

ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE ON NUTRITIONAL AWARENESS AMONG HEALTH CARE PROFESSIONALS

A P Rajalakshmy¹, R A Lokeshmaran^{2*}, Dr K Renuka³

¹Lecturer in Nutrition, Kasturba Gandhi Nursing College, Puducherry.

²Assistant Professor of Bio-statistics, Department of Community Medicine, Mahatma Gandhi Medical College and Research Institute, Puducherry.

³Principal, Kasturba Gandhi Nursing College, SBV University, Pondicherry.

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Corresponding Author: Dr. Lokeshmaran. A, Assistant Professor of Bio-statistics, Department of Community Medicine, Mahatma Gandhi Medical College and Research Institute, Puducherry.

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Abstract:

Background: The importance of including Nutrition in the training of health care professionals remains low priority. However, many health care providers are not adequately trained to address lifestyle recommendations that include Nutrition and Physical activity behaviours. This study sought to assess the Knowledge, Attitude and Practice (KAP) on Nutritional Awareness among health care professionals. A descriptive study focuses on the group of Health Care Professionals which includes Physicians, Dentists and Nursing faculty. Interested 90 Participants who fulfilled the inclusion criteria have been chosen through purposive sampling technique. The KAP of Health Care Professional related to Nutritional aspects were collected using structural Questionnaire for assessing Knowledge, Rating Scale for assessing Attitude and checklist for assessing Practice used respectively. **Results:** Knowledge, Attitude and Practice of the Health Care Professionals likely Physicians, Dentists and Nurses were evaluated on Nutritional awareness. Out of 90 overall 15.5% of participants has inadequate, 43.3% has moderate and 41.1 % has adequate knowledge. All 100% of participants has positive attitude. In case of Practices 1% has fair, 42.2 % has good and 47.7% has excellent practices. There is a statistical Correlations found between KAP in all participants. This study concludes that even though many sources are available to gain Awareness on Nutrition. Since, the knowledge among health care professionals needs to be improved.

Introduction

Nutrition is considered to be a major factor in the control of several major clinical diseases affecting the outcome and a determinant of the associated mortality and morbidity. Nutritional deficiency has been described in hospitalized population with varying degrees and is often reversible if recognized early.[1,2] Nutritional knowledge is one of the important factors for selection of healthy and nutritious diet [3]. According to an estimate by World Health Organization 80% of mentioned chronic disease a burden is due to the lifestyle and dietary factors [4]. Thus, it is essential to improve life style and dietary intake by taking balanced and nutritionally healthy diet to overcome various

adverse medical conditions [5]. Improper nutritional knowledge is one of the main causes for nutritional problems, which adversely affect dietary practices. Also, understanding of nutritional attitude and beliefs of the community are essential factors to improve healthy eating, effectively [6]. The good dietary pattern plays a major role in the prevention and treatment of many disorders, such as cardiovascular diseases and cancer [7,8]. It has been postulated that nearly 35% of cancer-related deaths can be prevented by following an appropriate diet [9]. Knowledge, attitudes, and practices (KAP) is a vital step for the development and evaluation of change management activities. KAP questionnaires are designed to measure what is “known, believed, and done in relation to a particular topic [10]

The aim of this study was to evaluate the knowledge, attitude and practices of health care professionals of a Mahatma Gandhi Medical College and research institute regarding Nutrition and its Association to eating habits and physical inactivity.

MATERIALS AND METHODS

A cross-sectional, descriptive, questionnaire-based survey method was carried out to assess the level of KAP regarding Nutrition among the health care professional including Physicians, Dentists and Nurses working in constituent colleges of Sri Balaji Vidyapeeth University, Puducherry during September 2018.

A total of 90 health care professionals got participated where 30 Physicians 30 Dentists and 30 Nurses. The inclusion criteria included 20-50-year old. After informing the participants about the aim of this study and obtaining the consent, questionnaires were given to them. Self-administered questionnaires were used to collect information on socio-demographic characteristics and nutrition knowledge, attitudes and practices of participants towards nutrition.

