

Community Pharmacy Practice – A Review

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ABSTRACT

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Article History

Accepted : 01 Sep 2020 Published : 20 Sep 2020 The present paper describes community pharmacy healthcare facility that is able to provide pharmacy services a community pharmacy, often referred to as retail pharmacy or retail drug outlets, is places where medicines are stored and dispensed, supplied or sold. A community pharmacy dispenses medicine, typically involving a registered pharmacist with the education, skills and competence to deliver professional service to the community. Summary of the areas where a pharmacist can involve in public health through community Pharmacy, History and development of community pharmacy Indian scenario and International scenario. Image of Community Pharmacists.

Keywords: Community Pharmacy, Healthcare, Indian Scenario, International Scenario

I. INTRODUCTION

A community pharmacy is a healthcare facility that is able to provide pharmacy services to people in a local area. A community pharmacy dispenses medicine, typically involving a registered pharmacist with the education, skills and competence to deliver professional service to the community.

OR

A community pharmacy is a pharmacy that deals directly with the people in the local area. It has responsibilities including compounding, counselling checking and dispensing of prescription drugs to the patient with care, accuracy and legality.

Community pharmacists

They are the health professionals most accessible to the public.

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. Pharm 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

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medicines according to Rule 65(15) of the Drugs and Cosmetics Rules1945

- ✓ They supply medicines in accordance with a prescription or, when legally permitted, sell them without a prescription.
- ✓ In addition to ensuring an accurate supply of appropriate products, their professional activities also cover

i) Counselling of patients at the time of dispensing of prescription and non-prescription drugs,

ii) Drug information to health professionals, patients and the general public, and

iii) Participation in health-promotion programmes.

iv) They maintain links with other health professionals in primary health care.

Summary of the areas where a pharmacist can involve in public health through community Pharmacy

- ✓ Drug and nutrition counseling
- ✓ Use of OTC and prescribed medicines
- ✓ Family planning
- ✓ Pregnancy and infant care
- ✓ Immunization
- ✓ Sexually transmitted diseases
- ✓ Toxic agent control
- ✓ Health and safety
- ✓ Control of accidental injuries
- ✓ Fluoridations of community water supply
- ✓ Prevention of smoking
- ✓ Prevention of alcoholism and drug abuse
- ✓ Nutritional counselling
- ✓ Environmental protection
- ✓ Weight control program
- \checkmark Poisoning and cancer detection

History and development of community pharmacy Indian scenario

✓ Today, community pharmacists play an important role in any country as they take responsibility for patient's medicine related needs. However, in India only the supply of medicines remains the core activity of the community pharmacist. Most community pharmacists in the country still hardly offer patient-oriented service.

- ✓ The genesis of community pharmacy practice in India can be traced back to British India when allopathic drugs were introduced and were made available through drug stores towards the end of the nineteenth century.
- ✓ During the colonial period, the pharmacy vocation remained business oriented and those trained to sell drugs were called drug sellers or sometimes dispensers.
- ✓ The pharmacy practice scenario and especially community pharmacy practice during pre-independence era was highly unregulated and there were no restrictions on the practice of pharmacy in India.
- ✓ The practice of prescribing and dispensing was normally a function performed by doctors. In addition, most doctors trained their clinic assistants to dispense medicines and assist in the compounding of medicinal preparations. The assistants were popularly known as "compounders", whose status, functions and defined duties were ill and improperly understood

Pharmacy Regulation

✓ After the enforcement of provisions of the Pharmacy Act 1948, pharmacists working in India must have a pharmacist registration certificate issued by the state in which they wish to practice. To obtain a registration certificate, the prospective pharmacist must acquire the minimum diploma (D. Pharm.) from a pharmacy institute that is recognized by the Pharmacy Council of India (PCI).

✓ Both D. Pharm. and B. Pharm. holders are allowed to practice in any sector of pharmacy.

✓ However, the B. Pharm course was designed in such a way as to satisfy the requirement of the pharmaceutical industry, drug control laboratories and drug regulatory bodies.

- ✓ The D. Pharm. course was developed to satisfy the requirements of hospitals and medical stores.
- ✓ The community pharmacists who actually manage pharmacies today are mostly D. Pharm. holders (diploma pharmacists).
- ✓ The D. Pharm involves a minimum of 2 years of study besides practical training of 500 hours spread over a period of 3 months in a hospital or community pharmacy.
- ✓ However, prior to 1984, persons without any pharmacy educational qualifications were able to register their names as pharmacists in the First Register of the pharmacy act, as long as they had five years of experience in the compounding and dispensing of drugs in a hospital or a clinic.
- ✓ However, section 32B provisions of the pharmacy act had been misused during 1980s and a large number of persons, without any recognized education or training, were reported to have registered their names as pharmacists (called non- diploma pharmacists). Many of these people, who did not succeed in placement in government hospitals, are currently working as community pharmacists in the private community pharmacies.
- ✓ On paper, every community pharmacy must have a diploma pharmacist or B. Pharm pharmacist onsite. In practice, few pharmacists are onsite in community pharmacies and the dispensing is undertaken by the owner of pharmacy.
- ✓ A study conducted in 2005 found about 50% of the pharmacies function without pharmacists. This study further observed that the majority of patients (70-80%) seek advice about sexually transmitted diseases, menstrual disorders, contraceptive methods and minor illnesses from community pharmacists
- ✓ A majority of pharmacy owners, who are not pharmacists, hire pharmacists on a token basis and as a result, pharmacists are never available to

dispense medications. Pharmacists are underpaid in retail outlets owned by people having no health related education or training.

