International Digital Organization for Scientific Research ISSN: 2579-0730
IDOSR JOURNAL OF BIOLOGY, CHEMISTRY AND PHARMACY 3(1) 111-123, 2019.

A Study of the Dispensing and Pharmaceutical Care Practices of Community Pharmacists in Enugu Metropolis, South-East Nigeria

Ogochukwu Fidelia Offu

Department of Clinical Pharmacy and Biopharmaceutics, Faculty of Pharmaceutical Sciences, Enugu State University of Science and Technology, Agbani, Enugu State, Nigeria.
Email: offu.ogochukwu@esut.edu.ng

ABSTRACT

Background: Due to the increasing prevalence of both Communicable and Non Communicable Diseases in Nigeria, the community pharmacist's role needs to be expanded to include more novel activities like pharmaceutical care activities to its traditional dispensing role. This will contribute towards reducing the incidence and prevalence of these diseases. Objectives: The objectives of this study are: to assess the dispensing practices of community pharmacists in Enugu metropolis, and to ascertain the level of involvement of community pharmacists in pharmaceutical care activities. Methods: The study involved administration of pre-tested and validated structured questionnaires. The questionnaire consisted of Part A (Demographics), Part B (dispensing practices) and Part C (pharmaceutical care services) were analyzed using SPSS and exported to Microsoft excel. Descriptive Statististic was carried out using means and percentages. The level of involvement in percentages was compared among the various groups using Analysis Of Variance (ANOVA) and Post Hoc Dunnet test. Results: Out of the 83 community pharmacists in Enugu, 64 agreed to join the study but only 59 of them completed the questionnaires. 49.2% of the participants were involved in carrying out dispensing activities and was not satisfactory. The mean responses of the participants with respect to their involvement in pharmaceutical care activities include: 24.2, 30.9, and 20.8 for direct patient care/current pharmacy practice; Referral, consultation and Instrumentation activities; and exploring awareness of pharmaceutical care respectively. These mean scores were all above their critical points of 18, 24 and 15 respectively. In addition, the percentage of pharmacists that scored above the neutral point for these pharmaceutical care activities were 75.1%, 65.9% and 73.9% respectively. The fourth pharmaceutical care domain , that is, documentation activity, had an involvement of 25.4% which is not satisfactory. Conclusion: This study demonstrates that the dispensing practices of community pharmacists in Enugu metropolis are not satisfactory. It also showed that community pharmacists' involvement in pharmaceutical care is satisfactory for three pharmaceutical care domains that were assessed. They are: direct patient care/current pharmacy practice; Referral, consultation and Instrumentation activities; and exploring awareness of pharmaceutical care. However, the community pharmacists' involvement in documentation, which is the fourth pharmaceutical care domain assessed was poor.

Keywords: Dispensing, pharmaceutical, community, pharmacist, Enugu, metropolis, south-east, Nigeria.

INTRODUCTION

The Community Pharmacy is the most accessible facility where health needs are met. This is because the community pharmacists do not charge for

consultation, they are usually located close to most households, and usually have extended working hours. They offer services such as: drug dispensing, counseling of patients on the proper use of drugs, sale of drugs, treatment of minor ailments with Over The Counter drugs, dispensing of Prescription Only Medicines.

These are the traditional roles for which the community pharmacies were known. In recent times, the pharmacy practice has imbibed more patient oriented roles with the advent of pharmaceutical care.

Primary health care centers cannot meet the health needs of the community because of limited number of health professionals present in these health care centers in the town and lack of supervision. This will greatly increase the health demands of clients who visit the community pharmacies [1].

The Practice of Community Pharmacy:

The traditional role of a pharmacist is dispensing of medication/devices written by a prescriber. Dispensing consists of all the events that take place from the moment a prescription is brought into the pharmacy to the point where the patient receives his medication [2]. Before the pharmacists dispense the drugs, he/she must ensure that the prescription is legal, appropriate and safe for the patients to use [3]. Dispensing should also be accompanied by counseling which comprises of effective communication of relevant information from the pharmacist to the patient so as to achieve optimal patient therapeutic outcome [4].

