

Overcoming barriers to Parkinson's disease care during lockdowns in Pakistan

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Madam, Parkinson's disease (PD) is one of the most prevalent neurodegenerative diseases in the ageing population globally, affecting 219 per 100,000 individuals in Pakistan.¹ This complex disease is characterised by motor symptoms (tremors, rigidity, akinesia, and postural abnormalities), and a spectrum of non-motor symptoms (autonomic manifestations, neuropsychiatric disorders, sensory symptoms, and sleep problems). Since the outbreak of coronavirus disease (COVID-19) pandemic, prolonged lockdowns have significantly hampered the neurorehabilitation services across Pakistan. This, coupled with the lack of tele-medicine in the tertiary-care public hospitals, perpetuates interruptions in medical care and exacerbates the symptoms of PD.

A survey of 142 patients afflicted with PD revealed that 40% of the respondents reported a decline in their physical and psychological health. In contrast the cessation in rehabilitative care or reduction in physical activity during Covid-19 was the most prominent reason for worsening PD symptoms.² Another study from Italy highlighted that the Covid-19 quarantine resulted in deterioration of cognitive (39.6%), pre-established (37.5%), and acquired (26%) behavioural symptoms, and motor symptoms (35.4%), causing an additive caregiver burden in 26% of cases.³

Physical inaccessibility to medical care, termination of visits by the healthcare provider and the fear associated with Covid-19 are deleterious to PD's motor and cognitive aspects.² Since physical activity and exercise during lockdowns displayed favourable effects on PD outcomes regardless of the exercise being performed remotely, under or without supervision, the introduction of tele-medicine and zoom-based rehabilitation is a plausible option.⁴ The feasibility of tele-medicine use in routine PD care during the pandemic was also divulged by a study conducted in Italy that employed web-based video evaluation to assess the impairment of non-motor PD

symptoms.⁵

It is pertinent to note that most patients visiting tertiary-care public hospitals from remote areas in Pakistan, cannot seek medical care due to lockdown-imposed restrictions. Thus, tele-medicine will be particularly advantageous in continuing PD care in such patients while reducing travel expenses and time. Additionally, physicians should consider the distance of the patient's residence from the hospital or clinic when accepting new PD cases and suggest a nearer facility that is easier to visit routinely, or alternative follow-up methods besides in-person appointments.

Considering the dearth of tele-medicine in Pakistan, or it being limited to a few private healthcare systems, lockdowns precipitate the existing burden of PD. With the advent of tele-medicine, and the adoption of video-based rehabilitative care, outcomes of PD can be considerably improved.

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