

An Empirical Perspective about the Inevitable Role of Pharmacist during Covid -19

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ABSTRACT

The pharmacist's function is evolving and will continue to evolve in response to the requirements and expectations of patients and service users. Change is unavoidable. Technology advancements, geopolitical shifts, the loss of deference, increased access to knowledge, and a trend to multi-disciplinary collaboration all indicate that pharmacists' work styles will need to evolve. Appropriate selection, education, training, and workforce planning can all be produced by establishing the role's fundamental traits. As a result, pharmacists must be created or adapted so that they can establish their own practice and duties to meet changing demands. The ability to participate more actively in decision-making and assume increasing leadership duties will undoubtedly be required. Pharmacists will also need to be able to move more freely between hospital and community settings, as well as recognize that their duties will alter over time.

This paper focuses upon the functions of a good pharmacy practice and the inevitable role of a pharmacist during the Covid – 19 pandemic.

(Keywords: Pharmacy Practice, Role of Pharmacist during Covid 19)

I. REVIEW OF LITERATURE:

Pharmacists and COVID-19 Ali Elbeddini, Thulasika Prabakaran, Sarah Almasalkhi & Cindy Tran **(June 2020)** In their article concluded that, Pharmacists have not stopped working because of COVID-19 and in fact, have stepped up to take on more responsibilities. Their efforts should not be forgotten when frontline workers are lauded once this global pandemic ends, but without question, should not be overlooked in the present, when their frontline efforts are still needed to fight COVID-19. Pharmacists are frontline workers; they should be addressed as such and given the recognition they deserve.

Role of pharmacist during the COVID-19 pandemic: A scoping review

Marília Berlofa Visacri,^a Isabel Vitória Figueiredo,^{b,c} and Tácio de Mendonça Lima^d

(July 2020) Their findings showed the different roles of pharmacists during the COVID-19 pandemic, such as disease prevention and infection control, adequate storage and drug supply, patient care and support for healthcare professionals. Pharmacists' interventions were mostly conducted for healthcare professionals and patients through one-to-one contact, telephone or video conference. The pharmacists' main responsibility was to provide drug information for healthcare professionals as well as patient counseling. All studies reported actions taken by pharmacists, although without providing a satisfactory description.

Global contributions of pharmacists during the COVID-19 pandemic

Debra A. Goff Pharm.D., FCCP, Diane Ashiru-Oredope MPharm DipClinPharm MPH Ph.D., Kelly A. Cairns BSP Pharm, GradDipClinPharm, MClinPharm, Khalid Eljaaly Pharm.D., M.S., Timothy P. Gauthier Pharm.D., Bradley J. Langford BScPharm, Pharm.D., Sara Fouad Mahmoud Pharm.D., Angeliki P. Messina MSP Pharm, Ubaka Chukwuemeka Michael Pharm.D., Ph.D., Thérèse Saad Pharm.D., Natalie Schellack BCur, BSP Pharm, Ph.D.

(September 2020) quoted in their article that Pharmacists are medication experts providing patient care in a variety of settings including hospitals, clinics, community pharmacies, long-term care, physician offices, and national and public health. In this paper, we describe how pharmacists from high and low-middle income countries contributed to essential patient care and well-being of the public during the COVID-19 pandemic.

Community Pharmacists Roles During the COVID-19 Pandemic Karl Hess, PharmD, APh, CTH, FCPA, FAPhA, AFTM RCPS (Glasg)1 , Albert Bach, PharmD, APh1 , Kimberly Won, PharmD, APh, BCCCP1 , and Sheila M. Seed, PharmD, MPH, CTH, AFTM RCPS (Glasg)2 **(December 2020)** The aim of this paper is to review the roles that community pharmacists in the United States (US) can play to support public health measures during the current severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) pandemic (COVID-19). Community pharmacists in the US are highly visible and accessible to the public and have long been regarded as a source for immunization services as well as other public health activities.

Multilevel Engagements of Pharmacists During the COVID-19 Pandemic: The Way Forward: Tauqeer Hussain Mallhi^{1*}, Aroosa Liaqat², Arooj Abid³, Yusra Habib Khan^{1*}, Nasser Hadal Alotaibi¹, Abdulaziz Ibrahim Alzarea¹, Nida Tanveer⁴ and Tahir Mehmood Khan⁵

(December 2020) narrates that this pandemic put more responsibilities on pharmacists due to disease novelty, its rapid transmission, associated morbidity and mortality, lack of vaccine or specific drugs, lack of treatment guidelines, and overwhelmed healthcare system. Pharmacists gave full play to their professional expertise; analyzed the current situation rationally; tested, treated, and immunized; formulated telehealth policies expeditiously; and guaranteed medication safety and rational use of drugs.

