Perspective of Cancer Patients Regarding Dietitian and Role of Nutrition.

*Priyanka Prajapati[1], Shivshankar Timmanpyati[2], Purabi Mahajan[3], Priti Arolkar[4]
[1]Dietitian, Chowpatty Medical Centre
[2]Chief Dietitian , Tata Memorial Hospital,
[3]Sr Dietitian, Tata Memorial Hospital
[4]Dietitian, Tata Memorial Hospital, Mumbai, India.
*Corresponding E-mail ID: privanka.prajapati951@gmail.com

Abstract

Introduction: Nutrition becomes the principle modifiable element in chronic disease conditions with evidence supporting positive and negative effects on the health. Public perception about dietitian is not clear. Doctors are frequently seen as the decision makers. Family doctors are considered suitable as a nutrition information source for diseases in general. The objective of the study was to understand the perspective of cancer patients regarding dietitian and nutrition.

Method: Total 146 cancer patients between 18-60 years age of both the genders were included. The study included newly registered cancer patients with the hospital and patients who followed up with nutrition clinic for at least four times. A structured questionnaire was used to determine three aspects: socio-demographic information, knowledge about role of dietitian, and role of nutrition in cancer.

Results: Average time spent by patients to meet dietitian was 2 hours. 52.7% new and 36% of follow up patients didn't know the reason for consulting dietitian. About one fourth patients didn't know the role of a dietitian. There was a significant difference between follow up and new patients about their perception for diet being important for cancer patients/(p=0.04). About 73% of the patients used to consult doctor for diet earlier. Dietitian was considered as the correct source of nutrition information by 52% of the patients.

Conclusion: Patients who consulted dietitian more than once had better perception of dietitian and nutrition compared to the new patients. Patients with higher education preferred dietitians over doctor for nutrition advice.

Keywords: Nutrition, Nietitian, Cancer, Diet

Introduction

Diet and nutrition plays an important role for promoting and maintain a good health. It becomes even crucial when treating cancer. Nutrition becomes the principle modifiable element in chronic disease conditions with evidence supporting positive and negative effects on the health. [1] Hence, nutrition education should be received by the patients by a nutrition expert. Public perception about dietitian is poor. Doctors are frequently seen as the decision makers. Family doctors are considered suitable as a nutrition information source in the following circumstances: disease in general, lowering cholesterol, eating less fat, eating less salt, diet, food allergies, and drugs [2]. People rely more on media for nutrition information [3]. Access to a dietitian is difficult, and, for this reason, is often put after doctor, practice nurse and health food shop as a source for nutrition information [2]. The decreasing order of source of nutrition as per consumers is family doctor, social environment, magazines, internet, dietitian, television, nutrition center, food labels, media and the food manufacturers [2]. People consider distributing meal as the job of dietitian [2]. Many people view tasty and healthy food as two different and mutually exclusive things [2]. Women and higher educated consumers are usually more aware of nutrition [2]. Differences exists among patients, nurses and dietitians regarding the most common nutrition concerns, the perception of importance of information frequently provided to patients with cancer. Cancer patients receiving chemotherapy expressed a strong interest in receiving health promotion information to guide their diet and exercise choices during treatment time [4]. Hence, there was a need to understand the perception of cancer patients about nutrition and dietitian.

Methodology

Study design:

This study adopted cross-sectional design and used a structured questionnaire to get qualitative information. The participants enrolled in the study comprised of cancer patients undergoing treatment at Tata Memorial Hospital (TMH) located in Parel, Mumbai.

Study population

The study population consisted of 146 cancer patients attending TMH between September to November 2018.

Inclusion and exclusion criteria

The study included newly registered cancer patients with the hospital and patients who followed up with nutrition clinic for atleast 4 times with age limit of 18-60 years of both the sexes. Patients who did not make visit nutrition clinic were excluded from the study.

Sampling

Patients visiting nutrition clinic were selected through simple random sampling. A structured close ended questionnaire was developed to determine perspective of patients regarding dietitian and role of nutrition in cancer. The questionnaire contained three aspects: first socio-demographic information, second: knowledge about role of dietitian, third: role of nutrition in cancer.

Data Analysis

Data entry templates were developed using statistical tools in Microsoft Excel. To examine the relationship between perception of nutrition and dietitian cross tabulation was done. A P-value that is less than alpha ($P<0.05$) was considered to be statistically significant.

