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**ASSESSMENT OF COMMUNITY PHARMACY PRACTICE IN ASMARA: A  
DESCRIPTIVE STUDY**

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**ABSTRACT**

The advent of pharmaceutical care revolutionized the pharmacy practice from a limited drug supply role into a more extended focus of patient oriented services. In order to get by this reformation, it's imperative for pharmacists to shape themselves accordingly. This study was conducted to assess the compliance level of pharmacy practice in community setting, in Asmara, Eritrea, with the Good Pharmacy Practice standards and to come up with pragmatic recommendations. 23 community pharmacies, grouped in three different categories, were included to make multidimensional, rationally defined observations. The results illustrated that the community pharmacy practice is at its most basic appearance, excepting the proper pharmaceutical care services provision. Moreover, decentralized practice, which is a growing threat for patients' trust on pharmacists, was observed. Thus, the need for a principal amendment in the entire practice of community pharmacy is clearly appreciated.

**KEYWORDS**

Community pharmacy practice, Pharmaceutical care, Good Pharmacy Practice and Decentralized practice.

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**INTRODUCTION**

Worldwide the significance of Good Pharmacy Practice (GPP) is clearly appreciated at times when irrational drug therapy and malpractice is becoming the epidemic disease of healthcare services. Pharmacists, usually being the last healthcare providers with whom a patient comes in contact before utilizing a medication, are burdened with huge responsibilities to provide medications and other healthcare products and services "to help

people make the best use of them" i.e erase "and society"<sup>1</sup>.

As community pharmacists are in direct contact with patients, they are tasked with a number of responsibilities, which can help enhance the vision of their profession and importance in a health care system<sup>2</sup>. In developing countries retail pharmacies are the important source of providing health advice<sup>3</sup>. The community pharmacist renders such a great professional services in the society without booking appointment and high consultation charges. And thus the pharmacist is placed at the summit between the patient and medication. As the pharmaceutical care is now taking a more clinical role toward the patients, it poses some challenges that must be met.

Pharmaceutical care is an extended professional role in which pharmacists assume responsibility for pharmaceutical and health outcomes that impact a patient's quality of life such as identifying and resolving potential drug-related problems, rather than a more limited drug supply role. This change is due to the advancement in technology, research, and education; thus meeting patient demands. Therefore, it is the transformation of community pharmacy practice from provision of product oriented services into the extent of pharmaceutical care provision<sup>1</sup>. Handing over prescribed medications to a patient is not the only role of a community pharmacist. Besides this patients demand suggestions and recommendations regarding the prescribed doses, therefore, the role of community pharmacists seem to be highlighted for the future<sup>4</sup>.

Updated drug information and trainings should be frequently given to professionals involved on dispensing<sup>5</sup>. Furthermore, another obligation of a pharmacist is to keep patients' records so there would be an ease to investigate medication dispensing history and medication profile. This way, there is a chance to build a relationship with patients and gain their trust toward the profession of pharmacy<sup>6</sup>.

Despite this being true today in many countries all over the world, some nations are still not fully

aware. Eritrea is one of such nations, which needs revitalization of community pharmacy practice. The present study was conducted to assess current community pharmacy practice in Asmara, capital of Eritrea. The scope of the assessment includes: the referencing materials used, communication with fellow professionals, labeling and packaging practice, and documentation practice level.

## **METHODS**

To assess the level of practice, cross-sectional/descriptive study was employed. The study was conducted in 23 community pharmacies in the city of Asmara. Both qualitative and quantitative data were collected.

The tools employed in this study include; literature review, which focused on the developed, and developing countries experience, pharmacist interview at the site of practice, questionnaire dissemination to pharmacist. Then to culminate the data gathered a focus group discussion with senior community pharmacists was conducted.

## **RESULTS**

### **Reference**

Table No.1 shows that all the governmentally owned chain pharmacies and 92.2% of the private community pharmacies claimed to have adequate reference materials. However, none of the chain pharmacies were found to have an electronic device (computer or laptop) aided referencing system, whereas 53.8% of the private pharmacies had either a desktop computer or a laptop.

