

ADDIS ABABA UNIVERSITY
COLLEGE OF HEALTH SCIENCES
DEPARTMENT OF EMERGENCY MEDICINE



**ASSESSMENT OF COMMUNICATION LEVEL AMONG NURSES AND
PHYSICIANS WORKING IN ADULT EMERGENCY DEPARTMENT OF
TIKUR ANBESSA SPECIALIZED HOSPITAL, ADDIS ABABA,
ETHIOPIA, 2018**

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**RESEARCH THESIS SUBMITTED TO ADDIS ABABA UNIVERSITY,
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JUNE, 2018

ADDIS ABABA, ETHIOPIA

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NURSES AND PHYSICIANS WORKING IN ADULT EMERGENCY
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Declaration

I, the undersigned, declare that this is my original work and that all sources of materials used for this thesis are duly acknowledged.

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LIST OF ACRONYMS

AED- Adult Emergency Department

BSC- Bachelor of Science

CDC – Center for Disease Control and prevention

COT- Communication Observation Tool

ED - Emergency Department

ER- Emergency Room

FGD- Focused Group Discussion

ICU – Intensive Care Unit

MSC- Masters of Science

NHSN – National HealthCare Safety Network

SBAR- Situation Background Assessment Recommendation

SNA – Social Network Analysis

SPSS – Statistical Package for Social Sciences

TASH – Tikur Anbessa Specialized Hospital

ABSTRACT

Background: Communication is a means of sending, receiving and exchanging information between two or a group of health professionals and patients. Work in EDs requires collaboration among health care workers from multidisciplinary professions in delivery of patient care.

Objective: The objective of this study is to assess level of communication among nurses and physicians in adult emergency department (ED) of Tikur Anbessa Specialized Hospital, Addis Ababa, Ethiopia.

Methodology: A cross sectional study with data collection was conducted in Tikur Anbessa Specialized Hospital from April 20 to May 30, 2018. Standardized data collection tool was used to collect the data. The data was entered into Epi data and exported to SPSS version 23 for analysis. The report was depicted descriptively using measures of central tendency, dispersion and displayed through texts, graphs and figures.

Result: Out of 109 participants who were included in this study with female to male ratio of 1: 1.36. Regarding to the educational level majority of them were BSc nurses 46 (42.2%) and 26 (23.9%) of them were interns. Regarding the level of communication, 55% of the respondents have poor level of communication. On binary logistic regression, year of experience of respondents was found to have a significant association with level of communication.

Conclusion: The study found that there was poor communication level between nurses and physicians in emergency department. Based on the finding from binary logistic regression, as the year of experience increases the level of communication also improves.

Key words: Communication, emergency physician, nurses.

CHAPTER 1: INTRODUCTION

1.1. Background

Communication is a means of sending, receiving and exchanging information between two or a group of health professionals and patients(1). To get the job done right, information need to be transferred in a clear and reliable way with respect and satisfaction. It is not only what is said that matters, but also the way it is communicated between nurse and physician(2) Nurse-physician communication is more than just exchanging of information in which common understanding across health care team is established(3). It is described as a professional interaction, working together, shared decision making around health issues, formulating collaborative patient care plan in which the actual team's performance is measured (4).

The emergency department is widely considered the main gate for patient care in the hospital. ER nurses and physicians have major responsibilities in patient care. Their roles require excellent communication so as to provide quality care and treatment (5). Communication and collaboration between nurses and doctors can have a profound effect on the workplace environment and patient care. Integrated structure and processes that allow nurses and physicians to resolve their differences are likely to increase nurse satisfaction, recruitment, and retention(6).

Emergency departments (EDs) are complex health care settings, characterized as high pressure, high intensity environments in which can be stressful to work(7). Work in EDs requires collaboration among health care workers from multidisciplinary professions in delivery of patient care, with frequent interaction among staff to communicate patient and associated information(6).

