

# Assessment of acceptability and satisfaction of patients for Government hospital diets

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■ ABSTRACT: Nutrition plays a major role in protecting health and slowing disease progression. Hospital diets play an indispensable role in patient recovery and well-being. But providing appropriate nutrition in the hospital meal is a particularly challenging task because of the diverse dietary needs of the patients. The proposed study was done with the objective to assess the satisfaction of the patients towards the diet and overall acceptability of the hospital diet being served to the patients. The study was conducted in one government hospital in Chandigarh city. Sixty self-structured questionnaires based on four types of diets viz., regular, diabetic, low protein-low sodium and high protein diets were filled with the cooperation of patients after seeking due permission from hospital authorities. Questionnaires were tabulated and analyzed using SPSS12. The sensory evaluation was done by using 5-point hedonic scale. From the data, it was deduced that 56.67 per cent of the patients were satisfied from the quantity given whereas only few patients (26.67%) were satisfied with the desired consistency of diets. After analyzing sensory aspects of the diets, it was found that the mean of freshness, taste, appearance and aroma were  $2.93 \pm 0.841, 2.55 \pm 0.946, 2.68 \pm 1.016$  and  $2.48 \pm 0.873$ , respectively. The mean of overall acceptability of the served diets was  $2.66 \pm 0.932$ . The findings of the study showed that almost all the patients were satisfied with the type of diets they were getting, amount of the feed and time taken for the delivery of the meal. The major issues for the dissatisfaction among patients were monotonous, repetitive and insipid food which require serious and determined attempts of dietetics and food service department.

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ealthy food is almost as important to healing as competent medical care, also healthy eating habits play a critical role in preventing chronic diseases such as heart disease and diabetes etc. Good dietary service based on the application of optimum nutritional requirements contributes significantly to the care and recovery of patients. Dietetics and Food Service Department is an integral part of the hospital supportive services which provides normal and therapeutic diets to the patients. Efficient delivery of proper, quality diet to each type of patient is the primary work of dietetics department resulting in great satisfaction of patients and their caretakers. Foodservice quality is significantly correlated with overall patient satisfaction (Sheehan-Smith,

2006). It is well recognized that food and other aspects of foodservice delivery are important elements of the patients' overall perception of the hospital experience. The greater patients' expectations are met, the more satisfied they seem to be (Lau and Gregoire, 1998; Fottler *et al.*, 2000). Therefore, provision of foodservices that not only meet but exceed the expectations of the patient should be considered essential for quality hospital foodservices (Fallon *et al.*, 2008).

A thorough knowledge of the varied dimensions of hospital food service satisfaction is needed to understand patient expectations and promote the health and nutritional status of patients (Wright *et al.*, 2006). Dubé *et al.* (1994) found that food quality was the best predictor of patient

satisfaction, followed by customization and attitude of the staff that deliver menus. The perception of food quality can depend on several different attributes, including meal taste, variety, flavour, texture and the perception of choosing a healthy meal (Wright et al., 2006). Disease status, poor appetite, gastro-intestinal intolerance, fatigue, early satiety and taste alterations often affect intake in a hospital setting (McLymont et al., 2003; Williams et al., 1998). Clinical dietitians often advise malnourished, hospitalized patients to consume 'small, frequent meals' or snacks every few hours to encourage oral intake and meet nutritional needs. Promoting optimal nutrition status can lead to faster recovery times and reduced hospital costs (Sullivan, et al., 1998; Giner et al., 1996; Johansen et al., 2004). European research on food and nutritional care in hospital has recognized that it is necessary to define responsibilities, promote staff qualification, enable patients' participation in nutritional decisions and integrate the health care team into nutritional care (Ovesen et al., 2001).

# **Objective:**

The proposed study was done with the objective to adjudge the satisfaction of the patients towards the diet and overall acceptability of the hospital diet being served to the patients in government hospital.

