

Efforts to Improve Dietary Services of Private Ward at Tertiary Care Hospital

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Introduction

Body nutrition is a major factor in patient care system. Therefore dietetics plays a vital role in delivering the nutritional support. Diet is a prescribed course of food which keeps an individual free from complications and in a steady state of well being. Maintenance of nutrition is essential for both prevention of disease as well as its management. A good dietetic service thus contributes significantly to the treatment and recovery of patients.

The life cannot be sustained without adequate nourishment. Man needs adequate food for growth, development and to lead active and healthy life. Importance of good diet for hospital patients, and the detrimental effect that poor diet could have on their recovery is well established (1). There is a great wastage of food portions since many of the meals prepared for patients are not eaten (2). This may be due to many reasons like different meal timings, unfamiliar hospital environment, bland diet, taste of food, due to cultural difference, repeated menus, fasting due to tests, nausea, vomiting, constipation, poor quality of food and many more. As a consequence one can see left out food in trays in hospitals. Food wastage is a problem in many hospitals and the problem may be due to number of reasons as mentioned above (3).

Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow is a superspecialty teaching hospital. There are six superspecialties viz. Endocrinology, Immunology, Cardiology, Gastroenterology, Neurology and Nephrology. The patients admitted in these wards require therapeutic diets in addition to normal diet, viz. low protein, high protein, low fat, high fat, low calories, high calories, low calcium, high calcium, moderate fat, modified fat, high fiber, low fiber, low salt, low potassium, high potassium etc., in different consistency like nasogastric tube feed, clear liquid, soft, semisolid and normal consistency. Besides this some patients require very specialised foods viz. elemental feed, gut feed jejunostomy feed, hepatic coma feed, high and low protein feed and high and low fiber supplementation. The dietetic services are provided to all admitted patients. There are four types of normal diet with different consistency viz., solid, semi-solid and liquid diets with five meals a day. Some patients are on specialised feeds and nutritional supplementation which are vital characteristics of dietary services.

Eighty percent of the private ward patients are always on therapeutic/modified individual special diets/feeds which constantly involve regular dietary services all the

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seven days of the week and all the year. For this separate and scientific food production, food/feed services are required in scientific way. Hence these services are not a mass feeding programme nor a community feeding programme. In this institute dietary services are scientific vital necessity and part of patients treatment and satisfaction. This has direct impact on the institute reputation. Therefore, it requires continuous evaluation for its improvement and to develop nutritional support as a integral part of treatment.

In view of above it was thought to have the survey of food and other components in the diet of existing dietetics services of private ward patients with following objectives.

1. To identify the dietetic component of the private wards.
2. To find out the acceptability of food by the patient in relation to quality of food, serving time, distribution schedule and some other factors.
3. Based on above, to recommend for further improvement in dietetic services for private ward patients.

METHODOLOGY

The present survey was conducted for the improvement of existing dietary services of private wards at Sanjay Gandhi Institute of Medical Sciences, Lucknow by following method :

Selection of the respondent

Two hundred patients of different private wards viz. endocrinology, cardiology, nephrology, urology, gastroenterology, neurology were randomly selected for the study.

Method of enquiry and collection of data

Each patient/respondent was personally interviewed and necessary information like quality and quantity of food, timing of serving, food hygiene and measures of improvement of existing dietary services were collected on a carefully framed questionnaire.

OBSERVATIONS

A – Food Services

Under existing system, there are six private rooms with one pantry for food service in each ward. All precooking and cooking processes takes place in main kitchen. Cooked food is carried by food trolleys by pantry man to each pantry. In pantry the food is warmed and individually served in trays which is collected by serviceman itself. Crockery and cutlery washing takes place in pantry after each meal.

The food is totally vegetarian, only egg can be given to the patients if advised by the dietician for the nutritional supplementations.