Efficient communication and effective interpersonal interactions are vital in most organizational endeavors, but particularly in demanding environments like ED. Without good communication and cooperation amongst members of an ED team, people will lack vital information, work organization will suffer, and this will likely lead to poor quality of care and the propensity for greater errors, with the potential to affect not only the ED but the rest of the hospital. Poor communication and coordination have been identified as research priorities for improving patient safety in developed countries (8-10). Communication in EDs is complex and mainly face-to-face (11).

1.2.Statement of the problem

Due to the hectic ED environment communication between physicians and nurses caring for the same patient could be fragmented or occasionally absent. As each provider has different tasks in caring for the patient, their work often proceeds in parallel each may have information that would benefit the other but it may not be exchanged. This can include a key piece of historical information, a change in clinical status, an abnormal vital sign, or response to therapy (11).

Communication between nurses and physicians was one of the factors most significantly associated with excess hospital mortality and verbal miscommunication between nurses and physicians was responsible for 37% of all errors(12). Similarly, another study also stated that communication between nurses and physicians is one of the most heavily associated factors with excess hospital mortality, accounting for 47% of the variance in nurse–physician communication(13).

Nurse-physician ineffective communication has an impact on nurses' and physicians' job satisfaction, turnover, and above all the quality of care(14). When nurses and physicians are not communicating effectively, patient safety is at risk due to lack of critical information, misinterpretation of information, unclear orders and overlooked changes in status(15). Smooth working relationships between doctors and nurses are pre-requisite for efficient delivery of health care(16). Findings indicate collaboration and communication as the key ingredients to improved nurse/physician relationships(17). Collaborative nurse/ physician work relationships are associated with improved patient satisfaction and improved patient care and outcomes(18).

Communication among healthcare providers faces various obstacles due to several factors such as policies, discipline's variety, work environment and physician's power than other professionals in health care. Positive communication between nurses and physicians may lead to improving job satisfaction, patient outcome and decrease in medical errors.(19)

Unsuccessful coordination of patient care has also been largely attributed to ineffective communication between teams or team members (20). A Study in Europe found those physicians and nurses reported experiencing similar communication difficulties for example delayed communication due to a slow and inefficient paging system. Delayed communication, such as being unable to contact the allocated doctor to obtain an order for analgesia, was reported to

compromise the quality of patient care and caused feelings of dissatisfaction for the staff and patients involved.(1)

Designing specific communication prompts or events during the patient's ED visit can facilitate communication and provide opportunities to share critical information. Additionally, structured updates between the resource nurse and physician can allow for communication about critical issues in the department, capacity and patient flow, bed availability and any number of issues that have arisen during the shift. The implementation of a communication strategy must enhance communication without compromising efficiency in caring for the patient (21).

The aim of this study is to assess communication level between nurses and doctors who works in ED of TASH. This is very important in improving patient care and treatment outcome.

1.3. Significance of the study

Since emergency department is a crowded and busy work place there might be a communication gap between health care professionals so it is crucial to assess the communication level between nurses and doctors that will benefit in building a good work environment and high quality of patient care. It can be used to design improved communication skill, identify where the gaps exist and provide recommendation to the concerned bodies.

Since there was no study conducted in this specific topic at Tikur Anbessa Specialized Hospital (TASH), this study will help to have base line information over all on the level of communication among the nurses and physicians who works in ED of TASH.

CHAPTER 2: LITERATURE REVIEW

2.1 Nurse – physician communication

Governments, healthcare organizations and researchers are increasingly recognizing the critical role that communication plays in patient safety and in the provision of quality health care, particularly in high stress contexts such as emergency departments. Communication in an Emergency Department (ED) is a key contributing factor to patient safety and satisfaction, as well as clinician satisfaction and retention(22).