II. INTRODUCTION

Pharmacy practice's purpose is to deliver pharmaceuticals and other health-care products and services while also assisting people and society in making the greatest use of them. A comprehensive pharmacy service includes participation in activities that promote good health and the prevention of disease in the population. According to the National Association of Boards of Pharmacy (NABP), the practice of pharmacy involves the: Interpretation, evaluation and implementation of medical orders, Dispensing of prescription drugs, Participation in the selection of drugs and medical devices, Administration of medication, Review of drug regimens, Research about drugs and related topics, Provision of patient counseling, Compounding and labeling of drugs and devices, Appropriate storage of drugs and medical devices, and Maintenance of medical records.

Types of Pharmacy

Hospital Pharmacy

The art, practice, and profession of choosing, preparing, storing, compounding, and dispensing medicines and medical equipment, as well as educating patients, doctors, nurses, and other healthcare professionals on their safe, effective, and efficient use, is known as hospital pharmacy. In a health facility, hospital pharmacy is a specialist branch of pharmacy that is an integral aspect of patient health care. In a hospital context, hospital pharmacy is the profession that tries to maintain and improve patient medication management and pharmaceutical treatment to the highest standards. In the changing scenario of pharmacy practice across the world, for successful practice of hospital pharmacy one must understand the various skills like drug distribution, drug information, and therapeutic drug monitoring for improved patient care.

The hospital pharmacist's missions are to: improve the safety and quality of all medicine-related processes affecting hospital patients to ensure the seven "rights" are respected: right patient, right medication, right dose, right time, right place, right drug, right information and documentation.

Community Pharmacy

Community pharmacies can be found on main streets, in neighbourhood centres, in supermarkets, and in the heart of the poorest neighbourhoods. When other health care experts are absent, many of them stay open late. Community pharmacies come in a variety of shapes and sizes, ranging from huge chains with locations on every High Street or in outlying supermarkets to small, independently owned pharmacies in small towns, suburbs, and often in impoverished areas or rural settings. The community pharmacist's conventional position as a healthcare worker who fills prescriptions prescribed by doctors has evolved. In recent years, community pharmacists have become more prominent.

The community pharmacy involves skills such as dispensing of drugs, responding to minor ailments by providing suitable and safe medication, patient counseling for improved patient care in the community setup.

What is a Good Pharmacy Practice?

The practice of pharmacy that responds to the requirements of the people who utilize pharmacists' services in order to deliver optimal, evidence-based treatment is known as good pharmacy practice. It is critical that a national framework of quality standards and guidelines be established to support this practice.

How to set standards for a Good Pharmacy Practice?

Just as pharmacy practice differs by country, it also differs by practice location. As a result, guidelines should take into account the diversity of pharmacy practice contexts (e.g. community and hospital pharmacy). Furthermore, as medications and requirements evolve, the standards should recognize changing practice environments and provide guidance to these emerging services without jeopardizing the growth of practice. Simultaneously, a practice baseline should be created below which the activity cannot be termed "pharmacy practice" at all and should not be tolerated.

To begin, define the functions that pharmacists play in the eyes of patients and society.

Second, within each job, important functions for which pharmacists have direct authority and accountability must be identified. Finally, based on the necessity to demonstrate competency in a set of tasks supporting each function and role, minimum national standards should be defined.

Minimum national standards for each activity are based on processes that must be applicable and specified appropriately in light of the pharmacy practice environment's local demands as well as national professional ambitions. These roles should be adopted by all national pharmacy

Professional groups.

Functions and activities for pharmacists

Prepare impromptu medicinal concoctions and medical supplies:

Pharmacists should verify that compounded medicines are consistently manufactured according to established formulas and quality standards for raw materials, equipment, and preparation methods, including sterility where applicable.

Obtaining, Storing and Securing medical items and medicine preparation:

Pharmacists in charge of procurement should make sure that the process is transparent, professional, and ethical in order to promote equity and access and to ensure accountability to the

appropriate governing and legal bodies. He should guarantee that substandard, adulterated, unlicensed, and spurious/false-labeled/falsified/counterfeit pharmaceuticals are not procured or permitted into the system. He should make sure that the process is backed up with a dependable information system that produces accurate and timely data.

Distribute Medical Products properly:

Pharmacists should make sure that all medical items, including medicine samples, are handled and delivered in a way that ensures the medicine supply's reliability and safety.

They should develop an effective distribution system, including a written policy, to recall medical items that are known or believed to be defective or spurious/false-labeled/falsified/counterfeit promptly and effectively, with a designated person(s) accountable for recalls. National medicines regulatory agencies may introduce new medicines that are authorized for marketing with limited safety data as part of a disaster or pandemic preparedness strategy; pharmacists must be aware of the safety issues and implement necessary mechanisms for monitoring the occurrence of adverse events.

