

ATTITUDE AND PERCEPTION OF SELECTED HEALTH WORKERS TOWARDS MULTI DISCIPLINARY COLLABORATION IN THE CARE OF PATIENTS WITH STROKE IN EKITI STATE UNIVERSITY TEACHING HOSPITAL (EKSUTH), ADO-EKITI, EKITI STATE, NIGERIA

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**Abstract:** This is a descriptive non-experimental research on attitude and perception of selected health workers towards multidisciplinary collaboration in stroke care in Ekiti State University Teaching Hospital, Ado-Ekiti. Multidisciplinary team is a collection of professionals from different disciplines who share a common area of working practice. However, bringing individual professionals together in the management of stroke patient doesn't mean they will automatically function cooperatively. The objective of this research work is to access the perception of health workers towards multidisciplinary collaboration in Ekiti State University Teaching Hospital, Ado-Ekiti. The findings and recommendation of this research will help the health care workers see the need to foster love, respect and understanding among health workers. A descriptive study design was used to assess the attitude and perception of health workers towards multidisciplinary collaboration in the management of stroke patient in Ekiti State University Teaching Hospital, Ado-Ekiti. The sample size of this study was made up of Doctors, Nurses and Physiotherapist in Ekiti State University Teaching Hospital, Ado-Ekiti. The population of health workers in the selected wards is 100. The findings revealed that 80% of the respondents agreed that to be effective, health professionals should understand the work of their fellow team members. Majority of the respondents agreed to usefulness of interdisciplinary team working in the delivery of care of stroke patient. 78% respondents accept to work in a team where nurses and other health professionals share responsibilities of patient care with Doctors.

It was also revealed in this study that health workers have good attitude towards multidisciplinary collaboration and that an interdisciplinary team working is a useful approach to effective and sustainable high quality care of stroke patient in Nigeria. Thus, Nurses and other health workers should provide a forum where they can collaborate in care of patient and they should eliminate all barriers that prevent team work.

**Keywords:** Stroke, Patients, Health workers.

### Introduction

Stroke is a major public health problem nationwide that causes permanent damage to a part of the brain by obstruction cerebral blood flow. It is the third leading cause of death in industrialized countries and rank among the five most common causes of hospital death in adults in Africa (Geoffery, 2010). It accounts for 11% of the death and represents the largest cause of adult disability. Cerebral infarction causes about 85% of strokes with the remaining 15% due to primary and subarachnoid haemorrhage (Clarke, 2010). According to a release by the World Health Organization (WHO). Stroke amount for 10.8% mortality and 3.1% of disease burden nationwide. In Nigerian hospitals, it constituted 3.7% emergency admission, 8.7% of medical admission and 6% of death (Ojini, 2014). Because of the wide range and seriousness of the impacts of stroke on patients and their families, multidisciplinary care is often required (Robyn, 2008). Stroke teams are larger than many health care teams, so coordination and effective collaboration are important. Stroke team in hospital are made up of core groups which are physiotherapist speech and language therapist, occupational therapist, stroke physician, nurses and health assistant. (Clarke, 2010). Multi-disciplinary teamwork implies that only not only do team members perform activities towards a common goal, they also accept the added responsibility of group effort on behalf of the patient. Members contribute different professional perspectives, but goal settings care planning and decision making are collaborative activities (Davies, 2009). In stroke service, this collaboration can occur weekly or more frequently, multidisciplinary team meetings and through ongoing patient focus dialog.

## Materials and Methods

*Study Area.* This research was carried out among doctors, nurses and physiotherapist selected in Ekiti State University Teaching Hospital, Ado-Ekiti. The hospital is a referral tertiary centre and the only teaching hospital in the state. The hospital is very large with several departments which include medicine, surgical out-patient unit, immunization unit, orthopedic unit, ear, nose and throat unit, ophthalmic, adult emergency unit, children emergency, maternity complex, theatre, chest clinic, psychiatry, laboratory, pharmacy. There are 29 consultants, 300 Nurses, 18 laboratory scientist, 4 pharmacy technician, 125 hospital attendants, and 10 physiotherapists.

*Study Design.* This was a descriptive cross-sectional study.