In research carried out by O'Leary K.,et al, found that nurses and physicians could not agree on certain aspects of patient care plans. There was disagreement on care plans, ranging between 11% regarding planned procedures to 42% for changes in medication. From these statistics, it is evident that a problem in communication exists, which is occasioned by disagreement between the physicians and nurses, especially in care plans for hospitalized patients(23). Such disagreements are likely to negatively impact nurse–physician relations, which may lead to poor job motivation and satisfaction. A study conducted by Tabak N found that nurses' status affects their decision-making and can cause conflicts with physicians, impacting stress levels and job satisfaction. The result could be poor performance, leading to low-quality care and a decline in patient outcome quality(24).

Cross Sectional Study with aim of assessing nurse – Physician work relationships and associated factors in Public Hospitals in Tigray Region, Northern Ethiopia stated that excellent working relationship between nurses and physicians is key to create a productive, safe, and satisfying practice environments. From a total of 255 nurses which resulted (42%) of the participants were dissatisfied about their relationship with physicians. Greater than half of the nurses were dissatisfied with administrative support in nurse-physician relationships. The study showed that there was poor working relationship between nurses and physicians. Hospital leaders should focus on improving nurse-physician work relationships; team conferences and interdisciplinary round (20).

A research done In UK on patterns of communication in ED explained good communication is important in patient care and plays an essential part of teamwork and patient safety. Communication in the emergency department (ED) can be chaotic, with the potential for error

resulting from communication overload and problems of communication. The nurse in charge of the ED plays a crucial role in maintaining communication flow (25).

Poor communication between nurses and physicians in the emergency department is a crucial aspect with respect to medical errors, with communication lapses being accountable for a huge fraction of poor patient and practitioner results. Poor communication practices and skills, both verbal and written, also pose a challenge in the emergency department. Practices such as conflicting or incomplete medical records, assumptions, and delayed information are some of the communication challenges(26). A similar study conducted by Redfern E found that communication failures occurred during the transfer of written information in the emergency department. In addition, the flow of information, whether vertically or horizontally, across or within the profession is sometimes poor. At times, it may result in partial or no information reaching some medical practitioners in the emergency department(27). Negative work related communication between nurses and physicians sometimes lead to catastrophic mistakes, such as medical errors. This may be detrimental when it comes to patient diagnosis, treatment, and predictive outcomes.

The emergency department is characterized by high workloads and tight time constraints, which requires most the nurses and physicians to carry out multiple tasks simultaneously. In a survey study of all hospital departments by Jenkins J (28). The Relationship between time Spent Communicating and Communication Outcomes on a hospital medicine service due to time constraints, most communication about patients was non-verbal, which led to losses of information about patients(29).

Most communications between nurses and physicians in the emergency department are verbal. It was important that non-verbal communication occurs in most of the health care areas between professionals, especially in complex areas such as the emergency department, due to time constraints and rapid turnover. In the emergency department, which is a crowded area, a lot of concentration is needed because communication among health professionals may be lacking postulated that the high workload in the emergency department has a significant impact on communication, which in turn affects patient care and safety(9, 27).

They also found out that there was a high degree of reliance between nurses and physicians, especially when it came to problem-solving. However, communication in the emergency department is more efficient within professional groups as opposed to across since those in a particular group have more in common (30). This implies that professional groupings can be barriers to effective communication between those groups.

CHAPTER 3: OBJECTIVE

3.1. General objective

- To assess communication level among nurses and physicians working in adult Emergency Department of Tikur Anbessa specialized hospital, Addis Ababa, Ethiopia, 2018.

3.2 Specific objective

- To identify the communication level among nurses and physicians working in adult ED of TASH
- To identify factors associated with level of communication among nurses and physicians working in adult ED of TASH.

CHAPTER 4: METHODOLOGY

4.1. Study area and Period

The study was conducted in Tikur Anbessa Specialized Hospital, Addis Ababa, capital city Ethiopia, which is the largest referral and comprehensive hospital in the country with a total bed capacity of more than 800. In Addis Ababa there are 37 hospitals (two NGO, twelve governmental, and twenty-three private hospital), 29 Health centers, 116 private not for profit and 357 private for profit clinics.

