Bayero Journal of Nursing and Health Care
bjnhc.nur@buk.edu.ng
Volume 5, Issue 1, June, 2023
Pages 1003-1013 ISSN: 2756-6501

Attitude and Satisfaction of in-Patients Toward Hospital Meals at Aminu Kano Teaching Hospital, Kano

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Abstract

Nutrients are essential to support the growth and healing of sick individuals. Most hospital provides meals for admitted patients. Sometimes these meals are not taken by these patients due to one reason or the other. Patients' satisfaction with hospital meals could play a role in the quality of care rendered. Aim: This study aimed to assess patients' attitudes and satisfaction with meals served to inpatients at Aminu Kano Teaching Hospital. Methods: A cross-sectional descriptive design was used to collect data from one hundred and thirty-one respondents utilizing a self-structured questionnaire. Data analysis was analyzed using simple descriptive statistics and results were presented in frequency and percentages. Results: The mean age of respondents was 41.5±5years, the majority are female 53.4%, married 66.4%, Hausa/Fulani 78.6% and have no formal education 33.4%. The preferred meal was home 68.7% and 62.6% were never asked about their choice of meal. The majority of the respondents 72.5% were satisfied with the hospital meal. There was no significant relationship between the level of income and satisfaction with hospital meals ($X2 = 5.934$; $p = 0.115$). Conclusion: Most patients are satisfied with the hospital meal. There was no relationship between income and satisfaction with hospital meals. It is recommended that patients be involved with the choice of meal served as this will enhance the taking of hospital meals and also help in quick healing and quality of care.

Keywords: Hospital, Patients, Meals, Satisfaction, Nutrients
https://dx.doi.org/10.4314/bjnhc.v5i1.4

Introduction

Nutrients are substances that are not synthesized in the body in sufficient amounts and therefore must be supplied by dietary intake. The required amount of essential nutrients differs by age, physiologic and pathologic state. Dietary composition affects the care since therapeutic diets like bland diets, low salt and diabetic diets to mention a few are often prescribed for patients. Many patients do not eat and drink sufficiently during hospital admission (Messina, Fenucci, Vencia, Niccolini, Quercioli, & Nante, 2012). The clinical consequences of this under-nutrition include lassitude, an increased risk of complications and prolonged convalescence. Patients often have reduced appetite, nausea, or aversion toward certain types of food, which may partly explain the inadequacy of their food and liquid intake. Poor oral intake could be due to inadequate food supply, and the problem of hospital food being too unappetizing to eat (Fischer, 1996).

In general, some hospitals serving system treats everybody as an equal and the meal trolley arrives at the ward at a certain time and at that time, everyone has to take their meal (Butterworth, 1974). Unfortunately, this does not match the patient's situation. Many patients get hungry outside meal hours and their appetite may change within a short period. According to a study conducted in the United Kingdom four out of ten patients have

food brought to them by family or friends, while about 37% leave hospital meals untouched (Fernandez, 2009). Meal service satisfaction was strongly associated with variety, temperature, meal taste, and menu staff (Wright, Connelly, & Capra, 2006). In a study carried out in a Queensland hospital in Australia, hospital patients aged 70 years or more rated their overall satisfaction significantly lower than younger patients, but no statistically significant differences in overall ratings existed for other contextual or demographic groups (Wright, Connelly & Capra, 2006). Another study however indicated that patient satisfaction with meal quality did not differ based on gender or age, but did differ based on length of stay and perceived health condition (Tranter, Gregoire, Fullam, & Lafferty, 2009). Hospital patients show some concern with meal variety, quality, taste, and appearance, and with the posting of menus. Some patients were less satisfied with areas related to their autonomy such as food choice and snack availability (Lengyel, Smith, Whiting, & Zello, 2004).

