Journal of Advances and Scholarly Researches in Allied Education
Vol. 16, Issue No. 4, March-2019, ISSN 2230-7540

Community Pharmacy Practice in India: Past, Present and Future

Naveen Yadav*

Abstract – Today, community pharmacists play an important role in any country as they take responsibility for patient's medicine related needs for access to healthcare. 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 role of the pharmacists in the community, and with it their medicine management, may change in the wake of the rapid growth of domestic medicine output and national healthcare expenditure. This article seeks to discuss the genesis of Indian community pharmacy, the majority of which are privately owned, and sketches its education, training and future prospects. Pharmacy education continues to evolve to better prepare pharmacists for their roles and responsibilities in an increasingly complex health care environment with advanced patient health needs. Another important factor is the pharmacists themselves. Over the past 50 years, the role of pharmacists has evolved along with the health care needs of our population. In addition to dispensing medications and ensuring patient safety, today's pharmacists are taking a larger role as medical counselors, educators and advocates. They are integral part of the health care team, and are among the most trusted and accessible health care professionals. This accessibility allows them to perform more patient care activities, including counseling, medication management, and preventive care screenings. Beyond the care provided to individual patients, pharmacists have expanded their reach to influence the public health of communities. All people who take medications are at risk of actual or potential drug therapy problems. These problems are a significant source of morbidity and mortality when left undetected and unresolved and drive huge costs across the health system. As drug therapy experts, pharmacists provide drug therapy management services built around a partnership between the pharmacist, the patient (or his or her caregiver), physicians and other members of a patient's health care team.

Key Words: Community pharmacy, pharmacy practice, India, Patient Compliance, Medication Adherence, Pharmacy Profession, Medicine

----------X----------

INTRODUCTION

Pharmacy is the art and science of preparing and dispensing medications and the provision of drug-related information to the public. It involves the interpretation of prescription orders; the compounding, labeling, and dispensing of drugs and devices; drug product selection and drug utilization reviews; patient monitoring and intervention; and the provision of cognitive services related to use of medications and devices. The current philosophy or approach to professional practice in pharmacy is designated as pharmaceutical care. This concept holds that the important role of the pharmacist is "the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient's quality of life." In 2015 the RPS proposed further integration of pharmacists into general practices outlining the various benefits that pharmacists could provide. Australia, New Zealand and Canada have shown positive GP responses towards the integration of pharmacists into general practices. GPs recognized that having a practice-based pharmacist decreased their workload and allowed them to focus on their diagnostic and prescribing roles, while pharmacists provided expert medication advice and patient counselling. The profession of Pharmacy is classically practiced in the three main areas of Pharmacy Practice: community, clinical, and hospital. It is now generally accepted that the clinic for a pharmacy practitioner is not confined to the hospital wards. Every place (even a community pharmacy) where medication is used for the prevention, diagnosis, and treatment of any clinical condition, that is considered to be the interface of pharmacist and patient, should be recognized as the pharmacist's clinic. India is a developing nation that is home to over 1.1 billion people. Rapidly growing, the country accounts for 2.4% of the world's surface

but is home to 16.7% of the world's population. Throughout its 28 states and 7 union territories, 22 national languages have been recognized and upwards of 400 mother tongues and 800 different dialects is in common use. 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 fucntion 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 duties were ill defined and improperly understood.

Community Pharmacists

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 (2) of the Pharmacy Act2 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.

