

LGBTQ Disparities in Health and Social Determinants of Health in a National Monitoring Survey of Americans during the COVID-19 Pandemic

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Abstract

Past research has shown health and mental health disparities between sexual minorities and others in the general population. More recently, increased incidence of mental health issues in the general population has been reported during the COVID-19 pandemic. This paper explores health and mental health disparities during the pandemic between adults who identify as LGBTQ (Lesbian, Gay, Bisexual, Transgender or Queer/Questioning) and other adults. The study was conducted as part of pandemic monitoring project with independent Census-balanced national samples drawn on a monthly basis for a large mobile panel of United States adults. Approximately 1,000 interviews were completed every month from March through November 2020. The survey was designed to yield a series of snapshots of public attitudes and behaviors of the course of the pandemic. Importantly, 8.7% of the sample personally identified as LGBTQ, yielding a subsample of more than 891 sexual minority adults. In these national surveys, LGBTQ adults reported greater adverse health, social, and financial outcomes during the COVID-19 pandemic compared to other adults. For the analysis of outcomes in LGBTQ adults, waves were combined to increase the sample size and analytic power. Results show three times as many LGBTQ adults than the non-LGBTQ adults reporting a diagnosis of the virus in their household. Additionally, a larger percentage of LGBTQ adults than those not identifying as LGBTQ reported job and income loss. Financial hardship extended to other issues, such as paying rent or mortgage (more than half of non-LGBTQ adults reported “no difficulty” paying the rent or mortgage, only 36% of LGBTQ adults could say the same). In summary, the LGBTQ population suffered from health disparities prior to the pandemic, and the data presented here indicate this population continues to be vulnerable on health and financial metrics during COVID.

Key Words: LGBTQ, COVID-19, survey, health, employment, income

1. Background

The COVID-19 pandemic has highlighted various healthcare disparities faced by the marginalized members of society. Sexual minority persons experience health disparities associated with sexual stigma and discrimination and have a high prevalence of several health conditions that have been associated with severe coronavirus disease 2019 (COVID-19).^{1,2} However, few studies have examined how respondent reported physical

¹ Logie C. The case for the World Health Organization’s Commission on the Social Determinants of Health to address sexual orientation. *Am J Public Health* 2012;102:1243–6.

and mental health, including COVID-19 diagnosis, has taken place since the beginning of COVID-19.³ This lack of research is not surprising given U.S. COVID-19 surveillance systems lack information on sexual orientation, challenges with respondent recruitment via probability sampling methods, and availability of research funding to conduct such studies, thus hampering examination of COVID-19–associated disparities among sexual minority adults.⁴

Discrimination, prejudice, financial insecurity, and a lack of healthcare insurance have all been reported by LGBTQ people, just as they have by other minority groups.⁵ These issues make it difficult to get healthcare information, diagnoses, and treatments, all of which are more important during a pandemic. LGBTQ people, on the other hand, report encountering a lack of healthcare professional awareness of LGBTQ needs, which may cause them to avoid or delay obtaining healthcare.⁶ Also, poverty affects a greater percentage of LGBTQ people (22%) than it does non-LGBTQ people (16%)⁷. This makes personal protective equipment like masks and hand sanitizers more unaffordable at a time when they are needed to decrease the danger of human exposure to the coronavirus.

A substantial incidence of sickness, many deaths, and broad economic and social upheaval were all evident in the first year of the pandemic. These findings have implications for COVID-19 containment measures in the community, including as early detection and isolation of positive persons, contact tracking, and long-term preventive actions. The current study further examines 1) health disparities between adults who identify as LGBTQ and other adults, 2) LGBTQ adults' access to healthcare, and 3) economic and financial impacts of the COVID 19 pandemic on LGBTQ adults.

2. Methodology

Shortly after COVID-19 was deemed a pandemic, ICF deployed a nationwide survey, the COVID-19 National Monitor Survey, in order to conduct monthly national surveys of COVID-19 beliefs, risk perceptions, trust and confidence in government institutions and

² US Department of Health and Human Services. Healthy people 2020: lesbian, gay, bisexual, and transgender health. Washington, DC: US Department of Health and Human Services; 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/lesbian-gay-bisexual-and-transgender-healthexternal> icon.

³ Krause, Kristen D. PhD, MPH Implications of the COVID-19 Pandemic on LGBTQ Communities, Journal of Public Health Management and Practice: January/February 2021 - Volume 27 - Issue - p S69-S71 doi: 10.1097/PHH.0000000000001273

⁴ Heslin, K. C., & Hall, J. E. (2021). Sexual orientation disparities in risk factors for adverse COVID-19-related outcomes, by race/ethnicity - Behavioral Risk Factor Surveillance System, United States, 2017-2019. *MMWR. Morbidity and Mortality Weekly Report*, 70(5), 149–154.

