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Practices of Self-Medication in the Harar City and Surrounding Communities in Eastern Ethiopia

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1. Introduction

The World Health Organization (WHO) defines self-medication as a component of self-care that involves people choosing and using medications to treat ailments or symptoms they have identified on their own [1]. In order to lessen the strain on health care facilities, particularly in understaffed, inaccessible distant locations, self-medication is used to quickly and effectively relieve the symptoms of mild illnesses without the need for medical consultations [2, 3].
When used properly, self-medication benefits both patients and healthcare systems. In addition to saving time spent waiting for a doctor, it enables people to take charge of their health, develops their confidence to manage it, and may save health care expenses [1, 4, 5]. However,The practice of self-medication has its own disadvantages, including increased pathogen resistance, greater adverse reactions, and a significant risk of inappropriate usage [6, 7]. Inaccurate self-diagnosis, delays in obtaining proper care, harmful drug interactions, improper dosage, inappropriate prescription selection, and the risk of dependence and drug misuse are further consequences of self-medication [2, 8].
Self-medication is very common, according to studies done in various settings [9–11]. Community pharmacy personnel can play an important role in reducing irrational drug usage due to self-medication by offering the general public support and medication advice [12–15]. However, research revealed that the public's comprehension of the community pharmacist's role in self-care was lacking [16, 17].

In developing nations such as Ethiopia, individuals are taking both prescription and over-the-counter medications [18]. Nevertheless, no research has been done in Harar City, Eastern Ethiopia, about the current state of self-medication practices and the opinions of the local population regarding the function of community pharmacy experts. Therefore, the purpose of this study was to evaluate the public's perceptions on the role of community pharmacy experts in Harar City as well as self-medication habits.

1. Supplies and Procedures
1.1. Time Period and Study Area. Between March and April of 2017, this study was carried out among the residents of Harar City and the surrounding area. Ethiopia's capital, Addis Ababa, is 525 kilometers away from Harar, the capital of Harari regional state, which is situated in the country's east. There were forty-four drug outlets and sixteen pharmacies in Harar City throughout the study period.

1.2. Study Population and Study Design. Clients who visited pharmacies during the study period

participated in a cross-sectional study. All clients who visited specific private drug retail locations for self-medication throughout the study period were the study populations, and all residents of Harar City and the surrounding areas were the source populations. The study comprised participants who were at least eighteen years old and who bought prescription drugs without a prescription. The study did not include clients who came in to pick up medications for other clients.

1.3. Sampling Method and Sample Size. By assuming a 5% marginal error, a 95% confidence interval, ∂ (alpha) = 0.05, and 50% of the prevalence rate of self-medication, the actual sample size for the study was calculated using the formula for single population percentage, yielding a total sample size of 384. Using a stratified random selection technique, representative drug retail outlets were chosen. The number of interview subjects for each chosen drug retail location was determined by the volume of patients who visited the chosen locations.

1.4. Information Gathering and Evaluation. Data was gathered using a standardized questionnaire. The purpose of the pretest was to verify the tools' functionality. Data collectors received instruction on how to approach interview subjects and the content of data collection tools. The questionnaires were reviewed for consistency and completeness following data collection. Ultimately, SPSS version 20 was used to code it, enter it into epi-data, process it, and analyze it. Tables were used to display the results, which were reported as frequencies, percentages, and summary measures.
1.5. Moral Deliberation. The Haramaya University School of Pharmacy Research Ethics Review Committee gave its approval to the study protocol. The managers of drug retail outlets were given a formal authorization letter from the College of Health and Medical Sciences, along with information about the research's goal and the selection process for its premise. Prior to the gathering of data, verbal consent was

acquired by explaining the goal of the study to each participant.

1.6. Definitions of Operations
professionals in pharmacy. Regardless of their educational background, pharmacy professionals worked in pharmacies.

pharmacies. refers to drug stores as well as community pharmacies.

2. Outcomes
2.1. Participants' sociodemographic details. A total of 370 customers who visited pharmacies in Harar City took part in the study; 14 more declined to do so, yielding a 96.4% response rate. The respondents' average age was 32 years old, with an 11.15-year standard deviation. Compared to men, 53% of the population was female. Of those surveyed, over half (54.9%) were married. In terms of economic position, the respondents' monthly income mean and standard deviation were 3179 and 2643.66 ETB, respectively. The sociodemographic details of the participants are displayed in Table 1.
2.2. Participants' Self-Medication Practices. Table 2 shows that approximately one-third (30.3%) of the participants self-medicated for headache relief, respiratory disorders (29.5%), and gastrointestinal disorders (27%). More than half (57.8%) of respondents cited prior experiences when asked why they self-medicated, and 20.50% of them did so in search of a less costly substance or service. Two-fifths of them (40.3%) cited pharmacy experts as their information source when it came to self-medication, whilst 18.9% of respondents said that friends, neighbors, or family members gave them advice. Approximately one-third (31.9%) of them lacked any informational resources for self-medication. The most often used medication in this study was an analgesic (42.2%), followed by respiratory (31.1%) and gastrointestinal (19.50%)

medications.

