

DISPENSING OF DRUGS WITH AND WITHOUT A PRESCRIPTION FROM PRIVATE PHARMACIES IN DAR ES SALAAM

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Summary

There is little literature available on dispensing patterns and unsupervised sale of medicines from pharmacies in Tanzania. The present study assessed the patterns of drug acquisition from pharmacies by customers: whether by prescription, recommended by pharmacist, or requested by a customer without a prescription. The counseling accompanying the dispensing of these drugs was also assessed.

Two three- hour observational visits were made to each of the twenty pharmacies to collect data. A total of 378 customers who visited the pharmacies were observed. Out of these, 64.29% requested a particular drug, 17.46% came in with a health problem seeking for advice, while 18.25% presented a prescription from a doctor. Of the total drugs demanded 37.08 % were “prescription only drugs”. Counseling of customers on drugs purchased was poor and drugs dispensed were not properly labeled. Among patients presenting with common ailments, patients with cough were the most encountered (25.76%). The pharmacy staff did not offer appropriate advice when faced with people having health related problems. The study highlights the need to reinforce laws governing sales and dispensing of drugs. There is need to educate the general public about self-medication so that people may practice responsible self-medication and stop self medicating using “prescription only” drugs.

Key Words: Self-medication, prescription only drugs, over the counter drugs, dispensing

Introduction

Community pharmacies hold a position of highest trust and responsibility. They are not only sites where medicines are bought and sold but also places where information and advice on common health problems and treatment is sought routinely. Pharmacists working in these pharmacies play an important role in primary health care. They are supposed to promote rational drug use by communicating effectively on issues relating to drugs, and by supplying drugs of good quality. Activities carried out in these pharmacies are expected to be according to Good Pharmacy Practice requirements, which requires that the first concern of the pharmacist must be the welfare of the patient in all settings⁽¹⁾. In many developing countries however, these pharmacies are often staffed by untrained people, or those with minimal formal training but without professional training. Usually the pharmacist in charge is not present in the premises and when present he/she rarely interacts with customers.⁽²⁾ Irrational use of drugs in developing countries is not uncommon.⁽³⁾ Misuse of antibiotics in treating diarrhoea, dispensing of the wrong drug for a particular condition, selling of “prescription only drugs” directly to customers without a prescription are but a few examples^(4,5,6).

Self-medication which involves the selection and use of medicines by individuals to treat self recognized illnesses or symptoms without medical advice is also widespread especially in developing countries.⁽³⁾ The majority of patients seeking drugs for self-medication tend to utilize community pharmacies most of the time. This has been shown to be due to easy access, short waiting time, availability of drugs and flexible opening hours.⁽⁷⁾ Thus private pharmacies are often the first source of health care outside the home for the majority of patients in developing countries.⁽²⁾ The counseling and advice on self-medication, given to patients by pharmacists and pharmacy attendants in these pharmacies has been questioned.⁽⁸⁾ Some studies have shown that pharmacy staffs do not have time to explain important details to the customer and at the same time the customer often has no time to be questioned or to seek the advice of the pharmacy staff.⁽⁸⁾ Such practices can cause self-medication through drugs purchased from pharmacies to be ineffective, wasteful, and at times harmful. In Tanzania the sale and dispensing of medicines is under the control of Tanzania Food and Drug Authority (TFDA). The TFDA Act requires that Part I Poison Drugs or 'Prescription only drugs' be sold and dispensed upon presentation of a prescription from a qualified doctor. While Part II Poison drugs or 'Over the Counter Drugs' may be sold and dispensed without a prescription.⁽⁹⁾ In practice however, any drug available on the market in Tanzania may be purchased over the counter from private pharmacies without a prescription. There is little information available on dispensing patterns and unsupervised sale of medicines from these pharmacies in Tanzania.

This observational study was therefore carried out to assess the services offered by pharmacists to patients who visit private pharmacies complaining of a common health problem, patients with prescriptions to be filled and customers who demanded a particular drug for self-medication.

