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Review Article

A Review on the Importance of Pharmacy Practice in Day-To-Day Life

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ABSTRACT

Pharmacist is also known as chemist or druggist as health care professionals who practice in pharmacy deal with the field of medicine and provide proper medication and are also involved in the field of preparation, standardization, formulation, quality checking, inspection, compounding, and dispensing of the different types of drug of several dosage forms in such a way the medication preferable for a simplified route of administration in the treatment of local as well as chronic diseases. Pharmacists are healthcare professionals who worked in a wide variety of health care systems such as in the pharmaceutical industry for innovation (R&D), formulation, manufacturing, processing, quality checking, and maintaining proper safety and toxicity parameters. Pharmacists are involved in patient education and worked in collaboration with physicians and other health care professionals for the prevention of disease and the treatment of patients. This article discusses a review on the importance of the pharmacy practice in different fields and fundamental characteristics of involvement in day-to-day life and plays a to assure patient benefits from rational evidence-based medication and improvement of patient care. There is a need for a system of assuring the integrity of the medicine supply chain to assure the value of medicines used very important role during the Covid19 pandemic.

Keywords –Pharmacist, Pharmaceutical technology, Pharmacy practice, clinical practice, Novel technology, Covid19 pandemic, Novel profession.

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INTRODUCTION

Public health and safety are the fundamental mottoes of all medical practitioners. Day by day safety of the public is reducing due to a lack of trained healthcare professionals, inadequate health facilities, poor standard of education, misleading medicine which impacts serious adverse issues to patient health. Managing the costs of medicines is critical to making the best use of limited resources to maximize the health care professionals to provide the proper medication with maintaining safety is ideal characteristics of medical safety executives. Substandard, adulterated, unlicensed, and spurious/false-labeled/falsified/counterfeit medicines are the major drawback of public health issues. There is a need for a

system of assuring the integrity of the medicine supply chain to assure the value of medicines used for the prevention of disease and the treatment of patients. Survey says, Due to wrong medication and wrong understanding of prescription 33.6% peoples dies in a year.^[1]

In general, Pharmacist is also known as chemist or druggist as health care professionals who practice in pharmacy deal with the field of medicine and provide proper medication and are also involved in the field of preparation, standardization, formulation, quality checking, inspection, compounding, and dispensing of the different types of drug of several dosage forms in such a way the medication preferable for a simplified route of administration in the

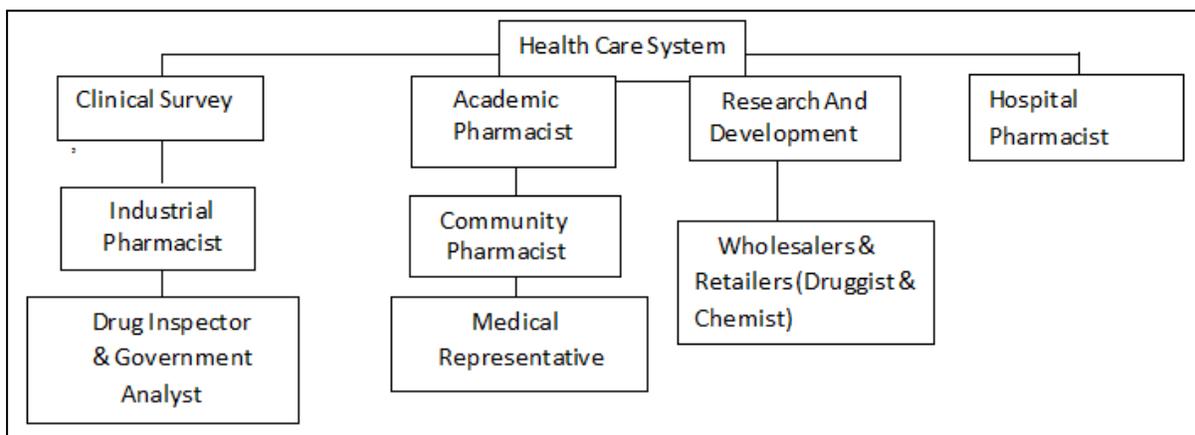
treatment of local as well as chronic diseases.^[2] Pharmaceutical care suggests a shifting of focus from technical, product function-oriented, patient counseling and professional services that collaborate with primary health care professionals, providing responsibility to patient care and safety concerning drug therapy.^[3]

