## A Comparative Study to Find Musculoskeletal Pain in Information Technology Professionals Working from Home and Office During the COVID-19 Pandemic

Ishita Joshi\*, Dr. Bhagyashree Kamble (PT), Dr. Medha Deo (PT)

TCPT's Terna Physiotherapy College, Nerul

\*Corresponding author

## ABSTRACT

**Introduction**: The COVID-19 pandemic has drastically affected the work ergonomic patterns as many IT companies shifted their usual work environment with home to limit the spread of SARS-COV-2 infection. As the lockdown lifted, some companies returned to work from office pattern, while majority of other companies are still continuing work from home pattern. The aim of our descriptive study was to identify musculoskeletal pain in the information technology (IT) professionals working from home and office. Work related musculoskeletal disorders is associated with absenteeism, lost productivity, increased healthcare, disability and work compensation costs. No study has compared the two populations. Hence, our study aims to compare the musculoskeletal pain in IT professionals working from home and IT professionals working from office, with contributing factors like ergonomic setup, job demands and social support.

**Methodology:** Study Design- Descriptive design using Questionnaire. Study Population- IT Professionals working from home and working from office.

**Sampling Technique**- Snowball sampling. Sample Size- 71 (Work from home=37; Work from office=34) Study Duration- 1 year. Study Setup- IT professionals from All over Maharashtra.

**Inclusion criteria**- Age: 20-50 years; all males and females IT professionals; Working from home since more than one year and working from office from past 3 months, Employees present during data collection and Willingness towards participation.

**Exclusion criteria**- Any type of known postural deformities; any history of recent injury/trauma or accident; Spinal surgery or any other surgery in any part of the body; any neurologic disorders. Pregnant and severely fallen ill recently (including SARS-COV-2 infection).

**Procedure**- Pilot study was performed and web based, self-designed questionnaire was validated. Institutional ethical approval was taken. Participants were asked to fill the questionnaire via social media to evaluate severity by self-assessing their experience of MSK pain, work conditions and physical activity. Descriptive analysis was done.

**Results**: On finding prevalence of MSK pain in IT professionals, 85% individuals of work from office group reported pain while15% reported no pain. work from home 100% individuals reported having MSK pain. The most prevalent body regions on which IT professionals (both groups) reported MSK pain have been the low back pain (43%), neck pain (22%) Followed by upper back pain (11%) and wrist/hand (8%). On comparing MSK pain in IT professionals of both the groups 67% work from office individuals reported having experienced more MSK pain than work from home. 43% work from home individuals reported having experienced more MSK pain than working from office.

**Conclusion:** The study showed 85% office going and 100% work from home IT individuals were having MSK pain. Commonest site of pain for both the groups were low back pain followed by neck pain and upper back



pain. Overall, this study suggests that there is significant MSK pain in both groups. Future scope of the study is to find effect of pain on work productivity.

**Keywords:** Musculoskeletal pain; IT professionals; Ergonomics; Physical activity; Job demands; Work from home; Work from office