

Health Emergency with COVID-19 and Supporting Role of Community Pharmacists in Pakistan

Mayyda Asif Bajwa¹, Kanwal Ashiq^{1,2*}, Haiqa Hafeez¹, Mehwish Qayyum¹, Samreen Tanveer³
Wajeaha Arslan⁴

¹Faculty of Pharmaceutical Sciences, Superior University Lahore, Pakistan.

²University College of Pharmacy, University of the Punjab Lahore Pakistan.

³Faculty of Pharmacy, University of the Central Punjab Lahore, Pakistan.

⁴DHQ Hospital Kallar Syedan, Rawalpindi, Pakistan.

Authors' Contributions

1 Data Collection & Processing, Data Analysis and/or Interpretation, Drafting of Manuscript.

2 Conception & Study design, Data Analysis and/or Interpretation, Drafting of Manuscript, Critical Review.

3 & 4 Data Collection & Processing, Data Analysis and/or Interpretation, Drafting of Manuscript, Critical Review.

5 & 6 Data Collection & Processing, Data Analysis and/or Interpretation, Critical Review.

Acknowledgement

Article info.

Received: September 29, 2020

Accepted: February 08, 2021

Funding Source: Nil

Conflict of Interest: Nil

Cite this article: Bajwa MA, Ashiq K, Hafeez H, Qayyum M, Tanveer S, Arslan W. Health Emergency with COVID-19 and Supporting Role of Community Pharmacists in Pakistan. RADS J Pharm Pharm Sci. 2020; 8(4):1-5.

*Address of Correspondence Author:

Kanwal.ashiq@superior.edu.pk

ABSTRACT

Background: The infection (COVID-19) inflicted via newly discovered strain of the virus was first spotted in Wuhan in December 2019 and established as a worldwide public health emergency on 30th January, 2020 demanding support from all healthcare sectors, on urgent basis.

Objective: The objective of this review is to highlight and appreciate roles of community pharmacists during COVID-19 pandemic.

Methodology: For literature review various databases were used such as Google Scholar, Springer Link, PubMed, MEDLINE and Science Direct.

Results: The proposed provisions such as social distancing and lockdowns to quite an extent aided in restricting the dispersion of the virus. In addition, wearing face mask, washing hands, using sanitizer with periodic disinfection of surrounding was recommended. These measures were registered to provide protection to all and positively influence the life of special population i.e., those suffering from chronic diseases, as they don't approach the healthcare facilities on a regular basis for their everyday care and supervision, in terms of medication. However, the easiest approach to gain access to sophisticated health facilities in such conditions remained and is through retail pharmacy outlets.

Conclusion: The existing healthcare system with surging stress and fear can be profoundly reduced by participation of community pharmacists and their thorough involvement in managing chronic illnesses and strengthening medication adherence.

Keywords: Community Pharmacists; COVID-19; Pandemic; Pharmacy.

INTRODUCTION

The 2019 coronavirus infection (COVID-19), driven by a newly emerging strain of coronavirus was first spotted in Wuhan, a populous city of China in December 2019. It was asserted to be a worldwide public health emergency by the World Health Organization (WHO) on January 30, 2020. In line

with the Centers for Disease Control and Prevention (CDC, USA), epidemic refers to a swift growth in morbidities beyond the usual expected occurrence in a certain region or zone. A pandemic is the intensified form of the epidemic, as the disease spreads out to wider geographical zones, across countries and continents. Pandemic strikes a significantly higher number of individuals around the globe [1, 2]. The virus has influenced the economy and affected the

healthcare system of almost every country. The low and middle-income countries (LMICs) with formerly poor healthcare systems are particularly called into question. This pandemic has severely affected countries, as before the coronavirus outbreak, healthcare systems in LMICs already had to deal with huge challenges in terms of high-quality, affordability and universally accessible care. Conditions normally turn worse with low financial resources, incompetent health professionals and deficiency of medications are similar challenges faced by the supporting staff. The pandemic has greatly incited high morbidity and mortality rates. However, with the objective to counter the threat of COVID-19 some major actions with close monitoring must be taken. WHO has voiced its concern observing the risky circumstances in various countries [3, 4].

Some novel precautionary measures are up taken to cope with this novel virus and put off its transmission. These measures comprise of movement restrictions and the closure of schools, universities, local gatherings, restaurants and retail shops [5].

Across the globe, community pharmacies follow a business model but overall governed by local health laws. Presently, the professional role of pharmacist in hospitals and community pharmacies is shifting from dispensing and mere sale of drugs, to patient centered services including counseling on a global scale. Previously medicine dispensing was practiced in store, unsupervised, pharmacists serving barely as salesmen and failing any contributions to society [6].

