



PHARMACISTS VIEWS ON THEIR INTERACTION WITH PATIENTS IN LAGOS, NIGERIA

Arinola E. Joda¹ & Joshua F. Eniojukan²

¹Department of Clinical Pharmacy and Biopharmacy, Faculty of Pharmacy, University of Lagos, Idiaraba campus

²Faculty of Pharmacy, Niger Delta University, Wilberforce Island, Yenagoa, Bayelsa State

Author for Correspondence

Email : arinolaj@yahoo.com Tel: 08023073233

Abstract

Background: The pharmacists overall goal of interacting with patients is to promote rational use of drugs (RUD). Good communication and counseling are important cornerstones of pharmacist/patient interactions. The goal of communication with the patient is to provide information that the patient is able to understand and use.

Methods: 37 pre-tested questionnaires were administered and collected back from 9 pharmacies (5 community, 4 hospital). The questionnaires sought demography and answers to research questions. 100% recovery was obtained. Data obtained was analyzed using EPIINFO statistical software¹⁸. Results are presented in form of tables and charts. Chi square analysis for significance was carried out as necessary

Results: Respondents were 61% male, 39% female with mean length in area of practice of 1.5 years. 21 pharmacists (10 in community, 11 in hospital) were satisfied while 13 pharmacists (1 in community, 12 in hospital) indicated they were not satisfied with the level of interaction they had with the patient, and this difference was statistically significant at 95% confidence interval. Only three respondents (1 in community, 2 in hospital) felt there was no need for improvement on current level.

Conclusion: It can be concluded that pharmacists are satisfied with their interaction with patients though there is

room and need for improvement in the attained level.

Key Words:

Pharmacists-Patient interaction, Community Pharmacists, Hospital Pharmacists, Patient Counseling, Pharmacy Services

Introduction

The pharmacists overall goal of interacting with the patient is to promote rational use of drugs (RUD). RUD requires that patients receive medication appropriate to their clinical needs in doses that meet their individual requirements for an adequate period of time and at the lowest cost to them and their community¹. Pharmacists' interaction/consultation with the patient should consist of pharmacists' assessment of patients' medication therapies with subsequent verbal communication with patients about appropriate use of their medicines². Good communication and counseling are important cornerstones of pharmacist/patient interactions. The goal of communication with the patient is to provide information that the patient is able to understand and use. The approach should be one that will be reassuring to the patient and will not unnecessarily cause harm. Inasmuch as the Pharmacist must carry out his duties with all professional expertise, he must develop a good relationship with his patients through skillful communication. His personality should

be such that will attract the patient to him to share his fears and concerns as well as propel him (the patient) to follow instructions given.

Counseling of patients is necessary with all prescribed and over-the-counter medication^{3,4,5}. This is to ensure that patients adhere to medical/medication advice⁶ and problems of drug usage do not arise^{7,8,9,10}. Patient counseling can be defined as the pharmacist drug consultation with patients with the aim of improving therapeutic outcomes¹¹. It can also be defined as providing medication information orally or in written form to the patients or their representative or providing proper directions of use, advice on side effects, storage, diet and life style modifications³. It involves a one-to-one interaction between a pharmacist and a patient and/or a care giver. Until patients are taught and motivated to take "the right drug at the right time in the right amount", it will be impossible for rational drug therapy to become a reality^{12,13}. In counseling a patient, suitable verbal, written or audiovisual communication techniques may be employed^{14,15,16}.

Four basic steps must be followed in counseling; Exercise active listening, Question the patient thoroughly, Interpret verbal and non-verbal communication and clarify the facts as necessary. Apart from counseling patients on medication usage, patients need counseling on basic health,



education and making bulletins available on different topics that address relevant issues can do this most conveniently⁶. The main objective of this study was to determine the level of interaction between pharmacists and patients in community and hospitals setting from the pharmacists' angle as verbal reports have been obtained on dissatisfaction with the level of interaction between pharmacists and patients which motivated this study.

Methods:

36 pre-tested semi-structured

questionnaires were administered and collected back from 9 pharmacies (5 community, 4 hospital). The hospitals were randomly selected using the Lagos State Ministry of Health's list of public and private health facilities. The community pharmacies were selected using the next nearest method, i.e. community pharmacies closest to these hospitals were selected¹⁷. The questionnaires sought demography and answers to research questions. Pharmacists' questionnaires were administered after they had finished

their transaction with patients to avoid bias. 100% recovery was obtained. Data obtained was analyzed using EPIINFO statistical software¹⁸. Results are presented in form of tables and charts. Chi square analysis for significance was carried out as necessary.

