



Research Article

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Assessment of Patient Satisfaction with Pharmaceutical Services in Community Pharmacies in Bayelsa State South- South of Nigeria



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Abstract

Today, contemporary pharmacy practice exhibits an evolving paradigm shift from traditional medication dispensing to more active and expanded clinical roles, such as clerking of patient on medication, counseling, screening prescriptions, dispensing and any other management work related to the stocking of medications activities. This study was set out to evaluate patient satisfaction with pharmaceutical services. About 300 respondents agreed to participate after they were made to understand the full details of the study. The questionnaire captured demographic data, drug information provided and how satisfied patients were with the pharmaceutical services provided. 60% of respondents reported that information on adverse effects of drugs/side effects was provided. 60% reported that information on food not to be taken with drugs was provided, 54% reported that information on drug-drug interactions was provided, 59% reported that information on what to do when adverse effects of drugs/side effects occur was provided, 59.5% reported that information on how to store their medications was provided, 74.5% reported that information on importance/need for adherence to medication was provided, 70.5% reported that instructions on the need for follow-up was provided.

48% of respondents rated good satisfaction with information provided to them on adverse effects of drugs/side effects. 33.5% rated good satisfaction with information provided to them on food not to be taken with drugs, 41.5% rated good satisfaction with information provided to them on drug-drug interactions, and 45.5% rated good satisfaction with information on what to do when adverse effects of drugs/side effects of drugs, 40% rated good satisfaction with information on storage of medication. Most of the respondents reported that prescribed drugs were available and affordable. Also on demographical data, Occupation, marital status, monthly income and education recorded statistical correlation. Drug information was provided and patients were satisfied with the information provided. However, pharmacists require continuous education on patient care and communication skills.

Keywords: Pharmaceutical services; Community; Satisfaction, Expectations

Introduction

Today, contemporary pharmacy practice exhibits an evolving paradigm shift from traditional medication dispensing to more active and expanded clinical roles, such as clerking of patient on medication counselling, screening prescriptions, dispensing and any other management work related to the stocking of medications activities. Medication counselling has become a key priority for modern community pharmacists. Medication counselling implies the provision of medication information orally or in written form to the patients or their caregivers on rational use of their medications. Studies have shown that

rightful medication counselling by pharmacists identify and correct potential drug therapy problems, side effects and adverse drug reactions. This will provide patient satisfaction with the pharmaceutical services and consequently optimize the patient quality of care. This implies that patient's expectations are being met and patient quality of life equally improves [1].

Pharmaceutical care is key in pharmacy practice globally. This is aim at providing a better outcome for the patients. Patient satisfaction is one of those outcomes. For pharmacies to have high patronage, their service must be attractive for patient

inflow. Patient satisfaction is likely to affect the image of the Pharmacist and pharmacy profession. The need to track patient satisfaction and improvement of pharmaceutical services is vital [2,3].

Drug manufacturing, dispensing and giving pharmaceutical care to patients will continue to be the primary responsibility of the pharmacist. Hence, proper evaluation of the level of satisfaction with medication counselling is pivotal components for predicting the quality of pharmacy services provided by the pharmacy. Medication counselling refers to “providing medication information orally or in written form to the patients or their caregivers on directions of use, advice on side effects, precautions, storage, diet and lifestyle modifications. This will enhance rational use of medicines by the patients and Health professionals. Although, the legal mandate have been given to the Pharmacists to provide medication counselling to every patients, but they have failed to offer drug information to their patients or just provide brief counselling upon patient request [4].

From the array of studies enumerated above we evaluated patient satisfaction with pharmaceutical services in Community pharmacies in Bayelsa State South-South of Nigeria.

Method

Study population

This study was carried out in Yenagoa council Area of Bayelsa State, South- South region of Nigeria with a population 266,008 at the 2006 census [5].