Sample Size: The sample size ( $N_0$ ) was calculated using Taro Yemen's formular:

$$N_0 = \frac{N}{1+e^2N}$$

Where  $N_0$ =Sample size

$N$ =Population size

$e$  = desired level of precision also known as sampling error (5%)

$$\text{Therefore, } N_0 = \frac{133}{1+133(0.05^2)}$$

$$N_0 = 100$$

The sample size was 100.

*Sampling Technique and Data Collection.* Data were collected using self-administered semi-structured questionnaire. The questionnaire had 5 parts; the first part assessed the Sociodemographic characteristics of the respondents while the other 4 parts assessed the perception of health workers towards interdisciplinary collaboration, attitude of interdisciplinary team working, benefit of multidisciplinary collaboration and factors that hinders multidisciplinary collaboration respectively. Purposeful sampling technique was used to select the medical wards (male and female) and the physiotherapy unit where concept of multidisciplinary collaboration in the management of stroke patient is usually adopted. The allotted questionnaires were then shared randomly, using systematic sampling method using the health care workers on the departmental duty register as the sampling frame. Care was taken to avoid re-administering the questionnaire to those that had previously been administered. This was done by simply asking if they had previously answered to this particular questionnaire. The purpose of the study was explained and consent obtained. The questionnaires were retrieved from each respondent immediately after completion and they were reviewed for completeness.

*Data Analysis.* The data obtained were analyzed using IBM SPSS Statistics version 23 (IBM Corp. Armonk, NY, USA). The data obtained were reclassified for easy analysis, age-grouped into  $\leq 50$  years and  $> 50$  years, marital status into single, married, divorced and widow, gender into male and female, religion into Christianity and Islam, occupation into doctor, nurse and physiotherapist and duration of service into  $\geq 0$  and  $\leq 15$  years.

*Ethical Consideration.* Permission to administer the questionnaire and carry out this research was sought and obtained from the Research and Ethics Committee of Ekiti State University Teaching Hospital, Ado-Ekiti, Ekiti State.

Results

Table 1: Sociodemographic characteristics of study population

VARIABLE	FREQUENCY	PERCENTAGE
Age		
20-29years	4	4
30-39years	25	25
40-49years	60	60
50years and Above	11	11
Total	100	100
Sex		
Male	21	21
Female	79	79
Total	100	100
Marital Status		
Single	17	17
Married	60	60
Divorced	16	16
Widow	7	7
Total	100	100
Religion		
Christianity	79	79
Islam	21	21
Total	100	100
Occupation		
Doctor	16	16
Nurse	70	70
Physiotherapist	14	14
Total	100	100
Duration of Service		
0-5years	20	20
6-10years	64	64
11-15years	16	16
Total	100	100

The above table 1 shows that 4% of the respondents are within the ages of 20-29years, 25% are within 30-39years, 60% are within 40-49years of age while 11% respondents are either 50years of age or above. This implies that majority of the respondents are within 40-49years of age. Majority of the respondents are female (79%), married (60%), Christianity (79%) and are nurses (70%). Nurses within 6-10 years of working experience made up the largest proportion (64%).

Table 2: Perceptions of health workers towards multidisciplinary collaboration in management of stroke patient

S/N	Item		Strongly Disagree	Disagree	Agree	Strongly Agree	Total
1	It is good to be exposed to training on interdisciplinary collaboration in care of stroke patient	<i>f</i>	3	8	31	58	100
		<i>%</i>	3	8	31	58	100
2	Ineffective collaboration significantly increases the risk of errors in client management	<i>f</i>	-	-	29	71	100
		<i>%</i>	-	-	29	71	100
3	An interdisciplinary goal is of greater value than the goals of individual team	<i>f</i>	19	18	21	42	100
		<i>%</i>	19	18	21	42	100

	members						
4	To be effective, health professionals should understand the work of their fellow team members	<i>f</i>	11	9	18	62	100
		%	11	9	18	62	100
5	I prefer to work with other health professionals that query the care i render to stroke patient	<i>f</i>	13	15	23	49	100
		%	13	15	23	49	100
6	Conflict is normal among health professionals when caring for stroke patient	<i>f</i>	55	15	13	17	100
		%	55	15	13	17	100
7	Conflict helps to deepen understanding and agreement among health professionals when caring for stroke patients	<i>f</i>	39	34	9	18	100
		%	39	34	9	18	100

