

PATIENT CARE COMMUNICATIONS AMONG HEALTHCARE PROFESSIONALS:
SATISFACTION OF KEY STAKEHOLDERS AT A TERTIARY HEALTH FACILITY IN
NIGERIA

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Abstract

Background: The paradigm shift in modern healthcare is patient-centred care that is respectful of and responsive to individual patient preferences, needs, and values which guide all clinical decisions. While various kinds of literature have given evidence of positive outcomes due to effective communication among healthcare professionals, non-collaboration and poor communication between healthcare professionals would adversely affect such positive outcomes.

Objective: This study examined if healthcare professionals (Pharmacists, Physicians and Nurses) in Jos University Teaching Hospital (JUTH) are satisfied with patient care communication between themselves.

Methods: A cross-sectional survey using questionnaires and convenience sampling was adopted for data collection at the Jos University Teaching Hospital to assess manners of patient care communications and the level of satisfaction among Pharmacists, Physicians, and Nurses within the facility.

Results: Participants in this study agree that face-to-face interprofessional patient care communication is significantly inadequate and non-collaborative ($p < 0.004$). Interprofessional therapeutic/clinical meetings as well as joint rounds by all categories of key stakeholders involved in direct patient care are significantly ($p < 0.002$) inadequate in the facility.

Conclusions: There is poor ($p < 0.182$) patient care communication between Pharmacists, Physicians and Nurses at the Jos University Teaching Hospital and are not satisfied with the manner ($P < 0.44$) and level ($p < 0.06$) of patient care communication and collaboration between themselves

Keywords: Communication, Collaboration, Satisfaction, Healthcare professionals, Hospital.

Introduction

The paradigm shift in modern healthcare is patient-centred care that is respectful of and responsive to individual patient preferences, needs, and values and ensures that patient values guide all clinical decisions. Hospitals are complex organizations humming with activities of heterogeneous groups of people such as Pharmacists, Physicians, Nurses, Laboratory Scientists, Radiographers, other paramedics, and administrative staff, working with a common goal of providing this care^[1]. Patient diagnosis, treatment planning and continuity of care are no longer dominated by clinician-focused approaches to service delivery. The shift requires that all healthcare professionals collaborate in managing a patient's journey upon admission through interventions, discharge and follow-up. The increasing complexity and specialization of care, increasing co-morbidities and increasing chronic diseases have led to a steep rise in demand for healthcare services thus necessitating collaboration among key healthcare professionals to improve patient care and outcomes. Collaboration is therefore globally recognized as an essential tool for constructing a more effective and patient-centered health care delivery system. The triple aim of improving patient experience and satisfaction, improving the health of the population, and reducing costs of care is not attainable without interprofessional collaboration.

Healthcare collaboration requires the sharing of critical information within and between key healthcare professionals. Patient care information is shared through communication. As a process of reciprocal exchange between colleagues, communication occurs in multiple modes and media, including but not limited to written discourse, oral speech, body language, and electronic transmission. Open

communication, cooperation, assertiveness, negotiation, accountability, trust, and coordination are all attributes of collaboration. Communication is therefore at the centre of effective healthcare collaboration [2]. It is a joint venture or cooperative endeavor, with willing participation, shared planning, and a team approach to decision-making [3]. A review of the literature has shown that effective communication can lead to the following positive outcomes: improved information flow, more effective interventions, improved safety, enhanced employee morale, increased patient, and family satisfaction, decreased length of treatments [4,5,6,7], decreased hospitalization and readmission rates [8].

Good communication augments and enhances interpersonal relationships. Most significantly, patients are more likely to receive the highest quality of care as healthcare professionals understand each other's roles, appreciate each other's skills [9,10], and work together effectively as a team [11,12]. Indeed, poor communication is the leading cause of preventable injuries, increased length of hospitalization, and death [13,14]. When healthcare professionals fail to communicate effectively, patient safety is at risk. Studies have reported that poor communication and teamwork failures are the major contributors to adverse events in health care [15, 16, 17].

Since inter-professional communication has become increasingly important in our healthcare services today it is important to constantly evaluate how healthcare professionals are communicating care decisions in an increasingly complex healthcare environment. Merely responding to this study instrument will raise the consciousness of participants to self-appraise their mode of communication with other healthcare service providers. This self-appraisal along with identified communication gaps is expected to motivate care providers to communicate patients' care decisions effectively for the good of the patient and the system. This study set out to assess if Pharmacists, Physicians, and Nurses in Jos University Teaching Hospital (JUTH) are satisfied with the level and manner of patient care communication between one another.