### **■ RESEARCH METHODS**

The study was conducted in the month of June and July 2013 in a government hospital of Chandigarh city. The name of the hospital is intended to be kept secret as per the directives maintained by the hospital authority. The data were collected after seeking the written permission from the hospital administration. Sixty questionnaires were filled with the cooperation and keen interest of patients. Self-structured pre-tested questionnaire, semi-structured interview with the patients as well as with their attendants and observation method were used in the study to draw the relevant conclusions. General information, demographic profile and eating habits of patients, satisfaction with menus mainly: food variety, taste, texture, temperature, freshness, appearance, aroma, portion size, service timeliness and style of service, food preferences and presentation by the food service department were assessed through the questionnaire. The subjects were divided on the basis of type of diet given to them, namely, regular, diabetic, high-protein and low proteinlow sodium diets. The regular diet is modified from the balanced diet recommended by ICMR. It provides all the nutrients in slightly higher amounts than recommended for a healthy male sedentary worker. Patients suffering from pyrexia and dizziness were given and treated under group of regular diets. High protein diet was served to the patients having malnutrition, seizure attack or trauma. Diabetic diets were provided to the diabetic patients excluding Type-I diabetic and gestational diabetic patients. Diabetic diet is as close to the regular diet as possible but slightly low in carbohydrates, but adequate in other food principles. Similarly, low protein-low sodium diets were given to acute and chronic renal failure and nephritis patients except the patients undergoing treatment for kidney transplant and dialysis. For sensory evaluation, a 5-point hedonic scale was allowed to subjects to rate quality from very good to very poor. Score 5 indicated extremely liked, 4 - liked slightly, 3- neither liked nor disliked whereas 2 and 1 indicated disliked slightly and extremely disliked, respectively.

# ■ RESEARCH FINDINGS AND DISCUSSION

Table 1 indicates that out of total selected subjects, 8.33 per cent patients suffering from pyrexia were getting regular diet. Diabetic and sodium-restricted diets were being served to 30 and 16.67 per cent of the patients, respectively. Around 27 patients having malnutrition, epileptic fit and fractures were given high protein diet.

Table 1: Type of diet served to the patients of government hospital (n=60)			
Type of diet	No. of patients	Percentage	
Regular	5	8.33	
Diabetic	18	30	
Low protein -low sodium	10	16.67	
High protein	27	45	

Further, the data from Table 2 revealed that only 56.67 per cent patients were satisfied with the quantity of the food given and only 26.67 per cent patients were satisfied with the consistency of the served diet. It was elicited from the data that only 65 per cent subjects were satisfied with the timing of delivery of feeds. During discussion with the patients, most of them were not comfortable with the serving time of breakfast which was 7 to 8 a.m. They also added that they do not feel hungry so early. According to Bulzaka (2008), mostly the programmes of hospital room service systems begin serving around 6:30-7 am and go into the early evening until 6:30-7 pm. However, some programmes run 24 hours a day, seven days a

Table 2 : Satisfaction level of patients towards diets of government				
hospital			(n=60)	
Satisfaction parameters	Responses	No. of patients	Percentage (%)	
Amount	Yes	34	56.67	
	No	26	43.33	
Consistency	Yes	16	26.67	
1	No	44	73.33	
Time of service	Yes	39	65.00	
	No	21	35.00	
Variety	Yes	37	61.67	
	No	23	38.33	

week. Hours of operation should be decided based on patient population; most important is that the majority of patients have what they want to eat and when they want to eat it (Norton, 2008). Moreover, the results showed that only 61.67 per cent patients were satisfied with the variety of diets and they informed the investigators that they were not satisfied with the monotonous feed of porridge, almost daily in breakfast.

Capra et al. (2005) stated that the food does not have to be of a high quality for the patient to be satisfied, as satisfaction is a comparison between an expectation and a reality or experience. Patients may expect the food to be very poor, and as a result will be inclined to rate 'ordinary' food well. It has also been suggested that patients tend to overinflate their satisfaction depending on any number of methodological influences (Sitzia, 1999).

Each hospital's food service institution is unique and interventions must be customized to the specific patient population's needs and perceptions (Wright et al., 2006). The data pertaining to sensory evaluation of the diets (Table 3) indicate that the mean scores of freshness, taste, appearance and aroma of government hospitals were 2.93  $\pm$  0.841, 2.55  $\pm$  $0.946, 2.68 \pm 1.016$  and  $2.48 \pm 0.873$ , respectively. The overall acceptability of patients towards the served diets was 2.66  $\pm$ 0.932 in government hospital patients.

Table 3: Sensory evaluation of served diets in government hospital		
Parameters	Mean $\pm$ S.D.	
Freshness	$2.93 \pm 0.841$	
Taste	$2.55 \pm 0.946$	
Appearance	$2.68\pm1.016$	
Aroma	$2.48\ \pm0.873$	
Overall acceptability	$2.66 \pm 0.932$	

# **Conclusion:**

The findings of the study showed that almost all the patients were by and large satisfied with the type of diets they were getting, amount of the feed and time taken for the delivery of the meal. The major issues for the dissatisfaction among patients were monotonous, repetitive and insipid food. Also early breakfast timings were not appreciated by most of the patients which can easily be amended.

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