Unfortunately, In the vision of the public, the role of pharmacist professionals, contributions, and responsibility are not duly recognized and not given a single value and even misunderstood. The reason behind it most possibly public and policymakers believed that the pharmacy role is merely restricted to only buying and selling of medicine as what ordinary salesman does to customers. As an enhancement of public confidence pharmacist professionals

still worked continuously to provide proper counseling with drug safety and earned through their dedication to ending pain and suffering.^[3]

Pharmacists are healthcare professionals who worked in a wide variety of health care systems such as in the pharmaceutical industry for innovation (R&D), formulation, manufacturing, processing, quality checking, and maintaining proper safety and toxicity parameters. As they are worked in the medical practice community such as hospitals and community pharmacists to provide the proper medication with proper dose and counseling of patients and also, they are involved in academics, regulatory affairs, clinical research, etc.^[4]

Table 01: Pharmacist role in different sectors



The necessity of pharmacy services –

The importance of the pharmaceutical executive role in various fields and several necessities related to public health and safety issues concerning the hospital field.

- Efficacy of drug with proper dosage form would ensure the proper treatment of the patient.
- Maintaining the proper drug according to the international guidelines and the skilled person should be operated.

- Maintaining the information regarding quality, cost, and source of supply and distribution of medicine.
- Ensuring the potency and any adverse effect may occur to the patient must be disclosed.
- Dispensing prescription to in-patient and outpatient and maintaining the schedule of drug according to Drug and cosmetic act 1940.^{[5], [6]}

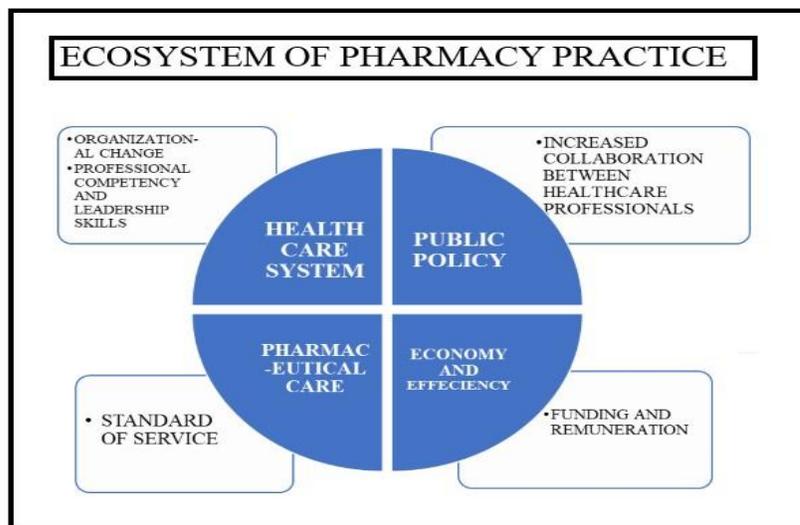


Figure 01: Ecosystem of pharmacy practice

Maintaining information and reporting to higher authorities concerning the health care sector –

- Maintain hospital formulary included purchase, size of inventory, turnover, storage facility, stock location system, and suitable conditions for emergency drugs.
- Maintain quality of drug and provide all papers according to GPP (good pharmacy practice).
- Maintain the total number and value of an item for inpatient and outpatient.
- Frequency of emergency demand.
- Maintain inner pharmacy department with proper stock.
- Volume of drug dispensed through pharmacy.^{[7],[8]}

The pharmaceutical sector is now growing and enhancing its development to a variety of technology. Day by day pharmaceutical companies are very much concerned about public health and safety and establish several departments to ensure the quality of product and maintain the precision of medicine and maintain proper international standard guidelines to make more attention to the reduction of patient compliance. Pharmaceutical institutions are more concerned to provide upcoming developed innovative technology introduced into the academic syllabus and providing proper theoretical as well as practical knowledge that the upcoming pharmacist generation can adopt new technology easily.^{[9],[10]}