The timing for the meal services are as under :

- | | |
|---------------------------------------------------|----------------------|
| 1. Morning Tea | – 6-30 – 7-30 A.M. |
| 2. Breakfast | – 8-00 – 9-00 A.M. |
| 3. Mid morning or
nutritional supplementations | – 10-00 – 11-00 A.M. |
| 4. Lunch | – 12-00 – 1-00 P.M. |
| 5. Evening Tea | – 4-00 – 5-00 P.M. |
| 6. Dinner | – 7-00 – 8-00 P.M. |

The menu – There are four types of diets for private patients named as :

P-I – Full Diet, **P-II** – Semisolid diet, **P-III** – Soft diet, **P-IV** – Liquid diet.

**Schedule of P-I Full Diet**

Meal	Items	Amount
Morning Tea	Tea	1 Cup
Breakfast	Milk	¼ Liter
	Toast	4
	Jam	1 Tea spoon
	Butter	1 Tea spoon
	Cornflakes	20 gms.
	Fruit	one (any seasonal)
Lunch	Soup	1 Cup
	Chappati	4 / Ad lib
	Rice	1 Plate / Ad lib
	Dal	1 Bowl / Ad lib
	Vegetable (green)	1 Bowl / Ad lib
	Dahi	1 Bowl
	Paneer Vegetable	1 Bowl
Evening Tea	Tea	1 Cup
	Biscuits	4
Dinner	Soup	1 Cup
	Chappati	4 / Ad lib
	Rice	1 Plate / Ad lib
	Dal	1 Bowl / Ad lib
	Vegetable	1 Bowl / Ad lib
	Dahi	1 Bowl
	Desert	1 Bowl

Description of P-II Diet Semi-Solid Diet

Meals	Items	Amount
Morning	Tea	1 Cup
Breakfast	Milk	¼ Liter
	Toast	4
	Jam	1 Tea spoon
	Butter	1 Tea spoon
	Cornflakes	20 gms.
	Fruit	one (any)
Lunch	Soup	1 Cup
	Khichri	1 Bowl
	Vegetable stew	1 Bowl
	Paneer Vegetable	1 Bowl
	Dahi	1 Bowl
Evening Tea	Tea	1 Cup
	Biscuits	4
Dinner	Soup	1 Cup
	Khichri	1 Bowl/Ad lib
	Vegetable stew	1 Bowl
	Dahi	1 Bowl
	Desert	1 Bowl

Description of P-III Diet Semi-Solid Diet

Meals	Items	Amount
Morning	Tea	1 Cup
Breakfast	Milk	¼ Liter
	Cereal gruel	1 Bowl/Ad lib
	Fruit	one
Lunch	Soup	1 Cup
	Milk	¼ Liter
	Bread	4
	Butter	2 Tea Spoons
	Cereal Gruel	1 Bowl/Ad lib
Evening Tea	Tea	1 Cup
	Biscuits	4
Dinner	Soup	1 Cup
	Milk	¼ Liter
	Bread Butter	4
	Cereal Gruel	1 Bowl/Ad lib
	Desert	1 Bowl

Description of P-IV Diet Liquid Diet

Meals	Items	Amount
Morning	Tea	1 Cup
Breakfast	Milk with Sugar	½ Liter
Lunch	Soup	1 Cup
	Milkwith Sugar	½ Liter
Evening Tea	Tea	1 Cup
	Fruit Juice	1 Glass (250 ml.)
Dinner	Soup	1 Cup
	Milk with Sugar	½ Liter

Note : ● There is a cyclic menu for a week which include different variety and preparations of green vegetables, dal dessert, paneer vegetables.

● Salads and sprouts are served only in therapeutic diet where high fiber are required.

B-

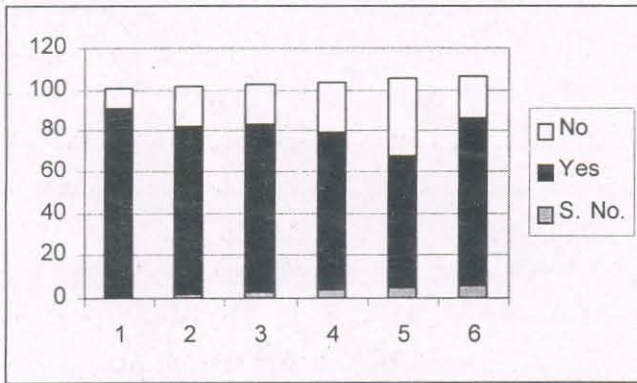
A survey was conducted for the improvement of existing dietary services of private ward at Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow. Two hundred patients of different private



wards were personally interviewed about the food quality and quantity, food hygiene, punctuality and measures of improvement of existing dietary services. The results obtained are summarized as follows :-