**Table 3:** Attitudes of health workers towards multidisciplinary collaboration in management of stroke patient

S/N	Item	Very Useful	Moderately Useful	Useful	Total	
8	How would you rate the usefulness of interdisciplinary team working in the delivery of care of stroke patient?	<i>f</i>	64	24	10	100
		%	64	24	10	100

S/N	Item	Yes	No	Total	
9	Do you consider interdisciplinary team working as a useful approach to effective and sustainable high quality care for stroke patient in Nigeria?	<i>f</i>	100	-	100
		%	100	-	100
10	Will you accept to work in a team where nurses and other health professionals share responsibilities of patient care with Doctors?	<i>f</i>	78	22	100
		%	78	22	100
11	Do you think that inter professional team working is necessary for the establishment and maintenance of subspecialty units in care of stroke patient in Nigeria?	<i>f</i>	98	2	100
		%	98	2	100
12	Do you think feasible to form inter professional teams in stroke rehabilitation departments in Nigerian Hospitals?	<i>f</i>	77	23	100
		%	77	23	100

**Table 4:** Factors that hinder multidisciplinary collaboration in management of stroke

S/N	Item	Yes	No	Total	
13	Being told that some procedures are meant for other professionals	<i>f</i>	75	25	100
		%	75	25	100
14	Being told by colleagues or other professionals that you should mind your own work	<i>f</i>	70	30	100
		%	70	30	100
15	Working in an arrangement where professionals boundaries are emphasized	<i>f</i>	74	26	100
		%	74	26	100
16	Work is delayed in multidisciplinary team work	<i>f</i>	13	87	100
		%	13	87	100
17	There is frequent conflict in decision making	<i>f</i>	77	23	100
		%	77	23	100
18	Conflicting instructions from different professionals	<i>f</i>	82	18	100
		%	82	18	100
19	Superiority Complex	<i>f</i>	81	19	100
		%	81	19	100

Are you happy to consult with and/or communicate your thoughts about patient care to nurses or health workers in your team and have them offer their opinions to guide your decisions about patient care?

