

## **Integrating Pharmacists into Public Health Initiatives: Challenges and Opportunities in India**

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### **KEYWORDS    ABSTRACT**

Public Health,  
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Since most people can visit pharmacies easily and don't need an appointment, they are naturally regarded as the primary choice for healthcare professionals in society. Pharmacists have the potential to be an important link in the global healthcare system. Since not everyone is served by public health services, pharmacies and private healthcare providers can play a significant role in the healthcare system. This also applies to the nation of India, which is inhabited by almost 1.3 billion people. The majority of India's chemists, both in the public and commercial sectors, are underutilised resources despite their extensive presence. The purpose of this study was to assess the emphasis on patient care and public health in pharmacy education, as well as the participation of pharmacists in national public health programmes (NPHPs) in India. The aim of the research was to ascertain the extent to which pharmacist education may aid in this transition and the locations where pharmacists could participate more actively in national public health campaigns. The public health and patient care components of the pharmacy curriculum in India are being evaluated for the first time with this study. It will be helpful to statutory organisations and curriculum reform committees in India and other countries where the functions of chemists are expanding to include public health and patient care.

### **1. Introduction**

Globally, healthcare systems have developed and improved. Nonetheless, there is still a great deal of room for improvement in healthcare services due to population growth and a significant rise in patient and family expectations from healthcare professionals [3]. Compared to the growing population, there are currently insufficient qualified and experienced healthcare providers [1]. In order to fulfil the objective of "Health for All," we must unquestionably incorporate the services of chemists in order to give patients and their families direct treatment. In this study, "public health services" refers to chemists' active involvement in significant government-run health initiatives [17]. Nonetheless, there is a lack of medical and paramedical staff in India's public health system. India offers a variety of undergraduate pharmacy education programmes with diverse curricula. [2]. The important role that chemists play in public health, especially in the pharmaceutical industry, was acknowledged by WHO resolution WHA 47.12 in 1994 and ought to be reflected in curriculum content[6]. Nevertheless, little research has been done on how public health and patient care issues have been integrated into pharmacy education in India and a few other countries where chemists are really more active in in-patient care and public health programmes [15]. The systematic efforts of society to promote health, prevent sickness, and prolong life are referred to as "public health" by the World Health Organisation [14]. Public health is a social and political concept that seeks to improve the general health and quality of life of the population through disease prevention, health promotion, and other health-related initiatives [13]. This study aimed to assess the focus of pharmacy education on public health and patient care, as well as the part played by chemists in India's national health care programmes [9]. The study aimed to identify potential and strategies for enhancing chemists' participation in national public health programmes, as well as how pharmacist education might help to partially permit this transition.

### **2. Literature Review**

Several studies have demonstrated the necessity for adaptable, well-researched methods of updating chemists' professional knowledge and abilities. Continuing Education (CE) programmes are adaptable ways to obtain post-qualification or postemployment Pharmacy-Education in industrialised nations. Previous research has revealed that working chemists in underdeveloped nations receive very little training. Furthermore, the meagre training that is provided is of poor quality and ineffective. Despite these realities, continuing education (CE) is frequently offered haphazardly in both wealthy and developing nations [4]. According to systematic research [5-7], the majority of chemists saw public health services as crucial to their jobs but as secondary to those connected to medicine. The majority

of chemists who participated in the review had positive opinions of and believed that providing public health services was a crucial role[8]. This indicates that the need of providing these services is acknowledged, and community pharmacists are coming to terms with the fact that their role is changing from traditional dispensing to a more active participation in health improvement. In general, pharmacists' levels of confidence in their capacity to offer public health services varied from average to low. Concerns about time were raised often when it comes to providing public health services [18]. But this has to be done as soon as possible. Setting practice standards, requiring pharmacists to be qualified and registered at all levels, and creating quality assurance requirements for pharmacy practice in National Health Programmes are important steps towards the development of the profession.

## **Pharmacists Into Public Health Initiative**

### **Pharmacists as Human Resources for Public Health Programs in India**

The global health workforce is confronted with formidable obstacles. The global health workforce issue, with an estimated four million health workers needed globally, may be the biggest obstacle to the health system for nations hoping to fulfil the 2015 Millennium Development Goals (MDGs). India is one of the 57 nations with a shortage of human resources for health, according to the World Health Report of 2006. In India, the wealthiest can afford the newest medical advancements, but the great majority of the population at least 800 million people have little to no access to healthcare. There is a scarcity of medical and paramedical staff in India's public health system [10]. There were 885,233 registered physicians in the nation as of March 2013. Based on openings in authorised positions, the government believes that 18% of primary health centres lack a physician, roughly 38% lack a laboratory technician, and 16% lack a chemist. Since doctors hold influential positions in the development of health care policies, they are crucial in formulating plans for chemist participation in national public health initiatives.

### **Status of Community Pharmacists in India**

A community pharmacy, also known as a retail pharmacy, retail drugstore, or "medical stores," is a type of establishment where prescription drugs are kept, filled, and sold. The origins of community pharmacy practice in India can be found in British India, where around the close of the 1870s allopathic medications were introduced and made accessible through drug stores. The pharmacy profession was still very businesslike back then. Druggists were individuals with training in the sale of pharmaceuticals. Before independence, community pharmacy operated completely unregulated. In colonial India, there were no prohibitions on the sale of pharmaceuticals. Herbal remedies and Ayurveda were widely used. Doctors diagnosed illnesses and prescribed medications, and they employed literate people to manufacture and dispense medications. Popularly referred to as "compounders," these assistants' roles, responsibilities, and position were unclear and misunderstood [16]. The first class of chemists and druggists, held at the Madras Medical College in the 1870s to teach students pharmacy practice skills, marked the beginning of the pharmacy profession in India[11]. The British Pharmaceutical Society's guidelines served as the foundation for pharmacy education. In Bengal, formal instruction for compounders began in 1881. Almost simultaneously, the pharmaceutical profession made its way into every Indian presidency. Before the B. Pharm programme began in 1937 at Banaras Hindu University and in 1944 at Punjab University, Lahore, not much advancement was seen for over fifty years. While the B.Pharm programme at Punjab University was initially practice-focused in pharmacy, it eventually shifted to a more industry-focused approach. This was the case for both institutions.

