Health and Social Precarity Among Americans Receiving Unemployment Benefits During the COVID-19 Outbreak

BACKGROUND

The Coronavirus Aid, Relief, and Economic Security (CARES) Act provided a $600/week supplement to unemployment benefits which expired July 31. Its extension is controversial. We examined health and social vulnerabilities among those receiving unemployment benefits during the COVID-19 outbreak to inform debate on the consequences of allowing the supplement to lapse.

METHODS

We analyzed the COVID Impact Survey, sponsored by the Federal Reserve Bank of Minneapolis and foundations.[1] Surveyors contacted a nationally representative random sample of US households by mail, email, telephone, and field interviews[2] between April 20, 2020, and June 8, 2020. We assessed adults 18–64 receiving (or applying for) unemployment benefits during the past week and those reporting working in the past week.

We first analyzed demographic characteristics and three categories of socio-medical vulnerabilities: food insecurity; lacking health insurance; and financial precarity (being unable to cover an unexpected $400 expense without selling possessions or going into debt).

Finally, to assess possible health risks resulting from unemployment beneficiaries' prematurely returning to work, we examined self-reported health; rates of seven clinical risk factors for severe COVID-19[3]; and the point prevalence of three major COVID-19 symptoms (fever/chills, cough, and dyspnea).

We used STATA/SE and weights provided by COVID Impact.

RESULTS

A total of 643 (weighted $n = 26.9$ million) of the 3480 nonelderly adults in our sample were unemployment beneficiaries; they were younger, poorer, less educated, and more often people of color than those at-work (Table 1).

Table 2 displays measures of socio-medical vulnerability for the two groups. Beneficiaries were more likely to report running out of food because they lacked money (39.0% vs. 17.0%, $p < 0.001$), or using a food pantry (17.3% vs. 5.1%, $p < 0.001$) in the past month; being uninsured (20.5% vs. 9.2%, $p < 0.001$); and being unable to afford an unexpected $400 expense (59.6% vs. 38.2%, $p < 0.001$). However, a larger absolute number of at-work individuals were vulnerable because many more adults were at-work. For instance, 26.0 million of those at-work reported problems affording food, versus 13.4 million unemployment beneficiaries.

Table 1 Characteristics of US Adults 18–64 Years of Age Receiving or Applying for Unemployment Insurance and Those Working, April–June 2020 ($n = 3480$)

	Working (%) ($n = 2837$)	Unemployment insurance beneficiaries (%) ($n = 643$)
Age		
18–24	11.43	19.58
25–34	26.11	26.54
35–44	21.95	22.40
45–54	20.34	19.37
55–64	20.17	12.11
Gender		
Male	53.1	51.01
Female	46.90	48.99
Race		
White	63.59	52.18
Black	10.84	12.10
Hispanic	15.75	27.33
Other	9.82	8.39
Income		
Less than $30,000	17.02	31.52
$30k to less than $60k	24.90	27.71
$60k to less than $125k	40.73	33.24
More than $125k	17.35	7.54
Education		
No high school diploma	5.52	18.26
High school graduate or equivalent	22.87	33.79
Some college	27.18	26.29
Bachelor of Arts or above	44.42	21.65

25 individuals in study population were missing data on race/ethnicity

Table 2 Measures of Sociomedical Vulnerability and Health Among US Adults 18–64 Years of Age Receiving or Applying for Unemployment Insurance and Those Working, April–June 2020