In recent times, the practice of community pharmacy has transcended from just offering traditional services, such as dispensing to delivering patient focused services such as pharmaceutical care. According to Hepler and Strand, pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improves a patient's quality of life [5]. Its goals are to optimize the health-related quality of life of patients and to reach positive clinical outcomes that are within economic expenditure [6]. In order that these goals are achieved, the pharmacists have to carry out the following activities:- establishing a professional/therapeutic relationship with the patient; collecting patient specific subjective and objective data; evaluating the data and identifying health and drug therapy problems; developing intervention (pharmacist's care plan); evaluate the interventions and follow-up the patient; pharmacist's documentation of all activities [7]. Apparently, the patient's full cooperation is necessary for the pharmacist to carry out pharmaceutical care activities successfully. Hence, the pharmacists should seek ways of offering pharmaceutical care services while dispensing medication to patients as this will optimize drug therapy outcomes.

Minimum standards required of community pharmacists for effective and good professional practice (GPP):

The Pharmacist must have the following abilities and skills in order to provide pharmaceutical care which is the standard for GPP:

i. Good Communication Skills: This is the most important for Pharmaceutical Care to be given effectively. Good communication skills consist of good interviewing techniques that will enable the pharmacist to gather accurate information. It is also important for efficient interaction with other healthcare providers.

ii. Therapeutic Knowledge: Pharmacists should be dedicated to developing their knowledge base. This will enable the pharmacist not just to identify problems but it will also help him to identify problems faster and to develop a more effective care plan. Therapeutic Knowledge could be acquired by seeking information from the internet, current healthcare journals and magazines; MCPD (Modules for Continuing Professional Development) ; and post-graduate

qualifications in Clinical Pharmacy etc.

iii. Clinical Problem Solving Skills: This is developed by increasing understanding of therapeutics and drug information skills; and appropriate training and practice.

iv. Good Documentation System: The development of an efficient documentation system (usually a computer) is vital for efficient pharmaceutical practice. Each patient's entire record as well as pertinent information and comments regarding a patient's therapy, should be readily retrievable.

Objectives of the study:

1. To assess the dispensing practices of community pharmacists in Enugu metropolis.
2. To ascertain the level of involvement of community pharmacists in pharmaceutical care activities.

METHODS

Methods of Data collection

Study design: A descriptive and cross sectional study was the study design used.

Setting: The setting is Enugu metropolis which is located in Enugu State. Enugu state is located in the South Eastern part of the country. According to the National population Census Report in 2006, it has an estimated population of 3,257,298. Majority of individuals based in this state are civil servants. The state is divided into seven health districts for the purpose of healthcare delivery system; each health district is made up of between one to three LGAs. Within Enugu State, there are six district hospitals, 36 cottage hospitals and 366 primary health care centres. There are also approximately 700 private health facilities. There are four tertiary health care centres in the state. Namely, the University of Nigeria Teaching Hospital(UNTH), Enugu; The National Orthopaedic Hospital Enugu(NOHE); The National Neuropsychiatric Hospital,; The Enugu State University Teaching Hospital(ESUTH). There are seventeen LGAs in Enugu State which are officially recognized by the federal government, as well as development council areas created by the state. Five of the LGAs are largely urban. Drugs are made available to the populace in the open market, in patent medicine shops, and in the community pharmacies. Prescription drugs and non prescription drugs are sold in these outlets most of the time by untrained personnel. A number of the community pharmacies do not have pharmacists present in them most of the time.

Population/Sample:

There were 83 community pharmacists in Enugu as at the time of this study. All the community pharmacies were visited and the intent of the study was explained to the pharmacist on duty. 64 community pharmacists gave oral informed consent and were included in the study. The Study was carried out from January 2014 to April 2014.

Data collection Instruments:

The questionnaire used in this study was an instrument that consisted of three parts-Part A, Part B and Part C. The Part A was developed to obtain demographic data of the participants, Part B was developed by reviewing pharmacy practice literature and was aimed at determining the dispensing practices of community pharmacists [8]. This questionnaire was validated and then pretested by administering to six community pharmacists in Enugu metropolis. It was developed based on a 'Yes' or 'No' response for each item on this part of the questionnaire. This questionnaire was developed to determine the dispensing practices of the community pharmacists in Enugu metropolis.

