

Patient satisfaction on admission in Nnamdi Azikiwe university teaching hospital, Nnewi, Nigeria

Modebe A. I.¹, Azuike E. C.^{1,*}, Ucheagwa C. M.¹, Azuike E. D.², Obi D. C.¹, Epundu U. U.¹, Chikezie N. I.¹, Ebulue C. C.¹, Aniagboso C. C.¹

¹Department of Community Medicine, Nnamdi Azikiwe University Teaching Hospital, Nnewi, Nigeria

²Department of Nursing Sciences, Faculty of Health Sciences, College of Health Sciences, nnamdi Azikiwe University, Awka, Nigeria

Email address:

emmanazuike@yahoo.com (Azuike E. C.)

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Abstract: Background: Patient's satisfaction measures the extent of patient expectation that was met during his or her stay in the hospital. It can be defined as inpatients personal evaluation of health care services and providers while on admission. Objective: To ascertain the level of patients' satisfaction on admission in Nnamdi Azikiwe University Hospital (NAUTH) Nnewi. Methodology: The study was a cross sectional study carried out amongst patients on admission in Nnamdi Azikiwe University Teaching Hospital Nnewi in Anamabra State. Questionnaires were used to assess the level of patient satisfaction on admission in the wards in Nnamdi Azikiwe University Hospital. Result: A total of 164 respondents with 83% being in the age range of 15 to above 60 and 14% being below 14 years participated in the study of which female 88 (53.7%) were slightly more than the males 76 (46.3%). 134 (87.2%) had a form of formal education at least primary school. One hundred and forty three (87.2%) were satisfied with the attitude of doctors, 126 (76.8%) were satisfied with nurses attitude, 84 (51.2%) were satisfied with the level of sanitation while 80 (48.8%) were not. 122 (24.4%) were satisfied with the quality of food, 155 (94.5%) were satisfied with the medication services. In General, 145 (88.4%) were satisfied with admission in NAUTH. Conclusion: The majority of the patients were satisfied on admission in Nnamdi Azikiwe University Teaching Hospital. However poor sanitation, late presentation of food, small quantity of food, poor taste of food, unfriendly attitude of Doctors and Nurses, lack of regard for patients' privacy and failure to receive quick attention from the Doctors and Nurses were among the complaints of patients on admission in NAUTH.

Keywords: Patient Satisfaction

1. Introduction

Patients satisfaction on admission is defined as inpatients' personal evaluation of health care services and providers while on admission, it is about the way the patient is treated and the facilities offered to him while on admission in a hospital.¹ It is a measure of the quality of care rendered to the patient on admission.² It is also an important determinant of the quality of health care services delivery of an institution.³

Patients' experiences with health care providers are a central component of their quality of care, complementing more technical aspects of care such as the appropriate use of medications and procedures.⁴ Quality of health care has become an international policy issue. Decades of studies

worldwide have shown the need for improvement in quality of care and the need for health professional to disclose more information about quality of care. These led to formation of numerous organizations, such as United States Agency of Health Care Research and Quality Forum, the institute of medicine, to report on quality issues.⁵ The dimensions of quality necessary for adequate and appropriate patient care include: technical competence, access to services, efficiency, interpersonal relations, continuity, safety, amenities. Hence quality of care can be measured by assessing whether health care is effective, accountable, safe, fair and accessible to patients in order to influence their perspective and opinion concerning the quality of care being rendered.⁶ To fulfil these dimensions, there are some factors that are essential determinants of patients' satisfaction on admission, these

include: The attitude of physicians and nurses, sanitation, medication services, quality of food. This study is important because the assessment of patients' opinion on the general aspects of inpatients care provided to them during admission will give us an opportunity to identify potential areas where patients are least satisfied. In this way, modifications and ratification of the sustaining policy in the service delivery will be made in order to promote quality of care and improve patients' quality of life. Also from review, there has not been much study done on patients' satisfaction on admission in Government Hospitals, in South East Nigeria, so this will contribute in having baseline data of the real situation in Nigerian hospitals using NAUTH as a case study.

