

# Evidence Review

## COVID-19: Depression and Suicide

### Key messages

**The evidence contained in this review includes a substantial body of work published in response to the COVID-19 pandemic. Owing to the need for expedient publishing this means that these papers will not have gone through as rigorous a peer-review process compared to pre-pandemic times, which must be taken into account when reviewing the presented data.**

- Levels of anxiety and depression have risen significantly during the current pandemic, with those at highest risk including:
  - Healthcare workers
  - People suffering from COVID-19 or with loved ones affected by the virus
  - Those at high-risk of infection due to other conditions
  - People with pre-existing mental health conditions
  - People in vulnerable situations such as the homeless, sufferers of domestic abuse, people with low-income/lower socioeconomic status
  - People with maladaptive or a lack of coping mechanisms and/or social support available or accessible
- Much of the available literature concerning the effects of COVID-19 on mental health and suicide risk is still emerging or based upon population and economic projections. Several authors predict a rise in suicide rates causally linked to a predicted rise in unemployment due to the economic effects of the pandemic.
- The key themes emerging are the need for governments, policy makers and health care providers to forward plan to deal with the predicted-likely mental health effects of the COVID-19 pandemic both now and going forward both economically and by improving access to mental health support and adapting support systems, providing recommendations and public awareness of positive coping mechanisms/techniques.



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## The Evidence

- 1. da Silva FC, Neto ML. Psychological effects caused by the COVID-19 pandemic in health professionals: A systematic review with meta-analysis. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2020**

This latest systematic review updated and combined previous research concerning the mental health of health professionals during the pandemic. The review found that irrespective of other demographic factors such as age, health care professionals showed significantly increased levels of anxiety, depression and insomnia/disordered sleeping as a risk factor for both.



Psychological effects caused by th

- 2. Luo M, Guo L, Yu M, Wang H. The Psychological and Mental Impact of Coronavirus Disease 2019 (COVID-19) on Medical Staff and General Public—A Systematic Review and Meta-analysis. Psychiatry Research. 2020**

This systematic review highlights findings from literature from 17 countries, confirming that pooled anxiety prevalence for anxiety and depression was 33% and highest among people with COVID-19 infection and/or pre-existing conditions. The review highlighted higher general prevalence in: women, nurses, people with lower socioeconomic status, people at higher risk or living in quarantine/high risk areas and social isolation.

The study highlighted protective factors included living in areas with sufficient medical resources, accurate information and tacking precautionary measures.



the psychological and mental impact c



**3. Pappa S, Ntella V, Giannakas T, Giannakoulis VG, Papoutsis E, Katsaounou P. Prevalence of depression, anxiety, and insomnia among healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. Brain, behavior, and immunity. 2020 May.**

This systematic review drew on the available research emerging at the time concerning the mental health of healthcare workers during the first wave of the COVID-19 pandemic. The emerging evidence suggested that frontline workers experienced higher levels of mood and sleep disorders during the outbreak and highlights the need to encourage healthcare staff to seek and access mental health support and assistance at this time.



Prevalence of depression, anxiety,

**4. Gautam M, Thakrar A, Akinyemi E, Mahr G. Current and Future Challenges in the Delivery of Mental Healthcare during COVID-19. Sn Comprehensive Clinical Medicine. 2020**

This article draws upon a literature review concerning the available evidence around the delivery of mental healthcare during the current pandemic. The authors highlight the evidence so far shows that frontline healthworkers are currently experiencing higher levels of psychiatric symptoms, with some evidence showing it may be more severe in females and in those in the nursing profession. Non-frontline healthcare staff and the general population are also experiencing additional pressures due to factors such as: increased isolation, increased anxiety, information overload, fear about the safety and wellbeing of family members and financial pressures. Migrant workers, children and the homeless may be disproportionately affected. Additionally the authors discuss the effects of the pandemic on the delivery of mental healthcare, noting that while flawed, telepsychiatry is proving to be a solution to increase the current availability of mental health support.



2020\_Article\_.pdf



**5. Pruitt LD, McIntosh LS, Reger G. Suicide Safety Planning During a Pandemic: The Implications of COVID-19 on Coping with a Crisis. Suicide and Life-Threatening Behavior. 2020**

This editorial article draws on the literature base to discuss practical applications and adaptations that may be utilised to improve suicide prevention during the current pandemic, from key themes such as safety planning, social support to listening alternative adaptations on recommended coping mechanisms which may have previously involved visiting physical spaces which are not accessible safely (e.g. exercise/activities/social activities etc).



