

### Arid Zone Journal of Basic and Applied Research

## Faculty of Science, Borno State University Maiduguri, Nigeria

Journal homepage: https://www.azjournalbar.com



#### Research Article

# Attitude, Perception and Acceptability of Medical Students' Involvement in Patient Management among Patients Attending Ahmadu Bello University Teaching Hospital, Zaria, Nigeria

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#### **ARTICLE INFO:**

#### **ABSTRACT**

#### **Keyword:**

Attitude, Clinical Clerkships, Medical Student, Patients, Perception The involvement of medical students in patient clerkship, whether in outpatients or inpatients wards, is an important aspect of the training of medical students. During clinical clerkship, students extend their medical knowledge, practice procedural and communication skills, and develop clinical thinking to build their clinical proficiency. However, this is only possible if there are healthy, consensual, and professional patient-student interactions and when patients show a positive attitude towards student participation. This study aimed to determine the attitude, perception, and level of acceptability of medical students' involvement in patient management among in-patients of Ahmadu Bello University Teaching Hospital (ABUTH), Zaria. A cross sectional hospital-based study was conducted among 185 patients of ABUTH, Zaria using an interviewer administered questionnaires. One hundred and eighty-five consented respondents aged ≥15 years were enrolled and administered with the doctors during the ward round time questionnaire. Data collected were presented in frequency and percentages. Most of the respondents 169 (91.4%) reported to have history of previous contact with medical students in their previous hospitalization, and 125 (67.6%) showed good attitude, perception and high acceptance level toward involvement of medical student in their clinical management. However, 40 (23.5%) patients raised their concern towards informing them before involving medical students in their clinical care. Hence, it was recommended that patients should be informed and agreed before medical students are allowed to be involved in their care in ABUTH Zaria.

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#### INTRODUCTION

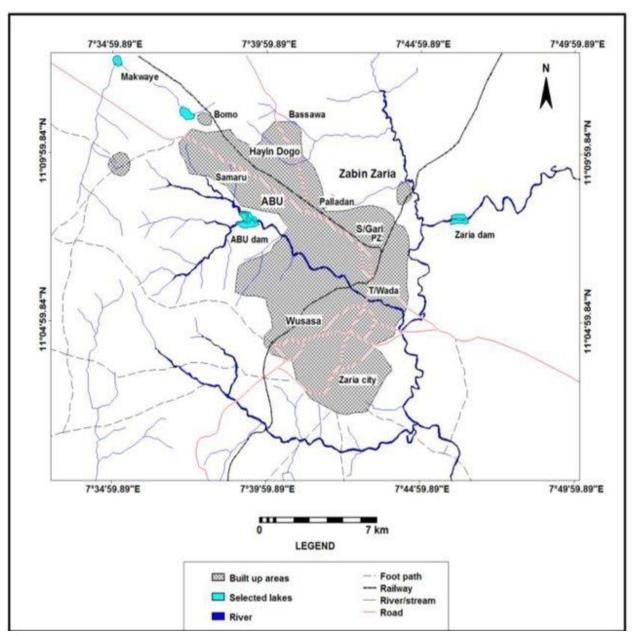
Student involvement in patients' management helps students to develop their clinical reasoning, decision-making, professionalism, empathy, and patient management (Iqbal et al., 2020). The involvement of medical students in patient's clerkship, whether in outpatients' or inpatients wards, is an important aspect of the training of medical students (Molapo and Muula, 2010 and Dornan et al., 2014). During the patient's clerkships by the medical students, the students may enhance their medical knowledge, practical procedure communication skills, and develop clinical thinking to build their clinical proficiency (Scheffer et al., 2010). Therefore, using the real patient will serve as the best resource for medical teaching (Al-Khatib et al., 2016). Patients' perceptions toward medical students' involvement in his/her medical care will be primarily based on personal experience or their surrounding experience and the way they evaluate the medical student's attitude (Al-Khatib et al., 2016). However, this can only possible if the student shows good healthy, consensual, and professional patient-student interactions. An effective patient-student relationship can also encourage patients to share detailed and accurate information about their condition and adhere to a management plan, which can lead to improvements in health outcomes (Igbal et al., 2020).