The study area specifically was in adult ED which includes triage, resuscitation (red zone where emergency patients who needs emergent care is delivered), orange side (where semi critical patients are kept), and intake (where all medical and surgical emergency patients are treated). TASH adult ED has more than 50 beds and staffed with 78 BSc and MSc nurses, interns, residents and specialists of emergency medicine, internal medicine, surgery and anesthesiology. The study was conducted from April 20- May 30, 2018.

4.2. Study design:

Institutional based Cross sectional study design was conducted.

4.3. Source population:

All physicians and nurses working in ED Tikur Anbessa Specialized Hospital.

4.3.1. Study population:

All physicians and nurses working in Tikur Anbessa Specialized Hospital, ED who full filed the inclusion criteria.

4.4 Inclusion and Exclusion Criteria

4.4.1. Inclusion Criteria:

All physician and nurses working in TASH ED during the study period.

4.4.2 Exclusion criteria

- ✚ Those who have stayed for less than a month in the ED
- ✚ Those who came from abroad
- ✚ Medical Student
- ✚ Nurse students

4.5. Sample size determination

Since non-probability convenience sampling method was used, sample size calculation was not necessary. Hence, 47 physicians and 62 nurses were included.

4.6. Study Variables

4.6.1. Dependent Variable

- ✚ Level of communication

4.6.2 Independent Variables

- ✚ Socio demographic characteristics (age, sex and marital status)
- ✚ Educational status
- ✚ Year of Experience
- ✚ Professional categories

4.7. Data collection tool and technique

A pretested self-administered structured questioner was utilized to assess the level of communication of respondents that was adopted from previously conducted study in Jimma(31). The questioner has two parts; the first parts inquires about the socio demographic characteristics and the second part assess the level communication among nurses and physicians. Four BSc nurses recruited for data collection and two MSc nurses supervisors were recruited.

4.8. Data quality assurance

Data quality was assured before, during and after data collection process

Before data collection: objective based and standardized English questioner was prepared. Training had been given for supervisor and data collectors on sampling procedures and data collection process. Pretest of all data collection tools was carried out at Zewditu Hospital in 15 participants in order to check the completeness and clarity of the tool.

During data collection: there had been a close day to day supervision in the data collection process. The questioner was checked to ensure completeness.

After data collection: double data entry and validation was done to avoid errors in data entry.

4.9. Data processing and Analysis

Data was entered in to Epi data and it was exported to SPSS version 23 for analysis. Descriptive statistics including mean, percentage and frequency were utilized to describe socio demographic characteristics and level of communication. Texts, tables, graphs and charts were used for data presentation. Binary and multiple logistic regression analysis were carried out to identify factors associated with level of communication. Statically significance was declared at $P < 0.05$. The strength of association was interpreted using adjusted odds ratio (AOR) 95% confidence interval (CI).

4.10. Operational definitions

- Level of communication: quality or content of work related exchange of information between physician and nurses.
- Good level of communication: respondents who scored above the mean.
- Poor level of communication: respondents who scored below the mean.

4.11. Ethical clearance

Ethical clearance was obtained from Institutional review board of Addis Ababa University. Official letter from the department was submitted to the Tikur Anbessa Specialized Hospital Emergency department. The letter obtained from the institutional review board was given to the adult ED head nurse. Written informed consent was obtained from each of the professionals for their willingness to be part of the study. Participants were told that they could refrain whenever they feel to do so. Participant's response kept anonymous and confidential throughout the study.

4.12. Dissemination of the Results

The result of this study will be submitted to Addis Ababa University, Department of Emergency Medicine. The copies of this study also will be given to the respective health institutions, TASH emergency room, so that they can use the results for planning and implementation of intervention programs and it will be sent to a reputable journal for possible publication after presentation and approval from the emergency department is obtained.