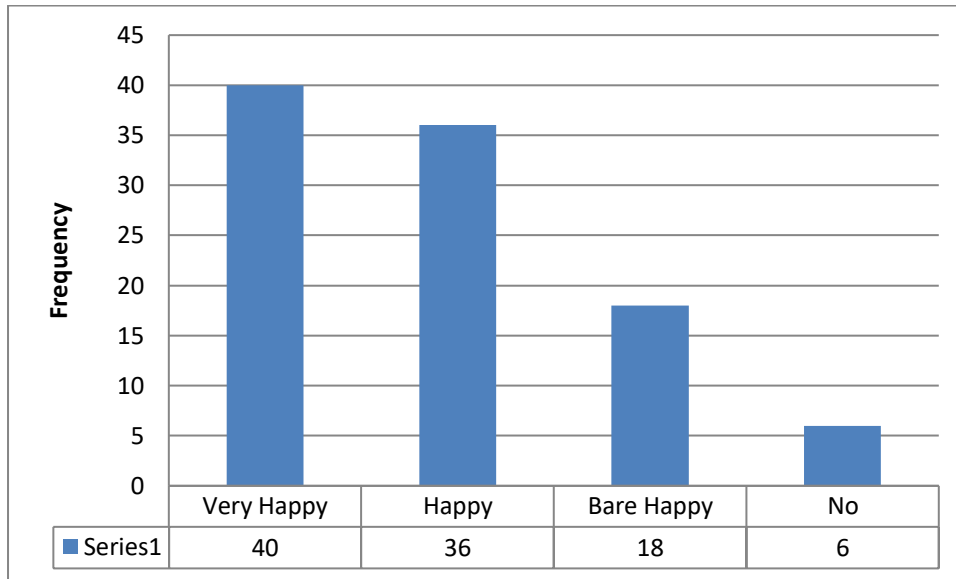


Table 2 shows that 3% respondents strongly disagreed to be exposed to training on interdisciplinary collaboration in care of stroke patient, 8% disagree, 31% agree while 58% respondents strongly agree. This implies that majority of the respondents agreed to be exposed to training on interdisciplinary collaboration in care of stroke patient. It was also shown in the table that 100% respondents agreed with the fact that ineffective collaboration significantly increases the risk of errors in client management. 37% respondents went against the fact that an interdisciplinary goal is of greater value than the goals of individual team members while 63% respondents agreed with the fact that an interdisciplinary goal is of greater value than the goals of individual team members. Also, 80% respondents accepted the fact that to be effective, health professionals should understand the work of their fellow team members while 20% respondents disagreed. This implies that majority of the respondents agreed that to be effective, health professionals should understand the work of their fellow team members. 72% respondents agreed that they prefer to work with other health professionals that query the care they render to stroke patient while 28% respondents disagreed. 70% respondents went against the fact that conflict is normal among health professionals when caring for stroke patient while 30% respondents said conflict is not normal among health professionals when caring for stroke patient. Lastly, it was observed in the analysis based on the respondent's opinion that conflict do not help to deepen understanding and agreement among health professionals when caring for stroke patients. It was shown in the table 3 above that 64% respondents said usefulness of interdisciplinary team working in the delivery of care of stroke patient is very useful, 24% said it's moderately useful while 10% respondents said it's useful. This implies that majority of the respondents agreed to usefulness of interdisciplinary team working in the delivery of care of stroke patient. Also, it was shown that 100% respondents consider interdisciplinary team working as a useful approach to effective and sustainable high quality care for stroke patient in Nigeria, 78% respondents accept to work in a team where nurses and other health professionals share responsibilities of patient care with Doctors while 22% respondents disagree, 98% respondents agree that inter professional team working is necessary for the establishment and maintenance of sub-specialty units in care of stroke patient in Nigeria. This implies that majority of the respondents agree that inter professional team working is necessary for the establishment and maintenance of sub-specialty units in care of stroke patient in Nigeria. Lastly, 77% respondents think feasible to form inter professional teams in stroke rehabilitation departments in Nigerian Hospitals while 23% respondents do not. This implies that majority of the respondents think feasible to form inter professional teams in stroke rehabilitation departments in Nigerian Hospitals. It was shown in table 4 that 75% respondents agree to have been told that some procedures are meant for other professionals while 25% respondents have never been told such, 70% respondents also agree to have been told by colleagues or other professionals that they should mind their own work while 30% of the respondents have never experienced such, 74% respondents also they would like working in an arrangement where professionals boundaries are emphasized while 26% respondents dispute of working in an arrangement where professionals boundaries are emphasized, 13% respondents go with the fact that work is delayed in multidisciplinary team work while 87% respondents dispute the fact that work is delayed in multidisciplinary team work. This implies that majority of the respondents believe that work is not delayed in multidisciplinary team work.

It was also revealed in this study that 77% respondents believe there is frequent conflict in decision making, 23% respondents do not agree there is frequent conflict in decision making. Also, 82% respondents have said to have gone through conflicting instructions from different professionals while 18% respondents have not and lastly, 81% respondents have experienced superiority complex while 19% respondents have not.

**Table 5: Association between attitude and perception of health workers towards multidisciplinary collaboration in the management of stroke patient.**

Variables	N	Mean	SD	Df	t-cal	p-value
Attitude of health workers	50	3.018	1.892	99	3.86	0.015
Perception of health workers	50	2.152	1.128			

**Table 6: Relationship between years of working experience and perception of health workers towards multidisciplinary collaboration in the management of stroke patient.**

Variables	N	Mean	SD	Df	t-cal	p-value
Years of working experience	50	5.091	1.903	99	2.85	0.038
Perception of health workers	50	2.152	1.128			

The analysis further revealed as it was shown in the above table 5, the result of test between attitude of health workers and perception of health workers in EKSUTH, Ado-Ekiti, Ekiti State, Nigeria that the p-value (0.015) < 0.05 level of significant and 99 degree of freedom. The null hypothesis which stated that there is no significant relationship between attitude and perception of health workers towards multidisciplinary collaboration in the management of stroke patient was rejected and conclude that there is a significant relationship between attitude and perception of health workers towards multidisciplinary collaboration in the management of stroke patient.

