

anticipated to increase the burden on the healthcare systems and the disability adjusted-life years.

**Key messages:**

- Covid-19 has impacted on behavioural attitudes and daily routines resulting in enhanced sedentary lifestyles with anticipated consequential effects including back pain.
- Covid-19 is anticipated to increase the burden on healthcare systems with enhanced chronic diseases occurrences including back pain.

## The impact of Covid-19 on symptomatic back pain – A new surging epidemic?

Sarah Cuschieri

S Cuschieri<sup>1</sup>, S Grech<sup>2</sup>

<sup>1</sup>Faculty of Medicine & Surgery, University of Malta, Msida, Malta

<sup>2</sup>Trauma & Orthopaedic, Mater Dei Hospital, Msida, Malta

Contact: sarah.cuschieri@gmail.com

### Background:

The Covid-19 pandemic led to global public health advocacy for a population behavioural and daily routine change. Remote work and social distancing were advocated to curb the community spread. A consequential effect on the physical health of the population is expected. The study aimed to explore whether since the onset of Covid-19 back pain complaints have increased while identifying potential reasons, among the Malta adult population.

### Methods:

An anonymous online survey was distributed on social media (6th to 20th April 2021). The survey enquired about changes in employment, daily routine, physical activity (PA) patterns and for the presence of back pain before (>6 months duration) and during Covid-19. Data on the socio-demographic status was noted. Descriptive, comparative and multivariate regression analyses were performed.

### Results:

A total of 388 responded with 30% (CI 95%: 25.55-34.64) reporting chronic back pain pre-Covid-19 while 49% (CI 95%:44.28-54.18) reported back pain since the onset of Covid-19. A significant change in daily routine and physical activity ( $p < 0.01$  respectively) to a more sedentary pattern was observed. Out of those reporting back pain since Covid-19, 51.83% (CI 95%:44.78-58.81) reported a shift to remote working/learning. Indeed, continuously sitting down (OR: 15.53  $p = < 0.01$ ), no PA (OR:4.22  $p = < 0.01$ ), once a week PA (OR:5.74  $p = < 0.01$ ), 2-3 times PA a week (OR:2.58  $p = 0.05$ ) and 4-5 PA a week (OR:3.46  $p = 0.02$ ) were associated with experiencing back pain since onset of Covid-19, when adjusted for sex, age, education and employment status.

### Conclusions:

The pandemic led to behavioural changes that have enhanced a sedentary lifestyle with a consequential negative impact on back pain. Those working/learning remotely may be experiencing non-optimal ergonomic conditions intensifying musculoskeletal strain with back pain complaints. Such occurrence is