Methods

Study Design and Location

The study design was a descriptive cross-sectional survey conducted in June and July 2020 at the Jos University Teaching Hospital (JUTH). Jos University Teaching Hospital is a 600-bed capacity tertiary hospital located at Lamingo in Jos North Local Government Area, Plateau State, Nigeria. The facility is a referral centre for North Central Nigeria and offers a wide range of clinical services.

Ethical approval was sought and obtained from the Ethics Committee of the JUTH Reference NO. JUTH/DCS/IREC/127/XXX/2220 dated 11th June 2020 before commencing data collection. Written informed consent was obtained from target populations before they were recruited into the study.

Study population/Sample size

The target population were Nurses, Physicians and Pharmacists working at the Jos University Teaching Hospital. A sample size of 360 (including 20% attrition) of the target population was calculated from the formula for finite population described by Daniel 1999 from the total target staff population estimated at 1354, made of 54 Pharmacists, 600 Nurses and 700 Physicians. Due to the disproportionate sizes of the target professionals that made up the population, a census population of Pharmacists was recruited while a proportionate sample of Physicians and Nurses was done in the ratio of 7:6 respectively to cover the remaining sample size. Pharmacists, Nurses, and Physicians who have been serving patients for at least six months before the interview date and who consent to participate were included in the study.

Data Collection Instrument/Process

A data collection questionnaire of 36 items was developed, face-validated by 8 experts in the field and pretested before administration to the target groups. The questionnaire was made up of 6 sections: demographics; mission and goal of the hospital; general relationships among professionals; roles, responsibilities, and professional autonomy; communication and information sharing among

professionals; decision-making and conflict management; and open-ended questions on challenges and recommendations. The convenience sampling method of data collection was used. A cross-section of the target population was approached prospectively at their duty posts and screened for eligibility and consent of participation. A total of three hundred and sixty (360) questionnaires were distributed to the eligible and consented Pharmacists, Physicians and Nurses working in JUTH.

Data Analysis

Responses of returned questionnaires were checked to ensure their completeness, entered into Microsoft Excel spreadsheet based on appropriate coding formats, cleaned, and transferred into the Statistical Package for Social Sciences (SPSS) version 26 for analysis. The reliability of the instrument was determined using Cronbach's Alpha test. An exploratory Factor Analysis was carried out to determine the adequacy of the sample size.

The questions in the instrument were rearranged in line with the loaded components generated by the factor analysis. Descriptive (proportions) statistics were used to describe the responses while Chi-square was used to test for differences in proportions. Responses to open-ended questions were subjected to thematic analysis.

Results

Three hundred and eleven filled questionnaires were returned (representing an 86% response rate). The Cronbach's alpha coefficient for the 36-item questionnaires was 0.966 and Cronbach's Alpha based on standardized items was 0.968.

More females (54%) participated in the study compared to their male counterparts (46%). Many of the respondents (53.4%) were adults within the age limits of between 26 and 35 years old and the majority (64%) of them were 10 years or less post-qualification. Most of the respondents were either Nurses (41%) or Physicians (40%) by profession and almost all of them (89.1%) were involved in ward rounds (Table 1). Kaiser-Meyer-Olkin (KMO) value of 0.966 indicated the adequacy of the sample population for factor analysis. (Table 1).

Table 1: Demographic characteristics of respondents

Demography	Frequency	Percentage
Profession		
Nurse	128	41.2
Doctor	125	40.2
Pharmacist	58	18.7
Gender		
Male	143	46
Female	168	54
Age		
<26yrs	20	6.4
26 - 35yrs	166	53.4
36 - 45yrs	75	24.1
>45yrs	50	16.1
Post-qualification		
<5yrs	117	37.7
5 - 10yrs	81	26
>10yrs	113	36.3

Whether involved in ward rounds

Yes	277	89.1
No	34	10.9

Rounds undertaken with:

Pharmacists only	39	16.2
Physicians only	79	32.8
Nurses only	17	7
Physicians and nurses	100	41.5
Physicians and pharmacists	5	2.1
Nurses and pharmacists	1	0.4

KMO measure of sample adequacy	0.966
Bartlett’s test of sphericity: Approx. Chi-Square	9227.639
df	630
<i>P</i> -value.	0.000

Frequency Distributions of the Four Components

- i. Communication and Information Sharing:* About 54% of the respondents agreed that the organizational structure and workflow in the hospital provided adequate patient care communication amongst them. Sixty-seven percent (67%) of them agreed that they recognized each other's work and contributions to patient care, while about 64% said they were not satisfied with the manner and level of patient care communication between them (**Table 2**).

