



Pharmaceutical care perceptions and attitudes of HIV/AIDS clinic pharmacists in southeast Nigerian hospitals

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Abstract

Pharmaceutical care is a ground-breaking concept in the practice of pharmacy which emerged in mid 1970s. The concept includes emotional commitment to the welfare of patients as individuals who require and deserve the pharmacist's compassion, concern and trust. It is a patient-centered care associated with improved health and economic outcomes, reduction in medicine-related adverse events, improved quality of life and reduced morbidity and mortality. Poor infrastructure and logistics have hampered its implementation in Nigeria and the researchers wanted to know if pharmacists are interested in the concept in the first place. This study was designed to assess the attitude of pharmacists working at the HIV/AIDS clinics of four (4) tertiary hospitals in southeast Nigeria towards pharmaceutical care. The study was conducted at the HIV clinics of 4 tertiary hospitals in southeast Nigeria. A self-administered Pharmaceutical care attitude survey (PCAS) questionnaire was used. It is a 25 - item instrument with a 5-point likert - type response scale. The retrieved questionnaires were analyzed with the statistical package for social sciences version 15 (SPSS 15.0, Chicago IL). The attitude scores showed that 15 items had a mean item score above the mid-point score of 3.94 while the other 10 items had mean item score below 3.94, indicating positive attitude to 15 items and negative attitude to 10 items. Hospital pharmacists working in HIV/AIDS clinics in southeast Nigeria have a positive attitude towards pharmaceutical care.

Keywords: Pharmaceutical care; Perceptions; Attitudes; HIV; AIDS; Pharmacists

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1. Introduction

Nigeria is the most populous country in Africa with about 162,470,737 (World Bank, 2011). The pharmacist population in Nigeria is about 16,970 (Abumere, 2012). This gives a Pharmacist - population ratio of 1:9,574 or 11:100,000 Nigerians. This is grossly inadequate considering the volume of work required of pharmacists in pharmaceutical care. Out of this number of pharmacists, more than 2000 are practicing in the various hospitals in Nigeria (Nwaozuzu et al., 2013). Though there is no international recommendation for number of pharmacists per population (FIP, 2009), yet there is a need to reduce this ratio to ensure adequate coverage of the Nigerian population by pharmacists.

The standard of pharmacy practice in Nigeria is not the same as it is in most other countries as practice settings are different (Erah and Nwazuoke, 2002). Pharmaceutical care has for many years been more theoretical than operational. Many factors constitute potentials barriers to and have largely contributed in compromising the standard of pharmacy practice as well as the implementation of pharmaceutical care in Nigeria. These factors have been enumerated and described by many scholars. One of the most important of these factors is the initial inertia in accepting the concept and philosophy of pharmaceutical care when it was first introduced. This poor attitude has gradually improved significantly over the years as some studies on students have shown (Opara et al., 2006 and Udeogaranya et al., 2009).

Pharmaceutical care seems to pose a great challenge for the pharmacy profession in Nigeria. These challenges facing it must be addressed or the concept will remain a theoretic concept in Nigeria.

2. Methods

The study was carried out at the HIV clinics of four (4) tertiary hospitals in southeast Nigeria. Forty eight (48) questionnaires were distributed to the ART pharmacists at the HIV clinics of these four (4) tertiary hospitals in southeast Nigeria and were personally retrieved by an assistant to the researcher.

The questionnaire was a self-administered Pharmaceutical care attitude survey (PCAS) questionnaire. It is a 25 - item instrument with a 5-point likert - type response scale. It was developed and revalidated in the US (Opara et al., 2006 and Udeogaranya et al., 2009). Three of the items were negatively worded. A demographic section was also included to provide information on age, gender, years of practice and area/unit of hospital practice.

The retrieved questionnaires were entered into statistical package for social science version 15 (SPSS 15.0, Chicago IL) and double-checked by another colleague. Demographic data were represented by frequency (percentage) and median (interquartile range). The three (3) negatively worded items were reversed. Mean item scores was computed for each item while mean scale scores were computed for each respondent. A midpoint of 3.94 was used for this 5 - point scale. This was gotten by adding all the scores and computing the average. Mean scale scores above the mid - point score were regarded as positive attitude while those below this mid - point were regarded as negative attitude. Because mean scale scores are normally distributed, parametric tests were used for inferential statistics. One - way ANOVA with post-hoc

test, Sheffe's or students' t - test were used to examine the variance in attitude scores among the different demographic variables. A two - tailed significance level of 0.05 was used.

