

People perception about Nutrition and Dietetics in various hospitals of Chandigarh

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ABSTRACT

There was increasing awareness of the importance of nutrition among health professionals and the public. This has led to a growing demand for dietetic and nutritional advice. However, dietitians may not be widely recognized by the public as experts in this field. Little research has been done on the public perception about nutrition and dietetics in various hospitals of Chandigarh. To assess public perception about nutrition and dietetics in various hospitals of Chandigarh by means of a questionnaire. It was decided to compare the food service quality of famous Fortis Hospital with the other hospitals of Chandigarh, a well known healthcare organization which is probably on the same level of people perception about nutrition and dietetics in these hospitals of Chandigarh (Fortis Hospital, Max Hospital and IVY Hospital). The questionnaire was also used to determine who the public would go to first for nutrition information. The purposes of this study were to assess hospital foodservice quality and to identify causes of quality problems and improvement strategies. Based on the review of literature, hospital foodservice quality was defined. The study was conducted to assess the nutritional standards specified on diet manuals and nutrients of planned menus, served meals, and consumed meals for regular, diabetic, and low-sodium diets were assessed in three general hospitals. Quality problems were found in all three hospitals since patients consumed less than their nutritional requirements. The Hospital Foodservice Quality Model was useful tool for identifying causes of the foodservice quality problems in hospitals.

Keywords: Hospital, foodservice, Nutrition, Dietetics, Malnutrition

Introduction

nutritional care is an important part of medical care of patients and plays a key role in improvement, prevention and control of malnutrition in hospitals. Nutrition is one of the major part of life that plays the significant role in human body. Life is not possible without food, without nutrients or food. Nutrition is the science that interprets the combination of nutrients and other substances in food in order to maintain the body, to enhance the growth of the body, reproduction and most importantly also enhance not only the human body, but also the animal and plant health and also protects our body from any kind of disease to an organism. (It includes intake of food, absorption of food, assimilation of food, biosynthesis, catabolism and most importantly excretion). It also helps in promoting your overall health, your intake of food will affect your health each day-Depending on your feeling-Today, Tomorrow and in future. The choice of your food and timings of Good nutrition is an important part of healthy lifestyle. Nutrition is also important for the proper functioning of the body and keeping yourself healthy. Nutrition is also important for maintaining your weight. It Reduces risk of chronic diseases. Good nutrition is an significant part that plays the

major role in leading a healthy life/healthy lifestyle. A good combination of your diet and your physical activities like balanced diet along with morning exercises, yoga, gyming etc. that will help you to reach and maintain a healthy weight, also helps in reducing the risk of chronic diseases (like cardiac diseases, kidney problems which is

very much prominent in today's time, cancer which is increasing day by day, skin problems which is occurring due to radiations coming out of sun.etc) So, protection is better than cure and these skin problems can be cure by balanced diet and good/nourished food.

Like, in today's time women are very much conscious about their beauty, skin and health so balanced, nourished and adequate nutrition is necessary in order to help them

to maintain their beauty and protect them from skin.but Good nutrition along with good exercises and daily workout plays the significant role not only in bringing up lifestyle but increasing your health in positive way.

Clinical Nutrition

Clinical nutrition is nutrition of patients in health care. Clinical in this sense refers to the management of patients,

including not only outpatients at clinics, but also (and mainly) inpatients in hospitals.

Child Care Nutrition-

Top 7 Foods Your Kids Should Be Eating Every Day

1. Egg
2. Blueberries
3. Nuts
4. Fish
5. All The Greens!

Food And Nutritional Care In Hospitals-

Before we discuss about the food and nutritional care in hospitals we will discuss about the hospital food i.e. what kind of food is going to be provide in hospitals, the way of providing food to the patients in hospital in different categories like clinical nutrition and child care nutrition.

