

Assessment of Patient Satisfaction with Pharmaceutical Services in Hospital Pharmacies in Dar es Salaam, TanzaniaM. JANDE^{1*}, A. LIWA², G. KONGOLA² AND M. JUSTIN-TEMU³

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Exit survey was conducted at four hospitals in Dar es Salaam, Tanzania, where 401 outpatients (51% males and 49% females) were randomly recruited in the survey. A structured questionnaire was used to obtain the required information from the patients and the data was analyzed using Epi-Info version 6 software. The presence of a polite pharmacist at a particular pharmacy attracted many patients (85.8%). Availability of a reputable medical practitioner at the hospital was another reason for many patients (55.6%) going to the hospital pharmacy. A number of patients (46.3%) went to particular hospital pharmacies to obtain their medicines because of good services in those facilities. Dissatisfied respondents (23.7%) rated the waiting time to obtain the medicines as too long. This was followed by unavailability of prescribed medicines (18.2%) and poor facilities in the waiting room. Quality of services at the hospital pharmacies were rated at 46%. Patients felt that the waiting time and the availability of medicines could be improved.

Key words: Pharmaceutical services, patient satisfaction, Dar es Salaam

INTRODUCTION

Currently, the management of many diseases requires multidisciplinary approach, which according to evidence based medicine, has improved treatment outcomes of many patients. However, the role of a pharmacist has not been adequately explored and is often regarded as passive by many medical personnel [1]. Tanzania is undergoing a major transition as far as the health sector is concerned (The Health Sector Reforms) and hence the services and education availed to patients by the pharmacists are increasingly becoming important.

Investigation on the contribution of pharmacists in a heart function clinic found

that patients who were suffering from heart failure showed significant improvement when given “directive guidance” by a pharmacist regarding their treatment [1]. This fact underlies the significant role played by the pharmacist in health care provision. Therefore, if problems facing pharmaceutical services in Dar es Salaam are understood, it may be possible to plan for interventions to improve the services [2]. It is a well known fact that patient compliance to medication is an important factor in the prognosis of numerous diseases. Poor patient compliance is a problem worldwide. Seeking advice from a pharmacist before purchasing drugs may be cost effective as well as promote compliance [2].

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Provision of pharmaceutical services is a business venture and therefore customer satisfaction should be one of the supreme goals. While assessing patients' satisfaction with pharmaceutical services, it was underlined that the attitude of the pharmacist and provision of information about drugs to patients, were important [3]. Other factors in promoting patient satisfaction include opening times which would increase accessibility to medicines.

A study by Newman assessed patients' satisfaction at various outpatient healthcare services and found that training of medicine providers, as well as availability and distribution of medicines, were areas that required improvement in order to enhance patient satisfaction [4]. Although there are extensive surveys regarding client satisfaction with pharmaceutical services in developed countries [1,2], there are limited studies, or no studies at all, in this aspect in the developing countries, including Tanzania. Assessment of patient satisfaction at various hospital pharmacies in Dar es Salaam would thus provide pharmacists a

forum for review of the pharmaceutical services.

METHODS

This was a prospective cross-sectional study. Four hospitals were randomly selected from a list of hospitals within Dar es Salaam City Council for the study. A questionnaire was developed for use as an exit survey at the hospital pharmacy. A total of 401 patients (51% males and 49 % females) were interviewed at a site far from the pharmacy to avoid interviews being overheard by pharmaceutical staff. Data was analyzed using Epi-Info version 6 software.

RESULTS

Data showing age distribution of the 401 patients interviewed from the four hospitals is shown in Table 1. Majority of the patients interviewed were in the age group 31-40 years. This is the most economically active group and could afford travel costs to hospitals. Elderly and paediatric patients were few.

Table 1: Age distribution of patients interviewed from the four hospitals

Age (years)	11-20	21-30	31-40	41-50	51-60	61-70	70+
Percentage	7.7	27.4	40.6	15.1	6.0	3.0	0.2

As shown in Figure 1, several factors influenced patients' choices of where they would go for their drugs. Many patients (55.6%), preferred to go to a pharmacy where a medical practitioner was available in the premises. Other factors which attracted patients to particular pharmacies were availability of diagnostic services such as laboratory services and x-rays (10.5%), acceptability of insurance schemes (8.3%) and clean surroundings (9.3%).

The study also determined the time patient had to wait at the pharmacies before they could receive the medicines. Long waiting time would discourage patients from returning to the same pharmacy for refills or to get new supplies of medicines. The waiting times at the hospital pharmacies are shown in Table 2. The majority of patients spent between 5 and 10 min at the pharmacies (52.62%). The numbers of patients were similar in government and private hospital pharmacies. About 33% of

the patients spent between 10 and 20 min and in this group more patients spent this time in government than in private facilities. Very few patients in government facilities

spent less than five minutes while a lot more patients spent more than 20 minutes in private facilities.

