



Pharmacists' Views on Necessary Intervention to Improve Pharmaceutical Care Practice in Rivers and Bayelsa States of Southern Nigeria

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ABSTRACT

Pharmaceutical care concept was introduced in Nigeria about a decade ago. Professional leadership have been advocating on the need for pharmacists to adopt the practice. However, most policy changes need some form of intervention to facilitate their adoption. Hence, this research is an original and maiden one in this geographical region to investigate the views of pharmacists on the type/s of intervention necessary to improve Pharmaceutical Care practice. A descriptive study was carried out with a questionnaire between the months of January and March, 2013 among 205 out of estimated 400 pharmacists practicing in Rivers and Bayelsa States of Nigeria. Data collected was subjected to descriptive analysis using Statistical Package for Social Sciences version 15. The study revealed that 23% of pharmacists were satisfied with their level of practice. The most significant option for the type/s of intervention needed was 'Inter professional relationship/Advocacy'-48%, followed by. 'Making favorable laws'-41%. On method/s of capacity building 'Institution based capacity building' and 'Improving practice setting' were preferred and rated equally. Pharmacists preferred to 'Improve documentation practices' and or 'Improve information and communication gadgets', both were rated equally. Pharmacists would like to improve their practice of Pharmaceutical Care .They realize they need to be better equipped but feel that challenges like 'Inter professional rapport/Advocacy' and 'Making favorable Laws' must first be tackled. Their views suggest that the current environment does not encourage the practice of the concept and so a deliberate, articulate plan and strategy should be employed to improve the practice.

Keywords: Pharmacists' views, Necessary intervention, Pharmaceutical care

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INTRODUCTION

Pharmaceutical Care concept gained worldwide acceptance when the International Pharmaceutical Federation (FIP) adopted it after modifying Hepler and Strand's ground breaking definition to state that 'Pharmaceutical care is the responsible provision of pharmacotherapy for the purpose of achieving definite outcomes that improves or maintains a patient's quality of life; it is a collaborative process that aims to prevent or identifies and resolves medicinal products and health related problems. This is a continuous quality improvement process for the use of medicinal products¹. Following the principle of achieving goals with sticks, carrots and sermons^{2,3}, pharmaceutical care goals (sticks) would need tools, procedures and an enabling environment (carrots) as well as evaluation/ appraisal (sermons). The purpose of this research is to identify what Nigerian pharmacists need that will help them achieve pharmaceutical care goals. These needs are likely to vary from country to country.

MATERIALS AND METHOD

The study was a prospective multi-centered study that involved three tertiary health facilities (Federal Medical Center, Yenagoa, Niger Delta University Teaching Hospital, and University of Port Harcourt Teaching Hospital), and two schools of pharmacy (Niger Delta University, Amasoma and University of Port Harcourt). Pharmacists were targeted at various pharmaceutical society and technical meetings in both states. A self administered questionnaire was used for data collection. The questionnaire was distributed to practicing pharmacists irrespective of their area of practice after oral consent was sought and obtained. The questionnaire was structured to retrieve demographic data as well as the views of practicing pharmacists on challenges and necessary interventions.

RESULTS AND DISCUSSION

Out of two hundred and sixty questionnaires distributed two hundred and five were completed and retrieved giving a response rate of 78.8%.

Demographics

There were more male pharmacists 60.5% while female pharmacists were 39.5% were female. The trend was similar to observations made by other researchers^{4, 5, 6}. Majority (88.7%) of respondents were less than 50 years of age similar to the report of Suleiman⁶ indicating an active work force as the older age may be more involved with management. Majority (62.4%) are married. There was no reported case of divorce indicating stability of the mind among pharmacists. About half (49.6%) of the respondents had less than 10 years practicing experience.

