## Commentary

# Increased prevalence of work-related musculoskeletal disorders among physiotherapists during the COVID-19 pandemic: A Commentary

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### Abstract.

**BACKGROUND:** COVID-19 is an exceptionally infectious virus that contaminates various systems and increases the demands on physiotherapists in the management of patients.

**OBJECTIVE:** The purpose of this commentary was to describe the impact of the COVID-19 pandemic among physiotherapists at the workplace.

**METHODS:** Explore the anxiety and stress levels of the physiotherapists during the pandemic and its consequence on the mental health.

**RESULTS:** The COVID-19 pandemic has altered the approach of rehabilitation services to patients and increased the prevalence of work-related musculoskeletal disorders (WMDs) among physiotherapists.

**CONCLUSIONS:** Physiotherapists must exercise due caution and diligence while managing these patients to protect themselves from contracting the infection and avoid WMDs.

#### 1. Introduction

COVID-19 is an extremely communicable virus that infects the respiratory system through droplet contamination and direct contact [1]. Recommendations have been given to safeguard physiotherapists involved in taking care of COVID-19 patients in various healthcare settings [2]. These disorders have increased during the pandemic due to a rapid upsurge in demand especially in intensive care units and due to sustained work-related loads for prolonged periods and constant movements in ergonomically adverse postures [3, 4]. These prevalence rates and missed days in the employment of physiotherapists have increased in various countries in the recent two years.

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The COVID-19 pandemic has changed the delivery of rehabilitation services to patients. As the number of cases surpassed 250 million in response to the pandemic, there was a steep surge in the demand for physiotherapists globally. These sudden changes in the hospital settings have made an adverse impact on posture and working habits thereby leading to the development of musculoskeletal disorders [5, 6]. The effects of COVID-19 affected healthcare personnel on mental health and mental stress is still unknown. Additionally, factors such as sub-optimal working conditions, scarcity of available healthcare workforce and scarcity of personal protection equipment during the pandemic are likely to increase the stress levels of the physiotherapists.

Along with these, physical load at work, an excessive amount of force and uncomfortable posture were the most commonly recurring factors [7]. Adaptations in working settings led to various alterations in ergonomics of the physiotherapists and added to the existing challenges to well-being at work, and increased musculoskeletal pain and work-related musculoskeletal disorders (WMDs). Tele rehabilitation is an effective modality for delivering physical therapy to patients [8, 9]. It can be foreseen that the use of teleconferencing and tele rehabilitation services is likely to lead to a different spectrum of musculoskeletal disorders in the physical therapists and future studies should aim at reporting the pattern of WMSDs and giving recommendations to reduce the same in the pre-COVID situation.

Unfortunately, several musculoskeletal disorders among physiotherapists during the COVID-19 are due to consequences of negligence at work [10]. Negligent hiring, training, supervision, and retention by the employer are considered the main factors for negligence at the workplace during this pandemic. Along with WMSDs, many physiotherapists contracted COVID-19 during the care of affected patients [11]. Another factor that needs consideration is that many physiotherapists had to choose the option to work from home and use teleconferencing to manage patients. Though most institutions and hospitals consider ergonomic adaptations at the workplace, a similar facility might not be available at home [12].

WMDs depend on the profession and the working condition. A qualitative study on podiatrists practicing in the UK during the COVID-19 pandemic has reported shoulder and neck pain was the most prevalent work-related musculoskeletal disorder [13]. There is a paucity of studies reporting WMDs in physiotherapists during the present pandemic. Future studies could shed more light on the adaptations undertaken by physiotherapists at the workplace.

#### 2. Conclusion

In physiotherapists, the severity of WMDs during COVID-19 remains to be the most substantial disorder initiating the sick leave at the workplace. Excessive burden of patient care, risk of getting an infection in the health care settings, the influence of ethnic and cultural discrepancies, and the possibility of transferring the infection to physiotherapists are additional new challenges being faced by physiotherapists during this pandemic. As WMSDs and psychosocial aspects are closely connected, it is crucial for hospitals/clinics to have both concerns in attention, to take necessary steps to alleviate the consequences and support the therapists to steer the emerging novel world of the workplace. Moreover, though the end of the pandemic seems imminent, the post-COVID world will lead to permanent changes in the work pattern of physiotherapists. Along with that, work patterns would be changed in the future through creativity, critical thinking, constant digital upskilling, the use of artificial intelligence, teleconferencing, and teleeducation to resolve complex situations. However, teleconferencing, and tele-education have become an integral part of all professionals, assessment of the true incidence and contributing factors for WMSDs in physiotherapists will be challenging because the confounding effect of additional use of electronic devices cannot be ignored. We would need to devise strategies to allay the additional burden on the musculoskeletal system that is imposed by the use of work-related electronic devices for telerehabilitation and telemedicine. In conclusion, the incidence of this sudden increase of WMSDs among physiotherapists can be decreased by following proper precautions and ergonomic risk assessments at regular intervals by using various questionnaires.

#### 2.1. Limitations

The anxiety and stress levels of the physiotherapists during this pandemic and its consequence on the mental health have not been investigated and future studies should explore the effects on workplace on the mental health of physiotherapists.

#### **Ethical Approval**

Not applicable.

#### **Informed Consent**

Not applicable.

#### **Conflict of interest**

None to report.

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