In India, neighbourhood pharmacies that were formerly known as medical shops or stores have transitioned to clinical settings and hospital pharmacies. In contrast to hospital pharmacies, the shift in clinical advancements was slower and more complex due to the challenges of running a business, lack of experience, and distance from the clinical setting. Industry and product orientation has characterised pharmacy education in India. Pharmacists with graduate degrees from India choose jobs in the pharmaceutical sector. The majority of these postgraduates and graduates choose not to work in

institutional or community pharmacies. Community chemists typically complete a two-year or four-year D. Pharm or B. Pharma degree, with very little clinical coursework. The cornerstone of pharmacy practice is comprised by these diploma-holding pharmacists.

Such major clinical problems cannot be effectively resolved by a chemist without ongoing training and appropriate clinical abilities. As a result, it's essential that they regularly refresh their knowledge and develop their professional skills. According to an Indian survey, over half of community pharmacies run without pharmacists on staff. Because of this, chemists are not always available to care for patients. In retail establishments run by individuals lacking proper healthcare education or training, chemists get inadequate compensation, which frequently leads to significant retention rates.

### **Knowledge, Attitude, and Practices of Pharmacists**

By offering PhC, a chemist can have a direct impact on illness management. The role of chemists must change from that of dispensers to that of drug managers. The majority of community chemists lack knowledge regarding the new practice guidelines. They fail to recognise the substantial impact that PhC services have on therapeutic results and that it is 'their' duty to offer patients these services [19].

Despite the fact that many chemists assert that they offer Ph.C. services, data suggests that their scope of practice is restricted to instructing patients on when and how to take prescription drugs; they are unable to provide patients with more expert care than that [12]. The requirement to examine the standards using a common platform is indicated by the lack of integration of universal practice standards across various settings. Additionally, pharmacists must get ready for the evolving landscape of pharmacy practice.

A new approach to pharmacy education is required in order to reassess workflow models and task allocation in light of newly defined roles and responsibilities.

Some models of practice are: -

- Drug information practice model,
- Self-care practice model,
- Clinical pharmacy practice model,
- Pharmaceutical Care practice model,
- The Distributive practice models

These models, either alone or in combination, are used throughout the world by chemists who are aware of their roles and possess the knowledge necessary to meet local pharmaceutical needs. Ensuring that chemists and other allied health professionals receive high-quality training both during and after their graduation is a crucial step towards standardising PhC services. In light of this new knowledge, educators and trainers are placing a greater emphasis on pharmaceutical care in pharmacy practice.

These days, chemists should concentrate on honing their patient assessment abilities, providing education and counselling, creating pharmacist care plans tailored to each patient, adjusting dosages, choosing therapeutic alternatives, and inventing preventive therapies. In order for community chemists to fulfil the rising demands, continuing pharmacy education would be a crucial turning point in their career. It is possible to identify the barriers to a deeper comprehension of patient care, with the ultimate goal of removing or improving them so that chemists can provide effective pharmaceutical care. The key interdependent traits that chemists are expected to possess are KAPs. KAP studies are helpful and crucial for giving an evaluation baseline for interventional programmes. The adoption of Pharmaceutical Care depends critically on the perception, actions, and attitude of chemists. Improving the attitude, conduct, and perception of chemists as healthcare professionals is essential to preventing or defeating DRPs. Knowing one's level of physical stress and emotional strength or weakness is also essential for exhibiting professional and polite behaviour at work. This indicates that community pharmacists are coming to terms with the fact that their job is changing from traditional dispensing to a more active role in health improvement, and that the benefit of providing these services is acknowledged. The general level of confidence that chemists had in their capacity to offer public health services varied from average to low. When it comes to providing public health services, time was a

common challenge. The following are the domains and responsibilities of chemists:

- Immunisation programmes;
- Administration and promotion of vaccinations Response to and preparation for disasters, including natural disasters
- Public outreach, mass drug delivery, monitoring of observable syndromic conditions, emergency response preparation, public education, etc. Contraceptive services
- Giving out contraceptive techniques and providing usage instructions Prevention and control of illness and injuries

Promoting healthy lifestyles and lowering hospital stays

### 3. Conclusion and future scope

Overstretching pharmaceutical items while disregarding patient needs resulted in a business that was product-centric and negatively impacted healthcare outcomes. The World Health Organisation is pushing patient-centric healthcare, which prioritises patients over products or processes, as a result of pervasive profit-driven practices. It was requested of chemists to oversee the overall results of therapies. So, instead of just administering medication, chemists now also consult patients and monitor the effectiveness of their treatments. Curriculum development teams and statutory authorities in India should consider incorporating public health and patient care components into curricula at all levels in order to promote these professions. The profession's evolution and modifications are greatly influenced by the curriculum. Despite variations in duration, quality, and public health specialisation, graduates of all three Indian pharmacy programmes are entitled to the designation of pharmacist.

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