2.3. Methods by Which Participants Request Self-Medication. About half of the individuals obtained the medication by informing experts the drug's name, whereas 43% of them asked professionals by describing their symptoms. Additionally, participants were asked what they expected from pharmacy workers. Thirty-three percent of respondents expected assistance in the drug selection process, and just under one-third (31.1%) expected pharmacy personnel to counsel them about drug adverse effects and how to avoid them (Table 3).

3. Conversation

This study's main goal was to evaluate the Harar City community's self-medication habits. Headaches and respiratory and gastrointestinal issues were the most common primary complaints in this study. The primary source of

TABLE 1: Sociodemographic characteristics of participants in Harar City and its surroundings from March to April, 2017(n=370).

Variable	Frequency	Percentage (%)
Age (years)		
18-25	123	33.2
26-33	128	34.6
34 and above	119	32.2
Mean (SD)	32(11.15)	
Gender		
Female	196	53.0
Male	174	47.0
Ethnicity		
Oromo	126	34.1
Amhara	118	31.9
Hader	56	15.1
Tigre	28	7.6
Somali	16	4.3
Others	26	7
Religion		
Orthodox	175	47.3
Muslim	154	41.6
Protestant	34	9.2
Others	7	1.9
Educational		
Illiterate	27	7.3
Read and write	10	2.7
Primary school	39	10.5
Secondary school	94	25.4
College and above	200	54.1
Marital status		
Single	136	36.8
Married	203	54.9
Divorced	18	4.8
Widowed	13	3.5
Occupations		
Merchant	145	39.2
Employee	107	28.9
Daily labor	37	10
House wife	63	17
Others	18	4.9
Monthly income		
Nondisclosed	175	47.3
400-2000	78	21.1
2001-3600	63	17.0
3601-5200	12	3.2
>5201	42	11.4
Mean (SD)	3179(2643.66) Birr	

∗ ETB, Ethiopian Birr, $1=28ETB, SD: standard deviation.

Self-medication was motivated by prior drug and illness experiences as well as the practice's lower cost as compared to visiting medical facilities like clinics and hospitals.

The primary source of knowledge for self-medication practice was pharmacy professionals, who were followed by friends, neighbors, or family. The most often used medication in this study was an analgesic, which was followed by gastrointestinal and respiratory medications.

The most common reason for self-medication in this survey was headache compliance (30.3%), which was followed by respiratory (29.5%) and gastrointestinal (27%). According to a systematic analysis carried out in Ethiopia, the most prevalent disorders for which self-medication was used were respiratory, gastrointestinal, and fever/headache conditions, which accounted for an average of 30.5%, 19.7%, and 18.3% of self-medication usage, respectively [18]. Additionally, this result is in line with research conducted elsewhere [19–21]. Self-medication for the aforementioned issues seems more sensible than going to the doctor because the drugstore is frequently more convenient and time-efficient. Patients and pharmacy staff need to be aware of concerning signs and symptoms that call for a doctor's visit, even though such symptoms appear less severe and controllable. Additionally, since not all illnesses need for medicine, pharmacists should comfort patients without suggesting medications.

In our study, 20.5% of participants reported self-medication due to its affordability, while the majority of participants (57.8%) reported self-medication due to prior experience. Another common explanation was that the illnesses were mild. This outcome is consistent with research conducted elsewhere [22–24]. Even if self-medication is inexpensive, if some medical conditions are not treated promptly and appropriately, there may be long-term health consequences. Therefore, pharmacists should be knowledgeable about these medical situations and advise clients on what to do.

Pharmacy professionals (40.3%) and self-decision without any information (31.9%) were the most common sources of information in the current study. These were followed by neighbors, friends, or family (18.9%) and reading drug-related materials (8.1%), such as labels, pamphlets, or promotions about the medication. This study is nearly identical to a study conducted in Jimma town that found that 48.02% of self-medicated individuals reported getting their knowledge from personal drug outlets [22]. In contrast to this study, a study conducted in Mekele found that the most common sources of information for self-medication were friends (31.25%), media and reading material (14.10%), and self-decision (64.0%). The least common sources of information for self-medication were pharmacists or pharmacy professionals (9.40%) [25]. Given that a subsequent study was carried out among university students, this discrepancy may result from the different study population. It makes sense that users obtain information for self-medication from a variety of sources. Nonetheless, the community should be able to demonstrate the veracity of information and be conscious that not all sources are reliable.

