Research & Reviews: Journal of Hospital and Clinical Pharmacy
e-ISSN: 2347-226X
p-ISSN: 2319-9857

Roles and Responsibilities of a Pharmacist

John Williams*

Department of Emergency Medicine, Aarhus University Hospital, Aarhus, Denmark

Editorial

Received: 11-Jan-2022 Manuscript No. JHCP- 52085**; Editor assigned:** 13-Jan-2022, PreQC No**.** JHCP-52085(PQ); **Reviewed:** 27-Jan-2022**,** QC No JHCP- 52085**;** **Accepted:** 01-Feb-2022**,** Manuscript No. JHCP-52085(R); **Published:** 08-Feb-2022**,** DOI: 10.4172/2347-226X.8.1.e001

***For Correspondence:** John Williams, Department of Emergency Medicine, Aarhus University Hospital, Aarhus, Denmark

E-mail: Jwilliams@health.sdu.dk

Keywords: Pharmacokinetics; Health-care; Pharmaceuticals; Drug treatment; Medicinal chemistry

ABSTRACT

Pharmaceuticals and medications are discovered, manufactured, disposed of, used safely and effectively, and regulated by the clinical health science of pharmacy. Primary care needs a clear understanding of medications, their mechanisms of action, side effects, interactions, mobility, and toxicity. It also needs therapeutic expertise and a comprehension of the disease process. Other abilities, such as understanding of the collecting and assessment of physical and laboratory data, are required for some pharmacist specializations, such as clinical pharmacy.

EDITORIAL NOTE

Pharmacy practice include both conventional tasks like as compounding and dispensing pharmaceuticals, as well as more modern health-care activities such as clinical services, medication safety and efficacy reviews, and drug information dissemination[1-3]. As a result, pharmacists are drug treatment specialists and the primary health

Professionals who optimize medicine use for the benefit of patients. A pharmacy or a chemist's store is a place where pharmacy is performed [4]. Drugstores in the United States and Canada sell pharmaceuticals as well as a variety of other things such as confectionary, cosmetics, office supplies, toys, hair care products, and periodicals, as well as beverages and groceries on occasion [5].

The work of the pharmacist, in its examination of herbal and chemical substances, might be considered a precursor to the contemporary sciences of chemistry and pharmacology, prior to the formation of the scientific method. The field of pharmacy may be divided into 3 main categories:

- Pharmaceutics
- Pharmacokinetics
- Pharmacy Practice, Medicinal Chemistry and Pharmacognosy

The distinctions between these fields and other sciences, such as biochemistry, are sometimes blurry. Often, multidisciplinary teams (pharmacists and other scientists) collaborate to develop new treatments and patient care strategies [6]. Pharmacy, on the other hand, is not a fundamental or biological science in the traditional sense. Medicinal chemistry is a subfield of synthetic chemistry that brings together pharmacology, organic chemistry, and chemical biology. Pharmacology is commonly referred to as the fourth pharmacy subject. Despite the reality that pharmacology is crucial to the study of pharmacy, it is not a pharmacy-specific subject. Both disciplines are separate from one another. Those interested in practicing both pharmacy (patient-centered) and pharmacology (a biological science needing the scientific method) obtain separate training and degrees [7-9].

Pharmacoinformatics is a relatively young science that aims to improve the efficiency and safety of drug research and development. The study of genetic-linked variations that affect patient clinical reactions, allergies, and medication metabolism is known as pharmacogenomics. Pharmacists are healthcare professionals with specific education and training who play a variety of responsibilities in ensuring that their patients have the best possible health outcomes by using drugs correctly. Pharmacists can also be small company owners who own the drugstore where they work. Pharmacists play a crucial role in optimizing medication therapy for an individual since they are well-versed in the mechanism of action of a drug, as well as its metabolism and physiological effects on the human body. Pharmacy technicians help pharmacists and other health care providers by completing a number of pharmacy-related tasks, such as delivering prescription medications and other medical equipment to patients and providing instructions on how to use them. They may also have administrative responsibilities in the pharmaceutical industry, such as checking prescription requests with doctors' offices and insurance firms to ensure that the right prescriptions are supplied and so that payment is received [10].

A pharmacist who is certified to practice medicine and whose responsibilities include distributing prescription medications, monitoring drug interactions, delivering immunizations, and educating patients on the effects and correct use of pharmaceuticals and dietary supplements.

Increased demand for pharmacists' clinical counselling abilities appears to be driven by an increase in the number of medication treatments available, an older but more aware and demanding population, and shortages in other parts of the health care system. Pharmaceutical care is one of the most significant jobs that pharmacists are now filling. Taking direct responsibility for patients and their illness conditions, drugs, and administration of each to

enhance outcomes is what pharmaceutical care entails. Reduced medication errors; increased patient compliance in medication regimen; better chronic disease state management, including hypertension and other cardiovascular disease risk factors; strong pharmacist–patient relationship; and decreased long-term medical costs are just a few of the advantages of pharmaceutical care.

Review and monitoring of prescription regimens are all part of clinical medication management.

Patients with undiscovered or diagnosed illnesses are assessed, and clinical drug management needs are determined. Specific illness monitoring, such as medicine dosage in renal and liver failure preparing drugs

Providing pharmaceutical information giving health monitoring and guidance to patients, including treatment and advice for common diseases and disease states. Overseeing pharmacy technicians and other personnel in the distribution of prescription medications and providing non-prescription or over-the-counter drug counselling

Patients and other health care providers receive instruction and counseling on how to take drugs most effectively (e.g., proper use, avoidance of overmedication)[11-12]. Pharmacokinetic evaluation of vaccines as a means of boosting public health and establishing medication formularies.

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p-ISSN: 2319-9857

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