Table-I Shows views of the patients regarding the Morning Tea

S. No.	Question	Views	
		Yes	No
1.	Satisfied with quality	90%	10%
2.	Satisfied with time	80%	20%
3.	Satisfied with punctuality	80%	20%
4.	Want Tea for attendant also	75%	25%
5.	Want light snack with tea	62.5%	37.5%
6.	Satisfied with mode of serving	80%	20%

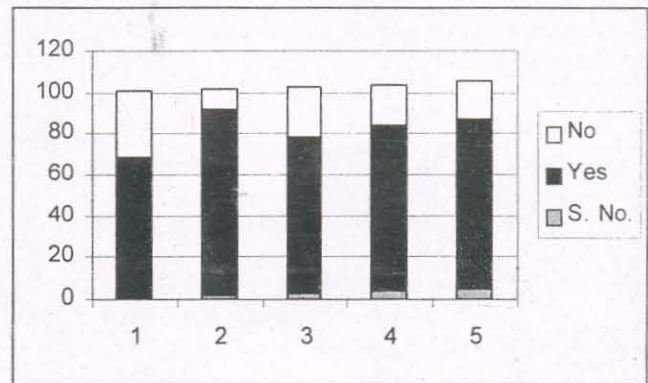


1. According to 90% of the respondents quality of Tea was good but 10% of the respondents were not satisfied and according to them high quality tea leaves should be used.
2. Eighty percent of the respondents were satisfied with the type of serving that is they want tea to be served in the tea pots and fully prepared but it should be served in hot flasks. Twenty percent want tea in the form of hot water with tea bags, milk and sugar cakes.
3. Eighty percent of the respondents were satisfied with the time of morning tea served i.e. between 6-30 A.M. to 7-00 A.M. Ten percent of them want morning tea at 6-00 A.M. and 10% want after 7-00 A.M.

4. Eighty percent of them were satisfied with the punctuality of morning tea served. Twenty percent had complaint of late serving of morning tea in comparison of given timings.
5. Seventy-five percent of the respondent want tea for their attendants also and 25% do not want for their attendants.
6. According to the respondents measures of improvement of morning tea are to improve the quality of the tea leaves and some light snacks like biscuits should be given with morning tea.

Table-II Shows views regarding Breakfast

S. No.	Question	Yes	No
1.	Satisfied with quality	67.5%	32.5%
2.	Satisfied with quantity	90%	10%
3.	Satisfied with punctuality	75%	25%
4.	Satisfied with time	80%	20%
5.	Want some light snack between breakfast and lunch	82.5%	17.5%



1. According to 67.5 % of the respondent were satisfied with the quality of the breakfast whereas 32.5% were not satisfied.
2. Ninety percent of the respondents were satisfied with the quantity of the breakfast served and told that it was sufficient but 10% were not satisfied with quantity and they want other things to be added.

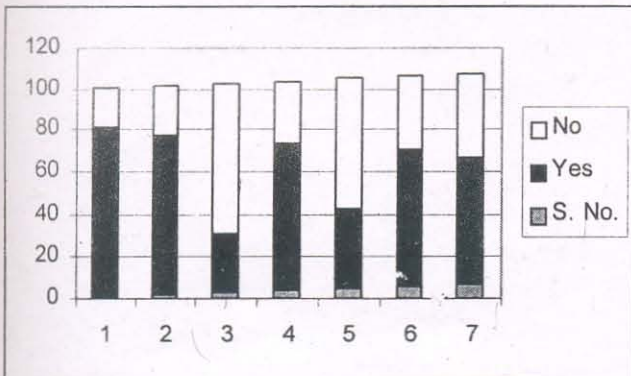


3. According to 75% of the respondents breakfast was served with punctuality but 25% were not satisfied with it.
4. Eighty percent of the respondent were satisfied with time while 20% were not satisfied and they want a little earlier.
5. Thirty percent of the respondents want breakfast to be served in hot cases, 40% want it in bone china ware, 20% want bread to be wrapped in aluminium foil and milk in hot flask and 10% were satisfied the present with the present services.
6. According to respondent measures of improvement are bread should be alternated with the gruels like dalia, rice gruels and other porridges and milk should be alternated with coffee and fruit served should have variety.