Table 2: Communication and information sharing among stakeholders (Component 1)

S/N	Variable Items	Responses				
		Strongly Agree n (%)	Agree n (%)	Undecided n (%)	Disagree n (%)	Strongly disagree n (%)
1	Patient care plans and treatment goals in this hospital are based on best practice guidelines from multiple professions	107(35)	139(45.4)	25(8.2)	33(10.8)	2(0.7)
2	There is a real desire among different professionals to work collaboratively in this hospital	56(18.9)	132(44.4)	53(17.8)	52(17.5)	4(1.3)
3	Physicians, Nurses, and Pharmacists recognize each other’s work and contributions to patient/client care	54(21.3)	116(45.8)	38(15)	39(15.4)	6(2.4)
4	The organizational structure and workflow provide for adequate patient care communication between health professionals	38(12.4)	127(41.5)	49(16)	80(26.1)	12(3.9)
5	The medication chart is the focal point for health professionals to communicate relevant medication-related information on the patient	63(20.7)	165(54.3)	23(7.6)	43(14.1)	10(3.3)
6	There are adequate inter-professional therapeutic meetings in the hospital	9(3)	45(14.9)	54(17.9)	150(49.7)	44(14.6)
7	I am free to communicate and assertively provide my expertise in patient management	47(15.5)	139(45.9)	49(16.2)	60(19.8)	8(2.6)

8	There is an effective communication strategy to share patient treatment goals and outcomes among health professionals	27(8.9)	86(28.2)	50(16.4)	125(41)	17(5.6)
9	The patient/client health record is used effectively by all team members as a major communication tool	60(19.7)	139(45.6)	38(12.5)	62(20.3)	6(2)
10	The patient care communication between Physicians, Nurses and Pharmacists in this hospital is satisfactory	14(5.5)	95(30.9)	38(12.4)	128(41.7)	32(10.4)
11	Face-to-face inter-professional communication on patient care is very adequate in this hospital	28(9.2)	65(21.3)	42(13.8)	136(44.6)	34(11.1)
12	I am satisfied with the manner of communication with other health professionals in this facility	10(3.3)	52(17)	47(15.4)	150(49)	47(15.4)
13	I am satisfied with the level of communication between health professionals in this facility	8(2.6)	50(16.4)	48(15.8)	157(51.6)	41(13.5)
14	When health professionals disagree, all points of view are considered before deciding on a solution	48(15.6)	116(37.8)	85(27.7)	51(16.6)	7(2.3)
15	There is an established process of managing inter-professional conflict in the hospital	14(4)	61(20.2)	110(36.4)	82(27.2)	40(13.2)

ii. General relationship among health professionals: Sixty-six percent (66%) of respondents agreed that they have a strong desire for collaborative patient care and 61 % strongly advocate the need for hospital policies that would enhance interprofessional patient care communication. About 56% strongly agreed that all health professionals have a role to play in developing and implementing patient care plans while 1.6% disagreed with this (**Table 3**).

Table 3: General relationships among health professionals (Component 2)

S/N	Variable item	Responses				
		Strongly agree n (%)	Agree n (%)	Undecided n (%)	Disagree n (%)	Strongly disagree n (%)
1	The hospital's mission embodies an inter-professional collaborative approach to patient care	150(49.7)	123(40.7)	11(3.6)	16(5.3)	2(0.7)
2	The primary purpose of health care is to assist patients/clients achieve treatment goals	235(76.5)	70(22.8)	2(0.6)	0(0)	0(0)
3	Members of my profession are committed to collaborative patient care	160(53)	124(41.1)	11(3.6)	7(2.3)	0(0)
4	I enjoy working with other healthcare professionals in the hospital	104(33.9)	151(49.2)	30(9.8)	17(5.5)	5(1.6)
5	There is a greater need for inter-professional collaboration in patient care	227(74.2)	77(25.2)	2(0.6)	0(0)	0(0)
6	I have a strong desire for collaborative patient care with other health professionals in this hospital	202(66)	91(29.7)	9(2.9)	4(1.3)	0(0)
7	All health professionals play a complementary role in healthcare	163(52.9)	122(39.6)	12(3.9)	8(2.6)	3(1)

