(RESEARCH ARTICLE)

Check for updates

Patient's satisfaction at outpatient pharmacy department in Intermediate Hospital Oshakati, Oshana region, Namibia

Emmanuel Magesa [1, *] Johanna Hanyanya [1] and Wakjira Erraso [2]

[1] Welwitchia University, Pharmacy & Nursing departments, Windhoek, Namibia.
[2] Ministry of Health and Social Services, Oshakati Intermediate Hospital Pharmacy Department, Oshana Region Directorate.

Abstract

Introduction: Patient waiting time Experience of waiting time in general is perceived as complex, subjective and culturally influenced. Complexity of prescription, few human resources and work process are the factors of patient waiting time in outpatient pharmacy departments (OPD). However, the complexity of wait time is poorly understood and has been explored only to a limited extent.

Objective of the study: The main objective of this study is to assess patient satisfactions on waiting time at Intermediate Hospital Oshakati (IHO), northern part of Namibia.

Method: The study was carried out at IH Quantitative descriptive design was employed and data collected was analyzed using Epi info version 7.

Results: The mean waiting time in IHO was 36±20 minutes. More patients (49.2%) were satisfied with OPD pharmacy when the waiting time is between 5-25 minutes. The major factors associated with the satisfaction of services were shorter waiting time (0.01 <p<0.05) and other personal reasons like long distance from the hospital (0.03<p<0.05).

Conclusion and recommendation: Many patients are satisfied if waiting time is between 5-25 minutes, therefore there is a need to improve waiting time by decongest patients overload at IHO, this can be achieved by improving coordination and communication between IHO and Primary health care (PHC) facilities.

Keywords: Outpatient pharmacy department ; Waiting time; Workload; Patient satisfaction

1. Introduction

Patient waiting time at the pharmacy has been defined as a duration from the time a patient enters a pharmacy for the purpose of receiving pharmaceutical services to the time he/she left the pharmacy [1]. Patients spend a substantial amount of time in the health facilities waiting for services to be delivered by health professionals. The degree to which patients are satisfied with the care received is strongly related to the quality of the waiting experience. Healthcare organizations that strive to deliver exceptional services, must effectively manage patients waiting time [1-3]. Failure to incorporate consumer-driven features into the design of wait experience could lead to patient and provider dissatisfaction. It is a well known fact that patient satisfaction and compliance to health services such as pharmaceutical service are an important factor in the prognosis of numerous diseases. Poor patient compliance can be a result of dissatisfaction of the provisional of health services [4]. It has been recommended that, at least 90% of patients should

* Corresponding author: Emmanuel Magesa
Welwitchia University, Pharmacy & Nursing departments, Windhoek, Namibia.

be seen within 30 min of their scheduled appointment time4. This is, however, not the case in most developing countries, as several studies have shown that patients spend 2-4 hours in the outpatient departments before seeing the doctor or pharmacists [5,6]. Namibia as one of developing countries in Africa faces the long waiting time in most of her health facilities, these include Intermediate Hospital Oshakati (IHO) which is situated in the northern part of Namibia. Intermediate hospital Oshakati pharmacy is one of the service delivery units in Oshakati state hospital. Oshakati state hospital pharmacy is giving service to all communities in Namibia in general and Oshana region in particular. The unit is operating with 10 pharmacist, 2 pharmacy technicians and 3 pharmacy assistance under four subunits. Inpatient, `outpatient, CDC and pediatric pharmacy are subunits in IHO pharmacy serving an average of 1800 patients on a daily basis (RX solution & EDT). Namibia, a highly sparsely populated country in Africa has been facing a long waiting time in its health facilities, particularly in IHO pharmacy department, which is overloaded by serving more than half of the entire Namibian population. Long waiting times and overcrowding of public health facilities like IHO are anecdotally acknowledged as major problems and it results in dissatisfaction among communities. Over a period of time, it appeared that numerous complaints were being received from patients who felt that waiting time at the outpatient pharmacy were excessive. However, at IHO pharmacy, there has been limited study addressing the long waiting time and level of patient satisfaction with the service. It is this concern that motivated a researcher to assess long waiting time at pharmacy department in IHO.

2. Methods

2.1. Study design

A cross sectional study was carried out at the outpatient pharmacy department in Intermediate hospital Oshakati.

