

Assessment of Patients' Satisfaction Level with Pharmaceutical Care Services in an Out Patient Department of a Public Secondary Healthcare Facility

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ABSTRACT

Background: Satisfying patients with pharmaceutical care has evolved as a requirement for improving patients' health behaviors, leading to better health care outcomes.

Aim: The study's goal was to analyze outpatient satisfaction and discover predictors of how satisfied patients are with the provision of pharmaceutical care in a public secondary health institution. **Methods:** Using the method of convenient sampling, a sample of 400 patients from the health facility's outpatient department was enlisted. 400 questionnaires were distributed, and 380 were returned.

Results: The weighted mean of the responses showed that respondents were extremely delighted with the corporate look of the pharmacy, which is great. In other words, the pharmacy environment and appearance increased their trust in the facility's pharmaceutical services. The majority of respondents claimed they were reasonably satisfied with the pharmaceutical care services given in the facility, while a smaller group said the services were below their expectations.

Conclusion: Patients were fairly pleased with pharmaceutical care services; therefore, patient satisfaction should be measured on a regular basis in our health facilities in order to improve pharmacy practice and health outcomes in general. Education and continuous training of staff along with the involvement of management staff is necessary to improve service quality in areas where patients are dissatisfied.

Keywords: patient's, pharmaceutical care, Pharmacist, Secondary Healthcare, satisfaction

I. INTRODUCTION

Patient satisfaction, independent of whether the treatments satisfy one's expectations or values, is often regarded as an important gauge of the standard of pharmaceutical care services delivered to patients. Satisfaction is an individual's assessment of how well a product or service meets their needs for consumption-related fulfillment (Karen, 2005). Being satisfied with pharmaceutical care has evolved as a requirement for improving patients' health behaviors, which leads to better healthcare results (Hasan et al., 2013).

To deliver patient-centered care, pharmacy practice has significantly grown (ACPE, 2011). As a result, efforts to assess patient satisfaction and developing measures for measuring outcomes have been described in the literature in several countries (NaikPanvelkar et al., 2009). As a patient's subjective judgment of health care service delivery, patient satisfaction is an important humanistic outcome (Njilele et al., 2012). Consumerism fueled the initial surge in interest in patient happiness. Patient satisfaction, on the other hand, has lately emerged as a requirement for providing sufficient healthcare, as it may be able to enhance patients' health behaviors, leading to better health care outcomes (Paddison et al., 1999). Previous research found that patient satisfaction with medication was potentially significant to patient-reported outcomes, which are associated with improved adherence, a major concern in health care (Barbosa et al., 2012).

According to Donabedian (1980), patient happiness is a vital component of healthcare service quality. Improvements in communication, convenience, empathy and politeness can lead to higher utilization of medical services and, eventually, better outcomes. High levels of satisfaction encourage healthy behaviors including

adherence and provider consistency. Patients who are pleased with their overall healthcare are much more likely to take their drugs correctly and are less inclined to transfer or change healthcare providers (Zastowny et al., 1989). Measuring satisfaction by health service providers is commonly used to gauge patient impressions of health care provider conduct (Larson et al., 1994).

Patients place a great priority on solid socio-psychological and communication ties with their caregivers, according to research (Arneson et al., 1989). Consumers of chain pharmacies were more unsatisfied with their pharmacist consultations than consumers of independent merchants, according to one study that looked at patient satisfaction by pharmacy type. This gap can be explained by the increased emphasis that independent pharmacists appear to place on personal and professional treatment. Many studies on patient satisfaction with healthcare professionals have been undertaken, but few have focused specifically on pharmacy, and even fewer have addressed various pharmacy situations. The most specific examination of the relationship between satisfaction and pharmacy was produced and confirmed by MacKeigan and Larson, who created and validated a poll of patient satisfaction with pharmaceutical services (MacKeigan et al., 1989). With only nine variables, the Visit-specific Satisfaction Questionnaire (VSQ) concept covers significant areas of services and care, including access, time spent interacting with provider, technical quality, and interpersonal quality. Ware and Hays proved their validity by examining the relationships of these questions in two separate previous researches (Rubin et al., 1993). Pharmacists are expected to provide medication advice, screen prescriptions, dispense medications, medication review and reconciliations, monitor outcomes, in addition to other duties relating to medication and patients management. Today, most hospitals are seeing a surge in patient patronage, particularly in developing countries. The trend of growing demand for patients with prescription continues, necessitating improved management of workflows within outpatient pharmacy environments in order to provide high-quality services (Ala'Eddin et al., 2016).