Method

This was an observational study. Thirty pharmacies out of 265 pharmacies were randomly selected from the three districts of Dar es Salaam namely Kinondoni, Ilala and Temeke. A letter requesting permission to undertake the study in their premises was sent to each pharmacy. Twenty pharmacies out of thirty agreed to participate. The researcher went to each of these pharmacies from 3 pm to 6 pm and made the observation for 3 hours. The observation was done twice for each pharmacy. The following were recorded: Number of patients who came in the pharmacy with a common ailment seeking for advice. The common conditions chosen were malaria, cough and headache. These conditions were chosen because they were common, and there was at least one or more over the counter products available. The researcher also recorded questions asked by the pharmacy staff to arrive at the diagnosis, the medication given, and whether the patient was referred to hospital. For those who were given the medication, the researcher noted

whether the medicines were properly labeled according to the International Pharmaceutical Federation (FIP) guidelines.⁽¹⁾ The researcher also recorded whether patients were counseled on the dose, storage, and side effects of the dispensed drugs. The researcher also assessed how the pharmacy staff attended customers who came in demanding a particular product for self-medication. The following were recorded: The name and type of the product demanded, number of those who were given or refused the drug, those given an alternative drug and any counseling done when dispensing the products. The researcher also asked and recorded the education level of the staff attending the patients. Only one staff was observed during the observation period. The staff member was not aware of the observational activity. The time of observation was chosen because experience has shown that majority of the people visit pharmacies during late afternoons and evening hours

Results

A total of 378 customers who visited the pharmacies during the research period were observed. Out of these, 64.23 % demanded a particular product for self-medication, 17.46 % came in with a problem seeking for advice and treatment while 18 % presented a prescription from a doctor. Of the products demanded by customers 37.08 % were "prescription only drugs" and 62.92 % were over the counter drugs (OTC). All products were provided.

Table 1 shows pharmacological category of products that were demanded by customers. Analgesics were demanded most (31%), followed by antimalarials (21%) and antibiotics (11.56%) Among the analgesics demanded paracetamol was the most demanded drug accounting for about 55.38%, (Table 2). A total of 71 antimalarial drugs were demanded, out of these 47.89% were SP type (Table 3). Common ailments that were encountered are shown in Table 4 with patients presenting with cough being the most frequently encountered (25.76 %). None of the patients was referred to the hospital. Of the twenty staffs that were assessed only 20% were pharmacists, 45% pharmaceutical technicians, and 35% others.

Table 1. Drug demanded arranged pharmacologically.

Drug	Frequency	%
Analgesics	105	31.9
Antimalarials	71	21.6
Antiacids	35	10.6
Antibiotics	39	11.56
Cough mixture	25	7.6
Vitamins	13	3.4
Anthelmintics	10	3.04
Antihistamines	10	3.04
Antiasthmatics	6	1.8
Muscle pain agents	5	1.52
Antihypertensives	4	1.2
Oral contraceptives	3	0.91
Sedative agents	2	0.6
Antiepileptics	1	0.3
Total	329	100.0

Table 2. Analgesics demanded.

Drug	Frequency	%
Paracetamol	55	52.38
Diclofenac	15	14.28
Hedex	10	9.52
Indocid	9	8.57
Nimulid	9	8.57
Brustan	6	5.71
Mifupen	1	0.95
Total	104	100.0

Table 3: Antimalarial drugs demanded

Drug	Frequency	%
Metakelfin	20	28.17
Fansidar	14	19.72
Arinate	12	16.90
Amodiaquine	10	14.08
Arsumax	5	7.04
Plasmotrine	5	7.04
Halfan	3	4.23
Emoquine syrup	1	1.41
Chloroquine	1	1.41
Total	71	100.00

Table 4: Common ailments encountered.