Majority (69.8%) had been aware of Pharmaceutical Care concept for up to 10 years. Over two-third of the respondents have been licensed for less than 20 years which is an indication that the greater percentage of the work force is still practicing enthusiastically. Almost 70% of respondents holds the bachelor's degree and over seventy percent have not specialized in any particular field. This group of respondents are more likely to be more interested in educational interventions because they are not yet fixated by any area of specialization. The dominant practice groups were community pharmacists, 43% and hospital/administrative pharmacists 38.5%. Four out of every five community pharmacy is owned by a pharmacist and by law has exclusive right to dispense/retail directly to patients/clients. About 70% of pharmacists working in hospitals or administrators work in a tertiary health care facility. This is a favorable distribution for pharmaceutical care implementation as significantly Federal Government is often the initiator and driver of most policy changes. The community pharmacies are regulated by Pharmacists Council of Nigeria, a Federal Government parastatal while the tertiary health care facilities are managed by the Federal Ministry of Health. Secondly, community pharmacists and hospital pharmacists are the windows through which the public access pharmaco therapeutic services. Over eighty percent of respondents practice in the urban area. This is indicative of lack of qualitative health services by rural dwellers. Details in Tables 1 (a,b).

Table 1(a): Demographic Data; n=205

Variables	Values	Frequency	Percentage
Sex	M	124	60.5
	F	81	39.5
Marital Status	Single	73	35.6
	Married	128	62.4
	Widowed	3	1.5
	No Response	1	0.5
Age Group	< 30	56	27.3
	31-40	72	35.1
	41-50	54	26.3
	51-60	20	9.8
	61-70	1	0.5
	> 70	2	1.0
Years of Post-Licensing Experience	< 10	102	49.8
	11-20	48	23.4
	21-30	36	17.6
	31-40	6	2.9
	41-50	2	1.0
	No Response	11	5.4
Years Spent in Current Practice	< 5	85	41.5
	6-10	42	20.5
	11-15	20	9.8

	16-20	11	5.4
	21-25	9	4.4
	26-30	11	5.4
	31-35	5	2.4
	No Response	22	10.6
Years of Awareness of PC Concept	0-5	84	41
	6-10	59	28.8
	11-15	24	11.5
	> 15	5	2.5
	No response	33	16.1

Table 1(b): Demographic Data; n=205

		Frequency	Percentage
Practice Group	NAHAP – Ministry	15	7.3
	NAHAP – 3 ^o Care	56	27.3
	NAHAP – 2 ^o Care	7	3.4
	NAHAP–Anonymous	1	0.5
	NAPA – Teaching	22	10.7
	NAPA – Consultancy	1	0.5
	ACPN – Wholesale	15	7.3
	ACPN – Retail	71	34.6
	ACPN – Int. Trade	4	2
	NAIP – Marketing	2	1
	NAIP – Int. Trade	1	0.5
	No Response	10	4.9
	Qualification	B. Pharm/B. Sc	141
Pharm. D		21	10.2
M.Sc. Pharm.		13	6.3
M. Pharm.		4	2.0
FPC Pharm.		8	3.9
Ph.D		7	3.4
MBA		6	2.9
MPH		3	1.5
No Response		2	1
Specialization (Specialty)	Public Health	8	3.9
	Pharm. Tech.	5	2.4
	Clinical Pharmacy	19	9.3
	Pharm. Chem.	2	1.0
	Pharm. Micro	1	0.5
	Pharmacology	4	2.0
	Pharmacognosy	3	1.5
	No Response	163	79.5
Practice Location	State Capital	167	81.5
	LGA Headquarters Others	12	5.9
	No Response	14	6.8
		12	5.9