According to recent studies, patient or pharmacists' satisfaction with pharmaceutical services is on the rise. Furthermore, an in-depth assessment of specific illnesses and pharmaceutical services provided in industrialized countries demonstrates an increasing level of satisfaction. This cannot be applied to other nations, such as impoverished ones where pharmaceutical services continue to administer prescriptions in the traditional manner (Khalaf et al., 2014; Seungwon et al., 2016). Many illnesses demand a multidisciplinary approach, which has resulted in superior outcomes of therapy for many patients, according to evidence-based medicine. However, the role of a pharmacist is still not completely understood and many healthcare professionals regard it as inactive. Countries like Tanzania are undergoing substantial health-care transformations, and pharmacists' services and teaching to patients are becoming increasingly important (Bucci et al., 2003).

Satisfaction is simply referred to a person's assessment of how well a product or service meets a pleasurable level of consumption-related fulfillment. It is an emotional reaction triggered by a product or service evaluation, followed by an individual's assessment of how well the service was delivered, resulting in either joy or dissatisfaction (Schommer, 2003). Similarly, satisfaction is thought to be a cognitive judgment of an emotional response to the system's structure, technique, and outcome (Gourley et al., 2001). The client's individual assessment of healthcare services and providers is described as patient satisfaction. Patient preferences and expectations can be viewed as satisfaction determinants, whereas technical and psychosocial care aspects can be regarded as its components (Larson et al., 2002). This study aimed to assess and identify predictive determinants of patient satisfaction with pharmaceutical care services in a secondary care facility.

II. METHODS

Design & Population

A single-site, descriptive, cross-sectional, and observational design was used in the investigation. Patients who attended the hospital outpatient pharmacy to refill their prescriptions are the study's target populations. After describing the study's premise to the respondent, the questionnaire was given to a random sample of patients at their point of interaction with the pharmacist. Out-patients aged 20 and up who gave their agreement were included as respondents; younger persons (under 20 years) and those refusing to take part in the study were omitted.

Sample Size & Study Instrument

According to facility records, an average of 8000 patients visits the outpatient department each month. A sample size of 380 was estimated using Taro Yemen's technique, and 400 patients were recruited for the survey. For the survey, a 20-item stem questionnaire with two sections was created. Bio-data and patient satisfaction with pharmaceutical care services offered in the pharmacy department were among the items.

Data Analysis & Ethical Issues

The collected questionnaires were analyzed using analysis of variance (ANOVA), with the aid of IBM SPSS version 23.0, a computer application. Statistical analysis was carried out using descriptive statistics such as summary data, frequency, distributions charts, and percentages to present data. The Research and Ethics Committee of the University Lagos Teaching Hospital (LUTH), Lagos state, Nigeria (NHREC: 19/12/2008a), granted ethical clearance. Before administering the questionnaire, respondents provided informed consent.

III. RESULTS

A total of four hundred (400) questionnaires were administered, while three hundred and eighty (380) were retrieved and analyzed.

Table 1: Demographic Characteristics of the Respondents (n=380)

Variable		Frequency	Percentage (%)
Sex	Male	234	61.6
	Female	146	38.4
Occupation	Civil servant	136	35.8
	Businessman/ woman	42	11.1
	Trader	37	9.7
	Teacher	90	23.7
	Student	73	19.2
Marital status	Single	203	53.4
	Married	140	36.8
	Divorced	37	9.7
Estimated monthly income (NGN)	Less than 20, 000	73	18.9
	20,000 - 59,000	104	27.4
	60,000 - 99,000	43	11.3
	100,000 – 139,000	21	5.5
	140,000 – 199,000	107	28.2
	200, 000 and above	33	8.7
Age in years	20 – 29	65	17.1
	30 – 39	123	32.4
	40 – 49	67	17.6
	50 – 59	70	18.4
	60 and above	55	14.5
Highest education	Tertiary	380	100