Results:

Respondents were 61% male, 39% female with mean length in area of practice of 1.5 years. Mean number of patients attended to daily was between 41 and 100 persons (Table 1).

TABLE 1: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

ITEM	CHARACTERISTICS	FREQUENCY	PERCENT
SEX	Male	22	61.1
	Female	14	38.9
	Total	36	100.0
AREA OF PRACTICE	Community	11	30.6
	Hospital	25	69.4
	Total	36	100.0
YEARS SINCE GRAD.	>10 years	8	22.2
	...	4	11.1
	...	7	19.4
	-	17	47.2
	-	36	100.0
NUMBER OF PATIENT'S ATTENDED TO	<40	4	11.1
	41-100	16	44.4
	101-150	9	25.0
	>150	7	19.4
	Total	36	100.0

All of the pharmacists (36 in number; 100%) indicated that they counsel their patients because it is a professional duty/role and they get a positive response from the patients (Table 2), though

TABLE 2: COUNSELING INFORMATION

ITEM	CHARACTERISTICS	FREQUENCY
DO YOU COUNSEL?	Yes	36
	No	0
	Total	36
REASONS WHY THEY COUNSEL	Positive response	14
	Professional Duty/Role	8
	Prof. Duty/Role + Positive response	11
	Blank	3

Only 6 in community (16.7%) and 8 in hospital (22.2%) rated their communication skills as being at least very good (Table 3).

TABLE 3: COMMUNICATION SKILLS OF RESPONDENTS

ITEM	CHARACTERISTICS	FREQUENCY	PERCENT
ANY TRAINING ON COMMUNICATION SKILLS?	Yes	31	86.1
	No	5	13.9
WHERE?	1 (Pharmacy school)	25	
	2 (C.E.P.)	7	
	3 (Workshops)	11	
	4 (Refresher courses)	9	
	5 (Books)	2	
	6 (Videos)	5	
	None	5	
RATE COMMUNICATION SKILL	Excellent	4	11.1
	Very good	10	27.8
	Good	13	36.1
	Okay	7	19.4
	Poor	0	0.0
	Very poor	0	0.0
	I don't know	0	0.0
	Blank	2	5.6

Surprising, two of the pharmacists (5.6%) said they believe that patients need to ask for information before they are counseled (Table 4).



TABLE 4: DO PATIENTS NEED TO ASK BEFORE THEY ARE COUNSELED?

ITEM	CHARACTERISTICS	FREQUENCY	PERCENT
PATIENT SHOULD ASK?	Yes	2	5.6
	No	34	94.4
	Total	36	100.0
REASONS	Pharmacists duty	9	25.0
	Patients don't know	11	30.6
	Patients right	5	13.9
	Pharm. duty & Pats don't know	7	19.4
	Others	4	11.2
	Total	36	100.0

Many of the respondents (83.3%) gave reasons why counseling is sometimes hindered including heavy workload, time constraint, lack of up-to-date information and attitude of the patient. Six pharmacists (16.7%) indicated that they always counsel and nothing hindered them from doing so (Fig. 1).