Dietetics At Max Hospital, Fortis Hospital And Ivy Hospital, Chandigarh

"This article is about the human diet. In nutrition diet is the sum of food consumed by a person or other organism. The word diet often implies the use of specific intake of nutrition for health or weight management reasons (with the two often being related). Although humans are omnivores, each culture and each person holds some food.

- 1) The customary amount and kind of food and drink taken by a person from day to day.
- 2) More narrowly, a regimen of food intake planned to meet specific requirements of the individual, including or excluding certain foods.

Dieticians

Dieticians are qualified to translate the science of nutrition in the health and disease into practical information about food.

Work as member of multidisciplinary team to look after patients who are under the care of consultants.

Visit IPD patients to check on their health and ensure their diet meets their requirements.

Act as advisors to the doctors on the nutritional standards and specifications for the patient food service to meet the patient's needs.

Dietetics at Max Hospital, Fortis Hospital & Ivy Hospital, Chandigarh

The department has a dietetics team consisting of 6 expert Dieticians with the head of department, MS.SONIA GANDHI in FORTIS HOSPITAL, MOHALI.

Follows rules as per JCI and NABH.

The dieticians remain active in patient's care and keep reporting the nutritional status of the patients as well as act as advisor to the physicians and medical team.

The Dieticians remain in touch with patients and visit them twice daily.

Normal Diet, soft diet, semi solid, liquid clear liquid diets and feeds are provided to the patients-all based on nature of disease-Diets provided to admitted patients are complimentary. No food from outside is allowed.

Dietetics works in co-ordination with F and B department.

Hospital Dietary Services

The dietary service is one of the important supporting service of the hospital unlike any other supporting services.

The objective of the diet services is to make provision for clean, hygienic and nutritious diet for the indoor patients as per their caloric requirements.

Materials and Methods Used

This cross-sectional study was conducted using observation method and a self-administered multiple choice questionnaire. A total of 198 samples from these three Multispeciality hospitals, including those people who are related and even visited to these Multispeciality hospitals of Chandigarh such as people who ever had admitted to the hospital (In - Patients), Attendants and out-patients (89 admitted patients (In-Patients), 81 attendants, and 28 out - patients) who use to visit these hospitals and have the experience of these hospitals were selected using simple random sampling. The knowledge and perception about nutrition and dietetics of these superspeciality hospitals was determined using the same questionnaire. The questionnaire was consisted of 15 questions which are needed to assess the people perception about nutrition and dietetics in the hospitals of Chandigarh. The questionnaire were given to these people who are related to the hospital or who have the experience of such hospitals in terms of nutrition and dietetics. The questionnaires were collected at the end of the day.

The calculation of nutrition knowledge and awareness scores were calculated giving one point for each correct answer. The subjects were given the option of suitable answering with Max Hospital, Fortis Hospital and IVY Hospital and it also includes "Yes" or "No". In this study, three aspects of knowledge including correct knowledge, perceived knowledge and accuracy of knowledge was determined. The correct knowledge is the easiest way to determine the knowledge level of the participants or respondents. The Perceived knowledge was calculated as the number of answers related to Max Hospital, Fortis Hospital and IVY Hospital which were divided by total number of questions. Conversely if the subject marked any



of the other answers he/she must have believed that knowledge. Choosing an answer or having an idea about a question is no guarantee for the knowledge of the person. After gathering all the questionnaires and coding them, collected data was entered to the computer using MS access.

Research Objective / Objective of the Study

- To Study the people perception about nutrition, food in different hospitals of Chandigarh.
- To make a comparative analysis of food services provided by different hospitals in Chandigarh under study.
- The main objective of such study is that it provides a comparative analysis of diet provision in selected hospitals of Chandigarh.
- Data collection and analysis of how rate of diet is fixed, how dietary services is being managed in hospitals, quality of food, conditions of kitchens of these hospitals for various types of patients like general, TB and others.

