

## STUDY DESCRIBING THE POSSIBLE ROLE OF COMMUNITY PHARMACIST IN IDENTIFYING MORE PREVALENT ORGAN SYSTEM DISORDERS IN THIRD WORLD SOCIETIES

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### Abstract

Data was collected from a community pharmacy setup under the supervision of pharmacist. The prevalence of various organ system disorders was measured by noting the percentage of the patients suffering from a particular organ system disorder. It was found that the ENT disorders were the most prevalent in the area where the pharmacy was located. GIT disorders were also much prevalent followed by the Cardiovascular and Endocrine disorders. Other disorders were comparatively less prevalent. There is a need to give more focus to specialty efforts to treat the disorders that are becoming more prevalent in the area surrounding the pharmacy. It is suggested that such surveys are conducted in all the pharmacy set-ups so that by accessing the number of patients entering the community pharmacy in any particular area the prevalence of various organ system disorders may also be accessed.

**Key words:** Community Pharmacist, Prevalence, Organ System Disorders

## Introduction

Prevalence of diseases may vary according to the geographical area [1-4]. Keeping an eye on the number of patients suffering can help to make efforts more targeted. Pharmacists may play important role in screening of various diseases [4]. Community pharmacists are in an ideal position to interact with various segments of community and can act as a source of information for the patients as well as other health professionals [5]. In developed countries community pharmacist help to identify to identify at risk patients of prevalent diseases [6]. They can also help to improve the compliance of poorly compliant patients [7].

In this article, we describe the project conducted at Shifa Pharmacy, one of the chain community pharmacies run by Shifa International Hospital, located in Islamabad, Pakistan. The pharmacy is under the supervision of well qualified pharmacist and also serves as a clerkship site for Pharmacy undergraduates. The pharmacy also has an associated medical center and fulfills the majority of health needs of population pool of the study.

## Material and Methods

The study was conducted for a time period of 30 days from 22<sup>nd</sup> march to 21<sup>st</sup> april 2013, during which period ≈170 patients were recognized suffering from various disorders. The patients participating the study were selected randomly from the patients entering the pharmacy during the 30 days period. A verbal consent was taken from the patients that their data will be used purpose of study. It was assured that absolute anonymity will be maintained. After a brief introduction, the individual patient was asked about the type of disorder he/she was suffering from. The diagnosis was further confirmed by the prescriber's diagnosis written on the prescription, if present any, and further reconfirmed by the therapeutic indications of drugs patient was taking. The various disorders were then noted and arranged according to the related organ system that was being affected e.g. Diabetes Mellitus was included under the heading of endocrine disorders. Hyper- and Hypo-thyroidism were also included in the same category. Similarly, constipation, diarrhea and acidity were considered under the disorders affecting GIT system. Disorders affecting respiratory system were classified separately from disorders affecting ENT (Ear, Nose, and Throat). In this way, disorders affecting various organ systems were classified and were compared for their relative prevalence.

## Results

The results of this study demonstrated that ENT disorders, 52(26%) were the most common organ system disorders among the patients entering the pharmacy. GIT disorders, 45(22.5%), Cardiovascular disorders, 29(14.5%), endocrine disorders, 21(10.5%), Neurological disorders, 12(6%) were the other common disorders. Ocular disorders, 4(2%), Immune system disorders, 3(1.5%) and Reproductive system disorders, 5(2.5%) were less common. The results of the study have been shown in Figure 1.

## Discussion

The study demonstrates that community pharmacists are in an ideal position to recognize the patient pool of various organ system disorders that can be useful source of information for various health care provider agencies. Patients were asked different questions by pharmacist about their lifestyle and dietary habits. It was found that these had some relation with the kind of disorder the patient was suffering from. Also it was found that the patient's adherence with their therapy could be improved by more active Pharmacist counseling in Pakistani community. Patients responded well to the various questions asked. No diagnosis was written on the majority of prescriptions and hence it was confirmed verbally from the patients and also by the therapeutic indication of the drugs. It is proposed that such study can be used to concentrate more specialty efforts to address the disorders of more prevalence in specific areas. Also community pharmacy lead awareness programmes can be conducted about the disorders in their areas of more prevalence.

## Limitations

The study was conducted only in a single pharmacy setup, so the results of the study cannot be generalized to the whole population. Seasonal effects may have affected the number of patients suffering from various organ system disorders. Time duration for the study was also short. Some patient bias could have been present because only those patients were included in the study who visited the specified pharmacy.

## Conclusion

This study highlights the vital role of Community Pharmacists in third world societies where not is much known about which organ system disorders are becoming more prevalent. By such information, it will be possible to use scarce resources more wisely

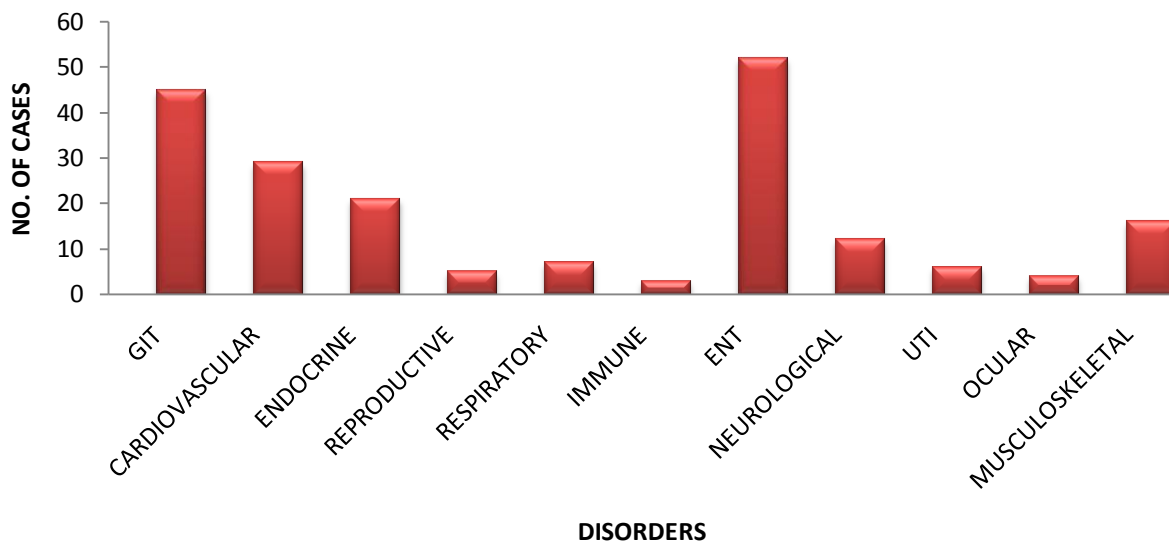
and make the efforts more focused as well.

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**Figure 1.** Relative prevalence of various organ system disorders