Generally, the patients' attitude and perception towards the students' involvement in their clinical care have several benefits in medical students training (Al-Ghobain *et al.*, 2016). Several studies have shown that most of the patients had positive attitudes towards the involvement of medical students in their

clinical management (Mwaka *et al.*, 2022). However, these attitudes vary across regions and countries and seem to be determined by various socio-demographic factors, cultural and religious perceptions (Length, 2012). The present study aimed to determine the patients' attitude, perception, and level of acceptance towards medical students' involvement in their clinical management at ABUTH, Zaria. This should provide useful information to clinical teachers on how to manage training clinics in a way that increases both students' learning opportunities and patients' comfort.

# MATERIALS AND METHODS Study Area

Ahmadu Bello University Teaching Hospital (ABUTH) is one of the first-generation hospitals in Nigeria. It started in 1967 as a health institute in accordance with statute 15 of the Ahmadu Bello University Law by the then Northern Nigerian Government. The hospital was later taken over by the Federal Ministry of Health where it became ABUTH under decree 10 of first January 1985 with 3 branches sites in Tudun Wada, Zaria; Anguwar Rimi, Kaduna in Kaduna state and Malumfashi in Katsina State. A need to centralize its services led to its move to its' permanent site in Shika following a ministerial directive in 1999. The permanent site was officially commissioned on 11th November 2005 by the then president, Chief Olusegun Obasanjo at Shika the village of Giwa LGA of Kaduna State and is about 3km from ABU main campus, Samaru- Zaria and about 2km from Shika town, along the Zaria-Funtua road (Oniye et al., 2014).



**Figure 1:** Map of Zaria-Nigeria showing the location of Ahmadu Bello University Teaching Hospital (Oniye *et al.*, 2014).

#### **Study Design**

A cross sectional hospital-based study among patients attending Ahmadu Bello University Teaching Hospital Shika (ABUTH).

#### **Ethical Approval**

The ethical approval for the study was obtained from the Health Researched Ethics Committee of ABUTH (HREC) before the commencement of the study.

#### **Study Population**

Study population comprises of only consented in-patients of ABUTH age ≥15 years. The purpose of the study was clearly explained to all participants and patients were assured of confidentiality of their information and the right to withdraw from the study if at any time felt uncomfortable.

#### **Data Collection**

A total of 250 structural questionnaires were administrated and informed consent form to each of the participants explained the aim of the study and how it will benefit society and structured interviewer questionnaires were administrated to consented participants. Most of the questions were close-ended types.

#### **Data Analysis**

The data generated in the study were analysed using the simple descriptive Statistics, into simple frequency and percentages.

#### **RESULTS**

Of the 250 questionnaires administrated, (185) respondents were retrieved in the study, most of the respondent 53(28.6%) were within the age group 25-34 years, followed by 41(22.2%) and 38(20.5%) among those aged 35-44 and 15-24 years respectively. The least number of the participants 15(8.1%) was found among those aged  $\geq 65$  years. Ninety-three (50.3%) of the participants were male, while 92(48.7%) were females, 135(73.0%) were Muslim and 50(27.0%) were Christian by religion. The majority of the participants 67(36.2%) have a tertiary level of education and 59(31.9%) with a secondary level. Fifty-six

(30.3%) participants were Entrepreneurs, 46(24.9%) civil servant, 43(23.2%) were businessmen/women while the remaining 40(21.6%) were not documented (Table 1).

One hundred and sixty-nine (91.4%) of the respondents have a history of previous contact with medical students during previous visits to the hospital while 15 (8.7%) respondents never had contact with medical students. Out of 185 respondents, 44(23.8%) reported that the medical student asked them some questions during clinical clerking, 12(6.5%) of the patients observed only doctors when examined and 4(2.2%) reported that only the medical students examined them, while 125(67.6%) reported that both the medical students and doctors carried all the procedures when examined them. One hundred and five (56.8%) patients reported having a good contact experience with medical students while 42(22.7%) patients had a very good experience (Table 2).

The attitude of the majority of the patients is strongly agreed and agreed toward the acceptance of medical students' involvement in their clinical management during their stay in the hospital. Only very, few are showed an attitude of strongly disagreed or disagreed with medical students' involvement in their clinical management during their stay at the hospital (Table 3).