Views on needed intervention

Most pharmacists were not satisfied with their level of practice as only 23% stated that they were satisfied with the level of their practice. The order for the choice of type of intervention starting with the most significant was as follows 'Inter professional rapport/Advocacy' 48%, 'Making favorable laws' 41%, 'Capacity building' 37%.⁹ (See Table 2). Pharmacists strongly agreed to proposed methods for capacity building as follows 'Institution based capacity building 51.2%, Informal self education 32.3%, Improving practice setting 53.7%' (See Table 3). On feasible methods to adopt within the next one year to improve practice setting the responses were highest for 'Improve documentation, 55.6% followed by Acquisition/Improvement of Information and Communication Technology gadgets, 51.2%. The percentage of pharmacists who gave their independent opinion for the way forward were 49.3%, Detailed result is shown in table 4. This survey revealed that poor 'inter professional relationship,' is considered as the greatest hindrance to pharmaceutical care practice in Nigeria, followed by the absence of favorable laws. Capacity building was only considered as the third major challenge to the practice of pharmaceutical care in Nigeria. Previous research corroborates the findings. The awareness and attitude of other health care practitioners towards pharmaceutical care and its practice pharmacists, participation in multidisciplinary ward rounds in three large hospitals in Nigeria was investigated in 2011⁷. The investigations revealed that 49% of respondents did not support that pharmacists should be part of the ward rounds while 34% were undecided⁷. In 2010, a former federal minister for health referred to the inter professional relationship between healthcare practitioners as "beauty contest"⁸. It is also worthy to note that enactment of enabling law in the year 2005 in the state of Minnesota in America contributed immensely to the improvement of the practice⁹. The high percentage of pharmacists who refused to comment on the vital issue of a way forward is significant. This may be due to reluctance in making changes to their present lifestyle especially as capacity building would involve much effort on their part much more than the process of advocacy or law making. The two preferred methods of capacity building, both equally rated were improving practice setting and institution based education (structured education) methods. The response to suggested feasible methods to improve practice setting within the next twelve months were mainly 'Improve documentation of activities' and 'Acquisition/Improvement of Information and Communication Technology gadgets' almost on an equal footing. The revelation here is that more than half the work force believed they could improve their documentation practices and their 'Information and Communication Technology' gadgets within twelve months. The improvement of both are inter related as improvement of

information and communication technology gadgets will greatly facilitate improvement in documentation practices. The 31.2% of pharmacists who believe in improving library are likely to be the pharmacists that strongly agreed to capacity building through informal self-education (32.2%). The low choice for employment of clinical pharmacists may be due to factors such as

1. Desire of entrepreneurs to reduce over head cost by reducing salaries.
2. Lack of a suitable working environment including tools for effective performance by clinical pharmacists.
3. Lack of confidence in the ability of the available clinical pharmacists to deliver.

Table 2: Respondents' Views on Methods of Improving PC Practice

Please indicate your level of agreement with the following methods of improving PC	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	No Response
(1) Capacity building	37.1	13.2	2	0.5	-	47.3
(2) Inter professional Rapport/Advocacy.	48.13	28.3	2.4	-	1.0	20
(3) Making of favorable laws.	40.5	26.3	3.4	1.0	1.5	27.3
(4) Other methods	3.4	0.5	-	-	-	96.1

Other methods suggested by pharmacists are; Improve staffing (1=0.5%) Public enlightenment (1=0.5%) Compulsory higher education (1=0.5%) Patient clerking (interview) (1=0.5%), Purpose but pharmacist (1=0.5%), Adequate enforcement of relevant laws (1=0.5%), Reasons not specified (2=1%) n=205: REPORTED IN PERCENTAGES.

Table 3: Respondents' Level of Agreement with Proposed Methods of Capacity Building by Percentage

n=205

Proposed methods	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	No Response
Institution based capacity building.	51.2	26.3	4.9	0.5	1.0	16.1
Informal self-education.	32.2	33.2	9.8	6.8	2.9	15.1
Improving practice setting	53.7	26.8	2.4	0.5	1.0	15.6

Table 4: Respondents' Opinion by Percentage on

1. Feasible Methods to Improve Practice Setting within the Next 12 Months.

2. Their Level of Satisfaction of PC Practice

n=205;REPORTED AS PERCENTAGES.