Part C was modified from a questionnaire developed by Okpalanma N et al to assess community pharmacists' effort in the provision of pharmaceutical care [9]. It

consisted of four domains made up of: direct patient care activities/current pharmacy practice; referral, consultation and instrumental activities; exploring the awareness of pharmaceutical care; and Documentation activity. A likert scale of 1-5 with a midpoint of three was used. (5=Very often, 4=Often, 3=Sometimes, 2=Rarely, 1=Never) except for assessment of Documentation activity in which percentage of community pharmacists who responded to 'Yes' or 'No' was determined.

Data Analysis

Data were entered into Microsoft excel spreadsheet from where it was loaded into SPSS Version 19 for analysis. Means, standard deviation and percentages were used for descriptive statistics. Data were presented on a table. Means and percentages were used to represent demographic data on Part A of the questionnaire. For Part B of the questionnaire, the percentage of community pharmacists that chose 'Yes' or 'No' to a particular item were determined.

For Part C, item analysis was carried out by summing up all the mean scores for the items listed under a domain to get the total mean score. This score is then compared with a logical neutral point. The neutral point was gotten by determining the highest possible mean score and adding it to the lowest possible mean score after which the sum of the two mean scores is divided by two to get the neutral point. For example, the direct patient care domain which consists of 6 items has a highest possible score 5x6=30 and the lowest possible score will be 1x6=6. The average of the two numbers is 30+6/2 which is equal to 18. Hence, 18 is the neutral point for the direct patient care domain. If the total mean score gotten for direct patient care is greater than 18, then the community pharmacist's involvement is satisfactory. If the total mean score is less than 18, it indicates a non satisfactory involvement. A low standard deviation indicates a cluster of responses to the mean while high standard deviation reflected high variability of opinion from the mean. The percentage performance was the group of persons that scored above the critical point or neutral point on the rating scale (i.e persons that scored either 4 or 5). ANOVA and independent t-test was used to test for statistically significant difference in level of involvement of community pharmacists between specified groups. Independent t-test was used for binary variables while ANOVA was used for analysis of variables that have been classified into two or more groups. If ANOVA reveals a statistically significant different level of involvement in a specified activity between groups of community pharmacists, then the post hoc dunnet test will be carried out to determine the particular group of community pharmacists that are involved in the specified activity differently.

RESULTS

There were 83 registered retail community pharmacists in Enugu, 64 volunteered to join the study but only 59 filled the questionnaire. Hence, response rate is 92.1%. As represented on Table 1, community pharmacists who were males were 44(74.6%). Majority of the pharmacists fell within the age range of 31-40(37.3%) while only two were above 60 years of age(3.4%). 40.3% of the respondents have had 1-5 years of work experience. None of the respondents had a doctorate degree. Only 18(30.5%) of the respondents have a masters degree while 4(6.8%) of the respondents are fellows of the West African Postgraduate College of Pharmacists (FPCPharm). 76.3% of the pharmacists do not have any qualification or training in public health. About half (50.8%) of the community pharmacies have been in operation for 1-5 years. Majority of the community pharmacies were pharmacist owned (76.3%). 3(5.1%) respondents reported that their premise had not been inspected in the previous year while the most frequent was two inspection visits in the previous year as reported by 25(42.3%) respondents.

5(8.5%) reported that they could not remember the number of times the PCN (Pharmacists' Council of Nigeria) visited their premises.

TABLE 1: Demographics of Respondents

CHARACTERISTICS		FREQUENCY	PERCENTAGE
SEX	FEMALE	15	25.4%
	MALE	44	74.6%
AGE	>60	2	3.4%
	51-60	4	6.8%
	41-50	13	22.0%
	31-40	22	37.3%
	21-30	18	30.5%
YEARS OF WORK EXPERIENCE	>20	8	13.6%
	16-20	4	6.8%
	11-15	9	15.3%
	6-10	14	23.7%
	1-5	24	40.7%
ADDITIONAL QUALIFICATION	PhD	0	0.0%
	Masters	18	30.5%
	FPCPHARM	4	6.8%
	Post grad Cert Mgmt	1	1.7%
QUALIFICATION/TRAINING IN PUBLIC HEALTH	NO	49	83.1%
	YES	10	16.9%
LENGTH OF TIME PHARMACY HAS BEEN IN OPERATION (YEARS)	1-5	30	50.8%
	6-10	15	25.4%
	11-15	4	6.8%
	16-20	6	10.2%
	>20	4	6.8%
OWNERSHIP OF PRACTICE	PHARMACIST	45	76.3%
	NON-PHARMACIST	14	23.7%
NO OF PCN INSPECTIONS WITHIN A YEAR	0	3	5.1%
	1	12	20.3%
	2	25	42.3%
	3	10	17.0%
	4	2	3.4%
	5	2	3.4%
	Can't Remember	5	8.5%

