ASSESSMENT OF PHARMACIST - PATIENT COMMUNICATION IN RELATION TO MINIMUM PRACTICE GUIDELINES AMONG HOSPITAL PHARMACISTS IN IMO STATE OF NIGERIA

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ABSTRACT

Background: Despite the importance of good communication skills in patient management, many pharmacists lack the relevant skills for pharmacist-patient communication or interaction.

Purpose: To assess the awareness, knowledge, and practice of hospital pharmacists with respect to pharmacist – patient communication, determine the barriers encountered and evaluate compliance with minimum practice guidelines.

Methods: A descriptive cross-sectional study using interviewer-administered questionnaires was used. Data was imputed into SPSS version 15.0 statistical package for appropriate analysis.

Results: There is a high level of awareness and a very good knowledge of the general principles of pharmacist-patient communication. The actual assessment of their knowledge of the minimum practice guidelines however revealed that only 39.0% strongly agreed with the guidelines.

On average, only 27.4% of the pharmacists implement the minimum practice guidelines all of the time. 58.3% of pharmacists often (more than 50% of time) encounter high work load as barrier to good pharmacists-patient communication;

Conclusion: Pharmacists in Imo State have an appreciable level of awareness of pharmacist/patient communication

interaction. Although most hospital pharmacists have a good knowledge of pharmacist-patient communication, half of them neglect the application of standard strategies for effective pharmacist-patient communication. A significant percentage of the pharmacists do not practice the standard behaviors for effective pharmacists-patient communication. Both environmental and human factors constitute barriers to effective pharmacist-patient communication.

Key Words: Pharmacist-Patient Communication; Minimum Practice Standards; Communication Barriers.

INTRODUCTION

Modern pharmacy practice is patient oriented to ensure optimal treatment outcomes[1,3]

Much of healthcare depends on communication. The more effectively and efficiently you learn to communicate, the more accomplished you become in fulfilling your health services role[4]

Pharmacist – patient communication refers to verbal or non verbal language interrelationship between pharmacist and patient with the aim of exchanging information. Such information is expected to assist pharmacist in decision making for better services to ensure rational drug use and better therapeutic outcomes[5]

Effective pharmacist – patient communication involves use of adequate communication skills, with the right content of message and information to identify problems, and make necessary interventions, based on sound professional knowledge.

An ability to use communication principles (e.g. listening, body language, voice intonation) and history – taking skills, is crucial to a successful patient interaction.[6,7]

The pharmacist must be able to establish a trusting professional – patient relationship. This allows him/her to gather the essential medical and social history needed to identify therapeutic problems, assess the patient's knowledge about drug therapy, and establish and evaluate therapeutic outcomes. This information is essential to the design and implementation of a pharmaceutical care plan that is specific to the needs of the individual patient.[8,9]

In all interactions, the pharmacist must treat the patient with respect and must make every effort to ask questions and receive information in a non-judgmental way.

Communication barriers can hamper pharmacist – patient communication.[10]

Communication barriers may be within the environment, or within the pharmacist, or the patient.[11]

Specific strategies, skills and techniques should be employed to resolve identifiable barriers in pharmacist – patient communication. Timely

resolution of such barriers in pharmacist – patient communication will ensure realization of goals and objective of pharmacist – patient interactions.

The essential elements of good pharmacist patient communication include the strategies, behaviors and processes, skills and information that should be applied to ensure good pharmacist-patient communication.6

The responsibility of the pharmacist is to ensure that the information is appropriate to the patient and is effective in helping the patient to modify or maintain appropriate medication – taking behaviors.

In 1994, the USP established an Ad Hoc Panel on Medication Counseling Behaviors Guidelines.

The work of the panel resulted in the development of patient medication counseling inventory delineating 35 behaviors that could be part of a patient counseling session.

