

Global-Level Depression, Nervousness and Worry about Food and Financial Security Amidst the COVID-19 Pandemic in 113 Countries, March 2022

Insights from the COVID Behaviors Dashboard

Background

An increase in negative health and mental wellness indicators such as food insecurity, depression, and anxiety has been observed during the COVID-19 pandemic (COVID-19 Mental Disorders Collaborators, 2021; FAO et al, 2021). Understanding the extent of ongoing pandemic-related psychological and economic distress informs the planning and provision of mental health and social support services in the near term as well as strategies for the continuation of mental health and social protection programs post-pandemic. This report presents data on reported nervousness, feelings of depression, and worries about food insecurity and financial insecurity from the COVID-19 Trends and Impacts Survey (CTIS) in March 2022.

Understanding the extent of psychological and economic distress can help inform the planning and provision of mental health and social support services.

Data and Methods

The CTIS (see sidebar) uses repeated cross-sectional sampling and is administered daily to active adult (18+ years) Facebook users. This analysis included survey responses recorded in the month of March 2022.

The sample consisted of survey responses from users in 113 countries. Responses from a country are only presented in this descriptive analysis when at least 100 individuals from that country responded to the survey. The wellness variables included in this report are not presented in the COVID Behaviors Dashboard but are collected simultaneously with the data presented on the dashboard.

About the COVID Behaviors Dashboard and the data behind it

This brief provides a secondary analysis of data from the COVID-19 Trends and Impact Survey (CTIS), generated by the University of Maryland Social Data Science center in collaboration with Facebook's Data for Good Initiative Analysis. CTIS data are presented through the interactive COVID Behaviors Dashboard, prepared by researchers and social and behavior change communication experts at Johns Hopkins Center for Communication Programs in coordination with WHO's Global Outbreak Alert and Response Network (GOARN). The dashboard presents data on COVID-related knowledge, attitudes, and practices, and responses are weighted for better data representation within each country.

Data and Methods, continued

CTIS respondents were asked four questions about mental health and financial wellness:

- During the past seven days, how often did you feel so nervous that nothing could calm you down?
- During the past seven days, how often did you feel so depressed that nothing could cheer you up?
- How worried are you about having enough to eat in the next week?
- How worried are you about your household's finances in the next month?

For questions about feeling nervous or depressed, respondents to the international version of the survey selected from five response options: "All of the time," "Most of the time," "Some of the time," "A little of the time," or "None of the time." For questions about worrying about food or finances, respondents selected from four options: "Very worried," "Somewhat worried," "A little worried," or "Not worried at all." Questions and response options relating to mental wellness were slightly different in the United States version of this survey, asking participants if they felt "nervous, anxious, or on edge" in the nervousness question and omitting the words "that nothing could cheer you up" for

the depressed feelings question, as well as lacking the response option "a little of the time." The responses "a little of the time" and "some of the time" were combined in the data presented from the international version of the survey to ensure consistency.

To assess feelings of nervousness and depression, analysts dichotomized survey responses into the following categories: (1) all, most, or some of the time, and (2) none of the time, or no answer. To assess worries about food and finances, survey responses were sorted into one of the following groups: (1) very or somewhat worried, and (2) a little or not worried, or no answer. Medians for each of these response options were calculated within each region using the country-level statistics presented here. Results presented in this brief focus on those who reported feelings of nervousness or depression all, most, or some of the time, and those who were very or somewhat worried about food or finances. It should be noted that these self-reported feelings are not clinical diagnoses. We present the data by World Health Organization (WHO) regional groups. We present the data by World Health Organization (WHO) regional groups.

