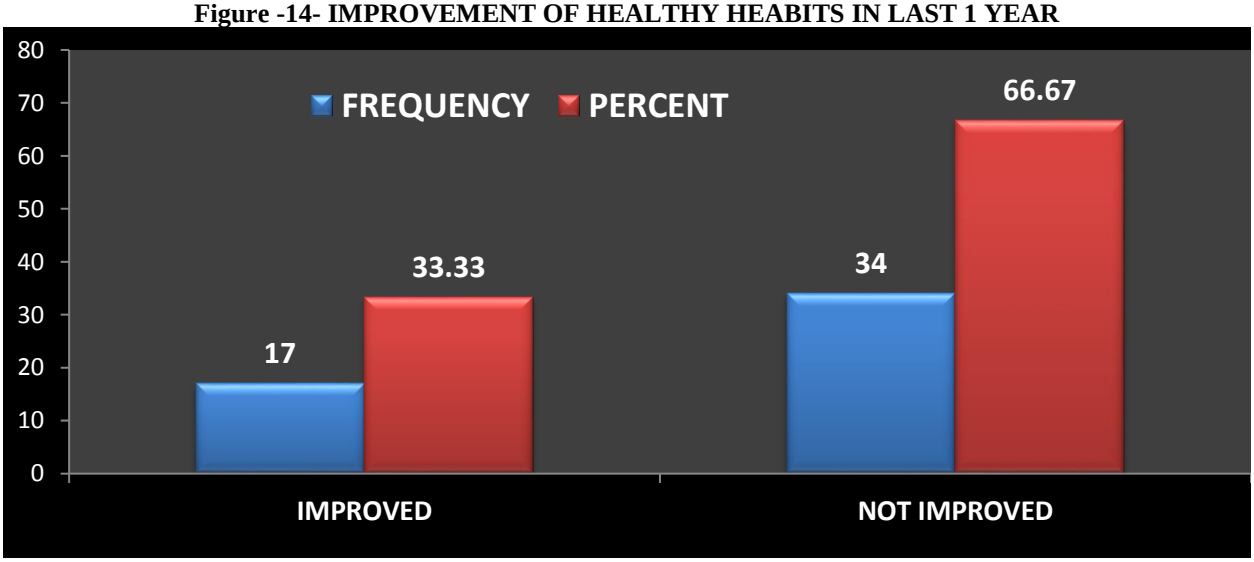
- Figure 12 shows that about 59% of workers consumed alcohol on daily basis without knowing its health implications.

Figure – 13- CONSUMPTION OF TOBACCO



- Figure 13 indicates that 39% of workers were addicted to tobacco. These workers were sent to tobacco counseling centre of Manav Rachna Institute.

Figure -14- IMPROVEMENT OF HEALTHY HEABITS IN LAST 1 YEAR



- Figure 14 shows that after repeated counseling session arranged by Manav Rachna Institute, 33% respondents had improved their healthy habits in last 1 year.

Discussion & Conclusion

A random cross section study was carried out among 51 workers (Class IV workers) of Manav Rachna University, Faridabad in the age group of 20-40 years with a view to assess their nutritivestatus, basic hygiene practices followed by them and associated health issues. This study also reveals the nutritive transition and its relation with health implications in them. The majority of the workers of the sample population were in the age between 25 to 29 years.

The study has revealed that majority of workers (around 59%) in our sample are in age group between 25 to 29 years and around same number (around 65%) of workers are having their monthly income less than Rs 10,000/-. From the data taken for health assessment, it is clear that about 84% of workers are not aware about the fact that poor nutrition and poor personal hygiene are the important cause of many diseases and maintaining proper nutritivestatus and basic hygiene practices with good health seeking behavior makes a man healthy & wealthy. About 57% of workers can not afford to take 2 times meals, which makes them vulnerable to many diseases due to decrease in immunity. This may also be due to mal-nutrition and less intake of balanced diet. The milk is consumed by only 29% and others do not take milk at all. Milk is an important source of protein for vegetarians as most of respondents are vegetarians (about 94%). Due to poor literacy, the ill effects of many items like alcohol and tabaco are not known to them. It is this reason that intake of these items is more among workers i.e alcohol is taken by about 59% and 40 % consume tabaco.

In short, poor literacy, family demographics, socio-economic conditions have taken the upper hand among these workers to keep them aloof of hygienic and nutritive standards. Illiteracy and poor counselling among these workers of good and healthy dietary habits and maintaining hygienic has led them under the clutches of various diseases. During study, these workers were counselled and motivated for adopting the various methods of fitness, healthy dietary habits and healthy environment.It is however felt that total change in their behavior would come if these workers are exposed to such counselling and training at regular intervals.

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