Knowledge questionnaire: This questionnaire was used based on recommended guidelines from literature. Scores were given according to the answers. 30 questions were asked in a multiple choice question pattern in different topic following Basic Nutrition, Functional Foods, Individual RDA and Metabolism of Nutrients along with one right answer three false answer were given accordingly. For the right answer 1 marks was given and for the wrong answer 0 mark was considered the total was calculated

Attitudes questionnaire: Each attitude question was a 5-point Likert Scale, in which the points were 1 and 5 indicating “no opinion” and “strongly agree” respectively, or it was contrariwise for any other questions, which were 0, as “strongly agree” and 5, as “strongly disagree”. Final scores were summed for each participant most negative and the most positive attitude toward dietary pattern, food preference, category to select food in their regular lifestyle practices were asked. Attitude scores that were less than the mean score were classified as the negative category, while scores at the mean level or more were considered as the positive category.

Practice questionnaire: Participants reported how often they consumed fruit, vegetables, skipping

breakfast, habit to do physical activity, quantity of water intake, preference of junk, undergoing regular health check-up. Totally consist of 10 questions based on their response yes or no towards adverse practices or favourable practices marks were given.

Data were collected and recorded in MS excel spread sheet (2007) and analysed by SPSS (version 16). ANOVA with post-hoc tests (Bonferroni and Tamhane for pair-wise comparison) was applied to find the significance between various health professionals. Assessment of correlation between the Knowledge, Attitude and Practices we used kappa Pearson’s correlation coefficient.

RESULTS

The KAP questionnaire on Nutrition Awareness were asked for three major health care professionals likely Physicians, Dentists and Nurses who are plying major role with public. The result shows that the knowledge level varies from professions to profession it decreases from Physicians to Dentists since, very less difference exists, Physicians > Nurses > Dentists.

From table1 it has been seen that Out of 90 overall 15.5% of participants has inadequate, 43.3% has moderate and 41.1 % has adequate knowledge. All 100% of participants has positive attitude. In case of Practices 1% has fair, 42.2 % has good and 47.7% has excellent practices. There is a statistical Correlations found between Knowledge, Attitude and Practices in all participants,

In case of Physicians 6.7% of inadequate, 33.3% Moderate and 60.0% have adequate knowledge. 100.0% lies in positive Attitude, while in Practices 3.3%, 43.3% and 53.3 % has fair, Good and excellent respectively

While seen through Dentist’s Physicians 23.3%of inadequate, 46.7% Moderate and 30.0% have adequate knowledge. 100.0% lies in positive Attitude, while in Practices 16.7% 46.7% and 36.7%has fair, Good and excellent respectively

In case of Nurses 16.7% of inadequate, 50.0% Moderate and 33.3% have adequate knowledge. 100.0% lies in positive Attitude, while in Practices 10.0% 36.7% and 53.3% has fair, Good and excellent respectively,

This variation also seen clearly in figure 1 and figure 2.

Table 1: Level of Know, attitude and practice among medical practitioner, dentist and nurses

		Physicians		Dentists		Nurses	
		N	Percentage	N	Percentage	N	Percentage
Knowledge	Inadequate	2	6.7%	7	23.3%	5	16.7%
	Moderate	10	33.3%	14	46.7%	15	50.0%
	Adequate	18	60.0%	9	30.0%	10	33.3%
Attitude	Positive	30	100.0%	30	100.0%	30	100.0%
Practice	Fair	1	3.3%	5	16.7%	3	10.0%
	Good	13	43.3%	14	46.7%	11	36.7%
	Excellent	16	53.3%	11	36.7%	16	53.3%