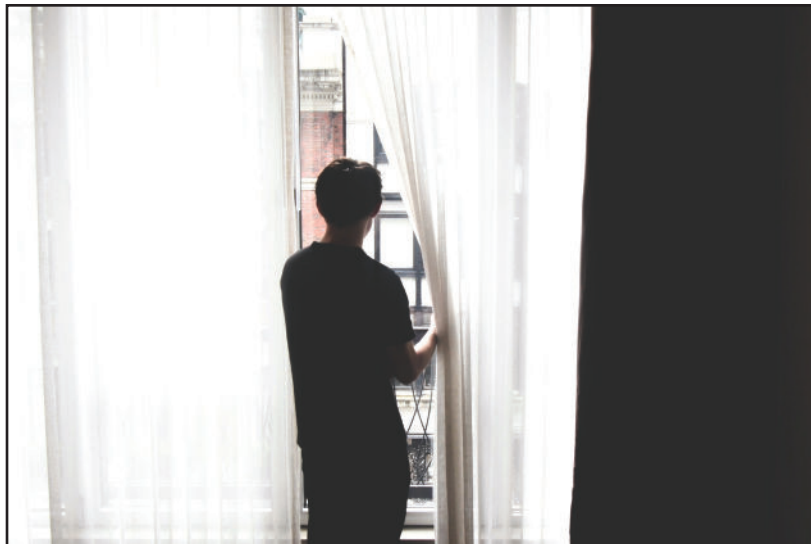


Photo by Max Harlyn King via Unsplash

Findings

WHO African Region

Self-reported nervousness in the WHO African region in the week before the March 2022 survey ranged from 34% in Ghana to 62% in Algeria (regional median of 45%) and self-reported depression ranged from 33% in Burkina Faso to 62% in Algeria (median of 45%). In Algeria, Benin, and Madagascar, both nervousness and feelings of depression were reported by more than 50% of the respondents.

This stands in sharp contrast to self-reports of worry about finances—at least 50% of respondents in thirteen countries (72% of countries in the region) reported financial worry in the week before the survey. Financial worry ranged from 35% in Algeria to 68% in Nigeria with a median of 54%, while worries about food were less frequent and ranged from 22% in Algeria to 55% in Nigeria with a median of 40%. The median value for food worry was the highest among all the surveyed WHO regions.

Figure 1: Heatmap of self-reported nervousness, feelings of depression, and worries about finances and food, WHO African Region, March 2022

	Nervousness (all, most, or some of the time)	Depressed feelings (all, most, or some of the time)	Worried about finances (somewhat or very)	Worried about food (somewhat or very)
Algeria	62%	62%	35%	22%
Angola	35%	43%	57%	39%
Benin	59%	58%	65%	49%
Burkina Faso	46%	33%	46%	36%
Cameroon	54%	49%	64%	52%
Côte d'Ivoire	46%	44%	59%	42%
Dem. Rep. of Congo	48%	45%	50%	41%
Ethiopia	44%	49%	46%	32%
Ghana	34%	40%	54%	38%
Guinea	43%	38%	54%	41%
Kenya	37%	46%	66%	52%
Madagascar	61%	55%	47%	25%
Mali	49%	56%	65%	44%
Mozambique	47%	45%	58%	41%
Nigeria	38%	43%	68%	55%
Senegal	45%	41%	50%	35%
South Africa	34%	44%	54%	31%
Tanzania	41%	49%	45%	34%

WHO Eastern Mediterranean Region

Self-reported nervousness in the 16 countries of the WHO Eastern Mediterranean region ranged from 31% in Qatar to 71% in Tunisia (regional median of 50%), while self-reported depressed feelings ranged from 36% in Kuwait to 70% in Tunisia (median of 54%). Reported worries about food were relatively low throughout the region (median of 27%), compared to reported mental wellness (median of 50% for feelings of nervousness, 54% for depression) and worries about finances (median of 48%).

Figure 2: Heatmap of self-reported nervousness, feelings of depression, and worries about finances and food, WHO Eastern Mediterranean Region, March 2022

	Nervousness (all, most, or some of the time)	Depressed feelings (all, most, or some of the time)	Worried about finances (somewhat or very)	Worried about food (somewhat or very)
Egypt	51%	59%	51%	27%
Iraq	54%	63%	55%	28%
Jordan	54%	56%	63%	35%
Kuwait	33%	36%	36%	12%
Lebanon	58%	64%	69%	44%
Libya	50%	52%	46%	25%
Morocco	58%	59%	41%	27%
Oman	33%	42%	40%	22%
Pakistan	40%	52%	40%	19%
Palestine	56%	61%	57%	29%
Qatar	31%	41%	37%	15%
Saudi Arabia	34%	43%	40%	19%
Sudan	47%	47%	59%	34%
Tunisia	71%	70%	51%	29%
United Arab Emirates	34%	42%	41%	18%
Yemen	60%	63%	67%	46%

WHO Region of the Americas

Finances were the predominant concern in the WHO region of the Americas, with at least half of respondents in 18 of 22 reporting worries about their household’s finances in the next month (responses ranged from 33% in Canada to 71% in Haiti, with a regional median value of 58%). Comparatively, reports of nervousness and food worries held median values of 38% and 39%, respectively (with the median food worry

value registering as the second highest among all surveyed regions, second to the WHO African region), while depression scored slightly higher at a median of 43%. Worries about having enough food and worries about finances were especially common in Haiti and Venezuela, where over 50-70% of respondents reported it.