The implications of COVID-19 on coping

**6. Iob E, Steptoe A, Fancourt D. Abuse, self-harm and suicidal ideation in the UK during the COVID-19 pandemic. The British Journal of Psychiatry. 2020**

Using data from the UK COVID-19 social study the authors here report that abuse, self-harm and thoughts of suicide/self-harm was higher among women, Black, Asian and minority ethnic (BAME) groups and people experiencing socioeconomic disadvantage, unemployment, disability, chronic physical illnesses, mental disorders and COVID-19 diagnosis. The results also found that while psychiatric medications were the most common type of support being used, the percentage of those experiencing these symptoms who were accessing formal or informal support was low, particularly in those experiencing physical or psychological abuse.



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-self-harm-and-suici



**7. Dawson DL, Golijani-Moghaddam N. COVID-19: Psychological flexibility, coping, mental health, and wellbeing in the UK during the pandemic. Journal of Contextual Behavioral Science. 2020**

The authors looked at data from 555 participants' experiences in the UK during a period of lockdown in May. The authors found elevated clinically relevant anxiety (27%) in the sample, but also that psychological flexibility was significantly linked to greater wellbeing, and inversely related to anxiety, depression, and COVID-19-related distress. Avoidant coping behaviour was linked to higher levels of distress and lower overall wellbeing. No relationship between adherence to government guidelines and psychological flexibility was found



Psychological flexibility, coping, m

**8. Cai Q, Feng H, Huang J, Wang M, Wang Q, Lu X, Xie Y, Wang X, Liu Z, Hou B, Ouyang K. The mental health of frontline and non-frontline medical workers during the coronavirus disease 2019 (COVID-19) outbreak in China: A case-control study. Journal of affective disorders. 2020**

This online survey-based study sought to examine the mental health effects of the pandemic on both frontline medical staff and non-frontline medical workers. The study indicated higher rates of depression anxiety and insomnia in frontline workers, but no subsequent rise or change in help seeking behaviour compared to the non-frontline workers. The authors highlight the importance of encouraging medical workers to seek support for mental health concerns, and argue for increased psychological support in medical teams.



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**9. Wang ZH, Yang HL, Yang YQ, Liu D, Li ZH, Zhang XR, Zhang YJ, Shen D, Chen PL, Song WQ, Wang XM. Prevalence of anxiety and depression symptom, and the demands for psychological knowledge and interventions in college students during COVID-19 epidemic: A large cross-sectional study. Journal of affective disorders. 2020**

This study involved a large cross-sectional survey of Chinese students. The survey showed relatively low levels of depression (7.7%) across the respondents, although those who had a family member with COVID-19 or who were at risk/suspected had higher levels of anxiety.



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**10. Ma YF, Li W, Deng HB, Wang L, Wang Y, Wang PH, Bo HX, Cao J, Wang Y, Zhu LY, Yang Y. Prevalence of depression and its association with quality of life in clinically stable patients with COVID-19. Journal of affective disorders. 2020**

This study looked at the quality of life scores of 770 people in isolation hospitals in China. The authors found that 43.1% of patients who were clinically stable showed depressive symptoms- additional factors independently associated with depression included: male gender, having a family member infected with COVID-19, suffering from severe COVID-19 infection and frequent social media use to look up information concerning COVID-19.



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**11. Cameron E, Joyce K, Delaquis C, Reynolds K, Protudjer J, Roos LE.  
Maternal Psychological Distress & Mental Health Services Use during  
the COVID-19 Pandemic. 2020**

This survey-based study found clinically-relevant higher levels of depression and anxiety in mothers of children aged 0-8 years during the pandemic, compared to population norms. Mothers were at higher risk if they had previous mental health history, were experiencing higher levels of stress and had lower social support. Those which children aged 0-18 month had additional risk factors including lower household income, lower maternal/partner education and financial strain/difficulties i.e. loss of income.



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**12. Rettie H, Daniels J. Coping and tolerance of uncertainty: Predictors and  
mediators of mental health during the COVID-19 pandemic. American  
Psychologist. 2020 Aug**

This study collected data from a sample of the general UK population during 10-day early lockdown. A quarter of those surveyed showed high levels of anxiety and depression. The authors note that mental health difficulties have become significantly raised during the first wave of the COVID-19 pandemic in the United Kingdom, particularly for the vulnerable, and the general public are experiencing higher levels of anxiety around future uncertainty -with those with lower coping mechanisms more vulnerable. The authors recommend a UK-wide focus on supporting the general public to develop effective coping strategies and tolerate the uncertainty of the current climate, equipping them for potential future pandemic waves.



2020-52963-001.pdf



**13. Van Rheenen TE, Meyer D, Neill E, Phillipou A, Tan EJ, Toh WL, Rossell SL. Mental health status of individuals with a mood-disorder during the COVID-19 pandemic in Australia: Initial results from the COLLATE project. Journal of affective disorders. 2020**

The initial findings of this study suggest that participants with a self-reported mood disorder experience higher levels of psychological stress due to distancing and other restrictions during the current pandemic. This Australian study also found higher levels of stress and depressive risk in those with bipolar disorder, and male gender, than those with depressive disorder. Those with bipolar disorder also were more likely to state financial worries as an added stress/concern factor.



