

## **An Assessment of Medical Doctors - Nurses Collaborative Working Relationship and Associated Factors Towards Improving Clients ' Healthcare in ATB University Teaching Hospital, Bauchi**

<sup>1</sup>Aliyu, D. A, BSc, MSc, and Sharon I. S., RN, BNSc, <sup>2</sup>Adamu, M, RN, BNSc, <sup>3</sup>Waziri, B. B, RN, BNSc, and Umar, S, RN, BNSc., <sup>4</sup>Dauda, M. J, MBBS, PGD.

<sup>1</sup>College of Nursing Sciences, ATB University Teaching Hospital, Bauchi, Abubakar Tafawa Balewa University, Bauchi, Nigeria.

<sup>2</sup>School of Post Basic Nursing, College of Nursing Sciences, ATB University Teaching Hospital, Abubakar Tafawa Balewa University, Bauchi, Nigeria.

<sup>3</sup>Department of Nursing, ATB University Teaching Hospital, Abubakar Tafawa Balewa University, Bauchi, Nigeria.

<sup>4</sup>Medical Department, Abubakar Tafawa Balewa University Bauchi, Nigeria.

Correspondence Author: aliyudanjuma914@gmail.com G. S. M. 08122689101

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### **ABSTRACT**

*The study was carried on the assessment of medical doctors' - nurses' perception on their collaborative working relationship and associated factors towards improving client's health care problems in ATBU Teaching Hospital Bauchi. It adopted a descriptive survey research design and collected data from medical personnel in ATB University Teaching Hospital Bauchi. The number of respondents used in this study was 720 doctors and nurses. Out of this population, sample of 254 respondents were selected in this study based on stratified proportionate sampling and the accidental sampling techniques. The instrument for data collection used in this study was a structured questionnaire. It was validated and a pilot study was carried on 30 doctors and nurses in Specialist hospital in Bauchi metropolis. A reliability coefficient of 98 of the instrument was obtained. The result shows that nurses and doctors perceived their working relationship positively and that nurses' and doctors' responsibilities is collaborative and complimentary to each other. Factors that influences positive working relationship between doctors and nurses the study discovered, include effective mutual respect and trust, and effective communication. In addition, the study also discovered that providing opportunities for joint training programs and workshops between doctors and nurses will encourage mutual respect and recognition, and will improve the collaborative working relationship between them. However, majority of the respondents did not believe that all the positions of authority in the hospital should be held by the medical doctors.*

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**Keywords:** Medical Doctors, Nurses, Collaborative, Relationship

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## INTRODUCTION

In the healthcare system, medical doctors and nurses play crucial roles in providing quality care to patients. The collaboration and working relationship between these two professionals, significantly impact positively in patients' outcomes. Effective teamwork and communication between doctors and nurses can enhance patients' safety, improve healthcare delivery, and contribute to overall organizational success. On the other hand, poor working relationship can lead to errors, delays in recovery of the patient and compromised patient's outcomes. Understanding and assessing the working relationship between doctors and nurses is essential for identifying areas of improvement and promoting a harmonious and efficient healthcare environment (Boev & Xia, 2019).

The inter professional collaboration between physicians and nurses is crucial and has been highlighted in different contexts (Sollami, Caricati & Sarli, 2015). Collaboration, between physicians and nurses, means cooperation in work, sharing responsibilities for solving problems, and making decisions to formulate and carry out plans for patient care (Boev & Xia, 2019). Although the provision of healthcare is becoming more complex, collaboration among healthcare workers can be a path to improve the quality of healthcare services especially in hospitals in which environment is characterized by ongoing interaction among professionals. Nurse-physician collaboration and teamwork can improve patient outcomes and lower healthcare cost (Tijia, Mazor, Field, Meterko, Spenard & Gurwitz, 2019), increase job satisfaction (Rosenstein, 2020) and maintain patients' safety (Anderson, 2022). The communication between nurses and physicians is considered a principal part of the information flow in healthcare. Meanwhile the growing evidences show that improper or poor communication can create a chronic state of conflict between nurses and physician leading to increase in the medical errors and poor outcomes [Tijia et al., 2017]. Furthermore, it has been shown that unsatisfactory inter professional relationships between physicians and nurses partially contributed to shortage of nurses and enforced nurses to leave their professions (Steinbrook, 2018).