CHAPTER 5: RESULT

5.1 Socio-demographic characteristics of study population

Out of 109 participants who were included in this study majority of the participants were male with female to male ratio of 1: 1.36. About half of the participants in the study were aged between 22 to 26 years with mean age of 26.6 (**SD**±3.27) years. Nearly three fourth (75.2%) of the respondents were single. Regarding to the educational level majority of them were BSc nurses 46 (42.2%) and 26 (23.9%) of them were interns. The finding further revealed that only 11 (10.1%) of the nurses and physicians had greater than five years of service. Regarding salary most of the study participant's 52 (47.7%) lies between 3001 and 5000 monthly salary (see table 1).

Table 1 Socio-demographic characteristics of respondents in Emergency department, TASH 2018 (N=109).

Variables		Frequency (N=109)	Percentage (%)
Professions	Nurse	62	56.9
	Physician	47	43.1
Sex	Male	63	57.8
	Female	46	42.2
Age	22-26	63	57.8
	27-31	34	31.2
	≥ 32	12	11
Marital status	Single	82	75.2
	Married	25	22.9
	Separated or divorced	1	0.9
	Other	1	0.9
Educational status	Diploma nurse	2	1.8
	BSC nurse	46	42.2
	Masters	14	12.8
	Intern	26	23.9
	Resident	21	19.3
Service year	<2 years	67	61.5
	2-5 years	31	28.4
	>5 years	11	10.1
Salary	< 3000	14	12.8
	3001-5000	52	47.7
	>5000	43	39.4

5.1.2 Current position of respondents

According to current position of physicians and nurses, 26(23.9%) were intern and 59 (54.1%) were staff nurses (see figure 1).

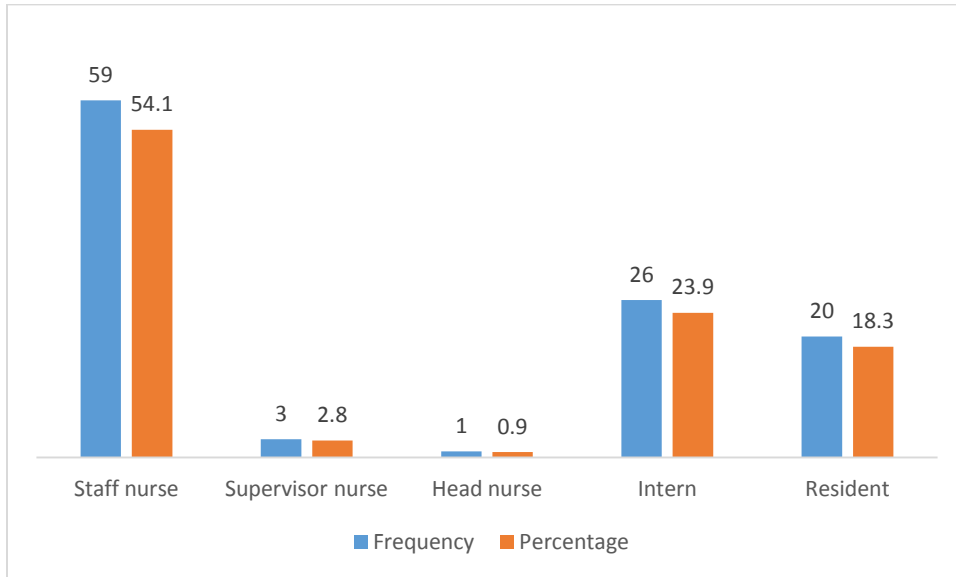


Figure 1 Current position of physicians and nurses in Emergency department, TASH, 2018 (N=109)

5.2 Level of communication

Regarding to the communication between nurses and physicians, at the event of a change in treatment plan, 39(35.8%) usually and 14(12.8%) rarely had a mutual understanding. Among all respondents 50(45.9%) sometimes discuss about the mechanism of maintaining patient safety.

