Patient Satisfaction with Pharmaceutical Care Services in Selected Health Facilities in Delta State, South-South of Nigeria

Godspower Onavbavba¹, Owonaro A Peter² and Eniojukan F Joshua²*  
¹Department of Clinical Pharmacy and Pharmacy Administration, Delta State University, Nigeria  
²Department of Clinical Pharmacy and Pharmacy Practice, Niger Delta University, Nigeria  
Submission: August 22, 2017; Published: September 07, 2017  
*Corresponding author: Eniojukan Joshua F, Public Health Pharmacy unit, Department of Clinical Pharmacy and Pharmacy Practice, Faculty of Pharmacy, Niger Delta University, Wilberforce Island, Bayelsa State, Nigeria, Email: jeniojukan@yahoo.com

Abstract

Introduction: Patients who are satisfied with their overall care by a pharmacist are more likely to take medications rationally and less likely to change from one health care professional to another in an arbitrary manner.

Objectives: This study evaluated patient satisfaction with pharmaceutical care services in some selected Hospitals in Delta State, South – South of Nigeria.

Method: Patients who were visiting the outpatient pharmacy department of Two Tertiary Hospitals and Two Secondary Hospitals for prescription refills were investigated. The inclusion criteria were: patients aged 21 years and above, and consent to participate in the study. A convenient sampling was done, of which a total of 400 questionnaires were distributed across the four health facilities.

Result: In General Hospital Abraka, 21% were within the age group of 31-35 years, 83% were females, 80% were married, 51% had postsecondary education and 35% were retired. In Central Hospital, Agbor, 94% out of which 22.3% were within the age group of 26-30 years, 70.2% were females, 60.6% were married, 45.7% had postsecondary education and 44.7% were traders/self-employed. In Federal Medical Centre, Asaba, 32.2% were within the age group of 41-45 years, 53.3% were females, 48.9% were married, 38.9% had post-secondary education and 31.1% were civil servants. In Delta State University teaching Hospital, Oghara, 18.8% were within the age group of 41-45 years, 62.5% were females, 55.2% were married, 39.6% had post-secondary education and 37.5% were traders/self-employed. The study reported patient satisfaction with pharmaceutical care services in the four health facilities, but Oghara Teaching Hospital was rated highest on satisfaction with pharmaceutical care services. There was correlation between social demography and some of the items as p was <0.05 in some of the items. Regarding, availability of the pharmacists to answer your questions, the study reported no statistical correlation with p value<0.05. There was statistical correlation with friendly explanation with job occupation and marital status.

Conclusion: This study reported patient satisfaction with pharmaceutical care services in the four health facilities. The study recommend more training for the health professionals on pharmaceutical care services and increase awareness of patient on expected pharmaceutical care services from their health care providers.

Keywords: Pharmaceutical services; Satisfaction; Hospital and Expectations

Abbreviations: FIP: International Pharmaceutical Federation; PC: Pharmaceutical Care; LGA: Local Government Areas; SPSS: Statistical Package for Social Sciences; WHO: World Health Organization

Introduction

Patient satisfaction is an integral component of the quality of healthcare [1,2]. Implementation of communication skills, convenience, rational use of medicines can lead to better use of medical services and ultimately better outcomes with improve quality of life for users. Patient satisfaction promotes positive health behaviors, such as compliance and continuity with providers [3]. Patients who are satisfied with their overall care by a pharmacist are more likely to take medications rationally and less likely to change from one health care professional to another [4]. Measuring satisfaction by provider setting is generally interpreted as a proxy for gauging patient perceptions of provider behavior [5]. Other studies have reported that patients place a high value on strong socio psychological and communicative relationships with their caregivers [6].
The International Pharmaceutical Federation (FIP) in 1998, defined pharmaceutical care (PC) as the “responsible provision of pharmacotherapy for the purpose of achieving definite outcomes that improves or maintains a patient’s quality of life”. This is a collaboration process between the pharmacist and the patient who is aimed at preventing or identifying and resolving drug and health related problems. This is targeted at improving patient’s quality of life [7]. This definition was a slight shift from [8]. It is the most widely used definition for pharmaceutical care. Changed the direction of Pharmacy practice worldwide with the paper published on Pharmaceutical Care; as patient oriented rather than the old product oriented focus.

The clinical pharmacy era, is loaded with rapid expansion of functions, professional transition and development of clinically oriented pharmacy practice. The notion of the pharmacy practice had shifted from compounding, and dispensing roles. Currently, emphasis is on clinical service delivery to their patients [9]. Clinical pharmacy is drug use “control” in which Donald Brodie [5] expounded and stated his theory: The ultimate goal of the service of pharmacy must be the safe use of drugs by the public. In this context, the mainstream function of pharmacy is clinical in nature that may be identified accurately as drug-use-control. By “drug-use-control” Brodie & Benson (2007) reported the sum total of knowledge, understanding, judgments, procedures, skills, controls and ethics that assures safety in the distribution and use of medications is needed Brodie & Benson (1976). The overall goal of clinical pharmacy activities is to promote the rational and appropriate use of medicinal products and devices [10]. From the array of previous study, a lot have reported that patients were satisfied with pharmaceutical care services. In this study we will further evaluate patient satisfaction with pharmaceutical care services in some selected Hospitals in Delta State, South of Nigeria.

Method

Study Design

A cross sectional randomized sampling study was carried out in four hospitals located in different Local Government Areas (LGA) in Delta State. These four hospitals were selected from the government hospitals (two Secondary and two Tertiary Health Institutions) in Delta state. Among the four hospitals is a teaching hospital located in Oghara, a Federal Medical Centre in Asaba, a general hospital in Abraka and a Central Hospital located in Agbor.

Study Setting

This research was carried out in four hospitals located in different Local Government Areas (LGA) in Delta State, Nigeria. Delta State was carved out of the former Bendel State on August 27th, 1991. Delta state is a state in Nigeria, populated by the Urhobos, which comprises the majority ethnic group, Enuani-Igbo (Aniocha/Oshimili), Ukwuani/Ndokwa and Ika ethnic nationalities which are collectively referred to as Anioma people, Isoko, Itsekiri, and Efik ethnic nations. The ethnic groups are grouped into three senatorial districts, namely Delta North, Delta South, and Delta Central, for administrative purposes. Delta is an oil producing state of Nigeria situated in the region known as the Niger Delta, South-South Geo-political zone with a population of 4,098,291 (Males: 2,674,306 Females: 2,024,08 [11].