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**14. Tang F, Liang J, Zhang H, Kelifa MM, He Q, Wang P. COVID-19 related depression and anxiety among quarantined respondents. Psychology & health. 2020**

This study involved a survey of 1160 people living under different restrictions in China. The study found that depression and, particularly anxiety, was elevated more in those who were quarantined. The study also found that people living in areas in which there was regular screening for covid-19 experienced lower levels of depression and anxiety.



COVID 19 related  
depression and anxiety





**15. Hao F, Tan W, Jiang L, Zhang L, Zhao X, Zou Y, Hu Y, Luo X, Jiang X, McIntyre RS, Tran B. Do psychiatric patients experience more psychiatric symptoms during COVID-19 pandemic and lockdown? A case-control study with service and research implications for immunopsychiatry. Brain, behavior, and immunity. 2020 Apr**

A sample study of psychiatric patients compared to control group found that psychiatric patients experienced higher anxiety, about their physical health, anger and impulsivity and intense suicidal ideation, along with higher levels of insomnia and depression. Although a small scale study, the authors also noted the impact of reduction of mental health treatment availability and increased fear of attending hospitals due to concerns about the virus.



Do psychiatric patients experience

**16. McIntyre RS, Lee Y. Projected increases in suicide in Canada as a consequence of COVID-19. Psychiatry research. 2020 May**

This paper looked at trends of incidences of suicide in Canada and projections as to how the COVID-19 pandemic may effect these moving forward. The authors looked at the projected scenarios of unemployment increasing by either 1.6% in 2020, 1.2% in 2021, or an increase in unemployment of 10.7% in 2020, 8.9% in 2021 :



**Table 1**  
Projected suicide rate per 100,000 population in 2019-2021, across a range of national unemployment scenarios.

Year	Minimal change in unemployment rate		Moderate increase in unemployment rate		Extreme increase in unemployment rate	
	Suicide Rate per 100,000 [95% CI]	UR, %	Suicide Rate per 100,000	UR, %	Suicide Rate per 100,000	UR, %
2019	10.9 [10.2, 11.7] n=4094	5.7	-	-	-	-
2020	11.0 [10.2, 11.8] n=4127	5.9	11.6 [10.8, 12.4] n=4365	7.5	14.0 [13.0, 15.0] n=5256	16.6
2021	11.0 [10.3, 11.8] n=4143	6.0	11.5 [10.7, 12.3] n=4323	7.2	13.6 [12.7, 14.6] n=5128	14.9

Abbreviations: CI = confidence interval, UR = unemployment rate.

Based on the forecasted results the authors highlight predicted rises in unemployment as likely to substantially increase suicide figures, and discussed the urgency of prioritizing access to mental healthcare and the provision of psychological first aid, as well as the need for more substantive planning and research into suicide prevention post-Covid.



Projected increases in suicide in Canada



**17. Wasserman D, Iosue M, Wuestefeld A, Carli V. Adaptation of evidence-based suicide prevention strategies during and after the COVID-19 pandemic. World psychiatry. 2020**

This article discusses and predicts the effects of the COVID-19 pandemic on suicide risk and suicide prevention strategies. Some risks, the authors acknowledge, will remain the same, but a rise in economic uncertainty, and other effects such as the bereaved not being able to see loved ones who have died due to quarantine and other pandemic restrictions, higher levels of depression, anxiety, substance abuse and PTSD are predicted to likely increase the overall population risk of suicide. The authors highlight the need for policy-based interventions to reduce suicide risk (such as economic interventions, increased funding for mental health services etc) and the need for adaptation and reinforcement of mental health care and accessibility within society.



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**18. Niederkrotenthaler T, Gunnell D, Arensman E, Pirkis J, Appleby L, Hawton K, John A, Kapur N, Khan M, O'Connor RC, Platt S. Suicide research, prevention, and COVID-19. 2020.**

Although an editorial, this paper draws in the limited amount of research available concerning mental health and suicide risk in the COVID-19 pandemic. The authors discuss the indicators of increased risk, pinpointing the likely subsequent economic difficulties face by many as likely to have an increasing effect on suicide risk in populaces, as well as noting innovations and changes within society that may have a mitigating effect such as increased community support and changes in telepsychiatry treatment that may improve long-term access to mental health provision.



editorial  
Suicide\_research,\_pr



## Indicative search strategy

COVID OR "coronavirus" OR "SARS-COV\*"; AND depress\* OR suicid\*

## Sources searched

Cochrane, CINAHL, PsycINFO, Medline

A structured public domain search for unpublished research.

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