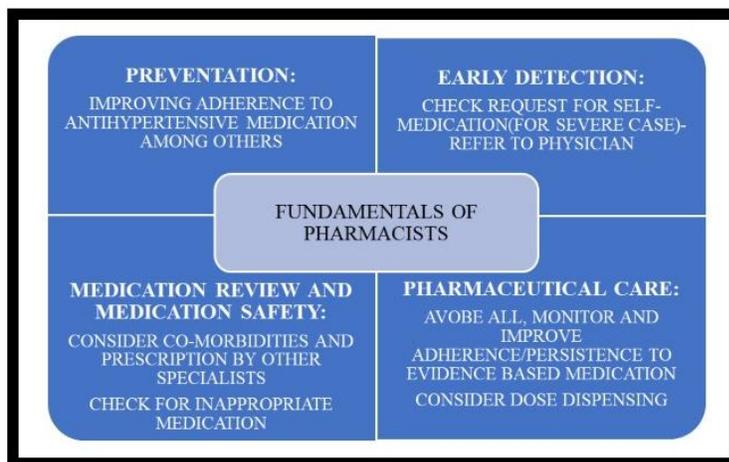


Figure 02: Fundamentals of Pharmacists

Different types of field of the Pharmacist –

Hospital Pharmacist –

In the area of Hospital pharmacy as well as retail pharmacy plays a very important role in the sector of health care professions. Pharmacists are directly in contact with patients and provide properly prescribed medication and provide patient counseling. Hospital pharmacy consists of several types of branches such as Retail pharmacy as also

called an outer patient department, Community pharmacy as the pharmacist is directly in contact with the patient, Pharmacy practice is the department involved in patient counseling and provide proper medication and administrative pharmacy involved with the officials work as medical dispensing bills with proper management of stock of drugs as well maintain the schedule of medicines as per Drug and Cosmetic act.^{[11],[12]}

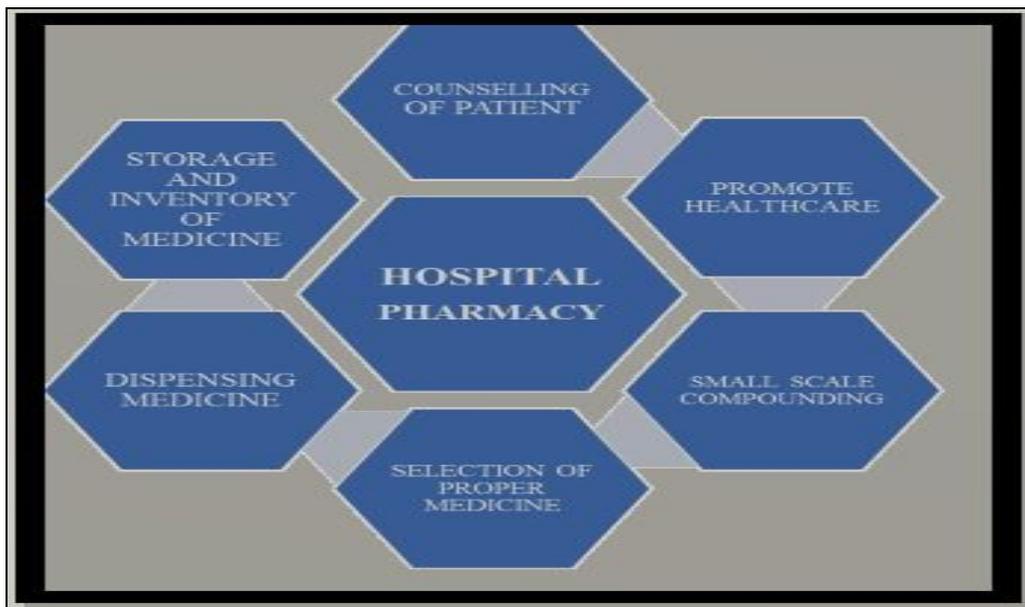


Figure 03: Function of hospital pharmacist

Clinical Pharmacy:

Clinical pharmacy is the branch of science which deals with biomedical and pharmaceutical knowledge using the drug to patient care with proper skill, knowledge, and safety. Pharmacists are directly contacting the patient and

understanding them and history of treatment and also helping the reduction of physician time which leads to an easy selection of the drug therapy. ^{[13], [14]}