Nurses and physicians extremely contribute to the patient care but often do not appreciate the role of each other (Anderson 2022). In previous studies, doctors and nurses viewed collaboration differently. Doctors view collaboration as following the instructions and the orders, while nurses view it as a complementary role more significantly than physicians do (Baggs, Schmitt, Mushlin, Eldredge, Oakes & Hutson, 2017).

Bujak and Bartholomew suggest that presently “the two most important people responsible for patient care are the nurses and the physicians, but they often do not talk to each other properly, and when they do, the interchange is often dysfunctional. "Traditionally, relationship between the physicians and the nurses is hierarchical and is characterized by doctors' dominance and nurses are viewed as assistants rather than a partner of holistic patient care. (Bukak & Bartholomew, 2019).

In the Palestinian health context, the physicians' approach is medically dominant comparing to nurses. Physicians have historically been in a position of greater authoritative power. The organizational structure endorsed by the Ministry of Health has left the nursing profession under the description as non-independent body where nurses are organizationally managed by physicians and technically have to implement their orders. Such state can make the nurses feel less autonomous and could create less cooperative relationship between the two professionals. To the best of our knowledge, this is the first study assessing nurses-physician collaboration

using the Arabic version of the Jefferson Scale of Attitude toward Nurse-Physician Collaboration. Based on the available literature, socio-demographic variables such as gender and age are not a significant influencer like experience at work and cultural factors in determining and shaping attitudes toward nurse-physician collaboration (Sayed & Sleem, 2019).

Where she to be alive today, Florence Nightingale would say that the disparity in the doctor-nurse relationship is becoming less marked. Nurses have made considerable advances in their professional standing, supported by extensive university training, expansion of skills and a gradually taking over of responsibilities that used to be in the purview of medical practice, for example carrying out phlebotomies, offering independent consultations and possibly, in the future, taking over some prescribing decisions. In recent years, a range of legislative and organizational changes have conferred on nurses significantly wider responsibilities. The establishment of NHS Direct in the UK and the skills and competency development work supported by 'care group workforce teams' in England are greatly expanding the roles of nurses in the NHS. Furthermore, the introduction of the European Working Directive will inevitably result in a handing over of responsibilities to nurses, as doctors are unlikely to be available in the hospital all the time, even during crises. For example, it has made planning assumptions whereby nurse practitioners could take over about 20% of work currently undertaken by physicians (Royal College of Nursing, 2016). Discussions are already well advanced focusing on the areas in which senior and trained nurses would be able to assess patients and decide on actions in place of doctors. Nurses have already moved into administration and supervisory roles, and control their own licensing processes. Senior nurse managers often operate as team leaders, particularly in community mental health teams, and doctors come within their purview. Some have said that these extra responsibilities and status symbols have been delegated down by physicians to share the workload rather than to establish parity of influence. Nurses are still not sure to whom they are accountable to, their own professional hierarchy, the doctors or management. Despite these advances, in hospital settings nurses remain in a subordinate role. A symbolic manifestation of this is the unequal allocation of space for personal offices, differential arrangements for eating facilities and the notion that doctors' time is more 'valuable' than nurses' time. At a personal level, the relationship is viewed differently: nurses see the relationship with doctors as potentially ego-building, while doctors see it as ego-maintaining. Nurses have to prove their competence in every interaction with physicians, whereas doctors' competencies are assumed and it is their fallibility and shortcomings that have to be proved. Regardless of this inequality, nurses and doctors are required to work together towards a common goal, and they do so by adhering to social rituals and etiquette. Barriers to collaboration are exemplified by the class and gender differences between these professional groups, the value assigned to intellectual rather than manual activities and differences in educational standards. For some time, however, excellent services, such as those following the tidal model (Royal College of Nursing, 2016)