2.2. Study setting

This study was carried out in OPD pharmacy unit in Intermediate Hospital Oshakati (IHO). Intermediate Hospital Oshakati is the largest referral hospital located in the northern part of Namibia. The hospital serves a catchment population of at least 750000 people, which means almost a half of Namibians consider IHO as their primary medical treatment hub. Catchment population at IHO is approximately 207,353 people. While adult catchment population is about 130,000 people. Within the pharmacy department there are several sub departments or units such as outpatient (adult and pediatric),inpatient, ARV and main store departments.

2.3. Patients /Participants

All patients above 18 years visited an OPD pharmacy as from 22nd October to 26th October 2018 were included in the study. Patients under 18 years of age, disabled, serious sick and those who refuse to participate in the study.

2.4. Sample size

The sample size was calculated by using a sample size calculator by Raosoft [7]. Where the total target population was 130,000 at the confidence level 95% and response rate of 50% with a margin error of 5%. Therefore, sample size was 384. By using Systematic sampling procedures were done in which total of 384 questionnaires were administered to the patients and 14 questionnaires were administered to pharmacy professionals (pharmacists, pharmacist technicians and pharmacist assistants).

2.5. Data collection procedure

Two separate closed ended questionnaires were administered. One questionnaire with patients demographic information, and patient satisfaction questions anchored on very satisfied, fairly satisfied and not satisfied was administered to the patients who visited adult outpatient pharmacy department at the of data collection and another questionnaire with demographic information at the time of data collection and questions related to provisional of pharmaceutical services was administered to pharmacy professions (pharmacists, pharmacist technicians and pharmacist assistants) who were working at an adult OPD pharmacy at the time of data collection. Stopwatch and time tracking sheet were used to record the amount of time patient spent from the time he enters an adult OPD pharmacy to the time he/she left adult OPD pharmacy. The purpose of both questionnaires was explained to the respondents before administered.

2.6. Data analysis

Data collected were entered into the Epi info software version 7. The descriptive data were summarized in frequencies, percentages and proportions. Simple linear regression was also used to identify the cause of patient satisfaction at outpatient pharmacy department in IHO.

2.7. Ethical approval

Ethical approval was obtained from the ethics committee in Intermediate hospital Oshakati. Respondents were assured with confidentiality of information provided. Names were not included in the questionnaire, rather c odes were used for the recordered purposes. Information collected were kept in a secured laptop where the password was created to make sure that, researchers are the only one get access to the information.

3. Results

3.1. Social demographic characteristics

The findings include demographic and socioeconomic information on respondents. The distributions of variables were presented by means of histograms and/or frequency distribution tables. A response rate was 100%. No any patient aged above 63 years visited an OPD pharmacy during data collection! In the table 1 below, the majority of the patients (37.4%, n=144) who visiting Intermediate Hospital Oshakati (IHO) are spending 26-46 minutes to get pharmacy services and 8.9%, n=34 of the patients are spending more than 1 hour to get pharmacy services. Patients at age group of 53-63 years (34.02%, n=131) spending more time in pharmacy compared to other age groups.

Table 1 Show age group of patients against waiting time in minutes spent in pharmacy (n=384)

Age group (years)	Waiting time in minutes					Total
	5-25	26-46	47-67	68-88	89-109	
Below 20	5	5	3	0	0	13
20-30	21	24	12	6	1	64
31-41	34	36	18	6	3	97
42-52	32	28	11	7	1	79
53-63	49	51	21	7	3	131
Total	141	144	65	26	8	384

Table 2 Mean waiting time (min) in pharmacy with age groups of patients (n=384)

	Below 20	20-30	31-41	42-52	53-63
Mean waiting time (μ)	32	35.3	36.6	35.8	38
Variance	248.7	368.5	402	479	405
Standard deviation	15.8	19	20	22	20

