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Evaluation Of Patient Care in Radio Diagnostic Departments in Plateau State, Nigeria.

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ABSTRACT

The aim of this study was to evaluate patient care in radio diagnostic department in three categories of hospitals (mission, tertiary and private) through a cross-sectional study which was conducted within the period of 5months among conscious patients after due consent was gotten. The data collection instrument used was a semi-structured questionnaire designed in line with the objective of the study. A total of 314 patients successful completed the questionnaire. Using a model, the following dimensions where considered: effective communication, physical comfort, patient satisfaction and waiting time /access by grouping the questions in questionnaire along the model. The result revealed from the four areas assess the patients care in the radio diagnostic departments are adequate. However, this can be improved on by making effort to reduce patients' waiting time before and after examination and providing better physical comfort and patient satisfaction within the radio diagnostic environment.

Keywords: Patient Care, effective communication, physical comfort, patient satisfaction, waiting time

INTRODUCTION

Patient-centred care is care found around the patient, a model in which health care providers partner with patients and families to identify and satisfy patients' needs and preferences is important (Itri 2015).

Technologists play a central role in the radiology department, and many of their responsibilities depend on effective communication with patients: taking histories, verifying patients' identity and the procedure to be performed, screening for safety, providing instructions and ensuring that patients understand all instructions, answering questions promptly and accurately, explaining post examination care, and coordinating patient care with efficient and effective use of resources (Scott., 2007). Since technologists play a central role, methods that improve their communication skills are paramount for ensuring patient safety and a positive experience. The acronym AIDET (acknowledge, introduce, duration, explanation, thank you) refers to a set of skills that can be used to improve communication between patients and health care providers in a radiology department (AIDET, Reynolds; 2009): advancing effective communication involves allowing patients time to talk; avoiding medical languages that can be unclear to patients; and using lively listening skills such as repetition, reiteration, and reflection.

To improve health literacy regarding radiologic examination and treatment, the Radiological Society of North America (RSNA) and the American College of Radiology (ACR) collaborated in the development of a public information Web site, Radiology Info (http://www.radiologyinfo.org). This Web site provides information about radiologic studies in a standard style that describes various procedures, indicates common uses, explains how to prepare for procedures, and provides pictures of the equipment used during procedures. The Web site currently contains information on nearly 200 radiologic procedures and can be viewed in English or Spanish (Ellenbogen & Tashjian; 2007).

The physical environment can have a important impact on a patient's experience, and a supportive environment may serve to help prevent illness and alleviate stress and depression (Winkel & Holahan, 1985). Humanizing the hospital's physical environment can be accomplished using windows, skylights, indoor plants, fountains with running water, and landscaping (Gerteis et al., 1993). To reduce ambient noise, beeper and telephone technologies are preferred to overhead speakers for paging. Waiting rooms should be designed to allow occupants to converse, watch television, and read or nap, with easy access to telephones, reading material, movable chairs and sofas, and special chairs for the elderly and handicapped (Itri 2015). Research has shown that when patients informed about the sensory aspects of a procedure it helps reduce worry, also inaccurate thinking about physical sensations (e.g., pain) can be a significant source of distress (Johnson et al; 1985,1974 &1978).

Examination waiting time is an important patient-centred performance metric that can be a significant cause of patient dissatisfaction in a busy radiology department. Patient focus groups and surveys reveal that the top satisfaction criteria for patients revolve around time—specifically, patients wanting quick access to scanners or study rooms (Lexa; 2006).

The five key factors that determine customer satisfaction for a given service are reliability (the ability to provide the service that was promised and to do so dependably and accurately), responsiveness (the willingness and ability to help customers promptly), assurance (the sense of confidence, competence, and courtesy that providers offer), empathy (the degree of caring and attention to individual customers), and tangibles (the physical appearance of facilities and the quality of the equipment) (Anderson & Zemke; 1998, Alderson; 2000)

MATERIALS AND METHOD

A cross-sectional study was conducted at scheduled radio diagnostic examination days for a period of five months at Mission, Tertiary and Private Hospitals in Plateau state. Before conducting research, both ethical clearance and verbal consent was obtained for all hospitals and patients. Semi structured both open and closed ended questionnaire were administered among 314 conscious patients who agreed to participate in the study with a consent form duly signed by each patient.

