

## Investigation Of Community Pharmacists Response To Common Symptoms In Dar es Salaam

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The study was conducted in order to investigate what advice community pharmacists in Dar es Salaam give to their clients when they visit their pharmacies with complaints of common symptoms of illness. Thirty pharmacies were randomly selected in Ilala District in Dar es Salaam and visited to seek for advice on three identified symptoms, namely, diarrhea, headache and sore throat. Three researchers visited each pharmacy once so that each pharmacy would be visited three times in all. On a few occasions a visit was not possible because of early closing or refusal for treatment. The pattern of advises and drugs given were interpreted in relation to the National Drug Policy and the Treatment Guidelines of Tanzania (NDPTGT). Out of the 26 pharmacies visited to seek advice on diarrhoea, 3 (11%) pharmacies recommended oral rehydration salt (ORS) only, 11% oral rehydration salts plus other drugs, while 9% recommended to see a doctor only, and 19% to see a doctor plus drugs. The rest (50%) recommended drugs only. In case of headache, 70% of the 28 pharmacies visited provided treatment according to the NDPTGT guidelines. For sore throat, 88% suggested symptomatic treatment, which is the recommended treatment by NDPTGT. The remaining 12% recommended use of antibiotics, which is occasionally used in clinical practice in case bacterial or viral infection is seen as the cause of the symptoms.

The study showed that pharmacists do attend to clients seeking treatment for common symptoms before they go to doctors. They advise their clients to see a doctor with or without selling them drugs. Most of their advises were in line with NDPTGT in the case of headache and sore throat but not diarrhoea (50% recommended drugs only). The pattern of drugs sold to the clients suggests that pharmacists in Dar es Salaam do not practice poly-pharmacy.

**Key Words:** Pharmacists, common symptoms, drugs, patients.

### INTRODUCTION

The role of pharmacists in the provision of primary health care is increasingly being discussed. Self-medication for self-limiting symptoms is relatively straightforward and safe, but many patients need guidance about the most suitable drugs to take, and for this they frequently turn to pharmacists [1,2]. A pharmacist can act as filter between a patient and a doctor in some circumstances, in which patients with symptoms they regard as minor would not be referred to a doctor. By virtue of training, experience and accessibility pharmacist can see to it that the right drugs are ordered for the right patients at the right time. He can also make sure that the patients know why and when to use both prescription and non-prescription drug products [2]. Normally, sick people rely on one or a combination of the following health facilities for treatment; medical clinics, private pharmacies, drug stores, friends who have previously been treated for such symptoms and traditional healers. A decision to opt for one of this particular treatment source is determined by several factors, including privacy, accessibility, familiarity with the person giving the treatment and perceived efficacy of

the treatment. Pharmacy and drug stores seem to have the above mentioned merits, and it is therefore logical to say that pharmacists play a role in the management of symptoms regarded by patients as minor ailments [1,3]. The referral cases are those which the pharmacists feel need more careful investigation.

Studies conducted to find out why clients prefer seeing pharmacists before going to a doctor found that pharmacists offer four important advantages, namely: convenience, choice of product, choice of provider and free consultation and counseling [5]. In order to ensure rational drug use and standardized case management, many developing countries, including Tanzania, have put in place National Drug Policy and Treatment Guidelines. In Tanzania, the Essential Drug Program was introduced in 1983 and the Standard Treatment Guidelines and National Essential Drug List was established in 1991 [6]. A study conducted between 1994 and 1995 to find out the effects of Standard Treatment Guidelines (STG) Manual on prescribing pattern in selected health facilities in Dar es salaam

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showed a positive impact on rational drug use [7]. The health facilities in which the intervention was implemented were found to adhere to the guidelines. This study was undertaken to examine the effectiveness of community pharmacists in giving advice to clients presenting themselves with common symptoms. The purpose was also to check if the pattern of drugs sold to the clients fall within the standard Treatment Guideline and Essential Drug List as laid down by the Ministry of Health in Tanzania.

