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IMPACT OF SOCIOECONOMIC STATUS ON NUTRITIONAL KNOWLEDGE AND DIETARY BEHAVIOUR OF ADULT POPULATIONS IN PATNA (BIHAR) – AN OBSERVATIONAL STUDY

Dentistry

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ABSTRACT

BACKGROUND: Nutritional principles can be applied to improve a healthy lifestyle and to support physical health, welfare, and physical working capacity. Rapid socioeconomic advancements in India in the recent decades have brought significant lifestyle changes in the population. The most disturbing and harmful effect of globalization to people and the nation as a whole is this drift away from a healthy choice of food and dietary habits. **AIMS AND OBJECTIVES:** The aim of the present study was to assess the nutritional knowledge of adult population in Patna, Bihar and the objectives of this study was to correlate the nutritional knowledge and dietary behavior with the socioeconomic status (SES) of adult population in Patna city. **MATERIALS AND METHODS:** In our study, a total of 2500 sample size was taken and a house-to-house survey was planned. House to house survey helped to minimize incomplete submission and clarification of the questionnaire was done on the spot if any difficulties were encountered. The questionnaire consisted of four parts. All questions were converted from English to local language (Hindi) so that people could understand it easily. The questionnaires were given to the subjects and were collected after the subjects filled it completely. **RESULT:** In our study, out of 2500 subjects, maximum subjects were females. Maximum numbers of subjects belonged to lower middle socioeconomic status (SES) followed by upper lower and upper middle. The nutritional knowledge was more in females as compare to males. Subjects of age group 18-27 years had more nutritional knowledge. **CONCLUSION** The study highlights the importance of nutrition education to improve the nutritional knowledge and dietary behaviour. We also found that socioeconomic status plays an important role in having nutritious food in daily diet.

KEYWORDS

Awareness, Knowledge, Nutrition, Obesity, Socioeconomic Status

INTRODUCTION

As quoted by Hippocrates "Let food be thy medicine and medicine be thy food". Although many patients are convinced of the importance of food in both causing and relieving their problems, many people's knowledge of nutrition is rudimentary. According to World health organization (WHO), nutrition is a critical part of health and development [1]. Today, many countries are facing a double burden of malnutrition; with concurrent undernutrition, micronutrient deficiencies and overweight and obesity. Malnutrition is caused by multiple factors and any approach to tackle the problem of malnutrition would require a holistic, multidimensional approach and combination of nutrition specific as well as nutrition sensitive interventions to address this problem [2]. Till today, no studies have been reported regarding nutritional knowledge among populations of Bihar. Hence this study was conducted in this part of India, to assess the knowledge and awareness of people towards nutrition.

MATERIALS AND METHODS

In our study, a total of 2500 sample size was taken and a house-to-house survey was planned. House to house survey helped to minimize incomplete submission and clarification of the questionnaire was done on the spot if any difficulties were encountered. The questionnaire consisted of four parts: first part collected the demographic details and second part were related to their diet, third part was related to lifestyle and oral hygiene and the fourth part consisted of nutritional knowledge. All questions were converted from English to local language (Hindi) so that people could understand it easily. The questionnaires were given to the subjects and were collected after the subjects filled it completely. The study was approved by ethical committee of the institute. The collected data were subsequently processed and analysed using SPSS statistical package version 22.

RESULTS

This study was conducted among adult population of Patna, Bihar. All people who are aged 18 years and above, living in Patna, Bihar (permanent residents) constituted the target population. In our study, maximum populations were females (61%). Maximum numbers of subjects belonged to the age group of 18-27 years followed by 24% subjects who belonged to the age group of 28-37 years, 12% of subjects belonged to the age group of 57 years and above whereas 11.5 % belonged to 38-47 years and 10.6 % belonged to 48-57 years [GRAPH 1]. A one-way ANOVA was conducted to determine if the nutrition scores differed significantly across five different age groups. The results indicated a statistically significant difference between the groups, $F = 39.894$, $p < 0.001$. The mean nutrition scores varied from a high of 4.72 ± 1.70 in age group of 18-27 years to a low of 3.79 ± 1.49 in 38-47 years age group. These results showed that age has a significant impact on nutritional scores [Table 1]. Maximum numbers of subjects (44%) belonged to lower-middle SES followed by 35% who were in upper-lower SES and 16% belonged to upper-middle SES. Among SES groups, nutrition knowledge score was maximum in upper-middle group followed by upper group. Least nutrition knowledge score was seen in lower SES [Table 2].