Patients/Participants

Patients who were visiting the outpatient pharmacy department of the various health facilities listed above for prescription refills were investigated. The inclusion criteria were: patients aged 21 years and above, and consent to participate in the study.

Sample Size

A Convenient sampling was done, of which a total of 400 questionnaires were distributed across the four health facilities. 100 questionnaires were used for each of the health facilities [12].

Data Collection Procedures

The data collected included socio demographic such as age, sex, and marital status, level of education, occupation and patient satisfaction. Patient satisfaction with pharmaceutical care services was assessed as humanistic outcome. This assessment was based on the twenty-item questionnaire developed by Larson et al. and also validated in a Nigerian study. The patient satisfaction questionnaire was anchored on; excellent=5, very good =4, good =3, fair =2, and poor=1. The purpose of the questionnaire was explained to the respondents before administering the questionnaires.

Data analysis

Data collected were entered into Microsoft Excel, rechecked for accuracy and loaded into the Statistical Package for Social Sciences (SPSS) software (version 21). Descriptive Statistics such as mean, percentage as well as inferential statistical analysis were conducted.

Ethical Approval

Ethical approval was obtained from ethics committee in the different health facilities used. Respondents were sure of confidentiality of information provided and names were not included in the questionnaire.

Result

Socio Demographic characteristics

In General Hospital Abraka, after retrieving and sorting out, all the 100 questionnaires distributed were well filled, out of which 21% were within the age group of 31- 35 years, 83% were females, 80% were married, 51% had postsecondary education and 35% were retired. In Central Hospital, Agbor after retrieving and sorting out, only 94 out of the 100 questionnaires distributed were well filled giving a response rate of 94% out of which 22.3% were within the age group of 26- 30 years, 70.2% were females, 60.6% were married, 45.7% had postsecondary education and 44.7% were trader/self-employed.
In Federal Medical Centre, Asaba, after retrieving and sorting out, only 90 out of the 100 questionnaires distributed were well filled giving a response rate of 90% out of which 32.2% were within the age group of 41-45 years, 53.3% were females, 48.9% were married, 38.9% had post-secondary education and 31.1% were civil servants. In Delta State University teaching Hospital, Oghara, after retrieving and sorting out, only 96 out of the 100 questionnaires distributed were usable giving a response rate of 96% out of which 18.8% were within the age group of 41-45 years, 62.5% were females, 55.2% were married, 39.6% had post-secondary education and 37.5% were traders/self-employed (Table 1).

Table 1: Socio demographic characteristics of the respondents.

| Variables            | Abraka N=100 | Agbor N=94 | Asaba N=90 | Oghara N=96 | Total N=380 |
|----------------------|--------------|------------|------------|-------------|-------------|
| **Age (yrs)**        |              |            |            |             |             |
| 21                   | 17 (17)      | 17 (18.1)  | 6 (6.7)    | 12 (12.5)   | 52 (13.7)   |
| 26                   | 19 (19)      | 21 (22.3)  | 10 (11.1)  | 17 (17.5)   | 77 (20.3)   |
| 31                   | 21 (21)      | 10 (10.6)  | 15 (16.7)  | 13 (12.5)   | 59 (15.5)   |
| 36                   | 4 (4)        | 9 (9.6)    | 22 (24.4)  | 15 (15.6)   | 50 (13.2)   |
| 41                   | 13 (13)      | 11 (11.7)  | 29 (32.2)  | 18 (18.8)   | 71 (18.7)   |
| 46-50                | 4 (4)        | 14 (14.9)  | 4 (4.4)    | 10 (10.4)   | 32 (8.4)    |
| 51 and above         | 12 (12)      | 12 (12.8)  | 4 (4.4)    | 11 (11.5)   | 39 (10.3)   |
| **Sex**              |              |            |            |             |             |
| Male                 | 17 (17)      | 28 (29.8)  | 42 (46.7)  | 36 (37.5)   | 123 (32.4)  |
| Female               | 83 (83)      | 66 (70.2)  | 48 (53.3)  | 60 (62.5)   | 257 (67.6)  |
| **Marital status**   |              |            |            |             |             |
| Single               | 10 (10)      | 27 (28.7)  | 27 (30.0)  | 28 (29.2)   | 92 (24.2)   |
| Married              | 80 (80)      | 57 (60.6)  | 44 (48.9)  | 53 (55.2)   | 234 (61.6)  |
| Divorced/separated   | 1 (1)        | 13 (14.4)  | 6 (6.3)    | 20 (5.3)    |              |
| Widowed              | 9 (9)        | 10 (10)    | 6 (6.7)    | 9 (9.4)     | 34 (8.9)    |
| Co-habiting          |              |            |            |             |             |
| **Educational status**|            |            |            |             |             |
| No formal education  | 16 (16)      | 16 (17.0)  | 13 (14.4)  | 15 (15.6)   | 60 (15.5)   |
| Primary education    | 22 (22)      | 22 (23.4)  | 13 (14.4)  | 21 (21.9)   | 78 (20.5)   |
| Secondary education  | 27 (27)      | 21 (22.3)  | 13 (14.4)  | 27 (28.1)   | 110 (28.9)  |
| Post secondary       | 51 (51)      | 43 (45.7)  | 35 (38.9)  | 38 (39.6)   | 161 (42.4)  |
| **Occupation**       |              |            |            |             |             |
| Unemployed           | 16 (16)      | 16 (17.0)  | 13 (14.4)  | 15 (15.6)   | 60 (15.5)   |
| Civil servant        | 17 (17)      | 13 (13.8)  | 28 (31.1)  | 20 (20.8)   | 78 (20.5)   |
| Student              | 12 (12)      | 7 (7.4)    | 16 (17.8)  | 11 (11.5)   | 46 (12.1)   |
| Retired              | 35 (35)      | 10 (10.6)  | 7 (7.8)    | 10 (10.4)   | 34 (8.9)    |
| Trader/Self-employed | 7 (7)        | 42 (44.7)  | 26 (28.9)  | 36 (37.5)   | 139 (36.6)  |
| Others               | 13 (13)      | 6 (6.4)    | 4 (4.2)    | 23 (6.1)    |             |

Satisfaction Assessment

Table 2: Scores of patients’ satisfaction assessment with Pharmaceutical services.

| Item Questions                  | ABRAKA N=100 Mean ± SD | AGBOR N=94 Mean ± SD | ASABA N=90 Mean ± SD | OGHARA N=96 Mean ± SD | TOTAL N=380 Mean ± SD |
|---------------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|
| ‘Friendly explanation’ items    |                        |                       |                       |                        |                        |
| How satisfied are you with;     |                        |                       |                       |                        |                        |
The patients’ satisfaction questionnaire was grouped into 2 sub scales, namely: Friendly explanation item and managing therapy item scale (drug management scale). Patients’ satisfaction with pharmaceutical care services was above average in these two components for all the four health facilities visited. Delta State University Teaching Hospital received the highest satisfaction with a mean score of 3.82±0.99 for the friendly explanation items and 3.75±0.92 for the managing therapy items (midpoint 3.0, range 1-5) (Table 2), (Figure 1).