Complaint	Frequency	%
Cough	17	25.76
Common cold	8	12.12
Malaria	6	9.09
Worms	5	7.58
Headache	5	7.58
Muscle pain	3	4.55
Eye problems	3	4.55
Boils	3	4.55
Stomach Discomfort	3	4.55
Loss of appetite	2	3.03
Fever	5	7.58
Back pain	2	3.03
Tiredness	2	3.03
Ear problems	1	1.52
Rashes	1	1.52
Total	66	100.00

Discussion

The present study shows that of the customers who visited the pharmacies, majority were those demanding a particular drug for self-medication. Only a few people with prescriptions from doctors visited the pharmacies during the by Vicencio et al. study period. Similar results were reported⁽¹⁰⁾ Of the common ailments assessed, patients complaining of cough were the most encountered (25.76%). Surprisingly, those complaining of malaria were few. This may be due to the fact that most people know at least one antimalarial drug for self-medication.

Self medication in this study was characterized by drugs bought by consumers from pharmacies without a doctor's prescription or advice from the pharmacist. As seen from the results, most customers encountered (64%) were those demanding a particular drug for self-medication. It is well accepted that self care is the primary source of any health care system.⁽¹¹⁾ People manage or treat a large proportion of

their ailments without consulting a doctor or pharmacist. It is required that only OTC products be used for self-medication. In this study however drugs demanded included "prescription only drugs" as well. The selling of "prescription only drugs" without a prescription is very much practiced in Tanzania, such that now the public knows that they can get any drug over the counter. The present results confirm this practice as shown by 37.08% of customers who demanded "prescription only drugs" over the counter, yet they were not questioned about the products, neither were they denied the products. The easy availability of "prescription only" medicines encourages unsafe self-medication by the public using these drugs. This is a serious and dangerous situation as some people may not be aware of the risks involved in using such medications without proper advice.

A pharmacist has a role to play in helping people make informed choices about drugs for self-medication. This was not the case in this study. Of the customers who came in demanding a particular product, 82 % were not asked a question at all. This implies that people were not guided at all on products they purchased. Among those who purchased antibiotics, for example, 50% purchased half the dosage. The reasons were not explored. It can only be speculated that ignorance and economic constraints were the contributing factors. A survey by Van Duong et al in Vietnam⁽¹²⁾ reported similar findings and showed that purchasers' poor knowledge about antibiotics was the contributing factor.

Among the drugs purchased on demand, analgesics were demanded most (31%). Similar results were shown.⁽¹⁰⁾ Among these analgesics, paracetamol was the most purchased drug amounting to 52.38%. It seems that people prefer buying their own drugs rather than revealing their problems to the pharmacist for advice. This is evident in case of antimalarials. In this study only a few patients (9%) came to the pharmacies complaining of malaria but those who demanded and purchased antimalarial drugs were many (21.6%).

The services offered by the pharmacies to patients who came in complaining of a particular ailment were also poor. The pharmacy staff did not ask proper questions to arrive at the diagnosis and the giving of correct drugs. Most cough patients for example were given cough mixtures regardless of whether they had dry or productive cough. Similar results have been reported by Cadore et al.⁽¹³⁾

The present study shows that little information was given to patients regarding use of medicines. Labeling of the medicines was also poor. Patients in most cases were given medicines labeled with the name of the drug and instructions written in figures as 2x3 or 2x2 accordingly. The figures are meant to indicate how many times the patient is to take the medicine in a day and the quantity to be taken. No more verbal information was given. With such instructions one can not tell whether the first 2 refers to the number of times the drug is to be taken or the number of tablets/capsules that have to be taken at one time.

The pharmacy law in Tanzania requires that pharmacy business must operate under a qualified pharmacist⁽⁹⁾ but this

is not adhered to as revealed by this study. Of the staff that were observed only 20% were pharmacist. Similar findings have been reported by other researchers.⁽²⁾

Conclusion

These results underscore the need to reinforce laws governing the sales of medicines in Tanzania. Educating the public on self-medication is also needed so that people may practice responsible self medication and stop purchasing and using “prescription only” drugs for self-medication.

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