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Review Article

Role of Pharmacist in Health Care System.

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ABSTRACT

The overall goal for this study was to conduct a segment analysis of the pharmacist workforce based upon time spent in medication providing and in patient care services. Health is a word very familiar to us but it also carries a lot of complications and problems. According to the World Health Organization, health is a state of complete physical, mental and social well-being and not merely absence of any illness. To make the above definition of health practical we have to depend upon a "health care team". Community independent pharmacists provide essential services to residents of small towns and isolated communities. Anecdotal reports indicate their role within the local health care community is often multi-faceted, extending beyond the provision of prescription and nonprescription medications at their retail stores. In 2008, we surveyed 401 community pharmacists that are the only retail provider in their community to document their extended relationships with other health care providers and the additional health care services these pharmacists provide to their patients. Pharmacist-owners in independent pharmacies located at least 10 miles from the next closest retail pharmacy were interviewed to determine the presence in their community of other types of health care organizations that require pharmaceutical support. Their level of involvement with those facilities, and the types of clinical services, the pharmacists offered to their own patients. Community pharmacist are the health professional most accessible to the public. Community pharmacist are in a distinctive position to identify, prevent and resolve drug related problems in ambulatory patients and data suggest that community based pharmacy services can improve the healthcare outcomes.

KEYWORDS

Role of Pharmacist, Health Care Professional, Community Pharmacy and Ambulatory Patients.

1. INTRODUCTION

The mission of the profession of pharmacy is to improve public health through ensuring safe, effective, and appropriate use of medications. Contemporary pharmacy practice reflects an evolving paradigm from one in which the pharmacist primarily supervises medication distribution and counsels patients, to a more expanded and team-based clinical role providing patient-centered medication therapy management, health improvement, and disease prevention services¹.

Pharmacists are society's experts on drugs. They have been at the interface between prescribers and patients for centuries: in the community particularly they have long provided a direct service to the public². All health systems contain four essential levels of care: lay self-care, primary professional care, general specialist care and super specialist care. Within this structure, primary health care (PHC) is the first level of professional contact in the community and this forms the corner-stone strategy for the attainment of level of health that will permit socially and economically productive life.

Since 1978, member states of the World Health Organization (WHO) have accepted primary health care as their health policy. Some crucial roles recommended for community pharmacists in the PHC programmes include the following³:

- Advise government on a regular basis on the selection of the drugs most appropriate for the programmes
- Form a network for the storage and distribution of essential vaccines to enhance coverage
- Promote the sale and distribution of essential drugs
- Train and supervise community health workers on the proper handling, usage and administration of essential drugs
- Provide expanded/clinical pharmaceutical services with proper documentation
- Promote health through public health education and enlightenment programmes
- Be involved in training and retraining of community health workers.

Primary health care concerns, public health (disease prevention and health promotion) as well as treating those who are ill are increasingly receiving the attention of many healthcare providers, including pharmacists. Today more than ever, it is widely recognized that traditional healthcare providers are limited in how they can positively contribute towards improving the quality of services that patients receive in any given community⁴. Teamwork, communication and collaboration between health professionals are important for the safe and effective delivery of health care. Pharmacy practice involves patient-centered care including counseling, providing drug information, monitoring drug therapy and patient adherence, as well as the supply of medicines. Over the last decade, the role of pharmacists in the community has expanded with the provision of many professional services including medication reviews, diabetes and asthma management programs, and patient medication profiles. It is in the additional role of managing medication therapy, in collaboration with prescribers, that pharmacists can now make a vital contribution to patient care⁵.

Today's pharmacists are increasingly seen as distributors of knowledge, patient educators, health promoters, counselors and in some jurisdictions prescribers, in addition to still being a provider

of medication. Pharmacists consult with patients to assist them with drug usage and information and general health care in addition to providing specialized services such as:

- Product compounding
- Health monitoring
- Medication and disease management
- Home health care
- Long term care services

Pharmacists embark in a lifelong learning process. Often referred to as "drug experts" they have more training in prescription and non-prescription medications than any other health care professional⁶.