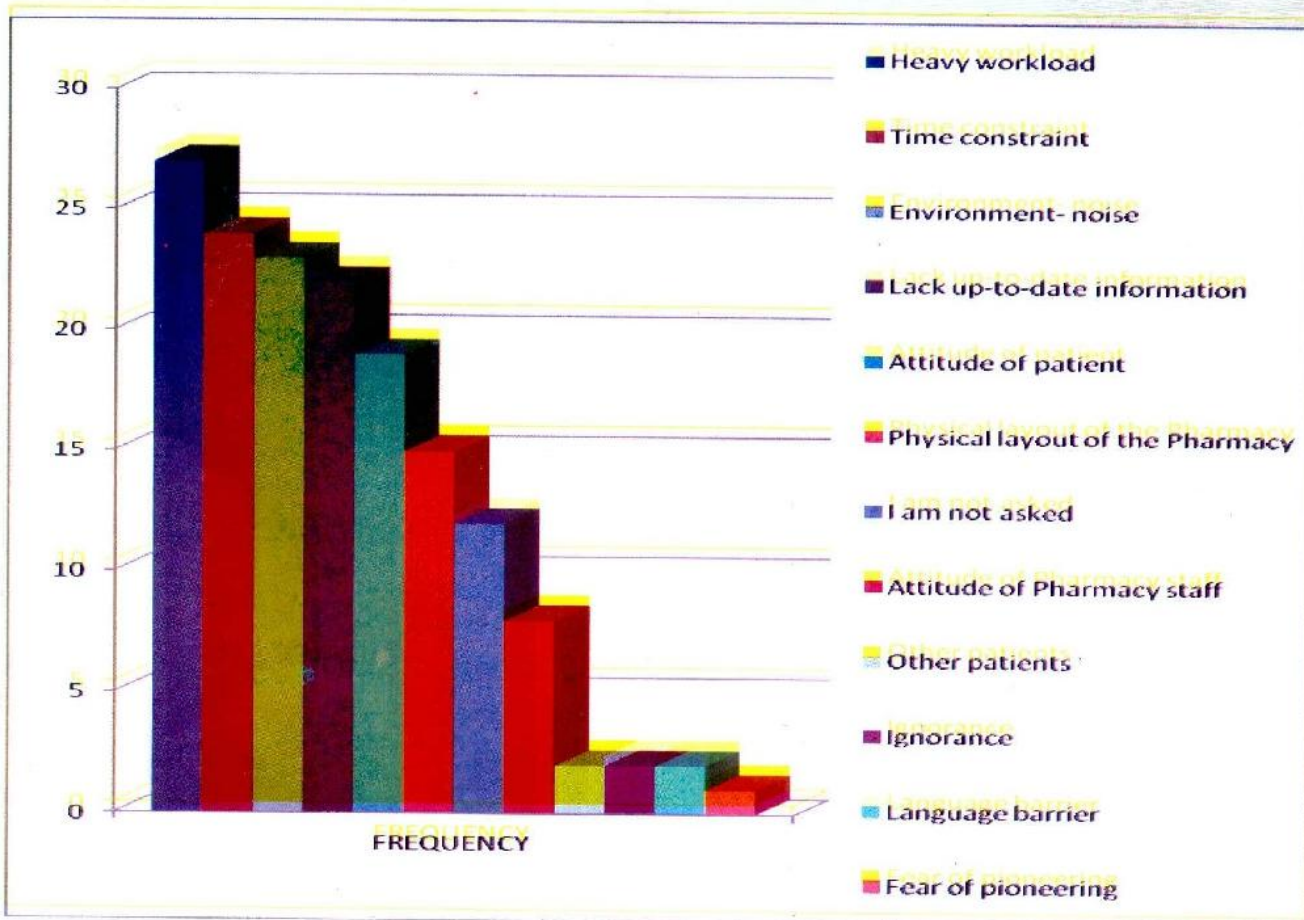


FIG. 1: HINDRANCES TO COUNSELING BY PHARMACISTS'



21 pharmacists (10 in community, 11 in hospital) were satisfied with their interactions with their patients while 13 pharmacists (1 in community, 12 in hospital) indicated they were not satisfied with the level of interaction they had. This difference was statistically significant at 95% confidence interval (Table 5).

TABLE 5: ARE PHARMACISTS SATISFIED

KIND	SATISFIED			χ^2 Critical value = 3.841
	+ (Yes)	- (No)	Total	
COMMUNITY	10	1	11	5.85
HOSPITAL	11	12	23	
Total	21	13	34	Statistically Significant

The hospital pharmacists predominantly rated their interaction with their patients as being just okay while the predominant response for the community pharmacists was good (Fig. 2).

