



Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.



ELSEVIER

Contents lists available at ScienceDirect

Disability and Health Journal

journal homepage: www.disabilityandhealthjnl.com

Brief Report

Financial hardship experienced by people with disabilities during the COVID-19 pandemic



Carli Friedman, PhD

CQL | The Council on Quality and Leadership, 100 West Road, Suite 300, Towson, MD 21204, USA

ARTICLE INFO

Article history:

Received 2 March 2022

Received in revised form

27 May 2022

Accepted 15 June 2022

Keywords:

COVID-19 pandemic

Poverty

Financial hardship

People with disabilities

ABSTRACT

Background: People with disabilities are poorer and more financially insecure than nondisabled people. While people with disabilities were adversely affected by the pandemic and were more likely to experience poverty prior to the pandemic, less is known about their experiences with financial hardship during the pandemic.

Objective: The aim of this study was to explore the financial hardship of people with disabilities during the COVID-19 pandemic, including differences with nondisabled people and those based on people with disabilities' sociodemographics.

Methods: We analyzed *Household Pulse Survey* data from 52,890 adults (18+) with disabilities and 391,532 nondisabled adults using complex samples descriptive statistics and binary logistic regressions.

Results: During the Delta and first Omicron waves of the COVID-19 pandemic, 52.0% of people with disabilities had difficulty paying usual household expenses. People with disabilities were 2.78 times more likely to experience financial hardship during the pandemic than nondisabled people. People with disabilities' most common sources of income/funds for spending needs included: regular income sources (66.7%); credit cards or loans (36.6%); money from savings or selling assets or possessions (31.5%); and borrowing from friends or family (22.0%).

Conclusions: A significant proportion of adults with disabilities experienced financial hardship during the COVID-19 pandemic, including at greater rates than nondisabled adults. Financial hardship can have long lasting impacts upon people with disabilities, including on their physical and mental health, well-being, and overall quality of life.

© 2022 Elsevier Inc. All rights reserved.

People with disabilities are poorer and more financially insecure than nondisabled people.^{1–4} People with disabilities are more likely to lack basic needs than nondisabled people.⁵ They are also less likely to have financial assets, including savings, retirements, stocks and bonds, vehicles, and real estate.^{6,7} In fact, disability and poverty are intertwined—not only are people with disabilities more likely to be poor, poverty can also cause and/or exacerbate disability.⁵ Discrimination also impacts the financial insecurity of people with disabilities.^{4,6} For example, as a result of discrimination in employment, people with disabilities are more likely to be unemployed, underemployed, paid lower wages, and have fewer advancement opportunities than nondisabled people.^{4,6} Means-

testing to qualify for social programs, which cap people's allowed assets, can also serve as structural barriers which contribute to people with disabilities' financial insecurity.⁶ The extra costs associated with disability also increase financial insecurity.^{4–8} For example, households with at least one adult with disabilities need 29% more income to have a similar standard of living to nondisabled households.⁷

People with disabilities' increased likelihood of living in poverty not only results in people with disabilities experiencing more financial hardship, such as being unable to pay expenses and bills, it can also contribute to other forms of hardship, such as food and housing insecurity.^{7,8} People with disabilities are also less likely to have savings and accumulate assets, which hinders their long-term financial well-being and social mobility, and makes them more vulnerable to economic changes and swings.^{4–6}

The COVID-19 pandemic, which began in March 2020, swiftly and significantly increased poverty and financial hardship in the United States (US), and across the globe.³ While poverty

Abbreviations: CI, Confidence interval; EBT, Electronic Benefits Transfer; OR, Odds ratio; SNAP, Supplemental Nutrition Assistance Program; SSI, Supplemental Security Income; UI, Unemployment insurance; US, United States.