DISCUSSION

Currently, the major causes of mortality worldwide are diseases that could be prevented with proper nutrition, regular physical exercise, and a healthy lifestyle that includes leisure time, stress management, and personal and environmental care. Today, knowledge about healthy food and nutrition receives more attention than ever before. Of particular interest is the impact of nutrition knowledge and beliefs on a healthy diet. Lack of nutrition knowledge is one of the social factors in consumption of low-quality food. So, being aware of poor dietary habits and their impacts on health is a key step in the formation of correct food pattern. According to the role of nutrition awareness in food choices and accepting the assumption that nutrition knowledge affects the eating attitudes and behavior, an appropriate diet pattern can be obtained. The health and nutritional status of the populations reflect the future of any country [3].

In the present study, we calculated the SES using modified Kuppuswamy scale of SES in which the total scores of all three categories (education, occupation and income) were given to determine the socioeconomic status of the populations [4]. In this study the maximum numbers of subjects belonged to lower-middle (44%). The 2nd highest SES of subjects belonged to upper-lower (35%) followed by upper-middle (16%). Only 1% subjects belonged to upper class of SES and only 5% belonged to lower class of SES which is in accordance with the study conducted by Silvia Saveinai NG et al in which maximum subjects belonged to lower-middle class too [5].

Individuals have been reported to be healthier as their socioeconomic status increases. Although it is more prominent in groups such as women, children and the elderly, the effects of differences in socioeconomic status on health; plays a significant role in the health of the whole society. The socioeconomic status affects the knowledge and attitudes of the parents on the subject, therefore it is a determining factor for the positive or negative effect of the parents on the child. These findings were in align with the study conducted by Sanders AE et al who found that socio-economic disparities in oral-health-related

quality of life are apparent among his study subjects and Silvia et al where participants from the upper- and lower-middle classes demonstrated superior oral hygiene behaviors compared with those from the lower and upper-lower classes [6,7].

CONCLUSION

Nutrition knowledge plays a crucial role in promoting healthier eating practices, leading to the maintenance of healthy body weight. This is because knowledge of dietary guidelines and healthy eating habits among adults has been positively correlated. In our study we found that younger age group had better nutritional knowledge compared to older age groups. We should conduct regular nutritional knowledge activities through active participation of populations present in different societies, educational institutes, public places with the help of government and non-government organisations. Our findings underscore the urgent need for health-promotion strategies tailored to socioeconomically disadvantaged populations to address the observed disparities in nutritional knowledge and dietary behaviour.

GRAPH 1: GRAPH SHOWS AGE WISE DISTRIBUTION OF SUBJECTS

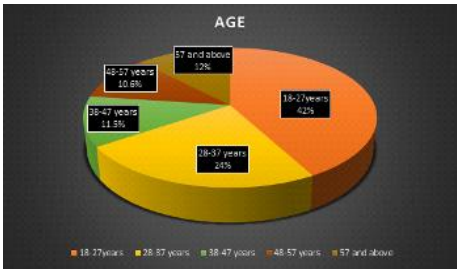

TABLE 1: TABLE SHOWS NUTRITION KNOWLEDGE SCORE AMONG AGE GROUPS

AGE GROUP	NUMBERS	MEAN	STD. DEVIATION
18-27 YEARS	1049	4.7169	1.70174
28-37 YEARS	591	4.0812	1.39375
38-47 YEARS	287	3.7944	1.49225
48-57 YEARS	265	3.9019	1.26648
58 YEARS and above	308	3.8442	1.62685
TOTAL	2500	4.2668	1.60544

TABLE 2: TABLE SHOWS NUTRITION KNOWLEDGE SCORE AMONG SOCIOECONOMIC STATUS (SES) GROUPS

SES	N	MEAN	STD. DEVIATION
UPPER	10	5.0000	1.49071
UPPER-MIDDLE	403	5.1414	1.46343
LOWER-MIDDLE	1086	4.5626	1.67201
UPPER-LOWER	882	3.6122	1.26751
LOWER	119	3.3950	1.40952
TOTAL	2500	4.2668	1.60544

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