1. According to 80% of the respondent quality of lunch and dinner were satisfactory while 20% of them were not satisfied.
2. Seventy-five percent of the satisfied with quantity of lunch and dinner served while 15% had the view that it was more than sufficient while 10% had the view that it was less in amount they needed.
3. Seventy percent of the respondents were satisfied with the timing of lunch and dinner served while 30% want dinner to be served between 8-30 P.M. to 9-00 P.M.
4. Sixty-two and a half percent of the respondent were not satisfied with the punctuality of the dinner and lunch served. According to them lunch was often late while 37.5% were satisfied with the punctuality of dinner and lunch served.
5. According to 72.5% of respondents, type of serving was not satisfactory. 63.5% of the respondent want lunch or dinner to be served in hot cases and 10% want it to be served in disposable pack wrapped in alumunium foil while 27.5% were satisfied with the existing services.
6. According to 65% of the respondent the lunch and dinner served was hot but as the patient did not consume i immediately so all the food served become cold at the time of consuming while 35% complaint that cold food was serving.
7. A ccording to 60% of the respondent there should be variety of items so that they have freedom to choose and eat within the prescribed calories and other nutrient while 40% were satisfied with the existing system.
8. Respondent's sugestions for the improvement of lunch and dinner are-
 - (a) The quality of the chappati should be improved. It should be hot served.

Table-III Shows views regarding Lunch/Dinner

S. No.	Question	Yes	No
1.	Satisfied with quality	80%	20%
2.	Satisfied with quantity	75%	15%
3.	Satisfied with type of serving	27.5%	72.5% more than sufficient
4.	Satisfied with time of serving	70%	30% Less than sufficient
5.	Satisfied with punctuality	37.5%	62.5%
6.	Is the food served hot	65%	35%
7.	Want variety of items and then choose`	60%	40%

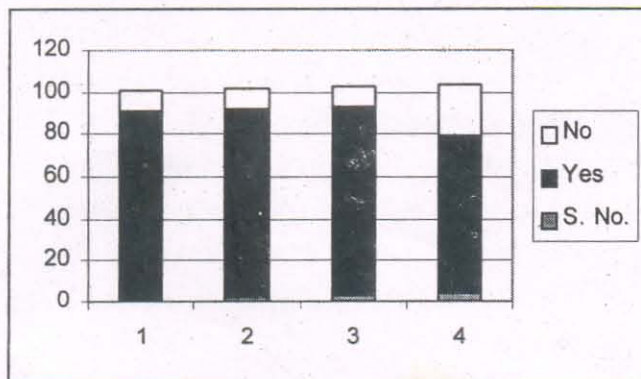




- (b) Variety of food should be served so that food according to preference can be selected by patients.
- (c) Lunch and dinner should be served with punctuality of time.
- (d) The vegetables included should have variety at each meal with alterations.
- (e) The quality of sweet dish/dessert served at dinner should be improved.
- (f) Rice should be served hot in hot cases as all the patients complaint of cold rice served.
- (g) Dal served is sometimes very watery and unpalatable so quality of dal should be improved.
- (h) Cereal and dal preparatons should be changed once or twice a week.
- (i) Salt should be added to the food itself as it increases the palatability of the food.