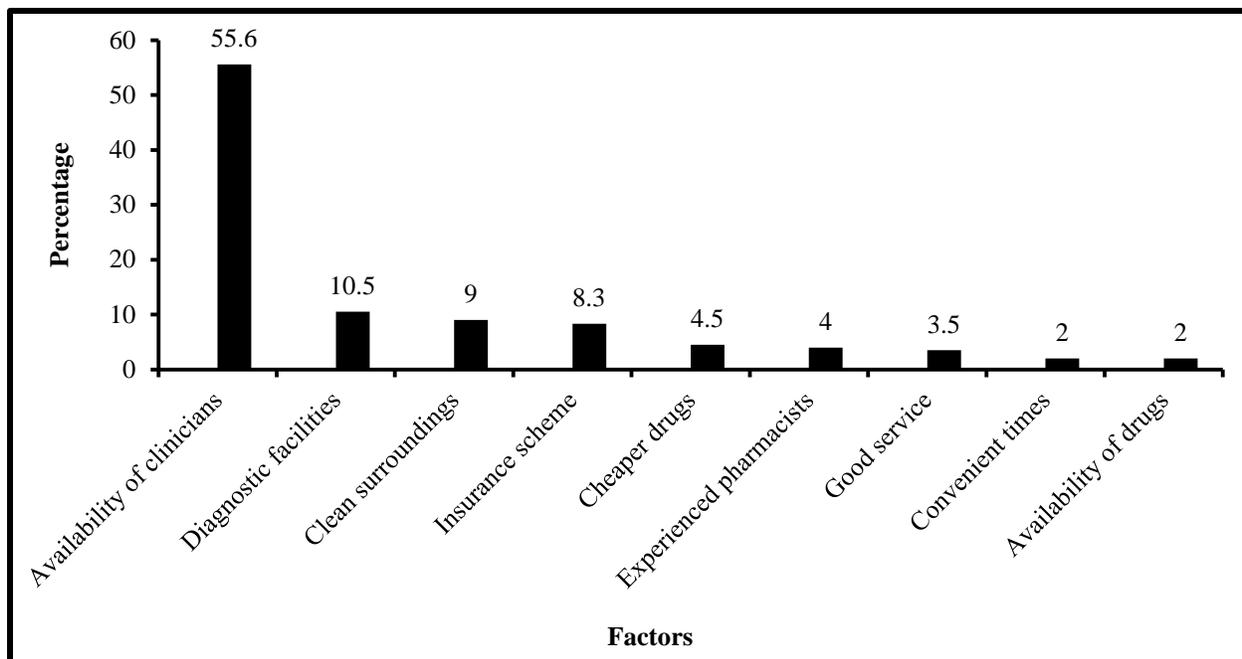


Figure 1. Factors that influenced patients to go to particular pharmacies.

Table 2: Patients waiting time

Time (min)	Government (%)	Private (%)
< 5	1.75	3.99
5 - 10	26.93	25.69
10 - 20	20.69	12.22
> 20	0.75	6.98
No response	0.24	0.75
Total	50.36	49.64

The cost of medicines in government hospitals cannot be used as a factor of satisfaction because of other confounding factors such as the cost sharing program, national insurance scheme and the introduction of community health funds. However, majority of patients attending

private pharmacies found the cost of medicines to be reasonable (52.45%), while 19% of the patients found the cost of medicines in private pharmacies to be expensive (Table 3). About 28% of the patients went to pharmacies which accept insurance schemes.

Availability of convenience facilities such as chairs, reading materials and toilets in the patients' waiting rooms were also assessed and tabulated in Table 4. Fifty percent of waiting rooms in government and private facilities had no toilets, about 75% of waiting rooms in private hospital pharmacies had no chairs and one government hospital pharmacy had no chair at all in the waiting area. There are a number of activities within pharmacies which can result in patient dissatisfaction with the pharmaceutical services offered.

Table 3: Patients views regarding the cost of medicines and availability of other facilities in private hospital pharmacies

Patients views	Number of patients	(%)
Reasonable	107	52.45
Expensive	39	19.12
Insurance and adequacy of other facilities	58	28.43
Total	204	100

Table 4: Facilities in the pharmacies

Facility	Government	Private
Chairs	50%	24.6%
Toilets	50%	50%

Table 5 shows aspects which caused dissatisfaction with pharmaceutical services. In this study many patients were dissatisfied with the time taken before they received a service; 12.7% in private pharmacies and 10.97% in government hospital pharmacies. The time was considered too long in both facilities (government and privates). A few patients considered the cost of medicines high (4.7%). Poor facilities in the waiting area made patients' dislike a particular pharmacy. About 3% of patients complained about poor facilities in both government and

private pharmacies. Unavailability of prescribed medicines was a problem in government hospital pharmacies and this problem was complained by 17.45% of those who went to the government pharmacies but was complained by less than 1% of patients who went to private pharmacies.