Objectives: To assess patients' satisfaction on admission in Nnamdi Azikiwe University Teaching Hospital. **Specific Objectives:** To assess the attitude of physicians and nurses towards patients on admission. To assess the patients' perception of sanitation in the wards. To assess inpatients' opinion on the quality of food given to them in the ward. To assess inpatients' opinion on the quality of medication services in the wards.

A study carried out in Chicago on the correlation between patients' comprehension of their reason for hospital admission and overall patients' satisfaction revealed that effective communication between doctors and patients about the reason for their admission can be an important predictor of patients' satisfaction.⁷ A study in India reported that overall level of satisfaction with doctors ranged from 89.29% to 9.96%, satisfaction with the attitude of nurses was slightly lower, however the area of cleanliness had the lowest score for satisfaction as only 33% were satisfied with sanitation. This affected the overall satisfaction. It was concluded in that study that sanitation is an essential factor in patients' satisfaction.⁸ A study done in Iran revealed that 46.2% of patients were satisfied with admission services of the hospital, the highest score in the satisfaction areas was in the areas of attitude of staff.⁹ A study in Pakistan showed that 48.8% of the patients were not satisfied with the patient-doctor communication and 27.6% said they did not receive helpful support from the nurses.¹⁰ A study conducted in a tertiary hospital in Dhaka revealed that physical evidence, doctor's services, nurse's services and feedback from patient lead to a higher level of patient satisfaction, and that amongst these variables, doctors service orientation was the most important factor explaining patient satisfaction.¹¹ The health policy advisory unit suggested that patient satisfaction is predicted on six underlying dimensions: medical care and information, food and physical facilities, non tangible environment, quality of food, nursing care and visiting arrangement. The study suggested that patients will weigh the factors according to their perceived importance in order to measure their overall satisfaction.¹² Studies have also suggested relationships existed between a patient's satisfaction with food service and satisfaction with medical care.¹³ Furthermore, a study carried out on patients' satisfaction with services at Aminu Kano Teaching Hospital, Kano, Nigeria revealed that 88%, 87% and 84% of the

patients were satisfied with patient-provider relationship, inpatient services, hospital facilities and access to care respectively.¹⁴ A study carried out on patients' perception of obstetric practice in Calabar, Nigeria reported that poor sanitary condition and lack of basic amenities were the major cause of dissatisfaction.¹⁵ An earlier study in NAUTH, reported that 79% of patients were satisfied with services in the general out-patient department in terms of the availability, accessibility, convenience and manner of delivery by hospital personnel.⁶ It also identified areas in the service delivery that needed to improve such as the comfort of the waiting area, process of retrieving records and availability of some medicine within the hospital pharmacy and at a cheaper rate.⁶ There has not been a similar study done on patients' satisfaction on admission in Nnamdi Azikiwe University Teaching Hospital.

2. Materials and Methods

The study was done at NAUTH, a tertiary government hospital with a total bed capacity of 368. It has 8 wards: female medical, female surgical, male medical, male surgical, paediatrics ward, obstetrics ward, accident and emergency ward and children emergency ward.

The study was a cross-sectional descriptive study.

The study population was patients on admission in the wards in NAUTH.

The minimum sample size was determined using the formula for opinion surveys for population > 10,000:

$$N = \frac{Z^2 P(1-P)}{D^2}$$

N = minimum sample size

Z = standard normal deviate usually set at 1.96

P = prevalence of satisfaction, .79 as reported in a previous study⁶

D = degree of precision usually 0.05

Applying the figures to the above formula will give 255.

But because the estimated population of patients in the wards (based on the number of beds) is 368, we apply the formula for population < 10,000:

$$nf = n/1 + (n/N)$$

where

nf = the minimum sample size when population is less than 10,000

n = calculated sample size when population is >10,000

N = estimated population

In this case:

n = 255

N = 368

Applying the figures to the formula

nf = 255/1 + (255/368)

nf = 150

in order to take care of attrition we added 10% of the calculated sample size = 150 + 15 = 165.