8	Each professional shares accountability for healthcare decisions and outcomes	119(39.1)	152(50)	21(6.9)	9(3%)	3(1%)
9	All professionals have a role to play in developing and implementing the patient care plan	170(56.1)	120(39.6)	8(2.6)	4(1.3%)	1(0.3%)
10	There is a need for hospital policies that would enhance interprofessional patient care communication	186(61.4)	98(32.3)	9(3%)	8(2.6%)	2(0.7%)
11	The opinions and expertise of other health professionals are important and considered in my patient care decisions	118(38.3)	155(50.3)	18(5.8)	15(4.9%)	2(0.6%)

iii. Patient care decision and conflict management: This shows that 34% strongly disagree that consulting other healthcare professionals in patient care wastes time and delays decision making while about 15% agreed that it does waste time. About 46 % agreed that there are overlapping roles between them while about 17% disagreed with this position. About 80% agree that there is more written than oral communication between health professionals in the facility (Table 4).

Table 4: Patient care decisions and conflict management in the hospital (Component C3) (N=311)

S/N	Variable item	Responses				
		Strongly agree n (%)	Agree n (%)	Undecided n (%)	Disagree n (%)	Strongly disagree n (%)
1	The institutional patient care structure does not encourage teamwork	32(10.8)	70(23.6)	50(16.9)	102(34.5)	42(14.2)
2	There are overlapping roles between Nurses, Physicians, and Pharmacists in patient management in this hospital	57(18.9)	140(46.5)	38(12.8)	52(17.3)	14(4.7)
3	Members of my profession feel restricted in rendering their expertise in patient care	59(19.6)	78(25.9)	42(14)	102(33.9)	20(6.6)
4	Consulting other professionals in patient care wastes time, delays decision-making	16(5.2)	46(14.9)	24(7.8)	118(38.2)	105(34)
5	A process where face-to-face inter-professional communication is very minimal would not be considered collaborative	48(15.6)	163(53.1)	38(12.4)	51(16.6)	7(2.3)
6	There is more written than oral communication between health professionals in this facility	89(28.9)	160(51.9)	27(8.8)	22(7.1)	10(3.2)
7	Disagreements among different professionals on patient care in this hospital are ignored	21(7)	91(30.4)	97(32.4)	79(26.4)	11(3.7)

iv. Stakeholders' opinions on roles, responsibilities, and professional autonomy: About 50% of respondents agreed that they respect each other's role and expertise in the hospital while about 26% reported that there was no respect for the role and expertise of each other in the hospital. Twenty percent of the respondents disagreed that the final decision in patient care rests with the physician (Table 5).

Table 5: Stakeholders' opinion on roles, responsibilities, and professional autonomy (Component 4) (N=311)

S/N	Variable item	Responses				Strongly disagree n (%)
		Strongly agree n (%)	Agree n (%)	Undecided n (%)	Disagree n (%)	
1	Physicians, Nurses, and Pharmacists respect each other's role and expertise in this hospital	34(11.4)	146(47.7)	46(15)	61(19.9)	18(5.9)
2	I believe that physicians should assume the ultimate responsibility for team decisions and outcomes in this hospital	74(24.4)	76(25.1)	28(9.2)	73(24.1)	52(17.2)
3	The final decision in patient/client care rests with the physician	85(28.4)	124(41.5)	29(9.7)	38(12.7)	23(7.7)

Participants 'satisfaction with patient care communications: Fifty-one (51%) per cent of them disagreed with the fact that inter-professional patient care communication was satisfactory while 64% of them reported that they were not satisfied with the manner and level of patient care communication between them, and face-to-face inter-professional patient care communication was significantly inadequate (Table 6).

