

## NURSES' COMMUNICATION AND PATIENT SATISFACTION IN A TERTIARY HOSPITAL IN BENIN CITY, NIGERIA

Omorogbe C. E. AND Amiegheme, F.E

Nurses' communication of nursing care provision in tertiary health facilities and patient satisfaction are closely related. This has remained a yardstick for measuring success of the services provided in many health facilities.

This study investigated the influence of nurses' communication of nursing care on patient satisfaction in a selected tertiary health facility, in Benin City, Nigeria. The research design was cross-sectional survey. Multistage sampling technique was used to select a total of 420 respondents from the wards/five units of the hospital. A semi-structured questionnaire was used to gather data.

The mean age of the respondents was  $38.6 \pm 10.5$  years. Sixty-one percent (61%) were female, forty-two percent (42%) had secondary school education while ninety percent (90%) were Christians. Ninety percent (90%) of the respondents possessed high level of knowledge of nursing care. Majority of the respondents claimed that they were satisfied with the nursing care communication of nurses in terms of administration of prescribed drugs and rated their satisfaction as moderate. Slightly above half (51.4%) of the respondents claimed they were moderately satisfied. Chi-square results of the respondents profile and satisfaction with communication of nursing care provision by sex was significant ( $p < 0.0076$ ).

The study recommended among others, that nurses' acquisition of relevant communication skills will be helpful in interactions between nurses and the patients during the period of admission. This will go a long way in ensuring patient satisfactory nursing care outcome in the tertiary health care facility.

### INTRODUCTION

Nurses' communications of nursing care provision in the tertiary health facility and patient outcome have become critical due to increasing emphasis on patient as consumer of health care services in the medical market place<sup>1,2</sup>. Several studies reveal that from the health/nursing care services patients receive from public

health care facilities, there are some very critical and major areas of their experiences<sup>3,4,5</sup>. These important areas from the point of view of the patients/users of health care services influence outcome. They are crucial issue both in evaluation and in the shaping of health care service provision. Different health service research reports have indicated that patients who are satisfied with health care services they receive from the health facilities in the developing countries behave differently from those who are dissatisfied<sup>2,3</sup>.

Despite, the efforts of the federal government at renovating the federal owned hospitals, restructuring and purchase of modern equipment<sup>6,7,8,9</sup> the

---

**KEYWORDS:** Nurses' communication, Nursing care, Tertiary Hospital, Patient Satisfaction

---

OMOROGBE C. E. AND AMIEGHEME, F.E

\* Correspondence:

OMOROGBE, C. E.  
Department of Nursing Science, School of Basic Medical  
Sciences, University of Benin, Benin City  
[omorogbechristie@yahoo.com](mailto:omorogbechristie@yahoo.com)  
08062304948

AMIEGHEME, F.E  
Department of Nursing Science, School of Basic Medical  
Sciences, University of Benin, Benin City  
08033459777

unwillingness of patients to repeat the visit of the hospital if the need arises due to dissatisfaction with health care delivery is worrisome. It has been observed that patient satisfaction is associated with several behavioral consequences such as willingness to use available services, adherence to health advice and co-operation with therapeutic regimen in the therapeutic milieu<sup>11</sup>.

The quality of communication of the nurse contributes to patient satisfaction<sup>12</sup>. When nursing care communication is friendly, patient satisfaction is enhanced but when it is unfriendly patient satisfaction is doused. Research studies have shown that there are wide ranges of factors that have been shown by independent measurement to influence patient satisfaction<sup>13,14</sup>.

Previous studies show that the level of distress is reduced when patient perceive themselves to have received adequate information concerning treatment plans<sup>15</sup>. A brief review of literature indicates that the views of patients and their expectations of the nurse are considered to be very significant<sup>16</sup>.