**Managing therapy items**

**Table 3:** Frequency statistics of patients satisfaction towards Pharmaceutical services for General hospital Abraka n=100.

| Item questions                                                                 | Poor | Fair | Good  | Very good | Excellent |
|--------------------------------------------------------------------------------|------|------|-------|-----------|-----------|
| The professional appearance of the pharmacy                                   | 10(10.0) | 6(6.0) | 45(45.0) | 28(28.0) | 11(11.0) |

**Figure 1:** Mean response for all the health facilities.
Table 4: Frequency statistics of patients’ satisfaction towards Pharmaceutical services for Central Hospital Agbor n=94.

| Item questions                                      | Poor  | Fair  | Good  | Very good | Excellent |
|-----------------------------------------------------|-------|-------|-------|-----------|-----------|
| The professional appearance of the pharmacy         | 9(9.6)| 10(10.6)| 48(51.1)| 19(20.2)| 8(8.5)   |
| The availability of the pharmacists to answer your question | 2(2.1)| 1(1.1)| 28(29.8)| 16(17.0)| 47(50.0) |
| The pharmacists professional relationship with you   | 1(1.1)| 2(2.1)| 27(28.7)| 43(45.7)| 21(22.3) |
| The pharmacist ability to advise you about problems that you might have with your medications | 3(3.2)| 6(6.4)| 22(23.4)| 48(51.1)| 15(16.0) |
| The promptness of prescription drug service          | 3(3.2)| 6(6.4)| 34(36.2)| 32(34.0)| 19(20.0) |
| The professionalism of the pharmacy staff           | 3(3.2)| 1(1.1)| 21(22.3)| 40(42.6)| 29(30.9) |
| How well the pharmacists explain what your medication do | 15(16.0)| 5(5.3)| 19(20.2)| 29(30.9)| 26(27.7) |
| How well the pharmacist instructs you about how to take your medications | 1(1.1)| 1(1.1)| 14(14.9)| 41(43.6)| 37(39.4) |
| The overall services of the pharmacy                 | 3(3.2)| 4(4.3)| 19(20.2)| 35(37.2)| 33(33.1) |
| How well the pharmacist answers your questions       | 3(3.2)| 22(23.4)| 35(37.2)| 34(36.2) |
| The courtesy and respect shown to you by pharmacy staff | 3(3.2)| 5(5.3)| 17(18.1)| 34(36.2)| 35(37.2) |
| The pharmacists interest in your health              | 1(1.1)| 2(2.1)| 24(25.5)| 38(40.4)| 29(30.9) |
| How well the pharmacists help you to manage your medications | 1(1.1)| 7(7.4)| 18(19.1)| 53(56.4)| 15(16.0) |
| The pharmacists effort to solve problems that you have with your medications | 1(1.1)| 3(3.2)| 21(22.3)| 59(62.8)| 10(10.6) |
| The responsibility that the pharmacists assume for your drug therapy | 1(1.1)| 5(5.3)| 22(23.4)| 52(55.3)| 14(14.9) |
| The pharmacists effort to help you improve your health and stay healthy | 2(2.1)| 5(5.3)| 19(20.2)| 52(55.3)| 16(17.0) |
| The privacy of your conversations with the pharmacists | 2(2.1)| 7(7.4)| 23(24.5)| 44(46.8)| 18(19.1) |
The pharmacist efforts to ensure that your medications do what they are supposed to  
| Poor | Fair | Good | Very good | Excellent |
|-----|-----|------|-----------|-----------|
| 4(4.4) | 37(41.1) | 42(46.7) | 7(7.8) |

How well the pharmacists explains possible side effects  
| Poor | Fair | Good | Very good | Excellent |
|-----|-----|------|-----------|-----------|
| 36(38.3) | 4(4.3) | 14(14.9) | 31(33.0) | 9(9.6) |

The amount of time the pharmacists offer to spend with you  
| Poor | Fair | Good | Very good | Excellent |
|-----|-----|------|-----------|-----------|
| 5(5.3) | 5(5.3) | 17(18.1) | 44(46.8) | 23(24.5) |

Total  
| Poor | Fair | Good | Very good | Excellent |
|-----|-----|------|-----------|-----------|
| 96(5.1) | 81(4.3) | 451(24.0) | 802(42.7) | 450(23.9) |

### Table 5: Frequency statistics of patients satisfaction towards Pharmaceutical services for Federal Medical Centre, Asaba (n=90).