RESULTS

Table 1a: Demographic data from three category of studied hospital

Hospitals	Patients	Males	Females
Mission	118 (37.6%)	66	52
Teaching	96 (30.6%)	46	50
Private	100 (31.8%)	38	62
Total	314(100%)	150 (47.8%)	164 (52.2%)

Table 1b: Demographic data from three category of studied hospital

Hospitals	15-25 years	26-35 years	36-45 years	Above 45 years
Mission	18 (20.4%)	36 (36.0%)	38 (54.3%)	26 (46.4%)
Teaching	30 (34.1%)	34 (34.0%)	20 (28.6%)	12 (21.4%)
Private	40 (45.5%)	30 (30.0%)	12 (17.1%)	18 (32.1%)
Total	88 (28.0%)	100 (31.8%)	70 (22.3%)	56 (17.8%)

Patients' responses on some of the criteria used to assess patient care

(a) Effective communication

Q1: Were you given adequate explanation before examination was carried out?

Q2: Were you given adequate instruction on what do at every point during the examination?

Table 2: effective communication responses

Hospitals	Yes	No
Mission	94 (35.6%)	24 (48.0%)
Teaching	82 (31.1%)	14 (28.0%)
Private	88 (33.3%)	12 (24.0%)
Total	264 (84.1%)	50 (15.9%)

(b) Physical comfort

Q3: Was the waiting comfortable?

Q4: Were their books, magazines, or television in the waiting area?

Table 3: Physical comfort responses

Hospitals	**Yes, Q3**	**Q4**	**No Q3**	**Q4**
Mission	96 (35.0 %)	62 (49.2%)	22 (55%)	56 (29.8%)
Teaching	86 (31.4%)	00	10 (25%)	96 (51.1%)
Private	92 (33.6%)	64 (50.8%)	8 (20%)	36 (19.1%)
Total	274 (87.3%)	126 (40.1%)	40 (12.7%)	188 (59.9%)

(c) Patient Satisfaction

Q5: were you satisfied with the way you were received?

Q6: were you given privacy during the examination?

Table 4a: Patient satisfaction responses on criteria

Hospitals	**Yes Q5**	**Q6**	**No Q5**	**Q6**
Mission	102 (34.9%)	110 (37.4%)	16 (36.3%)	8 (40.0%)
Teaching	94 (32.2%)	92 (31.3%)	2 (36.3%)	4 (20.0%)
Private	96 (32.9%)	92 (31.3%)	4 (36.3%)	8 (40.0%)
Total	292 (93.0%)	294 (93.6%)	22 (7.0%)	20 (6.4%)

Q7: What is your overall impression?

Table 4b: Patient satisfaction responses on criteria

Hospitals	**Adequate**	**Friendly**	**Inadequate**
Mission	32 (28.1%)	62 (35.6%)	24 (92.3%)
Teaching	46 (40.4%)	50 (28.7%)	00
Private	36 (31.6%)	62 (35.6%)	2 (7.7%)
Total	114 (36.3%)	174 (55.4%)	26 (8.3%)

(d) Waiting time and access

Q8: How long did you wait before the examination?

Table 5a: Waiting time and access responses

Hospitals	**<30minutes**	**30 minutes**	**1hour**	**>1hour**
Mission	54 (28.7%)	24 (32.4%)	20 (62.5%)	20 (100%)
Teaching	78 (41.5%)	18 (24.3%)	00	00
Private	56 (29.8%)	32 (43.2%)	12 (37.5%)	00
Total	188 (59.9%)	74 (23.6%)	32 (10.2%)	20 (6.4%)

Q9: How long did you wait after examination to get your result?