Table 4 showing the level of respondent perception toward medical student involvement in their clinical management during their stay in the study center. Majority of the respondents have good perception towards students' involvement in their clinical management. However, most of the respondents think they don't have right to refuse the involvement of medical students in their care.

 Table 1: Distribution of the Respondents Socio-Demographic Variable

Variable	Frequency	Percentage	
Age range(years)			
15 - 24	38	20.5	
25 - 34	53	28.6	
35 - 44	41	22.2	
45 - 54	20	10.8	
55 - 64	18	9.7	
≥65	15	8.1	
Sex			
Female	92	49.7	
Male	93	50.3	
Religion			
Christianity	50	27.0	
Islam	135	73.0	
Level of education			
No formal education	36	19.5	
Primary education	23	12.4	
Secondary education	59	31.9	
Tertiary education	67	36.2	
Occupation			
Entrepreneur	56	30.3	
Businessman/woman	43	23.2	
Civil Servant	46	24.9	
None documented	40	21.6	
Marital status			
Divorced	8	4.3	
Married	137	74.1	
Single	30	16.2	
Widowed	10	5.4	

 Table 2: History of Previous Contact with Medical Students by the Respondent

Variable	Frequency	Percentage (%)	
History of contact with medical students in	the hospital		
Yes	169	91.4	
No	16	8.7	
Services provided to the patient by the med	ical students		
Asked me questions only	44	23.8	
Examined me	4	2.2	
Observed doctors examining me	12	6.5	
All of the above	125	67.6	
Experience of contact with medical students	S		
Very good	42	22.7	
Good	105	56.8	
Neutral	29	15.7	
Bad	6	3.2	
Very bad	3	1.6	

 Table 3: Respondents Attitude toward Medical Students Involvement in their Clinical Management

<b>Attitude Statements</b>	S.A (%)	A (%)	N (%)	D (%)	S.D(%)
Can you allow medical students to read you file	72 (38.9)	92 (49.7)	6(3.2)	14(7.6)	1(0.5)
Can you permit medical students to be present during your interaction with you doctor	72(38.9)	92(49.7)	6(3.2)	15(8.1)	0(0.0)
Can you permit medical students to be present in the operation room when undergoing a surgery	70(37.8)	90(48.6)	4(2.2)	19(10.3)	2(1.1)
Can you permit medical students to take your medical history including personal details in the presence of a doctor	67(36.2)	99(53.5)	5(2.7)	13(7)	1(0.5)
Can you answer question about social life (smoking, alcohol and extramarital affairs) when asked by medical students	59(31.9)	99(53.5)	6(3.2)	20(10.8)	1(0.5)
Can you permit medical students to be present while doctor examines you	57(30.8)	101(54.6)	4(2.2)	22(11.9)	1(0.5)
Can you permit medical students to examine you in the presence of a doctor	61(33)	100(54.1)	6(3.2)	18(9.7)	0(0.0)
Can you permit medical students to examine you alone	59(31.9)	92(49.7)	6(3.2)	28(15.1)	0(0.0)
Can you permit medical students to be present while undergoing other procedures (e.g., drawing blood, inserting catheter, etc.)	75(40.5)	91(49.2)	5(2.7)	14(7.6)	0(0.0)

Can you permit medical students to					
perform other procedures on you? (e.g.	60(32.4)	98(53)	7(3.8)	20(10.8)	0(0.0)
Drawing blood, inserting catheter, etc)					0(0.0)

Key: S.A = Strongly agree; A = Agree; N = Neutral; D = Disagree; S.D = Strongly disagree