About 12 (11%) of the respondent never taught that a professional respect had effect on communication. Eight (7.3%) of physicians and nurses were mentioned never taking into account each other's schedule when making plans to treat a patient together. And also 5 (5.5%) of the respondents never have the same understanding on patient's care (see Table 2).

*Table 2 Level of communication physicians and nurses in Emergency department, TASH, 2018
(N=109)*

Variables	Always (%)	Usually (%)	Sometimes (%)	Rarely (%)	Never (%)
In the event of a change in treatment plan, the nurse and the physicians have a mutual understanding	11(10.1)	39(35.8)	39(35.8)	14(12.8)	6(5.5)
The nurse and physicians discuss the mechanism to maintain patient safety	13(11.9)	24(22)	50(45.9)	16(14.7)	6(5.5)
The nurse & the physicians have the same understanding on patient's care	10(9.2)	32(29.45)	32(29.4)	30(27.5)	5(5.5)
the nurse & the physicians take into account each other's schedule when making plans to treat a patient together	12(11)	12(11)	38(34.9)	39(35.8)	8(7.3)
openly exchange information or opinion about matters related to work	11(10.1)	36(33)	37(33.9)	18(16.5)	7(6.4)
the nurse and the physicians show concern for each other when they are very tired	7(6.4)	32(29.4)	33(30.3)	30(27.5)	7(6.4)
The nurse and the physicians help each other	12(11)	38(34.9)	40(36.7)	14(12.8)	5(4.6)

the Physicians and nurse listen to each other	9(8.3)	38(34.9)	35(32.1)	23(21.1)	4(3.7)
open to Receive correct information or advice from each other	6(5.5)	39(35.8)	37(33.9)	23(21.1)	4(3.7)
professional respect effect on communication	5(4.6)	33(30.3)	42(38.5)	17(15.6)	12(11)

Regarding the level of communication, 55% of the respondents have poor level of communication