✓ There are relatively few studies articulating the situation with community pharmacy services in India. One study reported that pharmacists lack proper training to undertake patient counselling. Two studies suggest that community pharmacy practice in India is only limited to the supply of "ready to dispense drug packages".

Image of Community Pharmacists

- ✓ The public image of community pharmacy and the pharmacist is very weak. The general population considers community pharmacists as drug traders and obviously not better than the general store owners.
- ✓ Consumers and patients consider a visit to the medical store to purchase drugs in much same way they consider a visit to a grocery to buy food items. They think anyone in our country can open a stationary shop and a medical store (i.e. pharmacy) also.
- ✓ The pharmacists are portrayed as poor compounders, who are assistants to doctors in mainstream. This is not surprising because the national health policy 2002, while declaring current levels of health care professionals, maintain a stoic silence about the pharmacists.
- ✓ The Indian Public Health Standards formulated recently under the National Rural Health Mission (NRHM) does not place much emphasis on the role of pharmacists as compared to other categories of personnel such as nurses and laboratory technicians.
- ✓ In the recently accepted union government's sixth pay commission report, pharmacists have been placed in the lowest band and structure along with other non-technical persons.

Community Pharmacy and Availability of Medicines

- ✓ The community (retail) pharmacy sector is the prime source of medicines for both ambulatory and hospitalized patients.
- ✓ The medicines manufactured by pharmaceutical companies are made available to the community pharmacy level through their distributor or clearing and forwarding agent.
- ✓ In many developing countries, private community pharmacies are often seen as a source of inexpensive medical care.
- Private pharmacies are often the first and only source of health care for a majority of patients in developing countries.
- ✓ During the early period the diploma courses were mostly run by Government medical colleges. Since the 1980's there has been phenomenal growth of private institutions offering D. Pharm courses.

Community pharmacy in India - the way forward

- According to unofficial estimates, there are over 600,000 licensed retail outlets for medicines sale and supply.
- ✓ In India, consumers (or patients) expectations from community pharmacists are that the medication should be effective, safe, and affordable.
- ✓ Other expectations from Indian pharmacists would be to dispense the drugs according to the rules with proper advice on how and when the medicines should be taken, and what to do in the case of adverse drug reactions as well as the provision of advice on common ailments.
- ✓ However, it is an undeniable fact that the community pharmacist has failed to provide all these patient oriented services. Perhaps our curriculum of D. Pharm, revised way back in 1991 has failed to change its focus from the preparative and compounding pharmacy towards a focus on patient care.

- ✓ Nonetheless, the introduction of the Doctor of Pharmacy (Pharm. D.) programme recently in India may not help the community pharmacy sector and apprehension has been raised regarding the utilization of this course for international status and a tool to serve the US pharmacist workforce shortage
- ✓ In nutshell, India faces massive challenges in providing health care for its vast and growing population. Despite many barriers, community pharmacy services are central to the safe and effective medicines management in advancing health. With rapidly occurring changes in the health care delivery and growing patient expectations, it is hoped that community pharmacy practice will change accordingly.

International scenario

2100 B.C.

- ✓ The first pharmaceutical text is written on clay tablets by the Mesopotamians. Some of the formulas and instructions on the tablets include pulverization, infusion, boiling, filtering, and spreading.
- ✓ In addition to herbs, ingredients such as beer, tree bark, and wine are mentioned.

130-200 A.D

- ✓ Galen introduces compounding, a process of mixing two or more medicines to meet the individual needs of a patient.
- ✓ Compounding is still practiced today for patients with special needs or for unique prescriptions.

1240 AD

- ✓ Pharmacy and Medicine are officially separated.
- ✓ King Frederick II, a powerful European ruler, issues an order for the first time in Europe completely separating the professions of physicians and pharmacists, and issuing professional regulations for both.
- ✓ Pharmacy and medicine in ancient times were inseparable. Historical figures from pharmacy like Galen were called physicians although they

were often involved in preparation and dispensing of medicines.

- ✓ The first prescriptions were etched on clay tablets in Mesopotamia around 2100 B.C.,
- ✓ The first drug stores were established in 754 A.D., during Islam's Golden Age.