Covid-19 and Supporting Role of Community Pharmacists

With the intention to improve the patient care, community and hospital pharmacies are widening their services and working hours for the adequate provision of the same [7]. Several developing nations have streamlined their pharmaceutical services via taking in consideration the importance of community pharmacists and their interaction to the patients [8]. Here in Pakistan, pharmacist are providing medicine, diagnostic tools, helping with their use and tackling and side effects reported, sharing and lowering the burden of hospital [2, 4]. At this time, where hospital is filled with patients and a red zone for any person accompanying the patient. Community pharmacists have played a part in strengthening medicine adherence and overall therapy management. During this need of the hour, inputs from community pharmacists are helpful to regulate the fundamental

services. Unlike physician or specialist, pharmacist is in a better position to individually monitor and counsel the patient and provide patient centric treatment [9].

In human settlements, pharmacists are majorly approachable healthcare workers and are first contact points to the patient. Out of multiple health professions, community pharmacy has a vital part to play in addressing this global emergency. The fact that community pharmacists are most easily approachable healthcare professionals and widely located in every community is well established. It is acknowledged that a community pharmacy will be the first port of call for the COVID-19 infected patients or any epidemic outbreak as the patients will rely for the advice and counseling on a licensed health professional. With media and awareness otherwise quacks and dispensers are rarely relied upon, by the people, anymore [10, 11].

A pharmacist is ideally positioned in a community to offer support to compromised individuals. In the recent past, it was accepted that a pharmacist can play four key roles for a disease that include its prevention, preparedness, response and recovery [12]. Currently, the International Pharmaceutical Federation (FIP) published interim guidelines for the pharmacy workforce that provides an overview of core duties that are associated with the pharmacists' professional responsibility during the recent pandemic [13]. Furthermore, these guideline laid down the responsibilities to handle the pandemic for both hospital and community pharmacists. Therefore, during this outbreak it is noteworthy to investigate how the pharmacists are carrying out their conventional rules along with additional and new roles, worldwide [14]. Pharmacists in the community facilities and retail outlets are contributing as an essential part in controlling the viral spread in line with the doctors and allied health care workers, who are battling at the frontline [15].

Community pharmacists are also entrusted with the responsibility of early detection and appropriate referral, besides provision of sustained stock of essential medicines and turning into a support center for information regarding the COVID-19 infection. They are also providing input to execute government arrangements, perform diagnostic tests and initial treatment [16]. Patients are oblivious about major and comprehensive pharmaceutical care services although their insight about general roles of pharmacist is found to be optimistic [17].

In underprivileged areas there is a lack of competent physician, or pharmacist, thus role of quacks prominent with declining health. The role of pharmacist has been supporting in this while and if restrictions are pulled out then pharmacists performing in hospitals, clinics, physician offices, and community settings can broaden their care services as they are skilled enough to treat infectious diseases and provision of initial and basic healthcare. Moreover, their clinical expertise and understanding of medicine in terms of constituent, dose and side effects is far more better and reliable than another professional [10].

With the changes observed in patient's needs and disease characteristics during COVID-19, the PC (Pharmaceutical care) services shall come up with varying features and some fruitful variations in future health system. In general, pharmaceutical care is characterized by patient centered pharmacist activity, which aims at enhancing medication handling amongst the diseased individuals [18]. Community pharmacies operate actively in providing patient's medication, precautionary measures and deliver protective equipment. Community pharmacists are and can better be trained and equipped enough to offer proficient and efficacious PC services to the public, leading to improved medication safety and promotion of the overall COVID-19 pandemic control [19].

Regarding COVID-19 vaccination, community pharmacists can be provided with this duty as health care professionals to participate thoroughly in the immunization process. Similarly it can be practiced with patients, at local retail pharmacy setups, already receiving tetanus shots and influenza vaccines. Over the previous few years, pharmacies have become the yet another point of contact for flu vaccination in adults due to convenience and lower costs [20]. Medication review obtained from patients is a step that gradually leads to enhanced and rational drug use. The definitive goal of majority of the medication review programs is to boost patient health outcomes [21,22].

For the provision of pharmaceutical care in the course of COVID-19 outbreak, the emphasis on role of community pharmacists will be on the prevention, identification and/or resolution of drug therapy problems for patients in each facility. The existing stress on the healthcare system can be lightened by the participation of community pharmacists by taking

the lead in managing chronic illnesses and strengthening medication adherence. Unlike, in the past when such services were delayed and occasionally provided on hospital visit [9].