3. Results

Forty (40) questionnaires were retrieved from the respondents. Nearly half of the respondents (47.5%) were aged 26 - 30 years. The details of the demographics are shown in Table 1.

Table 1. Demographics of pharmacists participating in the Pharmaceutical Care Attitude Survey

Characteristics	n (%)	p value (95% CI)
Age, years (N=40)		
20-25	11 (27.5)	
26-30	19 (47.5)	
31-35	9 (22.5)	
36 and above	1 (2.5)	
Gender (N=40)		
Female	20 (50)	
Male	20 (50)	
Practice experience, years (N=36)		
1-5	28 (77.8)	
6-10	6 (16.7)	
10 and above	2 (5.6)	
Hospitals (N=4)		
University of Nigeria Teaching Hospital, Enugu.	12 (30.0)	
Nnamdi Azikiwe University Teaching Hospital, Awka.	8 (20.0)	
Federal Medical Centre, Owerri.	16 (40.0)	
University Of PortHarcourt Teaching Hospital, PortHarcourt.	4 (10.0)	

Table 1 shows the demographic features of the responding pharmacists. It shows that most of the pharmacists working in the HIV/AIDS clinic pharmacies are the younger pharmacist aged between 26 and 30 years with an equal distribution of male and female pharmacists.

Table 2. Pharmaceutical care attitude questions and pharmacists' response (N=40)

S/N	ITEM	MEAN SCORE \pm SD	% POSITIVE RESPONSE (% NON - RESPONSE)
1	You have a fair understanding of the pharmaceutical concept	4.35 \pm 1.00	90.5 (2.4)
2	Pharmaceutical care centers on patient rather than other product	4.83 \pm 0.67	97.5 (0)
3	The pharmacist emphasizing patient care over the drug product is not	2.17 \pm 1.30	21.9 (7.3)

S/N	ITEM	MEAN SCORE \pm SD	% POSITIVE RESPONSE (% NON - RESPONSE)
	suitable for our developing country R		
4	Pharmacy practice which centers more on the patient rather than the dispensed drug should not replace the traditional practice R	3.67 \pm 1.20	58.5 (2.4)
5	There is no need to abandon traditional practice R	3.47 \pm 1.19	51.2 (2.4)
6	We can secure your willingness to abandon the traditional practice to embrace a patient centered practice	3.75 \pm 1.26	63.4 (0)
7	Pharmacists should concentrate on drug therapy needs of the patient	4.39 \pm 0.91	92.7 (0)
8	Pharmacists should care about drug product and leave patient care to doctors and nursesR	4.53 \pm 0.92	92.7 (0)
9	Pharmacist should abandon pharmaceutical care if there is an opposition from doctors and nurses R	4.68 \pm 0.75	95.1 (0)
10	The present knowledge and skill of the pharmacist are inadequate for patient centered practice R	3.46 \pm 1.18	51.2 (0)
11	You consider your knowledge of drug therapy outcomes inadequate R	4.45 \pm 0.81	87.8 (2.4)
12	Your current pharmaceutical practice is not adequately patient caring R	3.71 \pm 1.20	60.9 (0)
13	The pharmacist hitherto has paid less attention to economic outcome of therapy	2.62 \pm 1.19	27.2 (2.4)
14	At present the layout of our pharmacies is not suited for patient centered practice R	2.75 \pm 1.23	29.8 (2.4)
15	The present knowledge and skill of the pharmacist are inadequate for patient centered careR	3.78 \pm 1.15	70.8 (0)
16	Patients will resist pharmacists' close interactions with them R	4.23 \pm 0.98	87.8 (4.9)
17	Law should not back pharmacist close interaction with patients R	1.58 \pm 0.74	0 (0)
18	There is need for the pharmacist to improve his communication with patient and other care givers	4.72 \pm 0.59	92.1 (2.4)
19	If pharmaceutical care does not attract additional income, pharmacists should not embrace it R	4.12 \pm 0.93	80.5 (0)
20	There is no need for the pharmacist to	4.66 \pm 0.61	97.5 (0)

S/N	ITEM	MEAN SCORE \pm SD	% POSITIVE RESPONSE (% NON - RESPONSE)
	devote extra time for the patient R		
21	Pharmaceutical care will enhance the patient's appreciation of the pharmacist's value	4.85 \pm 0.35	100 (0)
22	You will implement a pharmacists' guideline for managing the individual patient in your practice	4.34 \pm 0.73	90.2 (0)
23	You will be prepared to create enough time to interact with the patient	4.46 \pm 0.59	95.1 (0)
24	You will surely be ready to document all your patient care activities	4.44 \pm 0.70	92.7 (0)
25	You will participate in any training program to enable you practice pharmaceutical care	4.51 \pm 0.74	97.5 (0)

Table 2 shows the attitude score of the responding pharmacists on the 25 items in the questionnaire. About 15 items had a mean item score above the mid-point score of 3.94 while the other 10 items had mean item score below 3.94. Thus the pharmacists showed positive attitude to 15 items and negative attitude to 10 items.