| Item questions                                                                 | Poor | Fair | Good | Very good | Excellent |
|--------------------------------------------------------------------------------|-----|-----|------|-----------|-----------|
| The professional appearance of the pharmacy                                   | 10(11.1) | 25(27.8) | 25(27.8) | 30(33.3) |
| The availability of the pharmacists to answer your question                   | 4(4.4) | 37(41.1) | 42(46.7) | 7(7.8) |
| The pharmacists professional relationship with you                           | 6(6.7) | 22(24.4) | 53(58.9) | 9(10.0) |
| The pharmacist ability to advice you about problems that you might have with your medications | 4(4.4) | 27(30.0) | 47(52.2) | 12(13.3) |
| The promptness of prescription drug service                                  | 8(8.9) | 6(6.7) | 28(31.1) | 45(50.0) | 3(3.3) |
| The professionalism of the pharmacy staff                                   | 6(6.7) | 27(30.0) | 47(52.2) | 10(11.1) |
| How well the pharmacists explain what your medication do                      | 19(21.1) | 67(74.4) | 4(4.4) |
| How well the pharmacist instructs you about how to take your medications     | 2(2.2) | 21(23.3) | 49(54.4) | 18(20.0) |
| The overall services of the pharmacy                                         | 29(32.2) | 5(56.7) | 10(11.1) |
| How well the pharmacist answers your questions                               | 2(2.2) | 16(17.8) | 66(73.3) | 6(6.7) |
| The courtesy and respect shown to you by pharmacy staff                       | 4(4.4) | 27(30.0) | 44(48.9) | 15(16.7) |
| The pharmacists interest in your health                                      | 2(2.2) | 4(4.4) | 27(30.0) | 44(48.9) | 1(1.0) |
| How well the pharmacists help you to manage your medications                 | 2(2.2) | 12(13.3) | 59(65.6) | 17(18.9) |
| The pharmacists effort to solve problems that you have with your medications | 2(2.2) | 25(27.8) | 53(58.9) | 10(11.1) |
| The responsibility that the pharmacists assume for your drug therapy          | 2(2.2) | 27(30.0) | 53(58.9) | 8(8.9) |
| The pharmacists effort to help you improve your health and stay healthy       | 2(2.2) | 33(36.7) | 44(48.9) | 11(12.2) |
| The privacy of your conversations with the pharmacists                        | 12(13.3) | 19(21.1) | 48(53.3) | 11(12.2) |
| The pharmacist efforts to ensure that your medications do what they are supposed to | 4(4.4) | 30(33.3) | 41(45.6) | 15(16.7) |
| How well the pharmacists explains possible side effects                       | 11(12.2) | 26(28.9) | 51(56.7) | 2(2.2) |
| The amount of time the pharmacists offer to spend with you                   | 24(26.7) | 31(34.4) | 35(38.9) |
| Total                                                                        | 22(1.2) | 120(6.7) | 508(28.2) | 969(53.8) | 181(10.1) |

### Table 6: Frequency statistics of patient’s satisfaction towards Pharmaceutical services for Delta State University Teaching Hospital, Oghara.

| Item questions                                                                 | Poor | Fair | Good | Very good | Excellent |
|--------------------------------------------------------------------------------|-----|-----|------|-----------|-----------|
| The professional appearance of the pharmacy                                   | 1(1.0) | 30(31.3) | 32(33.3) | 33(34.4) |
| The availability of the pharmacists to answer your questions                   | 2(2.1) | 3(3.1) | 33(34.4) | 28(29.2) | 30(31.3) |
| The pharmacists professional relationship with you                           | 1(1.0) | 5(5.2) | 26(27.1) | 49(51.0) | 14(14.6) |
| The pharmacist ability to advice you about problems that you might have with your medications | 2(2.1) | 5(5.2) | 26(27.1) | 49(51.0) | 14(14.6) |
| The promptness of prescription drug service                                  | 6(6.3) | 6(6.3) | 33(34.4) | 39(40.6) | 12(12.5) |
| The professionalism of the pharmacy staff                                   | 2(2.1) | 4(4.2) | 25(26.0) | 43(44.8) | 22(22.9) |
| How well the pharmacists explain what your medication do                      | 8(8.3) | 4(4.2) | 21(21.9) | 46(47.9) | 17(17.9) |
| How well the pharmacist instructs you about how to take your medications     | 1(1.0) | 2(2.1) | 18(18.8) | 48(50.0) | 27(28.1) |
| The overall services of the pharmacy                                         | 2(2.1) | 2(2.1) | 25(26.0) | 42(43.8) | 26(26.0) |
| How well the pharmacist answers your questions                               | 2(2.1) | 1(1.0) | 21(21.9) | 48(50.0) | 24(25.0) |
| The courtesy and respect shown to you by pharmacy staff                       | 2(2.1) | 5(5.2) | 24(25.0) | 39(40.0) | 23(24.0) |
The pharmacists interest in your health | 2(2.1) | 3(3.1) | 29(30.2) | 39(40.6) | 23(24.0)
How well the pharmacists help you to manage your medications | 1(1.0) | 5(5.2) | 16(16.7) | 57(59.4) | 17(17.7)
The pharmacists effort to solve problems that you have with your medications | 1(1.0) | 3(3.1) | 24(25.0) | 56(58.3) | 12(12.5)
The responsibility that the pharmacists assume for your drug therapy | 1(1.0) | 4(4.2) | 25(26.0) | 54(56.3) | 12(12.5)
The pharmacists effort to help you improve your health and stay healthy | 2(2.1) | 10(10.4) | 22(22.9) | 47(49.0) | 15(15.6)
The privacy of your conversations with the pharmacists | 2(2.1) | 10(10.4) | 22(22.9) | 47(49.0) | 15(15.6)
The pharmacists effort to ensure that your medications do what they are supposed to | 1(1.0) | 3(3.1) | 28(29.2) | 52(54.2) | 12(12.5)
How well the pharmacists explains possible side effects | 4(4.2) | 15(15.6) | 24(25.0) | 38(38.6) | 15(15.6)
The amount of time the pharmacists offer to spend with you | 4(4.2) | 15(15.6) | 24(25.0) | 38(38.6) | 15(15.6)
Total | 42(2.2) | 89(4.6) | 499(26.0) | 900(46.9) | 386(20.1)

Figure 2: Positive and negative response for all the health facilities.

Figure 3: Negative and positive response for secondary and tertiary health facilities.

All the values were de-aggregated into positive and negative response, of which poor and fair represent negative response while good, very good and excellent represent positive response. Central Hospital Abraka had a positive response of 87.3%, Delta state University Teaching Hospital Oghara had a positive response of 93.2%, summary of all secondary was 88.8%, and summary of all tertiary was 92.6% (Table 7). Oghara which is the teaching Hospital had the highest positive response while Abraka health facility had the least (Figures 2 & 3).

Table 7: Positive and Negative Response.

| Health facility | Negative response N(%) | Positive response N(%) |
|-----------------|-------------------------|------------------------|
| Abraka n=100 (total of 2000 responses) | 255(12.8) | 174(87.3) |
| Agbor n=94 (total of 1880 responses) | 177(9.4) | 1703(90.6) |
| Asaba n= 90 (total of 1800 responses) | 142(7.9) | 1615(92.1) |
| Oghara n = 96 (total of 1920) | 131(6.8) | 1785(93.2) |
| Summary of secondary n =194 (total of 3880 responses) | 432(11.1) | 3447(88.8) |
| Summary of tertiary n = 186 (total of 3720 responses) | 273(7.3) | 3443(92.6) |

Correlations/Cross-Tabulation of Satisfaction assessment for all Health facilities visited with social Demography

Table 8: Correlations/ Cross-Tabulations of some friendly explanation item with gender.

| Item                                      | Male n(%) | Female n(%) | $X^2$ | Df | p-value |
|-------------------------------------------|-----------|-------------|-------|-----|---------|
| The professional appearance of the pharmacy | poor 6(2.3) | 5(4.1) | 7(2.7) | 17.023 | 4 | 0.002 |
|                                           | Fair 33(26.8) | 81(31.5) | 48(17.9) | 68(55.3) | 94(36.6) | 17(13.8) | 69(80.2) |
**Correlation / Cross-tabulation of satisfaction assessment with social demography.** There was correlation or statistical significance between social demography, how well the pharmacists instruct you on how to take your medications and the courtesy and respect shown to you by the pharmacy staff asp was <0.05. But there was no statistical correlation in availability of the pharmacists to answer your questions (Table 8).

