



PHARMACY DISPENSING PRACTICE IN VARIOUS PHARMACIES OF KARACHI

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ABSTRACT

Objective: To study the pharmacy dispensing practice carried out in various pharmacies of Karachi focusing on the availability of a pharmacist in the pharmacy and their responsibility as pharmacy dispensers.

Method: A survey based study was conducted in which 40 pharmacies in various areas of Karachi including North Karachi, Nazimabad, Shakra-e-Faisal and Steel Town, were assessed with the help of closed-ended questionnaires.

Key Findings: Out of the 40 pharmacies surveyed only 12 were found to have pharmacists working in the pharmacy, 27 counsel their customers about the medication, 14 of them do support the idea of dispensing drugs without prescription, and 29 of the dispensers in these pharmacies think that people are now becoming more aware about their medication. Of the 27 pharmacies that counsel their customers, only 7 provide information regarding adverse effects of the drug, 16 provide information about storage, 20 about how and when to use the drug, only 3 about precautions and 18 pharmacies where medical devices are available guide about how to use the medical devices.

Conclusion: For good dispensing practice in a pharmacy, availability of a pharmacist in the pharmacy is a necessity. And to improve the quality of life of the patient effective and informative counseling is important. Pharmacies in Karachi lack these important factors and, therefore, there is an intensive need of improvements to be made in this field which can only be achieved by strict inspection of pharmacies and educating the pharmacists and dispensers regarding good dispensing practices.

Keywords: Dispensing practice, pharmacist, counseling.

INTRODUCTION

The mission of the profession of pharmacy is to improve public health through ensuring safe, effective, and appropriate use of medications. The word pharmacy is derived from its root word Pharma which was a term used since the 15th–17th centuries. However, the original Greek roots from "Pharmakos" imply sorcery or even poison.

Pharmacy is the science and technique of preparing as well as dispensing drugs and medicines. The scope of pharmacy practice includes more traditional roles such as compounding and dispensing medications, and it also includes more modern services related to health care including clinical services such as reviewing medications for safety and efficacy and providing drug information. Pharmacists are the experts on drug therapy and are the primary health professionals who optimize use of medication for the benefit of the patients. An establishment in which pharmacy is practiced is called a pharmacy, chemists or drugstore. [1]

The Model State Pharmacy Act and Model Rules of the National Association of Boards of Pharmacy (NABP) define the practice of pharmacy as follows:

The "Practice of Pharmacy" means the interpretation and implementation of medical orders the dispensing of prescription drug orders, administration, regimen review, participation in drug and device selection, the practice of telepharmacy within and across state lines, drug or drug-related research, the patient counseling the provision of those acts necessary to provide pharmacist care in all areas of patient care. The responsibility for compounding labeling of drugs (except labeling by a manufacturer, repackager, or distributor of Non-Prescription drugs and commercially packaged legend drugs and devices), proper storage of drugs maintenance of required records. The practice of pharmacy also includes continually optimizing patient safety and quality of services through effective use of emerging technologies and competency-based training.²

Nature of Work

The role of pharmacists as a healthcare practitioner was to check and distribute drugs to doctors for medication that had been prescribed to patients. Pharmacists advise patients and health care providers on the selection, dosages, interactions their side effects of medications. Pharmacists monitor the health of patients to ensure the safe and effective use of medication.

Thus pharmacists have a significant role in assessing medication management in patients and in referring patients to physicians. These roles may include clinical medication management, including reviewing and monitoring of medication regimens, assessment of patients with undiagnosed / diagnosed conditions and clinical medication management needs. Other than these monitoring of disease states, such as in renal and hepatic failure, compounding medicines as well as providing pharmaceutical information with health monitoring and advice. Supervising pharmacy technicians and other staff oversight of dispensing medicines on prescription³.

Types of pharmacy practice areas

Pharmacists practice in a variety of areas including community pharmacies, hospitals, clinics, extended care facilities, psychiatric hospitals, and regulatory agencies. Pharmacists can specialize in various areas of practice including but not limited to hematology, ambulatory care, oncology, infectious diseases, nutrition support, drug information, critical care, pediatrics¹, etc.