Table-IV Shows views regarding Evening Tea

S. No.	Question	Yes	No
1.	Satisfied with quality	90%	10%
2.	Satisfied with quantity	90%	10%
3.	Satisfied with punctuality	90%	10%
4.	Want more variety of snacks	75%	25%



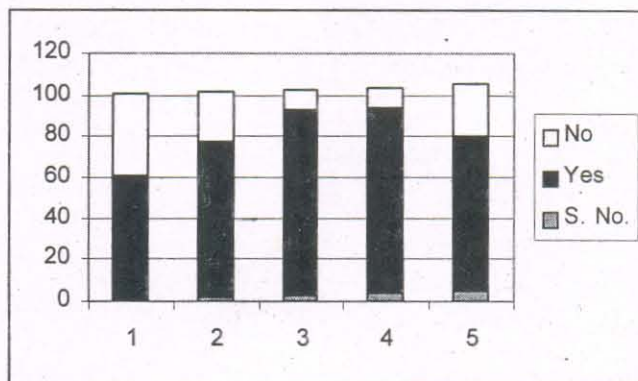
- 1. Ninety percent of the patients were satisfied with the quality and quantity of evening tea served.
- 2. Seventy-five percent of the respondents want more variety of snacks at evening tea other than

biscuits while 25% were satisfied with the serving of biscuits.

- 3. Ninety percent of the respondents were satisfied with the punctuality of time of evening tea served.
- 4. According to respondents measures of improvement of evening tea are to improve quality of tea leaves used and add variety of snacks.

Table-V Miscellaneous Questions

S. No.	Question	Yes	No
1.	Want food for attendant also	60%	40%
2.	Able to bear increase in cost of food if food quality is improved	75%	25%
3.	Satisfied with sanitation and hygiene of food served	90%	10%
4.	Satisfied with cleanliness, sanitation/hygiene and behaviour of pantry man	90%	10%
5.	Want pantry man to be in pantry for 24 hrs.	75%	25%



- 1. Sixty percent of the respondents want all the meals for their attendants also with full normal diet with variety and they are ready to bear the increase in the cost of food if the quality of the food is increased while 40% of the respondents do not want food for their attendants.
- 2. Ninety percent of the respondents were satisfied with the sanitation and hygiene of food served while 10% of them were not satisfied.

3. Ninety percent of the respondents were satisfied with hygiene, cleanliness and behaviour of pantry men while 10% of them complain of rude behaviour as they force the patient to have food immediately so that they can collect the utensils as they have to wash before they leave.
4. According to 75% of the respondents the pantry man should be there in ward for 24 hrs, as there is requirement of hot water or other things many times.

Conclusion

In a hospital food served to the patients has nutritional value but at the same time good, adequate and mannered served food is one of the most important parameters for measurement of patient's satisfaction. Though it is not possible to serve a food of taste of every body, but by and large a mix menu can serve the purpose. Usually the private ward patients are economically well to do and expect some better room services and better food. It is essential to know the weaknesses of the system for general improvement of the services. Continuous feedback from the patients by personal interaction, exit interview, complaint, suggestion helps the hospital to improve the dietary services. Based on mixed response received from the private room patients, followings are the recommendations made.

Recommendations

1. Type of serving of food should be changed. Milk and tea should be served in hot flask and lunch and dinner should be served in hot cases so that **all the food served will remain hot even if patient** do not consume it immediately or a pantry man should be there in pantry itself from 6-00 A.M. to 10-00 A.M., so that he can serve the food to patient as and when required as many patients go for **further investigations during meal hours.**
2. **Pantry should be equipped with food warmers/ OTG, regrigerators, water filters and other necessary equipments.**

3. Quality of tea leaves should be improved so that quality of morning and evening tea is improved.
4. Morning tea should be served with some light snacks like biscuits.
5. Melmoware plates and bowls should be replaced by bone china wares as they do not get stained by foods.
6. Bread served in the breakfast should be alternated with gruels like dalia or other cereal preparations.
7. The quality of the chappaties should be improved. It should be served hot. For this the chappaties can be made in pantry itself and served hot or it can be wrapped in aluminium foil after baking in main kitchen.
8. The quality of sweet dish/desert served at dinner should be improved with more enhanced taste and flavour.
9. The green vegetables served should be changed at each meal with different preparations also.
10. Cereal and dal preparations in lunch/dinner should be changed once or twice a week.
11. Salt should be added to food while cooking for patients without salt restriction as it increases the palatability of the food.
12. Evening tea should be served with different light snack each day.
13. According to 60% of the respondent attendant food should be served at each meal.
14. A Pantry man should be there in each pantry at least from 6-00 A.M. to 10-00 P.M. so as to meet the emergency dietary requirements of private patients.

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