**Correlations/Cross-Tabulations of Some Managing Therapy Item with Gender**

| Item                                             | Male n(%) | Female n(%) | X²     | Df | p-value |
|--------------------------------------------------|-----------|-------------|--------|----|---------|
| The pharmacists effort to solve problems that you have with your medications | Poor 2(1.6) | 1(0.4) | 6.989 | 4  | 0.136   |
|                                                  | Fair 8(40.0) | 12(60.0) |        |    |         |
|                                                  | Good 26(21.1) | 80(31.5) |        |    |         |
|                                                  | Very good 73(59.3) | 128(49.8) |        |    |         |
|                                                  | Excellent 14(11.5) | 36(9.5) |        |    |         |
| The responsibility that the pharmacist assume for your drug therapy | Poor 4(3.3) | 3(1.2) | 6.105 | 4  | 0.191   |
|                                                  | Fair 4(3.3) | 21(8.2) |        |    |         |
|                                                  | Good 41(33.3) | 71(27.6) |        |    |         |
|                                                  | Very good 59(48.0) | 127(68.3) |        |    |         |
|                                                  | Excellent 15(12.2) | 35(13.6) |        |    |         |
| The privacy of your conversation with the pharmacists | Poor 4(3.3) | 26(10.1) | 15.959 | 4  | 0.003   |
|                                                  | Fair 9(7.3) | 28(10.9) |        |    |         |
|                                                  | Good 23(18.7) | 73(28.4) |        |    |         |
|                                                  | Very good 67(54.5) | 93(36.2) |        |    |         |
|                                                  | Excellent 20(16.3) | 37(14.4) |        |    |         |
| How well the pharmacists explain the possible side effects | Poor 16(13.0) | 49(19.1) | 6.164 | 4  | 0.187   |
|                                                  | Fair 10(8.1) | 20(7.8) |        |    |         |
|                                                  | Good 28(22.8) | 65(25.3) |        |    |         |
|                                                  | Very good 55(44.7) | 84(32.7) |        |    |         |
|                                                  | Excellent 14(11.4) | 39(15.5) |        |    |         |
There was no statistical correlation on managing therapy with gender except for privacy of your conversation with the pharmacist (Table 9).

**Educational Level**

There was no statistical correlation with education except for how well the pharmacists instruct you about how to take your medications and availability of the pharmacists to answer your questions (Table 10).

**Correlations/Cross-Tabulations of Some Friendly Explanation Items with Marital status**

About 39.1%, 37.2%, 35% of single, married and divorced respectively, respondents reported that the professional appearance was good, availability of the pharmacist to answer your questions was good, and 61.8% respectively, of single, married and divorced respondents reported that how well the pharmacists instruct you about how to take your medication was very good. Likewise, the courtesy and respect shown to patients by pharmacy staff was reported very good. There was statistical correlation with friendly explanation and marital status, the professional appearance of the pharmacy, the availability of the pharmacist to answer your questions, how well the pharmacists instruct you about how to take your medication and the courtesy and respect shown to you by pharmacy staff (Table 11).

**Table 10: Educational level.**

| Item                                              | No formal education n(%) | Primary education n(%) | Secondary education n(%) | Post Secondary education n(%) | X² | Df | p-value |
|---------------------------------------------------|-------------------------|------------------------|--------------------------|-------------------------------|----|----|---------|
| The professional appearance of the pharmacy       |                          |                        |                          |                               |    |    |         |
| Poor                                              | 2(6.5)                  | 6(7.7)                 | 11(10.0)                 | 10(6.2)                       | 20.234 | 12 | 0.063  |
| Fair                                              | 5(16.1)                 | 8(10.3)                | 8(7.3)                   | 21(13.0)                      |      |    |         |
| Good                                               | 5                       | 21(13.0)               | 39                       | 64                            |      |    |         |
| Very good                                          | 11(35.5)                | 16(20.5)               | 39(35.5)                 | 43(39.5)                      |      |    |         |
| Excellent                                          | 8(25.8)                 | 8(10.3)                | 13(11.8)                 | 23(14.3)                      |      |    |         |
| The availability of the pharmacists to answer your questions | |                        |                          |                               | 41.578 | 12 | 0.000  |
| Poor                                              | 3(3.8)                  | 4(3.6)                 |                          |                               |      |    |         |
| Fair                                              | 4(5.1)                  | 6(5.5)                 |                          |                               |      |    |         |
| Good                                               | 22(71.0)                | 24(30.8)               | 41(37.3)                 | 55(34.2)                      |      |    |         |
| Very good                                          | 31(39.7)                | 35(31.8)               | 52(32.3)                 |                               |      |    |         |
| Excellent                                          | 9(29.0)                 | 16(20.5)               | 24(21.8)                 | 53(32.9)                      |      |    |         |
| How well the pharmacists instructs you about how to take your medications | |                        |                          |                               | 20.586 | 12 | 0.057  |
| Poor                                              | 0                       | 2(2.6)                 | 2(1.8)                   |                               |      |    |         |
| Fair                                              |                          | 3(2.7)                 | 3(1.9)                   |                               |      |    |         |
| Good                                               | 13(41.9)                | 23(29.5)               | 19(17.3)                 | 37(23.0)                      |      |    |         |
| Very good                                          | 12(38.7)                | 35(44.9)               | 46(41.8)                 | 81(50.3)                      |      |    |         |
| Excellent                                          | 6(19.4)                 | 18(23.1)               | 40(36.4)                 | 40(24.8)                      |      |    |         |
| The courtesy and respect shown to you by pharmacy staff | |                        |                          |                               | 19.986 | 12 | 0.067  |
| Poor                                              |                          | 2(1.8)                 | 3(1.9)                   |                               |      |    |         |
| Fair                                              | 6(19.4)                 | 4(5.1)                 | 3(2.7)                   | 7(4.3)                        |      |    |         |
| Good                                               | 6(19.4)                 | 26(33.3)               | 25(25.8)                 | 40(24.8)                      |      |    |         |
| Very good                                          | 12(38.7)                | 30(38.5)               | 44(40.0)                 | 66(41.0)                      |      |    |         |
| Excellent                                          | 7(22.6)                 | 18(23.1)               | 36(32.7)                 | 45(28.0)                      |      |    |         |