4. Discussion

The present study above identified the perception of and attitude of southeast Nigerian hospital pharmacists working the HIV/AIDS clinics towards pharmaceutical care. It also assessed factors that could have contributed to the observed scores. The researchers had earlier on carried out a similar study amongst the general population of hospital pharmacists in Nigeria but had to replicate the study using a sub - group of this population - ART hospital pharmacists. This was because we are carrying out a series of pharmaceutical care studies among HIV/AIDS patients and needed to know the pharmaceutical care attitudes and perceptions of the pharmacists attending to these patients.

Generally, the study showed that hospital pharmacists working in HIV/AIDS clinics in southeast Nigeria have positive attitude towards pharmaceutical care. This result is in contrast to a similar study carried out by the researchers amongst the general population of Nigerian hospital pharmacists which showed a negative attitude of Nigerian hospital pharmacists toward pharmaceutical care (Nwaozuzu et al., 2013). The results of this study is however similar to the results of similar studies carried out at the faculty of pharmacy, University of Nigeria Nsukka where the students showed positive attitude towards pharmaceutical care (Udeogaranya et al., 2009) and faculty of pharmacy University of Benin, Nigeria where the students showed moderately positive attitude towards pharmaceutical care (Oparah et al., 2006) This positive attitude towards Pharmaceutical care identified in this study is encouraging as the hospital pharmacies in Nigeria are the most prominent sites of pharmacy practice in Nigeria and hence the pace-setting sites for the

implementation of pharmaceutical care in Nigeria. It gives a ray of hope for better future for pharmacy practice in Nigeria as pharmacists in other countries of the world have long embraced and integrated pharmaceutical care into their practice with outstanding results and benefit to their patients, institutions, governments, their practice and even themselves. And as such Nigerian hospital pharmacists cannot afford to be left out. Negative attitudes are a barrier to performing pharmaceutical care. Therefore the need to foster positive attitudes in Nigerian hospital pharmacists has now become more imperative than ever considering the results of this study.

The demographics of the study also showed that most of the pharmacists working in the HIV/AIDS clinics were the younger pharmacists aged 26 - 30 years of age. This is an issue that may need to be addressed as most Nigerian pharmacists within this age bracket are young graduates without enough practical experience. Leaving them handle this special and sensitive and vulnerable class of patients (i.e. HIV/AIDS patients) may not be the best practice considering the magnitude of the global HIV/AIDS burden especially in Africa where the pandemic has had its greatest impact. There is need for a blend of older and younger pharmacists in the care of these HIV positive patients for optimal pharmaceutical care outcomes and results.

Generally, the concept of pharmaceutical care in Nigeria is still facing many challenges and these include lack of adequate infrastructure and logistics for the implementation and sustenance of pharmaceutical care. However, In the area of HIV/AIDS many international Non – governmental organizations (NGOs) like the Global HIV/AIDS Initiative of Nigeria (GHAIN) and Family Health International (FHI) have partnered tremendously with the Nigerian government in improving infrastructure, providing logistics and building manpower capacity needed for the care of HIV/AIDS patients including pharmaceutical care in the tertiary health institutions especially. This greatly improved the quality of care and services in the care of HIV/AIDS patients with very impressive results. This has not been the case with other areas of pharmaceutical and medical care and as such efforts need to be made towards replicating this partnership in this other areas so as to encourage the total integration of the philosophy and principles of pharmaceutical care in all areas of pharmacy and medical practice in Nigeria.

5. Limitations

Because of the nature of the study, the number of pharmacists involved in the study was relatively small and this could have affected the power of the statistical analysis. The results could have been even better had more pharmacists been involved in the study. However, the HIV/AIDS clinic pharmacies are just one out of the many pharmacy units in Nigerian hospitals and so the number of pharmacists working in them is not too many.

6. Conclusion

Hospital pharmacists working in HIV/AIDS clinics in southeast Nigeria showed a positive attitude towards pharmaceutical care. However, this positive attitude should be maintained and or improved on. Governments

and responsible stakeholders should make efforts to provide the entire necessary infrastructure and logistics that will enable this class of pharmacists (and other pharmacists in other areas) to integrate pharmaceutical care into their practice.

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