Table 6: Participants' Satisfaction with Patient Care Communications

Questions	Responses			P-value
	Agree	Undecided	Disagree	
Pharmacists, Physicians, and Nurses recognize each other's role in patient care				
Nurses	92	10	22	
Physicians	85	19	17	0.326
Pharmacists	43	9	6	
A process where face-to-face interprofessional communication is very minimal would not be considered collaborative				
Nurses	98	10	17	
Physicians	70	19	35	0.003
Pharmacists	43	9	6	*

There is adequate interprofessional therapeutic meetings in the hospital				
Nurses	33	24	65	0.002 *
Physicians	9	21	93	
Pharmacists	12	7	36	
Patient care communications between Pharmacists Physicians and Nurses in this hospital are satisfactory				
Nurses	54	10	62	0.182
Physicians	37	21	65	
Pharmacists	18	7	33	
Face-to-face interprofessional patient care communication is very adequate in the hospital				
Nurses	54	11	60	0.004 *
Physicians	25	20	77	
Pharmacists	14	11	33	
I am satisfied with the manner of communication with other health professionals in this facility				
Nurses	29	16	79	0.44
Physicians	22	23	79	
Pharmacists	11	8	39	
I am satisfied with the level of communication between health professionals in this facility				
Nurses	32	16	75	0.06
Physicians	16	25	82	
Pharmacists	10	7	41	

* $P < 0.05$

Qualitative Evaluation of Open-ended Questions

Perceived challenges and barriers to interprofessional communications summarized in the table below reveal that Ego, pride, arrogance, feeling of superiority and supremacy, and greed accounted for 25% of the challenges. Lack of joint rounds and joint clinical meetings constitute 3.6% of the challenges. Rivalry, poor attitude, disagreement, disunity, and conflict constitute about 10% of the reported challenges (**Table 7**)

Table 7: Reported Challenges/Barriers to Interprofessional Patient Care Communication

Challenges	Frequency	Percentage
Ego, pride, arrogance, superiority, and greed	57	25.4
Poor communication, lack of communication skills	36	16.1
Rivalry, poor attitude, disagreement, disunity, and distrust	24	10.8
Lack of collaboration, lack of face-to-face interaction in patient care	17	7.6

Lack of respect for other health professionals	9	4
Neglect of other professionals' opinions	9	4
Poor knowledge of and lack of adherence to job specifications	8	3.6
Lack of joint rounds and joint clinical meetings	8	3.6
Shortage of staff in some disciplines	6	2.7
Interprofessional challenge, pharmacists do not go on rounds	5	2.2
Non-documentation of patient care contributions of Pharmacists	4	1.8
Inferiority complex, lack of confidence, apprehension	3	1.3
Others	38	17

Discussion

The overall Cronbach's Alpha score was high (0.966), an indication of the reliability of items in the instrument to measure or answer the objectives of the study. It has been reported that Cronbach's Alpha result of 0.75 and above is acceptable^[18]. The high score in this study implies that the outcome of this study is reliable and a true reflection of the opinions of respondents. Generally, reliability in quantitative research refers to the consistency of a measure despite always being repeated several times and a measure of stability^[19]. Factor analysis is a statistical procedure used to identify a small number of factors that can be used to represent relationships among sets of interrelated variables^[20].

To proceed with factor analysis, the appropriateness of the sample size was tested using the Kaiser-Meyer-Oilkin (KMO) test. The KMO measure of sampling adequacy was very high (0.966) and greater than the minimum acceptable value of 0.5, and this indicated that the sample size was large enough to assess the factor structure^[21].

The appropriateness of factor analysis was supported by the result of Bartlett's test of sphericity, a measure of the strength of the relationship among variables. The Bartlett's test was significant ($p < 0.000$) indicating that the data were sufficient to proceed for the factor analysis and existence of inter-relationships within the variables^[22, 23]. The four domains or components generated by total variance explained indicate that one of the initial components of the instrument is absorbed into others because its initial Eigenvalues total is less than 1 but the factor loading shows that the items are strong enough to measure the instrument in other components.

Nurses, Physicians, and pharmacists are not the only groups of health professionals. However, they are the most frequently encountered by the patients whether for prevention or treatment of diseases. The greater number of female than male respondents may be due to the large number of nurses who were mostly females and their easier accessibility to respond to questionnaires than other categories of healthcare professionals in the study population.

This report reveals that though almost 100% of the respondents participate in ward rounds, most often these ward rounds are conducted in individual professional silos and rarely do the pharmacists participate in rounds with nurses and or Physicians.