E-mail address: cfriedman@thecouncil.org.

increased in general, Black and Hispanic communities were especially hard hit.^{9–14} In addition, lower income households, millennials, and people with health conditions were more likely to experience financial hardship during the pandemic.^{9,12,15} While people with disabilities were adversely affected by the pandemic and were more likely to experience poverty prior to the pandemic, less is known about their experiences with financial hardship during the pandemic. Yet, data about the impact of the pandemic on the disability community is critical, especially in order to develop policies, strategies, and programs to address the needs of people with disabilities, such as related to financial hardship.¹⁶ For these reasons, the aim of this study was to explore the financial hardship of people with disabilities in the US during the COVID-19 pandemic, including differences with nondisabled people, and those based on people with disabilities' sociodemographics. To do so, we analyzed *Household Pulse Survey* data from 52,890 adults with disabilities and 391,532 nondisabled adults.

Methods

Data

This study was a secondary data analysis (exempt by IRB as a result) of the *Household Pulse Survey*.¹⁷ The United States Census Bureau administered the Pulse survey to a random selection of households in the United States to examine the impact of the pandemic. A total of 518,728 adults (18+) participated in the survey between July 21, 2021 and January 10, 2022.

Four questions, which were developed by the Washington Group on Disability Status (a United Nations Statistical Commission City Group),^{18,19} were used to measure disability:

1. Do you have difficulty seeing, even when wearing glasses?
2. Do you have difficulty hearing, even when using a hearing aid?
3. Do you have difficulty remembering or concentrating? And
4. Do you have difficulty walking or climbing stairs?

Answer options were: (0.) No—no difficulty; (1.) Yes—some difficulty; (2.) Yes—a lot of difficulty; and, (3.) cannot do at all. People who answer “a lot of difficulty” or “cannot do at all” (3) have the applicable disability (yes [1]; no [0]) for each question.¹⁸ In total, 52,890 people had disabilities and 391,532 were nondisabled people, resulting in a sample size of 444,422. We applied the frequency-person weights supplied by the Census Bureau¹⁷ using SPSS complex samples to account for population demographics and nonresponses. When weighted, people with disabilities represented 14% of the sample, and nondisabled people 86.0%. (While using standardized questions to measure disability can be useful,¹⁶ it should be noted that the Census Bureau's questions do not capture all types of disabilities and may not include all people with disabilities²⁰; this likely contributed to people with disabilities representing a smaller proportion of the sample).

Measures

The *Pulse* survey asked participants the following question about financial hardship: *In the last 7 days, how difficult has it been for your household to pay for usual household expenses, including but not limited to food, rent or mortgage, car payments, medical expenses, student loans, and so on?* Answer options included: (1.) not at all difficult; (2.) a little difficult; (3.) somewhat difficult; and, (4.) very difficult. Those people who answer ‘somewhat’ or ‘very’ difficult are considered to have difficulty paying for household expenses (yes [1], no [0]).^{10,21–23}

Participants were also asked: *Thinking about your experience in the last 7 days, which of the following did you or your household members use to meet your spending needs?*

- Regular income sources like those received before the pandemic (answer options: yes or no)
- Credit cards or loans (answer options: yes or no)
- Money from savings or selling assets or possessions (including retirement withdrawals; answer options: yes or no)
- Borrowing from friends or family (answer options: yes or no)
- Unemployment insurance (UI) benefit payments (answer options: yes or no)
- Stimulus (economic impact) payment (answer options: yes or no)
- Child Tax Credit payment (answer options: yes or no)
- Money saved from deferred/forgiven payments (to meet your spending needs; answer options: yes or no)
- Supplemental Nutrition Assistance Program (SNAP; answer options: yes or no)
- School meal debit/EBT cards (answer options: yes or no)
- Government rental assistance (answer options: yes or no)
- Other (answer options: yes or no)

Analyses

We first conducted descriptive statistics. Next, we utilized complex samples binary logistic regressions to compare the financial hardship of people with disabilities and nondisabled people, while controlling for all sociodemographics. (Household income was not included as a sociodemographic variable because it was strongly correlated with the dependent variables).

Finally, we used complex samples binary logistic regressions to examine differences in people with disabilities' financial hardship based on their sociodemographics (with the exception of household income). Confidence intervals (CIs) for all odds ratios (OR) were 95%.