Patients were also asked to suggest what they thought could be done in order to improve pharmaceutical services. As tabulated in Table 6, many patients advised an increase in the number of pharmaceutical staff and a reduction in the waiting time (private pharmacies). In government hospital pharmacies, patients advised that the medicine stocks should be increased and that chairs or benches be installed in the waiting rooms.

Table 5: Views on factors contributing to dissatisfaction of patients

Factors	Private (%)	Government (%)
Negative attitude of the pharmacist	0.99	1.99
Poor facilities while waiting	2.49	3.24
Instructions not understood	0.2	0.5
Time taken was too long	12.7	10.97
Cost of medicines	4.7	0
Unavailability of prescribed medicines	0.75	17.45
Satisfaction with the services	25.4	21
Total	47.23	55.15

Table 6: Views of patients on areas requiring improvement at the hospital pharmacies

Response	Private (%)	Government (%)	Overall (%)
Reduce number of steps	0.7	0	0.7
Increase waiting area space	1.5	0	1.5
No change	2.7	1	3.7
Noise should be controlled	1.7	0	1.7
Increase number of staff	4.48	0.2	4.7
Stock the pharmacy with all medicines	1.2	7.48	8.7
Devise a system to reduce waiting time	7.23	2.24	9.47
Display informative posters in the waiting hall	1.9	0	1.9
Frequently clean the waiting area	0.2	0	0.2
Keep the cashier at the pharmacy	0.7	0	0.7
Put benches in the waiting area	0.5	5.5	6
Reduce price of medicines	2	0	2
Employ educated people at the pharmacy	0.2	0	0.2
No opinion	25	30.4	56.1

DISCUSSION

About 41% of the patients were within the 31-40 years age group. This group of patients, comprising of students and civil servants, does not wish to spend a lot of time at hospitals because of the nature of their activities. They would like to have their prescriptions attended quickly and get back to work. Thus, pharmacies that do not provide quick services would be unpopular among this age group.

The average waiting time for prescriptions to be filled in this study was about 15 min. In one study [5], it was observed the average waiting time before a prescription could be filled was 17.09 min. In this study the average waiting time was shorter and this implies that there were fewer delays from the time a patient handed in a prescription to the pharmaceutical personnel to the time the

medicine was dispensed to the patient. This may mean that pharmaceutical personnel do not take much time to educate the patients on the drugs prescribed.

In this study most patients preferred to get their medicine from government hospital pharmacies because of the availability of doctors who would examine them and request for some laboratory tests or x-rays to be taken in order to reach at a more correct diagnosis. Government hospitals are strategically located and well serviced by public transport system and have convenient working hours. Among the problems identified as affecting the utilization of hospital pharmacies included difficulties in getting to the clinics largely due to lack of transportation and long distances [4].

About 46% of the patients in this study graded the services received at the

pharmacies as good and 99% fully understood the instructions given by pharmacists. In one study patients complained that there was poor promptness by pharmacists to attend to prescriptions and that the time pharmacists spent with patients was inadequate [6]. This observation does not differ much from the observation made in this study where less than half of the patients were satisfied with only pharmaceutical services.

In our study patients may be less able to judge the technical quality of care they receive, but they do judge their social interaction with the pharmacists. Pharmacy professionals must increase patients' awareness of the value of pharmaceutical care services and make it important to their judgment of satisfaction [7].

Patients who were dissatisfied with pharmaceutical services complained of the cost of medicine being high (4.7% of patients in private pharmacies), time taken to fill the prescription as being long (12.7% of patients in private pharmacies), and unavailability of medicines (17.45% of patients in government pharmacies) and poor attitudes of the pharmacists (<2% of patients in both facilities). A higher satisfaction perception is usually achieved if patients are told the time they would expect to wait before they got the pharmaceutical service, and if during this waiting time they are provided with reading materials or health education [8].

Satisfaction has been found to be more closely related to satisfaction with waiting time and whether the pharmacy staffs are helpful and caring [9]. It has been reported that patients are least satisfied when waiting times are longer than expected, relatively satisfied when waiting times are perceived as equal to expectation and highly satisfied

when waiting times are shorter than expected [10]. A number of studies have shown that patient waiting time could be managed effectively even if it could not be shortened [11].

Patients pointed the need to decrease the waiting time despite being lower than what has been observed in other studies [1]. This could be achieved by increasing the number of pharmaceutical personnel which would go hand in hand with the improvement of the services. They also proposed increase in the number of stocked drugs and this would deter patients moving from one pharmacy to another looking for drugs they have missed in the previous pharmacy and thus save their time.

CONCLUSION

Many of the patients described pharmacists as polite and just about half the patients rated the pharmaceutical services as good. However, quite a few patients expressed dissatisfaction with long waiting times and unavailability of drugs. Patients suggested areas to be improved to include, increase in number of staff, devise a system to reduce the waiting time and stock the pharmacy with medicines. The scope has not been limited and many areas may have been observed. The study has shown that several patients were satisfied with many of pharmaceutical services.

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