

THE IMPACT OF COVID-19 LOCKDOWN ON OLDER ADULTS WITH PERSISTENT JOINT PAIN - OBJECTIVE AND SELF-REPORTED MEASURES OF PHYSICAL ACTIVITY, WALKING AND SEDENTARY BEHAVIOUR.

Purpose

In the United Kingdom (UK) rates of physical inactivity are particularly marked in older people aged 65 years and over. Persistent joint pain is one of the most common symptoms in older adults with up to 90% of all persistent pain related to the musculoskeletal system.

Given levels of physical activity in older people and people with joint pain were already lower than the general population before the COVID-19 pandemic, there is a need to investigate the impact of 'lockdowns' on physical activity, walking and sedentary behaviour, in order to make recommendations about how to maintain or increase physical activity levels in older people when restrictions, including 'lockdown' and 'shielding', apply.

This study aimed to 1) investigate in older adults with persistent joint pain how physical activity, walking and sedentary behaviour have been impacted during the COVID-19 restrictions and 2) determine the best method of physical activity data collection under such circumstances.

Methods

iPOPP trial participants, randomised prior to the first UK COVID-19 lockdown (N=386), were included in the study. Objective (accelerometry) and self-report measures (IPAQ-E) of physical activity, walking and sedentary behaviour were collected. Data were identified as to whether they were collected before, or after, the first UK lockdown (i.e. the 23rd March 2020) to form a pre-post lockdown study design. An additional set of questions were sent to all participants (between May and November 2021) to fully elicit participants' experiences of physical activity during the COVID-19 pandemic.

Results

Mean age of the total sample was 73 years (SD = 6.6) and 231 (60%) were female. Change score data were calculated for 276 (72%) participants who completed the IPAQ-E and 52 (13%) participants who returned an accelerometer. 273 participants (71%) completed the questions that sought their views of physical activity during the pandemic and 161 (59%) of those reported shielding during the COVID-19 pandemic.

Change scores on the IPAQ-E demonstrated a normal distribution that centred around no change, suggesting that some participants were more active after the legislated government COVID-19 restrictions (post-lockdown) and some were less active, but this averaged out at no change over time. This finding was corroborated by the question which asked about physical activity levels now, compared to before COVID-19 restrictions, whereby 39.3% stated they were the same, 39.2% stated they were doing less and 21.5% stated they were doing more. There is some suggestive evidence that those who did not shield, showed smaller reductions in physical activity post-lockdown compared to those that did.

Type of physical activity was dominated by walking post-lockdown, with 84% reporting they had walked in the past week. The accelerometry data demonstrated a mean change in average step/min count of 0.10 (SD = 2.7) with a 95% CI (-0.65, 0.86), suggesting that while participants appear to be doing fewer steps post-lockdown, no significant change was identified. Similarly, the IPAQ-E walking data (min/week) suggested that participants spent less time walking post-lockdown.

Approximately 55% of respondents felt it was more important to be active during COVID-19 compared to other times. However, a similar percentage of participants stated they were worried about exercising around other people when restrictions were lifted.

When asked about the amount of sitting now, compared to before COVID-19 restrictions, 49.4% stated that the amount was the same, 41.5% stated they sat more and 8.6% stated they sat less.

Conclusions

In our sample of older adults with persistent joint pain, physical activity, walking and sedentary behaviour appeared to either remain the same or be negatively impacted by COVID-19 restrictions 'lockdown'. Understanding the facilitators and barriers as to why some people increase or maintain their physical activity levels, while others become more inactive and sedentary is important and may help to support older adults with persistent joint pain to maintain activity during challenging situations.

Collection of the objective data by post was negatively impacted post-lockdown, due to difficulties getting the accelerators to and from participants. However, it was possible to shift the postal questionnaires to an online platform, which resulted in a successful response rate for the IPAQ-E. This suggests that digital methods of data collection may be suitable for older adults and can be considered as an option in terms of research data collection efficiency.