This seeming lack of joint rounds is the bane of inter-professional therapeutic communication in the hospital. For instance, pharmacists typically intervened when prescribers' instructions are incomplete, incorrect, or unclear, or when drug allergies are detected^[24, 25, 26]. The increasing complexity of medication therapies underscores the need for strong working relationships between pharmacists and physicians to optimize patient care. Hospital pharmacists have demonstrated their ability to improve care by decreasing mortality and morbidity, reducing adverse drug events, and reducing healthcare costs^[27].

Studies have revealed a disconnect between pharmacist and physician perceptions regarding the pharmacist's role in patient care^[28]. Another study also found less physician support for pharmacists recommending the use of certain prescription medications to either patients or physicians or for assisting physicians in designing drug therapy treatment plans for their patients^[29].

Communication and information sharing among healthcare professionals is very important in delivering effective healthcare to the patient. This can only be achieved when healthcare professionals meet from time to time to discuss patient care from their professional perspectives. Unfortunately, this report reveals inadequate inter-professional therapeutic meetings in the hospital as reported by 64% of the Physicians, nurses, and pharmacists. This is despite the report by 54% of the same groups that the organizational structure and workflow provide for adequate patient care communication between them. Face-to-face inter-professional patient care communication was reported by 56% of respondents to be inadequate. Pharmacists, Physicians, and nurses in this hospital reported that patient care communication between them is not satisfactory and they are not satisfied with the manner and level of communication between them in the hospital.

These submissions have great implications for patient care and outcomes. Any form of collaborative care can only be strengthened by face-to-face communication because non-verbal communication reinforces verbal or spoken words. This is why the respondents significantly agreed that where face-to-face contact is very minimal among healthcare professionals, care cannot be said to be collaborative.

Analysis of qualitative responses in this study reveals that ego, pride, greed, arrogance, lack of respect, poor attitude and distrust among health professionals are hindrances to therapeutic communication and collaborative practice. Efforts to improve healthcare safety and quality are often jeopardized by the communication barriers that exist among clinical staff.

These barriers may be due to differences in requirements, regulations, and norms of professional education. Members of the healthcare teams are trained separately in their respective disciplines and educational settings, leaving them unprepared to practice in complex collaborative settings.

Presently, Medicine, Pharmacy, Nursing etc., train their future members of the profession in their enclaves.

Patient care decisions are very crucial but how patient care decisions are arrived at also matters. Interestingly, the majority of respondents agree or strongly agree that all professionals have a role to play in developing and implementing patient care plans and that each professional share accountability for patient care decisions and care outcomes, the same decision table is the major point of inter-professional conflict and has become the point of divergence instead of convergence such that as high as about 45% of the health professionals reported that their professional expertise is restricted during patient care decisions and so there are more of written (80%) than oral (10%) communication between health professional in the facility.

If disagreements among different professionals on patient care in this hospital are ignored as reported by 37% of respondents, then conflict management is poor, and this further explains why face-to-face inter-professional patient care communication is minimal and ward rounds are conducted in professional silos. While the majority of Physicians agree that physicians should assume the ultimate responsibility for team decisions and outcomes, the majority of nurses and pharmacists disagree.

The most reported barriers to inter-professional patient care communication in the hospital are ego, arrogance and show of supremacy by a group of professionals. This was mainly reported by the nurses against Physicians. Rivalry, poor attitude, disunity, and conflict between the different professional groups were mainly reported by Physicians. Communication barriers have been reported to exist in the healthcare industry in Nigeria^[30]. Pharmacists complained of a lack of documentation of their patient care as a major challenge they face in inter-professional collaboration and teamwork. A shortage of pharmacists was also reported as a restriction on their participation in ward rounds. Healthcare teams that do not trust, respect, and collaborate are more likely to make mistakes that could negatively impact the safety of patients.

Other challenges Centre around disunity and conflict as reported thus; *"inter-professional rivalry"*, *"disregard for other professionals by Physicians," "disagreement among healthcare professionals"*, *lack of adherence to professional-specific duties and lack of trust among professionals"*-doctor: *inter-professional rivalry occasioned by lack of interest in knowing roles of the different professionals"*-doctor; are particularly negating inter-professional patient care collaboration and communication in the hospital.