### **Statement of the Problem**

Nurse-patient relationship is a caring relationship that supports a patient's well-being. Key components needed to develop a therapeutic relationship include trust, respect, showing a genuine interest, and empathy. The nurse and the doctor must be able to rely on each other. Mutual respect is vital. Nurses have dependent, independent and interdependent roles in their interaction with doctors, and both professions should embrace the Patient's Rights Charter, which requires a good standard of practice and care of patients. (Wunga, 2023)

Historically, the doctor-nurse relationship is an unequal one characterized by the dominance of the doctor, with nurses assuming a position of lower status and dependence to the physicians. One qualitative study showed that nurses perceive the quality of communication with doctors as being poor. Lack of teamwork in the relationship resulted from different expectations and a confusion of roles. Both professions have however demonstrated a willingness to promote teamwork in hospitals.

The working relationship between doctors and nurses is a critical aspect of healthcare delivery. Effective collaboration and communication between these two healthcare professions are essential for ensuring optimal patient care outcomes. However, in the context of ATBU Teaching Hospital Bauchi, there is a need to assess the current state of the working relationship between doctors and nurses and identify any challenges or areas for improvement. Despite the critical roles doctors and nurses play in healthcare, there are often challenges in their working relationship. Issues such as hierarchy, communication barriers, role ambiguity, and differences in professional perspectives can hinder effective collaboration between the two health care professionals. These challenges may arise due to various factors, including differences in education, training, and organizational culture. This prompted the researcher to assess medical doctors-nurse collaborative working relationship and associated factors towards improving client's health care in ATBU Teaching Hospital Bauchi.

### **Objectives of the Study**

The main objective of this study is to assess medical doctors-nurses perception on collaborative working relationship and associated factors towards improving health care among clients in ATBU Teaching Hospital Bauchi. The specific objectives are;

1. To explore the perceptions of doctors and nurses regarding their collaborative working relationship in ATBU Teaching Hospital Bauchi.
2. To identify the factors that influences the collaborative working relationship between doctors and nurses in ATBU Teaching Hospital Bauchi.
3. To find out ways for improving the collaborative working relationship between doctors and nurses in ATBU Teaching Hospital Bauchi.

### **Research Questions**

To achieve the research objectives, the following research questions were formulated to guide search for the solution of the identified problem in this study.

1. What are the perceptions of doctors and nurses regarding their collaborative working relationship in ATBU Teaching Hospital Bauchi?
2. What are the factor that influences the collaborative working relationship between doctors and nurses in ATBU Teaching Hospital Bauchi?
3. What are the ways of improving doctor-nurse collaborative working relationship in ATBU Teaching Hospital Bauchi?

### **Significance of the Study**

This study is significant for several reasons. Firstly, it provides valuable insights into the current state of the inter professional relationship between doctors and nurses in Nigeria especially in ATBUTH. Understanding the challenges and factors influencing this relationship can inform strategies and interventions to enhance collaboration and teamwork. Secondly, the study

contributes to the existing literature on collaborative relationships, between nurses and physicians, particularly in the context of developing countries like Nigeria. Lastly, by improving the working relationship between doctors and nurses, patient outcomes can be positively influenced, leading to better healthcare delivery and patient satisfaction in ATBUTH Bauchi.

### **Scope of the Study**

This study focuses on the assessment of medical doctors and nurses perception towards collaborative working relationship and associated factors in ATBU Teaching Hospital Bauchi. It involves doctors and nurses working in various departments and units within the hospital, with particular emphasis on the perceptions of physicians and nurses regarding their collaborative relationship, factors that influences the inter-professional relationship between physicians and nurses, and the ways for improving the collaborative relationship between physician and nurses in ATBU Teaching Hospital Bauchi.

### **Operational Definition of Terms**

**Doctors:** Medical professionals who have completed their medical education and training, typically holding a medical degree (e.g., MBBS, MD) and specializing in various medical fields. They diagnose, treat, and provide medical care to patients.