Limitations of the Study

The following were limitations of the study:-In this research project a sample survey was conducted. A sample of 198 respondents was selected. So, such sample size cannot be said to be the true representative of the universe. The time period of the study was very limited. The data provided was not upto the mark due to which some problems. The answers provided by the respondents suffered from biasness.

Objective of the study

- To study the people perception about the nutrition and dietetics in various hospitals of Chandigarh.
- To make a comparative analysis of food services provided by different hospitals in Chandigarh.
- The main objective of such study is that it provides a comparative analysis of diet provision in selected hospitals of Chandigarh.
- Data collection and analysis of how rate of diet is fixed, how dietary services is being managed in hospitals, quality of food, conditions of kitchens of these hospitals for various types of patients and people in different hospitals of Chandigarh
- To provide positive health and hygiene practices.
- To decrease the inconveniences occur to patient because of late diets.
- To improve the coordination between the team responsible for diet planning and dietary service management.

Analysis & Interpretation

Statistical analysis was performed using SPSS. Ver.16. Result were expressed as number and percentage, median, mean and standard deviation depending on the variable type. Kruskal- Wallis test and Mann- Whitney's test were performed to determine the significant difference about the nutritional care service and dietetics service to the people between these three hospitals of the Chandigarh. Statistical analysis was performed using statistic software SPSS 16.0 (SPSS Ltd westlands centre, Quart Bay Hong Kong). Descriptive analysis was performed and the values measured were denoted as median values. Non-Parametric tests were conducted and for each test material Krushal-Wallis test was followed to determine the significant comparison of nutritional care services and dietetics in these hospitals of Chandigarh. Mann-Whitney's test was performed to study pair-wise comparison between the groups.

Results

Table 1 shows the median and mean knowledge scores of admitted patients (IPD), Attendants (Relatives or people or are concerned with In-patients of the hospital), Out-Patients who use to come for regular checkup or who have the experience of food services of these hospitals during OPD hours (OPD). The median and mean correct knowledge score for Admitted patients, Attendants and Out- patients were (77,74%), (85,84%) and (75,73%), respectively. In all of the 3 groups median scores were higher than mean scores. Attendants, means those people who are in relation with the patients admitted to the hospital or a person who is concerned with the patients of these hospital responded with the highest scores in Comparison of the minimum and maximum scores in each group showed that admitted patients' gained the minimum score (14%). It should be mentioned that none of the participants answered all the questions correctly and 100% score was not reported. Based on the results of the current study, the mean perceived knowledge score for all three groups were 94% and median scores were 98 to 99%. Variations in perceived knowledge scores were highest among the admitted patients of these hospitals (range: 25-100%). Therefore, all the participants in the study had a certain attitude towards 94-96% of the questions and believed that they had the knowledge. However, reported accuracy of knowledge was not satisfactory. For admitted patients mean accuracy was 79%. The score were slightly lower for Out-patients(OPD) 76%. Among the attendants the mean accuracy level was the highest (87%) and the minimum score reported was significantly greater than the other two groups. Accuracy the groups. Attendants and Out-Patients(OPD) do not have correct nutrition knowledge on one quarter of the questions. score of 100% was not reported in any of the group.

Table 1: Distribution of scores (%) of the 3 aspects of knowledge of Admitted patients(IPD), Attendants(Relatives) and Out-patients(OPD) in the studied hospitals.

<u>Group</u>	<u>Index</u>	<u>Correct knowledge</u>	<u>Perceived knowledge</u>	<u>Accuracy of knowledge</u>
GROUP-1 Admitted Patients(IPD) (MAX HOSPITL,FORTIS HOSPITAL AND IVY HOSPITAL)	Median	77	99	80
	Mean	74	94	79
	Standard deviation	11.7	12.7	6.6
	Minimum	14	25	57
	Maximum	88	100	95
GROUP-2 Attendants(Relatives or people concerned with In-patients of these Hospitals) (MAX HOSPITAL,FORTIS HOSPITAL AND IVY HOSPITAL)	Median	85	98	88
	Mean	84	95	87
	Standard deviation	7.9	4.5	5.8
	Minimum	61	84	71
	Maximum	94	100	94
Group-3 OutPatients who use to come for regular checkup or who have the experience of food services of these hospitals during OPD hours.(OPD) (MAX HOSPITAL,FORTIS HOSPITAL AND IVY HOSPITAL)	Median	75	98	75
	Mean	73	96	76
	Standard Deviation	12.0	6.0	10.7
	Minimum	34	64	47
	Maximum	98	100	98