Meanwhile, telepharmacy has added importance in patient counseling, medication selection, therapy monitoring and the delivery of clinical services. The rural population observes major benefits of telepharmacy as the health information and pharmaceutical care is timely provided to them. The community pharmacies can aid the triage and refer patients of rural areas that lack competent physicians, to greater levels of care when diagnosis and advanced treatment is essential. Telepharmacy has also extended the capabilities of rural hospitals for the provision of pharmaceutical services 24/7, around the year. According to the anticipated intake of coronavirus cases, telepharmacy could be exercised for medication approval that will eventually decrease the delay time in getting medicines to the infected patients. At the same time, we also know that telepharmacy is based on technology that is not accessible to everyone in the country. Therefore, it becomes a limiting factor for its implementation. For the establishment of telepharmacy service aside from the technological requirements, significant amount of time, money and effort is also required [19, 23].

Collaborative inputs of pharmacists and physicians are desired so that they work with their governments and assure a standardized clinical treatment, focusing exclusively upon infected individuals at local clinics and pharmacies. While COVID-19 has and continues to be a challenge. This can also be the time for physicians and pharmacists to think creatively about new strategies for enhanced collaboration with a major focus on patient care optimization [24-27].

CONCLUSION

The sudden status of Covid19 outbreak, as a world pandemic has reshaped the entire health care system defining new roles and responsibilities of pharmacists. Pharmacists, not only have complemented the frontline workers but have also opened up new horizons for their mates, to polish and deliver services to the ailing community, like never before. Where appreciation is extended to physicians, nurses and other allied health care workers for their role as frontline guards in this crucial split of time, the role of pharmacists in particular the community pharmacist is

also worthwhile, tackling majority of population in their respective communities. Supply of equipments, their use, medicines utilization and due precautions are responsibly, provided by them. It is important to note that by division of labor, sharing the current load and working together as one healthcare team we can fight and end this disease and come out with a strengthened healthcare system, all across the globe.

Conflict of interest

There is no conflict of interest among the authors.

REFERENCES

- Godman B. Combating COVID-19: Lessons learnt particularly among developing countries and the implications. *Bangladesh J Med Sci.* 2020; Special Issue: 103-S. <https://doi.org/10.3329/bjms.v19i0.48413>.
- Ashiq K, Ashiq S, Bajwa MA, Tanveer S, Qayyum M. Knowledge, attitude and practices among the inhabitants of Lahore, Pakistan towards the COVID-19 pandemic: an immediate online based cross-sectional survey while people are under the lockdown. *Bangladesh J Med Sci.* 2020; 20: 69-S. <https://doi.org/10.3329/bjms.v19i0.48169>.
- Khan S, Khan M, Maqsood K, Hussain T, Zeeshan M. Is Pakistan prepared for the COVID-19 epidemic? A questionnaire-based survey. *J Med Virol.* 2020; 92(4): 1-9. <https://doi.org/10.1002/jmv.25814>.
- Waris A, Khan AU, Ali M, Ali A, Baset A. COVID-19 outbreak: current scenario of Pakistan. *New Microbes New Infect.* 2020; 35: 100681. <https://doi.org/10.1016/j.nmni.2020.100681>.
- Medicine TLR. COVID-19: delay, mitigate, and communicate. *Lancet Respir Med.* 2020; 8(4): 321. [https://dx.doi.org/10.1016%2FS2213-2600\(20\)30128-4](https://dx.doi.org/10.1016%2FS2213-2600(20)30128-4).
- Hussain A, Malik M, Toklu HZ. A literature review: pharmaceutical care an evolving role at community pharmacies in Pakistan. *J Pharmacol Pharm.* 2013; 4(5): 425-430. <http://dx.doi.org/10.4236/pp.2013.45060>.
- Aruru M, Truong H-A, Clark S. Pharmacy Emergency Preparedness and Response (PEPR) framework for expanding pharmacy professionals' roles and contributions to emergency preparedness and response during the COVID-19 pandemic and beyond. *Res Social Adm Pharm.* 2021; 21: 1967-1977. <https://doi.org/10.1016/j.sapharm.2020.04.002>.
- Hashmi FK, Hassali MA, Khalid A, Saleem F, Aljadhey H, Babar ZUD, Bashaar M. A qualitative study exploring perceptions and attitudes of community pharmacists about extended pharmacy services in Lahore, Pakistan. *BMC Health Serv Res.* 2017; 17(1): 1-9. <https://doi.org/10.1186/s12913-017-2442-6>.
- Kretchy IA, Asiedu-Danso M, Kretchy J-P. Medication management and adherence during the COVID-19 pandemic: Perspectives and experiences from LMICs. *Res Social Adm Pharm.* 2021; 17(1): 2023-2026. <https://doi.org/10.1016/j.sapharm.2020.04.007>.
- Hedima EW, Adeyemi MS, Ikunaiye NY. Community pharmacists: On the frontline of health service against COVID-19. *Res Social Adm Pharm.* 2021; 17(1): 1964-1966 <https://doi.org/10.1016/j.sapharm.2020.04.013>.
- Todd A, Copeland A, Husband A, Kasim A, Bamba C. The positive pharmacy care law: an area-level analysis of the relationship between community pharmacy distribution, urbanity, and social deprivation in England. *BMJ Open.* 2014; 4(8): e005764. <http://dx.doi.org/10.1136/bmjopen-2014-005764>.
- Watson KE, Singleton JA, Tippett V, Nissen LM. Defining pharmacists' roles in disasters: A Delphi study. *PLoS One.* 2019; 14(12). <https://doi.org/10.1371/journal.pone.0227132>.
- Amarillas P, Ledezma-Morales M, Salazar-Ospina A, Hincapié-García JA. How to link patients with suspicious COVID-19 to health systems from the community pharmacies? A route proposal. *Res Social Adm Pharm.* 2021; 17(1): 1988-1989. <https://doi.org/10.1016/j.sapharm.2020.03.007>.
- Basheti IA, Nassar R, Barakat M, Alqudah R, Abufarha R, Muqatash T, *et al.* Pharmacists' readiness to deal with the coronavirus pandemic: Assessing awareness and perception of roles. *Res Social Adm Pharm.* 2020. In press <https://doi.org/10.1016/j.sapharm.2020.04.020>.
- Bajwa MA, Ashiq K. The COVID-19 Crisis and Supportive Role of Pharmacists in Cancer Patients. *J Dow Univ Health Sci.* 2020; 14(2): 95-6. <https://doi.org/10.36570/jduhs.2020.1.948>.
- Ung COL. Community pharmacist in public health emergencies: quick to action against the coronavirus 2019-nCoV outbreak. *Res Social Adm Pharm.* 2020; 16(4): 583-586 <https://doi.org/10.1016/j.sapharm.2020.02.003>.
- Khan MU, Khan AN, Ahmed FR, Feroz Z, Rizvi SA, Shah S, *et al.* Patients' opinion of pharmacists and their roles in the health care system in Pakistan. *J Young Pharma.* 2013; 5(3): 90-4.
- Costa FA, Scullin C, Al-Taani G, Hawwa AF, Anderson C, Bezverhni Z, *et al.* Provision of