	Working		Unemployment insurance beneficiaries		*p* value*
	Weighted *N*, thousands (95% CI)	% (95% CI)	Weighted *N*, thousands (95% CI)	% (95% CI)	
Social precarity					
Cannot afford $400 expense †	40,631 (37,139, 44,124)	38.2 (35.7, 40.9)	15,983 (13,549, 18,417)	59.6 (53.9, 65.0)	< 0.001
Food security					
Worry food will run out ‡	23,606 (20,575, 26,638)	22.1 (19.8, 24.7)	12,353 (10,124, 14,583)	46.1 (40.3, 51.9)	< 0.001
Food ran out §	18,115 (15,461, 20,768)	17.0 (14.9, 19.3)	10,351 (8313, 12,388)	39.0 (33.3, 44.9)	< 0.001
Used food pantry ‖	5454 (4021, 6886)	5.1 (4.0, 6.6)	4642 (3419, 5865)	17.3 (13.5, 21.9)	< 0.001
Any food insecurity ¶	25,978 (22,849, 29,107)	24.4 (22.0, 27.0)	13,376 (11,103, 15,649)	50.3 (44.6, 56.1)	< 0.001
Uninsured **	9763 (7991, 11,534)	9.2 (7.7, 10.9)	5485 (4135, 6835)	20.5 (16.3, 25.5)	< 0.001
Possible COVID-19 symptoms ††					
Fever or chills	29,313 (26,303, 32,324)	27.7 (25.3, 30.2)	7140 (5614, 8667)	26.9 (22.2, 32.3)	0.79
Cough	14,977 (12,866, 17,087)	14.1 (12.3, 16.1)	4737 (3434, 6040)	17.7 (13.7, 22.6)	0.12
Dyspnea	11,523 (9829, 13,218)	10.9 (9.5, 12.6)	3138 (2246, 4030)	11.8 (8.9, 15.5)	0.62
Triad of all 3 symptoms	1926 (1275, 2577)	1.9 (1.3, 2.6)	957 (349, 1566)	3.7 (1.9, 6.8)	0.057
Self-reported health ‡‡					0.010
Good or better	96,906 (92,351, 101,461)	90.7 (89.1, 92.1)	23,051 (20,224, 25,877)	85.8 (81.5, 89.2)	
Fair or worse	9955 (8287, 11,624)	9.3 (7.9, 10.9)	3820 (2710, 4930)	14.2 (10.8, 18.5)	
Chronic conditions §§					
Diabetes	6780 (5490, 8071)	6.5 (5.4, 7.9)	2217 (1271, 3163)	8.6 (5.7, 12.8)	0.23
COPD	12,824 (10,854, 14,795)	12.4 (10.7, 14.3)	2918 (1966, 3870)	11.3 (8.3, 15.4)	0.62
Heart disease	2404 (1631, 3178)	2.3 (1.7, 3.2)	1212 (475, 1948)	4.7 (2.6, 8.4)	0.034
Asthma	14,701 (12,666, 16,735)	14.0 (12.3, 16.0)	3896 (2819, 4973)	15.1 (11.6, 19.5)	0.61
Liver disease	831 (354, 1308)	0.8 (0.4, 1.4)	352 (89, 616)	1.3 (0.6, 2.8)	0.26
Hypertension	23,937 (21,583, 26,292)	23.0 (20.9, 25.1)	5688 (4289, 7086)	22.1 (17.6, 27.3)	0.74
Immunocompromised	4818 (3761, 5874)	4.6 (3.7, 5.7)	2097 (1161, 3033)	8.2 (5.3, 12.4)	0.020
Number of conditions					0.97
0	54,875	56.3	13,194	57.1	

(continued on next page)

In total, 3.7% of unemployment beneficiaries had all three potential COVID-19 symptoms, versus 1.9% of those at-work ($p = 0.057$); unemployment beneficiaries were more likely to report fair/poor health (14.2% vs. 9.3%; $p = 0.010$), heart disease (4.7% vs. 2.3%; $p = 0.034$), and immunocompromise (8.2% vs. 4.6%; $p = 0.020$), but not other conditions. A total of 9.9 million unemployment beneficiaries had chronic conditions associated with increased risk of severe COVID-19.

DISCUSSION

Despite the $600/week supplement available to unemployment beneficiaries at the time of the survey,[4] many experienced financial precarity, and two factors were believed to compromise clinical outcomes: food insecurity and lack of health insurance. Although rates of these vulnerabilities were lower among those at-work, the absolute numbers affected were larger.

While critics of the supplementary unemployment benefits have argued that it disincentivized work,[1] a recent study cast doubt on that contention.[5] Even if jobs were available, in the context of ongoing community spread of SARS-CoV-2, forcing individuals back into the workplace under threat of impoverishment may place them, their co-workers, and the community at risk, since nearly 10 million unemployment beneficiaries have chronic conditions, and about one million had a triad of symptoms consistent with respiratory infection.