**Nurses:** Healthcare professionals who have completed nursing education and training, holding a nursing degree or diploma (e.g., B.Sc. Nursing, RN). They provide patient care, administer medications, monitor patients' conditions, and collaborate with other healthcare team members.

**The Nurse-Physician Relationship:** Refers to the interaction, collaboration, and professional rapport between doctors and nurses in the healthcare environment. It encompasses various aspects, including communication, teamwork, respect, and shared decision-making.

**Assessment:** The systematic process of gathering information, evaluating, and analyzing data related to a particular subject. In this context, it refers to evaluating the working relationship between doctors and nurses.

**ATBUTH:** Refers to Abubakar Tafawa Balewa University Teaching Hospital located in Bauchi, Nigeria. It is a tertiary healthcare institution that provides medical and healthcare services, as well as educational and training opportunities for healthcare professionals.

### **RESEARCH METHODOLOGY**

A cross-sectional descriptive research design was used in this study. Descriptive cross sectional research design is a research design that is used to collect data from sample respondents at one point in time rather than collecting data at several points in time. This design was used in this study to describe nurse-physician collaborative working relationship and associated factors towards solving clients health care problems in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi.

### **Setting**

This study was carried out in Abubakar Tafawa Balewa University Teaching Hospital,

(ATBUTH) Bauchi, Nigeria. ATBUTH is located in dan iya ward of Bauchi local government situated outside the traditional wall of Bauchi metropolis. The hospital shares boundaries with Abubakar Tafawa Balewa stadium to the east, cocin church to the south, college of nursing sciences to the west and doctors quarters to the north. The hospital was established in 1917 by the colonial administration as a small clinic for the treatment of leprosy. Following an increasing demands of services by the community, the hospital was expanded and upgraded to the status of general hospital in 1966, and to the status of specialist hospital in 1978 and then finally, to the status of a University teaching hospital in 2010 by the federal government of Nigeria.

### **Target Population**

The target population for this study was 720 health professionals which consist of 270 medical doctors and 450 nurses from different units and level of experience working in ATBUTH Bauchi (Department of Nursing, ATBUTH Bauchi 2022).

### **Sample Size**

The Sample size of this study consists of 254 respondents. This is in accordance with Krejcie and Morgan table for determining sample size for research study. These consist 1 of 56 medical doctors and 198 nurses.

### **Sampling Technique**

Stratified proportionate sampling technique and accidental sampling technique were employed to select participants for the study. The strata as involved in this study were the medical Doctors and the nurses. 84 medical doctors and 170 nurses were selected based on stratified random sampling technique. In the second stage of the sampling, the samples were selected using accidental sampling procedure. The researcher distributed the questionnaire to the sample that she met accidentally in the hospital during the different shift duties (morning, evening and night). This procedure was repeated the following two days until the required number of nurses and the medical doctors were met.

### **Instrument for Data Collection**

A self- structured questionnaire which consists of four sections, A, B, C & D. Section A comprises of demographic or personal data of the respondents whereas sections B and C contained lists of statements for the respondents to tick in either strongly agreed, agreed, disagreed and strongly disagreed based on modified scale. Section D contains list of close-ended questions consisting of Yes/No alternative response format for the respondents to tick in the appropriate answer as it applies to them. The questionnaire was distributed to the sample by the researcher and one research assistant. The completed questionnaire were collected immediately by the researcher and the research assistant for analyses.

### **Validity of the Instrument of Data Collection**

The instrument for data collection was validated by three lecturers, two from department of nursing and one from department of midwifery College of Nursing Sciences, ATBUTH Bauchi for making the necessary corrections in the draft instrument. The input of the validators were used in the final draft of the instrument.

### Reliability of the Instrument of Data Collection

The reliability of the instrument was established using the test-retest reliability method. The instrument was administered twice to a sample of similar characteristics in specialist hospital also located in Bauchi metropolis. The two results obtained from the reliability tests were correlated to obtain the reliability coefficient of the instrument. The reliability coefficient of 8.5 of the instrument was obtained in this study.