The above table 6 also shows the result of test between years of working experience and perception of health workers in EKSUTH, Ado-Ekiti, Ekiti State, Nigeria. The result indicates that the p-value (0.038) < 0.05 level of significant and 99 degree of freedom. The null hypothesis which earlier stated that there is no significant relationship between years of working experience and perception of health workers towards multidisciplinary collaboration in the management of stroke patient was rejected and conclude that there is a significant relationship between years of working experience and perception of health workers towards multidisciplinary collaboration in the management of stroke patient.

**Discussion**

In determining the perceptions of health workers towards multidisciplinary collaboration in management of stroke patient in tertiary hospital in Ekiti State, it was found out from this study that majority of the respondents accepted the fact that it is good to be exposed to training on interdisciplinary collaboration in care of stroke patient, ineffective collaboration significantly increases the risk of errors in client management, an interdisciplinary goal is of greater value than the goals of individual team members, to be effective, health professionals should understand the work of their fellow team members, they prefer to work with other health professionals that query the care they render to stroke patient. However, some disputed the fact that conflict is normal among health professionals when caring for stroke patient and that conflict helps to deepen understanding and agreement among health professionals when caring for stroke patients. **In identifying the attitudes of health workers towards multidisciplinary collaboration in management of stroke patient in tertiary hospital in Ekiti State**, it was revealed in this study that majority of the respondents agreed that usefulness of interdisciplinary team working in the delivery of care of stroke patient is very useful. It was also shown in this result that majority of the respondents consider interdisciplinary team working as a useful approach to effective and sustainable high quality care for stroke patient in Nigeria, they accept to work in a team where nurses and other health professionals share responsibilities of patient care with Doctors, they think that inter professional team working is necessary for the establishment and maintenance of subspecialty units in care of stroke patient in Nigeria and they think feasible to form inter professional teams in stroke rehabilitation departments in Nigerian Hospitals. **In accessing the benefits of multidisciplinary collaboration in management of stroke patient in tertiary hospital in Ekiti State**, the findings from this study revealed that when health care providers work as a team, they can be more responsive to changes as they occur, Interdisciplinary collaboration enables different health professionals to complement each



other, team members are more effective health care providers when they work together because they tend to learn more about what role each member plays. Also, Nurses, Doctors and Physiotherapists working as a team seem to be the best in health profession. **In identifying the factors that hinders multidisciplinary collaboration in management of stroke**, this findings shows that majority of the respondent have been told that some procedures are meant for other professionals, some were told by colleagues or other professionals that they should mind their own work, some are working in an arrangement where professionals boundaries are emphasized, the fact that work is delayed in multidisciplinary team work was disputed by majority of the respondents as well, there is frequent conflict in decision making, some experienced superiority complex and lastly, conflicting instructions from different professional is the issues faced by some of the respondents.

This study revealed that that Nurses, Doctors and Physiotherapists working as a team seems to be the best as it leads to improve patient outcomes. Also, it was considered that interdisciplinary team working is a very useful approach to effective and sustainable high quality care for stroke patient in Nigeria.

This research further revealed that respondents are very happy to consult with and/or communicate their thoughts about patient care to nurses or health workers in their team and have them offer their opinions to guide those decisions about patient care. Likewise can we conclude that it is feasible to form inter professional teams in stroke rehabilitation departments in Nigerian Hospitals. Inter professional team working is necessary for the establishment and maintenance of sub-specialty units in care of stroke patient in Nigeria and majority of the respondents agreed to usefulness of interdisciplinary team working in the delivery of care of stroke patient.

Based on the findings stated above in this study, it can therefore be recommended that attitude and perception of health workers towards multidisciplinary collaboration in the care of patients with stroke in EKSUTH should not be taking for granted so as for the stroke patients not to feel discouraged but to be loved.

### **Ethical Approval**

Ethical approval for the study was obtained from the research and ethics committee of the hospital.

### **Consent**

Consent was obtained prior to administration of the questionnaire. Consent form signed by the respondents.

### **Disclosure**

Funding is borne by the authors

### **Conflicts of Interest**

The authors declare that they have no conflicts of interest.

### **Author's Contributions**

All the authors approved the manuscript

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