TABLE-1

<u>Group</u>	<u>Index</u>	<u>Correct knowledge</u>	<u>Perceived knowledge</u>	<u>Accuracy of knowledge</u>
GROUP-1 Admitted Patients(IPD) (MAX HOSPITL, FORTIS HOSPITAL AND IVY HOSPITAL)	Median	77	99	80
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	Standard deviation	11.7	12.7	6.6
	Minimum	14	25	57
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Table-1 Comparison of Knowledge by Group- 1 People (Admitted Patients)

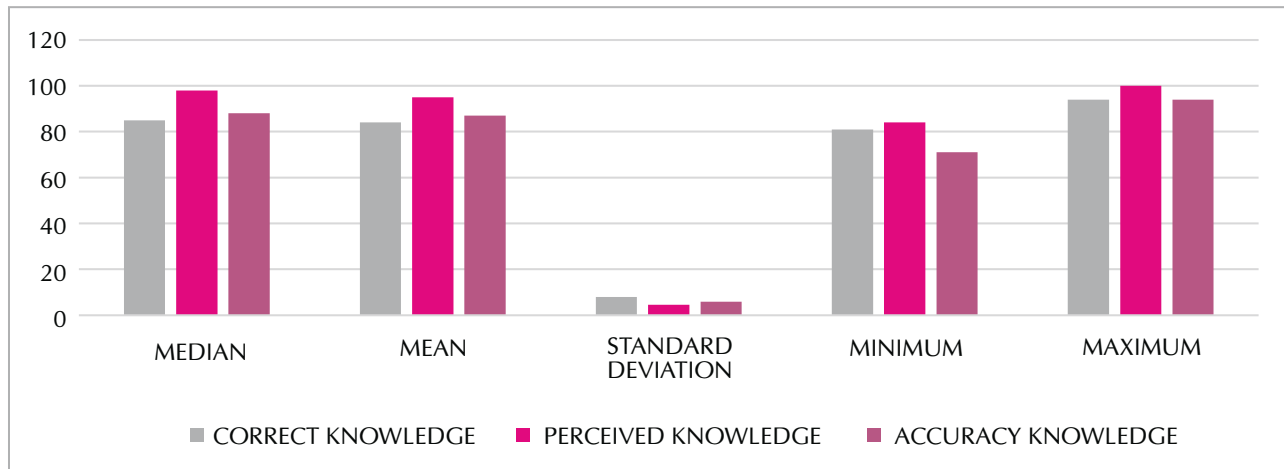


Figure-1 Comparison of Knowledge by Group- 1 People (Admitted Patients).

Table-2. This Table is showing the comparison of Nutrition Level Knowledge of Group-2 in these Hospitals.

Group	Index	Correct knowledge	Perceived knowledge	Accuracy of knowledge
GROUP-2 Attendants(Relatives or people concerned with In - patients of these Hospitals) (MAX HOSPITAL,FORTIS HOSPITAL AND IVY HOSPITAL)	Median	85	98	88
	Mean	84	95	87
	Standard deviation	7.9	4.5	5.8
	Minimum	61	84	71
	Maximum	94	100	94