**Table 4:** Respondents Perception toward Medical Students Involvement in their Clinical Management

Perception Statements	S.A (%)	A (%)	N (%)	D (%)	S.D (%)
I believe I have the right to refuse					_
medical students' involvement in my	47(25.4)	54(29.2)	9(4.9)	67(36.2)	8(4.3)
care					
I can object the presence of medical					
students during my physical	35(18.9)	41(22.2)	15(8.1)	82(44.3)	12(6.5)
examinations by a doctor					
I think I can agree if the medical student	32(17.3)	53(28.6)	32(17.3)	60(32.4)	8(4.3)
only asks me questions	-(-,:-)	()	-(-,)	33(2211)	5(112)
I believe that the general appearance and	50/21 4)	(1 (22)	17(0.0)	10(00.7)	7(2.0)
manner of the students can affect my co-	58(31.4)	61(33)	17(9.2)	42(22.7)	7(3.8)
operation with them					
I believe I would object to medical	25(13.5)	35(18.9)	16(8.6)	89(48.1)	20(10.8)
student examining me I feel I should be informed before					
medical students will be present during	44(23.8)	58(31.4)	18(9.7)	54(29.2)	11(5.9)
my examination	44(23.8)	36(31.4)	10(9.7)	34(29.2)	11(3.9)
I feel that the students should be the same					
gender with me	26(14.1)	43(23.2)	60(32)	13(7.0)	0(0.0)
I feel I have difficulty discussing my					
personal history with medical students	16(8.6)	29(12.4)	23(12.4)	91(49.2)	26(14.1)
I feel embarrassed when the doctor					
examines my genitalia in front of	30(16.2)	45(24.3)	17(9.2)	68(36.8)	25(13.5)
medical students	( /	- (	( )	()	- ( )
I feel humiliated if I'm asked questions					
about alcohol intake and extra marital	19(0.7)	20(12.4)	1.6(0,6)	02(50.2)	20(12.4)
sexual activities in the presence of	18(9.7)	29(12.4)	16(8.6)	93(50.3)	29(12.4)
medical students					
I think I will not recommend to any client					
to allow medical students as part of the	6(3.2)	18(9.7)	20(10.8)	106(57.3)	35(18.9)
people involved in their care					

Key: S.A = Strongly agree; A = Agree; N = Neutral; D = Disagree; S.D = Strongly disagree

#### **DISCUSSION**

The clinical clerkship, whether in outpatients' clinics or admission wards, is an important aspect of the training of medical students (Molapo and Muula, 2010). During clinical clerkship, students enhance their medical knowledge, practice procedural and

communication skills, and develop clinical thinking to build their clinical proficiency (Scheffer *et al.*, 2010). Interaction of medical studies with patients have been shown to help medical students articulate their knowledge of diseases and practice clinical reasoning in a wide range. Therefore, real patient involvement

is the best resource for medical teaching (Al-Khatib *et al.*, 2016). However, patients' perceptions of care can potentially be affected by the presence or involvement of medical students which in turn, influence the students' educational experience (Simon *et al.*, 2000 and Al Ghobain *et al.*, 2016).

The outcome of this study showed that the majority of the respondents' generally had a positive perception and attitude toward medical students' participation in their clinical management. This study agreed with the report of another study done by Al-Ghobain et al. (2016) among patients admitted to the medical and surgical wards in King Abdulaziz Medical City, Riyadh, Saudi Arabia, on patients' perceptions towards the participation of medical students in their care reported an overall 98% (407/416) of their participants acknowledged the educational benefit of the medical students if he/she involved in their care, 89% would permit physical examinations by medical students. Ikeako et al. (2016) in their study reported 75.4% (147/195) of the participants were willing to allow medical students to participate in their consultation in their study conducted on the attitudes of patients to the participation of medical students in their consultation in the gynecology clinic at the University of Nigeria Teaching Hospital, Ituku-Ozalla Enugu (UNTH), South-East Nigeria. Onotai et al. (2012) recorded 77.1% (185/240) that most of the respondents in their study were willing to allow medical students to participate in their clinical management in a descriptive cross-sectional study on all adult patients who attended the outpatient clinics of Ear, Nose, and Throat (ENT) surgery, General surgery, Internal Medicine, Obstetrics and Gynecology departments of the University of Port Harcourt Teaching Hospital (UPTH), River State, Nigeria. However, other studies have reported that lack of previous experience from the respondents with medical students'

involvement was the main factor for the discomfort when asked to identify factors that could influence their unwillingness to cooperate with medical students (Sayed-Hassan *et al.*, 2012).

#### **CONCLUSION**

In conclusion, the study indicated that the majority of the patients had a good attitude, perception, and acceptance of medical students' involvement in their care. This appeared to be affected by the manner and behavior of the student, the presence of a supervising doctor during the interactions, etc. However, few patients raised their concerns about informing them before the student's involvement. Hence, it was recommended that patients should be informed and give their consent before medical students are allowed to be involved in their care in ABUTH Zaria.

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