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Research Letter

Impact of COVID-19 lockdown on self-managed weight loss journeys



With the arrival of the COVID-19 pandemic, Australia took a range of public health control measures including a lockdown which resulted in closures of 'non-essential' services and confined people to their homes. The impact of self-quarantine on weight-related behaviours has been examined by studies in general populations exposed to similar restrictions [1]. Other papers have described its specific impacts in clinically managed patients with obesity [2,3]. We had the opportunity to examine these issues within a group of adults involved in an existing study who were above the healthy weight range and were faced the additional challenge of trying to self-manage their weight during this period.

Between mid-January and mid-March 2020, we had recruited participants to a 12-week online follow-up survey study in self-managed weight loss. Due to the disruption caused by Covid-19 we took the opportunity to ask them additional questions on the impact of the 6-week lockdown on their weight loss journey. Of the 229 participants who had completed the initial survey, 58 responded to the additional COVID-19 impact survey. We assessed the representativeness of these 58 respondents by age, gender, education, and marital status, and thematically summarised the issues they described.

Participants had a good age distribution (18–39 years: 21%; 40–55 years 41%; 56 year and above: 38%), but were skewed towards higher education (45% had Bachelor degree or higher), English-speaking (88%), mostly women (81%), and married or living with partners (76%). Most participants had a self-reported weight above healthy ranges (82%), with most within the range of obesity

(62%). The majority (60%) of the participants indicated that their diet strategy for weight loss had been impacted, and a little over half the participants (52%) said their exercise strategy had been impacted over this period. A thematic summary of issues is shown in Table 1.

Many of the issues raised by our participants were similar to those issues highlighted in the general population [1] as well as patients with obesity [2,3], with reports of high levels of 'stress eating' and 'eating out of boredom', followed by 'higher food consumption' 'more opportunities to eat', and 'higher consumption of junk foods'. The most common impacts to exercise reported in this sample were the 'lack of access to facilities' and the 'loss of social exercising'. Most experienced anxiety, depression, fear, loss of motivation and missed social life. Although less frequently reported, this sample described some positive impacts such as 'more time', 'home-cooked food' 'modified exercise regime', 'less stress'.

The pandemic has served to highlight the possibility of periods of physical distancing and quarantines – if not in relation to future waves of COVID-19, then in relation to other calamities or emerging diseases where there is no vaccine. While it's too early to estimate impact on individual and population level weight-gain, patients with obesity [3] as well as some of the general population [1] have shown increases in weight during the lockdown [1]. We also know from previous research that major life events such as marriage, pregnancy, stressful life events [4] and even seasonal holidays [5] disrupt the usual diet and exercise behaviours of people. These events affect ability to regulate our weight and subsequently have a profound effect on lifetime weight history. Therefore, the influences of lockdown periods on weight trajectories cannot be underestimated.

Table 1
Impact of COVID-19 lockdown on self-managed weight loss journeys.

	Diet	Exercise	Other
Negative impact	Stress eating	Lack of access to facilities (gym, swimming pool, dancing schools)	Anxiety, fear, depression
	Eating out of boredom	'Loss of social exercise' and social motivation	'Miss social life' meeting family and friends.
	Higher food consumption (frequency and portion size)	'Fear' of outdoor activity	Loss of motivation
	More opportunities to eat; temptation	'Reduced physical activity' because of work-from-home.	
Positive Impact	Higher consumption of 'junk foods'(long-life convenience food, nuggets, pies, rolls, chocolate, alcohol)		
	Lack of availability (rice, pasta, tuna, meats vegetarian)		
Positive Impact	'More time' to focus on healthy eating	'More time' for exercise	'More time' for self- reflection and introspection
	More home-cooked food	Modified exercise regimes 'Exercise with family'	Less stress

Our sample of higher-educated participants are likely to be better equipped at maintaining appropriate weight-related behaviours having embarked on self-managed weight loss journeys – yet were overwhelmed in lockdown. This highlights a need to develop specific weight management guidelines that address the unique pressures brought about on people during lockdowns. Quarantine specific programs and resources should be in place, which can be immediately picked up and recommended during such situations by health professionals that are advising people with obesity. Practical suggestions [1], should be embedded in lifestyle guidelines and strategies during a quarantine. In the short term, this should include advice on types of foods to take to lock down, mindful meal preparation, eating regularity, and use of treat foods. There also needs to be a broader range of options available to people to exercise from home. Social exercising stands out as an important strategy for those trying to self-manage their weight. However, apart from online exercise classes, which are only really appealing to a certain segments of the population [6] - it is necessary to find novel approaches to maintain the social nature of exercise while physical distancing. However, in the longer term, detrimental responses to lifestyle stresses such as social distancing lockdowns will only be attenuated when the food and activity environments are improved to be more supportive of healthful eating and active living under a variety of circumstances.

Conflicts of interest

The authors declare that there is no conflict of interest.

Ethical statement

This research has been approved by the IRB at the University of Sydney

Contributorship

Both authors jointly conceived the study and developed the survey, analysed the data, and developed and edited the manuscript.

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