Other studies<sup>17,18</sup> have shown that information giving has the highest single effect on all health professional behavior in influencing patient satisfaction. Findings show that effective health communication is an important part of the patient ability to understand and act upon health information. Patient satisfaction is related to information giving especially the extent health professionals including nurses provide information<sup>19</sup>. Poor communication between the nurse and the patient is a major reason for dissatisfaction and poor outcome of care<sup>20</sup>. Accordingly patient centered style of communication can take

the form of interview using open-ended questions and the nurse facilitates the expressions of the patient's concerns and feelings about their present problems<sup>21,22</sup>. In Nigeria, little is known about the relationship of the nurse in terms of communication of specific nursing care services to the in-patient/relations in the tertiary health care institution. Thus, this study seeks to examine the influence of nurses' communication of nursing care and the outcome of care received among the in-patients in the tertiary health facility with a view to mapping out strategies for effective nursing care communication between nurses and patients that will enhance patients' subjective satisfaction with nursing care.

#### MATERIALS AND METHODS

This hospital based descriptive cross-sectional study was conducted at the University of Benin Teaching Hospital (UBTH) Edo State, Nigeria between February and March 2014 after the approval of the study protocol by the Ethics Committee. The Teaching Hospital is located on a large expanse of land (a 150-acre site) in Benin City and along the Benin-Lagos highway in Edo State. It shares boundary with the main campus of the University of Benin, Benin City to the West, to the East, its boundary is with the Federal Government Girls College road Benin City. The health care facility was chosen because: It is a federal tertiary teaching hospital with highly qualified professional health team members and state-of-the-art facilities provided by the federal government. It is one of the centers of excellence in health care delivery in Nigeria with highly trained nurses.

#### Sample and sample size

The sample size was calculated using Lemeshow et al.<sup>22</sup> formula for estimating minimum sample size in descriptive health studies and findings from a

previous study<sup>3</sup> for a population survey with 95% confidence interval. This calculation was done using the formula below:

$$n = Z^2 \frac{P(1-P)}{E^2}$$

Where n= sample

z= standard normal score corresponding to 95% confidence level= 1.96

P= the estimated proportion of the factor to be studied (or P= the prevalence rate of medical research studies) assumed 50%

E= Sampling error that can be tolerated 5%

Z= 1.96, P= 0.5 or 50%, E= 0.05,

n= 456, N= 587 = Total bed complement in the hospital.

The estimated minimum sample size assuming 50% maximum satisfaction response variability is 384.16 and giving consideration to attrition this was increased by 10% = 384.16

The minimum sample size calculated was 423 after giving consideration to attrition.

Inclusion criteria were: 1. Adult males and females admitted into the wards for not less than forty-eight hours

2. In-patients, who are conscious, well oriented to time, place and person.

3. Relations/care givers stood proxy in the pediatric unit and

4. The in-patients who gave their consent.

Exclusion Criteria: In-patients who have received care for less than forty-eight hours, those who are unconscious and those patients who refused to give their consent to participate in the study were excluded

Sampling technique: A Multistage sampling technique was used to select the respondents from the five units of the hospital. The first stage of the selection commenced with purposive selection of the wards providing nursing care: medical care; surgical care as well as orthopedics, neuro-surgical and ophthalmology, obstetric and gynecological and ante-natal care, pediatrics care and emergency care were purposively selected because these are the existing nursing care units of the hospital where patients receive care. This was followed with systematic selection which involved proportionate selection in percentage of respondents across the units providing variety of health care services because the bed compliments differed.

The proportion in percentages in the different units are as follows: medical care; 86 (20 percentage), surgical care; 86 (20 percentage), pediatrics care; 89 (21 percentage), obstetric and gynecological; 87 (20 percentage), and emergency care; 74 (19 percentage) respectively to each unit stated above). The final selection involved simple random selection using balloting for those who took part in the study. However, in the end, 420 respondents participated in this study.