Administering Medicines, giving vaccinations, and other injectable pharmaceuticals:

Pharmacists should be involved in the production and administration of medications, as well as in establishing processes for administration in their workplaces and monitoring the outcomes of medication administration. They should play the roles of educator, facilitator, and immunizer, assisting in disease prevention by participating in vaccination programmes, ensuring vaccination coverage, and ensuring vaccine safety.

Dispensing:

Dispensing is the provision of drugs or medicines as set out properly on a lawful prescription. The dispensing of drugs should be carried out by trained pharmacists. Before giving medical items to a patient, pharmacists should review and evaluate any paper or electronic prescriptions received, taking into account the therapeutic, social, economic, and legal elements of the recommended indications. Generic substitution is recommended wherever possible. At the point of distributing medical items, pharmacists should maintain patient confidentiality and offer guidance to ensure that the patient receives and understands enough written and oral information to get the most out of the treatment.

Disposing of Medicine Preparations:

Recalled medical supplies, including pharmaceutical samples, should be maintained separately for later disposal and should not be available for further dispensing or distribution, according to pharmacists. Pharmacists should develop a secure method of disposing of pharmaceuticals waste at the hospital and/or community pharmacy so that patients and the general public are encouraged to return expired or unwanted drugs and medical devices. Alternatively, pharmacists should offer patients with instructions on how to properly dispose of outdated or unneeded medications.

Examine the patient's health and needs:

Health management, disease prevention, and healthy lifestyle behaviour should all be incorporated into the patient assessment and care process. In all individual patient assessments, pharmacists should take into account factors such as education level, cultural beliefs, literacy, native language, and physical and mental capacity.

Manage Patient's Therapy:

Pharmacists should ensure that local, regional, and/or national medicine formulary systems are

linked to standard treatment guidelines, protocols, and treatment pathways based on the best available evidence. Prescribers should be educated on access to and evidence for optimal and proper use of medicines, including required monitoring parameters and prescribing changes, by pharmacists. Pharmacists should provide advice or recommendations on medicine therapy to prescribers when appropriate, including the selection of the right medication or dosage.

Keep a tab on Patient's progress:

When evaluating a patient's reaction to pharmaceutical therapy, pharmacists should take into account the patient's diagnosis and unique needs, and intervene if necessary. They should keep track of clinical and patient data in order to assess and monitor pharmaceutical therapy and track patient outcomes. Pharmacists should conduct patient point-of-care testing to monitor and alter therapy as appropriate.

Inform people about medications and health-related issues:

Pharmacists should make sure that every pharmacy has a secure area where customers and

patients can exchange confidential information. They should give patients with adequate health, condition, and medicine-specific information so that they may participate in the decision-making process for a comprehensive care management plan. This information should assist the patient's adherence to therapy and empower them.

Device strategies to improve current and future performance:

Pharmacists should brush up on complementary and alternative therapies like traditional Chinese medicine, health supplements, acupuncture, homoeopathy, and naturopathy to keep their knowledge and abilities current. They should update their expertise and, if possible, participate in the application of new technologies and automation in pharmacy practice. Pharmacists should take steps to stay educated and up to speed on changes to medical product information.

Publicize well-researched information on medications and other aspects of self-care:

Pharmacists should create and/or employ educational materials for health management, health promotion, and illness prevention that are appropriate for a wide range of patient populations, ages, and health literacy levels. Patients should be educated on how to evaluate and use webbased or other kinds of healthcare information (including pharmaceuticals information), and pharmacists should strongly encourage them to seek advice from a pharmacist about the information they find, especially if it comes from the Internet. Patients and their care providers should be assisted by pharmacists in obtaining and critically analysing information to fulfil their specific requirements.

Actively involve in preventive care and services:

Preventive care actions that enhance public health and illness prevention, such as smoking cessation, infectious and sexually transmitted diseases, should be undertaken by pharmacists.

Pharmacists should provide point-of-care diagnostics and other health-related services, as needed. Patients having a higher risk of disease are subjected to screening activities.

Support and advocate for national policies that improve health outcomes:

Pharmacists should participate in public and professional organizations that promote, assess, and enhance community health. They should work with other health-care providers to improve health outcomes.

Role of a Pharmacist

Throughout the hospital, the pharmacist is the custodian of medicines and pharmaceutical items. In order to provide cost-effective, high-quality pharmaceutical care, procurement and distribution are important. Hospital pharmacists with a stronger commercial focus, who play a key role in pharmaceutical cost and asset management, have development and career options. A significant responsibility is medication safety monitoring and the evaluation of a patient's medication-related needs as part of the dispensing process by establishing the indication, safety, and effectiveness of therapy. Providing information and guidance to patients and other healthcare professionals is also a part of the job.

In a time when antibiotic resistance is on the rise, infections are becoming more difficult to cure. Pharmacists are crucial in ensuring that antimicrobials, such as antibiotics, are used appropriately and only when necessary in our hospitals. They make sure that the combination and duration of antimicrobial medication is right for each patient, and that it's stopped when it's no longer needed to avoid increasing antimicrobial resistance.