The table, above shows the mean waiting time of each age group, in which patients at age between 53 and 63 are waiting longer than the other age groups.
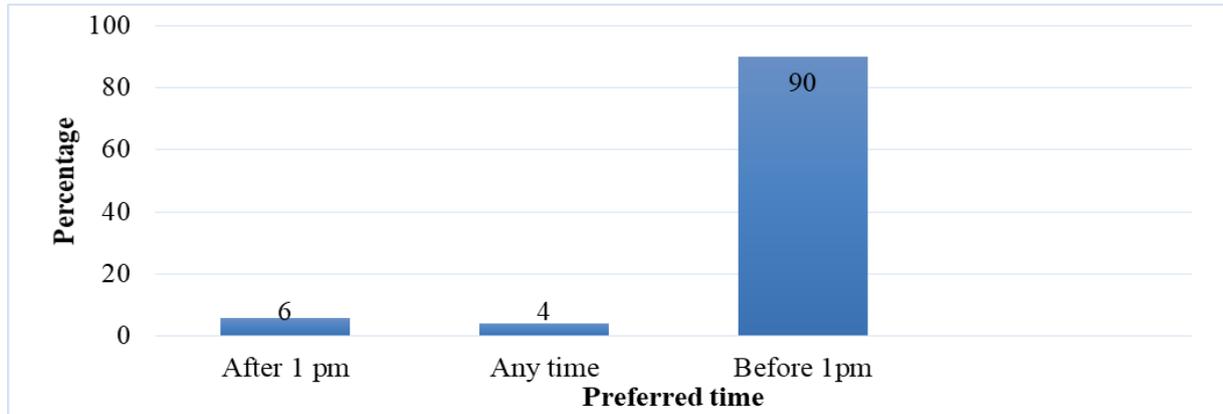
Figure 1 Preferred time by patients to come to the hospital/pharmacy.

The figure 1, above, shows that 90% (n = 346) of the patients are preferred to come to hospital /pharmacy before 1pm.
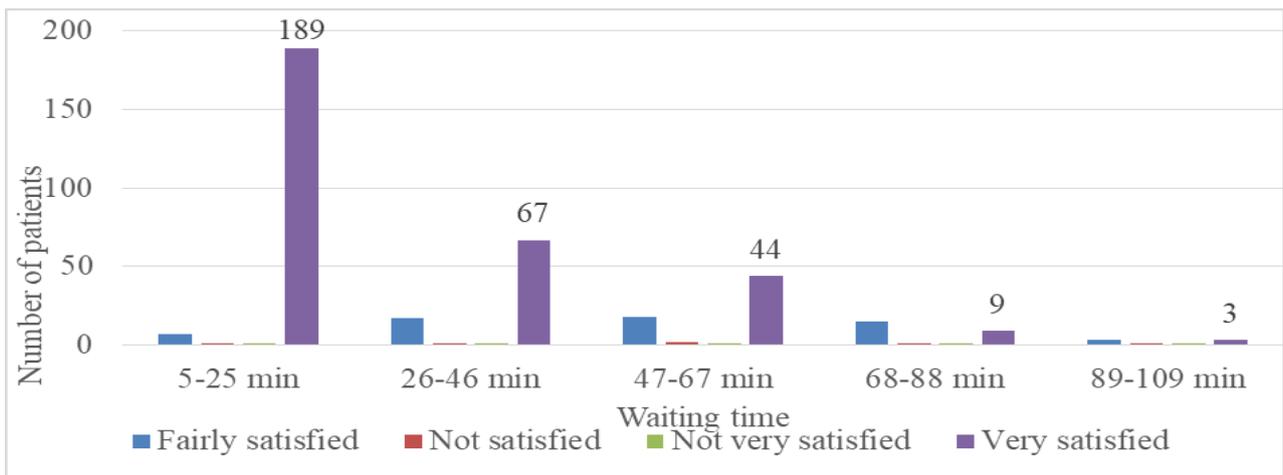
Figure 2 Satisfactions of the patients regarding the waiting time. (n=200)

The figure 2 above indicates the degree of the pharmacy service satisfaction. The majority of the patients (n =189) were very satisfied with the waiting time at the pharmacy and less than 7% were not satisfied.
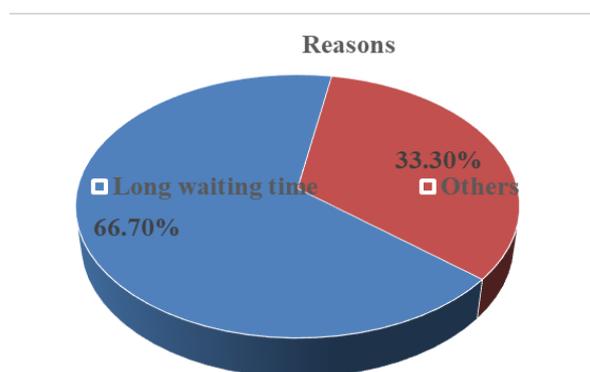
Figure 3 The reasons for not being satisfied with pharmacy service.