Study design and sample

A total of 600 questionnaires were given, but only 300 respondents agreed to participate after they were made to understand the full details of the study. The sample size was calculated using the formula for evaluating the sample size population [6]. The questionnaire captured demographic data, Pharmaceutical services provided and how they are satisfy the pharmaceutical services provided.

Data analysis

SPSS version 20 was utilized for data analysis. A t-test was also conducted using one way ANOVA.

Demography

About 55% of respondents were female, 44% of respondent’s falls within 18-30years, 26.5% were business men, 49.5% were single, 45.5% were monthly incomes falls within 10,000-20-000, 68.5% had tertiary education and 38.5% were I jaws (Table 1).

Table 1: Socio-demographic characteristics of respondents.

Variable	N=300	
	Frequency	%
Gender		
Male	110	55
Female	90	45
Age group		
18-30	88	44
31-50	87	43.5
51 and above	24	12
Occupation		
Civil servant	49	24.5
Business	53	26.5
Trader	17	8.5
Teacher	19	9.5
Student	51	25.5
Not working	11	5.5
Marital status		
Single	99	49.5
Married	93	46.5
Divorced	3	1.5
Widowed	5	2.5
Monthly income		
10,000-20,000	91	45.5
21,000-50,000	63	31.5

51,000-100,000	25	12.5
101,000 and above	21	10.5
Education		
Primary	9	4.5
Secondary	49	24.5
Tertiary	137	68.5
No formal education	4	2
Ethnicity		
Ijaw	77	38.5
Igbo	49	24.5
Hausa	14	7
Yoruba	16	8
Others	44	22

Information provided by pharmacies

About 60% reported that information on Adverse effects of drugs/side effects noticed was provided, food not to be taken with drugs 60% reported the information was provided, 54% reported that information on drug- drug interaction was provided, 59% reported that information on what to do when adverse effects of drugs/side effects was noticed was provided, 69.5% reported information on how to store medications were

provided, 74.5% reported that information on the importance/ need for adherence to medication regimen was provided, 70.5% reported that information on the need for follow-up was provided, 69.5% reported that information on how medication works was provided, 81.5% reported that information on reason for taking medication was provided, 81.5% of respondents reported that information on name of medication was provided and 57.5% reported that information on change of drugs if any side effects or adverse effects occur was provided (Table 2).

Table 2: information provided by Pharmacies.

Information	Prevalence					
	Yes		No		Not sure	
	Frequency	%	Frequency	%	Frequency	%
Adverse effects of drugs/side effects noticed	120	60	59	29.5	20	10
Food not to be taken with drugs	120	60	62	31	18	9
Drug-drug interactions	108	54	60	30	32	16
What to do when adverse effects of drugs/side effects of drugs are noticed	118	59	54	27	28	14
Storage of medication	139	69.5	40	20	21	10.5
Importance/need for adherence to medication regimen	149	74.5	36	18	15	7.5
Need for follow-up	141	70.5	41	20.5	18	9
How medications work	139	69.5	39	19.5	22	11

Reason for taking medication	163	81.5	26	13	11	5.5
Name of medications	163	81.5	27	13.5	10	5
Change of drugs if any side effects or adverse effects occur	115	57.5	58	29	27	13.5

Table 3: Rating of Respondents' Satisfaction on Information provided at Pharmacy.

Rating								
Information	Good		V. Good		Excellent		Not sure	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Adverse effects of drugs/ side effects noticed	96	48	44	22	34	17	26	13
Food not to be taken with drugs	67	33.5	55	27.5	30	15	48	24
Drug-drug interactions	83	41.5	42	21	29	14.5	46	23
What to do when adverse effects of drugs/side effects of drugs are noticed	91	45.5	49	24.5	29	14.5	31	15.5
Storage of medication	83	41.5	46	23	30	15	41	20.5
Importance/ need for adherence to medication regimen	72	36	60	30	32	16	36	18
Need for follow-up	79	39.5	56	28	32	16	33	16.5
How medications work	69	34.5	48	24	47	23.5	36	18
Name of medication	73	36.5	39	19.5	52	26	36	18
Reason for taking medication	72	36	47	23.5	48	24	33	16.5
Evaluation of therapeutic response	76	38	49	24.5	32	16	43	21.5
When to take medications	67	33.5	50	25	59	29.5	24	12