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Table 2: Level Patients' Satisfaction to Pharmaceutical Care Services Provided (n=380)

Item/Variable	Excellent (%) 5	Very Good (%) 4	Good (%) 3	Fair (%) 2	Poor (%) 1	Weighted Mean (WM)
The professional appearance of the pharmacy	271(71.3) 1,355	37(9.7) 148	73(18.9) 219	0	0	1722/380 =4.5 (5)
The availability of the pharmacist to answer questions.	0	97(25.5) 388	250(65.8) 750	0	33(8.7) 33	1171/380 =3.1 (3)
The pharmacist's professional relationship.	0	58(15.3) 232	283(74.5) 849	39(10.3) 78	0	1159/380 =3.1 (3)
The pharmacist's ability to advise on problems that might have with medications	0	58(15.3) 232	189(49.7) 567	133(35.0) 266	0	1065/380 =2.8 (3)
The promptness of prescription drug service.	0	109(28.7) 426	138(36.3) 414	66(17.4) 132	67(17.6) 67	1039/380 =2.7 (3)
The professionalism of the pharmacy staff.	0	0	247(65.0) 741	133(35.0) 266	0	1007/380 =2.7 (3)

How well the pharmacist explains medications do.	33(8.7) 165	39(10.3) 156	173(46.1) 519	100(26.3) 200	33(8.7) 33	1073/380 =2.8 (3)
The pharmacist's interest in clients' health.	0	0	204(53.7) 612	39(10.3) 78	137(36.1) 137	827/380 =2.2 (2)
How well the pharmacist helps to manage your medications.	0	33(8.7) 132	242(63.7) 726	72(18.9) 144	33(8.7) 33	1035/380 =2.7 (3)
The pharmacist's efforts to solve problems that one has with medications	0	33(8.7) 132	275(72.4) 825	39(10.3) 78	33(8.7) 33	1068/380 =2.8 (3)
The responsibility that the pharmacist assumes for your drug therapy	0	0	220(57.9) 660	127(33.4) 254	33(8.7) 33	947/380 =2.5 (3)
How well the pharmacist instructs about how to take medications	0	100(26.3) 400	226(59.5) 678	54(14.2) 108	0	1186/380 =3.1 (3)
Overall Pharmacy services	0	0	326(85.8) 978	21(5.5) 42	33(8.7) 33	1053/380 =2.8 (3)
How well the pharmacist answers questions	0	33(8.7) 132	189(49.7) 567	125(32.9) 250	33(8.7) 33	982/380 =2.6 (3)
The pharmacist's efforts to help improve your health and stay healthy	0	0	150(39.5) 450	126(33.2) 252	104(27.4) 208	910/380 =2.4 (2)

The courtesy and respect showed by the pharmacy staff	0	0	146(38.4) 438	130(34.2) 260	104(27.4) 104	802/380 =2.1 (2)
The privacy of conversations with the pharmacist	0	0	150(39.5) 450	130(34.2) 260	100(26.3) 100	810/380 =2.1 (2)
The pharmacist's efforts to assure that medications do what they are supposed to	0	0	113(29.7) 339	230(60.5) 460	37(9.7) 37	836/380 =2.2 (2)
How well the pharmacist explains possible side effects	0	0	222(58.4) 666	125(32.9) 250	33(8.7) 33	949/380 =2.5 (3)
The amount of time the pharmacist offers to spend with you.	0	0	150(39.5) 450	109(28.7) 218	121(31.8) 121	789/380 =2.1 (2)

IV. DISCUSSION

Following the analysis of the data, a total of 388 individuals participated in the survey. There were 61.6% of them who were male and 38.4% who were female. The participants were all doing one of two jobs, as evidenced by their occupations. The bulk of respondents (35.8%) were civil workers, 11.1% were businessmen or women, 9.7% were dealers, 23.7% were teachers, and 19.2% were tertiary students. 53.4% of those polled were single, 36.8% were married, and 9.7% of those polled were divorced or separated from their marriages (Table 1).

Only 18.9% of patients who participated in the study said that their expected monthly income is less than twenty thousand Naira (20,000), which could be tough to manage with on a regular basis. However, based on their comments, the majority of the patients were living above the national average. 27.4% said their estimated monthly income is between N20,000 - N50,000, 11.3% said N60,000 - N99,000, 5.5% said N100,000 - N139,000, 28.2% said 140,000 - 199,000, and 8.7% said N200,000 Naira, and above (Table 1).