Figure 3, above, shows the reasons given by the patients who visited IHO pharmacy regarding the provision of services. About 33.3% of patients who do not satisfied with the services mentioned other reasons apart from long waiting time.

Table 3 Relationship with the waiting time and the predictor variables.

Variable	Coefficient	Std Error	F-test	P-Value
Pharmacy follow up (Yes/No)	0.291	2.029	0.0206	0.885960
Gender	2.012	2.082	0.9335	0.334640
Not at all satisfied/fairly satisfied	2.306	7.896	0.0853	0.770467
Not very satisfied/fairly satisfied.	0.626	8.553	0.0054	0.941710
Very satisfied /fairly satisfied.	-23.970	2.729	77.1411	0.000000
Prefer service before 1pm/after 1pm)	0.890	4.437	0.0403	0.841109
Why do you prefer this time (H/D)	6.998	2.407	8.4566	0.003877
Why do you prefer this time (S/D)	28.138	18.199	2.3904	0.123019
Why do you prefer this time (T/D)	0.591	3.626	0.0266	0.870633
Why do you prefer this time(W/D)	1.173	2.604	0.2029	0.652683
Constant	51.651	5.212	98.1925	0.000000

Note: W= Back to work early. D = Far distance. S = Staffers are available. T = No patient load. H = Back to home early.
Correlation Coefficient: r^2=   0.23

From the table 3 above, indicates that patients waiting time are statistically significant affect patient satisfaction and also far distance from home (D) together with the intention to go back home early (H) (P =0.00 < 0.05) and P 0.004 < 0.05 respectively. The rest of the variables are not statistically significant as the p value is higher than 0.05'. Negative coefficient indicates that for every 23 minutes reduced or shortened in giving service there is an increase in the level of satisfaction.
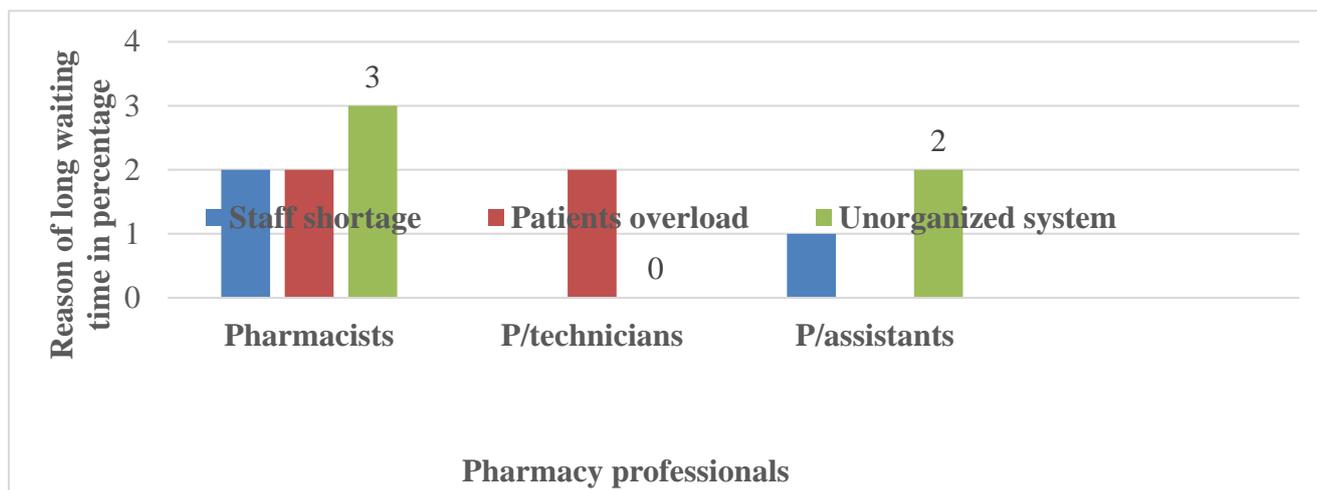
Figure 4. Reasons of long waiting time at pharmacy given by pharmacy professionals

From the figure 4 above, many (41.7%, n=5) pharmacy professionals mentioned unorganized health system delivery at IHO as a reason for long waiting time, followed by patients' overload which is 33.3%.