However we were able to get only 164 patients to participate in the study. All the results were based on 164 patients.

The calculated minimum sample size was 164.

A multi stage sampling technique was used.

Data collection was by the use of interviewer administered, structured questionnaire. Data analysis was done with the use of SPSS Version 20.

Informed consent was obtained from patients and patients’ relatives, they were assured of confidentiality.

3. Results

Table 1. Demographics.

| Variable | Frequency | (%) |
|---------------------|-----------|------|
| Age (years) | | |
| 0-14 | 28 | 17.0 |
| 15-29 | 25 | 15.0 |
| 30-44 | 35 | 21.0 |
| 45-59 | 32 | 20.0 |
| ≥ 60 | 44 | 27.0 |
| Sex | | |
| Males | 76 | 46.3 |
| Females | 88 | 53.7 |
| Marital Status | | |
| Single | 41 | 25.0 |
| Married | 123 | 75.0 |
| Educational Status | | |
| No Formal Education | 21 | 12.8 |
| Primary Education | 76 | 46.3 |
| Secondary Education | 44 | 26.8 |
| Tertiary Education | 23 | 14.0 |
| Ethnicity | | |
| Igbo | 162 | 98.8 |
| Hausa | 0 | 0.0 |
| Yoruba | 0 | 0.0 |
| Others | 2 | 1.2 |
| Employment Status | | |
| Government employed | 51 | 31.1 |
| Privately employed | 11 | 6.7 |
| Self employed | 54 | 32.9 |
| Unemployed | 48 | 29.3 |
| Religion | | |
| Catholic | 92 | 56.1 |
| Anglican | 52 | 31.7 |
| Pentecostal | 20 | 12.2 |
| Islam | 0 | 0.0 |
| Others | 0 | 0.0 |

Table 1 shows that out of the 164 respondents 83% of them were within the age range of 15 to above 60 years while 17% were 14 years and below. Out of 53.7% of the respondents were females and 46.3% were males. 123(75%) of the respondents were married while 41(25%) were single. 12.8% of the respondents had no formal education, 46.3% stopped at primary school, 26.8% stopped at secondary school and 14.0% had tertiary education. 98.8% of the respondents were from the Igbo tribe while 1.2% were from other tribes aside Hausa and Yoruba. 31.1% of the respondents were employed by government, 6.7% were employed private firms, 32.9% were self employed and 29.3% were unemployed. 56.1% were Catholics, 31.7% were

Anglicans, 12.2% were Pentecostals.

Table 2. Satisfaction.

| Variable | Response | Frequency | % |
|--|-------------------------------------|-----------|------|
| Are you satisfied with the attitude of doctors? | Yes | 143 | 87.2 |
| | No | 21 | 12.8 |
| Complaints by the unsatisfied | Does not respond to my calls | 0 | 0 |
| | Does not regard my privacy | 8 | 38.1 |
| | Does not explain procedures to me | 0 | 0 |
| | Unfriendly | 4 | 28.6 |
| | Doesn't respond quickly to my call | 8 | 38.1 |
| Are you satisfied with the attitude of nurses? | Yes | 126 | 76.8 |
| | No | 38 | 23.2 |
| Complaints by the unsatisfied | Does not respond to my questions | 3 | 7.9 |
| | Does not explain procedure to me | 0 | 0 |
| | Unfriendly | 30 | 79 |
| What do you think about the attitude of other staff? | Doesn't respond quickly to my calls | 5 | 13.1 |
| | Friendly | 130 | 79.3 |
| | Unfriendly | 34 | 20.7 |

Table 2 shows that 87.2% of the respondents were satisfied with the attitude of the doctors. 38.1% of the unsatisfied respondents felt that the doctors do not regard their privacy, 28.6% felt that the doctors were unfriendly and 38.1% felt that the doctors do not respond quickly to their calls. 76.8% were satisfied with the attitude of the nurse while 23.2% were not. Out of the 38 respondents who were not satisfied, 7.9% felt that the nurses do not respond to their questions, 79% felt the nurse were unfriendly, and 13.1% felt the nurses do not respond quickly to their calls. 79.3% felt the other hospital staffs were friendly while 20.7% felt they were unfriendly.

