

Who's been losing sleep during lockdown?

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Sleep has long been recognised as an essential factor in promoting good health. Previous research has found poor sleep to be associated with stress, anxiety, work pressures, financial concerns and physical activity – all factors which are likely to have changed during lockdown. In this briefing we provide the first insights into how the Covid-19 pandemic has affected sleep in the UK and look at who has been most vulnerable to sleep loss.

Not surprisingly, we find that more people lost sleep due to worry during the first four weeks of the pandemic lockdown than they did before it. In part, this is due to increased anxiety about being infected by coronavirus, with those from Black and Minority Ethnic (BAME) communities and key workers being particularly at risk. However, social distancing measures and lockdown itself are also playing a role, with women with young children being more likely to report sleep loss in recent weeks. This reflects the additional stresses of juggling home working and home schooling as well as concerns over finances.

This policy briefing provides an overview of the key findings of a medRxiv article available at: https://doi.org/10.1101/2020.07.19.20157255

Key Points:

- Sleep loss has increased during the UK pandemic lockdown, with widening differences between women and men and people with BAME heritage.
- A quarter of people surveyed during the first four weeks of the UK Covid-19 lockdown reported increased sleep loss due to worry.
- Women were nearly twice as likely as men to report they had lost sleep in the first four weeks of lockdown.
- 9.4% of BAME respondents reported having lost sleep 'much more than usual' through worrying in the first four weeks of lockdown, compared to 4.4% of white respondents.
- Sleep loss was also associated with being a key worker, having young children at home, being concerned about current or future financial circumstances and feeling lonely.
- Female respondents of BAME heritage with a child under 5 and reporting financial difficulties were nearly three times more likely to report sleep loss.
- To avert future secondary beath complications and their impact on NHS services, policy makers and bealth professionals need to support and promote better sleep bealth amongst vulnerable groups during the pandemic.



Introduction

Sleep has long been recognised as an essential determinant of human health and performance. Good sleep restores energy, promotes healing, interacts with the immune system and impacts upon behaviour. Sleep deprivation can impair judgement and cognitive performance and, if persistent, can result in the development of disease. It has even been associated with increased mortality. Understanding who is experiencing sleep loss and how sleep patterns have changed during the pandemic is an important part of understanding the wider impact of Covid-19.

On 23 March 2020, the UK went into lockdown in an unprecedented attempt to limit the spread of coronavirus. The resultant move to home working and learning and, for some, the loss of work altogether, along with limited social contact and increased isolation, may influence mental wellbeing and the ability to sleep.

In addition, older people, men and individuals from BAME groups are at increased risk of developing a severe response to the virus and are more likely to die from it. Those groups facing the greatest health risks from the virus might also be expected to be more prone to sleep loss due to worry.

Our study aims to provide new evidence on patterns of self-reported sleep loss due to worry during the first four weeks of the Covid-19 related lockdown in the UK.

The study

Our research used data from the first wave of the Understanding Society COVID-19 Study, conducted in April 2020 and covering the first month of lockdown in the UK. We linked this to Wave 9 of Understanding Society, conducted in 2018/19, so that we could compare the responses with information provided prior to the outbreak of the pandemic. The sample included 15,360 respondents aged 16 and over.

The survey asked "Have you recently lost much sleep over worry?", with the answers being: not at all; no more than usual; rather more than usual; much more than usual. Those who answered 'rather more than usual' or 'much more than usual' were defined as experiencing sleep loss.

Main findings

Has the Covid-19 pandemic lockdown worsened sleep loss over worry?

Prior to the pandemic one in six people (15.7%) reported sleep loss over worry. This increased to almost a quarter of respondents (24.7%) during the first four weeks of lockdown.

While there were differences between men and women prior to the lockdown, our study showed the differences widened during the pandemic. This is also true of differences by ethnic group (Table 1).

	Proportion experiencing sleep loss over worry before the Covid-19 pandemic (%)	Proportion experiencing sleep loss over worry during the Covid-19 pandemic (%)
Total	15.7	24.7
Sex	P<0.001	P<0.001
Men	11.9	16.5
Women	18.9	31.8
Ethnicity	P<0.001	P<0.001
British/English/Scottish/Welsh/Northern Irish (white)	15.4	24.3
Other white	13.5	22.4
Black, Asian, and minority ethnic (BAME)	20.7	32.0
Number of respondents	15360	15360

Note: All proportions are weighted using sample weights. Number of respondents are unweighted. Source: Authors' analysis, Understanding Society: COVID-19 Study, 2020; Wave 9 of Understanding Society.