### METHODOLOGY

Three researchers visited thirty pharmacies in Ilala District, in Dar es Salaam, randomly selected by alternative method from a total of 60 independent retail pharmacies registered by the Pharmacy and Poison's Board, between December 1995 to February 1996. The researchers were required to pose as patients seeking advice on three identified symptoms, namely, diarrhoea, headache and sore throat. Each research attempted to visit all selected pharmacies once, so that each would be visited three times in all. The researcher made one visit to avoid recognition on a second occasion. On a few occasions, a visit was not possible because of early closing day or refusal for treatment. Three questions, which were posed by the researchers, were as follows:

1. "I have an adult who has got terrible diarrhoea. What do you suggest?" On being questioned if there were symptoms of fever or bloody stool the researcher said, "No".
2. "I have got a headache. Can you suggest anything?"
3. "I have sore throat. I think it may be developing into a cold. What do you recommend?" In case the person at the pharmacy asked about symptoms such as fever the client denied.

Questions that were frequently asked by the pharmacy staff before giving advice in some pharmacies were:

"For how long has the patient been having the symptoms?"

"What is the age of the patient?"

"Has any treatment or medication been taken prior to visit?"

### RESULTS

The number of pharmacies visited to seek advice on diarrhoea headache and sore throat were 26, 28 and 25 respectively. The figure of thirty could not be attained because some pharmacies either denied treatment or were closed during the time of visit. The pattern of

response and drugs suggested for each of the three symptoms was as follows:

#### Diarrhoea

The results appear in table 1a and 1b. Nine percent (9%) of the pharmacies advised the patient with diarrhoea, to consult a doctor without recommending any drug. Nineteen percent advised the patients to see a doctor but also gave drugs. Eleven percent suggested the use of oral rehydration salts (ORS) or salt/sugar solution (SSS) only (a home made preparation especially for those who could not afford to purchase ORS). Another 11% suggested the use of ORS or SSS and other drugs. A significant number of the pharmacies (50%) recommended the use of drugs only. Out of the drugs recommended, antispasmodics contributed 47%, followed by antibacterials (14%) and antiprotozoans (19%) (table 1b).

TABLE 1a: PATTERN OF RESPONSE TO DIARRHOEA SYMPTOMS

Item	Response	No. of occasions	
		N= 26	%
1	Advised to see the Doctor	2	9
2	Advised to see the Doctor and drugs	5	19
3	ORS	3	11
4	ORS and drugs	3	11
5	Drugs only	13	50

TABLE 1b: PATTERN OF DRUGS SUGGESTED FOR DIARRHOEA

Drugs	No. of occasions	
	N= 26	%
No drugs	2	9
Oral Rehydration Salt (ORS)	3	11
ORS plus Loperamide (Imodium)*	3	11
Loperamide (Imodium)*	2	9
Diphenoxylate* (Iomotil)	7	27
Co-trimoxazole (septrin)**	3	11
Sulphadimidine**	1	3
Metronidazole (flagyl)***	4	16
Flagyl*** plus buscopan*	1	3

Key: \*Antimotility \*\* Antibacterial \*\*\* Antiprotozoan

## Headache

Advices given for the patient presenting with headache is shown in table 2a and 2b. Out of the 28 pharmacies visited, 11% advised the patient to consult a doctor without giving any drug, while 7% advised them to see a doctor plus giving some drugs. About 53% suggested the use of single analgesics and 29% gave combinations of several analgesics. For the single analgesic, paracetamol was the most suggested followed by aspirin. There was no occasion that a drug other than an analgesic was suggested.

TABLE 2a: PATTERN RESPONSE FOR HEADACHE

Item	Response	No. of occasions	
		N = 28	%
1	Advised to see the doctor	3	11
2	Advised to see the doctor + drugs	2	7
3	Single analgesic	15	3
4	Combination of several analgesics	8	29

TABLE 2b: PATTERN OF DRUGS SUGGESTED

Drugs	No. of occasions	
	N = 28	%
No drugs	3	11
Aspirin	4	14
Paracetamol	4	14
Panadol (paracetamol)	5	17
Panaway (paracetamol)	4	14
Imol	1	4
Dawanol	4	14
Action	1	1
Hedex	3	11

## Sore throat

The results in table 3a and 3b show that out of the 25 pharmacies visited, 68% recommended the use of lozenges, 8% use of lozenges and gargle solution and 16% use of antibiotics. Twelve percent advised the patient to consult a doctor and 8% to see a doctor but also suggested the use of drugs.

