

Original Research

Awareness of diagnosis and treatment plan among patients in the Accident and Emergency Department of a Nigerian tertiary hospital.

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Abstract

Background: Patient centred care has a correlation to effectiveness of patient engagement, patient care, and perceived quality of care. Even in the emergency room, awareness of diagnosis and treatment plan is a critical component in every doctor-patient interface as it enhances patient-centred care. This study aims to assess awareness of diagnosis and treatment plan among patients in the accident and emergency department.

Methodology: This is a cross-sectional study conducted at the accident and emergency department of the University of Port Harcourt Teaching Hospital.

Result: One hundred and ninety-seven respondents were recruited into this study comprising of 51.3% males and 48.8% females. Most 86.8% of the respondents were aware of their diagnosis, of which 91.8% knew the accurate diagnosis. Majority 84.8% of the respondents were aware of the treatment, while 68.8% of the respondents were aware of the names of the medications, most of the respondents 59.4% had no knowledge of the side effects of the medications. The majority, 61.4% were involved in the management decision. No significant relationship existed between the socio-demographic characteristics and knowledge of diagnosis and treatment plan.

Conclusion: The chaotic and overcrowded nature of the accident and emergency department should not hamper the delivery of patient centred care. Although, findings obtained from this study reveal that majority of the respondents are aware of their diagnosis and treatment plan, a portion of respondents do not understand their plan of care; this indicates the need for further studies to identify interventions that would ensure that gaps in the physician -patient communication are filled as this optimizes patients' satisfaction of care received, gives better sense of control of their total situation and better quality of life.

Keywords: Accident and Emergency; Diagnosis Awareness; Knowledge

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Introduction

Patient care is moving away from an out modelled traditional approach towards a patient-centred approach that involves patients in their own care¹. The accident and emergency (A&E) department is inundated with peculiar challenges in the provision of high-quality, patient-centred care in a distraction-filled and time-constraint environment which can cause compromise in communication². Communication is defined as the process by which there is an exchange of information between persons in which a common system or sign is used such as language³.

Very often, communication is not carefully considered, restricted only to a brief exchange of forms and prescriptions, leaving patients with ambiguity about the diagnosis, care plan and at risk of errors in medication use; Patients are entitled to have adequate information about their clinical evaluation, procedure, diagnosis and treatment plan and prognosis from their physicians. Effective communication should therefore be an essential characteristic of the capability of the physician and the quality of the medical care that is provided to the patients^{4,5} as this has been shown to have an impact on patient's outcome³.

Despite its advantages, multiple studies have shown lack of knowledge at discharge, with patients often unable to report their diagnosis, management plan, or reasons to return^{6,7}. In a Scottish study⁶, one out of five patients had no comparative understanding of their diagnosis with 31% responding neither agree nor disagree or lower for understanding their diagnosis, 17% did not know symptoms that would prompt them to revisit a doctor, and 42% of the patients had only partial concordance or lower for understanding instructions to take their medications. In another study⁷ in a UK hospital, 27% of patients did not remember being told their diagnosis. This low level of awareness of diagnosis and treatment is similar to the findings obtained in Shanghai and Sri Lanka^{8,9}, this however is in contrast to a Norwegian and Ethiopian studies^{10,11} which noted a high awareness level of 83% and 61.9% respectively.

There is however dearth of literature about patient's level of awareness of diagnosis and treatment in the accident and emergency department in Nigeria necessitating this study, the outcome of which will serve as a gauge on the quality of care provided.

Methodology

This cross-sectional study was conducted in the Accident and Emergency Department of University of Port Harcourt Teaching Hospital between June to September 2023. This 782- bed capacity tertiary care hospital located in the Southern state of Nigeria provides emergency care for the general population.

Study Population

Consenting patients who are discharged home, or admitted into the appropriate ward for further in-patient care or care givers when patient is unable to communicate were recruited into the study. Patients who were critically ill, cases leaving against medical advice, significant psychiatric history were excluded.

Data Collection

Trained data collectors administered the validated questionnaire which had been pre-tested to the consenting respondents. The two researchers supervised the data-collection process. Patients were classified as having awareness when information from patients' verbal report agreed with the information from their medical record.

Sampling Method

Consenting respondents admitted into the A&E were recruited into the study using purposive sampling method. Those recruited had their folders marked to avoid re-recruitment.