Results

Participants

Of the adults with disabilities in the sample, 27.9% had visual disabilities, 18.7% hearing disabilities, 43.5% cognitive disabilities, and 40.3% had mobility disabilities (Table 1). The average age of people with disabilities was 51.5 ($SE = 0.2$). Slightly more than half of people with disabilities (56.6%) were cisgender women. The majority (82.3%) of people with disabilities identified as straight. About three-quarters of people with disabilities (76.4%) were White; most people (83.2%) were not Hispanic. The most common level of education was high school degree or less education (46.7%). Slightly less than half of people with disabilities (45.7%) were currently married. In terms of health care coverage, 54.6% of people with disabilities had public insurance, 46.8% employer insurance, 20.9% private insurance, and 7.1% other forms of insurance. The mean household size of people with disabilities was 3.4 people. Of people with disabilities, 40.8% worked for pay in the last week and 25.2% experienced a job loss in their household in the last month. Among people with disabilities, 30.1% had a household income of less than \$25,000. Demographics of the nondisabled comparison group are also available in Table 1. Demographics of adults with disabilities varied significantly from nondisabled adults on: age; gender; sexual orientation; race; ethnicity; education; marital status; health care coverage (except private insurance); household size; working for pay; household job loss; and household income.

Table 1
Demographics.

Characteristic	% (weighted)		p
	Disability	Nondisabled	
Visual disability			
Yes	27.9%	0.0%	n/a
No	72.1%	100.0%	
Hearing disability			
Yes	18.7%	0.0%	n/a
No	81.3%	100.0%	
Cognitive disability			
Yes	43.5%	0.0%	n/a
No	56.5%	100.0%	
Mobility disability			
Yes	40.3%	0.0%	n/a
No	59.7%	100.0%	
Age (M [SE])	51.5 (0.18)	49.3 (0.06)	<0.001
Gender			
Cis male	38.6%	48.6%	<0.001
Cis female	56.6%	49.9%	
Transgender	1.5%	40.0%	
None of these	3.3%	1.1%	
Sexual orientation			
Straight	82.3%	89.8%	<0.001
Queer	17.7%	10.4%	
Race			
White, alone	76.4%	78.0%	<0.001
Black, alone	12.2%	11.1%	
Asian, alone	3.7%	6.1%	
Another race alone, or multiracial	7.8%	4.9%	
Ethnicity: Hispanic			
Yes	16.8%	15.7%	0.01
No	83.2%	84.3%	
Education			
High school degree or less	46.7%	34.5%	<0.001
Some college	23.6%	20.1%	
Associate's degree	10.0%	9.8%	
Bachelor's degree	11.7%	19.2%	
Graduate degree	8.0%	16.3%	
Marital status			
Now married	45.7%	58.7%	<0.001
Widowed	7.3%	4.2%	
Divorced	16.8%	10.9%	
Separated	3.6%	1.8%	
Never married	26.7%	24.3%	
Health care coverage			
Employer insurance			
Yes	46.8%	65.6%	<0.001
No	53.2%	34.4%	
Private insurance			
Yes	20.9%	21.7%	0.06
No	79.1%	78.3%	
Public insurance			
Yes	54.6%	35.5%	<0.001
No	45.4%	64.5%	
Others			
Yes	7.1%	4.6%	<0.001
No	92.9%	95.4%	
Number of people in household (M (SE))	3.4 (0.02)	3.2 (0.01)	<0.001
Worked for pay in last week			
Yes	40.8%	61.1%	<0.001
No	59.2%	38.9%	
Household job loss			
Yes	25.2%	14.6%	<0.001
No	74.8%	85.4%	
Household income (2020)			
Less than \$25,000	30.1%	12.8%	<0.001
\$25,000–\$34,999	15.7%	10.5%	
\$35,000–\$49,999	14.0%	12.0%	
\$50,000–\$74,999	16.1%	17.6%	
\$75,000–\$99,999	9.5%	13.7%	
\$100,000–\$149,999	8.5%	16.7%	
\$150,000–\$199,999	3.0%	7.8%	
\$200,000+	3.1%	8.9%	

Difficulties paying household expenses

During the Delta and first Omicron waves of the COVID-19 pandemic, 52.0% of people with disabilities had difficulty paying usual household expenses (Table 2). In contrast, 23.7% of nondisabled people had difficulty paying usual household expenses. Adjusting for all demographic factors (including job loss, and work for pay), people with disabilities were 2.78 times (CI [2.65, 2.93]) more likely to have difficulty paying usual household expenses during the pandemic than nondisabled people.

