Viewpoint

Challenges of non-COVID-19 patients with chronic illness during the pandemic

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BACKGROUND

number of 2019 coronavirus the S infection (COVID-19) cases are on the rise globally, healthcare workers are burdened with fear of contracting the virus; however, at the same time, they extend maximum care to the people who test positive for the coronavirus. Individuals who leave the hospital facilities after they are cured are often glad by the services they receive. On the contrary, people with chronic disease conditions such as hypertension, dyslipidemia, diabetes mellitus, cardiovascular diseases, stroke, chronic kidney disease, tuberculosis, acquired immune deficiency syndrome, cancer, arthritis, chronic obstructive pulmonary diseases, and psychiatric and disability are denied treatment in the first place. Data about COVID-19 in patients with above-mentioned chronic disease conditions are limited at present. A predictor of mortality in COVID-19 is directly proportional to the number of comorbidities.

IDEA/HYPOTHESIS

Non-COVID-19 patients with chronic illness have more chances of getting the virus or becoming more ill due to their underlying conditions and lack of proper care.

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Challenges faced by non-COVID-19 patients with chronic illness are limitless during the lockdown period. These patients are mostly immunocompromised and vulnerable to infection. The worst affected would be chronic disease patients with lower household income. Patients' fear of approaching medical facilities and also travel restrictions limit the patients to reach the healthcare team, and either of this leads to poor health outcome. Frequent communication with chronic disease patients by healthcare professionals is a key to encourage the patients to be adherent to the medications and manage their disease conditions.

Keywords: Immunosuppressant, lockdown period, novel coronavirus, quarantine period, vulnerable population, Covid-19

These patients, being the vulnerable group, are also demanded to get screened for COVID-19. Uncertainty of status of the disease during quarantine may also lead to different complications which make it critical for healthcare professionals to bring back the individual to normal.

CURRENT EVIDENCE

The worst affected people among the chronic illness patients would be patients with financial crisis or lower household income. Some may not have the means of having their daily prescriptions and regular medical care, which can compromise their health condition and worsen the course of the disease. People who are homeless, imprisoned, or confined in camps and suffering from chronic medical conditions make them more susceptible to virus transmission and infections due to environment exposures as well as scarcity of food and treatment.^[1]

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Hypertension (HTN), hyperlipidemia, and diabetes mellitus (DM) are the leading metabolic disorders in the population. Lack of physical activity and tendency to overeat being at home may lead to higher blood glucose levels and obesity. Constant stress, insomnia, and medication nonadherence increase the likelihood of aggravation of these disorders, which may result in different complications in a long run.^[2]

Cardiovascular diseases, stroke, and chronic kidney disease usually occur in patients with a history of HTN and DM and may also manifest alone in some individuals. Constant medical checkups and monitoring of their health conditions are needed which may be delayed in these times. People who are bedridden due to stroke and require medical support may lack constant care by home nurses. Patients undergoing hemodialysis are affected due to difficulty in the travel, risk to hospital transport, and shortages in the staffs and technician in main unit or satellite units. These deteriorate their health and quality of life which may lead to death of the affected individuals.^[3]

Patients with communicable diseases such as tuberculosis and HIV/acquired immune deficiency syndrome are at high risk of acquiring infections, which may hinder their treatment course due to delay in medical examinations and laboratory tests. Access to healthcare facilities, e.g., DOTS centers, for their medications and routine tests would seem difficult which often leads to worsening of their health or relapse of their illness in turn causing community transmission.^[4]

Cancer patients undergoing chemotherapy or radiotherapy need constant follow-up of their disease status for better prognosis and may be needed to undergo laboratory tests for figuring out the progress of the disease. Redeployment of personnel, beds, and equipment to COVID-19 wards leads to delay in treatments as some require hospital stay during their course and take a toll on their mental and physical health. Especially, newly diagnosed cancer patients, or the patients in the mid of cancer treatment, are facing challenges in getting their standard care treatment.^[5]