APhA Practice for Pharmaceutical Care

Pharmacists should gather or potentially produce abstract and target data in regards to the patient's general health and action status, past therapeutic history, medication history, social history, diet and exercise history, history of present sickness, and monetary circumstance (money related and guaranteed status). Wellsprings of data may incorporate, yet are not restricted to, the patient, medicinal outlines and reports, drug specialist led health/physical evaluation, the patient's family or caregiver, safety net provider, and other healthcare suppliers including doctors, attendants, mid-level professionals and different pharmacists. Since this data will shape the reason for choices with respect to the advancement and consequent adjustment of the drug treatment plan, it must be convenient, precise, and complete, and it must be sorted out and recorded to guarantee that it is promptly retrievable and refreshed as important and fitting. Patient data must be kept up in a secret way. In light of an exhaustive comprehension of the patient and his/her condition or disease and its treatment, the drug specialist must, with the patient and with the patient's other healthcare suppliers as vital, build up a result situated drug treatment plan. The arrangement may have different parts which address every one of the patient's diseases or conditions. In planning the arrangement, the drug specialist should cautiously consider the psychosocial parts of the disease just as the potential connection between the expense and additionally intricacy of treatment and patient adherence. As one of the patient's backers, the drug specialist guarantees the coordination of drug treatment with the patient's other healthcare suppliers and the patient. What's more, the patient must be informed of (1) different advantages and disadvantages (i.e., cost, reactions, diverse monitoring perspectives, and so forth.) of the choices in respect to drug treatment and (2) occasions where one choice might be increasingly advantageous dependent on the drug specialist's expert judgment. The basic components of the arrangement, including the patient's obligations, must be cautiously and totally disclosed to the patient. Data ought to be given to the patient at a dimension the patient will get it. The drug treatment plan must be reported in the patient's pharmacy record and imparted to the patient's other healthcare suppliers as fundamental. The drug specialist giving Pharmaceutical Care must accept extreme accountability for guaranteeing that his/her patient has had the capacity to get, and is suitably utilizing, any drugs and related items or hardware called for in the drug treatment plan. The drug specialist should likewise guarantee that the patient has an exhaustive comprehension of the disease and the treatment/medications recommended in the arrangement. The drug specialist is in charge of monitoring the patient's advancement in accomplishing the particular results as indicated by technique created in the drug treatment plan. The drug specialist facilitates changes in the arrangement with the patient and the patient's other healthcare suppliers as vital and proper so as to keep up or improve the wellbeing and additionally adequacy of drug treatment and to help limit by and large healthcare costs. Patient advancement is precisely reported in the pharmacy record and conveyed to the patient and to the patient's other healthcare suppliers as fitting. The drug specialist imparts data to other healthcare suppliers as the setting for consideration changes therefore guaranteeing progression of consideration as the patient moves between the community setting, the institutional setting, and the long-term care setting [1].

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 India4 (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 requirements 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. This is supported by the fact that diploma pharmacists are not considered appropriate for positions within the pharmaceutical industry and B. Pharm. (graduate) pharmacists are not in significant numbers in community pharmacies and in other practice settings, probably due to lower salary as compared with industrial positions. The community pharmacists who actually manage pharmacies today are mostly D. Pharm. holders (diploma pharmacists). The D. Pharm. (Table 1) 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. Once qualified, most of these pharmacists receive little additional training and there is no exposure to up-to-date information. 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 (related to displaced persons or repatriates) 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 relative in case of the pharmacy being owned by a pharmacist, or other supporting person (assistant or attendant) with knowledge of selling medicines. 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 counseling. Two studies suggest that community pharmacy practice in India is only limited to the supply of “ready to dispense drug packages”.

Scope of Pharmacists

A Pharmacist with the above skills and attitudes should make himself an indispensable partner in health care system of a nation. Pharmacy a complete profession: Pharmacists reflect on every sector of society in the form of

Artists – designing a drug dosage form.

Lawyer – having fair knowledge of laws and legislation about the drug.

Engineer - having sound technical knowledge.

Entrepreneur - with sound knowledge of management, accounting, marketing, Counseling.

Health professional - having fair knowledge regarding health.

Learning “Objectives for the pharmacists” roles in health promotion and disease prevention are listed below.

a. Define, compare and contrast the terms health, health promotion and disease prevention.

b. Explain the significance of health promotion and disease prevention efforts.

c. List and distinguish examples of promotion and prevention activities.

d. Describe the need for pharmacist and pharmacy student involvement in health promotion and disease prevention.

e. Identify opportunities and challenges for pharmacists to provide health promotion and disease prevention services.

Image of Community Pharmacists

The public perception 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. The educated people consider the retail pharmacist as a person who has acquired a drug licence to supply the medicines or a grocer who deals in medicines. 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 films and dramas .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 persons10. During the end of the twentieth century when the first author was a student, many hostel mates of engineering disciplines wanted to know, "What is the difference between the sales of medicines and the sale of common consumer goods?" They did not appear to be convinced by the explanation about the important role of pharmacists in making the right medicaments available to patients. The situation today has not changed.

Community Pharmacy and Availability of Medicines

The community (retail) pharmacy sector is the prime source of medicines for both ambulatory and hospitalized patients (minimum stock in many hospitals). 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. India is of no exception. 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. course s. However, most of these self-financing institutions that provide education in pharmacy are away from practice environment resulting in diploma pharmacists lacking the skills needed for the community practice setting.