Table 2 shows the response of the community pharmacists to involvement in proper dispensing activities. 15(25.4%) of the community pharmacists reported that a pharmacist was present in their pharmacies at all hours in which the community pharmacy was opened. 19(32.2%) insisted on a prescription before dispensing POMs. The number of community pharmacists that assessed the prescription properly before dispensing was 42(71.2%). The number of community pharmacists that labeled the product properly and counseled patients/clients

properly were both 35(59.3%) respectively. The mean number and percentage of community pharmacists that were involved in proper dispensing activity was 29(49.2%).

Table 2: Response of community pharmacists to involvement in proper dispensing practices

Dispensing Activity	Yes(%)	No(%)
Presence of a pharmacist at all hours the pharmacy is opened	15(25.4)	44(74.6)
Insistence on a prescription before dispensing POMs	19(32.2)	40(67.8)
Proper assessment of prescription before dispensing	42(71.2)	17(28.8)
Proper Labelling of the product	35(59.3)	24(40.7)
Proper counseling of patients/clients	35(59.3)	24(40.7)
Mean Total	29(49.2)	30(50.8)

Table 3 represents the Item analysis for pharmaceutical care activities. This item analysis consists of four domains namely: Direct Patient Care; Referral, consulation and Instrumental; Awareness of Pharmaceutical Care activities; and Documentation activities. Analysis of responses to Direct Patient Care/current practice produced a mean score of 24.2±5.1 which is above the neutral point of 18. About three quarters (75.1%) of the community pharmacists scored above the critical point. Hence, the community pharmacists exhibited a satisfactory level of Direct Patient care/current practice. Assessment of Referral, Consultation and instrumental activities scored 30.9±7.3 which is above the neutral point of 24. More than half (65.9%) of the participants scored above this critical point. This indicates a satisfactory level of involvement in Referral, Consultation and instrumental activities. However, the percentage of pharmacists that discuss patient's drug therapy with other pharmacists, make referral to other pharmacists, and communicate patient's progress to physicians were less than 50%. The scores were 44.1%, 47.5%, and 33.9% respectively. On analysis of 'exploring awareness of pharmaceutical care' a mean score of 20.8±4.6 which is above the neutral point of 15 was gotten. In addition, 73.9% of the community pharmacists scored above the critical point which is satisfactory.

Analysis of the effect of the number of PCN visits per year on the involvement of community pharmacists in carrying out pharmaceutical care activities showed no statistical significant difference in involvement between the groups. ANOVA was used for analysis. The p-values gotten are displayed on Table 4.

Table 5 displays the result of the effect of number of years of experience of community pharmacist on his involvement in pharmaceutical care activities. ANOVA was used to compare involvement between groups. The p-value gotten for exploring Awareness of pharmaceutical Care was less than 0.05(p=0.037) while the p-values for the other activities were greater than 0.05. Hence, there was a statistical significant difference in community pharmacists' awareness of pharmaceutical care between the groups of community pharmacists with different years of experience. After the Dunnet test was carried out, the group with a statistically significant different level of awareness of pharmaceutical care was those community pharmacists with 11-15 years of experience.