Duties of pharmacist

Professional knowledge that provide drug education to the patient can understand and use to benefit their therapy including: medication, indication, dosage, form, duration, route, side effects, precautions, interactions, missed dose procedures, storage recommendations and specific techniques for self monitoring. Discuss any therapeutic problems recognize compliance problems and increase adherence.

Communication Skills

Display effective verbal communication skills about use an interactive approach to assessing and verifying patient understanding through the use of open-ended questions and use language the patient will be able to understand.

Patient Interaction

Communicate to the patient why the counseling session information are important Systematically think through problems and present medication information in a logical order Display confidence and the ability to control and direct the counseling session Manage time during the session effectively⁴⁻⁶.

METHOD

To achieve the objective of investigating the dispensing practices being carried out in the pharmacies of Karachi, a survey was

conducted with the aid of close-ended questionnaires to be filled in by the dispensers in the pharmacy. These questionnaires were designed to focus on the factors like presence of pharmacist in the pharmacy, counseling, qualification of other staff members, dispensing prescription drugs only on prescription and awareness of the customers about medications. 40 pharmacies were surveyed to achieve the target located in different areas of

Karachi. The areas covered were Nazimabad, North Karachi, Gulberg, Gulshan-e-Iqbal, Steel Town and Shakra-E-Faisal. Among these 40 Pharmacies 6 were hospital pharmacies, 13 were pharmacies with clinics and 21 were medical stores. These different ranges of pharmacies were selected in order to observe the pharmacy practices being carried out in them.

Table 1: Dispensing Practice.

	Pharmacist Present	Patient Counseling	Dispensing Without Prescription	Awareness of the Patients
Number of Pharmacies	12	27	14	29

Table 2: Information Provided to the Customers During Counseling.

	ADRs	Storage	How And When to Administer	How to Use Medical Device(if Available)
Number of Pharmacies	7	16	20	18

RESULT

The survey results show that only 15% of the surveyed pharmacies happened to have pharmacist working in their Pharmacies, 17% allow dispensing of prescription drugs without prescription to the customers, 33% counsel their customers about their medication and 35% of them think that the people have knowledge about their medications as compared to older times.

When it comes to counseling, 31% of the surveyed pharmacies tell their customers that how and when to take their medication, 25% inform about storage conditions of the drug, 28% of the pharmacies keep medical devices as well and guide the patients on how to use the device, and only 11% and 5% of the pharmacies inform the patients about the adverse effects and precautions of the drugs, respectively.

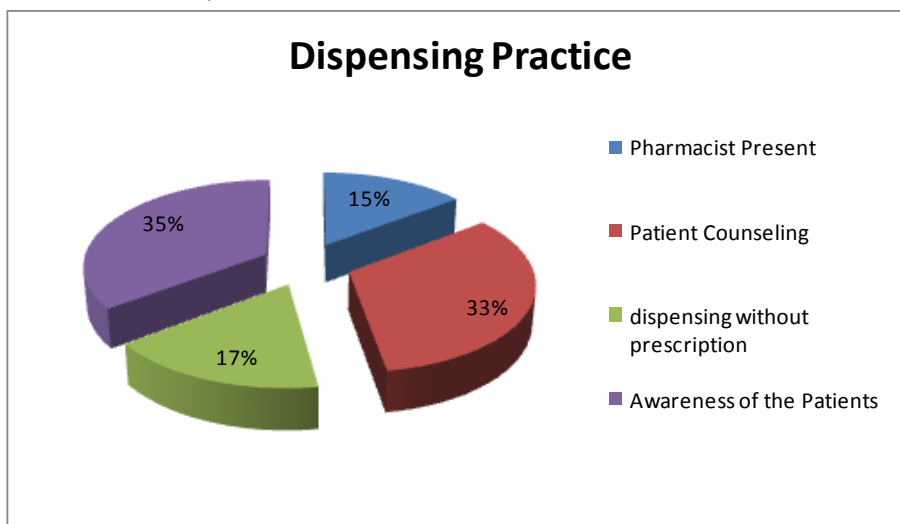


Fig. 1: Dispensing practice.