In Hospital Management

A Pharmacist has a great role to play in hospital administration. The responsibilities of a hospital Pharmacist are to develop a high quality comprehensive pharmaceutical service, properly coordinate & meet the needs of the numerous diagnostics & therapeutic departments, the nursing service, the medical staff, medical equipment of hospital & the hospital as a whole in the interest of community improving patient care. Clinical pharmacists 'role in patient safety stated below:

a. Hospital pharmacists should take responsibility for the management and disposal of waste related to the medicine use process, and advise on disposal of human waste from patients receiving medicines.

b. Hospital pharmacists should take responsibility for all aspects of selection, implementation and maintenance of technologies that support the medicine use process, including distribution devices, administration devices, and other equipment.

c. Hospital pharmacists should ensure appropriate assessment, development, implementation and maintenance of clinical decision support systems and informatics that guide therapeutic decision making and improve the medicine use process.

d. Hospital pharmacists should support the development of policies regarding the use or medicines brought into the hospital by patients, including the evaluation of appropriateness of complementary and alternative medicines.

e. Doses of chemotherapy and other institutionally identified high-risk medicines should be independently checked against the original prescription by at least two health care professionals, 1 of whom should be a pharmacist, prior to administration.

f. Hospital pharmacists should ensure the development of quality assurance strategies for medicines administration to detect errors and identify priorities for improvement

g. an easily accessible reporting system for adverse drug reactions should be established and maintained.

h. an easily accessible reporting system for medication errors, including near misses, should be established and maintained.

i. Medicines use practices should be self-assessed and compared with benchmarks and best practices to improve safety, clinical effectiveness, and cost-effectiveness'.

j. Systematic approaches (trigger tools) should be used to provide quantitative data on adverse drug events and optimal medicines use. These data should be regularly reviewed to improve the quality and safety of medicines practices.

Over time, hospital pharmacist roles have divided along functional service lines. The division across service lines may be unhelpful in achieving a paradigm shift from a drug centered orientation to a patient-centered orientation. Clinical pharmacy practice, due in part to its evolution, offers a blueprint for a patient-centered orientation whereby patients (and/or carers) are supported in their decision-making about medicines. Clinical pharmacy has been defined as the area of pharmacy concerned with the science and practice of rational medication use; or more elaborately, as a health science discipline in which pharmacists provide patient care that optimizes medication therapy and promotes health, wellness, and disease prevention. 3 Clinical pharmacy embraces the concept of pharmaceutical care 4 and medicines management. All hospital pharmacists therefore engage in clinical pharmacy practice. The level and complexity of that practice will vary depending on role and experience (Source: Olalekan K et al. Hospital pharmacists' contribution: a perspective. Web Hospital Pharmacy Europe 29 January, 2016).

Pharmacist's Role Plays in Public Health

Pharmacist contributions to public health that are not widely reported. This may be partially due to some of these services not being framed within public health categories, so the population impact of their services goes unnoticed. Nearly 93% of U.S. residents live within five miles of a pharmacy, making the community pharmacy one of the most accessible healthcare institutions. The pharmacist is in a unique position to make essential public health contributions. However, there is limited evidence that patient perspectives on the role of pharmacists has changed. The role of the pharmacist as part of the interdisciplinary team is even more critical in rural locations as many of them are healthcare worker shortage areas, and the pharmacist may be one of the few healthcare professionals in the community. NHS England (NHSE) is facing a growing GP workforce crisis, with continuing problems around GP recruitment, retention, and retirement rates. Approximately 30% of GP partners have reported not being able to fill a GP vacancy in their practice for at least 12 months (2017-18 survey). Recent studies support clinical pharmacists in General Practice, including their perceived competencies, scope of practice, practice environments, levels of integration, and support needs.

Figure 1. Factors of Quality care

Prescription for Excellence made a clear commitment to ensuring people had access to pharmaceutical care which was delivered by pharmacist independent prescribers across all care settings. Significant progress has already been made to build a complementary mix of skills within the pharmacy team, including independent prescribing, communication skills, history taking and advanced clinical assessment skills. A further drive to recruit more pharmacists to undertake these programmers, along with an increase in training places and additional financial resources, will be needed to support the planned capacity increase in pharmacists with advanced clinical skills to meet the needs of the service (Source: NHS Scotland. Achieving Excellence in Pharmaceutical Care A Strategy for Scotland. The Scottish Government, August 2017).

CONCLUSION

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.