The behaviors are divided into four groups that structure the counseling session into:
(i)   The introduction of the session
(ii)   The content of the session
(iii)   The process followed; and
(iv)   The conclusion of the session

The inventory of behaviours was designed to be relevant to a wide variety of counseling situations and can provide a framework for pharmacists and other health professionals.

Patient interview, patient counseling, and patient education, are components of pharmacist – patient communication. Pharmacist – patient communication enables the pharmacist to gather or share information that is required for patient care activities in the hospital or community pharmacies.

Pharmacists can contribute significantly to the care of patients through pharmacist-patient communication by obtaining information regarding past and present medications, history of allergies and side – effects; as well as attitudes towards drug, and by determining compliance behavior and therapeutic

response to drugs. These activities are dependent on the pharmacists understanding of interpersonal relations, and use of appropriate interviewing techniques and communication skills.

Pharmacists can improve patient adherence to drug therapy through appropriate strategies, including patient counseling and education.[12]

Pharmacist-patient communication is an essential process in pharmaceutical care, because what the pharmacist can do for the patient depends on how much information about the patient he has (patient specific data) and how such information is utilized.[13]

Despite the importance of good communication skills in patient management, many pharmacists lack the relevant skills for pharmacist-patient communication or interaction.

The overall goal of this study is to assess pharmacist–patient communication in relation to minimum practice guidelines.

Specific objectives are:
1. To assess the awareness and knowledge of pharmacist regarding pharmacist-patient communication.
2. To evaluate the behaviors of pharmacists in relation to minimum practice guidelines; and
3. To determine the barriers to pharmacist-patient communication/interaction

EXPERIMENTAL
Study Area/Setting
The study was carried out among pharmacists working in secondary and tertiary government hospitals in Imo State, which is strategically located at the heart of the five South East States of Nigeria. There are twenty –seven (27) local government areas in Imo State, distributed on a tripodal zonal structure of Owerri, Okigwe and Orlu.

The study covered Eleven (11) General Hospitals, One (1) Federal Medical Centre, and One (1) Teaching Hospital involving a total of Fifty-Eight (58) Pharmacists.

Study Design

A descriptive cross sectional study was employed in assessing interpersonal communication between pharmacist and patients.

Data Collection
The study population was interviewed using interviewer administered questionnaires. The variables studied include: age, educational qualification, gender, nature of practice, years of post-graduate experience, awareness and knowledge of general principles of pharmacist -patient communication/interaction, barriers to pharmacist - patient communication/interaction, and assessment of the behaviors of pharmacist to pharmacist - patient communication/Interaction in relation to minimum practice guidelines.

Data Analysis
SPSS, Version 15.0 (SPSS, Inc, Chicago) was used for all statistical analyses. Due to the categorical nature of the data, descriptive statistics procedures were undertaken to determine proportions for respondents' responses.

Frequency tables and charts were generated for relevant variables.

RESULT
Forty-eight of 58 (RR = response rate; RR = 82.8%) Pharmacists completed the survey instrument. Response rates for each cohort hospital were, for General Hospital: 15 of 18 (RR = 83.3%); Federal Medical Centre: 26 of 33 (RR = 78.8%); .Imo State Teaching Hospital: 7 of 7 (RR = 100.0%);

Majority (91.7%) of the Pharmacists are aged between 20 and 50 years with an overall mean age of 36.5 years. There are more male pharmacists, (68.8%), than female pharmacists (31.2%).

More than 80% of hospital pharmacists in Imo State do not have additional higher qualification after the Bachelor of Pharmacy degree. About 4% and 8% have additional Pharm.D and Fellowship of the West African Postgraduate College of Pharmacists (FPCPharm.) respectively. Others have additional MPH degree.

The mean years of post graduation

experience is eleven (11) years. About 38% of the pharmacists have less than 5years post graduation experience

General Awareness and Knowledge of Patient Communication Interaction

Majority of the pharmacists indicated a high awareness and very good knowledge of the general principles and tenets of patient communication.