⁵ Durso L.E., Meyer I.H. Patterns and predictors of disclosure of sexual orientation to healthcare providers among lesbians, gay men, and bisexuals. *Sex Res Social Policy*. 2013;10(1):35–42.

⁶ Quinn G.P., Sutton S.K., Winfield B., Breen S., Canales J., Shetty G. Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (LGBTQ) perceptions and health care experiences. *J Gay Lesbian Soc Serv*. 2015;27(2):246–261. doi: 10.1080/10538720.2015.1022273.

⁷ Salerno J.P., Williams N.D., Gattamorta K.A. LGBTQ populations: Psychologically vulnerable communities in the COVID-19 pandemic. *Psychological Trauma: Theory, Research, Practice, and Policy*. 2020;12(S1):S239–S242. doi: 10.1037/tra0000837.

information sources. Respondents were selected from the MFour mobile panel and received the survey notification through MFour's Surveys On The Go® app. A number of profiling questions and fraud detection methods are used to determine who is eligible to join the panel. The zip code, age, gender, race/ethnicity, and education of panel members are included in the profile so that samples may be geographically and demographically balanced to meet Census estimates.

Each month, an app notification delivered to a Census-balanced (age, gender, and racial) sample of roughly 3,000 adult panel members served as the first invitation for each survey. Nonrespondents received three reminders through app push notifications over the several days. Respondents were compensated up to \$4 for their time. Beginning in late March 2020, each of the ten waves consisted of about 1,000 interviews. The results presented here are based on the ten waves completed between March 2020 and November 2020, as well as April 2021.

The average smart phone-based questionnaire duration ranged 18 to 22 minutes across the 10 waves. The response rates to the survey (AAPOR RR 1) ranged from 21% to 33%. For the analysis, waves were combined to increase the sample size and analytic power, and results are weighted. To further measure respondents' global mental health, the Patient Health Questionnaire (PHQ-4) was utilized. The PHQ-4 is a diagnostic instrument that measures depression using a four-point likert-type scale. Depending on how nervous, worried, interest in doing things, and feeling down a respondent felt, they selected according to the following scale: 0 = not at all, 1 = several days, 2 = more than half the days, and 3 = nearly every day. Total scores are rated as normal (0-2), mild (3-5), moderate (6-8), and severe (9-12).⁸

2.1 Survey Measures

2.1.1. Health and Mental Health

Health of LGBTQ adults and non-LGBTQ adults was assessed using three measures: 1) average number of bad physical health days, 2) likelihood of getting sick with COVID-19 (on a scale of 0 to 100%), and 3) tested positive for COVID-19. The sample size for the third measure is smaller because the question was only asked to those who received a COVID-19 test. The measures used to assess mental health included: 1) average number of bad mental health days, 2) told by a healthcare professional that they have a depressive disorder, and 3) Patient Health Questionnaire (PHQ-4).

2.1.2. Access to Healthcare

To measure access to healthcare, the question “Was there a time in the past 12 months when you needed to see a doctor but could not because of cost?” was used to evaluate access to healthcare. Additionally, access to healthcare was measured by a change in the source of health insurance.

2.1.3. Financial Impact

The financial impact because of COVID-19 was assessed by two food insecurity measures: 1) The food bought didn't last and didn't have money to get more, 2) Worried food would run out before they got money to buy more. Moreover, financial impact was

⁸ Kroenke K, Spitzer RL, Williams JB, Löwe B. An ultra-brief screening scale for anxiety and depression: the PHQ-4. *Psychosomatics*. 2009;50(6):613-21. From *Principles of Neuropathic Pain Assessment and Management*, November 2011

evaluated by four additional measures: 1) difficulty paying the full amount of rent or mortgage, 2) change in employment, 3) change in income, and 4) confidence in managing personal finances.

2.2 Statistical Analysis

Crosstabulations were performed to examining the relationships between LGBTQ adults and non-LGBTQ adults. The Rao-Scott Chi-Square test was performed to test the significance of the relationship between variables. All results reported are significant with a 0.05 or less significance level.

3. Results

Approximately, 8.7% of respondents identified as lesbian, gay, bisexual, transgender, or queer, yielding a subsample of 891 sexual minority adults. A total of 10,080 people participated in the ten national surveys. For each wave of the COVID-19 National Monitor Survey, the demographic profiles were closely matched with the American Community Survey (ACS)⁹, an ongoing survey by the U.S. Census Bureau, findings (Table 1). Participants who identified as LGBTQ represented a higher representation of lower education and income compared to non-LGBTQ adults and U.S. Census Bureau's profiles.