REQUEST	Yes	No	No Response
Please indicate which of the under listed methods you would employ within the next 12 months to improve PC practice settings.			
Acquisition/Improvement of library.	31.2	61	7.8

Acquisition/Improvement of I.C.T gadgets.	51.2	41	7.8
Employment of Clinical Pharmacists.	28.8	63.9	7.3
Improve documentation of activities.	55.6	37.1	7.3
Are you satisfied with your level of PC practice?	22.9	65.4	11.7

Strategies for intervention as suggested by pharmacists

Half (49.3%) of the respondents gave their opinions on strategies that should be employed to improve pharmaceutical care practice. These opinions may be summarized as follows-

Policy, politics and law

1. Pharmacists should be involved in politics with a view to making favorable laws and policies to advance the cause of pharmacy in general and improve pharmaceutical care practice in particular.
2. Pharmacists should employ advocacy to improve interpersonal relationship between healthcare practitioners in order to foster collaborative services.
3. Pharmacists should endeavor to change their attitude by being receptive to new ideas and accept evidence- based best practices.
4. Pharmacists should explore avenues to convince Government at all levels to employ more pharmacists in the public service.
5. Pharmacists should work towards legalization of ward rounds, the unit dose dispensing system and protocol for inter professional relationships.
6. Pharmaceutical care practice should have legislative empowerment.
7. Pharmaceutical care should be remunerated.
8. Pharmacy laws should be reviewed.

Pharmacy practice

1. The Pharm. D degree should be the minimum benchmark for practice.
2. All pharmacies should be mandated to have a counseling room.
3. Pharmacists Council of Nigeria should abolish the Patient and Proprietary Vendors License (PPMVL).The PPMVL is a license given to a non pharmacist to handle a limited class of medications in areas of need.
4. Pharmacists Council of Nigeria to update clinical pharmacy practice license.
5. Pharmacists Council of Nigeria to regulate clinical pharmacy practice.
6. Guidelines for Pharmaceutical care practice should be made available.
7. Information and Communication technology facilities and software should be made available to modernize pharmacy practice.

8. Documentation should be improved.
9. Pilot study should be undertaken to set standards.
10. There should be periodic assessment of practice standards.

Capacity building

1. Undergraduate curriculum to be reviewed to start the teaching of clinical pharmacy from the second year.
2. Clinical Pharmacy lecturers should practically teach in the teaching hospitals.
3. Mandatory Continuing Education Program should be used as an avenue for training practical pharmaceutical care skills.
4. Seminars and short courses should be organized to equip pharmacist with skills for pharmaceutical care practice.
5. Post graduate education should be enforced.
6. Residency program for pharmaceutical care and other relevant courses should be commenced.
7. Pharmacy curriculum should work out areas of specialization.
8. Pharmacists should be encouraged to specialize.

The above listed suggestions indicate that to improve pharmaceutical care practice, pharmacists at leadership level need to employ political solution with the society but should be firm with colleagues on issues relating to standards of practice and training. This is in line with the FIP strategy of research and development, followed by coaching and training and finally regulation and incentives⁹. Despite the success story of Minnesota due to enactment of favorable laws including remuneration¹⁰, Losinki and Cippole¹¹ revealed in their survey that what really boosted the practice were

1. Clearly defined standards of practice
2. Accessible web- based pharmaceutical care training
3. Commercially available pharmaceutical care practice planning tools and resources.

CONCLUSION

The study reveals that the work force of the pharmacy profession is youthful and enthusiastic about implementing the pharmaceutical care concept. However, there are challenges that are hindering the progress of implementation. Most pharmacists perceive that the challenges are beyond the effort of the average pharmacist. They suggest that these challenges must be overcome by collective effort or law before there will be meaning full progress. Such challenges

are Inter professional rapport and favorable laws. They do acknowledge that the average pharmacist need to be better equipped with skills, knowledge, gadgets and facilities. They also see the need to be more organized and to improve documentation practices. Hence, there is need for the profession to win the support of Government, Healthcare practitioners and the public. The profession also need to improve capacity with skills, tools and an enabling environment. There is also the need for standardization and regulation of the practice.

CONFLICT OF INTEREST

The authors declare that there was no conflict of interest.

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