



## Editorial

# Lifestyle behaviours during the COVID-19 – time to connect

Loneliness and social isolation are associated with poor mental and physical health and may increase the likelihood of common mental disorders (depressive and anxiety disorders), substance use and cognitive decline (1,2). At this moment, people around the globe have been urged to self-isolate and refrain from social interaction due to the COVID-19 pandemic. From public health and preventative care perspectives, there is a pressing need to provide individuals, communities and health agencies with information and interventions to maintain the healthiest possible lifestyle while in isolation.

Healthy lifestyle (HL) behaviours have been consistently associated with reduced all-cause mortality, and increased lifespan and wellbeing (3). Unhealthy behaviours (poor-quality diet, lack of physical exercise, tobacco and alcohol use) are major contributors to the global burden of disease (4) and have also been associated with worse outcomes across psychiatric disorders (5). Moreover, it is increasingly acknowledged that unhealthy lifestyles may be a driving force in the epidemic of common mental disorders (6). Evidence suggests that the current pandemic-related, mandatory self-isolation may trigger depression and post-traumatic stress disorder (PTSD) (7) and that being a healthcare worker or having COVID-19 is risk factors for stress-related psychiatric disorders (8,9).

Given the lack of effective treatments for COVID-19, non-pharmacological interventions (NPIs) are mandatory to decrease disease transmission. NPIs include personal restrictions and *physical-distancing policies*, such as mass confinement and compulsory home isolation. NPIs may modify, for better or for worse, lifestyle behaviours. Increased adoption of unhealthy nutrition and sedentary behaviour, and decreased outdoor time and increased screen time are expected to occur. These behaviours may have unforeseen medium- and long-term consequences for mental and physical health (10). For instance, diminished physical activity resulting from home isolation may increase a wide range of negative cardio-metabolic and mental effects (11).

Research has mostly focused on the psychological impact, rather than lifestyle issues under

physical-distancing policies. Lifestyle behaviours including dietary changes, restricted physical activity and the effect of increased indoor and screen time remain an under-researched area (12). Of note, towards the end of the SARS epidemic, social support, mental health awareness and other lifestyles changes (exercise, more time for relaxation and restorative sleep) were all associated with decreased perceived stress and incidence of PTSD (13).

The ongoing COVID-19 outbreak has led to an unprecedented public health crisis worldwide. From our perspective, several actions are required to minimize the transition to a social crisis with long-lasting consequences. It is time that such interventions start to include lifestyle guidelines with the aim to translate evidence into public health policies. This is crucial for the vulnerable groups, such as low-income families and children (14,15), the elderly, socially isolated individuals and people with severe mental disorders (SMD). Regarding patients with SMD requiring admission, the field is recommending home hospitalizations to keep patients safe while avoiding formal hospital admissions (16).

Regarding *lifestyle guidelines*, recent reviews have emphasized the role of maintaining a healthy nutritional status (17) and engaging in physical exercise at home (11) in the management of COVID-19 outbreak. Similar recommendations were made at the time of the influenza pandemic in 1918, when public health nurses adhered to precepts of good hygiene, nutrition, fresh air and rest (18). However, such lifestyle guidelines are not entirely evidence based. Indeed, they are basically the same guidance used during non-pandemic times. Observational data on how the general public and patients with psychiatric disorders actually deal with self-care, nutrition, physical activity or restorative sleep during confinement are lacking and represent a research gap.

To address such gap, *observational studies of lifestyle behaviours* during the compulsory isolation are timely and clearly a necessary step for the design of rational and effective public policies. Such studies would provide the much-needed evidence to design interventions to prevent a new

pandemic of psychiatric disorders and cardio-metabolic comorbidities as proposed by the COVID-19 Snapshot Monitoring (COSMO) initiative (19). Furthermore, data collection must be fast and provide useful and reliable information in real time to health authorities, media and citizens.

Psychiatry and behavioural medicine may be particularly benefited from surveys and interventions carried out remotely to reach a large number of individuals in need. Large-scale surveys will require international networking to address changes in lifestyle behaviours and the expected consequences after the COVID-19 (9). We urge the field to embrace and extend eHealth and mobile health interventions, online monitoring surveys and big data technologies. Remote data collection using social networks, georeferencing and the available tools provided by data science is available, feasible and necessary in the context of this pandemic. Such tools provide the means of groups across the globe to connect and generate the real-time necessary data to inform policymakers.

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## Conflict of interest

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