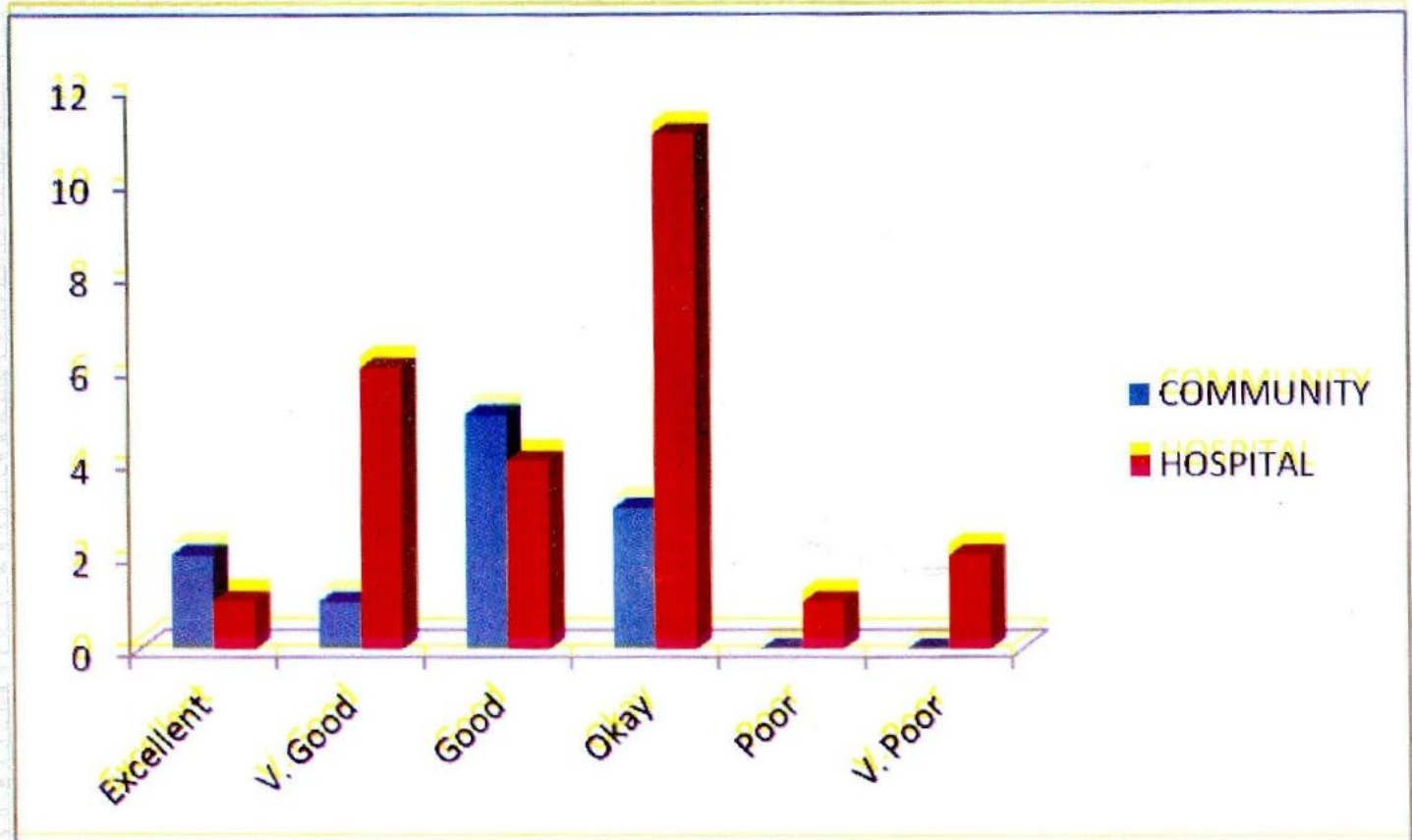


FIG. 2: RATING OF PHARMACISTS INTERACTION WITH PATIENTS

Only 3 (1 in community, 2 in hospital) felt there was no need for improvement on current level of interactions they have with their patients (Fig. 3).