Table 1. Sleep loss before and during the Covid-19 pandemic by sex and ethnicity

The extent of sleep loss during the pandemic lockdown

Sleep loss during the first four weeks of pandemic lockdown was not felt equally by all groups.

Women were twice as likely as men to suffer sleep loss over worry. Almost a third of women (31.8%) reported sleep loss over worry 'much more than usual' or 'rather more than usual', compared to 16.5% of men.

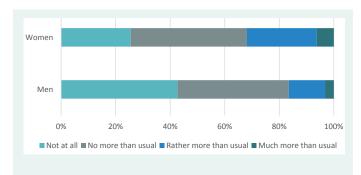
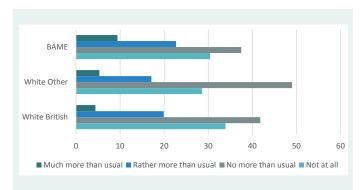


Figure 1: Have you recently lost much sleep over worry? By gender (%)

People of Black, Asian and minority ethnic identity (BAME) were considerably more likely to report sleep loss over worry than White British or White Other groups; 32% of BAME respondents reported sleep loss compared to 24.3% of White British and 22.4% of those identifying as White Other. Double the proportion of BAME respondents (9.4%) reported having lost sleep 'much more than usual' through worry over the last few weeks, compared to 4.4% of White British and White Other respondents.



We also found that having symptoms of coronavirus, being aged 16-64, a key worker, having children aged 0-4 or of school-age at home, feeling lonely, and having perceived financial difficulties, were all predictive of sleep loss during the first four weeks of the lockdown.

With the move to home working and home schooling, some individuals may experience multiple stressors. Female respondents from BAME heritage with a child aged 0-4 and with self-reported financial difficulties were nearly three times more likely to report sleep loss than on average. This risk was heightened further if they were a key worker and had had symptoms.

Policy implications

Sleep loss is affecting more people during the Covid-19 pandemic than previously, reflecting the fact that stress levels have risen due to anxieties about health, financial consequences, changes in social life and the daily routine.

People from BAME heritage have a higher prevalence and incidence rate of sleep loss than white people. This reflects disproportionally higher rates of coronavirus infection among BAME individuals, leading to potentially higher anxiety associated with coronavirus–specific circumstances, as well as a higher risk of being a key worker, having dependent children, and feeling lonely. All of these are likely to increase the risk of sleep loss.

Our results also highlight the differential impact of lockdown on women and men. Many parents will be affected by school closures, and the need to balance paid work with increasing childcare and providing support to their children's learning.

However, the gendered allocation of childcare means that in many households, it is the mother who continues to provide the majority of primary care for children. At the same time, many mid-life women find themselves juggling employment with caring responsibilities for aged parents and grandchildren.

The Covid-19 pandemic and the policy responses to it, including home working and schooling, have widened the disparities of sleep deprivation across gender and ethnicity, putting women and ethnic minorities at an even greater disadvantage.

Policy makers and health professionals need to take action to support and promote better sleep health amongst vulnerable groups during the pandemic. This will improve resilience and health and forestall future secondary complications.

Improving bio-security through increased testing, alongside continuing to provide financial support for those whose livelihoods have been interrupted, will help alleviate anxiety and sleep loss.

Authors

Jane Falkingham

(University of Southampton, CPC)

Maria Evandrou

(University of Southampton, CRA, CPC)

Min Qin

(University of Southampton, CRA, CPC)

Athina Vlachantoni

(University of Southampton, CRA, CPC)

Edited by Teresa McGowan & Becki Dey (University of Southampton, CPC)

ESRC Centre for Population Change

Building 58 Faculty of Social Sciences University of Southampton SO17 1BJ

Tel: +44 (0)23 8059 2579 Email: cpc@southampton.ac.uk

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- it! Centre-for-population-change

cpc.ac.uk