4. Discussion

4.1. Demography

The study revealed that more female participated in the study carried out at OPD pharmacy, intermediated hospital Oshakati (IHO). The high number of females is expected as the studies have shown that more female than male visit health facility for medical problems6. In both male and female many patients (n=133) who visit OPD pharmacy department are at the age of 53-63 years. As shown in table 1, majority (38.9%) of the patients at age 53-63 years, spending 26-46 minutes at OPD pharmacy in order to get services by the mean waiting time of 38±20 minutes. (Table 2). This findings are supported by a study conducted in Indonesia, which showed that the patients just needed to wait less than 30 minutes to get their medicines [2,11].

Table 3, revealed that about 49.2% of patients who come to OPD pharmacy are very satisfied with the OPD pharmacy services as the waiting time is 5-25 minutes, however, as the time increases the level of satisfaction decreases as indicated in the figure 2, in other words the shorter the waiting time the higher the degree of satisfaction. This result is supported by a study done in Malaysia [7-9] which indicated that the level of satisfaction of services is less likely if the waiting time is above 30 minutes. Although there are a lot of indicators of patients' satisfaction, waiting time has been a key compared to others [10-12].

In this study some individual reasons were also put into consideration as indicated in table 3, in which the results indicate that some individual reasons ($p< 0.05$) are statistically significant predict the degree of satisfactions ($p < 0.05$). The issue of time conscious has been demonstrated in figure 1, in which more patients prefer to come before 1pm. However there is no study conducted found with the similar results.

4.2. Limitation of the study

The sample was selected from only one unit of OPD Pharmacy department. The results of this study can therefore not be generalised to other hospitals

5. Conclusion and recommendation

Patients satisfied when waiting time is between 5-25 minutes. Therefore, there is a need to improve services by shortening waiting time from 36 minutes to 25 minutes in order to improve the level of satisfaction of patients who visit OPD pharmacy. It is recommended that decongestions of patients overload at IHO can be done by improving proper coordination and communication between IHO and Primary health care (PHC) so that other patients can get services from PHC facilities especially patients who are coming for refill of medications.

Compliance with ethical standards

Disclosure of conflict of interest

The authors declare that there is no conflict of interest.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

[1] Afolabi M, Erhun O. Patients' response to waiting time in an out-patient pharmacy in Nigeria. Tropical Journal of Pharmaceutical Research. 2003; 2 (2): 207-214.

[2] Ahmad B, Khairatul K, Farnaza A. An assessment of patient waiting and consultation time in a primary healthcare clinic. The Official Journal of the Academy of Family Physicians of Malaysia. 2017; 12(1): 14–21.

[3]   Atinga RA. A Critique of Quality Healthcare Management in Hospitals. Lambert Academic Publishing: Saarbrucken. 2011.

[4]   Catherine LK, Thomas R, Scott D, Rashmi UK, Carrie K, et al. Emergency Department Visits and Injury Hospitalizations forn Female and Male Victims and Perpetrators of Intimate Partner Violence. Advances in Emergency Medicine. 2015.

[5]   Datuk I, Roslan Johari Dato G, Noor Hazilah M, Abu Hassan A, Azman B, Salikin F. Hospital waiting time: The forgotten premise of healthcare service delivery? International Journal of Health Care Quality Assurance. 2011; 24(7): 506-22.

[6]   Febrianta NS, Sundari S, Pudjaningsih D. Waiting Time Analysis of Pharmaceutical Services with Queue Method in PKU Muhammadiyah Hospital Bantul. International Journal of Scientific and Research Publications. 2017; 7 (9).

[7]   Oche M, Adamu H. Determinants of patient waiting time in general outpatient department of tertiary health institution in north western Nigeria. Annals of medical and health science research. 2013; 3(4); 588-592.

[8]   Ofilli AN.What patients want: a content analysis of key qualities that influence patient satisfaction. Journal of medical practice manage. 2013; 22: 255-261.

[9]   Rondeau KV. Managing the clinic wait: an important quality of care challenge. Nurse care qual. 2012; 13: 11-20.

[10]   Sherif H.E.Patient satisfaction with public primary health care service delivery in Khomas region, Windhoek district Namibia. 2010.

[11]   Tran TD, Nguyen U, Minh Nong V, Tran BX. Patient waiting time in the outpatient clinic at a central surgical hospital of Vietnam: Implications for resource allocation. 2017; 6: 454.

[12]   Zegeye DT. Assessment of waiting and service times in Public and Private Health Care Facilities in Gondar District, North Western Ethiopia. 2008.