#### Ethical Clearance

The study protocol was submitted to the Ethics Committee of the University of Benin Teaching Hospital and approval to conduct the study was obtained from Ethics Committee of the University of the Benin Teaching Hospital before embarking on the study. Informed consent was obtained from the respondents who were willing to

participate in the study. Participation of patients in the study was voluntary. Only respondents who were willing to participate in the research were involved in the study. The ethical issues that apply to human subjects were adhered to. The respondents were at liberty to refuse to participate in the study at any time they so desired and were also free to withdraw from the study any time without penalty.

**Pre-Testing of instruments:** Prior to administration of the questionnaire, pre-testing of the instrument was carried out in the University College Hospital (UCH) Ibadan. Results from the analysis of responses helped to modify the contents of the present research instruments prior to its administration.

**Instruments for Data collection:** A Semi-structured questionnaire was used for data collection. The questionnaire was developed after an extensive literature review and has three sections. Section A assessed the socio-demographic profile of the respondents, section B assessed the participant levels of knowledge and section C assessed patient satisfaction with nursing care.

Each item on Knowledge and awareness of available nursing care services was computed by adding the scores of items in the questionnaire on knowledge and awareness about health care services for each respondent. Composite scores that were obtained from the computation were used to categorize patients level of knowledge as Low (those who score below (<) 6.3) Moderate between 6.4–12.6 and High for those who score between 12.7 and (>) above)

For each item on satisfaction, respondents were provided with a five point Likert Scale (1-5). This five point scale constituted the rating scale. Each point of the scale carried a score. (1) indicated the lowest and (5) indicating the highest. Respondents indicated their level of satisfaction by selecting responses ranging from 1-5 to categorize their satisfaction with nursing care services using scale items that were adapted from existing instrument used in previous patient satisfaction surveys (Ware and Hays 1983).

#### Measurement of Patients' Satisfaction with nursing care services

(How the variables were measured)

The study adapted Kibikiwa (2010) model of Students' satisfaction which classified measures of Students' satisfaction as; Low Students' satisfaction, Moderate Students' satisfaction and high Students' satisfaction. The range was calculated as follows Low, Moderate = 35- 67 and High = 68-100. Similarly our respondents were categorized depending on the scores obtained by the patient, into 3 levels: low, moderate and high satisfaction.

The scoring system took into consideration the maximum and minimum scores used for finding the levels of satisfaction of the patient.

**Data collection:** Data were collected through Mondays to Sundays at various Wards and Units with the use of the pre-tested Semi-structured questionnaire containing both close and open-ended questions between February and March 2014.

Data analysis: This was done using the Statistical Package for Social Science (SPSS) version 17. Frequency tables and cross-tabulation were used to present respondents' demographic profiles. Test of associations were done at the bivariate level of analysis using Chi-square test that had probability values (P-values) of 0.05. Simple descriptive analysis was done to assess levels of knowledge of the different nursing care provision which relate to communication practices of the nurse and patient satisfaction.

## RESULTS

Out of the four hundred and twenty-three (423) respondents that constituted the sample size, four hundred and twenty (420) participated in the study. Data from the four hundred and twenty patients (420) were analyzed. Table 1 show the socio-demographic profile of the respondents in the study. The mean age of the respondents was  $38.6 \pm 10.5$  years, Sixty-one percent (61%) were female, Seventy percent (70.0%) were married, Forty-two percent (42.0%) had secondary school education, and Ninety percent (90.0%) were Christians. Ninety percent (90.0%) of the respondents possessed high level of knowledge of nursing care provided by nurses. The study revealed that a significant relationship existed between marital status and patient satisfaction ( $X^2 = 22.400$ ). Slightly above half (51.4%) of the respondents said they were moderately satisfied, 45.0% reported high satisfaction while only 7.9% reported low satisfaction with communication of drug administration by the nurse to the patients. On the whole, majority of the respondents rated

their level of satisfaction with respect to communication of prescribed drug administration by nurses as moderate.

More than 27.0 percent of the females compared to 17.9 percent males admitted to the hospital reported satisfaction that was rated as high satisfaction.

A cross-tabulation of selected demographic characteristics of the respondents showed that there was a statistically significant relationship between levels of satisfaction and the different gender having prescribed drugs by the doctors and administered by the nurse to the respondents with a chi-square value ( $p < 0.0076$ ).