It is well known that appropriate nutrition is vital for patients' recovery and could affect morbidity and mortality. Malnutrition has a major impact on the national healthcare budget because it can lead to re-hospitalization, increased treatment costs, increased length of stay in hospitals, and other healthcare institutional problems (Freijer, Tan, Koopmanschap, Meijers, Halfens, & Nuijten, 2013). It is therefore important to accomplish adequate nutritional care during the patients' hospital stay (Bjerrum, Tewes, & Pedersen, 2012). During hospitalization, poor appetite, medical procedures, and food access issues can impair dietary intake leading to iatrogenic malnutrition (Cheung, Pizzola, & Keller, 2013).

Reduced oral intake was associated with a four times higher mortality (Holst, Mortensen, Jacobsen, & Rasmussen, 2010). Jefferies, Johnson, and Ravens, (2011) discovered that when an individual becomes ill and is subsequently admitted to a hospital, familiar meals may serve as a source of comfort and security to that individual. They added further that a patient's notion of hospital meal quality correlates with his/her contentment with both treatment and overall hospital stay. The strongest influences on patients' meal preferences are cultural background or traditions (Jefferies, Johnson & Ravens, 2011). Patients often would like to eat meals they are used to when sick and in an unfamiliar environment such as a hospital (O'Regan, 2009). Making sure patients have a choice and autonomy over what they eat will enhance the satisfaction they get from the food and the resultant energy intake (Mahoney, Zulli, & Walton, 2009).

Simple tasks such as delivering food trays to a patient in a respectful, calm and polite manner as well as taking time out to describe the meal content to the patient will positively enhance his or her satisfaction (o'Regan 2009). Poor appetite was a commonly reported reason for not consuming all the offered food and supports existing literature where a loss of appetite or "not hungry" was also reported as the main reason for reduced intake by hospital patients (Mudge, Ross, Young, Isenring, & Banks, 2011).

The provision of meals is carried out either by the hospital itself or by an external operator. The central plating system exists in some hospitals and decentralized plating in others. The number of meals produced per day is generally three. In-between meals and snacks are not readily available. Two types of diets, general or normal and therapeutic diets are available in hospitals. The therapeutic diet is a modification of the normal diet. The food is ordered by the nurse responsible for the ward based on the medical prescription on the clinical chart. Food intake in hospital depends upon the acceptability of the available meal (Sahin, Demir, Aycicek, & Cihangiroglu, 2007). Jessri, et al., (2011), agreed that factors causing dissatisfaction with hospital meals could be grouped into food-related issues, the hospital and its management, and patients'

own personal circumstances. According to Jessri, et al., (2011), patients complained about both the quality and quantity of meals. Quality issues were attributed to six main factors: freshness, poor ingredient quality, poor preparation, a lack of spices and vegetables, problems with desserts and side dishes and food arriving cold from the kitchen. Food quantity issues were due to two main factors: small portion sizes and a lack of food and drink available between mealtimes. Patients criticized portion sizes but judged them against healthy norms, and many said they did not eat all that was served to them mostly because of poor quality (Jessri, et al., 2011). Patients do feel hungry because they cannot get anything between meals, and need more at mealtimes than at home (Jessri, et al., 2011). Lack of food between meals was a significant concern. Overall, men were more dissatisfied with portions than women were, but all patients felt breakfast portions were too small considering the importance of this meal (Jessri, et al., 2011).

According to Jessri, et al., (2011), management issues were mainly experienced as limited choice. The meal varied little from day to day and patients felt that the main consideration of the food service managers was ease of preparation, rather than meal quality. Mealtimes were rigidly set and rigidly applied. About half of the patients were dissatisfied with the food service (Jessri, et al., 2011). Studies have shown that food intake in hospitals depends upon the acceptability of food and the circumstances in which it is consumed (Jessri, et al., 2011). Research has shown that the nutritional status of a patient may be compromised due to hospital admission, metabolic consequences of illness, inadequate food and fluid intake served meals not conforming to patient wish, eating in an uncomfortable position and maybe frequent interruptions during mealtimes by hospital staff (Dunne, 2013).

