Understanding Society

POLICY EVALUATION

Did older people exercise less during lockdowns?

Evaluation tracks people before and during restrictions to show changing activity levels for different groups

Evidence suggests that physical activity reduced generally during the pandemic, but it is less clear which demographics were most affected, and which older adults stopped doing the recommended minimum level of physical activity at different stages of lockdown.

Research using Understanding Society tracked individuals before and during the pandemic restrictions and found that the proportion realising the Chief Medical Officers' physical activity recommendations decreased from 43% in September 2020 to 33% in January 2021. This decrease in physical activity was found regardless of health condition, age, neighbourhood deprivation, or pre-pandemic activity levels.

Interestingly, those doing the least activity pre-lockdown increased their activity early in the pandemic up to April 2020, and those doing the most decreased their activity levels during this early stage.

This rebalancing might be explained in part by the regulations limiting the time people were allowed outside to an hour. This was less than some of the most active were exercising before, but more than those less active before the pandemic.

Why was the policy considered necessary?

To reduce transmission during the pandemic, people were instructed to stay at home, group sports were suspended, and gyms were closed, limiting opportunities for physical activity. The guidance and regulations evolved with the changing risk, but throughout the period of the pandemic, most people's social and work lives fundamentally changed.

There were concerns that these measures could lead to adverse effects on the physical and mental health of the population. Regular physical activity that raises your heart rate and makes you breathe faster is consistently associated with reduced risk of chronic diseases, cognitive decline, and mortality. This is particularly true of older populations, for whom time spent not active is associated with frailty and adverse health outcomes – and sitting for eight hours or more increases the risk of all-cause mortality.

Efforts were made to allow certain group activities where the risk was low. However, older adults may have consciously decided to continue to refrain from group physical activity in order to reduce the risk of exposing themselves to a disease to which they are particularly vulnerable.

How was the evaluation carried out?

The researchers examined the proportion of older adults (i.e. those over 65) achieving the Chief Medical Officers' physical activity recommendations at several time points before and during lockdowns. This was done by tracking older people's activity using Understanding Society's monthly COVID-19 survey and comparing this against their individual baseline levels from Waves 7, 9, and 11 of the annual main survey (2015-20). A sample of 3,660 over-65s was identified from 14,523 adults who reported the required activity in the main and COVID-19 survey.

Understanding Society participants reported the number of days they were physically active for at least ten minutes at a time in the last seven days. This data was used to develop an indicator for whether individuals met the recommended weekly physical activity levels of at least 150 min of walking or moderate physical activity, or at least 75 min of vigorous physical activity.

Activity levels generally vary by season, with lower levels in the winter months and higher in summer. Given that before lockdown, data were collected in Waves throughout the year, and after lockdown data were collected in the COVID-19 survey every 1-2 months, there was a risk that changes in activity levels could be reflecting seasonality rather than the effect of an imposed lockdown. The researchers therefore further restricted the sample, only including baseline activity data that was collected in the main survey one month on either side of April 2020, September 2020, and January 2021.

What were the strengths of using Understanding Society data?

Our longitudinal main survey data allowed researchers to track individuals' activity levels in the years leading up to the pandemic, and link this baseline data with our COVID-19 survey data on pandemic activity levels. A further strength was Understanding Society's baseline data on age, long-standing physical or mental impairment, illness, or disability, and the ability to link our data to the Index of Multiple Deprivation.

Findings

The results show that activity levels among older people held up from the beginning of the pandemic to September 2020, despite the imposition of the first lockdown, but there was a marked decline in activity between September 2020 and January 2021, with a drop from 43 to 33% of people achieving the Chief Medical Officers' recommended levels of physical activity. Within this declining trend:

- Those least active before the beginning of the pandemic became more active during the early stages of the pandemic up to April 2020, while the most active became less active up to this point. The increase up to April 2020 was most marked among those aged 74 and over.
- Levels of activity declined for all thereafter, with the reduction in activity level between September 2020 and January 2021 being most marked among those from the least deprived areas. However, while the rate of decline in activity level was not as marked among those living in the most deprived areas, they remained the least active group.
- Similarly, those not reporting a health condition before the pandemic showed more marked decreases in activity levels to January 2021 than those who had previously reported health conditions, but those with health conditions remained the least active group.

After April 2020, those aged 74 and over showed slightly more marked decreases in activity levels to January 2021 than those aged 65-73, and all over 65s showed a more marked decline than people aged 16-64, despite the over 65s reporting considerably lower levels of activity pre-pandemic.

The lockdown was a public health policy intended to control the spread of COVID-19, which was a particular threat to over-65s. One unintended consequence was a reduction in activity levels, with long-term negative consequences for health. This research offers any future government contemplating a lockdown some insight into how best to design and communicate the policy to minimise this impact.

Source: *Jack Elliott, Luke Munford, Saima Ahmed, Alison Littlewood and Chris Todd, The impact of COVID-19 lockdowns on physical activity amongst older adults: evidence from longitudinal data in the UK, BMC Public Health, 2022*: https://doi.org/10.1186/s12889-022-14156-y