### **Documentation**

Documentation practice in its most basic form, logbook recording and prescription retention, was found to be practiced more in the private pharmacies, 69.2% as compared to the governmentally owned chain pharmacies, 20%. Results similar to Table No.1 were recorded regarding poor practice of electronic documentation in which none of the chain pharmacies and only 7.7% of the private pharmacies were found to have electronic documentation system.

### **Labeling and Packaging**

It is clearly demonstrated from Table No.3 that none of the chain pharmacies use either clear or printed labels for the dispensed pharmaceuticals, that is all the dispensers in these chain pharmacies use markers and ball point pen for labeling. Moreover, with some exceptions, none of the labels from these chain pharmacies contain detailed information; the included information is limited to frequency and timing of drug administration. Labeling of dispensed drugs was practiced relatively better in the private community pharmacies, in which 30.8% of the pharmacists from the private pharmacies claimed to use headed and clearly printed labels with detailed information. Putting it altogether, it can be said that only 23.8% of the community pharmacies in Asmara have good labeling practice. Similarly, only 23.8% claimed to offer proper patient counseling. All of the community pharmacies in Asmara use papers, old journals or newspapers to wrap the dispensed pharmaceuticals for packing. However none of the pharmacies were found to use special packaging materials such as paper bags, retail boxes or other containers designed for the purpose.

From Table No.4, as many as 52.4% of the pharmacists working in the community pharmacies, stated that it was challenging to communicate with prescribers. Consequently, the formal communication between pharmacists and prescribers is notably low, 61.9%. Likewise, the questionnaire results indicate that the formal communication among community pharmacists in Asmara is as low as 38.1%.

### **DISCUSSION**

In the profession of pharmacy it can be said “you are what you refer and what you sought to achieve as a professional”. Having easy and updated references would thus be positively correlated with a better practice and better patient care. This fact doesn't negate that reference uniformity is one key aspect. Thus healthcare professionals involved in drug dispensing have to update themselves with drug information in order to provide patients, and

the general public with the adequate information they need. The reality in the ground shows that very few do follow a proper way of referencing and updating ones' self.

As per the Ministry of Health (MOH) standard the four must have references are Eritrean National Formulary (ENF), Eritrean National Treatment Guidelines (ENTG), British National Formulary (BNF), and Martindale. Those reference materials though seem to be enough, suffer from apparent drawbacks; such as problem in constant updating at least every year and only offer limited information for knowledge expansion, which would hamper the uniformity, quality, and the practice as a whole.

Therefore, it's recommended that electronic devices aided referencing system that has promising features, be introduced in the practice of community pharmacy in Eritrea. Through such referencing system, it is easy for practitioners to access information regarding the practice as well as for the community pharmacies to possess updated and uniform reference materials.

In pharmacy practice documentation refers to the act of keeping records of patients' medical history and updating particular information with follow-ups. This documentation practice can range from the retention of prescription for further inspection, to keeping full medical history record for medication and/or chronic disease management. For instance, keeping a patient's blood pressure and sugar level record as well as the treatments given for a year; would put a practitioner in a better position to advice the particular patient about his/her lifestyle. Despite electronic tracking seemed a farfetched idea in community pharmacy practice in Eritrea, it was found that some private pharmacies in Asmara do have it already.

Problems such as, patients' confidentiality in that many patients may be reluctant to leave any health profile in a pharmacy; and tracking patients as patients' visit to a community pharmacy has great variance, could be raised as potential limitations to the introduction of documentation practice. However, implementation of the practice in a wider along with some legislation would change this in

the perceivable future. Introduction of better documentation strategy such that the electronic means would therefore help pharmacists build confidence on their routine practices. Thus it's recommended that, great emphasis should be given to the documentation practice and such electronic means be given a ground for proper implementation in the community pharmacy practice.

Counseling patients on their medication and properly labeling the dispensed medicines are among the most vital steps in improving patients' compliance, and hence, treatment outcomes. The way drugs are dispensed and the quality of information conveyed during dispensing determine the way drugs are utilized by patients. Clear and complete instructions on how to take or use medicines, risk-benefit of using medicines, adverse effects, when and how to use drugs are the fundamental drug information that should be delivered to patients during prescribing and dispensing a medication<sup>1</sup>. On the other hand, improper patient counseling and inadequate labeling are some of the well documented reasons behind poor-adherence of patients<sup>7</sup>. Being cautious of its impact in patients' safety, the Ministry of Health should take pragmatic steps towards standardizing the labeling and packaging practices. In addition, since it's the pharmacists' responsibility to make sure that dispensed products are utilized appropriately and safely by patients, it is crucial that community pharmacists take some private initiatives to make this practice right.

