MULTI - DIMENSIONAL ROLE OF A PHARMACIST IN HOSPITAL: A HEALTH CARE PROVIDER

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ABSTRACT

The objective of this study was to point out multi-dimensional role of a pharmacist with a special emphasis on the hospital pharmacist. A pharmacist is a person who is involved in designing, creating or manufacturing of a drug product, dispensing of a drug, managing and planning of a pharmaceutical care. They are experts on the action and uses of drugs, including their chemistry, pharmacology and formulation. The professional life of a hospital pharmacist might seem insignificant as compared to that of doctors, but actually they are highly trained health professionals who plays important role in patient safety, patient compliance, therapeutic monitoring and even in direct patient care. With the passage of time and advancements in health care services and pharmaceuticals, the role of a hospital pharmacist has become more diversified. To a career, a hospital pharmacist must possess a diploma/degree in pharmacy from an accredited pharmacy college and must be registered with the state pharmacy council of their respective region. In this study, we have assessed the behavior, communication skills, qualifications of the pharmacist, prescription handling ability and other factors to evaluate the diversified role of hospital pharmacist and their comparison with pharmacists practicing in rural and urban areas. Current surveys show that the pharmacists are not practicing as per the standard due to lack of proper guidelines and watch over their practicing sense. The rules and guidelines prescribed by the Food and drug administration (FDA) and Indian pharmacopeia commission (IPC) were not followed by the pharmacist.

Keywords: Pharmacist, Drugs, Clinical Pharmacist, FDA, IPC.

INTRODUCTION

Many hospital pharmacists quietly do the traditional pharmacist role. They just fill doctors prescriptions, compound, or mix drugs; plan and monitor patient drug schedules; enter information into a database so nurses can access it; determine the success of prescribed medications, and advise patients on how to take their medications during and after their hospital stay. Overall, as Purdue University points out, hospital pharmacists are responsible for systems which control drug distribution and ensure that patients receive the right medication, in the correct form and dosage at the required time, without causing the patient adverse reactions. [1][2][3]

Community Pharmacist

A community pharmacy, often referred to as retail pharmacy or retail drug outlets, is places where medicines are stored and dispensed, supplied or sold. The general population usually calls community pharmacies "medical stores." Pharmacists working in the community practice setting are either diploma pharmacists or graduate pharmacists with B. Pharmacy degrees. Throughout this paper the word “Pharmacist” has been used to describe both types. Pharmacists are registered under the clause (i) and section (ii) of the Pharmacy Act 1948 and their presence is legally required during the dispensing and selling of medicines according to Rule 65(15) of the Drugs and Cosmetics Rules 1945. [4]

Clinical Pharmacists and Specializations

Pharmacists are experts on the immense arrangement of pharmaceuticals, which makes them appropriate individuals to advise physicians on the best drugs for patient conditions. Clinical pharmacists, these professionals provide patient care, minimizes side effects of drugs by proper guidance to the patient. They may go on rounds with doctors, recommending the appropriate medications to give to patients, and they can even recognize untreated health conditions that might improve with medications. They guide the patients on how to take medicines and when to take medications, and then assess patients’ health to ensure the prescribed medications are working optimally as shown in Figure
Singh et al, Diversified roles of a Hospital Pharmacist

1. These pharmacists may specialize in certain areas of medicine, including nuclear pharmacy, which uses radioactive drugs for diagnosis and treatment; pain management, pediatrics, oncology and psychiatry. [3][4][5][6][7][8]

**Hospital Pharmacist**

Hospital pharmacies are pharmacies usually found within the premises of a hospital. Hospital pharmacies usually stock a larger range of medications, including more specialized and investigational medications (medicines that are being studied, but have not yet been approved), than would be feasible in the community setting. Hospital pharmacies typically provide medications for the hospitalized patients only, and are not retail establishments and therefore typically do not provide prescription service to the public. Some hospitals do have retail pharmacies within them which provide over-the-counter (OTC) as well as prescription medications to the public, but these are not the actual hospital pharmacy. [9][10]

**Figure 1: Clinical Pharmacist during examination of patient in a hospital** [11]

**Multidimensional role of pharmacist in health care**

Hospitals and medical institutions services serves as outpatient care, drug-dependency treatment facilities, poison control centers, drug information centers, drugs adverse reactions reporting and long-term care facilities, may be operated by the government or privately. While many of the pharmacist’s activities in such facilities may be similar to those performed by community pharmacists, they differ in a number of ways. Additionally

- Pharmacist has more opportunity to communicate closely with the prescriber and, therefore, to encourage the rational prescribing and use of drugs.
- Pharmacist in larger hospital and institutional pharmacies, is usually one of several pharmacists, and thus has a greater opportunity to interact with others, to enumerate and to gain greater proficiency.
- Pharmacist has access to medical records, is in a position to control the selection of drugs and dosage regimens, to monitor patient compliance and therapeutic response to drugs, and to identify and report adverse drug reactions.
- Pharmacist can more easily than the community pharmacist judge and monitor patterns of drug usage and thus recommend changes where necessary.
- Pharmacist serve as a member of policy-making committees, including those concerned with drug selection, the use of antibiotics, antiviral, antihypertensive, anticancer like drugs and hospital infections (Drug and Therapeutics Committee) and thereby influences the preparation and composition of an essential-drug list or formulary in the updating the list.
- Pharmacist is in a better position to educate other health professionals about the balanced use of drugs.
- Pharmacist more easily participates in studies to conclude the valuable or unfavorable effects of drugs, and is involved in the analysis of drugs in body fluids.
- Pharmacist can control hospital manufacture and procurement of drugs to ensure the contribution of high-quality products.
- Pharmacist takes part in the scheduling and achievement of clinical trials. [12][13][14][15]