X² is significant at p<0.05
### Table 11: Correlations/ Cross-Tabulations Of some friendly explanation items with Marital status.

|                               | Marital Status |         |         |       |       |       |       |
|-------------------------------|----------------|---------|---------|-------|-------|-------|-------|
|                               | Single         | Married | Divorced/ | Widowed|       |       |       |
|                               |                |         | separated|       |       |       |       |
| The professional appearance of the pharmacy | Poor           | 14      | 8       | 4     | 3    | 27.536 | 12 0.006 |
|                               |                |         |         |       |       |       |       |
|                               | Fair           | 12      | 27      | 2     | 1    |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Good           | 36      | 87      | 7     | 18   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Very good      | 17      | 79      | 4     | 9    |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Excellent      | 13      | 33      | 3     | 3    |       |       |
| The availability of the pharmacist to answer your questions | Poor           | 7       |         |       |       | 59.219 | 12 0.000 |
|                               |                |         |         |       |       |       |       |
|                               | Fair           | 8       | 3       |       |       |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Good           | 52      | 71      | 3     | 16   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Very good      | 24      | 68      | 14    | 12   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Excellent      | 16      | 80      | 6     |      |       |       |
| How well the pharmacists instructs you about how to take your medication | Poor           |         |        |       |       |       | 34.934 12 0.000 |
|                               |                |         |         |       |       |       |       |
|                               | Fair           | 5       | 1       |       |       |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Good           | 24      | 56      | 4     | 8    |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Very good      | 43      | 94      | 16    | 21   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Excellent      | 20      | 79      | 5     |      |       |       |
| The courtesy and respect shown to you by pharmacy staff | Poor           |         |        |       |       |       | 41.044 12 0.000 |
|                               |                |         |         |       |       |       |       |
|                               | Fair           | 9       | 6       |       |       |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Good           | 30      | 51      | 6     | 10   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Very good      | 36      | 88      | 14    | 14   |       |       |
|                               |                |         |         |       |       |       |       |
|                               | Excellent      | 17      | 84      | 5     |      |       |       |

$X^2$ is significant at $p<0.05$
Correlations/ Cross-Tabulations of some friendly explanation Items with Job Occupation

**Table 12: Correlations/ Cross-Tabulations of some friendly explanation items with Job occupation.**

| Job occupation | Unemployed | Civil servant | Student | Retired | Trader/self-employed | Others | $X^2$ | Df | p-value |
|----------------|------------|---------------|---------|---------|-----------------------|--------|-------|-----|---------|
| The professional appearance of the pharmacy | Poor | 8 | 9 | 5 | 2 | 2 | 3 | 37.100 | 20 | 0.011 |
| | 13.3% | 11.5% | 10.9% | 5.9% | 14% | 13.0% |
| | Fair | 9 | 15 | 3 | 1 | 10 | 4 | 15.0% | 19.2% | 6.5% | 2.9% | 7.2% | 17.4% |
| | Good | 20 | 23 | 20 | 15 | 63 | 7 | 33.3% | 29.5% | 43.5% | 44.1% | 45.3% | 30.4% |
| | Very good | 14 | 20 | 13 | 15 | 40 | 7 | 23.3% | 25.6% | 28.3% | 44.1% | 28.8% | 30.4% |
| | Excellent | 9 | 11 | 5 | 1 | 24 | 2 | 15.0% | 14.1% | 10.9% | 2.9% | 17.3% | 8.7% |
| The availability of the pharmacist to answer your questions | Poor | 2 | 1 | 4 | 3.3% | 2.9% | 2.9% |
| | Fair | 6 | 2 | 3 | 7.7% | 1.4% | 13.0% |
| | Good | 31 | 20 | 15 | 13 | 55 | 8 | 51.7% | 25.6% | 32.6% | 38.2% | 39.6% | 34.8% |
| | Very good | 6 | 31 | 25 | 10 | 40 | 6 | 10.0% | 39.7% | 54.3% | 29.4% | 28.8% | 26.1% |
| | Excellent | 21 | 21 | 6 | 10 | 38 | 6 | 35.0% | 26.9% | 13.0% | 29.4% | 27.3% | 26.1% |
| How well the pharmacists instructs you about how to take your medication | Poor | 2 | 2 | 2.6% | 1.4% |
| | Fair | 3 | 2 | 3.8% | 4.3% | 4.3% |
| | Good | 13 | 20 | 11 | 8 | 34 | 6 | 21.7% | 25.6% | 23.9% | 23.5% | 24.5% | 26.1% |
| | Very good | 31 | 37 | 20 | 15 | 66 | 5 | 51.7% | 47.4% | 43.5% | 44.1% | 47.5% | 21.7% |
| | Excellent | 16 | 16 | 13 | 11 | 37 | 11 | 26.7% | 20.5% | 28.3% | 32.4% | 26.6% | 47.8% |
| The courtesy and respect shown to you by pharmacy staff | Poor | 5 | | | | | | 53.448 | 20 | 0.000 |
| | Fair | 4 | 2 | 3 | 6 | 5 | 3.6% |
| | Good | 26 | 21 | 15 | 3 | 22 | 10 | 43.3% | 26.9% | 32.6% | 8.8% | 15.8% | 43.5% |
| | Very good | 21 | 35 | 16 | 10 | 63 | 7 | 35.0% | 44.9% | 34.8% | 29.4% | 45.3% | 30.4% |
| | Excellent | 9 | 20 | 12 | 15 | 44 | 6 | 15.0% | 25.6% | 26.1% | 44.1% | 31.7% | 26.1% |

$X^2$ is significant at $p<0.05$. 

How to cite this article: Godspower O, Owonaro A P, Eniojukan F J. Patient Satisfaction with Pharmaceutical Care Services in Selected Health Facilities in Delta State, South-South of Nigeria. Ortho & Rheum Open Access 2017; 8(3): 555739. DOI: 10.19080/OROAJO.2017.08.555739.
Discussion

Demography

The study revealed that more female participated in the study carried out in the four Health facilities. Although, they were more of married women, civil servant, mostly within the age group of 41-45 years with post-secondary education. The high number of female is expected. Studies have shown that more female visit health facility for medical problems [13].