Among people with disabilities themselves, there were also significant differences in the ability to pay household expenses based on sociodemographics (Table 3). The following people with disabilities were more likely to have difficulty paying for usual household expenses: people with visual disabilities (compared to people with disabilities other than visual disabilities); people with hearing disabilities (compared to people with disabilities other than hearing disabilities); people with cognitive disabilities (compared to people with disabilities other than cognitive disabilities); people with mobility disabilities (compared to people with disabilities other than mobility disabilities); younger people; cisgender women; Black people; people who were “another” race or multiracial; people with a high school degree or less; widowed, divorced, and separated people; and, people who lived in a household that experienced a loss of employment.

Sources of income/funds for spending needs

People with disabilities' most common sources of income/funds for spending needs included: regular income sources (66.7%); credit cards or loans (36.6%); money from savings or selling assets or possessions (31.5%); and borrowing from friends or family (22.0%; Table 2). Controlling for all sociodemographics, people with disabilities were 1.56 times less likely (OR = 0.64 [0.60, 0.68]) than nondisabled people to use regular income sources for spending needs. Moreover, controlling for all sociodemographics, people with disabilities were more likely to use the following sources of income/funds than nondisabled people: credit cards or loans (OR = 1.39 [1.33, 1.46]); money from savings or selling assets or possessions (OR = 1.46 [1.40, 1.53]); borrowing from friends/family (OR = 2.10 [1.96, 2.25]); stimulus payment (OR = 1.31 [1.23, 1.40]); child tax credit payment (OR = 1.10 [1.01, 1.181]); money saved from deferred/forgiven payments (OR = 1.58 [1.42, 1.76]); SNAP (OR = 1.63 [1.51, 1.77]); school meal debit/EBT cards (OR = 1.37 [1.23, 1.51]); government rental assistance (OR = 1.71 [1.45, 2.02]); and, other (OR = 1.43 [1.31, 1.56]). For sociodemographic differences in people with disabilities' sources of income/funds see Supplementary Table 4.

Discussion

During the Delta and first Omicron waves of the COVID-19 pandemic, 1 in 2 people with disabilities (52%) experienced financial hardship. While poverty itself hinders the health and well-being of people with disabilities, financial hardship also increases the likelihood that people will lose their homes, be food insecure, experience stress, anxiety, and depression, and delay and forgo medical care, all of which further negatively impact people with disabilities' health, well-being, and quality of life and intensifies the disparities they face.^{8,9,24–28}

People with disabilities were significantly more likely to be financially insecure during the pandemic than nondisabled

Table 2
Financial hardship during the pandemic: Differences between people with and without disabilities.

	%		Adjusted OR (CI; ref: nondisabled)
	Disability	Nondisabled	
Had difficulty paying usual household expenses			
Yes	52.0%	23.7%	2.78 [2.65, 2.93]***
No	48.0%	76.3%	ref
Sources of income/funds for spending needs (% yes)			
Regular income sources	66.7%	83.3%	0.64 [0.60, 0.68]***
Credit cards or loans	36.6%	31.1%	1.39 [1.33, 1.46]***
Money from savings or selling assets or possessions (including retirement withdrawals)	31.5%	23.1%	1.46 [1.40, 1.53]***
Borrowing from friends/family	22.0%	9.2%	2.10 [1.96, 2.25]***
Stimulus payment	18.4%	12.3%	1.31 [1.23, 1.40]***
Supplemental Nutrition Assistance Program	14.0%	5.2%	1.63 [1.51, 1.77]***
Child Tax Credit payment	11.8%	10.6%	1.10 [1.01, 1.18]*
School meal debit/EBT cards	8.2%	4.4%	1.37 [1.23, 1.51]***
Unemployment insurance benefit payments	6.5%	4.5%	0.93 [0.89, 1.09]
Money saved from deferred/forgiven payments	3.7%	2.4%	1.58 [1.42, 1.76]***
Government rental assistance	2.8%	0.8%	1.71 [1.45, 2.02]***
Other	8.6%	4.2%	1.43 [1.31, 1.56]***

Note. **p* < 0.05. ***p* < 0.01. ****p* < 0.001. Odds ratio (OR) adjusted for: age; gender; sexual orientation; race; ethnicity; education; marital status; health care coverage; work for pay in last week; household job loss; and number of people in household.

