

The role of pharmacists in the management of sexually transmitted diseases in Tanzania

TEMU JUSTIN, M.^{1*}, OUTWATER, A.², LYAMUYA, E.F.³, HAULE, A.F.K.¹, LESHABARI, M.T.⁴,
PALLANGYO, K.J.³

¹Temu-Justin, M., * Haule, A.F.K., Faculty of Pharmacy, Muhimbili University College of Health Sciences, P.O. Box 65013 Dar es Salaam, Tanzania. ²Outwater, A., Family Health International AIDSTECH, P.O. Box 3219 Dar es Salaam, Tanzania. ³Lyamuya, E.F., Pallangyo, K.J., Faculty of Medicine, Muhimbili University College of Health Sciences, P.O. Box 65002 Dar es Salaam, Tanzania. ⁴Leshabari, M.T., Institute of Public Health, Muhimbili University College of Health Sciences, P.O. Box 65002 Dar es Salaam, Tanzania.

* Author to whom correspondence should be addressed.

The study was conducted in order to ascertain the knowledge and involvement of pharmacists in over-the-counter treatment of common sexually transmitted diseases (STDs) in Dar es Salaam including their role in disseminating information to their clients. Structured questionnaires were sent to 58 pharmacists working in private pharmacies in Dar es Salaam. Altogether 43 (74%) pharmacists completed the questionnaires. Data collected using interview methods and group discussions involving 15 pharmacists were also analyzed. The drugs dispensed by pharmacists were collected by interviewers posing as patients.

Results indicate that on average, a total of 200 clients in the study area seek treatment for STDs from pharmacists every day. Symptoms described by clients are non-specific for the various STD syndromes but those with genital discharge are better understood than others. Eighty to hundred percent of the pharmacists knew the aetiology of various STDs in general terms, but less than 10% knew the specific causative agents for the majority of common STDs. Whereas a significant proportion of pharmacists knew some of the drugs for STD treatment, 94% and 100% of them did not know the Ministry of Health (MOH) recommended standard treatment regimen for lymphogranuloma venereum (LGV) and vaginitis respectively.

This is the first documented study on the extent of involvement of pharmacists in the management of STDs in Tanzania. Our data suggest that pharmacists should be equipped with the proper knowledge on STD aetiology, treatment and prevention. They should also be more conversant with M.O.H. recommended STD treatment regimen.

Key words: Pharmacists, Clients, STDs, Drugs.

INTRODUCTION

Sexually transmitted diseases (STDs) are an important cause of morbidity and mortality in Tanzania. Whereas the true magnitude of STDs is not known, available data indicate that they are widespread [1]. For example, in a study by Msamanga et al [2], of every 1000 outpatients in Tanzania, 15 were diagnosed as having an STD. The role of STDs that produce genital ulcers in facilitating transmission and spread of the human immunodeficiency virus (HIV) is now well established [3], and programmes which provide effective management of STDs have been shown to decrease sexual transmission of HIV significantly [4]. Beside the programmes organized by the Ministry of Health (MOH), the National AIDS Control Programme of the M.O.H. produced a booklet on STDs in July 1992 [5]. It was from this time that the STD syndromic treatment algorithm approach, described in the booklet,

came into operation. This was introduced mainly for medical professionals dealing with STDs where laboratory facilities are not available. Emphasis was on the regular monitoring of the sensitivity pattern of STD pathogens to antimicrobial chemotherapeutic agents in order to update the syndromic treatment algorithm guideline [6].

Patients with STDs shop around for diagnosis and treatment from one or a combination of the following health care facilities: medical clinics, retail pharmacies and drug stores, friends who have previously been treated for STDs and traditional healers. A decision to opt for a particular treatment source is based on several factors, including privacy, accessibility, familiarity with the person giving treatment, and the perceived efficacy of the treatment. Pharmacy and drug stores seem to have most of the above mentioned merits, and it is therefore logical to hypothesize that pharmacists may discreetly be playing a significant role in the

management of STDs in Tanzania. However, currently existing laws and regulations do not allow pharmacists to dispense drugs in Part I poisons list without prescriptions, from a duly qualified medical practitioner, dentist or veterinary surgeon [7].

The extent to which pharmacists are involved in the diagnosis, treatment and prevention of STDs in Tanzania is unknown. The aim of this study was to find out the knowledge, attitude and practice (KAP) of pharmacists in STD management, the extent to which STD clients sought treatment from pharmacists, and the role of pharmacists in disseminating information to their STD clients. Knowledge obtained from this study should provide some information on the significance of this source of treatment in STD management in Tanzania.