REFERENCES

1. National Portal of India. http://india.gov.in/ (accessed 3 Mar 2009).
2. The Pharmacy Act, 1948 (8 of 1948), Government of India, Ministry of Law, Justice and Company Affairs.
3. The Drugs and Cosmetics Act 1940 and Rules there under 1945, Ministry of Health and Family Welfare, Government of India. Available at http://www.cdsco.nic.in/html/Drugs&CosmeticAct.pdf (accessed Feb 9 2009).
4. Pharmacy Council of India. http://pci.nic.in/ (accessed Mar 3 2009).
5. Basak SC, Prasad GS, Arunkumar A, Senthilkumar S. (2005). An attempt to develop community pharmacy practice: results of two surveys and two workshops conducted in Tamilnadu. Indian J Pharm Sci.; 67: pp. 362- 367.
6. Varma D, Girish M, Shafanas KK, Renjit PB (2000). A study on community pharmacy in Kerala. Indian J Hosp Pharm 2000; 37: pp. 49-52.
7. Basak SC, Arunkumar A, Masilamani K. (2002). Community pharmacists' attitudes towards use of medicine in rural India – An analysis of the current situation. Int Pharm J; 16 (2): pp. 32-35.
8. Basak SC, Raja R, Ramesh S, Senthil Kumar S. (2001). From policy to practice of community pharmacy in India: A growing need. Indian J Hosp Pharm; 38: pp. 169-172.
9. National Health Policy-2002, http://www.mohfw.nic.in/ (accessed Jan 10 2009).
10. Miglani BD (2008). 6th pay commission report- fatal blow for practicing pharmacists. Pharma Review; 7: pp. 69-70.
11. Goel P, Ross-Degnan D, Berman P, Soumerai S. (1996). Retail pharmacies in developing countries; a behaviour and intervention framework. Soc, Sci & Medicine; 42: pp. 1155-1161.
12. Kamat VR, Nichter M. (1998). Pharmacies, selfmedication, and pharmaceutical marketing in Bombay, India. Soc Sci & Medicine; 47: pp. 779-794.
13. Tseng A, Foisy M, Hughes CA, et al. Role of the Pharmacist in Caring for Patients with HIV/AIDS: Clinical Practice Guidelines. Can J Hosp Pharm.; 65 (2): pp. 125-45.
14. NICE. Contraceptive services for under 25s. Public health guideline Published: 26 March 2014.
15. Tong S, Amand C, Kieffer A, Kyaw MH (2018). Trends in healthcare utilization and costs associated with pneumonia in the United States during 2008-2014. BMC Health Serv Res.; 18 (1): 715. Published 2018 Sep 14. DOI: 10.1186/s12913-018-3529-4.
16. Katoue MG (2018). Role of pharmacists in providing parenteral nutrition support: current insights and future directions. Integr Pharm Res Pract. 2018; 7: pp. 125-140. Published. DOI: 10.2147/IPRP.S117118.
17. Gelayee DA, Mekonnen GB (2018). Pharmacy students' provision of health promotion counseling services during a community pharmacy clerkship: a cross sectional study, Northwest Ethiopia. BMC Med Educ.; 18 (1): 95. Published 2018 May 4. doi: 10.1186/s12909-018-1216-0.
18. Saxena P, Mishra A, Nigam A (2016). Evaluation of Pharmacists' Services for Dispensing Emergency Contraceptive Pills in Delhi, India: A Mystery Shopper Study. Indian J Community Med.; 41 (3): pp. 198-202.
19. Chin-Quee DS, Stanback J, Orr T (2018). Family planning provision in pharmacies and drug shops: an urgent prescription. Contraception. 2018 Nov; 98 (5): pp. 379-382. DOI: 10.1016/j. contraception. 2018. 08. 013. Epub 2018 Aug 28. PubMed PMID: 30170029.
20. Santschi V, Chiolero A, Paradis G, Colosimo AL, Burnand B (2012). Pharmacist interventions to improve cardiovascular disease risk factors in diabetes: a systematic review and meta-analysis of randomized controlled trials. Diabetes Care.; 35 (12): pp. 2706-17.

21. FIP. Pharmacists supporting Women and responsible use of medicines. Empowering informal caregivers 2018. Available From: https://www.fip.org/files/fip/publications/Pharmacistssupporting-women-responsible-use-medicines. pdf

22. Toklu HZ, Hussain A (2013). The changing face of pharmacy practice and the need for a new model of pharmacy education. J Young Pharm.; 5 (2): pp. 38-40.

23. Ali A, Katz DL (2015). Disease Prevention and Health Promotion: How Integrative Medicine Fits. Am J Prev Med.; 49 (5 Suppl 3): pp. S230-40.

24. Institute for Work & Health (Toronto). What researchers mean by Primary, secondary and tertiary prevention. Published: April 2015.

Corresponding Author

Naveen Yadav*