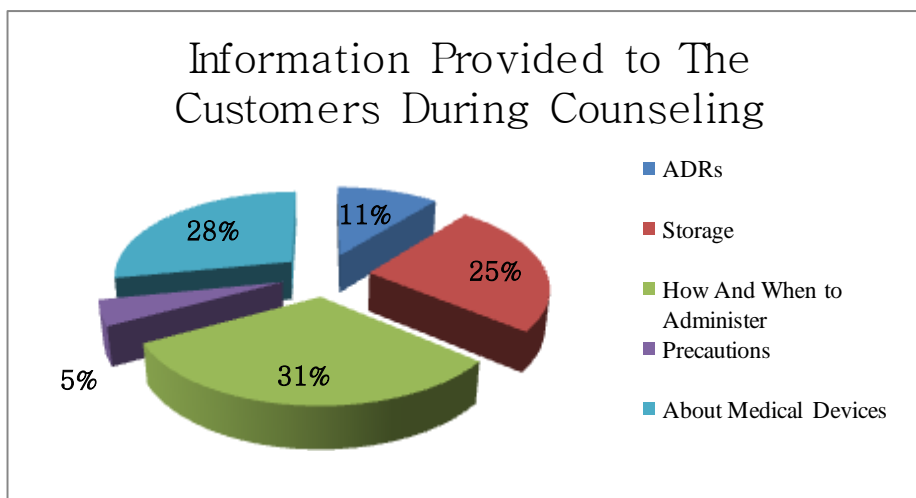


Fig. 2: Information provided to patients.

DISCUSSION

Pharmacists are well known as custodians of drugs and being one they have a great deal of responsibilities on their shoulders. Pharmacists are among the most accessible and trusted of all health professionals and patients frequently consult pharmacists for advice about medication. Whereas, pharmacy is a place where a patient can find a pharmacist and can get complete information and guidance regarding their medication and where a pharmacist can fulfill his responsibilities.

They are not only the custodians of drugs but also custodians of the health of the patients. It is the responsibility of the pharmacists to dispense the correct drug in correct dosage form and dose to the correct patient with correct information and guidance at an economical price which results in better outcomes and improved quality of life of the patient. This can be achieved by following good dispensing practices i.e. reading and understanding the prescription carefully, checking it for any errors and counseling the patient before dispensing the drug to him.

But very unfortunately, in this survey it has been realized that this profession is not being justified in a city like Karachi. Majority of the pharmacies that were surveyed had no pharmacist in their staff, instead, metric pass and intermediates are employed in most of these pharmacies. According to 'the Pharmacy Act', it is necessary to have a pharmacy graduate or a 2 year trained and experienced person to run a pharmacy. This lack of qualified staff results in malpractices that we observed in few pharmacies where there was dispensing of prescription drugs without prescription which should be strictly avoided and discouraged otherwise it leads to misuse of medications, and also not covering important information during counseling like possible adverse reactions and precautions that a patient must know. During counseling the pharmacist must also be able to remove any confusion about the medication in the patient/customer's mind. During our survey we also observed that there are pharmacies that do have either only pharmacists or more than one pharmacist in their staff and follow good dispensing practices and counsel their patients.

Recently, there has been a lot of work done like the DRAP Act 2012 to improve the functioning of pharmacies and other drug related issues and recognizing the pharmacy profession. Many universities are producing fresh and qualified pharmacist which

indicates that there will be a lot of improvement in this field in the future and these qualified personnel will be able to provide better pharmacies and will follow rational dispensing practices which will result in better outcomes of treatment and health.

CONCLUSION

We conclude that although majority of the pharmacies are not following rational dispensing practices but there a few which are working hard to meet the standard practices and that in future it can be expected that there will be an increase in such up to standard pharmacies. It is also observed that the people have now become more aware of their medication which is a good sign which may result in reduced events of drug misuse and complications associated with them.

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