Identifying indirect impacts of the COVID pandemic: The C-19 health behaviour and wellbeing daily tracker study

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Study summary

In rapid response to the COVID-19 pandemic and the sweeping changes to healthcare and restrictions on daily living, we set up a mixed methods UK intensive longitudinal study to understand the impact on health behaviours and mental health/wellbeing.

Background

Health behaviours such as alcohol, tobacco and substance use, dietary choices, physical activity and sleep, have immediate and long-term health and mental health impacts. The 'lockdown' and social distancing measures as a result of the COVID-19 pandemic are likely to have profoundly affected health behaviours. However, the actual impact of these unprecedented social measures are poorly understood. This includes whether such changes are likely to further widen health inequalities or affect marginalised and vulnerable groups disproportionately.

Study design

This study started in early April 2020 and uses an explanatory, sequential, mixed methods design with four components:

- 1) A baseline cohort of 1,044 people with assessments of participants' circumstances and health behaviours before the COVID-19 pandemic
- 2) Daily surveys using Ecological Momentary Assessment (EMA) for 12 weeks (~84,000 daily data sets) among the cohort tracking health behaviours and wellbeing, including COVID-19 symptoms, smoking and alternative nicotine device use, alcohol and substance use, physical activity, diet, sleep and theory-informed psychosocial determinants of health behaviours. We will use Latent Class Curve analysis to classify participants into meaningful groups with similar trajectory patterns (e.g., stable, increasing, decreasing) and identify predictors of these trajectories. Alongside, we are recording changes in COVID-19-related government actions
- 3) A 3, 6 and 12 month questionnaires to establish longer term changes in behavioural, health and mental health patterns and outcomes
- 4) Detailed qualitative interviews at 3 months to provide further insights and contextualised explanations for self-recorded behavioural and mental health changes.

Participants

We purposively targeted vulnerable and marginalised populations for recruitment and for all four study components we will have a particular focus on three priority groups: low socioeconomic status, having a physical high-risk health condition for COVID-19 and those with a self-reported mental health issue.

The baseline sample (N=1,044) has a good mixture of characteristics:

- 72.2% female
- 29.5% in a C19 at risk group
- 6.0% with a mental health issue
- 4.3% BAME
- 14.1% unemployed or furloughed
- 26.6% key workers

- 21.6% net household income <£1.5k p/m
- 30.7% had change in household income
- 84.9% who drank alcohol in past month
- 8.6% current smokers
- 6.1% recreational drug users

Implications and potential impact of findings

The data will enable us to:

- Robustly demonstrate associations between changed social and cultural conditions and individual level health behaviour and wellbeing during a critical time of the COVID-19 pandemic in UK adults
- Identify predictors of changes in health behaviour and wellbeing trajectories that will likely
 impact on long-term health outcomes that can be targeted through bespoke interventions or
 policy-based action. This will identify some of the wider determinants of poorer health
 outcomes due to COVID-19
- Inform public health modelling, future commissioning of health and wellbeing services and contribute to policy planning for future pandemics