For example, 44 out of 48 (91.7%) strongly agreed that pharmacist-patient communication is of paramount importance in ensuring optimal patient drug treatment outcomes. 64.6% strongly agree that exposure to more training would improve their knowledge about pharmacist-patient communication.

72.9%, 77.1% and 72.9% respectively strongly agree that Patient Counselling, Patient Interview and Patient Education are components of the Pharmacist-patient communication. Majority of the pharmacists identified listening skills as requirement needed to establish positive and productive relationships with patients. 56.3% acknowledged in strong terms that pharmacist-patient communication is a complex process involving more than just verbal communication.

Table 1 shows the ordered frequency of the responses.

Table 1: Awareness and Knowledge of pharmacist about pharmacist-patient communication interaction principles

	Questionnaire item	Strongly agree %	Agree %	Neutral %	Disagree %	Strongly disagree %
1.	Pharmacist-patient communication is of paramount importance in ensuring optimal patient drug treatment outcomes.	91.7	8.3	0	0	0
2.	Pharmacist-patient communication is the most important method of identifying factors that influence patients' health conditions.	39.6	47.9	8.3	4.2	0
3.	Today's pharmacists in Nigeria require re-training to be professionally competent to apply the skills for effective pharmacist-patient communication.	31.3	58.3	2.1	8.3	0
4.	Exposure to more training would improve your knowledge about pharmacist-patient communication.	64.6	35.4	0	0	0
5.	Patient counseling is a component of pharmacist-patient communication	72.9	27.1	0	0	0
6.	Patient interview is a component of pharmacist-patient communication	77.1	22.9	0	0	0
7.	Patient education is a component of pharmacist-patient communication	72.9	27.1	0	0	0
8.	Listening skills are needed by pharmacist to establish positive and productive relationships with patient.	62.5	29.2	2.0	6.3	0
9.	Speaking skills are needed by pharmacist to establish positive and productive relationships with patient.	68.8	29.2	2.0	0	0
10.	Patient counseling should provide information on identity of medication.	77.1	20.8	0	2.1	0
11.	Patient counseling should provide information on how to use medication.	83.3	14.6	0	2.1	0
12.	Patient counseling should provide information on side effects.	81.3	16.7	0	2.0	0
13.	Pharmacist-patient communication is a complex process involving more than just verbal communication.	56.3	25.0	8.3	10.4	0
	TOTAL AVERAGE	67.6	27.9	1.8	2.7	0.0

Knowledge of minimum practice guidelines
While majority (68.1%) of the pharmacists exhibited a strong agreement with the general principles of patient communication, the actual assessment of knowledge of pharmacists about minimum practice guidelines revealed that only 39.0% strongly agreed with the guidelines.

For example, only 18.8% strongly agreed with the guideline to discuss the intended duration for the interaction with the patient. 52.1% strongly agreed to ensure sufficient time for patient to ask questions toward the end of the interaction.

Table 2 shows the ordered frequency of the responses

Table 2: Knowledge of Pharmacists about minimum practice guidelines

S/N	Questionnaire item	Strongly agree %	Agree %	Neutral %	Disagree %	Strongly disagree %
1.	Introduce yourself to patient during an interaction.	47.9	37.5	10.4	4.2	0
2.	Outline for the patient what you intend to achieve/cover during the interaction.	33.3	45.8	6.3	8.3	6.3
3.	Demonstrate empathy or caring attitude so that the patient feels at ease.	50.0	29.1	16.7	4.2	0
4.	Discuss with the patient the intended duration for the interaction.	18.8	27.0	18.8	35.4	0
5.	Discuss the expected outcome of the interaction.	31.3	52.1	8.3	8.3	0
6.	Use feedback strategies through out the interaction to ensure patient understanding.	43.8	47.8	4.2	4.2	0
7.	Ensure sufficient time for patient to ask questions towards the end of the interaction.	52.1	41.7	2.0	4.2	0
8.	Being sympathetic with the patient health condition.	27.1	43.8	12.5	12.5	4.1
9.	Active listening, focusing on the patient.	47.9	52.1	0	0	0
10.	Eye contact, being attentive but not staring.	39.6	52.1	8.3	0	0
11.	Being aware of your own body language, such as facing patient and giving them your undivided attention.	33.3	50.0	8.3	6.3	2.1
	Total	39.0	44.0	9.0	8.0	1.0