SUBJECTS AND METHODS

The KAP survey was done in 1992 on 58 pharmacists from 58 pharmacies in Dar es Salaam, of whom 43 completed the questionnaire; 22(35) from Ilala, 14(15) from Kinondoni, and 7(8) from Temeke districts. The numbers in parentheses are the total number of pharmacies operating in Dar es Salaam, and the list was obtained from the Pharmacy Board, M.O.H. Each pharmacist was requested to complete a questionnaire. The questionnaire sought information on the level of education of the pharmacist, STD syndromes reported to the pharmacist, the disease's local names, the pharmacist's knowledge on the aetiology, the suggested treatment of common STD's, the awareness of the treatment algorithm for STDs as laid down by the Ministry of Health, and their practice relating to treatment of STDs in men and women. In addition, information was sought on the availability of drugs for STDs in the pharmacies studied, the routine advice given to clients, and the awareness of the modes of STD transmission (especially that of HIV) and option for prevention.

Focus group discussion:

Three sessions were held involving 3 separate groups of participants (5 participants/group) who were pharmacists from 15 of the pharmacies covered in the study. The pharmacists were from Ilala (7), Kinondoni (7), and Temeke (1) districts. It was noted that the participants operated mainly in low in-come densely populated areas. A facilitator, leading the discussion, posed questions seeking information on STD symptoms, causes and treatment, and the responses from each participant were written down by two recorders (a doctor and a pharmacist). In this way information on the same aspects as in the (KAP) survey was obtained.

RESULTS AND DISCUSSIONS

All the 43 pharmacists were university graduates. Thirty eight (88.4%) of them underwent university training directly after Form 6, three (7%) had been working as pharmaceutical technicians and two (4.6%) were medical assistants before university training in pharmacy.

A total of 200 clients calculated from the figure reported by each participant, sought treatment for STDs from pharmacists everyday. The majority of clients were from low in-come densely populated areas. The symptoms the clients reported to the pharmacists using their own vernacular such as *kugonga mwamba*, *kujikwaa* and so on, were not clearly descriptive of the STD syndromes (Table 1). The local names simply aimed at drawing the attention of the pharmacist to the fact that something was wrong with one's private parts.

As seen in Table 2, 82-100% of the pharmacists knew the aetiology of various STDs in general terms, but few knew the specific causative agents. It can also be observed that a significant proportion of pharmacists knew some of the drugs used for STD treatment, while some of them did not know the standard treatment recommended by the MOH.

TABLE I. Various STD names as reported by clients

Name	No. (%)	Name	No. (%)	Name	No. (%)
Kugonga	9(21.4)	Kuwashwa	2(4.8)	Kugonga mwamba	4(9.5)
Fungus	5(11.9)	Gono	23(54.8)	Kichocho	2(9.5)
Kisonono	20(47.6)	TV	4(9.5)	Syphillis	8(19.0)
Mtoki	1(2.4)	Kaswende	18(42.9)	Kujikwaa	1(2.4)
Herpes	1(2.4)	Kunasa	1(2.4)	Vipele	1(2.4)
Kukwama	3(7.1)	Usaha	1(2.4)	Kuumia kazini	1(2.4)
Candidiasis	3(7.1)	Vidonda	2(4.8)	Kunoku injini	2(4.8)
UTI	1(2.4)	Kuumwa tumbo	1(2.4)	Kuharibikiwa	1(2.4)
Kuvamia mkenge	1(2.4)	Kidonda chini	1(2.4)	Mafua	1(2.4)
Kuingia gari bovu	1(2.4)	Mkojo unaouma	1(2.4)	Kugonga gari	1(2.4)
Engine imegonga	1(2.4)	Pangusa	4(9.5)		

TABLE II. STD causes and treatment as reported by pharmacists

STD TREATMENT	CAUSES							
	Choice	Bacteria	Virus	Fungus	Specific	Don't know	Useful	1st choice
Gonorrhoea		100%	----	----	6%	----	T,C,P,E,Ce	None
NGU		100%	----	----	----	----	Don't know	None
Chancroid		100%	----	----	----	----	Antibiotic	None
Genital herpes		90%	----	----	----	----	None	Acyclovir
IGV		6%	----	----	----	94%	T,P,E	None
GI		100%	----	----	----	----	T	None
Trichomoniasis		----	----	6%	94%	----	Met.	Met
Vaginosis		----	----	----	----	100%	Don't know	None
Warts		----	100%	----	----	----	P ₀ AgN	P ₀ AgN
Candidiasis		----	----	100%	----	----	N,F,Clo.	N
Chlamydia		82%	----	----	----	18%	T,Aug	None