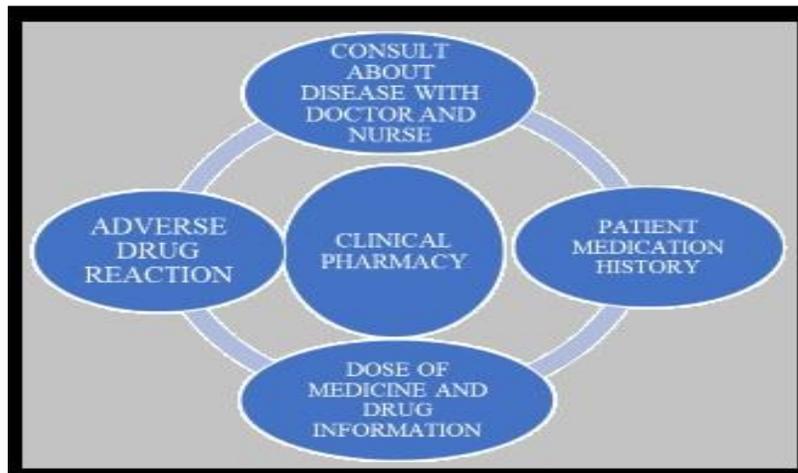


Figure 04: Schematic representation of Clinical Pharmacy

Teaching:

Carrier opportunities of the academic sector of the pharmaceutical institutions are helping to support the future member of the pharmacy. Academic professionals have inspired them and educated them to move towards next-generation healthcare professionals. Recently pharmaceutical institutions are more concerned about

upcoming technology. They adopt this technology and provide proper bits of knowledge which can be helped them to grow in the technology field and bring up the upcoming innovative technology. Academics are providing proper ethical knowledge and education of pharmaceutical practices and producing skilled pharmacies to fulfill future demands. ^{[15], [16]}



Figure 05: Diagrammatic representation of community pharmacy

Research:

Research is the major key profession in the field of pharmacy to develop, bring the new technology, new formulation as well as reduction of patient compliance. Research and development are involved in drug discovery and scientific disease mechanisms. Involvement of therapeutic outcomes and greater efficacy in severe and local diseases are their key responsibilities. ^[17]

Service–

Pharmacists are involved in several services as pharmacovigilance, Advocacy and professional sector development, retail chain, etc. Pharmacovigilance is the branch of sciences that deals with the evaluation, prevention of adverse effects as well as adverse events or any kind of drug-related problems that can be detected and major impacted in the clinical field which ensures public safety and efficacy of the medication. ^[18]

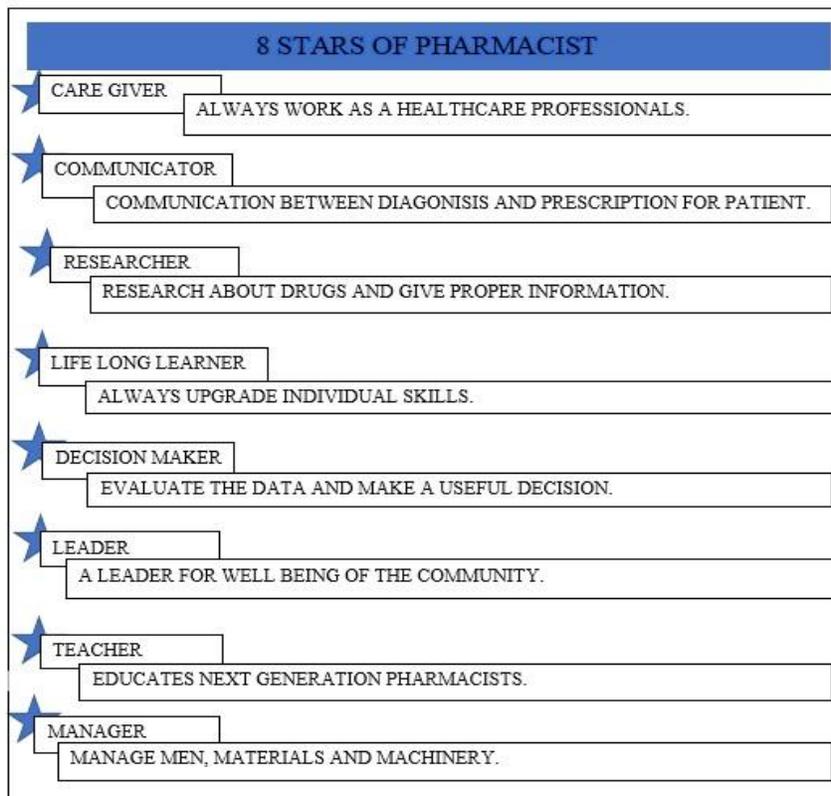


Figure 06: Different functions of a Pharmacist

Pharmaceutical Industry –

Industrial pharmacy is a disciplinary pharmaceutical field involved in the manufacturing, development, marketing, and distribution of drug products including quality checking and assurance activity to ensure the safety of the drug.