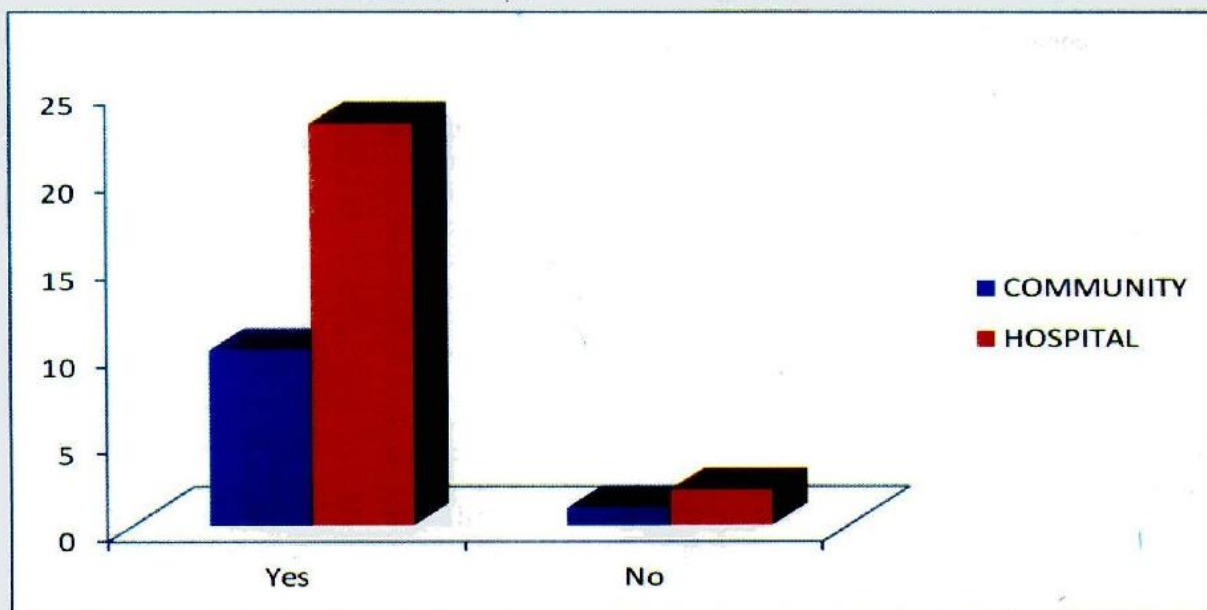


FIG. 3: PHARMACISTS OPINION OF NEED FOR IMPROVEMENT INTERACTION

On the reasons given for improvement 38% were economic/managerial; 29% were for public enlightenment, 20% were for improvement in drug information and 7% each for personality and ideal physical environment (Table 6).

TABLE 6: WAYS OF IMPROVING INTERACTION

WAYS OF IMPROVING INTERACTION	FREQUENCY
Economic/ Managerial	17
Public enlightenment	13
Drug information	9
Personality	3
Ideal environment	3

Discussion

A Pharmacist is a person who possesses the educational qualifications recognized by the Pharmacists Council of Nigeria and has been licensed or registered by the same, to practice Pharmacy¹⁹. With significant growth and development in the pharmacy profession over the years, the profession evolved a new concept called pharmaceutical care; the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve the patients' quality of life which is patient-centred

and oriented. These outcomes are cure of disease, elimination or reduction of symptoms, arresting or slowing of disease progressions, or preventing a disease or symptom²⁰. This concept of practice is underscored by good communication skills and counselling of patients in a proactive manner^{21,22,23,24}. Most of the respondents in this survey attend to between 40 and 100 patients daily. A survey carried out in Wisconsin showed that 40% of the respondents averaged 76-150 prescriptions per day²⁵. With this turnout of patients, all the respondents said they counsel

patients that visit their premises though a few expect patients to ask for information. This is an unexpected response from pharmacists who are to proactively provide information to patients. Surprising a patient survey carried out previously revealed that up to 36% of the patients surveyed believe that pharmacists should only talk if the patient asks for information. Only 27% of the patients in that survey felt that the pharmacists should talk to them every time a prescription is dispensed². In a survey in the US, 25% of pharmacists did not talk with the simulated patients



and 47% of all these patients did not receive any oral drug information⁸ from pharmacy staff unlike in this survey where pharmacists said they always counsel their patients. Providing pharmaceutical care services to patients will improve service delivery to patients and guarantee return visits and referrals by satisfied patients²⁶. It will ensure professional fulfilment and satisfaction for the pharmacist and this will result in a distinction between retail practices under the direct supervision of pharmacists and those that are managed by business-men, patent dealers and quacks^{26,27}.

Though all pharmacists surveyed indicate that they counsel their patients/clients, most of them also indicated that there are many hindrances to providing counsel which include lack of up-to-date information by pharmacists, other patients and that they are not asked for information by patients. In a study of 8 states in the United States, the age of the Pharmacist and busyness were associated with less counseling just like in this survey were heavy workload and time constraints are the most commonly cited hindrances to counseling by pharmacists⁸. In similar vein in a survey in Wisconsin, pharmacists indicated that they have hindrances to patient counselling. Patient motivation was the most frequently cited determinant of the amount and type of counseling, followed by type of medication, patient abilities, and time available for counseling²⁵.