Aminu Kano Teaching Hospital since its inception undertaken feeding of all in-patients except those on nil per oral, one would have thought that this would remove the burden of feeding from patients' families but often times patients' relatives are seen with food flasks in and out of the hospital wards. These prompt the researchers to seek to assess the attitude of in-patients toward hospital meals At Aminu Kano Teaching Hospital.

Material and Methods.

The research was conducted in Aminu Kano Teaching Hospital, Kano. It involves all the wards in the hospital where patients are served hospital meals.

Target Population

The target population was all patients admitted at Aminu Kano Teaching Hospital during the study period.

Sample and Sampling Technique

A total sample of 131 respondents was obtained using Taro Yamane's (1967) formula for sample size estimation. Questionnaires were purposively administered to patients served with hospital meals on an availability basis.

Instrument and Methods of data collection

A structured self-administered questionnaire was used for the collection of data for the study. It consisted of a section for sociodemographic data, and three others each reflecting a research objective.

Method of Data Collection

Data collected was by a self-administered questionnaire, The consent of the respondents was sought and a detailed explanation was given about the research.

Data Analysis

The data collected from the study was analyzed using the Statistical Package for Social Sciences (SPSS) version 20, and the data collected was presented and summarized using descriptive statistics, simple frequency tables, percentages and chat.

Ethical Consideration

Ethical consideration was sought from the Ethical Review Board of the hospital (NHREC/17/03/2018). Informed consent was

obtained from each study participant after they were introduced to the purpose of the study and informed about their right to withdraw at anytime. The respondents were assured of privacy, anonymity confidentiality and the general ethical principle of beneficence and no maleficence was maintained at every stage of the study.

Results

Table 1: Socio-demographic Data of Respondents (n=131)

Age (years)	**Frequency**	**(%)**
18-23	20	15.3
24-29	32	24.4
30-35	26	19.8
36-41	16	12.2
42-47	8	6.1
48-53	11	8.4
54-59	8	6.1
60- above	10	7.6
The mean age of respondents was 41.5±5 years		
Gender		
Male	61	46.6
Female	70	53.4
Religion		
Islam	106	80.9
Christianity	25	19.1
Marital status		
Married	87	66.4
Single	21	16
Divorced	11	8.4
Widow/widower	12	9.2
Education		
Informal/Quranic	44	33.6
Primary	19	14.5
Secondary	26	19.8
Tertiary	42	32.1
Ethnic group		
Hausa?Fulani	103	78.6
Yoruba	4	3.1
Igbo	17	13
Others	7	5.3
Occupation		
Civil Servant	27	20.6
Full-Time housewife	50	38.2
Business	33	25.2
Student	10	7.6
Farmer	7	5.3
Others	4	3.1
Monthly Income (Naira)		
Less than 10,000	44	33.6
10,000 – 29, 000	38	29
30, 000 -49,000	35	26.7
50,000 and above	14	10.7
Days on Admission		
3 -5 days	47	35.9
6-8 days	31	23.7
9-11 days	10	7.6
12-14 days	14	10.7
15 days and above	29	22.1

Table 1 shows that the male age of respondents was 41.5±5 years. Majority of the respondents are female 70(53.4%),

Table 2: Attitude of In-Patients Towards Hospital Meals (n=131)

Statement	Frequency	%
Is your food preference asked before serving your meal		
Yes	49	37.4
No	82	62.6
Would you like to be asked your choice meal before serving you		
Yes	104	79.4
No	27	20.6
Do you eat hospital meals served		
Always	57	43.5
Some times	64	48.9
Never	10	7.6
Do your family bring food to the hospital for you		
Always	74	56.5
Some times	42	32.1
Never	15	11.5
Which meal do you prefer while on admission		
Hospital meal	41	31.3
Home meal	90	68.7

Table 2 shows that the majority 82(62.6%) were not asked their preferred meal before serving and 104(79.4%) would have preferred they are asked the meal they want before serving.