Pharmacy evolved over the years in numerous ancient societies including:

- Indian
- Chinese
- Egyptian
- Greek
- Roman
- Islamic
- European

1700's

- ✓ 1729- Irish immigrant Christopher Marshall opens one of Colonial America's first apothecaries in Philadelphia,
- ✓ 1759- The Philadelphia Hospital, Colonial America's first hospital, opens the first hospital pharmacy.

1800's

- ✓ 1820- Creation of the United States Pharmacopeia (USP), which offers a system of standards to be used as a reference guide for professional pharmacists
- ✓ 1821- America's first pharmacy school established
 -- Philadelphia College of Pharmacy
- ✓ 1825-Soda fountains in first pharmacies. The soda fountain became a hallmark of the American drugstore from the 1860s to the 1950s.
- ✓ 1852- Founding of the American Pharmaceutical (now Pharmacists) Association, or APhA, the first established national professional society of American pharmacists.
- ✓ 1886-Dr. John Stith Pemberton, a local Atlanta pharmacist, creates a syrup which is the origin of the drink Coca Cola.
- ✓ 1892- German pharmacist Felix Hoffmann successfully synthesizes salicylic acid, or aspirin,

for commercial sale, which becomes the most widely used drug in modern times.

1900's

- ✓ 1905- New York State requires graduation from a minimum two-year course in pharmacy to taking the licensing examination.
- ✓ 1914- The Harrison Narcotic Act requires controls on manufacture or distribution of addictive substances.
- ✓ 1922- Canadian scientists isolate insulin.
- ✓ 1938- Congress passes the Food, Drug and Cosmetic Act in response to the Elixir of Sulfonilamide tragedy(The medicine that killed Dr. Calhoun's patients was Elixir Sulfanilamide. During September and October 1937 this drug was responsible for the deaths of more than 100 people in 15 states)
- ✓ 1940- Oxford University scientists successfully develop penicillin for administration.

Mid-1900's

- ✓ 1942- Formation of the American Society of Hospital (now Health-System) Pharmacists, or ASHP.
- ✓ 1948- Lederle Laboratories develops methotrexate, one of the earliest anticancer agents with the ability to destroy cancer cells.
- ✓ 1954- The American Association of Colleges of Pharmacy (AACP) approves a proposal requiring the completion of five years of academic training to earn a degree in pharmacy.
- ✓ 1955- Jonas Salk at the University of Pittsburgh develops an injectable polio vaccine.
- ✓ 1965- The national Medicare and Medicaid programs are created.
- ✓ Mid 1900's Two practice model Emerged.



Prior to the 1960's, pharmacists were primarily

i) Retail merchants,

- ii) Important part of communities,
- iii) Not evidence based practitioners.

Community pharmacy practice in 1960s and 1970s

- ✓ Pharmacies owned & operated by pharmacists as independent businesses
- ✓ Located near MDs who prescribed therapeutic treatment choices on a 3x5 inch piece of paper that was hand delivered by the patient to the pharmacy
- ✓ The pharmacist's role was to accurately provide an elegant pharmaceutical product as written
- ✓ Pharmacists compounded, cultivated long term relationships with patients, MDs, and the community
- ✓ In 1952, the APhA's code of ethics prohibited pharmacists from discussing "therapeutic effects or composition of a prescription with a patient"
- ✓ The Omnibus Budget Reconciliation Act of 1990 (OBRA90) mandated that pharmacists ask patients if they wanted to discuss their new prescriptions with a pharmacist

1970s & 1980s:

- ✓ Pioneering pharmacists experimented with innovative pharmacy practices
- ✓ Eugene V. White from Berryville, Virginia conceived and implemented the concept of an office based setting pharmacy practice in the 1960's.

American community pharmacy in the modern era can be divided into four periods:

1. 1920–1949 (Soda Fountain Era)

- ✓ By the time the modern era of pharmacy dawned in the 1920s, pharmacy education was rapidly adopting three and four-year degrees as the standard for education
- ✓ This detailed guide to pharmacy education, created by the American Association of Colleges of Pharmacy (AACP)

2. 1950–1979 (Lick, Stick, Pour and More Era)-

✓ The patient care roles of the pharmacist and educational standards increased from the 1950s through the 1970s

3. 1980–2009 (Pharmaceutical Care Era)-

✓ The final major change to pharmacy education in the last 100 years was the transition **from** the five-year, entry-level B.S. degree with the optional post-graduate PharmD training to the PharmD becoming the entry level degree.

4. 2010-present (Post-Pharmaceutical Care Era)-

- ✓ By 2010, the all-PharmD requirement had been fully implemented
- ✓ Immunizations and patient care services have both increased in the 2010s
- ✓ The majority of patients report feeling comfortable receiving vaccines in pharmacy settings, and more than 22% of all people who got vaccinated for influenza during the 2014–15 flu having received their immunization from a pharmacy or store.

II. FUTURE PERSPECTIVES

The aim should be to make the plant derived EPIs available in the market for clinical therapy. The constraints in the development of the product should be investigated and eliminated. Researches should focus on making ample data on preclinical and clinical data on the use of EPIs in both animal model sand human patients.

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