Implementation of minimum practice guidelines

On average, only 27.4% of the pharmacists implement the minimum practice guidelines all of the time, while only 28.3% often (more than 50% of the time) implement the minimum practice guidelines.

For example, 29.2% never document medication errors identified and 16.7% never maintain audio-visual privacy during counselling.

Only 27.0% document identified adverse drug reactions all of the time and only 22.9% provide drug information service to patients all of the time.

Table 3 shows the ordered frequency of the responses.

Table 3: Implementation of minimum practice guidelines

S/N	Questionnaire item	Never %	Sometimes less than 50% of time %	Often more than 50% of time %	All of the time %
1.	Provision of drug information service to patients.	2.1	31.2	43.8	22.9
2.	Documentation of services provided to each patient who consults you.	16.7	35.4	29.1	18.8
3.	Documentation of medication errors identified.	29.2	31.3	16.6	22.9
4.	Documentation of adverse drug reaction identified.	6.3	35.4	31.3	27.0
5.	Provision of medication adherence counseling to patient.	12.5	16.7	27.0	43.8
6.	Assessment of patient medication adherence during drug refill.	2.1	45.8	22.9	29.2
7	Maintenance of audio-visual privacy during counseling.	16.7	29.1	27.1	27.1
	Total	12.2	32.1	28.3	27.4

Barriers to pharmacist – patient interaction
Overall, 20.8% of the pharmacists never encounter barriers to communication while 25.7% often encounter barriers (more than 50% of the time). Table 4 shows the ordered frequency of the responses.

Table 4: Barriers to pharmacist-patient communication/interaction

/N	Questionnaire items	Never	Sometimes less than 50% of time	Often more than 50% of time	All of the time
		%	%	%	%
.	Lack of privacy	6.2	33.3	41.7	18.8
.	Interruptions.	6.3	43.8	39.5	10.4
.	High work load.	2.1	25.0	58.3	14.6
.	Lack of sufficient staff.	10.4	22.9	43.8	22.9
.	Lack of desire to adequately counsel patients.	54.2	35.4	10.4	
.	Difficulty in maintaining concentration.	43.8	41.7	12.5	2.0
.	Audio-visual functional problems on part of the patient.	18.8	70.8	10.4	
.	Language barriers.	22.9	64.6	10.4	2.1
.	Emotional barriers (anxiety, anger, depression etc)	22.9	72.9	4.2	
	Total	20.8	45.6	25.7	7.9

Specifically,14.6%, 22.9% and 18.8% respectively encounter high workload, lack of sufficient number of staff and lack of privacy as barriers all of the time.

DISCUSSION
This study investigated hospital pharmacists' knowledge, awareness, and behaviors regarding pharmacist – patient communication and minimum practice guidelines.

Most of the pharmacists have a high awareness and good knowledge of the general principles of patient communication interaction. However, only a few have good knowledge of the recommended minimum practice guidelines. Thus, there is a gap between awareness of general principles and recommended minimum practice guidelines which can be filled by more training and retraining to which majority of the pharmacists subscribe. More than 80% of the hospital pharmacists in Imo State do not have additional higher qualifications after the B. Pharm degree. This is an indication that the pharmacists do not show keen interest in acquiring additional degrees and

training that can enhance their practice. It was gratifying to discover that about 68.8% of the pharmacists have had recent training on pharmacist/patient communication and that 65.0% actually believe that additional training in this area will enhance their patient interaction. There is also the consensus among these pharmacists that today's pharmacists in Nigeria require re-training to be professionally competent to apply the skills for effective patient interaction.