Table 2 shows respondents' knowledge of nursing care in the tertiary hospital by gender. The findings from the study showed that there is a relatively high level of knowledge of nursing care that the professional nurse in the teaching hospital render to patients. Majority were aware and had knowledge of nursing care available in the tertiary health care facility. Generally over 50% of the female respondents compared to less than 40% of the male respondents claimed to have knowledge about assessment of the patients by professional nurse in the teaching hospital.

Table 3 displays respondents' satisfaction with communication of administration of prescribed drugs by the nurse to patients when asked to rate how satisfied they were with communication of administration of drugs by nurses to patients. The table reveals that the female

**Table 1: Socio-demographic characteristics of respondents**

Variable n=420	Frequency (n)	Percent (%)
<b>Age</b>		
20 - 29 YRS	161	38.33
30 - 39 YRS	129	30.71
40 - 49 YRS	59	14.05
50 - 59 YRS	57	13.57
60 - 69 YRS	12	2.86
70 YRS and above	2	0.48
<b>Sex</b>		
Male	162	39
Female	258	61
<b>Marital status</b>		
Single (Never Married)	90	21
Cohabiting	8	2
Married	70	15
Civil servant	69	9
Full-time housewife	37	44
Self employed	185	9
Teacher/lecturer	38	

**Table 2: Respondents' knowledge of nursing care services by sex**

Knowledge of nursing care services	Male n=162		Female n = 258		$\chi^2$	Df	Sig
	Yes	No	Yes	No			
-Knowledge about nurses assessment of patients before a doctor's consultation	143 (37.6%)	19 (47.5%)	237 (62.4%)	21 (52.5%)	1.487	1	0.223
-Knowledge about whether Nurse is the one that is supposed to administer your drugs as prescribe	159 (39.1%)	3 (23.1%)	248 (60.9%)	10 (76.9%)	1.359	1	0.244
-Knowledge about different diets are supposed to be provided for different patients	150 (39.0%)	12 (34.3%)	235 (61.0%)	23 (65.7%)	0.296	1	0.586
-Knowledge about the visiting hours for visitors	153 (39.5%)	9 (27.3%)	234 (60.5%)	24 (72.7%)	7.529	1	0.006

Table 2 shows respondents' knowledge of nursing care services in the tertiary hospital by gender.

**Table 3: Respondents' satisfaction with nurses' communication by sex**

Gender	Communication of prescribed drug administration			Total
	Low satisfaction	Moderate satisfaction	High satisfaction	
Male	10 (2.4%)	77 (18.3%)	75 (17.9%)	162 (38.6%)
Female	12 (3.1%)	131 (31.2%)	114 (27.1%)	258 (61.4%)
<b>Total</b>	23 (7.9%)	208 (51.4%)	189 (45.0%)	420 (100%)

Chi-square=.544 df=2 P-Value= .0076

Table 3 displays respondents' satisfaction with communication of administration of prescribed drugs by the nurse to patients being a core health care service activity by the nurse. More than 27.00 percent of the female compared to 17.9 percent male that reported satisfaction that is rated as high satisfaction with communication of administration of prescribed drugs by the nurse to patients

**Table 4 Respondents' level of satisfaction with nursing care**

Categories of nursing care services	Frequency/ Percent	Low satisfaction	Moderate satisfaction	High satisfaction
Nurses' assessment carried out on you on the ward (Pre-consultation)	Frequency	25	232	163
	Percent	6.0%	55.2%	38.8%
Getting your prescribed drugs administered to you	Frequency	23	208	189
	Percent	5.5%	49.5%	45.0%
Getting information about the type of food served	Frequency	129	205	86
	Percent	30.7%	48.8%	20.5%
Nurses communication of visiting hours to visitors	Frequency	77	248	95
	Percent	18.3%	59.0%	22.6%

Table 4 shows the distribution of levels of satisfaction with nursing care provided. Over 30.0 percent of the females relative to 18.3 percent males reported satisfaction that is rated as moderate satisfaction level with the communication of prescribed drug administration by the nurse to the patient.

respondents expressed higher satisfaction with more than 27.00% of the female compared to 17.9% male that reported high satisfaction with communication of administration of prescribed drugs by the nurse to patients. Table 4 shows the distribution of levels of satisfaction. Over 30.0% of the females compared to 18.3% males reported satisfaction that is rated as moderate satisfaction level with the communication of prescribed drug administration by the nurse.