TABLE 3 : Item analysis of involvement in pharmaceutical care

PHARMACEUTICAL CARE		
DIRECT PATIENT CARE/CURRENT PHARMACY PRACTICE	Mean±SD	% INVOLVEMENT
Assessment of actual pattern of medication use	4.4±0.7	91.5
Enquire about the perceived effectiveness of drug	4.3±0.8	86.5
Ascertain ifTherapeutic objective was realised	4.2±0.8	79.7
Assess Drug Related Problems	4.0±0.9	69.5
Implementation of DRP strategy	3.8±0.9	66.2
Evaluation of progress towards DRPs	3.7±1.0	57.6
MEAN TOTAL	24.2±5.1	75.1
REFERRAL, CONSULTATION AND INSTRUMENTAL ACTIVITIES	MEAN±SD	% INVOLVEMENT
Discuss Patient's Drug Therapy Problem with other pharmacists	3.4±1.0	44.1
Make referrals to other pharmacists	3.3±1.2	47.5
Refer patient to specific doctor	4.2±0.8	78.0
Communicate patient's therapy progress to physician	3.1±1.1	33.9
Counselling patients visiting your pharmacy	4.4±0.7	89.8
Usage of quiet location for patients counseling	4.2±0.8	76.3
Double check each prescription	4.1±0.9	78.0
Use appropriate info services	4.2±0.8	79.7
MEAN TOTAL	30.9±7.3	65.9
EXPLORING THE AWARENESS OF PHARMACEUTICAL CARE	MEAN±SD	% INVOLVEMENT
Try to provide Pharmaceutical care	4.2±0.7	79.7
Psychological commitment	4.2±0.8	72.9
Evaluation of patient satisfaction	3.9±0.9	64.4
Participation in higher education	3.7±1.1	67.8
Provision of general medical information	3.8±1.0	84.7
MEAN TOTAL	20.8±4.6	73.9
DOCUMENTATION ACTIVITY	-	25.4%

TABLE 4: Effect of years of experience on involvement in pharmaceutical care activities

ACTIVITY	YEARS OF EXPERIENCE	MEAN±S.D	P-values	MEAN DIFFERENCE
Direct Patient Care	>20	70.3±23.43	0.053	-8.8
	16-20	80.6±15.8		1.5
	11-15	58.9±23.0		-20.1
	6-10	78.9±15.0		-0.1
	1-5	79.0±13.9		Reference group
	Total	75.1±18.0		
Referral, Consultation and instrumental activities	>20	70.5±18.3	0.088	-5.8
	16-20	66.7±22.6		-9.6
	11-15	59.4±12.5		-16.9
	6-10	66.3±14.9		-10.0
	1-5	76.3±15.3		Reference group
	Total	70.1±16.2		
Awareness of Pharmaceutical care	>20	78.6±14.9	0.037	1.5
	16-20	73.3±24.7		-3.8
	11-15	57.5±12.2		-19.6*
	6-10	73.6±18.1		-3.5
	1-5	77.1±12.8		Reference group
	Total	73.4±16.1		

*.The mean difference is significant at the 0.05 level after the Dunnet test was carried out.

Table 5: The Effect of Number of Pcn Inspections On Involvement In Pharmaceutical Care Activities

ACTIVITIES	NO. OF PCN VISITS PER YEAR	MEAN±SD	P-VALUES
Direct Patient Care	0	72.2±8.7	0.492
	1	82.9±14.6	
	2	71.3±18.0	
	3	73.2±14.4	
	4	85.4±14.7	
	5	81.3±14.7	
Referral, Consultation and Instrumental	0	56.3±15.6	0.433
	1	72.2±18.6	
	2	66.7±13.7	
	3	71.4±19.2	
	4	84.4±17.7	
	5	75.0±8.8	
Awareness of Pharmaceutical Care	0	58.3±15.3	0.774
	1	72.8±18.6	
	2	71.0±14.7	
	3	70.7±20.1	
	4	80.0±14.1	
	5	75.0±21.2	

DISCUSSION

More than half of the community pharmacists that participated in the study were males. This result was similar to results gotten from a study carried out in Indiana, USA [10]. This might be because of the long work hours needed to produce optimum profit in the community pharmacies. Most females prefer to work in other areas of pharmacy practice that affords them time to take care of their families. Generally, men are also more business inclined than women.

None of the respondents had a doctorate degree while less than half of the community pharmacists had a master's degree. This might be because the community pharmacists feel that having an additional degree is of no added advantage to their practice.

Pharmacies that have been in operation for 1-5 years were about half of the community pharmacies studied. This implies that there was an increase in the establishment of new pharmacies in the past five years.