### Method of Data Collection

An introductory letter was collected by the researcher from the research committee of the College of nursing sciences ATBUTH Bauchi and presented to the ATBUTH Bauchi to obtain the permission to conduct the study. During the procedure of the data collection, nurses and the medical doctors in the hospital were given a structured electronic questionnaire to fill in. Quensequently, it was collected on the spot to ensure high return rate.

### Method of Data Analysis

All data that was collected related to research questions 1 and 2 were presented in tables and analyzed using mean statistics, while all data that were collected in relation to research question 3 were presented in frequency tables and analyzed using simple percentage.

### Ethical Consideration

The researcher has assured the respondents that information obtained from them will be treated as confidential, mainly for the purpose of this research work.

### Results

Socio-demographic data of the respondents.

**Table 4.1 distribution of respondents based on age**

S/N	Age (Years)	Frequency	Percentage %
1	18-24	25	9.89
2	25-34	112	44.10
3	35-44	77	30.31
4	45-54	40	15.70
	<b>Total</b>	<b>254</b>	<b>100</b>

Table 4.1 showed that majority, 112(44.10%) of the respondents are within the age range of 25-34years, 77(30.31%) of the respondents falls within the age range of 35-44year with 40(15.70%) of the respondents who are within the age range of 44-54year and few 25(9.0%) of the respondents who are within the age range of 18-24years.

**Table 4.2 Distribution of Respondents Based on Gender**

S/N	Gender	Frequency	Percentage (%)
1	Male	108	42.52
2	Female	146	57.48
	<b>Total</b>	<b>254</b>	<b>100</b>

Table 4.2 showed that majority 146(57.48%) of the respondents are female while 108(42.52%) of the respondents are male.

**Table 4.3 Distribution of Respondents Based on Marital Status**

S/N	Marital Status	Frequency	Percentage (%)
1	Single	78	30.70
2	Married	161	63.39
3	Divorced	15	5.91
	<b>Total</b>	<b>254</b>	<b>100</b>

Table 4.3 showed that Most 161(63.39%) of the respondents are married. Meanwhile 78(30.70%) are single and then few 15(5.91%) respondents are divorced.

**Table 4.4 Distribution of Respondents Based on Profession**

S/N	Profession	Frequency	Percentage (%)
1	Nurse	198	77.95
2	Physician	56	22.05
	<b>Total</b>	<b>254</b>	<b>100</b>

*Source:* field survey (2023)

Table 4.4 showed that majority 198 (77.95%) of the respondents are nurses whereas 56(22.05%) of the respondents are physicians.



**Research Question One: What are the Perceptions of Doctors and Nurses Regarding their Collaborative Working Relationship in ATBU University Teaching Hospital Bauchi?**

To analyze the above research question, mean on the perception of the 254 sample respondents was calculated. The criterion mean used in this study was 2.5.

Items with mean equals to or greater than 2.5 were accepted, while those with mean less than 2.5 were rejected.

**Table 4.5: Perception of Doctors and Nurses Regarding their Collaborative Working Relationship in ATBU Teaching Hospital Bauchi.**

S/N	Items	4	3	2	1	N	Mean	Remarks
1.	Effective communication between doctors and nurses is crucial for a smooth working relationship	149	96	7	2	254	3.54	Accepted
2.	Doctors and nurses collaborate on patient care decisions	57	46	98	53	254	2.66	Accepted
3.	Mutual respect and trust between doctors and nurses is important for their working relationship	115	79	32	28	254	3.11	Accepted
4.	Clearly defined roles and responsibilities are beneficial for the working relationship between doctors and nurses	186	64	3	1	254	3.71	Accepted
5.	Regular meetings and discussions is helpful in improving the working relationship between doctors and nurses	125	58	41	30	254	2.93	Accepted
6.	Shared goals and objectives enhance the working relationship between doctors and nurses	173	53	18	10	254	3.53	Accepted
7.	Work of nurses and doctors is collaborative and complimentary to each other	193	37	19	5	254	3.64	Accepted

*Source:* Field survey (2023)

Table 4.5 above shows the perception of physicians and nurses regarding their working relationship. And all the items are accepted as they all have mean of or greater than 2.5. This means that there is good perception of physician and nurses regarding their working relationship in ATBU Teaching Hospital Bauchi.