Results

Characteristics of survey respondents

Majority of the patients i.e. 73% (n=106) were males. More than half (59.5%) of the patients visited nutrition clinic for the first time while the rest (40.5%) had visited nutrition clinic 4 times or more. Patients from the private category of the hospital were 67% (n=98) and from general category were only 33% (n=48). Twenty one percent of the patients had a family history of cancer. Most of the patients (53%) had never visited a dietitian earlier in their life. Only 25 patients had consulted dietitian before coming to TMH out of which 12 (48%) patients agreed to have complied with the diets provided to them. Cancer patients visiting nutrition clinic were referred by doctors (94.6%), while rest of the patients themselves wanted to consult a dietitian. The ones, who wanted dietitian's consultation themselves, were mostly patients of private category of the hospital. People from varied backgrounds were interviewed. Distribution of cancer patients according to their education is shown in Figure1.

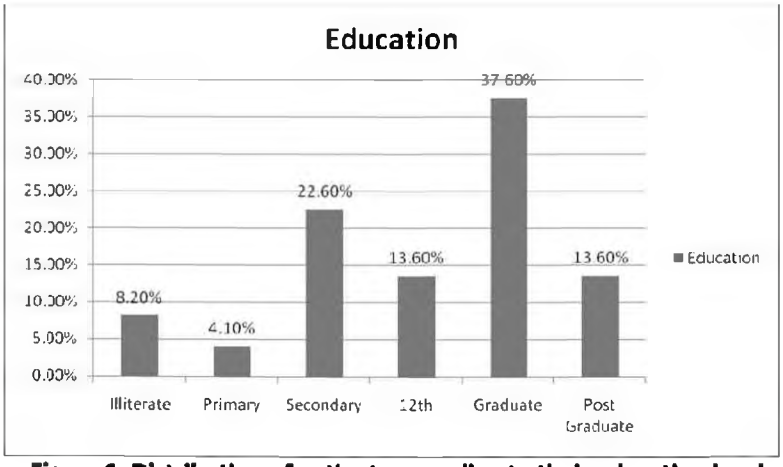


Figure 1: Distribution of patients according to their education level

Education becomes an integral part when it comes to awareness about nutrition, hence it was seen that 35% of the patients had education upto 10th standard or lesser than that out of which 8% of the patients were illiterate. However, 50% (n= 75) of the patients were either graduate or post graduate, which indicates most of the patients were highly educated.

It is essential to follow up with the dietitians especially for cancer patients, to prevent malnutrition during or after cancer treatment.

Reasons	N(%)
Inability to eat	27 (18.5)
Poor appetite	13 (8.9)
Weight loss	35 (23.9)
Supplements	3 (2.05)
Referred by doctor	68 (46.57)

Table 1: Reasons for visiting dietitian according to the patients

The number of visits a patient makes to an onconutritionist is comparatively higher than for other disease conditions. In this research it was found that amongst the follow up patients 67% (n=40) patients made atleast 4-5 visits to the dietitian and 10% (n=6) visited dietitian atleast 10-12 times. This indicates the importance of nutrition considered by doctors as well as patients. The reasons mentioned by the cancer patients is given in Table 1.

Almost half of the patients (46.57%) didn't know the reason for consulting dietitian as they visited because they were asked to consult by a doctor. One of the main reasons for cancer patient to consult a dietitian was weight loss (24%). Almost 20% of the patients consulting dietitian for the first time and 31% of the follow-up patients wanted to consult dietitian to know about their prognosis. More than half of the new patients (52.7%) and 36% of the follow up patients were consulting dietitian as they were recommended by a doctor. There was a significant difference between follow-up and new patients and the reason for them to consult a dietitian (p=0.009). Patients were questioned about the role of dietitian according to what they understand which is given in Table 2.

Role of dietitian	N(%)
To suggest food to be eaten during treatment	79 (54.1)
To prescribe supplements	5 (3.42)
To give information about healthy food habits	21 (14.38)
To help patients get food	8 (5.47)
Didn't know	33 (22.60)

Table 2: Role of a dietitian according to cancer patients

Approximately one fourth of the patients (22.6%) didn't know the actual role of a dietitian, and had visited as it was a protocol to consult.