Most of the respondents indicated their satisfaction with interactions they have with their patients. Similarly, most patients and providers were satisfied with the services provided by the pharmacist-managed lipid clinic²⁶ in a survey carried out in 2006. In an earlier survey on patients' satisfaction, most of them also indicated that they were satisfied with the interaction they have with pharmacists. In this survey and that on patients, the respondents added that there is room for improvement²⁸. Pharmacists suggested managerial interventions and incentives as the most frequently occurring index for improvement in interactions involving

such items as provision of counseling areas/room, computerization of the Pharmacy, employing more Pharmacists, etc. This is then followed by organizing of public enlightenment on the role of the Pharmacist in healthcare. Robust practice research on pharmacist interactions is required to improve service delivery, however, it is noted that practice research is driven primarily by interested academics and, to a lesser degree, by pharmacy associations. Well designed practice-based research has been conducted through these fora but there is no national research agenda or infrastructure^{29,30}.

Conclusion

Effective and productive interactions between Pharmacists and patients are a prerequisite for optimal drug use in any community. Though respondents said they are satisfied with interaction, it is imperative for Pharmacists and Pharmacy managers to rise up to the challenge of ensuring that processes and facilities are developed for the improvement of the existing level of interaction.

References

1. WHO, 1985. World Health Organization. The Rational Use of Drugs – Report of the Conference of Experts, Nairobi
2. Schommer, J. C. (1994). Patients Satisfaction with Pharmacists Consultation Services: Application of a Model of Service Encounter Evaluation. *Journal of Patient Satisfaction, Dissatisfaction and Complaining Behaviour*, 7:74-86
3. Schommer, J. C. (1997). Patients' Expectations And Knowledge of Patient Counselling Services That Are Available From Pharmacists. *American Journal of Pharmaceutical Education*, 61:402-406
4. Subish, P., Mukhyaprana P. & Shankar, P. R. (2006). Patient

Counselling by Pharmacist -A Focus on Chronic Illness. *Pak. J. Pharm. Sci.*, 19(1): 62-65

5. Morris LA, Tabak ER, Gondek K. (1997). Counselling patients about prescribed medication: 12-year trends. *Med Care*, 35:996-1007.
6. Popovich NG (1995). Ambulatory patient care. In: Gennaro AR editor Remington: The science and practice of pharmacy, Vol.2. Mack Publishing Company, Pennsylvania, 19th ed., pp.1695-1719.
7. Schulz, M., Verheven, F., Muhlig, S., Muller, J. M., Muhlbauer, K., Knop-Schneickert, E., Petermann, F. & Bergman, K. C. (2001). Pharmaceutical care services for asthma patients: a controlled intervention study. *J Clin Pharmacol*, 41 (6):668-676
8. Svarstad, B. L., Dara C. Bultman, D. C. & Mount, J. K. (2004). Patient Counselling Provided in Community Pharmacies: Effects of State Regulation, Pharmacist Age, and Busyness. *J Am Pharm Assoc*. 44(1)
9. Karapinar- Çarkit, F., Borgsteede, S. D., Zoer, J. Smit, H. J., Egberts, A. C. G. & van den Bemt, P. (2009). Effect of Medication Reconciliation With and Without Patient Counseling on the Number of Pharmaceutical Interventions Among Patients Discharged from the Hospital. *Ann Pharmacother*, 43 (6):1001-1010
10. Schnipper, J. L., Kirwin, J. L., Cotugno, M. C., Wahlstrom, S. A., Brandon A. Brown, B. A., Tarvin, E., Kachalia, A., Horng, M., Christopher L. Roy, C. L., McKean, S. C. & Bates, D. W.