## DISCUSSION

The study sought to assess patient satisfaction with nurses' communications of nursing care in the tertiary health facility. The results of this study show that with respect to selected socio-demographic characteristics profile of respondents over 70% of the respondents who are under the age of 60 years (96.7%) indicated that they utilized nursing care provided by nurses. The implication of the finding is that most respondents under the age of 50 years tend to patronize tertiary nursing care. The result is consistent with the result of previous studies by Iliyasu et al.<sup>3</sup> and Alliyu et al.<sup>5</sup> on gender utilization of teaching hospital facility in Northern and South West of Nigeria. Regarding, levels of knowledge of nursing care, the results show that a large majority of the respondents are married and this represents about 70% of the sample population. This is similar to findings of the National Demographic Health Survey<sup>23</sup>. Majority of the respondents were aware and had knowledge about nursing care provided by the professional nurse.

This confirms the findings in a study of patients conducted in a teaching hospital in the Northern Nigeria<sup>3</sup> that most of the users (in-patients) of the tertiary hospital in Nigeria are well educated as majority had knowledge of the nursing care provided by the professional nursing care leaders in teaching hospital. This goes further to emphasize the fact that knowledge of nursing care possessed by patients in the health facility has empowered them in the utilization of tertiary health care for illness management. This affirms that health education and adequate communication have influence on the utilization of tertiary health care for illness management and outcome.

In this study, female respondents indicated and rated a higher level of satisfaction with the nurses' communication of information when they were asked to rate their satisfaction with communication of nursing care of administration of prescribed drugs which showed that though both gender received similar nursing care, female respondents rated their level of satisfaction differently. The higher rating (27.1%) of the females gender proportion compared to 17.9% of the males may have been due to the fact that women undertake and appreciate both complex and major family responsibilities of childrearing and in fact family reproduction which entails the responsibilities of even carrying out caring activities of different types that may require frequent visit to health facilities not only for their spouses but for their own children as some other studies have found

in literature<sup>18</sup>. Another possible explanation for the higher rating of the female gender difference with satisfaction derived as outcome may be in terms of realization of expectations during their clinical ward experiences of events as majority of the nurses are females and by their nature are more likely to understand the female nurses than male respondents while receiving attention to their problems which considerations are not given to in any way.

In conclusion, this study has provided evidence that revealed link between nurses' communication and patient satisfaction at the University of Benin Teaching Hospital. Nurses' communication in terms of nursing care provision in the tertiary hospital, and patient satisfaction were investigated by examining patients' level of knowledge and awareness of the benefits to be derived. It is evident that the feeling of satisfaction rated as moderate satisfaction by the respondents reflects the overall pattern of satisfaction with nursing care provided by the professional nurse to the patients on admission. The views of patients gave insight into the understanding of the factors that lead to patients' satisfaction.

This study also revealed that there are some respondents who rated their satisfaction as low satisfaction. This calls for urgent attention in the training of nurses (and other health care givers) in relevant communication skills to enhance the provision of quality care for patients.

## Recommendations

In view of the associated importance of the contributions of nurses' communication to care provision in tertiary hospitals, we recommend:

That health talks which highlight the benefits of tertiary health care be made available to the patients and their relations in the therapeutic environment during admission and illness management. This will create awareness and help patients acquire enough knowledge about different health care services that are available.

Also, that nurses should endeavor to upgrade and improve their communication skills through continuous education, conferences and seminars.