Time	N (%)
< 15minutes	27 (18.49)
30 minutes	27 (18.49)
Upto 1 hr	24 (16.43)
Upto 2 hrs	23 (15.75)
2- 4 hrs	23 (15.75)
4-6 hrs	22 (15.06)

Table 3: Time spent waiting to meet the dietitian

About 7.5% (n=11) patients didn't consider nutrition as an important aspect during the treatment for cancer. There was a significant difference between follow up and new patients for their perception about diet being important for them. (p=0.04).

Patients have myth that nutrition is required only when they undergo treatment. Good nutrition is important for cancer prognosis outcome, hence it is essential to understand their perspective regarding the nutrition during treatment. Patients could choose more than one food group that they considered important. Fruits were considered important for faster recovery from the disease. Fruit juices were considered to be benefiting patients especially in cases where there was dysphagia or poor appetite.

More than 40% of them had a belief pure veg foods are required for them to improve their health.

Figure 2: Food is considered essential during cancer treatment. Nutrition queries are usually handled by the doctors when a patient doesn't' consult a dietitian. Most of the patients (73%) used to consult doctor in the past for their diet related queries. Rest of the patients believed their family, friends or relatives for food related information, while some used to refer books and/or internet. More than half of the patients (52%) believed dietitian is the correct source of nutrition education while 45% of them still believed doctor for their dietary recommendations.

Significant differences were seen amongst the new and follow up patients for their perception of correct source of nutrition education. (p=0.005). Equal number of follow up and new patients(26%) considered dietitian as the correct source for getting nutrition related information. This indicates that follow up patients had better perception about the dietitians compared to patients consulting dietitians for the first time.

Out of 12 uneducated cancer patients 9 patients considered doctor as the correct source of nutrition education. 69.8% (n=82) graduates and postgraduates considered dietician as the foremost individual for correct nutrition advice. Mostly uneducated and patients with primary education opted for doctor compared to patients with higher education as the correct individual for correct nutrition education.

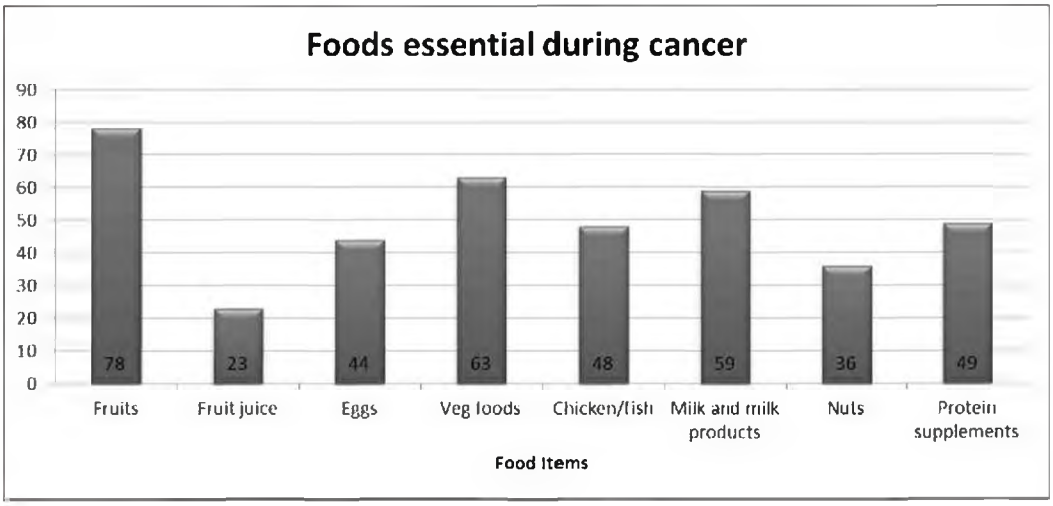


Figure 2: Food items considered essential during cancer treatment

Discussion:

Education played an important role for the perspective of patients about nutrition and dietitian. Dietary knowledge of breast cancer women was assessed in Greece which indicated limited knowledge among older women with lower educational level [5].