Table 3: Patient's Satisfaction with Hospital Meal (n=131)

Statement	Frequency	%
Is the quantity of meal served		
Adequate	82	62.6
Moderate	39	29.8
Inadequate	10	7.6
Is the time of breakfast appropriate?		
Yes	87	66.4
No	44	33.6
Is the time of lunch appropriate?		
Yes	113	86.3
No	18	13.7
Is the time for dinner appropriate?		
Yes	112	85.5
No	19	14.5
Nature of the meal served is often		
Hot	58	44.3
Warm	63	48.1
Cold	10	7.6
How do you like your meal to be served		
Hot	71	54.2
Warm	51	38.9
Cold	9	6.9
Do you like the way meals are packaged for you		
Yes	103	78.6
No	28	21.4
Generally, would you say you are satisfied with hospital meal service		
Yes	95	72.5
No	36	27.5

Table 3 shows that the majority of the respondents 82(62.6%) said the quantity of meal is adequate and 87(66.4%), 113(86.3%) and 112 (85.5%) of the respondents said the timing of serving was appropriate for breakfast, lunch and dinner respectively.

Table 4: Result of Hypothesis Testing

Hypothesis	**There is no relationship between level of income and satisfaction with hospital meal**						
Income (Naira)	Satisfaction with hospital meal			χ^2	Df	p-value	Remark
	Yes	No	Total	5.934	3	0.115	Not Significant
<10000	32	12	44				
10000-29000	29	9	38				
30000-49000	21	14	35				
>50000	13	1	14				
Total	95	36	131				

The result concluded that there is no statistically significant relationship between the level of income and satisfaction with hospital meals served P>0.05 ($X^2 = 5.934$; P = 0.115).

Discussion

The mean age of the study participant is 41.5±5 years. Two-thirds 66.4% are married, 78.6% are Hausa/Fulani and 80.9% practice Islam as a religion. This is so because over 95% of the indigenous people of Kano are Hausa/Fulani and Muslims. Findings from this study revealed that 62.6% of respondents were not asked their preferred meal, while 79.4% preferred they be asked before being served. Lack of involvement of patients in the process of determining what is served to them could affect their satisfaction and attitude towards the meal served. Bitner et al., (1997) reported that when patients have increased involvement with the choice of food served, satisfaction would be increased. Similarly, Lengyel et al., (2004) reported that patients were less satisfied with their autonomy in food choice because they were not involved in planning the meal served. This present study also revealed that 43.5 % of patients eat hospital meals always while 7.6% never take the hospital meal. This shows that the general attitude towards hospital meals is not positive. This finding is similar to what was reported by Banks et al., (2001) that attitude towards hospital food is generally not positive because of fixed meal times, the environment, and limited choice in food served. This study finding revealed that 68.7% of patients preferred home meals compared to hospital meals. This is similar to what was reported by Cardello et al., patients who hospital meals prefer (1996) to food prepared at home. This could be due to the cultural and traditional background of the patient and not necessarily due to the poor nature of hospital meals (Jefferies et al., 2011).

The findings of this present study about patient satisfaction revealed that the quantity of meals served was adequate 62.7%, timing of meals was appropriate for breakfast 66.4%, lunch 86.3% and dinner 85.5%. Patients also reported that meals are often served hot 44.3%, though 54.2% would have liked their meal served hot. This gives a difference of about 10% who are not satisfied with the temperature of meal served to them. The overall satisfaction of patients with the hospital meal in this study was 72.5%. This is similar to the 78.8% satisfaction with the quantity of meals served reported at Makkah Hospital by Abdulhafez et al., (2012).

Conclusion

Based on the findings of this study, it can be concluded that patients are not involved in the choice of meal served. However, the majority of the patients are satisfied with the hospital meal. There was no relationship between income and satisfaction with hospital meals.

Recommendations

The provision of meals should be individualized and flexible and all patients should have the possibility to order food and extra food and be informed about this possibility. In addition, patients should be involved in planning their meals and have some control over food selection.

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