In this study, community pharmacists' involvement in proper dispensing practices was not satisfactory. The major factors that are responsible for this non satisfactory involvement was the absence of a pharmacist in the pharmacy at all hours in which the pharmacy was opened and the small number of community pharmacists that insisted on a prescription before dispensing POMs. Almost all the pharmacies 58(98.3%) had a superintendent pharmacist but only 15(25.4%) affirmed that a pharmacist was always present in the pharmacy during open hours. This is not satisfactory because according to 'The four part Compendium of minimum standards for the assurance of pharmaceutical care in Nigeria', the superintendent pharmacist must be physically present at open hours especially when medicines must be dispensed under the supervision of the pharmacist [11]. In the course of this study, it was quite uncommon to get a pharmacist who was present in his/her shop in the morning hours. Data was collected from most of the community pharmacists in the evenings or at night. Some pharmacists reported that the community pharmacy practice alone will not provide for their basic needs and that they had to look for other means of livelihood to support what they make in the community pharmacies. They also said that they cannot afford to pay a locum pharmacist who will be at their pharmacy while they are away. A large proportion of these community pharmacists, 76.3% have SSCE holders as support staff. Similar findings were gotten in Ghana where untrained personnel were left to run the pharmacy on the pharmacist absence [12]. This may be because it is cheaper to maintain the salary of a young secondary school leaver than that of a pharmacy technician or a nurse who has better knowledge about drugs and health. These young secondary school leavers are often left to run the premise while the pharmacist is away. These support staff are not competent and trained to advise patients on their drug therapy. They may not also dispense the drugs in accordance with Good Pharmacy Practice. This results in treatment failure because this support staff may not give the client information as regards drug-drug interactions, drug-food interactions, whether the drug should be taken before or after food, adverse effects, contraindication, and dosage regimen. A similar result was gotten from a study that was carried out in Turkey by [13] where it was reported that the dispensing practice of the community pharmacist seems inadequate [14]. Findings of a study carried out in Pakistan community pharmacists revealed that only 22% of pharmacists were present in their pharmacies as at the time they were visited for data collection and that drugs were sold without a prescription [15]. Overtime, drug therapy outcomes of the patients become poor and could lead to increase in morbidity

and mortality in the community. Hence, the PCN should focus on developing strategies that will motivate the pharmacists to remain in their shops at open hours and offer pharmaceutical services to patients/clients, otherwise the practice of community pharmacy in Enugu will not be viewed as a health care center but rather as a retail shop.

In the current study, less than half of the community pharmacists claim to assess the prescription properly before dispensing but this is only done when they are present in the pharmacy otherwise the support staff who are usually untrained does it. Furthermore, about a third of the participants reported that they insisted on a prescription before dispensing the POMs. Like our finding, a review carried out by Tang et al in India, Taiwan and Africa, community pharmacists dispensed POMs without a prescription [16]. Similarly, in the course of this study it was observed that incomplete regimen of antibiotics was often sold to clients in some community pharmacies in Enugu because the pharmacists fear loss of their customers to the patent medicine dealers. Some others opined that they recommend and dispense POMs without prescription because the medical doctors have robbed them of the opportunity of seeing prescriptions since most of these doctors prescribe and dispense the drugs in their private clinics and hence prescriptions do not come to the pharmacists often. Therefore, they sell the drugs without prescriptions rather than running at a loss by allowing them to expire on the shelves. Some others reported that if they insist on a prescription before dispensing the POMs, they will lose most of their clients to neighboring patent medicine dealers who will sell these drugs to these clients without any inhibitions. This may have given rise to the recent increase in demand for addictive medications such as benylin with codeine syrup (cough syrup), tramadol capsules, and pentazocine injections in community pharmacies in Enugu. Eventually, the incidence of persons who abuse these substances will increase.

The community pharmacists in Enugu showed that they were highly involved in the first three domains of pharmaceutical care (Direct patient care activities/current pharmacy practice; Referral, consultation and instrumental activities; Exploring the awareness of pharmaceutical care) as shown by findings of this study. Similarly, another study carried out by [17] in 2005 revealed that Nigerian pharmacists irrespective of their practice setting showed favorably high attitude towards pharmaceutical care [18]. Undoubtedly, the high attitude exhibited by Nigerian community pharmacists in 2005 must have influenced and reflected in their high involvement in pharmaceutical care activities as identified in this study. However, specific activities like communicating patient's therapy progress to physicians, showed low involvement. The low involvement of community pharmacists in communicating patient's therapy progress to physicians may be because of the poor relationship between doctors and pharmacists. This is supported by similar findings that were recorded in another study [19]. In the current study, discussing and seeking advice from other pharmacists on patients' medical cases was low. In addition, making referrals to other pharmacists as well as doctors was also low which may be due to unhealthy competition that exists between health professionals. As a result, ways/means of improving pharmacist-pharmacist and pharmacist-doctor collaboration should be highly developed and encouraged as this will contribute towards improving patients' health outcomes. Adopting a system whereby community pharmacists can refer patients or clients promptly to other physicians when the case arises should be developed in Nigeria so that diseases are treated promptly before complications arise. To support this finding, studies have revealed that patients who receive Pharmaceutical Care reported better control of their medical

conditions and that they were also satisfied with the service [20]; [21]; [22].

