

QF84

## **NO EVIDENCE FOR AN EFFECT OF THE FIRST COVID-19 LOCKDOWN ON NECK PAIN AND NECK DISABILITY AMONG SWISS OFFICE WORKERS**

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**Introduction:** During March and April 2020, the COVID-19 pandemic forced around 50 % of employees of Switzerland into a working from home setting. Working from home appears to have considerably changed the work experience of office workers. Newspapers reported an increase in non-specific neck pain as a negative consequence of working from home. Therefore, the main driver for this abstract was to confirm these observations with higher levels of evidence.

**Purpose of the study:** The aim of this analysis was to investigate the effect of the first COVID-19 lockdown on neck pain. We hypothesised that the COVID-19 lockdown would increase neck pain.

**Methods:** This longitudinal analysis is based on control group data from an ongoing stepped-wedge cluster randomised controlled trial. Office workers from two Swiss organisations, aged 18-65 years, were included. Baseline data collected in January 2020 before the COVID-19 pandemic were compared with follow-up data collected during the fourth and fifth week of the first lockdown in April 2020. Neck pain was assessed with a measure of intensity (numeric rating scale NRS from 0 = no pain to 10 = maximum pain), frequency (number of days within the last 28 days), and disability (neck disability index from 0 % = no disability to 100 % = maximum disability). Paired Wilcoxon signed rank tests were performed for statistical analysis as the normality assumption was not met.

**Results:** Data from 76 participants were analysed. The mean age was 42.7 years (ranging from 21.8 to 62.7) at baseline and fifty-four participants (71.1 %) were female. At baseline, the mean intensity of neck pain was NRS 2.3 ( $\pm 1.9$ ), mean frequency of neck pain 4.5 / 28 days ( $\pm 8.3$ ), and mean neck disability 11.7 % ( $\pm 10.0$ ). At follow-up, the mean intensity of neck pain was NRS 2.2 ( $\pm 2.2$ ), mean frequency of neck pain 6.8 / 28 days ( $\pm 7.4$ ), and mean neck disability 11.1 % ( $\pm 10.9$ ). We found no evidence for a difference in the intensity of neck pain (estimate =  $2.59 \times 10^{-5}$ , 95 % CI from -0.50 to 0.50, p-value = 0.607), frequency of neck pain (estimate =  $3.26 \times 10^{-5}$ , 95 % CI from -2.00 to 2.50, p-value = 0.964), or neck disability index (estimate =  $4.43 \times 10^{-6}$ , 95 % CI from -2.00 to 3.00, p-value = 0.794) between both measurement time points.

**Conclusion:** The first COVID-19 lockdown did not result in a difference of neck pain among our sample of office workers, neither in intensity nor in frequency nor in disability. Therefore, our hypothesis and the findings of the newspapers could not be confirmed. A higher number of work breaks taken as well as improved working times and work-life balance may have contributed to this result. To enable more comprehensive statements, further dimensions of pain (i.e., duration) and the effect of psychosocial factors (i.e., mental health) would need to be investigated.

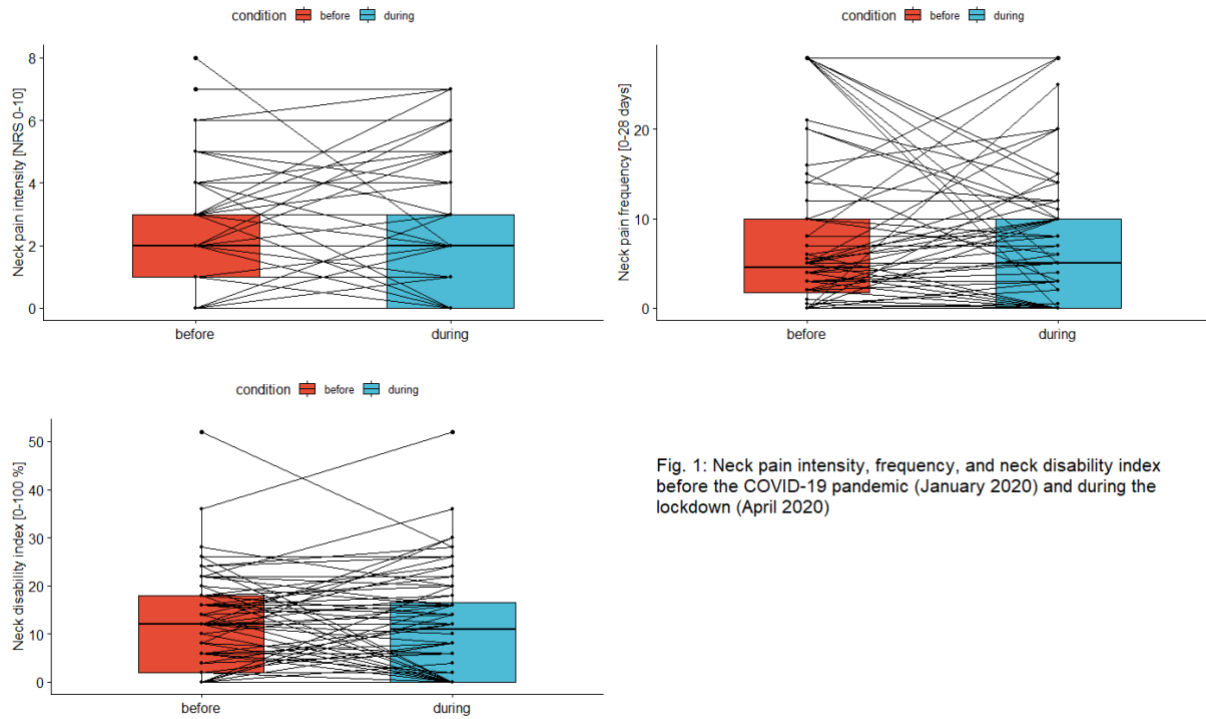


Fig. 1: Neck pain intensity, frequency, and neck disability index before the COVID-19 pandemic (January 2020) and during the lockdown (April 2020)

Keywords: neck pain, neck disability, intensity, frequency

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