**Research Question Two: What are the Factors that Influences the Collaborative Working Relationship between Doctors and Nurses in ATBU Teaching Hospital Bauchi?**

To analyze the above research question, mean of factors that influence the collaborative working

relationship between Doctors and Nurses was calculated on 254 sample respondents in the area of the study.

**Table 4.6: Factors that Influences the Collaborative Working Relationship between Doctors and Nurses in ATBU Teaching Hospital Bauchi.**

S/N	Items	4	3	2	1	N	Mean	Remarks
8.	Effective communication plays a significant role in fostering a positive working relationship between doctors and nurses.	193	61	0	0	254	3.76	Accepted
9.	Mutual respect and trust are essential factors in establishing a harmonious working relationship between doctors and nurses.	185	69	0	0	254	3.73	Accepted
10.	Effective leadership positively impact the working relationship between doctor and nurses	108	106	25	15	254	3.21	Accepted
11.	Cultural diversity and inclusivity influence the working relationship between doctors and nurses	78	57	93	26	254	2.74	Accepted
12.	Adequate staffing a factor that affects the working relationship between doctors and nurses	68	79	58	49	254	2.65	Accepted
13.	Feeling of superiority or inferiority affects the relationship between doctors and nurses	138	54	43	19	254	3.22	Accepted

*Source:* Field survey (2023)

Table 4.6 above shows the factors that influences the collaborative working relationship between Doctors and nurses in the area of the study. All the items were accepted by the sample respondents as factors because the mean values to each of the items were significant in this study.

**Research Question 3: What are the ways of improving doctor-nurse collaborative relationship in ATBUTH, Bauchi?**

To answer the above research question, the following items were used to illicit responses from the sample.

**Table 4.7: Ways to Improve Collaborative Working Relationships between Doctors and Nurses in ATBUTH Bauchi.**

S/N	Does Providing opportunities for joint training / workshops improves relation between doctors & nurses?	Frequency	Percentage (%)
1.	Yes	240	94.49

2.	No	14	5.51
<b>Total</b>		<b>254</b>	<b>100</b>

Table 4.7 above shows that the majority of the respondents 240(94.49) accepted that providing opportunities for joint training programs and workshops can improve the doctor-nurse relationship, whereas 14(5.51%) of the respondents disagree with this view point.

**Table 4.8: Encouraging regular inter-professional meetings and discussions can enhance the doctor-nurse relationship.**

S/N	Do you think encouraging regular inter-professional meeting & discussions will improve r/ship between nurses & doctors?	Frequency	Percentage (%)
	Yes	138	54.33
	No	116	45.67
<b>Total</b>		<b>254</b>	<b>100</b>

Table 4.8 above showed majority 138(54.33%) of the respondent indicated that encouraging regular inter-professional meetings and discussions can enhance the doctor-nurse relationship while 116(45.67%) of the respondents did not accept this view.

**Table 4.8: Who should hold Positions of Leadership in the Hospital.**

S/N	Do you believe that all positions of authority in the hospital should be held only by the medical doctors.	Frequency	Percentage (%)
	Yes	123	48.43
	No	131	51.57
<b>Total</b>		<b>254</b>	<b>100</b>

Table 4.9 showed that Majority 131(51.57%) of the respondents did not accept that all positions of authority in the hospital belongs to the medical doctors.

**Table 4.10 Promoting a Culture of Mutual Respect and Recognition Between Doctors and**

**Nurses can Positively Impact on the Doctor-nurse Relationship in ATBU Teaching Hospital.**

S/N	Does promoting the culture of mutual respect & recognition btw doctors & nurses impact positively on doctors-nurses collaborative relationships?	Frequency	Percentage (%)
	Yes	243	95.67
	No	11	4.33
<b>TOTAL</b>		<b>254</b>	<b>100</b>

*Source:* Field survey, (2023)

Table 4.10 highlighted that Most 243(95.67%) of the respondents indicated that Promoting a culture of mutual respect and recognition between doctors and nurses can positively impact the doctor-nurse relationship, whereas 11(4.33%) of the respondents did not accepted it.