The result of a study aimed at evaluating pharmaceutical care documentation practices of pharmacists in some South Western states of Nigeria revealed that about half the pharmacists who participated in the study implemented pharmaceutical care but only a minority of them carry out documentation [13]. In a similar manner, in the current study, only about one quarter of community pharmacists (25.4%) in Enugu documented pharmaceutical care activities, which is quite low. Documentation of pharmaceutical care activities of the pharmacist is important because it provides evidence of what was done by the pharmacist and also ensures continuity of care when another pharmacist is on duty [12]. It acts as a data repository for future research and is the acceptable means of communicating patient therapy decisions and health outcomes among health professionals [6]. In Sweden, pharmaceutical care has advanced since the founding of a National database in 2004 where all drug related problems could be stored. This encouraged the practice of drug review amongst Sweden community pharmacists [18]. Thus, emphasizing the importance of documenting pharmaceutical care activities. In Denmark, pharmaceutical care has been a standard for practice in community pharmacies since 1995 [21]. Hence, pharmacy administrators should develop strategies that will improve documentation practices of community pharmacists.

The number of times PCN visits a community pharmacy within a year has no statistical significant effect on the community pharmacist's level of involvement in pharmaceutical care activities. This could imply that regulation is not done effectively such that a visit by PCN does not influence the involvement of the community pharmacist in pharmaceutical care activities. The level of Awareness of Pharmaceutical Care amongst community pharmacists with 11-15 years of experience was statistically significantly different when compared with the other groups of community pharmacists.

CONCLUSION

This study revealed that involvement of community pharmacist in proper dispensing activities in Enugu metropolis was not satisfactory.

This study also demonstrates a satisfactory involvement of community pharmacists in all pharmaceutical care activities assessed except for documentation activities where they had a non satisfactory involvement.

RECOMMENDATION

The PCN should incorporate in her MCPD program, trainings aimed at improving community pharmacists' dispensing and pharmaceutical care practices. This will improve the involvement of community pharmacists in these areas and eventually improve the health status of the community.

Policy makers should give incentives to community pharmacists that offer satisfactory dispensing and pharmaceutical care services. This will motivate the community pharmacists to improve their involvement in such services.

REFERENCES

1. Abimbola, O. (2012) How to improve the quality of primary health care in Nigeria. Nigerians Talk. http://nigerianstalk.org/2012/05/11/how-to-improve-the-quality-of-primary-health-care-in-nigeria/.
2. Aje AA and Erhun WO. (2016). Assessment of the documentation of pharmaceutical care activities among community pharmacists in Ibadan. West African Journal of Pharmacy. 27 (1) 118-125.
3. APhA 2019. Principles of Practice for Pharmaceutical Care. Available from https://www.pharmacist.com/principles-practice-pharmaceutical-care. Accessed on 19th September, 2019.
4. Bernsten, C., Björkman, I., Caramona, M., Crealey, G., Frøkjær, B. and Grundberger, E. (2001). Pharmacist_Workload_and_Pharmacy_Characteristics.45(5). P 456-652. Available from: http://journals.lww.com/lww-medicalcare/Abstract/2007/05000/Pharmacist_Workload_and_Pharmacy_Characteristics.12.aspx (Accessed on 10th February 2014)
5. Butt, ZA., Gilani, M., Nanan, D., Sheikh, DA. and White, F. Quality of pharmacies in Pakistan:
6. Department of Health.(2004). Choosing health through pharmacy: A programme for pharmaceutical public health 2005–2015.Available from http://www.nhsalliance.org/publication/choosing-health-through-pharmacy-a-programme-for-pharmaceutical-public-health-2005-2015/. (Accessed: 2nd February, 2014)
7. Farris, KB., Fernandez-Llimos, F and Benrimoj, SI. (2005) .Pharmaceutical Care in Community Pharmacies: Practice and Research from Around the World. Annals of Pharmacothery. [online] 39(15) p 39-41. Available from www.theannals.com, DOI 10.1345/aph.1G049. [Accessed 2nd February 2014]
8. George, P., Molina, JA., Cheah, J., Chan, SC. and Lim, BP (2010) The Evolving Role of the Community Pharmacist in Chronic Disease Management - A Literature Review. Annals of Academics of Medicine Singapore.(Online). 39(11) p.861-867. Available from
9. Gokcekus, L., Toklu, H., Demirdamar, R. and Gumusel, B., (2012). Dispensing practice in the community pharmacies in the Turkish Republic of Northern Cyprus. International Journal of Clinical Practice. [online]34(2) p 312-324. Available from
10. Hepler, CD., Strand, LM. (1990) Opportunities and responsibilities in pharmaceutical care. Am J Hosp Pharm [online] 533(43): p47. Available from http://www.ncbi.nlm.nih.gov/pubmed/2316538. (Accessed: 10th March 2014)
11. Kassam, R., Collins, J. and Berkowitz, J.(2012). Patient satisfaction with pharmaceutical care delivery in community pharmacies. Dove press 2012 (6)p.337-348
12. Kotecki, JE., Sona, EI. and Mohammed, TR. (2000) Health Promotion Beliefs and Practices among community pharmacists. Journal of the American Pharmacist Association. [Online] 40(6) p406-407 Available from: http://www.medscape.com/viewarticle/406703. [Accessed on22nd February 2014]
13. Mil, F. and Schulz M. (2006). A Review of Pharmaceutical Care in Community Pharmacy in Europe. Havard Health Policy Review.7(1) p.155-168. Available from: http://www.researchgate.net/publication/230681417_A_review_of_Ph