- (2006). Role of Pharmacist Counselling in Preventing Adverse Drug Events After Hospitalization. *Arch Intern Med*, 166:565-571.
- Eniojukan, J. F. (1999). Patient Education and Counselling. Unpublished. University of Lagos
- Nair, K., Dolovich, L., Cassels, A., McCormack, A., Levine, M., Gray, J., Mann, K. and Burns, S. (2002). What Patients Want to Know About their Medications. Focus Group Study of Patient and Clinician Perspectives. *Canadian Family Physician*, 48(1):104-110
- Benjamin, D. M. (2003). Reducing Medication Errors and Increasing Patient Safety: Case Studies in Clinical Pharmacology. *J Clin Pharmacol*, 43 (7):768-783
- Svarstad BL, Bultman DC, Mount JK. (2003). Evaluation of written prescription information provided in community pharmacies: a study in 8 states. *J Am Pharm Assoc.*, 43:383-93.
- Morris LA, Halperin JA. (1979). Effects of written drug information on patient knowledge and compliance: a literature review. *Am J Public Health*, 69:47-52.
- Atueyi, I. (1993). Patient Education in the West African Sub-Region – Meeting the challenges. *Journal of West African Pharmacy*, 2:7
- Sullivan, K. M., May, S., Maberly, G. (2000). Urinary Iodine Assessment: A Manual on Survey and Laboratory Methods. Atlanta, USA: UNICEF.
- Dean, A. G., Arner, T. G., Sunki, G. G., Friedman, R., Lantinga, M., Sangam, S., Zubieta, J. C., Sullivan, K. M., Brendel, K. A., Gao, Z., Fontaine, N., Shu, M. & Fuller, G. (2002). Epi Info™, a database and statistics program for public health professionals. Centers for Disease Control and Prevention, Atlanta, Georgia, USA.
19. Adenika, F. B. (1998). Pharmacy in Nigeria. Panpharm Limited, Lagos, Nigeria.
 20. Hepler, C. D., Strand, L. M. (1990). Opportunities and responsibilities in pharmaceutical care. *Am. J. Hosp. Pharm.*, 47(3): 533-43.
 21. Cherson, R. S., Bilger, R., Mohr S, and Wuller C. (2005). Instructional Design and Assessment: Design of a Pharmaceutical Care Laboratory: A Survey of Practitioners. *American Journal of Pharmaceutical Education*, 69 (1) Article 3. 19-24
 22. Cavaco, A. and Roter, D. (2010), Pharmaceutical consultations in community pharmacies: utility of the Roter Interaction Analysis System to study pharmacist-patient communication. *International Journal of Pharmacy Practice*, 18: 141-148.
 23. Abdelhamid, E., Awad, A., Gismallah, A. (2008). Evaluation of a hospital pharmacy-based pharmaceutical care services for asthma patients. *Pharmacy Practice (Internet)*, 6(1)
 24. Datye, V., Kielmann, K., Sheikh, K., Deshmukh, D., Deshpande, S., Porter, J. & Rangan, S. (2006). Private practitioners' communications with patients around HIV testing in Pune, India. *Health Policy Plan*, 21 (5):343-352
 25. Schommer, J. C. & Wiederholt, J. B. (1994). Pharmacists' perceptions of patients' needs for counseling. *American Journal of Hospital Pharmacy*, 51(4):478-485
 26. Collins, C., Kramer, A., O'Day, M. & Low, M. B. (2006). Evaluation of Patient and Provider Satisfaction With a Pharmacist-managed Lipid Clinic in a Veterans Affairs Medical Center. *American Journal of Health-System Pharmacy*, 63(18):1723-1727
 27. Volmer, D., Vendla, K., Vetka, A., Bell, J. S. & Hamilton, D. (2008). Pharmaceutical care in community pharmacies: practice and research in Estonia. *Ann Pharmacother*, Jul;42(7):1104-11.
 28. Joda, A. E. & Eniojukan, J. (2004). Patients Views about Level of their Interactions with Pharmacists. *The Nigerian Journal of Pharmacy*, 36 (3): 14-18.
 29. Gardner, D. M., Murphy, A. L., Woodman, A. K. & Connelly, S. (2001). Community pharmacy services for antidepressant users. *International Journal of Pharmacy Practice*, 9: 217-224.
 30. Reebye, R. N., Avery, A. J., Van Den Bosch, W. J. H. M., Aslam, M., Nijholt, A. and van der Bij, A. (1999), Exploring community pharmacists' perceptions of their professional relationships with physicians, in Canada and the Netherlands. *International Journal of Pharmacy Practice*, 7: 149-158.