Figure 3: Heatmap of self-reported nervousness, feelings of depression, and worries about finances and food, WHO Region of the Americas, March 2022

	Nervousness (all, most, or some of the time)	Depressed feelings (all, most, or some of the time)	Worried about finances (somewhat or very)	Worried about food (somewhat or very)
Argentina	39%	41%	62%	39%
Bolivia	47%	54%	57%	40%
Brazil	38%	43%	60%	36%
Canada	32%	43%	33%	14%
Chile	43%	48%	56%	36%
Colombia	34%	42%	62%	45%
Costa Rica	35%	41%	54%	37%
Dominican Republic	28%	36%	56%	37%
Ecuador	38%	46%	63%	43%
El Salvador	39%	43%	61%	43%
Guatemala	40%	47%	62%	40%
Haiti	59%	53%	71%	66%
Honduras	36%	46%	60%	42%
Mexico	38%	42%	50%	33%
Nicaragua	37%	45%	62%	44%
Panama	29%	36%	52%	34%
Paraguay	53%	52%	53%	32%
Peru	39%	47%	64%	45%
Puerto Rico, U.S.	36%	40%	48%	30%
United States	49%	43%	40%	NA*
Uruguay	32%	33%	49%	30%
Venezuela	32%	39%	63%	51%

*Question about food worry was not asked in the United States.

WHO European Region

In the 38 countries of the WHO European region, reports of mental and financial wellness varied widely. Nervousness and depression self-reports were the lowest in Denmark at 17% and 24% respectively and highest in Ukraine at 67%* (nervousness) and Turkey at 69% (depression) with regional medians of 42% and 44%, respectively.

Worries about food and finances were similarly varied, though generally lower than reports of nervousness and depressed feelings (median financial worry: 40%, median food worry: 21%).

More than half of the respondents in eight of the 38 countries reported worry about finances, with Ukraine, Moldova, and Belarus at the top, while Ukraine was the only country where more than half of respondents reported worrying about food in the week before the survey. It should be noted that responses in Ukraine and surrounding countries may be subject to response bias given the Russian invasion and subsequent humanitarian crisis beginning in February 2022. This could also be the case for other countries experiencing natural disasters or other conflicts.

Figure 4: Heatmap of self-reported nervousness, feelings of depression, and worries about finances and food, WHO European Region, March 2022

	Nervousness (all, most, or some of the time)	Depressed feelings (all, most, or some of the time)	Worried about finances (somewhat or very)	Worried about food (somewhat or very)
Albania	39%	46%	45%	32%
Armenia	61%	60%	50%	31%
Austria	31%	38%	32%	11%
Azerbaijan	63%	68%	56%	28%
Belarus	64%	64%	68%	37%
Belgium	42%	47%	42%	17%
Bosnia and Herzegovina	45%	40%	40%	24%
Bulgaria	41%	34%	41%	23%
Croatia	41%	40%	37%	19%
Czech Republic	29%	37%	27%	13%
Denmark	17%	24%	15%	4%
Finland	31%	32%	25%	10%
France	40%	45%	41%	20%
Germany	36%	45%	36%	12%
Greece	45%	52%	62%	34%
Hungary	43%	35%	40%	21%
Ireland	30%	37%	29%	10%
Israel	44%	43%	35%	13%
Italy	52%	50%	35%	18%
Kazakhstan	50%	48%	48%	30%
Kyrgyzstan	56%	49%	53%	38%
Moldova	51%	54%	68%	41%
Netherlands	22%	31%	20%	8%
Norway	19%	26%	19%	5%
Poland	43%	50%	47%	24%
Portugal	42%	44%	41%	26%
Romania	33%	36%	34%	21%
Russia	64%	64%	64%	36%
Serbia	47%	40%	38%	20%
Slovakia	45%	45%	41%	24%
Slovenia	30%	32%	29%	13%
Spain	38%	39%	42%	20%
Sweden	21%	26%	17%	5%
Switzerland	33%	38%	23%	9%
Turkey	60%	69%	60%	34%
Ukraine	67%	66%	75%	58%
United Kingdom	29%	42%	36%	12%
Uzbekistan	62%	56%	44%	29%

WHO South-East Asia and Western Pacific Regions

In the WHO South-East Asian region, Bangladesh and Thailand had the largest percentage of respondents reporting nervousness, depressed feelings, and financial worry among the seven countries in the region, with 63% in Thailand reporting nervousness and 58% of those in Bangladesh reporting depressed feelings (compared to a regional median of 43% and 44%, respectively), as well as 54% of Bangladeshis reporting financial worry (median of 45%). Reports of worries about having enough to eat were much less common, ranging from only 19% to 34% with a median of 32%.