armaceutical_Care_in_Community_Pharmacy_in_Europe. [Accessed on 10th January 2014]
14. Okpalanma, N., Okonta, MJ., and Ilodigwe EE.(2013). Development and Validation of Questionnaire for theAssessment of Pharmaceutical Care by CommunityPharmacists in a State in Nigeria. Journal of Biology, Agriculture, and Healthcare.[online] 3(7) p:6261-6266 Available from: http://www.iiste.org/Journals/index.php/JBAH/article/view/6261. [Accessed 21st January 2014]
15. Oparah, AC., Eferakeya, AE. (2005). Attitudes of Nigerian Pharmacists towards Pharmaceutical Care. Pharmacy World and Science.[Online] 27(3) p:208-214. Available from:http://journals1.scholarsportal.info/details/09281231/v27i0003/208_aonptpc.xml?q=%22Pharmaceutical+care%22&search_in=KW&sub=. [Accessed on 8th February]
16. Oparah AC. 2010. Essentials of Pharmaceutical Care. Cybex Publication. 22; 31 – 35.
17. PCN. (2009), The Four-part Compendium of Minimum Standards for the Assurance of Pharmaceutical Care in Nigeria, 2nd ed. Ibadan:Bliss International Limited.
18. Smith, F. (2004). Community pharmacy in Ghana: enhancing the contribution to primary health care. Health policy and planning[online] 19(4):p. 234–241. Available from: doi: 10.1093/heapol/czh028 Health Policy and Planning 19(4). [Accessed 17th March 2014].
19. Sturgess, IK., McElnay, JC., Hughes, CM. and Crealey, G.(2003) Community pharmacy based provision of pharmaceutical care to older patients. Pharmacy World of Science(Online) 25(5). P218-226. Available from: http://link.springer.com/article/10.2165/00002512-200118010-00005. (Accessed on 12th January 2014)
20. Suleiman, AI., Eniojukan, FJ. And Eze, I.(2012) Evaluating Pharmaceutical Care Documentation among Pharmacists in Nigeria, West African Journal of Pharmacy[online] 23 (1) 69 – 76. Available from http://www.journalmanagers.org/index.php/wajp/article/view/44. [Accessed 22nd February 2014]
21. Tang, JTC. (2008). The Role of Pharmacists in Asia and Africa - A Comparative Study to the UK and Sweden. Institute. F. Farmacia[online]. Available from http://www.farmfak.uu.se/farm/exjob/diplomawork/HT08_JanetT_apotekarens_roll_i_fyra_lander.pdf. [Accessed 23rd January 2014]
22. WHO 2018. The role of the pharmacist in the healthcare system. https://apps.who.int/medicinedocs/en/d/Jh2995e/1.6.2.html. Accessed on 17th September, 2014.