**Research Question 3: What are the ways of improving doctor and nurse collaborative working relationship in ATBU teaching Hospital Bauchi?**

From the research findings, the researcher identifies that some of the ways of improving doctor and nurse collaborative relationship in ATB University teaching Hospital Bauchi include the following: In table 4.7, most of the respondents 240(94.49%) agreed that providing opportunities for joint training programs and workshops can improve the doctor-nurse relationship. In table 4.8, the respondents 138 (54.33%) maintained that encouraging regular inter-professional meetings and discussions can enhance the doctor-nurse relationship. Whereas in table 4.9, the majority of the respondents 131 (51.57%), did not accept the notion that implementing a new policy that any leadership positions in the hospital should be held by the medical doctors will improve nurse - doctor working relationship in the hospital. In contrast to that, the findings discovered that this notion hampers the smooth working relationship between the medical doctors and the nurses. In table 4.10, most of the respondents 243 (95.67%) agreed that promoting a culture of mutual respect and recognition between doctors and nurses can positively impact on the doctor-nurse collaborative relationship in the hospital.

**Discussion of Findings**

Based on the findings related to research question one, it has been discovered that effective communication between doctors and nurses with a mean of 2.93 is important component for a smooth working relationship. This is similar to the views expressed by Roseline (2017), who stated that development of interpersonal communication skills plays a crucial role in the working relationship between doctors and nurses. The results of item 2 in table 4.5 with a mean of 2.66 also shows that doctors and nurses collaboration improves patient care. This is in line with Tijia et al (2019) who stated that nurse- physician collaboration and teamwork can improve patient outcome and lower healthcare cost. Other items in table 4.5 shows that good perception of nurses

and doctors regarding their working relationship includes mutual respect and trust with a mean of 3.11, clearly defined roles and responsibilities with a mean of 3.71, regular meetings and discussions with a mean of 2.93, shared goals & objectives with a mean 3.53 and nurses and doctors should see their work as collaborative and complimentary with a mean of 3.64. Results related to research question two indicated that item 13 in table 4.6 with a mean of 3.22 was accepted by the sample respondents which indicated that Feeling of superiority/inferiority affects the working relationship between doctors and nurses in ATB University Teaching Hospital Bauchi. This view deviates from the opinion of Roseline (2017) who stated that there should be no superiority between doctors and nurses in terms of working relationship in the hospital for better service delivery. Item 8 also in table 4.6 with a mean of 3.76 was accepted by the respondents as a factor which indicated that effective communication plays a significant role in fostering a positive relationship between doctors and nurses in the hospital. This view point was in line with the statement of Tijja et al (2019) who asserts that communication between nurses and physicians is considered a principal part of the information flow in health care delivery in any hospital. Other factors that influence nurses-doctors working relationship according to this study includes: mutual respect and trust, effective leadership, Cultural diversity and inclusive type of work environment, and adequate staffing as factors influencing collaborative relationship between doctors and nurses as shown in table 4.6 in chapter 4. These have means of 3.73, 3.21, 2.74 and 2.65 respectively. This also agrees with Roseline (2017) who stated that mutual respect, compliance to advice, effective communication are factors that influence doctor-nurse relationship in any hospital setting.

### **Summary of the Study**

The study titled "Assessment of medical doctors and nurses perception towards collaborative working relationship and associated factors in improving clients healthcare was carried in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi, Bauchi State, Nigeria. It adopted the survey design and collected data from the medical doctors and nurses working in the hospital. The total number of doctors and nurses used for this study was 720. From this population, sample of 254 nurses and doctors were chosen based on stratified proportionate random sampling. Medical and nursing departments were used as strata. The questionnaire was developed by the researcher based on the literature reviewed. Items included in the instrument were structured in four point modified scale and Yes/No alternative response format for the respondents to tick in the appropriate column. The instrument was validated and a pilot study was carried on thirty health professionals i. e. twenty nurses and ten doctors in specialist hospital Bauchi. Data was collected and presented in tables and were analyzed using mean statistics and the percentage. The criterion mean of 2.5 was used in this study. Mean of 2.5 and above, were accepted, while mean below 2.5 were rejected as insufficient evidence to be considered as a factor. The results of the study showed that effective collaboration between nurses and doctors, effective communication and mutual respect, Providing opportunities for joint training programs and workshops, promoting a culture of mutual respect and recognition all impacted positively in improving the working relationship between nurses and doctors in ATB University Teaching Hospital, Bauchi.