**Current Status of Pharmacy and Pharmacist in India with their loop holes**

In our study, listed tables shows current status of pharmacist and their pharmacy practice in rural, urban and hospital pharmacies. In Table 1 and Table 2 we pointed out pharmacist and prescription related factors and differences how a pharmacist working in hospital, urban and rural areas differ in their respective knowledge, attitude, dressing dress, patient counseling, customer satisfaction etc. [3][4][16][17]

**DISCUSSION**

The role of pharmacist in the society has been enlarging due to the latest innovation in the dispensing and prescription of drug substances for the patient’s safety and compliance. In order to have decent and effective communication a mutual understanding amongst the three parties i.e.; the patients, physicians and the hospital pharmacist must exist. Handing over the prescribed medications to the patient is not the only central role of pharmacist; besides this a pharmacist must give proper information to the patient as per their demands and must give information like the prescribed doses, their time interval as well as their directions to use. The future of hospital pharmacist role seems to be more
functional in coming future due to advancement in hospital pharmacy. Besides of this pharmacist working in different locality differ by so many factors like dressing sense, qualification etc. Above mentioned pharmacist related and prescription related factors shows that how loop holes still exist in the practicing sense of pharmacist working in hospital, urban and rural areas. To overcome such loop holes the authorized bodies must enforce the rules and regulations strictly.

Table 1: Pharmacist related factors

<table>
<thead>
<tr>
<th>S. No</th>
<th>Factors</th>
<th>Hospital</th>
<th>Urban</th>
<th>Rural</th>
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<tbody>
<tr>
<td>1</td>
<td>Pharmacist behavior</td>
<td>88%</td>
<td>92%</td>
<td>64%</td>
</tr>
<tr>
<td>2</td>
<td>Proper dressing</td>
<td>56%</td>
<td>12%</td>
<td>0%</td>
</tr>
<tr>
<td>3</td>
<td>Prescribed age</td>
<td>84%</td>
<td>88%</td>
<td>64%</td>
</tr>
<tr>
<td>4</td>
<td>Communication Skill</td>
<td>88%</td>
<td>64%</td>
<td>60%</td>
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<td>5</td>
<td>Patient sympathy</td>
<td>72%</td>
<td>84%</td>
<td>60%</td>
</tr>
<tr>
<td>6</td>
<td>Handling the Patient</td>
<td>92%</td>
<td>92%</td>
<td>68%</td>
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<tr>
<td>7</td>
<td>Customer service</td>
<td>80%</td>
<td>84%</td>
<td>68%</td>
</tr>
<tr>
<td>8</td>
<td>Customer satisfaction</td>
<td>76%</td>
<td>84%</td>
<td>60%</td>
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<tr>
<td>9</td>
<td>Advise on OTC drugs</td>
<td>48%</td>
<td>40%</td>
<td>12%</td>
</tr>
<tr>
<td>10</td>
<td>Tobacco chewing and smoking</td>
<td>28%</td>
<td>28%</td>
<td>16%</td>
</tr>
<tr>
<td>11</td>
<td>Problem solving</td>
<td>80%</td>
<td>64%</td>
<td>8%</td>
</tr>
<tr>
<td>12</td>
<td>Attitude</td>
<td>92%</td>
<td>84%</td>
<td>64%</td>
</tr>
<tr>
<td>13</td>
<td>Qualified</td>
<td>84%</td>
<td>64%</td>
<td>24%</td>
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Table 2: Prescription related factors

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</thead>
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<tr>
<td>1</td>
<td>Frequency of dose</td>
<td>88%</td>
<td>56%</td>
<td>28%</td>
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<td>2</td>
<td>Drug food interaction</td>
<td>64%</td>
<td>48%</td>
<td>8%</td>
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<td>3</td>
<td>Proper advising</td>
<td>68%</td>
<td>44%</td>
<td>4%</td>
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<td>4</td>
<td>Signature of doctor</td>
<td>92%</td>
<td>76%</td>
<td>40%</td>
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<tr>
<td>5</td>
<td>Review of date</td>
<td>76%</td>
<td>28%</td>
<td>0%</td>
</tr>
<tr>
<td>6</td>
<td>Handling of prescription</td>
<td>88%</td>
<td>92%</td>
<td>28%</td>
</tr>
<tr>
<td>7</td>
<td>Changing of drug</td>
<td>12%</td>
<td>20%</td>
<td>28%</td>
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</table>

CONFLICT OF INTEREST

The authors have no conflict of interest.

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REFERENCE