## REFERENCES

1. Smith, S. Sinclair D. Raine R. and Reeves B. Health Care Evaluation. Open University Press. England. 2<sup>nd</sup> edition, 2010. Pp143-146
2. Reeder, L.G. The Patient-client as a consumer; Some observation on the changing professional-client Relationship. J. Health Soc. Behav 1972, Vol. 13 (4) Pp 406-410.
3. Iliyasu, Z., Abubakar, I.S, Abubakar, S., Lawani, U.M. and Gajida A.U. Patients' satisfaction with services obtained from Amino Kano Teaching Hospital Kano, Northern Nigeria. Niger J. Clin Practice. 2010 Vol. 13(3) Pp 371- 378
4. Davies, C. Gender and the Professional Predicament in Nursing, Buckingham: Open University Press. 1995
5. Alliyu N. and Oduwole M. D. Hospital and Quality of Care: Implications for health Development: In Nigeria. Ago Iwoye Journal of Social and Behavioural Sciences 2005 Vol. 1 (1) Pp 88-10

6. Federal Ministry of Health (FMH) Health Care in Nigeria: Annual Bulletin of the Federal Ministry of Health Nigeria, Abuja. Nigeria. 1998.
7. Erah, P.O. Care of Hospitalized patients in Nigeria: The need or review and overhaul. *International journal of Health Research* 2009 Vol. 2 (2) Pp105-106.
8. Messina, Scott, Ganey and Zipp. The relationship between patient satisfaction and in-patient admission across teaching hospital and non-teaching hospital. *Journal of Health care management*. 2009.
9. Ware, J.E, Wright, R. and Snyder. Defining and measuring patient satisfaction with medical care. *Eval. Prog. Planning* 1983. Vol. 6 ( ) Pp 247-263.
10. Kibikiwa, T. M. Students' Satisfaction with health care services at Jaja Clinic, University of Ibadan, Ibadan. M.P.H. Thesis. Questionnaire. 2010 1+ 4
11. Duttton, D. R. Explaining the low use of health services by the poor; cost, attitude and delivery system. *American Sociological Review*. 1978. Vol. 43 (3) Pp140-156
12. Technical Assistance Research Programs Washington, DC: TARPs Oxford University Press; 2001
13. Fitzpatrick, R.M. The assessment of patient satisfaction in assessment and evaluation of health and medical care. Jenkinson. Ed. Bulkinghan. Open University Press. 1977.
14. Dornan, M. and Hall, J. Meta-analysis of satisfaction with medical care; description of satisfaction with medical care: a meta-analysis. *Social science and medicine* 1988; Vol.36 (8) Pp11-18.
15. Levinson, W. Roter, D. L. Mullooly J. P. Dull V. T, Frankel, R.M. Physician-patient communication: the relationship with malpractice claims among primary care physicians and Surgeons. *Journal of America Medical Association* 1997. 277; 553-559.
16. Salvage and Kershaw. *Models for Nursing*, London: Scutari. Press. 1990.
17. Jegede, A.S. *African Culture and Health*. Book Wright Publishers. Ibadan. 2013,pp
18. Owumi, B.E. Society and health, social pattern of illness and medical Care. In *Readings in Medical Sociology*. E.A. Oke. and B.E.Owumi. eds. *Resource Development and Management Services (RDMS)* 2013, pp196-208.
19. Jefferys and Sachs. *Rethinking General Practice*, Tavistock. London. 1982
20. Black, N. and Gruen R. *Understanding Health Services*. Open University Press. England. 3<sup>rd</sup> edition, 2009; Pp 100-134.
21. Haralambos, M and Holborn, M. *Sociology: Themes and Perspective*. London. Harper Collins Publisher. 2008; Pp 250-260.
22. Lemeshow, S. and Lwanga, S. *Determination in health studies: A Practical manual*. Geneva. World Health Organization. 1991; Pp146-150
23. National Demographic Health Survey National Demographic Health Survey. Abuja, Nigeria. 2013.