1.2. Areas of Pharmacy Profession 7,10

Pharmacist

- 1. Practice Setting
- 2. Other Settings
- **3.** Industry
- 1) Practice Setting
 - Community
 - Hospital
 - Clinical
- 2) Other Settings
 - Academics
 - Teaching
 - o Research
 - Research
 - Regulatory
- 3) Industry
 - Production
 - Q.A
 - Marketing
 - Packaging
 - Regulatory
 - R & D
 - Q.C

1.3. Pharmacy Profession in India⁸

Currently there are over a million pharmacists in India with around 55% of them in community, 20% in hospital, 10 % in industry & regulatory. And 2 % in academia in India, formal pharmacy education leading to a degree began in 1937, with the introduction of a 3 year industry – oriented Bachelor of Pharmacy course. To meet the varying needs of the profession at different levels the following pharmacy programs are offered in India today: Diploma in Pharmacy (D.Pharm.),

Bachelor of Pharmacy (B.Pharm.), Master of Pharmacy (M.Pharm.), practice- based Doctor of Pharmacy (Pharm.D.), and Doctor of Philosophy in Pharmacy (Ph.D.). To practice as a pharmacist in India, one needs at least a diploma in pharmacy, which is awarded after 2 years and 3 months of pharmacy studies & practical training. These diploma-trained pharmacists are currently the mainstay of pharmacy practice in India. Pharmacy Council of India (PCI) is the statutory body established in 1949, for regulating pharmacy education and practice of pharmacy profession in India. PCI is actively working towards strengthening and upgrading the curriculum to produce competent workforce that is able to meet the growing demands of the industry & community. In 2003, the Pharma Vision 2020 Charter was released by the then President of India, Dr. A.P.J. Abdul Kalam, at the 55th Indian Pharmaceutical Congress at Chennai. The Vision 2020 is focused on promoting the highest professional ethical standards of pharmacy, focusing the image of pharmacists and competent healthcare professionals, sensitizing the community, government and others on vital professional issues and supporting pharmaceutical education and sciences in all aspects. Indian Pharmaceutical Association once again, with the support of the leaders of the pharmacy profession presented the road map to Pharma Vision 2020 at the 58th Indian Pharmaceutical Congress held in December 2006 at Mumbai. The themes of the subsequent Congresses in the country have been centered on Pharma Vision 2020.

1.4. Indian Scenario⁹:

India is a country with significant problems in medication use, but until recently Indian pharmacists have not been properly educated for a patient-care role. Clinical Pharmacy services on the whole have so far remained neglected within India and there has been resistance on part of the medical professionals to accept the fact that pharmacists too have a clinical role. There has also been reluctance on part of pharmacists themselves towards assuming such clinical role and responsibilities. However this dismal scenario has started undergoing promising changes in the recent past. Many hospitals across India have of late initiated clinical pharmacy and pharmaceutical care services and this step has already started showing positive results.

The concept of pharmaceutical care is not much developed in India as in developed countries like USA and UK. In India pharmacy is limited to drug dispensing in hospitals, where as in community it is mainly focused to medical stores aimed at selling of drug to public and is mainly profit oriented. In 1999, WHO suggested the Good Pharmacy Practices in community and hospital pharmacy. This guideline emphasize the provision of pharmaceutical care by the pharmacist and also recommend that national standards are to be set for the promotion of health, supply of medicine and medical devices and medicines use by pharmacist.

1.5. Consultation and Collaboration within the Healthcare Team¹⁰

Pharmacists usually have more frequent interactions with a patient than other health professionals, because patients usually visit pharmacies on at least a monthly basis to have their refill prescriptions dispensed. Education is a vital part of making sure patients understand their treatments, and it has a proven effect on patient adherence. Pharmacists are well-positioned to identity non-adherence and give patients information on their condition, treatment and self-management strategies in a timely and personal way.

Pharmacists should,

- Ask patients how they are going with their medicines at each pharmacy visit
- Create concordance involve patients in actively planning their treatment and medicine-taking strategies
- Reinforce important information, provide additional information and clear up misunderstandings
- Monitor the effectiveness of medicines
- Use telephone reminder systems to prompt
- Patients to fill repeat prescriptions
- Counsel patients, for example, using motivational interviewing
- Educate patients about their condition, the risks and benefits of treatment, lifestyle information, the medicine that has been prescribed, its dose and potential side effects.

Pharmacists can make sure patients have a satisfactory knowledge of their medicines by:

- Checking patients know the name of their medicine, its strength and purpose
- Checking patients know how to take their medicine and what to do if a dose is missed
- Demonstrating devices to patients
- Giving patients specific information as required, that is, special directions, drug-food interactions and drug-drug interactions
- Giving patients information about common and serious side effects, and what to do if they occur
- Giving patients tips on self-monitoring techniques
- Checking patients know the duration of their treatment
- Checking patients know the benefits of their medicine and its impact on their condition

1.6. The Pharmacist as a health care provider¹¹

The World Health Organization (WHO) has defined health as the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Within the context of this definition, health care providers play a major role in striving for health in a population. In terms of modern health care delivery, studies have shown that engaging multidisciplinary expertise is one of the goals for achieving ultimate population health.