- Introduce new technology to the manufacturing process.
- Maintain quality checking attributes.
- Improvement of patient compliance.
- Greater efficiency and economy to disease therapy.
- Improvement of therapeutic outcomes.
- Maintain good manufacturing practice as well as good laboratory practice.^{[19], [20].}
- Involvement in the discovery of new drug development.
- To promote drug research and formulate into the technology transfer.

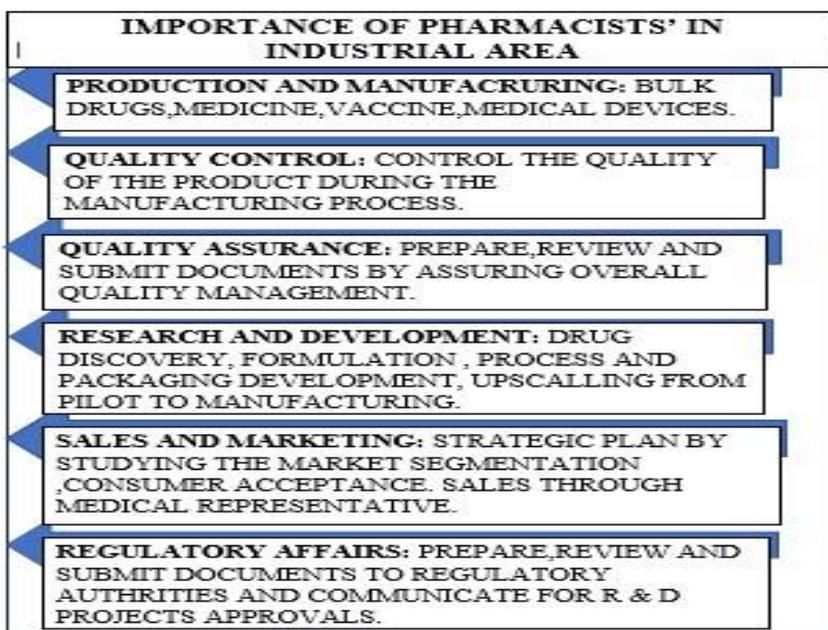


Figure 07: Importance of pharmacists in the industrial sector

Pharmacist role in Covid19 Pandemic –

Through pharmacy is a novel profession in the sector of health care. They provide all responsibility to patient safety by taking risks of their life. During the Covid19 pandemic

situation where people are restricted to go outside their home and workplace, these professionals stayed with Covid patients and provide first aid as primary care and supplies medications to survive public health.

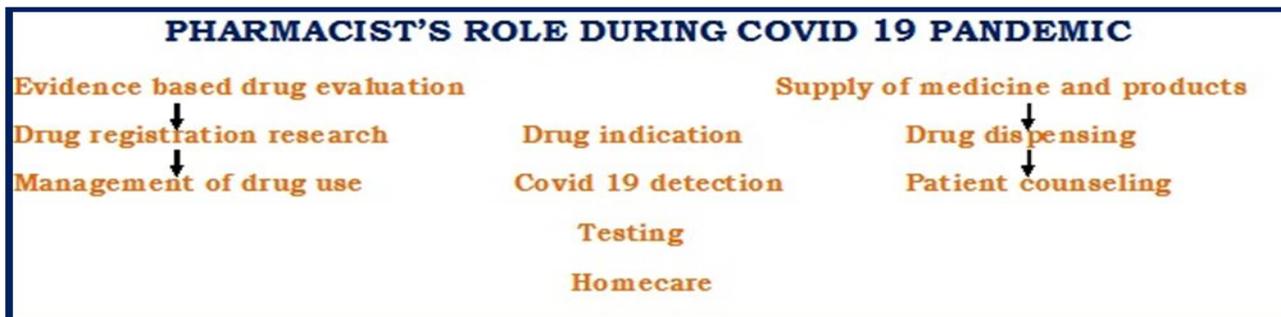


Figure 08: Pharmacists role during Covid19 pandemic

CONCLUSION

Till many decades before the basic and major of pharmacy was involved in the dispensing and compounding as providing the medicine to customers. After that readymade industry has grown up and several formulations come to the markets and pharmacists also focused more on inventory management and dispensing of medicine. After several years Modern industry was established to maintain the proper guideline and safety concerns of public health care. Pharmacists are involved in patient education and worked in collaboration with physicians and other health care professionals to assure patient benefits from rational evidence-based medication and improvement of patient care.

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