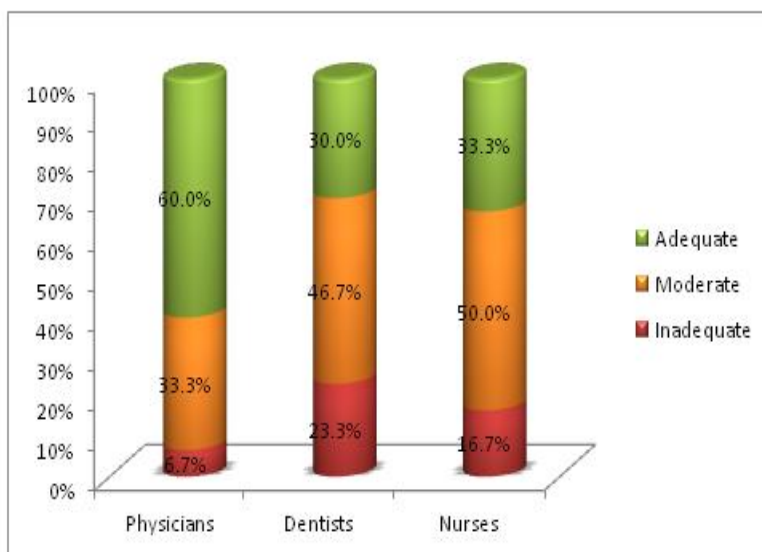


Figure 1: the knowledge of adequate, moderate and inadequate of three professionals

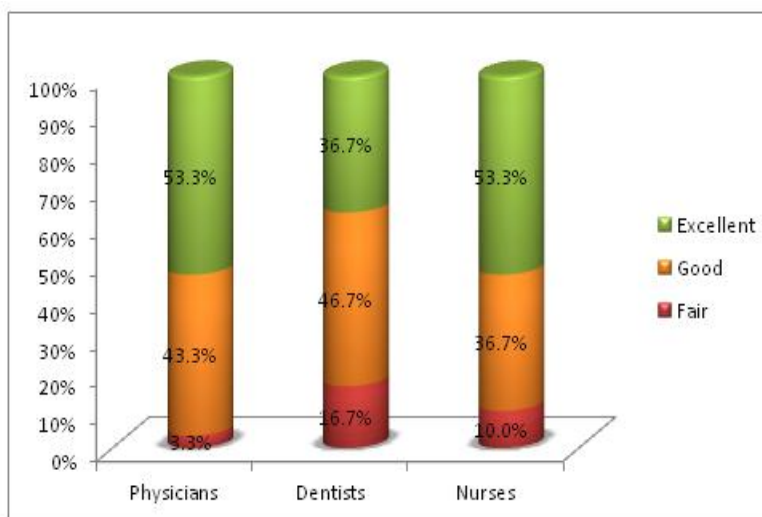


Figure 2: the practices of excellent, good and fair practices of three professionals

Table 2: ANOVA for knowledge, attitude and practices among Physicians, Dentist and Nurses

Score		Mean	Std. Deviation	Std. Error	F	p-value
Knowledge	Physicians	17.53	4.041	0.738	12.462	<0.001
	Dentist	12.3 ^b	3.334	0.609		
	Nurses	13.83 ^b	4.983	0.910		
Attitude	Physicians	50.67	5.797	1.058	13.391	<0.001
	Dentist	42.57 ^t	4.576	0.836		
	Nurses	45.23 ^t	7.745	1.414		
Practice	Physicians I	7.23	1.524	0.278	11.996	<0.001
	Dentist	5.1 ^b	2.304	0.421		
	Nurses	5.3 ^b	1.841	0.336		

b – Significant from Physicians (Bonferroni post-hoc test applied)

t – Significant from Physicians (Tamhane post-hoc test applied)

Table2 shows the ANOVA test for Knowledge, Attitude and Practices among all health care professionals the post-hoc test shows that Physicians are having higher knowledge and practices than other healthcare professionals namely Dentists and Nurses.

Table3: Correlation between Knowledge, Attitude, and Practices among Physicians, dentist and nurses

	Knowledge Vs Attitude	Knowledge Vs Practice	Attitude Vs Practice
Physicians	0.694*	0.751*	0.684*
Dentist	0.501*	0.512*	0.493*
Nurse	0.548*	0.598*	0.510*

Table3 shows that significant correlation seen between knowledge, attitude and practices among all health care professionals (Physicians, Dentists and Nurses). Amongst Physicians are having higher significant than Dentists and Nurses.