Always, effective therapy with prescribed medications requires a collaborative process that includes prescribers and pharmacists. Possible errors about a medication can be detected and reduced by pharmacists' interventions.

Well established communication between pharmacists and prescribers is thus one of the most crucial components in good dispensing practices, through which confidence is built over the dispensed process. Hence, the provision of patients with safe and effective medications, which is the ultimate goal of healthcare practices, can be achieved. Globally, pharmacists and prescribers communication is implemented effectively and has made excellent scores in developing the community pharmacy practice. A study from Turkey indicated that 95.8% of community pharmacists call the prescriber to discuss about patients' prescription in case of any ambiguity<sup>8</sup>. However; communication challenges shown in Table No.4 are found to contribute to the poor communication of pharmacists with physicians and fellow community pharmacists. Such observations were also made from a study conducted in 2010, in Asmara showing that only 10.8% patients reported that their pharmacist communicate back with their physician<sup>9</sup>. Under such conditions, coherent practice is lost, hence patients' trust, which is one of the golden assets in the pharmacy practice, is being compromised. In order to develop the community pharmacy practice and to fortify the falling trust of patients, it's imperative for the pharmacists to convene persistent meetings at defined time intervals through which knowledge regarding the practice is exchanged.

Therefore these communication barriers should be defined clearly and addressed aptly on time, as it will be very difficult, if not impossible, to rectify them. Since, a durable means of communication is very essential, it's highly recommended that the Ministry of Health takes earnest actions in this regard.

**Table No.1: Referencing**

S.No		% of respective pharmacists who said:			
		Chain pharmacy (n=5)		Private pharmacy (n=13)	
		Yes	No	Yes	No
1	Referencing indicators				
2	Availability of adequate reference materials	100	0	92.3	7.7
3	Availability of electronic devices for different purposes	0	100	53.8	38.5

**Table No.2: Documentation practices**

S.No		% of respective pharmacists who said:			
		Chain pharmacy (n=5)		Private pharmacy (n=13)	
1	Documentation practice indicators	Yes	No	Yes	No
2	Basic form of documentation; prescription retention, logbook recording	20	80	69.2	15.4
3	Electronic documentation system	0	100	7.7	76.9

**Table No.3: Packaging and labeling practices**

S.No		% of respective pharmacists who said:				
		Chain pharmacy (n=5)		Private pharmacy(n=13)		
1	Indicators	Yes	No	Yes	No	
2	Labeling dispensed products using:	Markers and Ball point pen	100	0	69.2	7.7
		Printed papers	0	100	30.8	69.2
		Include limited information	100	0	100	0
		Include detailed information	0	100	38.5	53.8
3	Packing dispensed items using	Paper, old journal, newspaper wraps	100	0	92.3	0
		Special packages designed for this purpose	0	100	0	100

**Table No.4: Formal Communication of Pharmacists**

S.No		% of Pharmacists who said: (n=21)			
		YES	No	N/A	
1	Indicators	YES	No	N/A	
2	Formal communication of pharmacists with:	Prescribers	61.9	33.3	4.8
		Fellow community pharmacists	38.1	52.4	9.5
3	Challenges to communicate with prescribers	52.4	23.8	23.8	

**CONCLUSION**

Observations made from this study divulged that the community pharmacy practice as a whole is not satisfactory. Despite the availability of adequate reference materials, lack of their harmony hampers the uniformity of the practice entirely. The poor documentation practice noted also contributes to the limiting factors for the development of community pharmacy practice. Moreover the means of information exchange between the community pharmacists and patients is deficient both from counseling and label of dispensed products; hence patients are not getting the information they need. Likewise formal communication of a community pharmacist with fellow community pharmacists and prescribers was found to be unsatisfactory. Therefore, it's highly recommended that the

executive body be vigorous in both provision and enforcement of appropriate standards of practice, so as the practice to move forward.

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## CONFLICT OF INTEREST

We declare that we have no conflict of interest.

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