Table 3
People with disabilities' difficulties paying for household expenses.

Characteristic	OR [CI]
Visual disability (ref: no)	1.83 [1.63, 2.06]***
Hearing disability (ref: no)	1.21 [1.06, 1.38]**
Cognitive disability (ref: no)	1.80 [1.61, 2.01]***
Mobility disability (ref: no)	1.64 [1.45, 1.84]***
Age	0.98 [0.98, 0.99]***
Gender (ref: cis male)	
Cis female	1.17 [1.07, 1.28]**
Transgender	0.84 [0.50, 1.40]
None of these	0.94 [0.69, 1.27]
Queer (ref: straight)	1.12 [0.98, 1.29]
Race (ref: White alone)	
Black, alone	1.70 [1.47, 1.95]***
Asian, alone	0.99 [0.73, 1.34]
Another race alone, or multiracial	1.20 [1.01, 1.44]*
Ethnicity: Hispanic (ref: not Hispanic)	1.02 [0.88, 1.17]
Education (ref: high school degree or less)	
Some college	0.85 [0.76, 0.95]**
Associate's degree	0.81 [0.71, 0.92]**
Bachelor's degree	0.62 [0.55, 0.69]***
Graduate degree	0.48 [0.42, 0.54]***
Marital status (ref: never married)	
Now married	1.02 [0.90, 1.16]
Widowed	1.29 [1.06, 1.57]**
Divorced	1.60 [1.39, 1.84]***
Separated	2.09 [1.57, 2.79]***
Health care coverage	
Employer insurance (ref: no)	0.59 [0.53, 0.65]***
Private insurance (ref: no)	0.88 [0.79, 0.98]*
Public insurance (ref: no)	1.03 [0.92, 1.15]
Other (ref: no)	1.22 [0.96, 1.55]
Worked for pay in last week (ref: no)	0.84 [0.74, 0.94]**
Household job loss (ref: no)	4.02 [3.58, 4.51]***
Number of people in household	1.02 [0.99, 1.05]

Note. **p* < 0.05. ***p* < 0.01. ****p* < 0.001. All data are weighted.

people, even when sociodemographics, including working for pay, and household job loss, were controlled. Moreover, compared to nondisabled people, people with disabilities were less likely to rely on regular sources of income for spending needs, and more likely to rely on other sources of funds such as credit cards or loans. For example, 37% of people with disabilities relied on credit cards and loans to fund their household expenses. Reliance on credit cards will likely result in people with disabilities accruing new, longer-term debt, which will further intensify their financial hardships.

Compared to nondisabled people, people with disabilities were also more likely to rely on stimulus programs, including the economic impact payments and Child Tax Credit, and social programs such as SNAP, EBT, and rental assistance. Similarly, prior to the pandemic, people with disabilities were more likely to rely on SNAP and housing assistance programs than nondisabled people.^{29,30} Research suggests the COVID-19 stimulus programs, such as the American Result Plan Act and the Child Tax Credit, helped reduce material hardship, child poverty, financial instability, and food insecurity in the United States.^{31–33} In fact, most people used the Child Tax Credits for bills and living expenses.³¹ Given people with disabilities in our study were significantly more likely to rely on these programs than nondisabled people, as was also common prior to the pandemic,^{29,30} we believe it suggests these programs are especially beneficial for people with disabilities. As such, continued COVID-19 relief packages, as well as a strengthening of social programs^{6,8,34–36} would likely help improve the economic positions of people with disabilities. For example, disability advocates have been pushing for Supplemental Security Income (SSI) reform, including by increasing benefits and asset limits as they contribute to disability poverty^{37,38}; the initiative is not only supported by a number of congressional representatives,³⁹ but also viewed favorably generally by the public.⁴⁰ While doing so, it is also important to recognize that federal poverty levels do not account for the extra costs associated with disability.⁷ In addition, targeted interventions for the following groups of people with disabilities would be especially fruitful given they were all significantly more likely to experience financial hardship during the pandemic: younger people, cisgender women, Black people, people who were “another” race or multiracial, widowed, divorced, and separated people, people with a high school degree or less, and people who experienced household job losses.