Diseases such as osteoarthritis or rheumatoid arthritis require frequent physiotherapy sessions and medications to alleviate the distress of the patients. These therapies may be delayed due to unavailability of professionals to carry out the sessions at home or fear to access medical facilities. Patients often rely on corticosteroids which is considered as an immunosuppressant which raises chances of them getting infected when they approach healthcare facilities.^[6]

Patients with chronic obstructive pulmonary diseases such as bronchial asthma, chronic bronchitis, and

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emphysema are often susceptible to exacerbations and infections such as pneumonia which can be mistook for a COVID-19 diagnosis, subjectively. This may raise a stigma among those affected and lead to mismanagement of their disease. Patients tend to either double or skip their medication doses in the light of improper guidance from caregivers or self-care which may lead to adverse events or hospitalizations.

Psychiatric problems such as depression and anxiety rise due to lack of psychotherapies and lockdown measures, which increase suicidal tendencies among those affected. Online sessions of therapies seldom benefit them as direct interactions with psychiatrists may be beneficial for better outcomes. Patients with any disabilities, such as autism spectrum disorder, Down syndrome, and neurological issues, find it difficult to get their routine care such as educational and behavioral interventions, such as special education, occupational therapy, speech therapy, and applied behavior analysis, disrupting their quality of life, as well as their caregivers.^[7]

Recommendation

Timely and effective treatment strategies are needed to be taken by healthcare facilities as well as the caregivers in managing the health of this vulnerable population. Healthcare facilities must see to that every patient is received well, the basic treatment approach provided, and subsequent needs of the patients be met. Caregivers ensure that the patients are in good health during their homestay, stock up on medications, as well as report to medical authorities when need arises.

Healthcare workers should also be given attention and made sure that they are given adequate resources such as personal protective equipment to deal with the patients. Healthcare systems may face strain in delivering quality care to patients with chronic illness as primary attention of frontline healthcare workers is to contain and treat the COVID-19 patients. Telehealth can be employed in these situations, but this would be a challenge among people with low socioeconomic background who is devoid of various amenities. Frequent communication with chronic disease patients by healthcare professionals is a key to not only encouraging the patients to be adherence to the medications and manage their disease conditions but also safeguarding the professional's mental health.

AUTHORS' CONTRIBUTION

Debi Ann Abraham designed the main conceptual ideas and proof outline and wrote the manuscript. Muhasaparur Ganesan Rajanandh and Thangavel Mahalingam Vijayakumar corrected, edited the manuscript, and supervised the review. Abraham, et al.: Challenges of non-COVID-19 patients with chronic illness

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Conflicts of interest

There are no conflicts of interest.

References

- 1. Legido-Quigley H, Asgari N, Teo YY, Leung GM, Oshitani H, Fukuda K, *et al.* Are high-performing health systems resilient against the COVID-19 epidemic? Lancet 2020;395:848-50.
- Boutayeb A. The double burden of communicable and non-communicable diseases in developing countries. Trans R Soc Trop Med Hyg 2006;100:191-9.
- 3. Wang C, Horby PW, Hayden FG, Gao GF. A novel coronavirus

outbreak of global health concern. Lancet 2020;395:470-3.

- Kang C, Yang S, Yuan J, Xu L, Zhao X, Yang J. Patients with chronic illness urgently need integrated physical and psychological care during the COVID-19 outbreak. Asian J Psychiatr 2020;51:102081.
- Salleh MR. Life event, stress and illness. Malays J Med Sci 2008;15:9-18.
- Kretchy IA, Asiedu-Danso M, Kretchy JP. Medication management and adherence during the COVID-19 pandemic: Perspectives and experiences from low-and middle-income countries. Res Social Adm Pharm 2020;S1551-7411(20) 30332-6.
- 7. Brooks SK, Webster RK, Smith LE, Woodland L, Wessely S, Greenberg N, *et al.* The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. Lancet 2020;395:912-20.