Research Instrument

The data collection tool as designed is divided into three parts. Part 1 comprised questions related to socio-demographics; Part 2 was adapted from the Communication Assessment Tool (CAT) while Part 3 comprised questions on patients' awareness of diagnosis. The Communication Assessment Tool (CAT) is a 15-item questionnaire that was developed by Makoul, Krupat and Chang¹² in 2007. Fourteen of the items in the Communication Assessment Tool (CAT) focus on the doctor while one question focused on the staff working with the physician. The Communication Assessment Tool (CAT) is measured on a 5-Likert scale, 1-poor, 2-fair, 3-good, 4-very good and 5-excellent; it is an easy questionnaire that can be scored effectively.¹¹ This tool is reliable and has been validated in studies in Italy and America^{12,13}

Data Analysis

Data were entered, cleaned and coded using the Statistical Package for Social Sciences (SPSS) version 29 and presented in tables. Descriptive statistics, including frequency distribution and percentages were made for most variables. Chi-square was used to compare variables and a $P < 0.05$ was considered significant.

Ethical Considerations

Informed verbal consent was obtained from each respondent after detailed explanation. Privacy, confidentiality and autonomy was maintained throughout the study as only serial numbers was be allocated to the participants. The participants were informed of their rights to withdraw from the study at any stage without loss of benefit. Pass worded data was accessible only to the investigators. This study was approved by the UPTH Research Ethics Committee

Results

The number of respondents recruited into this study was 197. The result shows that 55(27.9%) of the respondents were 60 years or above, 101(51.3%) were males, 81(41.1%) were single, 89(45.2%) attained tertiary level education, and 116(58.9%) were patients (Table 1)

Tables 1: Socio-Demographic Characteristics of the Respondents

Variable	Frequency n=197	Percent
Age group		
<20	21	10.7
20-29	31	15.7
30-39	29	14.7
40-49	33	16.8
50-59	28	14.2
≥60	55	27.9
Sex		
Male	101	51.3
Female	96	48.7
Marital Status		
Single	81	41.1
Married	75	38.1
Widow/widower	28	14.2
Divorce	5	2.5
Separated	8	4.1
Education		
No formal education	24	12.2

Primary	19	9.6
Secondary	65	33
Tertiary	89	45.2
Respondent		
Patient	116	58.9
Caregiver/companion	81	41.1

Awareness of Diagnosis

The result shows that 121(56.9%) of the respondents had been admitted for 2-5 days, and 171(86.8%) knew their diagnosis. For the patients who said they knew their diagnosis. On crossing the diagnosis in the patient's clinical notes, 157 (91.8%) of the respondents reported the correct diagnosis while 14 (8.2%) were incorrect (Table 3).

Table 2: Awareness of Diagnosis

Variable	Frequency n=197	Percent
Duration of Admission		
≤1 days	30	15.2
2-5 days	112	56.9
6-10 days	33	16.8
>10 days	22	11.2
Know diagnosis		
Yes	171	86.8
No	26	13.2
Correct Diagnosis		
Yes	157	91.8
No	14	8.2
Important for the doctor to tell diagnosis		
Yes	165	83.8
No	32	16.2

Awareness of Treatment

The result shows that 144(73.1%) of the respondents reported that the doctor voluntarily told them the diagnosis, 165(83.8%) reported that it is important for the doctor to tell them the diagnosis, 130(68.8%) reported that the doctors informed them of the names of their medication and 80(40.6%) of the respondents discussed the side effect with their doctors. Furthermore, 180(91.8%) of the respondents reported that the doctor requested for investigation, 121(61.4%) reported that they were involved in decisions concerning their management and 147(74.6%) were encouraged to ask questions. (Table 3)

Table 3: Awareness of treatment

Variable	Frequency n=197	Percent
Informed the names of medication		
Yes	130	68.8
No	59	31.2
Discussed side effects of medication		
Yes	80	40.6
No	117	59.4
Discussed management/treatment		
Yes	167	84.8
No	30	15.2
Doctor requested investigation		
Yes	180	91.8
No	16	8.2
The doctor discussed the requested investigation		
Yes	177	89.8
No	20	10.2
Involved in management decision		
Yes	121	61.4
No	46	23.4
Don't know	30	15.2
Encouraged to ask questions		
Yes	147	74.6
No	50	25.4

Socio-Demographic Characteristics and Awareness of Diagnosis

There was no significant relationship between Socio demographic characteristics and knowledge of diagnosis (Table 4).

Table 4: Socio-Demographic Characteristics and Awareness of diagnosis

Variable	Know Diagnosis		X ² (p-value)
	Yes n(%)	No n(%)	
Age group			
< 40 years	69(94.5)	4(5.5)	0.938(0.333)
≥ 40 years	96(90.6)	10(9.4)	

Sex			
Male	85(91.4)	8(8.6)	0.164(0.686)
Female	80(93.0)	6(7.0)	
Marital Status			
Married	62(91.2)	6(8.8)	0.153(0.696)
Single/Divorced/Widowed	103(92.8)	8(7.2)	
Education			
≤ Secondary education	87(89.7)	10(10.3)	1.818(0.178)
Tertiary education	78(95.1)	4(4.9)	
Respondent			
Patient	79(92.9)	6(7.1)	0.106(0.745)
Caregiver	65(91.5)	6(8.5)	
Caregiver Education			
≤ Secondary education	25(96.2)	1(3.8)	0.667(0.414)
Tertiary education	140(91.5)	13(8.5)	