On the other hand, Physicians particularly blame other professionals for *"low self-esteem and lack of understanding of the focus of other professionals," "lack of job description for everyone in the health sector"*, *poor knowledge of job description and expertise"*-doctor. The Physicians opined that other professionals either do not know their job description or specifications or are not adhering to it as the

basis for conflict. A doctor also reported that other health professionals have apprehensive attitudes towards the physician and that there is an inferiority complex among other healthcare professionals, and poor knowledge of the job description. An evidence-based practice standard known as "safety huddles" enables staff to share safety information, foster empowerment, and foster a sense of community^[31].

Others blame poor inter-professional communication on the lack of institutional policy and structure to support teamwork. Statements such as "*No framework for joint rounds*"- pharmacist; "*No institutional collaboration*"-doctor; "*No organized structure for adequate patient care communication between professionals*"-doctor; "*Lack of laid down protocol for inter-professional meetings*"- pharmacist; "*Lack of hospital policy concerning inter-professional communication and collaborative practice*"-nurse; call for deliberate policy on the part of the hospital administration to establish a policy of inter-professional grand rounds if not daily, at least twice a week to build a culture of team spirit among the health care professionals.

Several solutions were suggested by respondents as a way out of the challenges to inter-professional communications in the hospital. The majority of the suggestions require deliberate policy formulation and implementation. Verbal communication has been advocated as an institutional policy to enhance interprofessional communication in healthcare^[32]

All disciplines need to be trained to understand, recognize, and appreciate that all cannot be in one profession, and no one can be in all professions. These suggestions when effectively implemented will help in building the health care structure and work ethics that will serve the patient better.

Conclusion

The hospital's mission and goal embody an inter-professional approach to patient care, but this is not translated into practice. Pharmacists, Physicians, and Nurses at the Jos University Teaching Hospital are not satisfied with the manner and level of inter-professional patient care communication between themselves. This is because the major mode of patient care communication is through the written patient record and face-to-face oral communication is very minimal so patient care is largely non-collaborative. Major barriers to patient care communication were identified to include ego, pride, rivalry, and disrespect for one another.

References

1. Kaini, B.K. Principles of Hospital Management. Kathmandu: Makalu Books 2005.
2. Bridges, D., Davidson, R., Odegard, P., Maki, I., and Tomkowiak, J. Interprofessional collaboration: Three best practice models of interprofessional education 2011. Available from <http://www.med-ed-online.net>
3. Fewster-Thuente, L., and Velsor-Friedrich, B. Interdisciplinary collaboration for healthcare professionals. *Nursing Administration Quarterly* 2008;32(1), 40–48.
4. Rosenstein A, and O'Daniel M. Addressing disruptive nurse-physician behaviours: developing programs and policies to improve outcomes of care. *Harvard Health Policy Review* Spring 2006; 7:86-91.
5. Chassin MR, and Becher EC. The wrong patient. *Ann Intern Med* 2002;136(11):26-33.
6. Zimmerman JE, Shortell SM, Rousseau DM, Duffy J., Gills RR, Knaus WA. *et al.* Improving intensive care: observations based on organization case studies in nine intensive care units: a prospective multicenter study. *Crit Care Med* 1993; 21(10):1443-51.
7. Shortell SM, Zimmerman JE, Rousseau DM, Gills RR, Wagner DP, Draper EA, *et al.* The performance of intensive care units: does good management make a difference? *Med Care* 1994; 32(5):508-25.
8. Sommers, L. S., Marton, K. I., Barbaccia, J. C., and Randolph, J. Physician, nurse, and social worker collaboration in primary care for chronically ill seniors. *Archives of Internal Medicine* 2000; 160, 1825-1833.
9. D'Amour, D., and Oandasan, I. Interprofessionality as the field of interprofessional practice and interprofessional education: An emerging concept. *Journal of Interprofessional Care* 2005; 19(S1), 8-20. doi:10.1080/13561820500081604