In the WHO Western Pacific Region, nervousness and financial worries were the highest in Laos, at 60% for both measures (regional median values of 40% and 36%, respectively). Feelings of depression ranged from 34% in New Zealand to 55% in Hong Kong (median of 43%), while worries about food ranged from 6% in Taiwan to 37% in the Philippines (median of 17%).

Figure 5: Heatmap of self-reported nervousness, feelings of depression, and worries about finances and food, WHO South-East Asian and Western Pacific Regions, March 2022

		Nervousness (all, most, or some of the time)	Depressed feelings (all, most, or some of the time)	Worried about finances (somewhat or very)	Worried about food (somewhat or very)
South- East Asia	Bangladesh	48%	58%	51%	34%
	India	30%	38%	37%	19%
	Indonesia	22%	30%	45%	32%
	Myanmar	43%	44%	44%	34%
	Nepal	34%	38%	43%	20%
	Sri Lanka	43%	48%	51%	33%
	Thailand	63%	51%	54%	28%
Western Pacific	Australia	33%	39%	29%	13%
	Cambodia	47%	51%	54%	33%
	Hong Kong	52%	55%	35%	21%
	Japan	36%	38%	30%	12%
	Laos	60%	51%	60%	31%
	Malaysia	42%	45%	43%	25%
	New Zealand	29%	34%	27%	13%
	Philippines	31%	40%	54%	37%
	Singapore	33%	37%	22%	12%
	South Korea	44%	50%	37%	13%
	Taiwan	46%	49%	18%	6%
	Vietnam	37%	40%	48%	21%

Discussion

Across countries, financial worries and feelings of nervousness and depression were reported most frequently, while worries about food were much less common. In the WHO African region and WHO region of the Americas, worries about finances often exceeded reports of depression and nervousness. These single-question statistics do not provide the precision of other depression, anxiety, or food insecurity surveys or diagnostic tools but they do provide a snapshot indicator to watch over time, as is exemplified currently from data provided by Ukrainian participants. While CTIS lacks pre-pandemic data, these data suggest that both mental wellness and financial insecurity are critical issues that affect a large proportion of respondents across the globe and should be considered in current and post-pandemic recovery efforts.

Understanding the context of these data, recommendations for social behavior change implementers include the following:

- COVID-19 activities must consider the economic impact of the pandemic in messaging and programmatic interventions. People who are concerned about household finances or food security may not be able to take the same pandemic precautions as those with greater financial security. Even missing a couple days of work due to vaccination side effects may be too great a loss for some. Survey respondents across the globe and across all age groups are worried about finances and are asking for more information about the economic impacts of the pandemic. Failure to identify ways to decrease added financial burden and address this major concern may reduce the efficacy of interventions.

- Scale-up of mental health services is essential, both during the pandemic and post-pandemic. Survey results indicate that a large proportion of the population may be struggling with mental health issues, and there is demand for more information on mental health. Additional services to diagnose and treat anxiety and depression are needed. In addition, health communicators should develop population-specific messaging about mental health and available local resources. Several different approaches to developing these services have been tested, including those vetted by the [WHO](#) and [CETA](#).
- Additional research is needed to more accurately assess mental health at the individual and population levels in many countries. Examples of diagnostic tools include but are not limited to depression scales such as the SRQ-20, PHQ-9, and an anxiety scale such as the GAD-7. Each scale has benefits and limitations and should be administered by individuals with mental health survey application experience.

References

- COVID-19 Mental Disorders Collaborators (2021). Global prevalence and burden of depressive and anxiety disorders in 204 countries and territories in 2020 due to the COVID-19 pandemic. *Lancet* (London, England), 398(10312), 1700–1712. [https://doi.org/10.1016/S0140-6736\(21\)02143-7](https://doi.org/10.1016/S0140-6736(21)02143-7)
- FAO, IFAD, UNICEF, WFP and WHO. (2021). *The State of Food Security and Nutrition in the World 2021. Transforming food systems for food security, improved nutrition, and affordable healthy diets for all*. Rome, FAO, <https://doi.org/10.4060.cb4474en>

Recommended citation:

Rosen, E., Menghrajani, J., Rosen, G., Tseng, T., Nybro, E., Shaivitz, M. & Shattuck, D. (2022). Global-Level Depression, Nervousness and Worry about Food and Financial Security amidst the COVID-19 Pandemic in 113 Countries, March 2022. Johns Hopkins Center Communication Programs. https://breakthrough.link/technicalbrief_mentalwellness