TABLE 3a: PATTERN OF RESPONSE FOR SORE THROAT SYMPTOMS

Item	Response	No. of occasions	
		N = 25	%
1	Advised to see the doctor	3	12
2	Advised to see the doctor + lozenges	2	8
3	Lozenges only	15	60
	Lozenges + gargle	2	8
5	Antibiotics	4	16

TABLE 3b: PATTERN OF DRUGS SUGGESTED

Drugs	No. of occasions	
	N = 25	%
No drug	3	12
Strepsil*	5	20
Vicks Kingo*	5	20
Dequadin*	4	16
Cofta*	2	8
Strepsil* + potassium permanganate gargle	1	4
Strepsil* + mediocal gargle	1	4
Penicillin -v**	3	12
Ampicillin**	1	4

Key: \* Lozenges \*\* Antibiotics

## DISCUSSIONS

Surveys of professional groups show that they consist of practitioners of varying competence and integrity. In this survey, only 21.5% of the pharmacies visited to advise on the three types of symptoms suggested a visit to a doctor. Only 41.2% of these did not give any drug to the patient. This is contrary to a similar study conducted elsewhere in Europe, where 50% of the pharmacies gave advice to see a doctor [1]. In Asia this kind of study revealed that only 16% of pharmacies advised the patients to consult a doctor, or to use ORS [8]. Comparison between the results obtained in Asia and those in Tanzania shows that a small number of community pharmacies follow WHO recommendations for diarrhoea treatment, that is, use of ORS as first line of treatment although ORS was introduced in 1969 which may be due to lack of continuing education and economic reasons.

This study was conducted to examine the effectiveness of pharmacists as advisers in management of simple common symptoms of illnesses and to find out if the drugs they suggest comply with those outlined in the National Drug Policy and Treatment Guidelines in Tanzania. On the advice for diarrhoea, which was sought in 26 pharmacies, 11% suggested the use of ORS, 11% use of ORS and drugs while 50% advised use of drugs only. The drugs suggested or dispensed included antispasmodics, antibacterials and antiprotozoans. According to the National Treatment Guideline of Tanzania, the first line of treatment for diarrhoea is the use of ORS to correct dehydration [6]. In this study, only 22% of the pharmacies used ORS, although half of these added imodium, which is not prescribed in the guideline. The use of antibacterials is rarely indicated in routine treatment of acute diarrhoea unless the infection has been diagnosed and the causative agent established [2,9]. The antimotility drugs are not recommended in the treatment of diarrhoea because they interfere with the mechanical clearance of pathogens or toxins from the gastrointestinal tract [9].

For the headache, out of 28 pharmacies visited, 53% suggested the use of simple single analgesics. This is in line with the National treatment Guidelines policy. Twenty-nine pharmacies recommended the use of a combination of analgesics like "Hedex", which contains aspirin, paracetamol and caffeine. This was improper treatment because each component has its own pharmacological and side effects. Caffeine is a stimulant and its side effect is the potentiating of the irritation due to aspirin, and, on withdrawing, it induces headache [10], thus worsening the patient's headache.

The advice for sore throat sought from 25 pharmacies showed that 80% suggested the use of lozenges alone or lozenges with a gargle or antibiotic alone. The National Treatment Guidelines recommend symptomatic treatment plus an antibiotic where a viral or a bacterial infection is indicated [2,6]. In this study, majority of the pharmacies suggested symptomatic treatment, while a few suggested antibiotics, both of which are in line with what is being practiced according to NTG and clinical practice. It was noted that in all pharmacies visited for advice on common symptoms, poly-pharmacy was less practiced.

In conclusion, the study found that community pharmacists showed good knowledge and practice on the symptoms of headache and sore throat but not on diarrhoea.

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