10. Hall, P. Interprofessional teamwork: Professional cultures as barriers. *Journal of Interprofessional Care* 2005; 19(S1), 188-196.
11. Barnsteiner, J. H., Disch, J. M., Hall, L., Mayor, D., and Moore, S. M. Promoting interprofessional education: It can't be left to chance. *Nursing Outlook* 2007; 55, 144-150. doi:10.1016/j.outlook.03.003
12. Hall, P., and Weaver, L. Interdisciplinary education and teamwork: A long and winding road. *Medical Education* 2001; 35, 867-875.
13. McComb, S., Henneman, E., Hickey, K., Richardson, C., Peto, R., Kleppel, R. *et al.*, Improving teamwork in general medicine unit: When teams do not work face-to-face. *The Joint Commission Journal on Quality and Patient Safety* 2012;38(10), 471-478.
14. Sutcliff, K., Lewton, E., and Rosenthal, M. Communication failures: An insidious contributor to medical mishaps. *Academic Medicine* 2004;79(2), 186-194.
15. Cornell, P., and Townsend-Gervis, M. Improving situation awareness and patient outcomes through interdisciplinary rounding and structured communication. *The Journal of Nursing Administration* 2014; 44(3), 164-169.
16. Fernandez, R., Tran, D., Johnson, M., and Jones, S. Interdisciplinary communication in general medical and surgical wards using two different models of nursing care delivery. *Journal of Nursing Management* 2010;18, 265-274.
17. O'Leary, K., Boudreau, Y., Creden, A., Slade, M., and Williams, M. Assessment of teamwork during structured interdisciplinary rounds at medical units. *Journal of Hospital Medicine* 2012; 7(9), 679-683. Epub 2012 Sep 7. doi:10.1002/jhm.1970
18. Taber K.S. The use of Cronbach's Alpha when developing and reporting research instruments in science education. *Res. Sci. Edu* 2018; 48: 1273-1296
19. Kirk, J., and Miller, M. L. Reliability and validity in qualitative research. *Sage* 1986.
20. Chan L.L. and Idris N. Validity and Reliability of The Instrument Using Exploratory Factor Analysis and Cronbach's alpha. *International Journal of Academic Research in Business and Social Sciences* 2017, Vol. 7, No. 10
21. Jimam NS, Ismail NE, and Dapar MLP. Development and validation of an instrument for assessing patients' knowledge, attitude, and practice (KAP) on uncomplicated malaria management. *J Appl Pharm Sci*, 2019; 9(06):033-042
22. Pallant J. SPSS survival manual, a step-by-step guide to data analysis using SPSS for Windows. 3 ed. Sydney: *McGraw Hill* 2007; p. 179-200.
23. Tabachnick, B. G. and Fidell, L. S. Using Multivariate Statistics. 5th edition. Boston, MA: Pearson Education. Inc 2007.
24. Rupp M.T., DeYoung M. and Schondelmeyer S.W. Prescribing problems and pharmacists' interventions in community practice. *Med. Care* 1992; 30:926-940
25. Geibig C.B., Mansur J.M., Medema P.G. and Nold E.G. Pharmacy-controlled documentation of drug allergy. *Am J Hosp Pharm* 1991; 48; 260-264
26. Tripp B.M. and Brown G.R. Pharmacists assessment of drug allergies. *Am. J. Hosp Pharm* 1993; 50: 95 -98
27. Chisholm-Burns M, Graff Zivin JS, Lee JK, Spivey CA, Slack M, Herrier RN, *et al.* Economic effects of pharmacists on health outcomes in the United States: a systematic review. *Am J Health Syst Pharm* 2010; 67:1624-34.
28. Howard M, Trim K, Woodward C, *et al.* Collaboration between community pharmacists and family physicians: lessons learned from the Seniors Medication Assessment Research Trial. *J Am Pharm Assoc* 2003; 43:566-72
29. Kucukarslan S, Lai S, Dong Y, Al-Bassam N and Kim K. Physician beliefs and attitudes toward collaboration with community pharmacists. *Res Soc Admin Pharm* 2011;7:224-232
30. Kate Ndukauba, Ijeoma Nduka and Adaeze Ngozi Ohuoba (2021): Communication barriers in healthcare delivery in Nigeria. *IOSR Journal of Humanities And Social Science (IOSR-JHSS)* Vol 26, Issue 4, Series 1; 15-22
31. Rorkeek Michael Offiah, Opirite Boma Peter-Kio and Jane Ibinabo Akuroma (2022): Health Information Communication among Health Personnel for Effective Patient Safety. *Nigerian Journal of Health Promotion*. Vol 15, 179-191

32. Ikpoko-ore-ebirien Dike Isaruk, Stella Aripirinye Jamaica and Justina Ikpko-ore-ebirien Dike Isaruk (2023): Good communication skills: a panacea for improving the performance of those who manage health information at the university of port harcourt teaching hospital, rivers state, Nigeria. EPRA International Journal of Research and Development (IJRD). Vol 8, Issue: 1 | January 2023