As their level of satisfaction with pharmaceutical services given by pharmacists in the health facility, data and responses from patients were assigned numeric values that ranged from 5 to 1. This was then calculated as the weighted average or mean (WM) of all survey parameters. The number 5 denotes excellent (that patients are extremely delighted with the services offered at the center), the number 4 denotes 'very good,' the number 3 represents 'good,' 2 denotes 'fair,' and 1 denotes 'poor' pharmaceutical care services (Table 2). These findings are consistent with Aragon and Edwards' 2004 paper, which stated that patient satisfaction is the function underlying satisfaction constructs such as satisfaction with primary care providers and waiting time. Identifying these elements allows pharmacy managers to work on enhancing them, leading to happier patients and increased pharmacy viability.

Majority of participants stated they were moderately satisfied with the pharmacist's availability to answer their questions, the pharmacist's professional relationship, the pharmacist's ability to advise them about problems they might have with their medications, the promptness of prescription drug services, the professionalism of the pharmacy staffs, the manner in which the pharmacist explained what their medications did, and how well the pharmacologist explained what their medications did. The poll participants evaluated all of the above variables as good (3) (Table 2). Patient satisfaction, according to Larson et al., 2002, is more subjective than reports of care, providing reliable proof of what occurs during an appointment with a healthcare provider, and that patient satisfaction is a valuable humanistic outcome that should be measured to determine the sustainability of healthcare services. It also shows how pharmacy services affect patients' life.

Finally, participants expressed some satisfaction with some of the services provided by pharmacists in the health care facility, such as the pharmacists' dedication to their health, efforts to help them improve their health and stay healthy, the courtesy and honor towards them by the pharmacy staff, the confidentiality of their conversations with the pharmacist, and the pharmacist's efforts to guarantee their medication was administered correctly. According to the respondents, all of the following parameters were below their expectations, as indicated by the weighted mean of 2 (which denotes fair). This finding is consistent with the literature, as evidenced by research by Azuka et al. (2004), which found that patients in Nigeria are dissatisfied with present pharmaceutical services. They also indicated that patients' sociodemographic factors were not related to their level of pleasure. This is consistent with the findings of a recent assessment of patients' satisfaction with pharmaceutical services provided in a health facility.

V. CONCLUSION

This was a face-to-face survey, and the results reflect the actual expression of patients' thoughts and perceptions of the pharmaceutical care services given at the facility. Patients were observed to be aware of everything and everyone they encounter in the health facility, as they may assess not only the pharmacists but also the non-pharmacy employees of the Unit. Patients in the facility were moderately satisfied with the pharmaceutical care services offered to them. Patients' use of pharmaceutical care services is increasing in comparison to earlier studies. The increasing demand for prescriptions from patients continues to grow, necessitating improved workflow management within outpatient pharmacy environments in order to provide high-quality services.