- pharmaceutical care by community pharmacists across E Europe: Is it developing and spreading? *J Eval Clin Pract.* 2017; 23(6): 1336-47. <https://doi.org/10.1111/jep.12783>.
19. Zheng S-q, Yang L, Zhou P-x, Li H-b, Liu F, Zhao R-s. Recommendations and guidance for providing pharmaceutical care services during COVID-19 pandemic: a China perspective. *Res Social Adm Pharm.* 2021; 17(1): 1819-1824. <https://doi.org/10.1016/j.sapharm.2020.03.012>.
 20. Adunlin G, Murphy PZ, Manis M. COVID-19: How Can Rural Community Pharmacies Respond to the Outbreak? *J Rural Health.* 2020. <https://dx.doi.org/10.1111%2Fjrh.12439>.
 21. Tesfaye WH, Wimmer BC, Peterson GM, Castelino RL, Jose M, McKercher C, Zaidi ST. Effect of pharmacist-led medication review on medication appropriateness in older adults with chronic kidney disease. *J Pharm Pract Res.* 2019; 49(5): 471-6. <https://doi.org/10.1002/jppr.1539>.
 22. Kolhatkar A, Cheng L, Chan FK, Harrison M, Law MR. The impact of medication reviews by community pharmacists. *J Am Pharm Assoc.* 2016; 56(5): 513-20. <https://doi.org/10.1016/j.japh.2016.05.002>.
 23. Ak M. Prospect of tele-pharmacists in pandemic situations: Bangladesh perspective. *J Bio Med Open Access.* 2020; 1(1): 101.
 24. Brazeau G. Leadership Challenges and Collaborative Opportunities Unveiled Through COVID-19. *Marshall J Med.* 2020; 6(2): 4. <https://doi.org/10.33470/2379-9536.1282>.
 25. Atif M, Malik I. COVID-19 and community pharmacy services in Pakistan: challenges, barriers and solution for progress. *J Pharm Pol Pract.* 2020; 13(1):1-4. <https://doi.org/10.1186/s40545-020-00240-4>.
 26. Ashiq K, Bajwa MA, Ashiq S. COVID-19 Pandemic and its Impact on the Pharmacy Education. *Turk J Pharm Sci.* 2021 (In press) <https://doi.org/10.4274/tjps.galenos.2020.39024>.
 27. Liu S, Luo P, Tang M, Hu Q, Polidoro JP, Sun S, Gong Z. Providing pharmacy services during the coronavirus pandemic. *Int J Clin Pharm.* 2020; 42(2):2 99-304. <https://doi.org/10.1007/s11096-020-01017-0>.



This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.