Table 5b: waiting time and access responses

Hospitals	**<30minutes**	**30 minutes**	**1hour**	**>1hour**
Mission	38 (24.1%)	22 (44.0%)	18 (45.0%)	40 (60.6%)
Teaching	72 (45.6%)	10 (20.0%)	8 (20.0%)	6(9.1%)
Private	48 (304%)	18 (36.0%)	14 (35.0%)	20(30.0%)
Total	158 (50.3%)	50 (15.9%)	40 (12.7 %)	66 (21.0%)

DISCUSSION

A total of 314 patients participated in the study out of which 150 (47.8%) were male and 164 (52.2%) were females (Table1a). Age distribution, 15-35 years were 88 (28.0%), 26-35 years were 100 (31.8%), 36-45 years were 70 (22.3%) and over 45 years were 56 (17.8%) respectively (Table 1b). In the area of educational qualification 48 (15.3%) had no education, 30 (9.6%) had primary education, 42 (13.4%) had secondary education and 194 (61.8%) had higher secondary education. For the assessment of patients care using the model on Dimensions of Patient-centered radiology Itri (2015) which includes: effective communication, physical comfort, patient satisfaction and waiting time/ access.

(a) effective communication: from the three categories of hospitals assess the responses shows that most of the patients (84.1%) were given adequate information on the examination being carried out,

however 15.9% responses shows that there is still room for improvement (Table 2). In a survey conducted by Chand et al; 2012 on evaluation of patients care in radio diagnosis Department of Tribhuvan University Teaching Hospital, Kathmandu, Nepal, discovered that social aspects of patient's care were perceived to be poor by the patients as majority of them were not given adequate attention on arrival and member of staff should be welcoming. Since effective communication is essential for successful patient-radiologist relationship; allowing the communication to be more patient centred will improve both quality of care and patient satisfaction. This means letting patients to talk about psychosocial issues, using the patient's own language, and providing information about the examination and explaining steps that will be taken throughout the examination this goes a long way to avoiding unnecessary fear and lack of cooperation during the radiological section.

(b) Physical comfort: From the responses gathered (Table 3) from this study 87.3% of the waiting areas of the hospitals were conducive while 12.7% were found to be inconducive however when Q4 is also analyzed the level of comfort gotten is questionable owing to the absence of materials that should enhance the patients' waiting time. In a previous study by Okaro et al., (2010) it also reported concern of comfortability of waiting areas and environment, they suggested that it can be solved by various hospital management teams providing socially acceptable and comfortable waiting areas. According to Gerteis et al., (1993) humanizing the hospital's physical environment can be accomplished using windows, skylights, indoor plants, fountains with running water, and landscaping. Winkel et al; (1985) in their study "The environmental psychology of the hospital: is the cure worse than the illness?" reveal that the physical environment can have a significant impact on a patient's experience, and a supportive environment may serve to help prevent illness and alleviate stress and depression.

(c) Patient satisfaction: 93.0% of the responses from Q5 and Q6 shows that in the three category of hospitals studied patients were satisfied with the privacy and way they were received although 7.0% were not satisfied (Table 4a). Also, Q7 from Table 4b shows that the overall impression was 36.3% adequate and 55.4% friendly. Patient-centred design features for diagnostic and treatment areas include using sheets and pillows to minimize patient contact with cold metal equipment; making available a variety of musical selections through earphones or headsets; monitoring room temperature so that patients are comfortable in gowns; and ensuring privacy before, during, and after examinations and procedures (Itri 2015) which will improve patients' satisfaction.

(d) Waiting time/ access: Table 5a indicates 59.9% of the response reveals less that 30minutes sent before eexamination while 50.3% is sent after examination waiting for feedback. There need to improve on the time sent. Lexa (2006) study that waiting time is an important patient-centred performance metric that can be a significant cause of patient dissatisfaction in a busy radiology department. The survey also reveals that the top satisfaction criteria for patients revolve around time—specifically, patients wanting quick access to scanners or study rooms. Hence there is need reduce time sent before and after examination.

CONCLUSION

Measures must be put in place to enhance patients' care and such measure requires cooperation in the part of the medical team, management and as well as the patients.

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