Table 3 shows that out of the 164 respondents 51.2% were satisfied with level of sanitation in the wards while 48.8% were not satisfied with the level of sanitation in the wards. Among the respondents who were not satisfied with the level of sanitation in the wards, 90% complained of the toilet and bathroom, 8.6% complained of the linens, 12.9% complained of the bed sheets, 47.1% felt the overall ward sanitation was poor (Note that multiple responses were allowed). 74.4% of the respondents were satisfied with the quality of food while 25.6% were not satisfied with the quality of food. Out of the 42 respondents who were not satisfied, 33.3% had felt the food was tasteless, 79.0% felt the food was not appetizing, 35.7% felt the food was usually presented late and 16.7% had other reason like the food is usually small. 94.5% of the respondents were satisfied with medication services while 5.5 were not. Out of the 9 respondents that were not satisfied, 4(44.4%) felt the medications were administered late and 5 felt the drugs were administered with dirty equipment. Asked

about their general satisfaction level with admission in Nnamdi Azikiwe University Teaching Hospital, 88.4% of the respondents were satisfied while 11.6% were not satisfied. 92.7% of the respondents agreed that they will recommend NAUTH to other patients while 7.3% said they will not. The respondents gave the following suggestions: improvement in sanitation, staff friendliness, increased quantity & quality of food and early of food presentation.

Table 3. Satisfaction with other services.

| Variable | Response | Frequency | % |
|--|------------------------------------|-----------|------|
| Are you satisfied with the sanitation in the wards? | Yes | 84 | 51.2 |
| | No | 80 | 48.8 |
| Areas you are unsatisfied with their sanitation (multiple responses) | Toilet | 63 | 90 |
| | Bathroom | 63 | 90 |
| | Linens | 6 | 86 |
| | Bed sheets | 9 | 12.9 |
| Are you satisfied with the quality of food? | Yes | 122 | 74.4 |
| | No | 42 | 35.6 |
| Complaints about the food (multiple responses) | Not appetizing | 8 | 19 |
| | Late presentation | 15 | 35.7 |
| | Tasteless | 14 | 33.3 |
| | Others | 7 | 16.7 |
| Are you satisfied with medications? | Yes | 155 | 94.5 |
| | No | 9 | 5.5 |
| | Late administration | 4 | 44.4 |
| | Administered with dirty Equipments | 5 | 55.6 |
| Complaints about medication | Not properly administered | 0 | 0 |
| | Does not resolve my symptoms | 0 | 0 |
| General satisfaction | Yes | 145 | 88.5 |
| | No | 19 | 11.6 |
| Will you recommend this hospital to others? | Yes | 152 | 92.7 |
| | No | 12 | 7.3 |

4. Discussion

Patients' satisfaction constitutes a crucial aspect of quality of care, it plays an important role in measuring the effectiveness and quality of health care services delivered to the public. Across the different age groups, 60 and above was the age with the highest admission rate [44%]. This finding suggests an appreciable demand for geriatric health services and this should be made readily available. Females were slightly higher in number than males this is in keeping with demographics of attendance to government hospitals as documented by previous workers.⁶ These differences may be associated with reproductive biology and conditions specific to gender, difference in health perception and the reporting of symptoms and illness, or a greater likelihood that women seek help for prevention. Satisfaction with doctors and nurses was high (87.2% and 76.8% respectively). This is similar to the findings of a work done at Aminu Kano Teaching Hospital which revealed that 88% of the patients were satisfied with patient-provider relationship¹⁴ and also in the finding of a similar work done in Benin Teaching Hospital which revealed that 84% of patients were satisfied with the time spent with doctor.¹⁷ This finding is in contrast