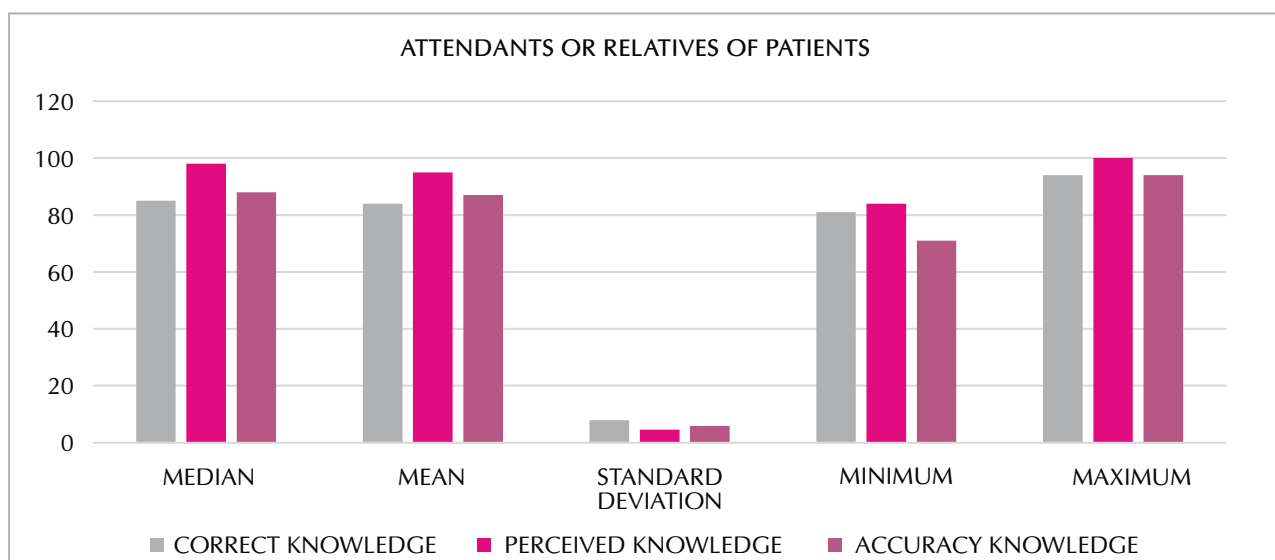


Figure-2. This figure is showing the comparison of Nutrition Level Knowledge of Group-2 in these Hospitals.

Table-3. This table is showing the comparison of Nutrition Level Knowledge of Group-3 in these Hospitals.

<u>Group</u>	<u>Index</u>	<u>Correct knowledge</u>	<u>Perceived knowledge</u>	<u>Accuracy of knowledge</u>
Group-3 Out-Patients who use to come for regular checkup or who have the experience of food services of these hospitals during OPD hours.(OPD) (MAX HOSPITAL,FORTIS HOSPITAL AND IVY HOSPITAL)	Median	75	98	75
	Mean	73	96	76
	Standard Deviation	12.0	6.0	10.7
	Minimum	34	64	47
	Maximum	98	100	98