DISCUSSION

Our current study is to estimate KAP on Nutrition Awareness among health care professions, including Physicians, Dentist and Nurse since they are having direct verbal communication with the public so it is important to analyse their Nutrition Knowledge.

The nutrition knowledge among health care professions was not seen elsewhere since, some studies where done among Medical Students that have been discussed below.

Mahsa Raji Lahiji et.al.,done a study on Nutrition knowledge, attitudes, and practice towards breast cancer prevention a cross-sectional study among 500 female students from Iran University of Medical Science (IUMS). Students’ knowledge with the mean score of 16.97, significantly varied by age (P¼ 0.03), the field of study (P¼ 0.001) and family history of BC

(P¼ 0.01). The mean score of attitudes and practice toward nutrition-related BC prevention factors were 24.86 and 39.39, respectively. A significant relationship was observed between nutrition knowledge and attitude (r¼0.27, P<0.001). Also, Nutrition-related attitudes were positively correlated with the BC prevention dietary practices (r¼0.23, P<0.001). Nutrition KAP about BC prevention factors was found to be influenced by individual factors such as age, field of study, familial history of BC, job and residency status. Together, their findings stated confirm that increasing nutrition knowledge is not sufficient for dietary behaviour change, but is necessary.[11]

Xia Zhao et.al., done a study on to gain insight into the knowledge of, attitude toward, and practical experience with listeriosis among medical staff in two hospitals in Fangshan, Beijing, in their study they

have taken total, 397 With regard to the staff members' working in hospitals their general knowledge of listeriosis, they answered 65.96% of the items correctly. The knowledge scores among obstetricians and gynecologists were higher than those of other clinical Physicians ($p < 0.05$); however, obstetricians and gynecologists were less knowledgeable about which drugs are effective against listeriosis than the other Physicians ($p = 0.007$). The percentage of participants with a positive attitude about preventing listeriosis was 96.47%, the percentage with practice formation was 52.39%. The medical staff's mean score for knowledge of listeriosis was 4.61 – 1.83. The mean score for attitude toward listeriosis was 9.71 – 1.31. There was a significant association between attitude and knowledge of listeriosis ($r = 0.221$, $p < 0.001$). Medical staff obtained a mean score of 2.10 – 1.07 for the practice formation. There was a significant association between practice formation and knowledge of listeriosis ($r = 0.502$, $p < 0.001$). The mean knowledge–attitude–practice (KAP) score for listeriosis among medical staff was 16.41 – 3.19. [12]

Nusrat Zareen et.al., they done a study among Undergraduate Medical Student On Coronary Heart Disease And Its Association To Eating Habits And Physical Inactivity In Arab Community in their study the results reflected a deficient knowledge of coronary heart diseases among students, especially unawareness of the risk factors. Fifty one and 38% of the students respectively did not know the association of physical inactivity and over-eating, to coronary heart disease. Non-healthy attitudes and practices of frequent junk food consumption (30%), overeating (13%), and inactive lifestyle (77%) was observed in the survey in this study it has been concluded that Proper counseling and training of the medical students for better understanding of the disease and its risk factor prevention is required. [13]

In these studies also it has been proved that there is lack of nutritional Knowledge among medical student hence, it has been proved that some improvement needed in the curriculum of health care professions

CONCLUSION

This study shows that there is a lack in nutritional knowledge among many health care professionals comparatively Physicians are having higher knowledge than Nurses and Dentist this is because the Physicians are dealing major part with patients analysis and examination but since this need to be

improved. Hence, to know about nutrition is essential in all health care professionals. Regarding practices majorly it lies in excellent this shows the change between normal public and health care professionals but still the knowledge need to be improved more by academics in all health care professionals this will helps the public to know about the Nutrition.

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