with the findings in a tertiary care hospital in Pakistan which showed that 48.8% of the patients were not satisfied with the patient-doctor communication and 27.8% said they did not receive helpful support from the nurses.⁷ In the present study majority of the patients who were not satisfied with the doctors attitude felt that the doctors do not regard their privacy and do not responding quickly to their call. This may be because NAUTH is a tertiary teaching hospital and usually has a large number of patients on admission such that a doctor on call may not be disposed at the moment a patient needs his attention because he is attending to another patient. The area of doctors not regarding the patients' privacy may be as a result of lack of understanding on the side of the patient that in a teaching hospital, patients are used in teaching medical students and resident doctors and this may entail exposing the patient in the presence of a crowd of students and residents which usually results in a level of discomfort to the patient. This misconception can be corrected by a proper orientation of the admitted patients on the way a teaching hospital functions. 79% of those who were not satisfied with the attitude of the nurses felt the nurses were unfriendly. This is similar to the finding of an earlier study done at the General out patients department of this hospital which revealed that 13.5% of the patients opined that the nurses were rude to them.⁶ Sanitation was found to be a strong factor that influenced patients' satisfaction on admission. It was found that out of the 164 respondents 48.8% were not satisfied with the level of sanitation of the hospital. This is a common problem in most government hospitals as revealed by similarity with findings in other government hospitals, like in University of Benin Teaching Hospital¹² and Government hospital Calabar.¹⁵ This calls for a pragmatic approach to attending to sanitation, as this could result in infection and cross infection among patients. This is similar to findings of other studies.^{12, 18} Late presentation and poor taste of food was the major reason the patients were not satisfied with the quality of food. This may be because of large number of patients on admission with relatively lesser number of catering staff. Nearly all the respondents were satisfied with the medication services. This is similar to the findings of a study in University of Patras Medical School which revealed a high degree of satisfaction with all aspects of medication in the wards.¹⁹ This may be because admitted patients in tertiary hospitals of which NAUTH is one, are managed by specialists in their area of ailment hence quality medical care is ensured. The respondents that were not satisfied with medication complained that the drugs were not given when needed and that the drugs are administered with dirty equipment, this may be as a result of nonchalant attitude on the side of the nurses. In general 88.4% were satisfied on admission in NAUTH, this corroborates previous works on satisfaction done in different centres in this country.^{14,17} A hospital may be well organized, ideally located and well equipped but it will fail in its responsibility to provide quality care if patient satisfaction is not of a high priority. From this study, areas of need identified include: change in the attitude of all the

healthcare workers, sanitation of the wards, time of presentation of food and taste of food, employment of more staff.

In conclusion, the majority of the patients were satisfied on admission in Nnamdi Azikiwe University Teaching Hospital. However poor sanitation, late presentation of food, small quantity of food, poor taste of food, unfriendly attitude of doctors and nurses, lack of regard for patients' privacy and failure to receive prompt attention from the doctors and nurses were the negative perceptions of the patients on admission in NAUTH. These negative perceptions can affect future patients and adversely affect the image of the hospital. Therefore improvement on areas where services are deficient must be made so as to ensure the delivery of quality health services.

We therefore recommend as follows: The NAUTH management should strengthen and strictly enforce regular washing of the toilets and bathrooms, linens, bed sheets in the wards and cleaning of the wards. Frequent orientation programs should be organized for the nurses and doctors and other hospital staff to ensure a more friendly and effective services. More intensive orientation of patients on admission on the workings of the hospital as a tertiary/teaching centre.