Pharmacists' behaviors toward Patient Communication, on the other hand, appear to be more worrisome. Most of the Pharmacists were aware of the existence of major communication strategies but few applied the strategies in their daily professional work. Pharmacists' knowledge that communication strategies exist does not predict whether they will apply such strategies in their professional work.

About 83% of the pharmacists are favorably disposed (Strongly Agreed and Agree) to the application of standard strategies for effective

pharmacists-patients communication and interaction. However, only 55.7% of the pharmacists practice behaviors in line with standard practice guideline (all the time and often) during pharmacist- patient communication.

Clearly, more work needs to be done in ensuring that pharmacists not only know that communication strategies exist, but that they also apply them to their professional work.

In dealing with the short-fall in the pharmacists' perception, knowledge and behaviors regarding patient communication, a balanced approach should be taken that includes training, monitoring and evaluation. We recommend a four-part strategy aimed at minimizing the deficiencies:

1. Educating pharmacists about minimum standard practice guidelines through a consistent and collaborative effort

2. Promoting pharmacists' commitment to engaging in appropriate self-development efforts and programmes aimed at minimizing the burn-out syndrome and enhancing

professional competencies

3. Designing approaches to monitoring and evaluation that support the pharmacists' learning and professional behaviors at the workplace. These will include studies of effectiveness of pharmacist/patient interactions and patient satisfaction with such interactions.

4. Implementing visible procedures for monitoring and detecting professional incompetence, including appropriate punishment and re-education measures.

It is evident from the research that one major militating factor is the issue of barriers to patient communication interaction. Only about 20% of the pharmacists never had any form of barriers during pharmacists-patient communication, while about 80% of the pharmacists encounter various kinds of barriers during pharmacists-patient communication (All the time, often, and sometimes). This means that what we tend to achieve or gain through good knowledge, standard strategies and practice behavior, we also tend to destroy or lose through barriers and challenges to effective pharmacists-patient communication. Thus, a major additional strategy to enhance professional behaviors of pharmacists would be by creating a conducive and enabling environment at the workplace. The issues of privacy and adequate staff complement (workload) are paramount. One would expect a major deviation from the current approach to the design of the Hospital Pharmacy Department with a very limited space and only a 'pigeon-hole' counter for pharmacist-patient interaction. More support staff must be engaged to free the pharmacists' time to engage in direct professional patient interaction. Available staff should also be adequately motivated to provide positively-impacting professional service.

CONCLUSION
One can safely conclude from this study that pharmacists in Imo State have an appreciable level of awareness of pharmacist/patient communication interaction. In this State, the study revealed that, although most hospital pharmacists have a good knowledge of pharmacist-patient communication, half of them neglect the application of standard strategies for effective pharmacist-patient communication. Also, a reasonable percentage of the pharmacists do not practice the standard behaviors for effective pharmacists-patient communication. These deficiencies may result from failure to acquire postgraduate qualifications and training. Aggressive training of hospital pharmacists for enhanced service delivery should be pursued. The pharmacists should embrace the concept of self-development for knowledge and skill acquisition.

In this State both environmental and human factors constitute barriers and challenges to effective pharmacist-patient communication.

More pharmacists need to be employed to enhance the pharmacist-patient ratio and reduce the degree of work over-load.

Such staff can be recruited on part-time basis, in line with the principle of private-public partnership in a resource-constrained practicing environment.

The infrastructural facilities in the pharmacy departments should also be improved upon to create a better environment for more result- oriented pharmacy practice.

We also recommend a four-part strategy aimed at minimizing the deficiencies in perception, knowledge and behaviors of pharmacists regarding pharmacist-patient communication interaction vis-à-vis minimum practice guidelines.

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