Satisfaction on information provided at the pharmacy

Regarding satisfaction 48% of respondents reported that they were satisfied with information provided on Adverse effects of drugs/side effects, food not to be taken with drugs 33.5% reported that they were satisfied with the information provided, 41.5% reported that they were satisfied with information provided on drug- drug interaction, 45.5% reported that they were satisfied with information provided on what to do when adverse effects of drugs/side effects, 41.5% reported that they were satisfied with information provided on how to store medications, 36% reported that they were satisfied with information provided on the Importance/need for adherence to medication regimen,

39.5% reported that they were satisfied with information provided on the need for follow-up, 34.5% reported that they

Table 4: Affordability of prescribed drug.

Variable	Yes		No		Not sure	
	Frequency	%	Frequency	%	Frequency	%
Were you able to afford drugs prescribed to you?	186	93	8	4	6	3
Were drugs prescribed to you available	181	90.5	16	8	3	1.5
How expensive are your drugs?	Affordable	High	Low			
	Frequency	%	Frequency	%	Frequency	%
	147	73.5	43	21.5	10	5

Demographic variables on satisfaction

There was no correlation among gender, occupation, marital status, monthly income except for age on satisfaction (Table 5).

Table 5: Impact of socio-demographic variables on satisfaction.

Predictor	Standardized Coefficient Beta	CI at 95%	p-value
Gender	-0.027	-0.226 - 0.154	0.707
Age	-0.123	-0.309 - 0.065	0.199
Occupation	0.014	-0.059 - 0.070	0.866
Marital status	0.039	-0.144 - 0.225	0.665
Monthly income	0.019	0.849 - 0.117	0.849
Education	-0.167	0.037 - 0.358	0.037*

*p-value <0.05 is significant. CI: Confidence interval. Overall model (R Square)=0.037, F (6,192)=1.228, p=0.293.

Discussion

The study revealed that more female participated within the age group of 31-30 years. This is not surprising since female visit to the Community pharmacy is more common and frequent [7]. Majority of the respondents were civil servants, married and holders of tertiary education qualifications. Their monthly

were satisfied with information provided on how medication works, 36% reported that they were satisfied with information provided on reason for taking medication, 36.5% of respondents reported that they were satisfied with information provided on name of medication, 38% reported that they were satisfied with information provided on Evaluation of therapeutic response and 33.5% reported that they were satisfied with information provided on when to take medications (Table 3).

Affordability of prescribed drugs

93% of respondents reported that prescribed drugs were affordable, 90.5% reported the drugs prescribed were available and 73.5% reported that prescribed drugs were not expensive (Table 4).

incomes falls within 10,000-20,000 and are I jaw speaking people. This is expected since Bayelsa State is and I jaw speaking people. Hence, more I jaw speaking people are expected to participate in this study (Wikipedia I jaw people 2007).

Drug information provided at the pharmacy

Regarding drug information provided at the pharmacy most of the respondents reported that information on adverse effects of drugs/side effects was provided, food not to be taken with drugs, drug-drug interactions, what to do when adverse effects of drugs/side effects, how to store their medications, importance/ need for adherence to medication, need for follow-up, how medications works, reasons for taking their medications, name of medications and change of drugs if any side effects or adverse effects was provided. Pharmacist role in providing advice about medications, screening prescriptions, dispensing and any other management work related to the stocking of medications remain sacrosanct.