References

- [1] Aldaqual SM, Alghamdi H, AlTurki H, El-deek BS, Kensarah AA. Determinants of patients' satisfaction in the surgical ward at University Hospital in Saudi Arabia. *Life Science Journal*, 2012; 9(1): 489-493.
- [2] Singh J. The patients' satisfaction concept: a review and re-conceptualization. *Advances in consumer research*, 1989; 16: 176-179.
- [3] Credo AC. Health care service satisfaction of the admitted patients in the four major departments of Zamboanga city medical centre. A thesis presented to the faculty of graduate school Ateneo De Zamboanga University, Zamboanga city. Available online www.som.adzu.edu.ph/research/pdf
- [4] Eisenberg L. Good technical outcome, poor experience: a verdict on contemporary medical care? *JAMA*. 2001; 285(20): 2639-41.
- [5] Donabedian A. Evaluating quality of medical care. *The Milbank Quarterly*, 2005; 83(4) : 691-729.
- [6] Emelumadu OF, Ndulue CN. Patients characteristics and perception of quality of care in a Teaching Hospital in Anambra State, Nigeria. *Nigerian Journal of medicine*, 2012; 21(1): 16-20.
- [7] Downey LV, Zun LS. The correlation between patient comprehension of their reason for hospital admission and overall patient satisfaction in the emergency department. *J Natl Med Assoc*. 2010; 102(7): 637-43.
- [8] Samina M. Perception of patients regarding the services provided to inpatients by the department of paediatrics. *Int J Health Science*, 2008; 2(4): 306-310.
- [9] Taheri SA, Farzandipour M, Sadoughi F. Consumers' satisfaction with admission services in teaching hospitals affiliated to Kashan University of Medical Sciences. *Journal of Health Administration*, 2007; 10(29): 24-25.
- [10] Imam SZ, Syed KS, Ali SA, Ali SU, Fatima K, Gill M, et al. Patients' satisfaction and opinions of their experiences during admission in a tertiary care hospital in Pakistan – a cross sectional study. *BMC Health Services Research*, 2007; 7: 161.
- [11] Habib S, Pasha A. Patient satisfaction in a tertiary private hospital in Dhaka: A case study on square Hospital Limited. *International Journal of Research in Computer Application and Management* 2011; 1(2): 9-15.
- [12] Angelopoulou P, Fangis P. Private and public medicine, a comparison of quality perceptions. *International Journal of Health Care Quality Assurance*, 1998; 11(1): 14-20.
- [13] Naithani S, Whelan K, Thomas J, Gulliford MC, Morgan M. Hospital inpatients experiences of access to food: a qualitative interview and observation study. *Health expert*, 2008; 11(3): 294-303.
- [14] Illiyasu Z, Abubakar IS, Abubakar S, Lawan UM, Gajida AU. Patients' satisfaction with services obtained from Aminu Kano Teaching Hospital, Kano, Northern Nigeria. *Nigerian Journal of Clinical Practice*, 2010; 13(4): 371-8.
- [15] Oyo-Ita AE, Etuk SJ, Ikpeme BM, Ameh SS, Nsan EN. Patients' perception of obstetric practice in Calabar, Nigeria. *Nigeria Journal of Clinical Practice*, 2007; 10(3): 224-8.
- [16] Araoye MO. *Research Methodology with statistics for health and social sciences*. Nathadex publishers, Ilorin; 2004: 117-120.
- [17] Ofili AN, Ofovwe CE. Patients' assessment of efficiency of services at a teaching hospital in a developing country. *Annals of African Medicine*, 2005; 4(4) 2005: 150-153.
- [18] Coulter A, Le Maistre A, Henderson L. Patients experience of choosing where to undergo surgical treatment. *Evaluation of London Patient Choice Scheme 2005*. Oxford Picker Institute Europe. Available online <http://www.pickereurope.org/Filestore/News/LPCfinalreport.pdf>
- [19] Geitona M, Kyriopoulos J, Zavras D, Theodoratou T, Alexopoulos EC. Medication use and patient satisfaction: a population-based survey. *Fam Pract*. 2008; 25(5): 362-369.