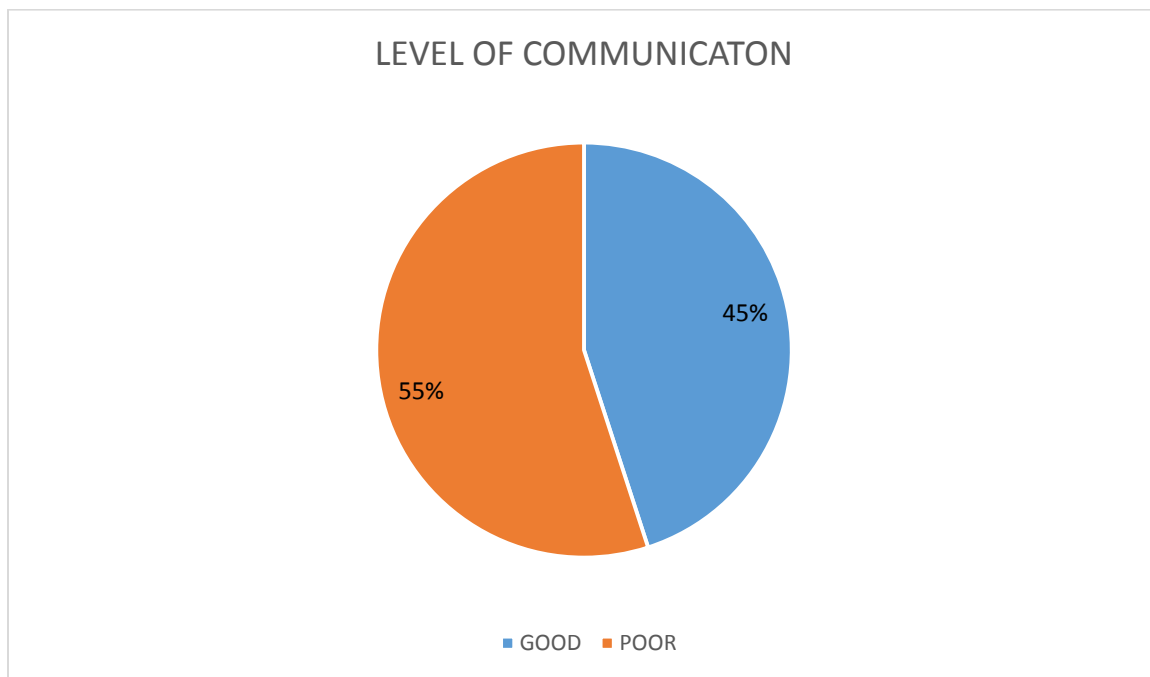


Figure 2 : level of communication among nurses and physicians in emergency department of TASH, 2018

5.3 Factors associated with level of communication

Binary and multiple logistic regression analysis was performed to see the existence of association between level of communication and socio demographic characteristics of respondents. On binary logistic regression, year of experience of respondents was found to have a significant association with level of communication. On the other hand, to control the effect of confounding variable, factors with p value <0.2 were entered in to multiple logistic regression and years of experience of respondents was significantly associated with level of communication. Nurses and physicians having an experience of 2-5 years were 2.65 times more likely to have good level of communication than those having < 2 years of experience. (see Table 3)

Table 3 Factors associated with level of communication TASH Addis Ababa, Ethiopia, 2018.

Variables		Level of communication		COR(95%CI)	AOR(95%CI)
		Poor	Good		
Age	22-26	35(55.7%)	28(45.5%)	Ref	
	27-31	18(53%)	16(47%)	1.11(0.481,2.56)	
	> 32	7(58.3%)	5(41.7%)	0.893(0.56,3.11)	
Sex	Male	36(57.1%)	27(42.9%)	1	
	Female	24(52.2%)	22(47.8%)	1.222(0.569,2.624)	
Profession	Nurse	30(48.4%)	32(51.6%)	1ref	1
	Physician	30(63.8%)	17(36.2%)	0.53(0.245,1.154)	0.692(0.270,1.389)
Service year	<2 years	43(64.1%)	24(35.9%)	Ref	Ref
	2-5 years	12(38.7%)	19(61.3%)	2.837(1.178,6.829)	2.65(1.089,6.448)
	>5 years	5(45.5%)	6(54.5%)	2.15(0.593,7.792)	1.755(0.463,6.649)
Salary	<3000	9(64.3%)	5(35.7%)	Ref	
	3001-5000	29(55.8%)	23(44.2%)	1.428(0.420, 4.848)	
	>5000	22(51.2%)	21(48.8%)	1.718(0.494,5.973)	

CHAPTER 6: DISCUSSION

In health care institutions, the main objective that nurses and physicians share is serving patients. To achieve desired quality of patient outcome having the right nurse-physician communication is an important strategy and brings solutions for collaborative patient care by reducing major risk factors to patient safety such as lack of critical information, misinterpretation of information, medication errors and others(32). But the two professionals also have different perspectives on their inter professional communication and factors affecting their communication.

This study has found that the level of communication between nurses and physicians 44.5% of them responded to be good which is above the standard mean score (23.08) this is in line with study conducted in Jimma where perceived openness and sharing of patient information during nurse-physician communication in patient care was 48.52% (31) which shows that level of nurses and physicians communication has attention seeking gap in their communication level. Hence, the finding of our study suggests the need for developing and implementing nurse-physician communication improvement strategies to solve communication mishaps in patient care.

On factors associated with level of communication between nurses and physicians, having 2-5 years of experiences was found to be 2.6 more likely to have good level of communication than less than two years of work experiences. This might be due to as professionals get along together for longer time their level of understanding and communication will also develop together.

The nurse and physicians discuss the mechanism to maintain patient safety sometimes 50(45.9%), rarely 16(14.7%), and never 6(5.5%) during their delivery of care to patients this is in line with the study conducted in Jimma where they showed the same finding.