REFERENCES

- [1]. Accreditation Council for Pharmacy Education - ACPE (2011). Accreditation Standards and Guidelines for the Professional Program in Pharmacy Leading to the Doctor of Pharmacy Degree. Chicago, Illinois, 2011. [cited 2014, Sep11] available from: <https://www.acpe-accredit.org/standards/>.
- [2]. Ala'Eddin MA, Mohammad AS, Saleh AS, Omar ZA, Hussein MA (2016). Factors Influencing Patient Satisfaction with Pharmacy Services: An Empirical Investigation at King Fahd Armed Forces Hospital, Saudi Arabia. *International Journal of Business and Management* 11(9).
- [3]. Arneson DL, Jacobs EW, Scott DM (1989). Patronage motives of community pharmacy patrons. *J Pharm Mark Manage*; 4(2):3-22.
- [4]. Azuka C. Opara, Ehijie FO Enato, Obehi Akoria (2004). Assessment of patient satisfaction with pharmaceutical services in a Nigerian Teaching Hospital. *International Journal of Pharmacy Practice*; 12(1): 7-12. <https://doi.org/10.1211/0022357023204>
- [5]. Barbosa CD, Balp MM, Kulich K, Germain N, Rofail D (2012). A literature review to explore the link between treatment satisfaction and adherence, compliance, and persistence. *Patient Prefer Adherence*; 6: 39–48. 10.2147/PPA.S24752.
- [6]. Bucci, C. Jackevicius, K. McFarlane, and P. Liu. (2003). Health Sector Reforms. *Can. J. Cardiol.* 19(4), 2003, 391-396.
- [7]. Donabedian A (1980). Explorations in quality assessment and monitoring: the definition of quality and approaches to its assessment. Ann Arbor, MI: Health Administration.
- [8]. Gourley, G., Gourley, D., Rigolosi, E., Reed, P., Solomon, D. and Washington, E. (2001). "Development and validation of the pharmaceutical care satisfaction questionnaire. *The American Journal of Managed Care*, Vol. 7 No. 5, pp. 461-466.
- [9]. Hasan S, Sulieman H, Stewart K, Chapman CB, Hasan MY, Kong DC (2013). Assessing patient satisfaction with community pharmacies in the UAE using a newly-validated tool. *Res Social Adm Pharm*; 9(6): 841–850. 10.1016/j.sapharm.2012.10.002.
- [10]. Karen JM (2005). Continuing Education brought to pharmacists by Pfizer Inc., USPG.
- [11]. 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).
- [12]. Lang, J.R. and Fullerton, S.D. (1992). The components of satisfaction with outpatient pharmacy services. *Health Mark Q*, Vol. 10 Nos 1-2, pp. 143-154.
- [13]. Larson LN, MacKeigan LD (1994). Further validation of an instrument to measure patient satisfaction with pharmacy services. *J Pharm Mark Manage*; 8(1):125-39.
- [14]. Larson, N.L., Rovers, J.P. and MacKeigan, L.D. (2002). Patient satisfaction with pharmaceutical care: update of a validated instrument. *Journal of the American Pharmaceutical Association*, Vol. 42 No. 1, pp. 44-50.
- [15]. MacKeigan LD, Larson L (1989). Development and validation of an instrument to measure patient satisfaction with pharmacy services. *Med Care*; 27:522-36.
- [16]. NaikPanvelkar P, Saini B, Armour C (2009). Measurement of patient satisfaction with community pharmacy services: a review. *Pharm World Sci.*; 31(5): 525–537. 10.1007/s11096-009-9311-2.
- [17]. Njilele AC, Ukwe CV, Okonta JM, Ekwunife OI (2012). Development of a patient satisfaction questionnaire for HIV/AIDS patients in Nigeria. *Int J Clin Pharm.*; 34(1): 98–104. 10.1007/s11096-011-9596-9.
- [18]. Paddison C, Pachana NA (1999). Health and demographic determinants of satisfaction with pharmacy services in older adults. *New Zealand Journal of Psychology*; 28 2: 133–136.
- [19]. Quintana, J., Gonza'lez, N., Bilbao, A., Aizpuru, F., Escobar, A., Esteban, C., San-Sebastia'n, J., De-la-Sierra, E. and Thompson, A. (2006). Predictors of patient satisfaction with hospital health care. *BMC Health Services Research*, Vol. 6, p. 102.

- [20]. Rubin HR, Gandek B, Rogers WH (1993). Patients' ratings of outpatient visits in different practice settings: results from the Medical Outcomes Study. *JAMA*; 270:835-40.
- [21]. Schommer, J. and Kucukarslan, S. (1997). Measuring patient satisfaction with pharmaceutical services. *American Journal of Health-System Pharmacy*, Vol. 54 No. 23, pp. 2721-2732.
- [22]. Schommer, J.C. (2003). Patient satisfaction", *Pharmacoeconomics and Outcomes: Applications for Patient Care*, 2nd ed., American College of Clinical Pharmacy, Kansas City, MS.
- [23]. Seungwon Y, Dasohm K, Hye JC, Min Jung C (2016). A comparison of patients' and pharmacists' satisfaction with medication counseling provided by community pharmacies: a cross-sectional survey. *BMC Health Ser Res*; 16: 131.
- [24]. Zastowny TR, Roghmann KJ, Cafferata GL (1989). Patient satisfaction and the use of health services: explorations in causality. *Med Care*; 27:705-23.

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