Limitations

A number of limitations should be noted. This was secondary data; as such, we did not have the ability to ask follow-up questions or add additional variables. While the questions the Census Bureau used to ask about disability are used in censuses across the world, they likely do not capture all kinds of disabilities, so some people with disabilities may not be represented in this study. In addition, it is unclear if, and, how the Census Bureau made the survey accessible to people with disabilities.

Conclusion

A significant proportion of adults with disabilities experienced financial hardship during the COVID-19 pandemic, including at greater rates than nondisabled adults. Financial hardship can have long lasting impacts upon people with disabilities, including on their physical and mental health, well-being, and overall quality of life. As disability advocates say, it is time to “demolish disabled poverty.”³⁸

Acknowledgments

Thank you to Mary Kay Rizzolo for reviewing this manuscript and providing feedback.

Conflicts of interest

The author has no conflicts of interest.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.dhjo.2022.101359>.

References

- Pinilla-Roncancio M, Alkire S. How poor are people with disabilities? Evidence based on the global multidimensional poverty index. *J Disabil Pol Stud.* 2021;31:206–216.
- Brucker DL, Mitra S, Chaitoo N, Mauro J. More likely to be poor whatever the measure: working-age persons with disabilities in the United States. *Soc Sci Q.* 2015;96:273–296.
- Shrider EA, Kollar M, Chen F, Semega J. *Income and Poverty in the United States: 2020.* 2021.
- Parish SL, Grinstein-Weiss M, Yeo YH, Rose RA, Rimmerman A. Assets and income: disability-based disparities in the United States. *Soc Work Res.* 2010;34:71–82.
- Palmer M. Disability and poverty: a conceptual review. *J Disabil Pol Stud.* 2011;21:210–218.
- Maroto M, Pettinicchio D. Barriers to economic security: disability, employment, and asset disparities in Canada. *Can Rev Sociol.* 2020;57:53–79.
- Morris ZA, McGarity SV, Goodman N, Zaidi A. The extra costs associated with living with a disability in the United States. *J Disabil Pol Stud.* 2020; 10442073211043521.
- Sonik RA. Health insurance and food insecurity: sparking a potential virtuous cycle. *J Am Public Health Assoc.* 2019;109:1163–1165.
- Kim D. Financial hardship and social assistance as determinants of mental health and food and housing insecurity during the COVID-19 pandemic in the United States. *SSM-Popul Health.* 2021;16:100862.
- Sherman A, Stone C, Rice D, Leachman M, Zippel C. *New Data on Hardship Underscore Continued Need for Substantial COVID Relief.* 2020.
- Enriquez D, Goldstein A. COVID-19's socioeconomic impact on low-income benefit recipients: early evidence from tracking surveys. *Socius.* 2020;6, 2378023120970794.
- Bruce C, Gearing ME, DeMatteis J, et al. Financial vulnerability and the impact of COVID-19 on American households. *PLoS One.* 2022;17, e0262301.
- Center on Budget and Policy Priorities. *Tracking the COVID-19 Recession's Effects on Food, Housing, and Employment Hardships.* 2020.
- Anyamele OD, McFarland SM, Fiakofi K. The disparities on loss of employment income by US households during the COVID-19 pandemic. *J Econ, Raace, Pol.* 2021;1–19.
- Garner TI, Safir A, Schild J. *Changes in consumer behaviors and financial well-being during the coronavirus pandemic: results from the U.S. Household Pulse Survey.* 2020.
- Boyle CA, Fox MH, Havercamp SM, Zubler J. The public health response to the COVID-19 pandemic for people with disabilities. *Disabil Health J.* 2020;13: 100943.