Satisfaction Assessment

The patients’ satisfaction was grouped into 2 sub scales. They are friendly explanation item and managing therapy item scale (drug management scale). Patients’ satisfaction with pharmaceutical care services was rated above average in these two components for all the four health facilities. This shows that Pharmaceutical care is well integrated in all pharmacy departments in the Health facility. This is in line with other studies. Pharmacists are living up to their responsibility as prescribed by world Health Organization (WHO) and international pharmaceutical federation [7,8]. This reported patient satisfaction is basically assessed by patient’s perception and attitude of service providers [1],[14-19]. Also another indicator of patient satisfaction with pharmaceutical care services is that patients take their medications rationally and pharmacists of late have improve in their communication skills [4,5].

However, Delta State University Teaching Hospital had the highest satisfaction with a mean score of 3.82± 0.99 for the friendly explanation items and 3.75± 0.92 for the managing therapy items (midpoint 3.0, range 1- 5). This reported patient high satisfaction may be due to the high standard of health professionals and structural out-fit in the pharmacy department in the teaching Hospital. High level of pharmaceutical care delivery does not depend on just the quality of personnel but the structural outfit or layout of the pharmacy unit has a major impact in boosting service delivery. The result showed that respondents had post-secondary education; this means that they are literate and are exposed to pharmaceutical care services to be provided with high expectations. Also patient expectation may be very high in pharmaceutical care services they are expecting to get from the pharmacy [20].

This study has shown that in spite of their high expectations, pharmacist is meeting up to patients expectations with quality pharmaceutical care services they render to them. Several studies have reported that patients were provided with pharmaceutical care services and were satisfied with the services provided. Also patients were willing to receive drug information from pharmacists. Their satisfaction is likely associated with the provision of Pharmaceutical care services, promptness in service delivery, pharmacist attitude/ communication skills, medication counseling, pharmacy physical structure, and reduced waiting time in the pharmacy [21-27].

Frequency statistics for patient’s satisfaction

Regarding Pharmacy professional appearance, the four hospitals were rated excellent. This implies that the pharmacies were neat and pharmacists were in their best professional conduct. Also pharmacists showed competency in their job. This connotes that patients were satisfied with the pharmaceutical care services provided [28].

In the four health facilities, about 50% of single, married and divorced respondents reported that the professional appearance was satisfactory. Pharmacists are the most accessible health care professionals and play a key role in the delivery of health care services, particularly in ensuring effective and safe treatment with drugs. Pharmacist’s role in the medical industry will continue to revolve towards patient oriented services to achieve optimal safe use of medicines. Pharmacists are the most trusted and highly rated professionals. Their professional appearance before patients is crucial in patient building confident in them and their services they will and about to deliver to their patients. This will raise patient confident with expression of satisfaction which will translate to compliance. Hence, the drug use policy has been met with rational use of drug, clinical and humanistic outcomes will be achieved. Other studies have equally reported satisfaction with pharmacist professional appearance [22].

Regarding availability of the pharmacist to answer your questions over 50% of respondents reported that they were satisfy. Pharmacists are the most trusted and accessible health professional. They are always available to render their legal responsibility of dispensing, clerking patients and giving drug information to patients. This has drastically reduced irrational use of drug among patient with evidence of better clinical and humanistic outcomes. Other studies have reported that pharmacists are always available to answer questions from patients and other health care professionals; regarding drugs use and their health [22].

In the same vein over 50% of respondents that were single, married and divorced respondents reported that, how well the pharmacists instructs patient about how to take your medication was very good. Likewise, the courtesy and respect shown to patients by pharmacy staff was reported very good. This is clearly seen in majority of the patients. The pharmacist intervention in instructing patients how and when to take their medications has of late improve patient response to their health with evidence of excellent clinical outcomes, humanistic outcomes and improve quality of life. Several studies have reported that intervention of pharmacist in patient medication and Health team have raised standard of patient care and they help the health team on therapy related issues since they are the only recognised specialist on drug related issue.
Pharmacists are trained from their undergraduate days to be respective, discipline and to be honest in their practice. Studies have reported that they are one of the most trusted health professionals. Dishonesty in service delivery by the pharmacist can destroy millions of life. It is eminent on the pharmacist to remain honest, respectful to their patients to deliver the best pharmaceutical care services to their patients. This connotes that pharmacists are doing their job as prescribed and patients are satisfied with their services. This shows that pharmacists are always on their duty post. Hence, they have met the expected standard required in their conduct and professionalism. Pharmacists, there for have met their legal responsibility, by providing advice about medications use, screening prescriptions, dispensing and any other management work related to the stocking of medications [22,29,30].

**Correlation / Cross-tabulation of Satisfaction Assessment with Social Demography**

There was correlation or statistical significance between social demographic data on professional appearance, availability of pharmacist to answer questions, how well the pharmacists instruct you on how to take your medications and the courtesy and respect shown to you by the pharmacy staff as p was <0.05. There was no correlation with availability of the pharmacists to answer your questions. This might be due to the setting of the pharmacy department at the time of this study. Regarding managing therapy, there was no statistical correlation with gender except for privacy of your conversation with the pharmacist. This is expected because Pharmacists are expected to maintain high level of confidentiality with patient’s medical problems. There was also no statistical correlation with education except for how well the pharmacists instruct the patient about how to take their medications and availability of the pharmacists to answer patient’s questions. This is expected as pharmacists are the best trained on drug related issue. Patient knowledge on drug cannot be correlated as they were fed with the information given by the pharmacists. For marital status there was statistical correlation with friendly explanation and marital status.

**Conclusion**

The study revealed that more female participated, majority were married with higher education qualification. Patients reported satisfaction with pharmaceutical care services. However, Delta State University Teaching Hospital was rated highest with patient satisfaction with pharmaceutical care services provided for friendly explanation and managing therapy. For managing therapy, there was no statistical correlation with gender except for privacy of your conversation with the pharmacist. Also there was no statistical correlation with education except for how well the pharmacists instruct you about how to take your medications and availability of the pharmacists to answer your questions. However, more training for the health care professionals and awareness programmers of pharmaceutical care service for patients is required.