This suggests that nurse and physicians should work together in planning and throughout the patient care.

CHAPTER 7: STRENGTHS AND LIMITATION OF THE STUDY

Strengths

- ❖ This study is the first study that attempted to assess level of communication in emergency department in Tikur Anbessa specialized Hospital
- ❖ Found base line information for future health plan.
- ❖ Can be used as base line data for future further study.

Limitation

- ❖ Lack of literatures hinders further discussion and comparison
- ❖ Since the study design is cross sectional it cannot revealed cause effect

CHAPTER 8: CONCLUSION

The study found that there was poor communication level between nurses and physicians in emergency department. Based on the finding from binary logistic regression, as the year of experience increases the level of communication also improves. The nurses and physicians mainly discuss the mechanism to maintain patient safety. There is a need for developing and implementing nurse-physician communication improvement strategies.

CHAPTER 9: RECOMMENDATION

For Emergency Department

- There should be education or training regarding communication skills for health professionals to support collaboration amongst clinical teams

For Emergency Department physicians and nurses

- Nurses and physicians should consider carefully the effects of their communication behavior on their own efficiency and effectiveness as well as on that of others
- Nurses and physicians should have meetings together to promote team centered communication and eliminate the hierarchical interactions among team members.
- Other research should be conducted by involving large sample size to identify the other factors that can affect communication by including private hospitals

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ANNEXES

ANNEX ONE: CONSENT FORM

CONSENT FORM

Interviewer ID

Date

Start time

Introduction

Good Morning / afternoon /evening

My name is EyerusalemAmanu, a postgraduate student of Emergency Medicine and critical care in TikurAnbessa Specialized Hospital, Addis Ababa, Ethiopia. I am carrying out a study to assess the level of communication between Nurses and Physician in TASH emergency Department. The study is towards the partial fulfillment of attaining Master's degree of Emergency medicine and Critical care nursing in Addis Ababa University.

I am going to ask you some questions about the level of communication between Nurses and physician in the emergency department.

The interview will take about only 20 minutes. And all the information that you will be giving remains strictly confidential.

So, would you agree to participate in this research?

Yes No

Signature _____

ANNEX TWO: SELF ADMINISTER QUESTIONNAIRE

Part 1: Characteristics of participants

No.	Variable	Response categories
101	Professional categories	1. Nurse 2. Physician
102	Sex	1. Male 2. Female
103	Age (in Years)	_____
104	Marital status	1. Single 2. Married 3. Separated or divorced 4. Widowed 5. Other, specify_____
105	Educational Qualification	1. Diploma nurse 2. BSc Nurse 3. MSc Nurse 4. Intern physician 5. Resident physician 6. Consultant Physician
106	Current position	1. Staff nurse 2. Supervisor nurse 3. Head nurse 4. Intern physician 5. Resident Physician 6. Consultant physician 7. Department head physician
107	Year of service in ED (in year)	1. <2 2. 2 – 5 3. >5years
108	Salary category (in ETB)	1. <3000 2. 3001 – 5000 3. >5000

Part two: Level of Communication

No.	Variables	Always	Usually	Sometimes	Rarely	Never
201	In the event of a change in treatment plan, is the nurse and the physicians have a mutual understanding?					
202	Did the nurse and physicians discuss the mechanism to maintain patient safety?					
203	Did the nurse & the physicians have the same understanding on patient's care?					
204	Did the nurse & the physicians take into account each other's schedule when making plans to treat a patient together?					
205	Did the nurse & the physicians can openly exchange information or opinion about matters related to work?					
206	Did the nurse and the physicians show concern for each other when they are very tired?					
207	Did the nurse and the physicians help each other?					
208	Are the Physicians and nurse listen to each other?					
209	Are they open to Receive correct information or advice from each other?					
210	Is their Perceived professional respect and satisfaction on communication?					