In contemporary practice pharmaceutical care is now the corner stone of pharmacy practice globally. This will help to improve patient's better on adherence, clinical and economic outcomes. Studies have shown that Pharmacist held unto the ethics of their profession by providing services as mandated

legally. Drug information is given verbally and in written form to patients. This has drastically reduced irrational use of drug. Also patients have equally reported the drug information rendered to them was beneficial to them. However, other studies have reported lack of information on the need on follow-up and documentation at the point of dispensing [8-11].

Regarding Satisfaction with Information Provided at Pharmacy, most of the respondents reported that they were satisfied with adverse effects of drugs/side effects, Food not to be taken with drugs, drug-drug interactions, on what to do when adverse effects of drugs/side effects of drugs, storage of medication, importance/need for adherence, how medications works, name of medication, reasons for taking medication, evaluation of therapeutic response and when to take medications. Several studies have reported that patient satisfaction with pharmaceutical services was provided. Also, patients were willing to receive pharmaceutical information. Their satisfaction is likely associated with the provision of service promptness, pharmacist attitude/ communication skills, medication counselling, pharmacy location, and waiting area [12-15].

A study in Nigeria reported that patient received low satisfaction with pharmaceutical services. This low satisfaction with pharmaceutical services provide may be connected to too high expectation from the patients mostly the literates [16,17]. Patient satisfaction with pharmaceutical services is subjective. It is 'an individual's judgment about the extent to which a product or service provides a pleasurable level of consumption-related fulfillment. This level of satisfaction is based on patient expectations. Hence satisfaction varies based on the patient level of education and exposure. Satisfying the literate require more skills by being at the top of your profession. In the same line satisfaction of the patient that are blind, deaf and dumb will require greater skills.

For the illiterate it will require special skills like the blind, deaf and dumb. Hence, the need of perfect communications skills with adequate knowledge of drugs and disease state is a panacea of providing excellent drug information to the understanding and clarity of the patient which will translate to satisfaction of pharmaceutical services provided. Most pharmacists have deficiencies in communication skills which have impaired adequate provision of pharmaceutical services [18].

Drug information closer to patient via the use of internet. Every educated patient with a reading culture has some form of knowledge/information about his/her medication or disease state before visiting the Hospital or Health professional. To satisfy the generality of patient that visit the pharmacy, the Pharmacists is expected to have first-hand knowledge of drugs and the disease state of the patient to inform/educate the patient more than what he/he already knows. To enhance this,

Pharmacists are encouraged to engage in mandatory continuous education to be at the very best of their practice as an expert of drug [19].

Affordability and availability

Regarding affordability most of prescribed drugs were affordable and available. However, this study reveals that the drugs were expensive.

Accessibility refers to physical access to the products, or where the products can be delivered to patients. It involves the overall organization of the health system and especially, its procurement, supply and dispensing systems. In order to embrace the notion of access to treatment, accessibility in this publication is also understood as encompassing factors such as access to prescribers and proper education and information about the products. Affordability refers to a product's cost vs. the ability and willingness of people (as well as health systems and third-party payers) to pay for it. Affordability entails a product's price components (manufacturing, supply, taxes, mark-ups), as well as policies and other factors that affect these components – such as pricing and reimbursement policies, intellectual property and competition laws, regulatory standards and requirements.

Availability is defined as the presence in a country of products that meet the population's health needs. It refers to the range of products marketed in a country; which of them are selected by the health system; and how and according to which indications and guidelines they should be prescribed and delivered. The availability and affordability of prescribed drugs might have influence patients reported level of satisfaction with pharmaceutical services [20]. On socio demographic variables with satisfaction with pharmaceutical services; gender, Age recorded no correlation whereas, Occupation, marital status, monthly income and education recorded statistical correlation with pharmaceutical service satisfaction.

Conclusion

The study revealed that more female participated within the age group of 31-30years. Pharmaceutical services were provided and Patient reported that the services provided were beneficiary to them and they were equally satisfied with the drug information provided to them. Also medications were affordable and available to patients. Demographical data shows Occupation, marital status, monthly income and education recorded statistical correlation.

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