

SHORT-COMMUNICATION**Lesson learnt during COVID-19 pandemic in Pakistan****Sana Rehman***

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Abstract: The outbreak of novel coronavirus (COVID-19) is a major health crisis affecting the several nations. In particular, the high ratio of COVID-19 pandemic in Pakistan is significantly deteriorating human mental as well as physical health. The huge mental and physical loss has taught several lessons, which have been retrieved from already existing literature. The latest researches were consulted to identify the challenges and solution to combat COVID-19. First of all, the pharmacy communities in Pakistan are not sufficient to handle the burden of COVID-19 due to economic issues. However, the Government should provide interest-free loans to students and researchers for conducting scholarly work for manufacturing advance medication to combat against COVID-19. Secondly, the drugs that have been used to control the spread of COVID-19, found to be associated with the development of a neuropsychiatric complication. Therefore, there is a dire need to develop more mental health services to control the medication side effects. Thirdly as the traditional mental health services are not sufficient to provide effective and advanced mental health services, therefore, transformative changes through community psychology are mandatory to implement. Lastly, as communicable disease limit the geographical access to avail mental health services. Therefore, the e-CBT approaches must be provided to mitigate the pre and post-pandemic effects. The findings of the study would provide the direction for preparing to combat communicable diseases in the future.

Keywords: Lesson learnt, transformative change, E-CBT, scholarly work, COVID-19, Pakistan.

INTRODUCTION

The COVID-19 outbreak due to SARS-CoV-2 fallout in China in December 2019 and has spread in 209 countries of Europe, Asia, Australia, and America including Pakistan (Waris *et al.*, 2020). According to WHO (2019), till May around 10, 3,925,815 confirmed cases of COVID-19 and 274,488 deaths have been recorded. The first case of COVID-19 in Pakistan was reported on February 26, 2020 (Government of Pakistan, 2020). Till July 17, nearly 259,999 confirmed cases, and 5475 deaths had taken place in Pakistan (Worldometer, 2020). World Health Organization implemented several precautionary measures to mitigate the obnoxious consequences of the pandemic. Unfortunately due to the high literacy or health illiteracy, increased the magnitude of infection spread. According to recent data, the total literacy rate in Pakistan is 57% among which the 21% women and 71% males are illiterate (Ali & Gul, 2018). People with lack of awareness found to be indulged in the least compliant behaviour for precautionary measure against COVID-19. Furthermore, the role of community pharmacology during COVID-19 found to be associated with developing mental health issues. Considering all the above factors several lessons have been learned, some of which are briefly described hereunder.

The Role of Community Pharmacist in Health Care Providers Groups

The role of the pharmacist in providing vaccine,

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medication and therapeutic plan has been very crucial during previous pandemics. Ebola Virus, Zika, HINI, Influenza Flu, and black fever are the finest example which highlighted the significance of pharmacist contribution to mitigate the adverse effect of pre and post-infection outbreak effects (Chakraborty & Parvez, 2020). As COVID-19 was a novel disease in Pakistan, and community pharmacists were not ready to bear the burden of pandemic related disaster. Therefore the period has been very challenging for pharmacist community and they took active participation in controlling the spread of infection outbreak (Walker *et al.*, 2017). The pharmacy community at Pakistan has been plagued by many limitations which have been addressed at government or economic, curriculum and Pharmacy level. According to a substantial body of researches, the pharmaceuticals community's encountered more challenges to bear the burden of COVID-19 compared to other counties such as China, Iran and the European Union Nation (Nelson *et al.*, 2017). Pakistan is a highly populated country with low income per capita around the US \$45 during 2015-2016 (Government of Pakistan, 2020). The community pharmacist is not primarily responsible for mitigating the adverse effect of COVID-19. The government should provide an interest-free loan to students and scholars for conducting experimental and evidence-based researched to test the effectiveness of COVID-19.

At the academic level, advance experimental researches are needed to investigate the gaps in economic and social conditions that are inhibiting the growth of

pharmaceuticals companies. Drug Regularity Authority (2012) the conditions of pharmacy stores, the number of pharmacy stores must follow precautions including management, storage, dispensing, disposal of medicine, unsafe storage and medicine prescription (Atif *et al.*, 2020). At the pharmacy level, the following limitation has been observed. Several medication and vaccinations have been manufactured to treat COVID-19. The medication that has been used to mitigate the spread of COVID-19 was not found to be effective. According to literature, persistent use of medication and vaccination found to be associated with developing mental health issues (Huremovic, 2019). Pencilling and quinolines have been used to treat previous infection outbreak but reported to be associated with anxiety and depression (Huremovic, 2019). Furthermore, some other medications have been used to treat COVID-19 infections. Remidevir antiviral has been used to treat COVID-19 infection but found to be associated with the poor quality life, anxiety and fatigue (Rehman & Lela, 2020). Another medication Lopivinar was also tested on COVID-19 patients and developed dizziness, nightmare, anxiety and delusion (12). Oseltamivir is a neuraminidase inhibitor caused delirium, panic attack, convulsion, depressive symptoms, nausea and loss of consciousness (Chung and Joung, 2010).