- United States Census Bureau. *Household Pulse Survey: Measuring Social and Economic Impacts during the Coronavirus Pandemic.* 2021.
- United States Census Bureau. *Measuring Disability in a Census.* 2017.
- Washington Group on Disability Statistics. *An Introduction to the Washington Group on Disability Statistics Question Sets.* 2020.
- Sabariago C, Oberhauser C, Posarac A, et al. Measuring disability: comparing the impact of two data collection approaches on disability rates. *Int J Environ Res Publ Health.* 2015;12:10329–10351.
- Perez-Lopez DJ, Monte LM. *Household Pulse Survey Shows Stimulus Payments Have Eased Financial Hardship.* United States Census Bureau; 2021.
- Carey P, Groen JA, Jensen BA, Krolik TJ, Polivka AE. *Applying For and Receiving Unemployment Insurance Benefits During the Coronavirus Pandemic.* Monthly Labor Review. United States Bureau of Labor Statistics; 2021.
- United States Census Bureau. *Household Pulse Survey Interactive Tool.* n.d.
- Giannouchos TV, Brooks JM, Andreyeva E, Ukert B. Frequency and factors associated with foregone and delayed medical care due to COVID-19 among nonelderly US adults from August to December 2020. *J Eval Clin Pract.* 2022;28: 33–42.
- McCormick L, Schwartz A, Passerini C. Housing for people with disabilities: a review of state Olmstead and HUD consolidated plans. *J Plann Educ Res.* 2019: 1–15.
- Schwartz N, Tarasuk V, Buliung R, Wilson K. Mobility impairments and geographic variation in vulnerability to household food insecurity. *Soc Sci Med.* 2019;243:112636.
- Acosta S, Bailey A, Bailey P. *Extend CARES Act Eviction Moratorium, Combine with Rental Assistance to Promote Housing Stability.* 2020.
- Emerson E, Madden R, Graham H, Llewellyn G, Hatton C, Robertson J. The health of disabled people and the social determinants of health. *Publ Health.* 2011;125:145–147.
- Schwartz N, Buliung R, Wilson K. Disability and food access and insecurity: a scoping review of the literature. *Health Place.* 2019;57:107–121.
- Souza MT, Collinson R, Martin M, Steffen B, Vandembroucke DA, Yao Y-GD. *Worst Case Housing Needs of People with Disabilities: Supplemental Findings of the Worst Case Housing Needs 2009: Report to Congress.* 2011.
- Pilkauskas N, Cooney P. *Receipt and Usage of Child Tax Credit Payments Among Low-Income Families: What We Know.* 2021.
- Parolin Z, Ananat E, Collyer SM, Curran M, Wimer C. *The Initial Effects of the Expanded Child Tax Credit on Material Hardship.* 2021.
- Cooney P, Shaefer HL. *Material Hardship and Mental Health Following the COVID-19 Relief Bill and American Rescue Plan Act.* 2021.
- Hoffman DW, Livermore GA. The house next door: a comparison of residences by disability status using new measures in the American Housing Survey. *Cityscape: J Pol Dev Res.* 2012;14:5–33.
- Swann CA. Household history, SNAP participation, and food insecurity. *Food Pol.* 2017;73:1–9.
- Gundersen C, Waxman E, Crumbaugh AS. An examination of the adequacy of supplemental nutrition assistance program (SNAP) benefit levels: impacts on food insecurity. *Agric Resour Econ Rev.* 2019;48:433–447.
- Vallas R, Cortland M. *The Safety Net Program Congress Forgot.* The Hill; 2021.
- Astor M. *How Disabled Americans Are Pushing to Overhaul a Key Benefit Program.* The New York Times; 2021.
- Bowman J. *Rep. Bowman and Sens. Brown, Sanders, and Warren Lead Colleagues in Calling for Desperately-Needed Expansion and Improvements to SSI Program.* 2021.
- Ne'emman A, Memo Medlock J. *Americans Support Reforming SSI and Expanding Community Services for People with Disabilities and Seniors.* 2021.