## **Conclusion**

From the findings of this study, it is concluded that effective communication, and mutual respect, providing opportunities for joint training and workshops, promoting a culture of mutual respect and recognition will enhance effective working relationship between nurses and doctors in ATBU Teaching Hospital Bauchi.

## **Implications of the study to Nursing**

The implications of this study to nurses and the medical doctors working in Abubakar Tafawa Balewa University Teaching Hospital, Bauchi are as follows: The study will.

1. Foster collaborative working relationship between nurses and doctors towards improving client's health care in the hospital.
2. Enhance mutual respect, trust and confidence between nurses and doctors in the hospital.
3. Encourage regular inter-professional meetings and discussions between nurses and doctors towards achieving common goals of giving effective health care to the patients in particular and to the society in general.

## **Recommendations**

Based on the findings of this study, the following recommendations are made;

1. Improve communication between doctors and nurses. Poor communication can result in unmet expectations resulting to frustration and poor working relationships, while effective communication enhances better understanding.
2. Development of organizational vision of how doctors and nurses should interact. The visions should be translated into behavior and concrete policies to correct misbehavior.
3. Clearly defined roles and responsibilities should be stated for both nurses and doctors. Both of them should see each other as members of a team and partners in progress contributing to the hospital objectives.
4. Provide opportunities for joint training programs and workshops between nurses and doctors.
5. Encouraging regular interpersonal meetings and discussions.
6. Implementing clear communication channels and protocols.
7. Promoting a culture of mutual respect and recognition.

## **Suggestion for Further Studies**

Based on the findings of this studies, the researcher suggest that researchers should build upon findings of this research, and conduct the similar research studies in a new setting and location and also res-asses and expand theory, framework and model addressed in this research work.

## REFERENCES

- Anderson A.(2022).Nurse-physician interaction and job satisfaction.
- Baggs J. G., et al., (2017). Nurse physician collaboration and satisfaction with the decision-making process in three critical care units. *American Journal of Critical Care*; 6 (5):393–399.
- Boev C., & Xia Y.(2019).Nurse-physician collaboration and hospital-acquired infections in critical care. *Critical Care Nurse*; 35(2):66–72. doi: 10.4037/ccn2015809.
- Bujak J. S & Bartholomew K. (2019). Transforming physician-nurse communication healthcare executive: 26(4): 56 - 59.
- ELSayed K. A. & Sleem W. F. (2019).Nurse-physician Collaboration: a Comparative Study of the Attitudes of *Nurses and Physicians at Mansoura University Hospital. Life Science Journal*; 8 (2):140–145
- Rosenstein A.H., (2020). Nurse-physician relationships: *Impact on Nurse Satisfaction and retention. American Journal of Nursing*;102 (6):26–34.
- Roseline I O, & clements A. A (2017). Questionnaire Survey of Working Relationship between Nurses and Doctors in University Teaching Hospital in Southern Nigeria.
- Sollami A., Caricati L.& Sarli L, (2015). Nurse-physician collaboration: a meta-analytical investigation of survey scores. *Journal of Inter-professional Care*. 2015;29(3):223–229. doi: 10.3109 / 13561820.
- Steinbrook R., (2018). Nursing in the crossfire. *New England Journal of Medicine*; 346 (22): 1757– 1766. doi:10.1056/NEJM200205303462225.
- Tjia J., et al., (2019). Nurse-physician communication in the long-term care setting: perceived barriers and impact on patients 2005; 14 (1):71–77.