The perception of dietitian is poor among the cancer patients which was similar to the results of Aberdeen (Scotland), where public perception of dietitians was found to be poor compared to physiotherapists [6]. Most of the decisions related to nutrition were made by doctors. Doctors are preferred for nutrition related choices. In this study, most of the patients did know the role of a dietitian compared to other study where dietitians were thought to be distributing meals or were involved in preparing meals in hospital. Patients had to wait for more than an hour or two, on an average which indicates access to dietitians was not easy and hence, doctors, practicing nurses were preferred for all nutrition related queries [6].

Dietary knowledge of cancer patients was assessed in Australia and they found majority (71%) had a perception that food was not the cause for cancer while many (63%) considered nutrition as an important part during the treatment for cancer patients which was similar to the results of this study. Dietary related information was taken from dietitians and, oncologists, books, internet , family and internet (39%). However, only 47% of the patients found the information useful given by a dietitian. Hence it becomes important to educate cancer patients about correct nutrition practices for better treatment and health care [7].

Majority of both groups acknowledged the value of nutritional management in cancer treatment and the need for continuing medical education. Awareness of the contribution that the dietitian-nutritionist can make to the health care team should be encouraged. Most of the respondents (51%) considered nutritionists as the predominant source of nutrition information [8].

Primary care physicians in Saudi Arabia described their knowledge of nutrition to be poor while some reported to be moderate. About 2/3rd of them scored between 40-69% in questions about nutrition [9].Norman (2013) reported similar results with physicians in Canada. They responded on an average correctly to nutrition related questions 63.1% [10]. These studies reveal doctors are not really well versed with nutrition and hence dietitian plays an important role in educating cancer patients about correct dietary habits to fight with cancer and its related symptoms.

Conclusion

Patients who consulted dietitian more than once had better perception of dietitian and

nutrition compared to the new patients consulting for the first time. Education makes people more aware of importance of good nutrition and dieticians/nutritionists are better equipped to handle nutrition in patient care compared to doctors.

References:

1. Anita Patel, Yashwant Pathak, Jayvadan Patel, Vijaykumar Sutariya, Role of nutritional factors in pathogenesis of cancer, Food Quality and Safety, Volume 2, Issue 1, March 2018, Pages 2736, https://doi.org/10.1093/fqsafe/fyx033)

2. Sonja ME van Dillen, Gerrit J Hiddink, Maria A Koelen, Cees de Graaf, Cees MJ van Woerkum, Understanding nutrition communication between health professionals and consumers: development of a model for nutrition awareness based on qualitative consumer research, The American Journal of Clinical Nutrition, Volume 77, Issue 4, April 2003, Pages 1065S1072S,

3. Thomas L Fuller, Kathryn Backett-Milburn, Jane L Hopton, Healthy eating: the views of general practitioners and patients in Scotland, The American Journal of Clinical Nutrition, Volume 77, Issue 4, April 2003, Pages 1043S1047S, https://doi.org/10.1093/ajcn/77.4.1043S

4. James-Martin, G., Koczwara, B., Smith, E. L., & Miller, M. D. (2013). Information needs of cancer patients and survivors regarding diet, exercise and weight management: a qualitative study. European Journal of Cancer Care, 23(3), 340348. doi:10.1111/ecc.12159.

5. Bali G et al., 2018. Knowledge and practices on healthy eating among breast cancer patients on chemotherapy, Abstracts / Clinical Nutrition ESPEN 24 (2018) 173e190 181

6. Crocker, J. (2008). A1. The public perception of the role of dieticians compared with physiotherapists and radiographers. *Journal of Human Nutrition and Dietetics*, *13*(5), 363-371.

7. Lee S, Wyld D, Brown T, Eastgate M. (2018), Dietary patterns and attitudes in cancer patients. Journal of Clinical Oncology, DOI: 10.1200/JCO.2018.36.15_suppl.e22055

8. Cooper-Stephenson, Cynthia. Theologides, Athanasios. (2013). Nutrition in cancer: Physicians' knowledge, opinions, and educational needs, Journal - American Dietetic Association, 78(5), 472-46

9. Khalid S. Al-Numair. (2004). Nutrition Knowledge of Primary Care Physicians in Saudi Arabia. Pakistan Journal of Nutrition, 3 (6): 344-347

10. Norman J. Temple (1999) Survey of Nutrition Knowledge of Canadian Physicians, Journal of the American College of Nutrition, 18:1, 26-29, DOI: 10.1080/07315724.1999.10718823