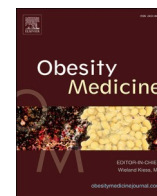




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“Covibesity,” a new pandemic

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ARTICLE INFO

Keywords

COVID-19
Confinement
Body weight
Health behavior
Lockdown
Pandemic
Obesity

ABSTRACT

The COVID-19 lockdown produced behavioral, psychosocial and environmental changes which, through a variety of mechanisms, has led to widespread rapid weight gain amongst certain populations worldwide. We have termed this phenomenon ‘covibesity’. There has been an increase in food shopping, food take ways and increase in alcohol sales. Furthermore, the combination of working from home, on-line education and social media usage have all caused screen time to surge. The food industry has intensified on-line advertising focused on children. A swift response is needed from all stakeholders to prevent covibesity becoming a pandemic.

Since declaration of the COVID-19 pandemic on March 11, 2020, rapid global spread of the disease has led to unprecedented measures. The early surge in cases threatened to overwhelm medical services and led to more than 2.6 billion people going into lockdown in order to ‘flatten the curve’ of COVID ([Lockdown is the world’s b, 2020](#)). The resultant social isolation has led to unparalleled and precipitous changes in human behavior. The impromptu nature of such lockdown has triggered rapid weight gain, or covibesity. This worldwide phenomenon is of great significance and needs both acknowledgement and action.

In 2016, the World Health Organization estimated that more than two billion adults are overweight and 650 million are obese ([Obesity and overweight. A, 2020](#)). Lockdown-related weight gain will inflate these extraordinary statistics still further. However, even a modest gain in weight over a short period can have profound health implications with long-term consequences. Metabolic changes may ensue with enduring implications, increasing the incidence of diabetes and cardiovascular disease. The association of obesity with arthritis and depression is well established ([Han et al., 2011](#)). The extra pounds acquired are unlikely to be shed and those already overweight are likely to gain twice that of normal weight individuals ([Yanovski et al., 2000](#); [Kasperek et al., 2008](#)). Rapid body mass increases in children are linked to obesity in later life whilst swift weight gain in pregnancy can have enduring health repercussions for both the mother and child ([Salgin et al., 2015](#); [Marchi et al., 2015](#)).

In lockdown, forced inactivity has been coupled with altered eating

habits often associated with stress and emotional turmoil. Comfort eating is increased and is greater when amongst those less able to express their feelings, a common feature of lockdown ([Kasperek et al., 2008](#); [Salgin et al., 2015](#)). This combination has swung the nutritional energy balance towards weight increase with calorific intake outstripping expenditure ([Bhutani and Cooper, 2020](#); [Zorbas et al., 2020](#)).

Furthermore, the combination of working from home, on-line education and social media usage have all caused screen time to surge ([Nagata et al., 2020](#)). The food industry has been quick to identify this change in their target audience and has intensified on-line advertising and focused on children ([News Stories - Junk Food, 2020](#); [Advertising in the Age of, 2020](#); [Recalibrated Consumption, 2020](#)). Food shopping increased by 124%, take-away food purchasing rose and alcohol sales have surged by more than 24% ([Advertising in the Age of, 2020](#); [Franck, 2017](#); [Rebalancing the ‘D-19, 2020](#)).

The COVID experience has highlighted multiple factors contributing to success or failure in pandemic management. Strong leadership and clear communication have been major contributors to effective management. Advance planning and decisive actions have reaped better outcomes with reduced morbidity and mortality. Countries utilizing primary care and community-based services coupled with coordinated testing have decreased mortality ([Stafford, 2020](#)). Confused public messages and disorganized implementation of policies has led to slower adoption or piecemeal uptake of lockdown measures which have been costly in both morbidity and mortality.

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<https://doi.org/10.1016/j.obmed.2020.100282>

Received 19 June 2020; Received in revised form 12 July 2020; Accepted 12 July 2020

Available online 21 July 2020

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Furthermore, variation in risk and severity of disease by socioeconomic status mirrors the incidence of covibesity. Deprived London boroughs saw twice the mortality rates of more affluent areas (Deaths involving D-19, 2020). Ethnic origin has significance in addition, with Black and Asian populations faring worse. High density minority ethnic populations in underprivileged communities are particularly at risk. Economic hardship present prior to the pandemic already limited dietary choices. Food insecurity, intensified by job losses and financial uncertainty, encourages purchasing of cheap, poor quality foodstuffs with heavily processed, energy-dense nutrient-poor products (Dunn et al., 2020). Less fresh produce and more long-life items are consumed (Bhutani and Cooper, 2020).

Subsequent reinstatement of local lockdowns across the world confirms that forced confinements are far from over. The effects of lockdown will perpetuate and the global burden related to obesity will increase. New initiatives and working relationships spanning disciplines and national borders seen presently in virology research need matching in tackling covibesity.

The COVID pandemic disrupted normal work patterns with home schooling and working from home. The behavioral changes adopted during this period are going to stay, with industries adapting to the challenges. Such alterations in patterns of activity will have an impact on weight management for the future.

Due to the evolving nature of this pandemic, studies are so far observational, and only time will give us hard epidemiological facts. However, we must accept that faster transition towards obesity is happening with significant consequences for the future.

To tackle covibesity effectively changes must occur. The development of comprehensive strategies aimed at the most vulnerable sections of society are urgently needed now. Future pandemic waves need careful contingency planning to reduce further escalation of covibesity. The public requires support aided by health and education professionals as well as changes in central government policy. The food industry needs to be engaged in transformative marketing promoting healthy affordable options. Primary care will have a central role in provision of support with proven benefit (Redwood-Campbell and Abrahams, 2011). Adopting new technologies is fundamental to success of such initiatives and the use of social and mainstream media prompts is effective (Zhang et al., 2015). However, communities where digital access is inadequate or absent can become increasingly disadvantaged with poorer health outcomes overall (Korp, 2006). Meeting the needs of this population calls for alternative approaches.

Covibesity needs swift, effective, broad management involving multiple stakeholders. Support in high risk communities particularly from primary care via novel initiatives is essential so that we do not win one battle, against Covid, only to lose another to obesity.

Author contribution

MABK and JEMS conceived the idea of work, wrote the perspective, and approved its final version.

Funding

No funding was involved in the preparation of this letter.

Declaration of competing interest

The authors declare that they have no conflict of interest related to the current letter to the editor.

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