Socio- Demographic Characteristics and Knowledge of Treatment

There was no significant relationship between socio demographics and knowledge of treatment (Table 5)

Table 5: Relationship between Socio- Demographic Characteristics and Knowledge of Treatment

Variable	Know treatment		X ² (p-value)
	Yes n(%)	No n(%)	
Age group			
< 40 years	56(71.8)	22(28.2)	0.625(0.429)
≥ 40 years	73(66.4)	37(33.6)	
Sex			
Male	70(73.7)	25(26.3)	2.137(0.144)
Female	60(63.8)	34(36.2)	
Marital Status			
Married	49(68.1)	23(31.9)	0.029(0.866)
Single/Divorced/Widowed	81(69.2)	36(30.8)	
Education			
≤ Secondary education	68(64.8)	37(35.2)	1.779(0.182)
Tertiary education	62(73.8)	22(26.2)	
Respondent			
Patient	68(77.3)	20(22.7)	2.699(0.100)
Caregiver	52(65.8)	27(34.2)	
Caregiver Education			
≤ Secondary education	20(64.5)	11(35.5)	0.314(0.575)
Tertiary education	110(69.6)	48(30.4)	

Discussion

Hospital emergency departments provide health care to patients with various ailments and illnesses. Visits to the ED are most times not anticipated resulting in stressful situation for the patient. This then presents peculiar challenges to the patient-physician relationship; rapid pace of clinical care, energetic nature of managing teams, and lack of a prior relationship¹⁴. Despite these challenges, good doctor-patient communication should be established when patients are told their diagnosis and treatment plan as this empowers the patient to express their concerns and preferences¹⁴.

In this study, most of the respondents 86.8% were aware of their diagnosis with a 91.8% accuracy, this is similar to Ethiopian and Nepalese studies which had majority of its respondents 61.9% and 57.7% aware of their diagnosis respectively while 52.8% of the patients were aware of management plan^{11,15}; this however is in contrast to a Scottish study⁶ which found that one out of five patients had no comparative understanding of their diagnosis with 31% responding neither agree nor disagree or lower for understanding their diagnosis and in an United Kingdom and US studies 27% of patients did not remember being told their diagnosis, while more than one-third of patients could not clearly describe their diagnosis^{7,16}

Medications are vital for the health recovery, providing patients with information concerning their prescribed medications enables them to use the medications appropriately, thereby increasing not only their satisfaction but also their compliance with the treatment plan. In this study, most of the respondents 84.8% had knowledge of the treatment plan and while 68.8% knew the name of the medications, this is comparable to a Turkish study¹⁷, whose finding indicated that majority of the respondents 57.1% knew the purpose of the medication, while 31.7 % knew the name of the medications. In a UK study 42% of the patients had only partial concordance or lower for understanding instructions to take their medications⁷

This study did not find any significant association between socio- demographics characteristics and diagnosis and treatment, this is similar to an Ethiopian study,¹¹ however, this is in contrast to a New York study conducted in an acute care facility where a significant relationship existed between age, educational level and patient wishes to know their diagnosis¹⁶. This may be due to poor healthcare seeking behaviour in Nigeria. The variable results obtained from the various studies could be because of the different sample sizes, different sampling methods and questionnaires used in these studies.

The findings from this study indicates that there may be some potential barriers in the provision of understandable information between the doctor and the patient in the Emergency department, these barriers could be; time constraint, frequent interruptions, varying health care personnel's (HCP) communication skills, poor patient health literacy, patient culture of not asking or clarifying questions, non-availability of written, standardised information and patients who do not necessarily feel adequately informed or satisfied with the information^{12,13,18,19}

Limitation

Since this study is cross-sectional in nature, it will not be possible to establish the direction of effect of some outcomes and explanatory variables. The study is not able to highlight factors responsible for the lack of awareness of the diagnosis and treatment plans among the patients. The study also did not investigate on the impact of varying levels of health literacy among patients – there could have been inpatients who had better awareness and understanding of their conditions because of chronicity, compared to those newly diagnosed or those with acute conditions. Furthermore, the study did not enquire whether patients acquired information from other sources during the study period.

Conclusion

Although the proportion of respondents that reported awareness of clinical diagnosis and current medication were high, a substantial portion of respondents do not understand their plan of care. Efforts should be made to improve hospitalized patients' understanding of their care plan by using a shared decision-making model and health education activities throughout their hospitalization. This is desirable as well-informed patients are more satisfied with care, have a better sense of control of their total situation and report a better quality of life. The noticeable communication gaps seen in this study between the doctor and patient needs to be addressed. This clearly indicates the need of interventions to understand how this gap of physician patient communication can be filled.

Conflict of interest: None

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