The most often used medicine category for self-medication in the current study was analgesics (42.2%), followed by medications for respiratory issues (31.10%) and gastrointestinal medications (19.50%). This result is consistent with research done elsewhere [17, 20]. But

TABLE 2: Self-medication practice among participants in Harar City and its surroundings from March to April, 2017(n=370).

Variables	Responses	Frequency	Percentage (%)
Major chief complaints			
	Headache	112	30.3
	Respiratory disorders	109	29.5
	Gastrointestinal disorders	100	27.0
	Fever	26	7.0
	Skin disorders	23	6.2
Reason for self-medication			
	Less expensive	76	20.5
	Prior experience of drug or disease	214	57.8
	Disease is not serious	49	13.2
	Emergency care	30	8.1
	Others∗	1	0.3
Sources of information			
	Pharmacist	149	40.3
	No information	118	31.9
	Advised by neighbors, friends, or relatives	70	18.9
	Labels and leaflets or promotional materials	30	8.1
	Others∧	3	0.8
Medications used			
	Analgesic / antipyretics	156	42.2
	Respiratory drugs	115	31.1
	GI drugs	72	19.5
	Oral rehydration salt	2	0.5
	Antimicrobials	11	3.0
	Others∗∗	14	3.8
Adverse drug reaction			
	Yes	44	11.9
	No	326	88.1

∗ indicates less waiting time; ∧ indicates other professionals, past experiences; ∗∗ indicates vitamins and anthelmintics.

TABLE 3: Participants' ways of request for self-medication in Harar city and its surroundings from March to April, 2017(n=370).

Variables	Responses	Frequency	Percentage (%)
Self-medication request			
	By telling professionals the symptom of illness	159	43
	By telling professionals the name of the drug	183	49.5
	By showing an old sample/package of the drugs	16	4.3
	By describing the physical characteristics of the drugs	12	3.2
Participants expectation from pharmacy professionals			
	To counsel them about drug side effects and how to avoid it	115	31.1
	To help them in selecting drugs	112	30.3
	To counsel them about diseases	76	20.5
	To monitor their health's progress to ensure the safety and effectiveness of drugs	35	9.5
	To label their drugs for self-medication	32	8.6

The report on antimicrobial use showed the biggest disparity. Just 3% of individuals in our survey said they used antibiotics. This could be because participants didn't know what kind of medicines they were using. Discouragement of antibiotic self-medication is crucial, even though fewer individuals

reported using antibiotics.
The public is supposed to respect and profit from community pharmacy workers' knowledge of medication-related matters. However, only 30.3% of participants in this survey sought assistance in choosing a medication for self-medication, and only 31.1% of individuals anticipated consulting pharmacy personnel regarding the drug's side effects comparatively low as compared to other studies [9, 26]. This discrepancy can result from variations in the research area, which indicate a lack of knowledge regarding the function of community pharmacy practitioners in this field. Due to their direct access to the community, community pharmacy professionals can play an important role in primary care. However, these experts are frequently underutilized for a variety of reasons, including mistrust and a lack of understanding among the community about possible possibilities. Therefore, it is crucial to raise community understanding of the responsibilities and skills of community pharmacy staff with regard to medication-related matters.

1. Conclusion

In the current study, patients frequently sought self-medication for gastrointestinal issues, headaches, and respiratory difficulties. The practitioners also mentioned the drug's affordability in the pharmacy and their prior experience as contributing factors. A sizable portion of individuals were unaware of the medication they were taking, despite the fact that many self-medication users had learned about it from their pharmacist. The most often utilized pharmaceuticals were antipain ones, which were followed by gastrointestinal and respiratory meds. In the current study, it was usual to ask professionals for medication by telling them the drug's name, followed by asking them about their symptoms. Additionally, individuals' perspectives on the function of pharmacy professionals varied.

Availability of Data

Upon request, the corresponding author will provide the data that supported the study's conclusions.

Extra Points

The study's limitations. Since we only included study participants who used drugs for self-medication, we were unable to demonstrate a cause-and-effect link. Because it was not multicenter, the current study also had limitations with regard to its generalizability.

Conflicts of Interest

There are no disclosed conflicts of interest for the writers.

Recognitions

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