Our study is limited by the low survey response rate, which could reduce generalizability; however, the

Table 2. (continued)

	Working		Unemployment insurance beneficiaries		*p* value*
	Weighted *N*, thousands (95% CI)	% (95% CI)	Weighted *N*, thousands (95% CI)	% (95% CI)	
1	(51,178, 58,572) 30,506 (27,725, 33,287)	(53.6, 59.0) 31.3 (28.9, 33.8)	(11,079, 15,310) 7096 (5515, 8678)	(51.0, 63.0) 30.7 (25.3, 36.7)	
2+	12,086 (10,337, 13,835)	12.4 (10.8, 14.2)	2809 (1905, 3712)	12.2 (8.9, 16.4)	

*Pearson chi-square

†Individuals were asked "Suppose that you have an unexpected expense that costs $400. Based on your current financial situation, how would you pay for this expense?"; 8 non-mutually exclusive response options were provided. We created a binary mutually exclusive indicator. Those who reported that they would cover the expense with a credit card that they would pay off in full, or who would use cash or a checking/savings account, were considered able to afford the $400 expense. Those reporting they would use a credit card which they would pay off over time; a bank loan or line of credit; borrow from a family member or friend; use a payday loan, overdraft, or deposit advance; sell something; or would not be able to pay for it were categorized as unable to pay the expense, even if they also chose one of the other two responses. N = 20 of 3480 with missing data

‡Individuals were asked whether they were "worried our food would run out before we got money to buy more." Those who responded with "never true" were categorized as not worried, while those who answered "often true" or "sometimes true" were categorized as worried. N = 8 of 3480 with missing data

§Individuals were asked whether "The food that we bought just didn't last, and we didn't have money to get more." Those who responded with "never true" were categorized to not have run out of food, while those who answered "often true" or "sometimes true" were categorized to have run out. N = 11 of 3480 with missing data

‖ Individuals were asked about use (or application for) food pantry benefits in the past 7 days. Those who answered "did not receive nor apply for any" benefits were categorized as not using a pantry, while those who answered "received," "applied for," or "tried to apply for" were categorized as using a pantry. N = 19 of 3480 with missing data

¶Those with one of the three previous measures of food security, compared with those with none. N = 15 of 3480 with missing data

**Individuals were asked whether they were currently covered by one of the 8 types of insurance. Individuals reporting being covered by employer/union coverage, directly purchased insurance, TRICARE or other military care, Medicaid or similar plans, Medicare, or the Veterans Health Administration were classified as insured. Those reporting none of these insurance types, even if they reported Indian Health Service or "other" coverage, were considered uninsured. N = 19 of 3480 individuals with missing data

††Individuals were asked about experiencing 17 symptoms in the past 7 days. We created three binary variables from responses about four of these symptoms (fever or chills was considered to be one symptom). We also created a binary variable to indicate those reporting all three of these symptoms, vs. those with less than three. Number with missing data: 39 for fever/chills; 29 for cough; 39 for dyspnea; and 95 for all the three-symptom indicator

‡‡This five-category variable was dichotomized in the typical fashion: poor or fair vs. excellent, very good, or good. None with missing data

§§ Participants were asked whether "a doctor or other health care provider ever told you that you have any of the following," followed by questions about 13 conditions. From these, we created binary variables for seven conditions identified by the CDC as risk factors (or possible risk factors) for severe COVID-19.[3] We did not include cystic fibrosis given very low numbers. We also did not include "overweight or obesity" given that we lacked BMI to differentiate overweight vs. obesity, only the latter of which the CDC classified as a risk factor. We also created a three-category variable designating 0, 1, or 2+ of these chronic conditions; for this variable, having both asthma and COPD was considered only as one condition. Individuals with missing data out of n = 3480: N = 101 for diabetes; 102 with COPD; 84 with heart disease; 80 with asthma; 48 with liver disease; 90 with hypertension; 97 with immunocompromise; and 316 for the three-category chronic disease indicator

number of unemployment beneficiaries identified corresponds to official estimates from the Department of Labor.[6] Additionally, symptom data was self-reported, without confirmation by SARS-Cov-2 testing or clinical assessment. Because the triad of COVID-19 symptoms is non-specific, those reporting them may have other illnesses. Our data was cross-sectional, and cannot be used to draw causal inferences about the specific impact of any particular policy, including the $600 supplement. A notable strength of the study, however, is our use of timely, nationally representative data, including on medical conditions and specific symptoms, which, to our knowledge, is not available from any other source.

The economic and medical repercussions of the COVID-19 crisis are interconnected. The supplemental unemployment benefits provided a safety net for the US economy and population well-being. The lapse of the $600/week CARES supplement could inflict further medical and financial harm on millions of American households. Additional policies, however, are needed to strengthen the social safety net during the pandemic and beyond, both for the unemployed and for those at-work.

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Compliance with Ethical Standards:

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