Pharmacy is the health profession that links the health sciences with the basic sciences; it is committed to ensuring the safe and effective use of medication .Pharmacists' professional roles and responsibilities have evolved historically from a focus on medication compounding and dispensing to extended pharmaceutical care services. An increase in health demands, with a complex range of chronic medicines and poor adherence to prescribed medicines, has forced pharmacists to take a patient-centered approach.

1.7. Role of Community Pharmacists 12

• Most community pharmacists (83%) provided important services for other health care providers and facilities in their communities.

- Almost all (92%) of the communities served by a single independent retail pharmacy are also served by at least one other type of inpatient or outpatient health care organization.
- Skilled nursing or long-term care facilities, hospice providers and home health agencies, all of whom serve predominately elderly patients, were the most common types of health care organizations in the communities surveyed.
- Almost half of all pharmacists (42%) offered additional clinical and educational services
 to community residents including blood pressure checks, screening for cholesterol and
 osteoporosis, glucose screening and diabetes counseling, tobacco cessation programs, and
 immunizations

1.8. Daily and Extended Role of Community Pharmacists^{2,13}

- Delivery services to household patients
- Services for groups with special needs
- Services for residential homes
- Out of hours services
- Domiciliary visits
- Hospital discharge and admission procedures
- Health promotion activities
- Needle and syringe exchange schemes
- Distribution of welfare food
- Disposal of unwanted medicines
- Sale of prepayment certificates
- Health screening
- Patient referrals to general practitioners and other health professionals
- Development of local formularies
- Provision of professional advice
- Supply of disability aids
- Reporting adverse drug reactions
- Supply of complementary medicines
- Advice on over the counter medicines
- Training of other health professionals
- Clinical scrutiny of prescriptions;
- Oversight of safe dispensing processes;
- Providing patients with advice about medicines and treatments;
- Provision of public health information to patients and customers and promotion of wellness;
- Signposting people to other services, self-care organizations or information resources;
- Assessment and treatment for minor ailments;
- Professional oversight of the sales of over the counter (OTC) medicines;

• Clinical review services for specific patient groups in GP practices, e.g. asthma, diabetes, hypertension.

1.9. Future Need and Scope of Community Pharmacy^{13,14}:

With a population of billion, the community pharmacy in India is in demand for its various services. India is a global face of rapidly changing developing nations, which requires strengthening its professional aspects of community pharmacy. With changing demands from educated and urbanized mass, there needs a reform in the policies and structure of the present community pharmacy setup. Professional and educational development of the community pharmacist can make an important place in the health delivery network. Their needs lot of initiatives from the community pharmacy, which should cater the needs of the increasing demand of the health and drug information support to the local community.

This will enhance the public health, leading to more healthy society. However, there also needs a input from the society and other medical practitioners towards reorganization of the community pharmacy services, which should compliments the efforts made by the pharmacist towards betterment of the patient care¹³.

Pharmacists' scope of practice consists of a legal component set by state laws and board regulations and guidelines set by employers or administrators for specific practice settings. In the early 1990s, an examination of pharmacists' scope of practice identified four primary domains in which pharmacists were permitted to provide care: ensuring appropriate medication therapy and outcomes, dispensing medications and devices, engaging in health promotion and disease prevention, and engaging in health systems management. The integration of pharmacists into team-based models of care could potentially lead to improved health outcomes¹⁴.

2. CONCLUSION

The pharmacy profession has undergone significant changes in the past sixty years, evolving into a patient care focused approach. Pharmacy education and training have been revised to prepare future pharmacists for careers in pharmaceutical care, and post-graduate training opportunities and certification programs have been instrumental in training pharmacists for future practice in innovative patient settings. Pharmacists have expanded their roles in practice settings and now serve as integral members of an interdisciplinary health care system. It will now be important to determine how the public will respond to a more patient-centered pharmacy practice. Pharmacists have the skills and knowledge to contribute to the quality use of medicines, to minimize medication misadventure and to help consumers better manages their medicines. Interdisciplinary clinical teaching, communication and relationships are the keys to improving collaboration to achieve optimal medication management. Interprofessional collaboration between general practitioners and pharmacists must continue to evolve to meet the medication management and healthcare needs of the community now and in the future.

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