Key: NGU - Non-gonococcal urethritis
 GI - Granuloma inguinale
 C - Cotrimoxazole
 E - Erythromycin
 Met. - Metronidazole
 AgN - Silver Nitrate
 F - Floraquin
 Aug - Augmentin

LGV - Lymphogranuloma venereum
 T - Tetracycline
 P - Penicillin
 Ce - Cephalosporin
 Po - Podophyllin
 N - Nystatin
 Clo - Clotrimazole

All participants knew the correct treatment according to the M.O.H. treatment algorithm for urethral discharge in males, and vaginal discharge and lower abdominal pain in females.

Regarding drug availability and determinants of stocking STD drugs, it was found that 80-100% of the drugs used for the treatment of common STDs were available most of the time in all pharmacies. The main determinant of stocking STD drugs was found to be patient demand (79%) and doctors' prescribing habits (70%). The price of the drugs to some extent influenced stocking (42.6%).

In all pharmacies studied, it was reported that clients were normally given instructions on how to use the drugs either verbally (93%) or using verbal plus a supplementary written instruction (91%). In addition, the pharmacists reported that patients were advised to consult their physicians for further management, by 76% of the pharmacists. 78% of the pharmacists also reported that they advised their STD clients to send their partners to physicians for investigation and treatment.

Ninety to hundred percent (90-100%) of the pharmacists were aware of the various modes of HIV transmission. Eighty eight percent (88%) were aware of the role of condom use and sticking to one partner as important measures for preventing STD (including HIV) transmission.

Tanzania has about 300 registered pharmacists. Most of them are employed by the government and the majority are stationed in Dar es Salaam. In this study, 43 out of 58 pharmacists from retail pharmacies in Dar

es Salaam participated. This sample therefore represented 14.3% of all registered pharmacists in the whole country.

The findings obtained in this study clearly show that STD patients do seek treatment for their problems from pharmacists. The explanation for STD patients opting for this source of medical care is probably multifactorial, including such aspects as the availability of appropriate treatment, secrecy, accessibility, and quick provision of service. The availability of drugs for STD treatment was also confirmed in this study. The observation that most of the STD synonyms reported to pharmacists are not descriptive enough is important because any attempt to involve pharmacists in STD management would require them to know how to elicit the relevant symptoms from the patients. It was observed from the focus group discussions that recognition of STDs presenting with urethral discharge in males or vaginal discharge associated with lower abdominal pain in females was easily made, and even the correct treatment was known by all pharmacists. The reason for this remarkable awareness could be the acute nature of the presentation of these STDs and the fact that they are fairly common and known to many people.

The MOH designed an STD syndromic treatment algorithm, aimed at making it possible to treat STDs in the absence of laboratory diagnosis and even clinical examination [5]. The approach is certainly useful in peripheral health care units where laboratory facilities are either rudimentary or non-existent. Since it is undeniable that patients seek STD therapy from retail pharmacies, it is logical to suggest that any attempt to

treat STD patients in such a setting should involve the use of the M.O.H. algorithm because of lack of laboratory facilities. Therefore, efforts to explore the possibility of involving pharmacists in STD management is further strengthened by the observation that some of the pharmacists had previous experience in medical practice as medical assistants.

Medical assistants are trained to make diagnosis and prescribe treatment. Besides treatment, this study also revealed that pharmacists give advice to the clients on the hazards of STDs, the mode of transmission, and how to prevent them. This finding is of immense significance in STD prevention because pharmacists could easily be involved in the information communication and education strategy.

In conclusion, this study has revealed that pharmacists do play a significant role in STD management, which should not be overlooked when planning management strategies. From the findings obtained in this study the following recommendations are pertinent.

1. Currently the existing laws and regulations do not allow pharmacists to give treatment without prescription from a qualified medical practitioner. However, in view of the findings obtained in this study, it is recommended that these regulations be reviewed in order to utilize pharmacists in the recognition and management of the common STDs in our community.
2. Pharmacists should be well equipped with correct information regarding control and prevention measures for STD and should be involved in the dissemination of this information to the community.
3. Since pharmacists know the mode of transmission of the AIDS virus they should be involved in disseminating this information to the people as part of the AIDS control programme.

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