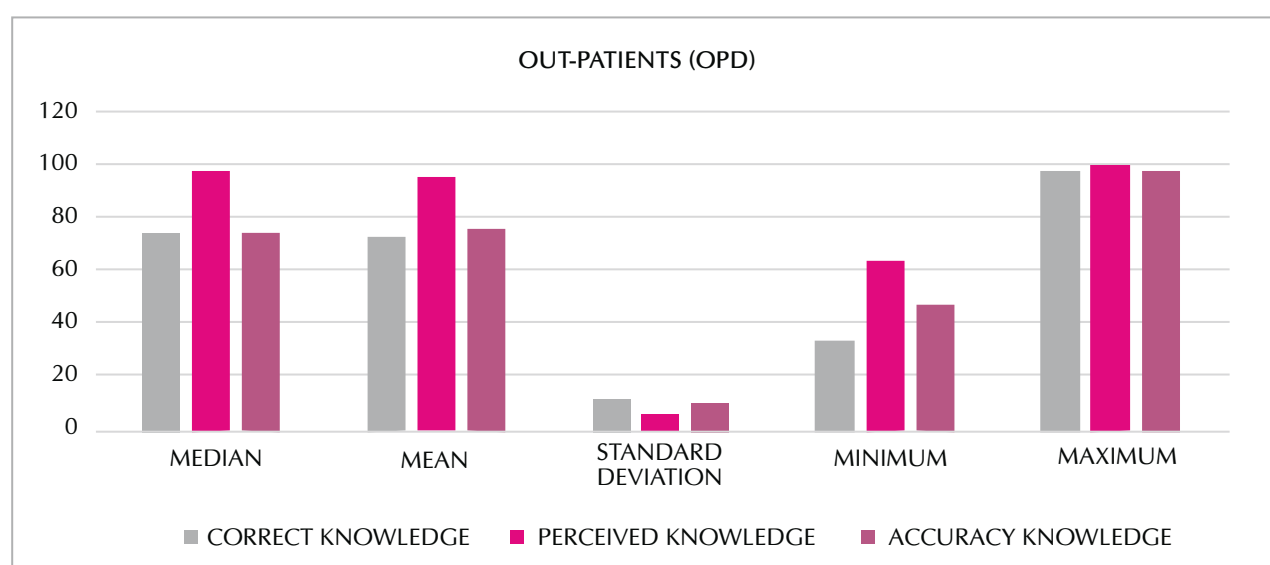


Figure-3. This Figure is showing the comparison of Nutrition Level Knowledge of Group-3 in these Hospitals

Conclusion

Admitted patients (IPD), Attendants or relatives of patients, Out-Patients (OPD) are the persons responsible for providing their views and feedback about the quality of nutrition care is providing in these hospitals. They give nutrition requests and receive nutrition advice by nutritionists. Our findings indicated that the nutritional knowledge levels of admitted patients (IPD), attendants or relatives & out-patients (OPD), especially in the field of clinical nutrition, is not satisfactory. Increased nutrition knowledge seems to improve nutrition practice. To improve nutritional care in hospitals effective nutrition training and continuing education for all staff involved in nutritional care of patients has to be addressed as a priority.

References

Mason P. Under nutrition in hospital. *Hospital Pharmacist*. 2006;13:353-58.

SPSS 16.0. 2008. SPSS.

Dugdale AE, Chandler D, Baghurst K. Knowledge and belief in nutrition. *American Journal of Clinical Nutrition*. 1979;

Allard JP, Keller H, Jeejeebhoy KN, Laporte M, Duerksen D, Gramlich L, Payette H, Bernier P, Vesnaver E, Davidson B, Terterina A, Lou W. Malnutrition at hospital admission: contributors and impact on length of stay. A prospective cohort study from the Canadian malnutrition task Force. *J Parenter Enter Nutr*. 2016;40(4):487-497. doi: 10.1177/0148607114567902. [PubMed] [Cross Ref]

Agarwal E, Ferguson M, Banks M, Batterham M, Bauer J, Capra S, Isenring E. Malnutrition and poor food intake are associated with prolonged hospital stay, frequent readmissions, and greater in-hospital mortality: results from the nutrition care day survey 2010. *Clin Nutr*. 2013;32(5):737-745. doi: 10.1016/j.clnu.2012.11.021. [PubMed] [Cross Ref]



Barker LA, Gout BS, Crowe TC. Hospital malnutrition: prevalence, identification and impact on patients and the healthcare system. *Int J Environ Res Public Health*. 2011;8:514–527. doi: 10.3390/ijerph8020514. [PMC free article] [PubMed] [Cross Ref]

Corish CA, Kennedy NP. Protein-energy undernutrition in hospital in-patients. *Br J Nutr*. 2000;83:575–591. doi: 10.1017/S000711450000074X. [PubMed] [Cross Ref]