Role of Pharmacists during Covid 19 Pandemic:

Pharmacists were rarely cited as vital frontline health care workers by the news media, the public, or legislators during the global SARS-CoV-2 (COVID-19) epidemic. Pharmacists are on the front lines of health care every day around the world, providing crucial health care services during the pandemic. Pharmacists work in a number of settings, including hospitals, clinics, community pharmacies, long-term care facilities, physician offices, and national and public health.

During the COVID-19 epidemic, pharmacists in both the public and commercial sectors supplied and implemented a variety of pharmacological care services. Optimizing prescription regimens, teleconsultation services, dealing with drug shortages, clinical interventions, and event-driven pharmaceutical care services, such as point-of-care testing and vaccination services, are all part of it.

During COVID-19, community, hospital, and clinical pharmacists around the world confronted a variety of work-related obstacles and challenges. The immediate challenge was to keep personnel and patients safe from infection in the pharmacy. Another apparent impediment to

providing emergency assistance was the risk of catching the coronavirus illness.

Pharmacists were required to work outside of their normal scope of practise in hospitals, including redeployment to intensive care units (ICUs), managing COVID-19 clinical trials, scaling up sterile production units to compound and supply increased volumes of ready-to-administer parenteral medicines to reduce work for nurses wearing full PPE, and adapting medicine policies to ensure they are fit for use in the current pandemic climate. While other frontline health care personnel migrated to distant consultations, community pharmacies remained open to the public, giving reassurance and guidance on medicines and illnesses.

Remote technology such as tablet devices, computers, cameras, and telephones were used to communicate, limiting the personal touch, and pharmacists had to adjust to these new technical techniques. Due to disruptions in the worldwide and central drug supply, addressing institutional medicine shortages was another task. Work schedule changes, staff shortages, deferred leaves, vacations, increased workload, communication with disabled, geriatric, and low health literacy patients, and language challenges have all been recorded.

With the COVID-19 vaccine, pharmacists will be deemed one of the frontline health workers who should be allowed to administer vaccinations. Pharmacists continue to distinguish themselves and demonstrate the difference they can make in vaccine distribution. There is no doubt that this work will assist the industry diversify and flourish in the future, as the pharmacy industry now has many inroads and possibilities for considerably increased services to aid with profitability, adherence, and our patients' general health.

Given community pharmacists' historical effectiveness in raising yearly seasonal influenza vaccination uptake and accessibility, pharmacists will play a key role in providing COVID-19 vaccines to ensure speedy population-wide coverage. When the pandemic is finally over, some people may forget about all of the new work that their local pharmacist took on, but what will never be forgotten is the massive footprint that the pharmacist left as part of the solution.

III. CONCLUSION

Along with firefighters, nurses, teachers, and doctors, pharmacists are one of the most trusted professions in the world. Pharmacists

performed a critical role in disease prevention, management, and containment during the current epidemic, when the healthcare system was crumbling due to an extraordinary number of corona virus disease 2019 (COVID-19) cases. They worked in a variety of locations and were either directly or indirectly connected to the patients. Because of their availability and accessibility to the general population, health authorities in a variety of countries are recognizing the importance of community pharmacists in the healthcare system.

During the measles outbreak, pharmacists are credited with lowering the workload of public health workers. Because pharmacists are readily available, accessible, and trustworthy, they can manage vaccinations plans and raise vaccine awareness, which leads to higher vaccination acceptance rates. During the severe acute respiratory syndrome (SARS) outbreak, pharmacists provided patient-centered therapy while also enforcing strict infection control procedures. They distributed the medications not just in the wards, but also in the quarantine areas. Pharmacists have shown to be a crucial member of the healthcare team by offering information and patient care during times of crisis. Pharmacists can be involved at many levels in disease management and prevention, patient care, and treatment during the COVID-19 chaos, based on earlier contributions and present extended pharmacy services.

Pharmacists' efforts during the COVID-19 pandemic differ significantly from those documented in past pandemics and outbreaks, when pharmacists were primarily involved in vaccination and disease education. Due to the disease's novelty, quick transmission, related morbidity and death, large infodemic, deceptive narratives, absence of vaccination or specialized medications, lack of treatment recommendations, and an overburdened healthcare system, pharmacists were given increased responsibility in this pandemic.

During the COVID-19 pandemic, pharmacists' activities differed greatly from those described in previous pandemics and outbreaks, when pharmacists were primarily active in vaccination and disease education. Pharmacists were given increased responsibility in this pandemic due to the disease's novelty, rapid transmission, associated morbidity and death, large infodemic, deceptive narratives, lack of vaccination or specialized medications, lack of treatment recommendations, and an overburdened healthcare system.

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