**References**

1. Schommer JC, Kucukkarslan SN (1997) Measuring patient satisfaction with pharmaceutical services. Am J Health Syst Pharm 54(23): 2721-2732.
2. Ann K, Matthew D, Douglas M, Jeannie P, Linda F, et al. (1980) Nursing: A Key to Patient Satisfaction, Health Affairs (Milwood) 28(4): 669-677.
3. Ware JE, Davies AR (1983) Behavioral consequences of consumer dissatisfaction with medical care. Eval Program Plann 6(3, 4): 185-210.
4. Chisholm Burns MA, Kim LJ, Spivey CA (2010) US pharmacists effect as team members on patient care: systematic review and meta-analyses. Med Care 48(10): 923-933.
5. Brodie D (1967) Making Crime Pay: Law and Order in Contemporary American Politics. Oxford University Press, New York, USA.
6. Ford RC, Bach SA, Fottler MD (1997) Methods of measuring patient satisfaction in health care organizations. Health Care Manag Rev 22(2): 74-89.
7. Statement on pharmaceutical care. International Pharmaceutical Federation (1988) The Hague, Netherlands.
8. Hepler CD, Strand LM (1990) Opportunities and Responsibilities in Pharmaceutical Care. Am J Hosp Pharm 47(3): 533-543.
9. Van Mil JW, Schulz M, Tromp FJ (2004) Pharmaceutical care, European developments in concepts, implementation, teaching and research: a review. Pharm World Sci 26(6): 303-311.
10. Alminana D, Ridker PM, Mora S (2007). Blood pressure and risk of developing type 2 diabetes mellitus: The Women's Health Study. Eur Heart J 28(23): 2937-2943.
11. Araoye MO (2003) Research methodology with statistics for health and social sciences. Nathaden Publishers, Opomu, Ilorin West, Kwara pp. 117-118.
12. El Sharif SL, Alrahman NA, Khaled N, Sayah N, Gamal E et al. (2017) Assessment of patient’s satisfaction with pharmaceutical care services in community pharmacies in the United Arab Emirates. Arch Pharma Pract 8(1): 22-30.
13. Catherine LK, Thomas R, Scott D, Rashmi UK, Carrie K, et al. (2015) Emergency Department Visits and Injury Hospitalizations for Female and Male Victims and Perpetrators of Intimate Partner Violence. Advances in Emergency Medicine p. 11.
14. Opara CA, Enato EFO, Akoria OA (2005) Assessment of patient satisfaction with pharmaceutical services in a Nigerian teaching hospital. Int J Pharm Pract 12(1): 7-12.
15. Oparah AC (2004) Pharmaceutical Care: The Right of the Patient. West Afr J of Pharm 18(1): 11b.
16. Oparah CA, Efekoleka AE (2005) Attitude of Nigerian pharmacists towards pharmaceutical care. Pharm Int J Pharm Pract 27(3): 208-214.
17. Panvelkar PN, Saini B, Armour C (2009) Measurement of patient satisfaction with community pharmacy services: a review. Pharm World Sci 31(5): 525-537.
18. Briesacher B, Corey R (1997) Patient satisfaction with pharmaceutical services at independent and chain pharmacies. Am J Health Syst Pharm 54(5): 531-536.
19. Wayne AK, Richard S Dale, Andy S, Sean S, Pete F, et al. (1999) Patients Perceived Benefit from and Satisfaction with Asthma-Related Pharmacy Services. Journal of America Pharmacists Association 39(5): 658-666.
How to cite this article: Godspower O, Owonaro AP, Eniojukan FJ. Patient Satisfaction with Pharmaceutical Care Services in Selected Health Facilities in Delta State, South-South of Nigeria. Ortho & Rheum Open Access 2017; 8(3): 555739. DOI: 10.19080/OROAJ.2017.08.555739.

20. Ayalew MB, Taye K, Asfaw D, Lemma B, Dadi F, et al. (2017) Patients'/clients' expectation toward and satisfaction from pharmacy services. J Res Pharm Pract 6(1): 21-26.
21. Abebe TB, Erkau DA, Gebresillasse HM, Haile KT, Mekuria AB (2016) Expectation and satisfaction of HIV/AIDS patients toward the pharmaceutical care provided at Gondar University Referral Hospital, Northwestern Ethiopia: a cross-sectional study. Patient Prefer Adherence 10: 2073-2082.
22. Mináríková D, Malovecká I, Lehočka L, Snopková M, Foltán V (2016) The Assessment of Patient Satisfaction and Attendance of Community Pharmacies in Slovakia. Eur Pharm J LVIII (2): 23-29.
23. Khalaf A, Mohamed AH, Ibrahim A (2014) Patient Satisfaction with the Health Services Provided by the Pharmacist at a General Hospital in Riyadh, Saudi Arabia. European Journal for Person Centered Healthcare 2(4).
24. Okoye MO, Ukwe VC, Okoye TC, Adibe MO, Ekunwefe OI (2014) Satisfaction of HIV patients with pharmaceutical services in South Eastern Nigerian hospitals. Int J Clin Pharm 36(5): 914-921.
25. Wilcock M, Harding G (2011) Patients' experience of hospital pharmaceutical services. Int J Pharm Pract 19(6): 400-407.
26. Imran FK (1988) Measuring patients' satisfaction with pharmaceutical services at a public hospital in Qatar. International Journal of Health Care Quality Assurance, USA.
27. Khudair IF, Raza SA (1988) Measuring patients' satisfaction with pharmaceutical services at a public hospital in Qatar. Int J Health Care Qual Assur 26(5): 398-419.
28. Maria B, Carol M (2013) Pharmacists’ Expectations for Entry-level Practitioner Competency. American Journal of Pharmaceutical Education 77(1): 5.
29. Owonaro AP, Eniojukan FJ, Owonaro AED, Ebinyo C Nelson (2017) Assessment of Patient Satisfaction with Pharmaceutical Services in Community Pharmacies in Bayelsa State South-South of Nigeria. Glob J Pharmaceu Sci 2(3): 555589a.
30. Owonaro AP, Eniojukan FJ, Owonaro AD, EbinyoCN (2017) Assessment of Patient Satisfaction with Pharmaceutical Services In A Hospital In Bayelsa State South-South Of Nigeria. Ortho & Rheum 6(2): 555686.

This work is licensed under Creative Commons Attribution 4.0 License
DOI: 10.19080/OROAJ.2017.08.555739

Your next submission with Juniper Publishers will reach you the below assets
- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different form atts
(Pdf, E-pub, Full Text, Audio)
- Unceasing customer service

Track the below URL for one-step submission
https://juniperpublishers.com/online-submission.php