Favipiravir is an RNA dependent RNA polymerases (RdRp) also used to treat neuropsychiatric complication. Ribavirin was also used to treat COVID-19 but found to be with depressive symptoms (Raison *et al.*, 2015). The FDA approved medication reported to be effective for the management of infectious diseases but reported to be associated with diverse mental health issues such as depression, frustration, delusion, anorexia nervosa, fear and frustration (Rehman & Lela, 2020). All these medications have been administered and tested though experimental studies and controlled randomized researchers and produced some obnoxious consequences. Therefore, during COVID-19 or any other infectious outbreak, the full-blown pharmacy services are needed to control the situation. As the persistent use of medication and vaccination found to be associated with the neuropsychiatric complication (Durcan *et al.*, 2020). Therefore there is a dire need to develop more mental health services. The existing mental health services need transformative changes considering the current need of the time. Transformative changes can be developed through community psychology.

The need for Transformative change in Mental Health Services through Community Psychology.

The Covid-19 not merely affected the physical health of the people, but also imparted the negative impact on mental health. Community psychology helps in understanding human problems considering their social context with which they interact over time. Contemporary

mental health services encounter struggles to capture or understand how mental health issues emerge from an array of social experiences that are embedded within the specific economic, cultural, social, and historical (Spindel, 2000). In Pakistan, the stigmatization of mental illness is still unacceptable, and communities do not support mental health patients. As the current condition of the Pakistani community is in danger, special mental health services are needed to control the traumatic influence among people. Furthermore, it provides an ecological analysis to determine the mental health implications, focusing on the community rather than individuals, and strengthening the community resources to plan for a change.

In Pakistan, mental health services need improvement through transformative and ameliorative change. An ameliorative change refers to first-order change as it involves in making changes within the system with no concern with fundamental values (Bellack, 2004). For example, a person with mental health issues is a problem that needs to be resolve through Assertive Community Programs (ASP) or Intensive Case Management (ICM) (Spindel, 2000). Hence the transformative changes refer to a second-order change that deals with the fundamental alterations in the values and operation systems. For example, the mental health patients are an equally respectable citizen and have equal rights, strengths and potential for recovery. Both the ameliorative and transformative changes are mandatory for the betterment of community mental health services during the critical time of the COVID-19 pandemic (Rothan, and Byrareddy, 2020). Most specifically the transformative changes in intervention, determining the counsellor or psychologist role, and developing desired outcomes are more imperative in the critical time of the COVID-19 outbreak (Ullah, 2020). Generally, the focus of psychological intervention revolves around the medications and social skill training for the betterment of the patients (Mukhtar, 2020). It needs transformative change such as including community support in treatment plans that may ameliorate better results. Transformative changes are mandatory to develop following the principles of community psychology to maintain the fabric in the society before and after the pandemic conditions.

The need for Online Cognitive Behavior Therapy

Another transformative change in the mental health services is to promote e-CBT approach. It is the most important lesson that has been learnt during COVID-19 is to promote online cognitive behaviour therapy (Rehman and Lela, 2020). As WHO implemented the two precautionary rule i.e. isolation and quarantine to control the spread of illness. However, quarantine leads to many psychological and mental health issues to social, economic and personal life deterioration (Liu *et al.*,

2020). Furthermore, the patient who was living in isolation under sever medication were also found to have severe neuropsychiatric complication. In both situations, the people were unable to take the psychiatric or psychological support due to limited geographical location. Therefore, the dire need for providing the ever-increasing proliferation of e-CBT help was a need (Webb *et al.*, 2017). The mental health support through e-CBT was found effective in diverse infection outbreak. The e-CBT is a novel approach which proposed an effective management plan to combat against the stressful situation. The e-CBT approach comprised of twelve asynchronous steps from designing session to termination of the session (Alvi & Omrani, 2019).

During COVID-19, the collaborative efforts of a psychologists, physicians, psychiatrist, pharmacist and mental health practitioners are needed to manage the pre and post-pandemic effects. Their collaborative work to investigate the nature and level of neuropsychiatric complication during COVID-19 and devising medical or psychological management plan would be highly effective.

CONCLUSION

The study has contemporary significance as disasters, crises and communicable disease has been prevalent throughout human history and may attack the world at any time in the future. The preparedness in terms of medical, social, psychological, and community levels is imperative for the survival of Pakistan. Therefore the current study provides the alarming picture of the current situation in multiple areas, so that the required steps can be taken to improve the condition of Pakistan.

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