Table 1. Comparison of Demographic between LGBTQ, Non-LGBTQ Adults, and ACS (unweighted)

Category	Descriptive	COVID-19 National Monitoring Survey		
		LGBTQ	Non-LGBTQ	2019 ACS
Race	White	73.2%	75.0%	75.0%
	Black	16.3%	13.5%	14.2%
	Asian	5.1%	4.9%	6.8%
	Other	12.9%	8.8%	7.6%
Ethnicity	Hispanic (any race)	22.8%	14.6%	18.4%
	Non-Hispanic	77.2%	85.4%	81.6%
Education	Less than High School	16.3%	7.0%	11.4%
	High School Diploma / GED	27.1%	32.4%	26.9%
	Some College or Associates Degree	28.9%	30.3%	28.6%
	Bachelor's Degree or Above	27.6%	30.3%	33.1%
Income	Less than \$25,000	34.5%	22.6%	18.1%
	\$25,000 to \$34,999	15.2%	12.8%	8.4%
	\$35,000 to \$49,999	14.4%	14.3%	11.9%
	\$50,000 to \$74,999	13.3%	17.4%	17.4%
	\$75,000 to \$99,999	6.6%	10.2%	12.8%
	\$100,000 or more	8.8%	16.9%	22.9%

⁹ Explore Census Data. (2021). Retrieved 1 September 2021, from <https://data.census.gov/cedsci/>

3.2 Health and Access to Healthcare

Table 2 shows mental health results. COVID-19 were found to have a greater impact on LGBTQ adults' physical and mental health than on non-LGBTQ adults. In the past seven days from when respondents took the survey, LGBTQ adults experienced an average of 1.45 bad physical health days and 3.06 bad mental health days, compared to non-LGBTQ adults who experienced an average of 1.15 bad physical health days and 1.70 bad mental health days. On average, LGBTQ adults smoked more cigarettes in the past seven days from when they took the survey (8.19 cigarettes) than non-LGBTQ adults (7.83 cigarettes). LGBTQ adults also appear to have a higher likelihood of getting sick with COVID-19 when asked to provide a percentage on a scale of 0 to 100% of how likely they think they will get sick with COVID-19 (37% LGBTQ vs 32% non-LGBTQ). Furthermore, 3.6% of LGBTQ adults tested positive for COVID-19, whereas 1.2% adults tested positive for COVID-19.

LGBTQ adults were also disproportionately affected by depression and anxiety. In comparison to 31% of non-LGBTQ respondents, 57% LGBTQ adults (57%) said a healthcare practitioner told them had a depressive illness by. To further measure respondents' global mental health, the Patient Health Questionnaire (PHQ-4) was utilized.

The results of each question were combined, mean scores were derived, and compared by LGBTQ adults and non-LGBTQ adults. There were considerable differences between LGBTQ and non-LGBTQ respondents, with LGBTQ adults reported a higher overall PHQ-4 score (9.26), as well as more core symptoms and signs of depression, indicating severe a mental health impact, whereas non-LGBTQ adults total score suggested COVID-19 had a moderate mental health impact. Results are shown in Table 2.

Table 2. Mental Health Mean Score Comparison of LGBTQ Adults and Non-LGBTQ Adults

PHQ-4 Scale: Over the last 2 weeks, how often have you been bothered by.....	LGBTQ Adults	Non-LGBTQ Adults
Feeling nervous, anxious or on edge	2.39	1.88
Not being able to stop or control worrying	2.28	1.81
Little interest or pleasure in doing things	2.29	1.79
Feeling down, depressed, or hopeless	2.30	1.76
Total Score	9.26	7.24

This study found that, although the proportion of respondents who did have health insurance was similar between LGBTQ adults (11%) and non-LGBTQ adults (10%), there was a significant difference in the ability to see a doctor. Approximately 34% LGBTQ adults could not see a doctor due to cost, compared to 20% of non-LGBTQ adults. Also, 30% of LGBTQ adults reported a change in their health insurance due to COVID-19. Conversely, 13% of non-LGBTQ adults reported experiencing a change in health insurance. This inability to access a healthcare practitioner, presents obstacles for LGBTQ individuals seeking healthcare, potentially resulting in negative outcomes and consequences for COVID-19 control efforts.

3.3 COVID-19 Impact on Personal Finances

In comparison to before COVID-19, 48% of LGBTQ adults are less confident about their financial future (vs. 35% of non-LGBTQ adults). Similarly, 42% of LGBTQ people are unsure about managing their own finances (vs. 24% of non-LGBTQ adults). Forty-four

percent of non-LGBTQ individuals, and 54% of LGBTQ adults stated they were having trouble paying their mortgage in full (results not shown).

Food insecurity also showed potential differences between LGBTQ and non-LGBTQ adults (see Figure 1). Among LGBTQ adults, 19% reported that they were often or sometimes worried about their food running out and 18% reported that the food they bought often or sometimes didn't last and they didn't have money to get more. The impact of food insecurity appears to be different for non-LGBTQ adults.

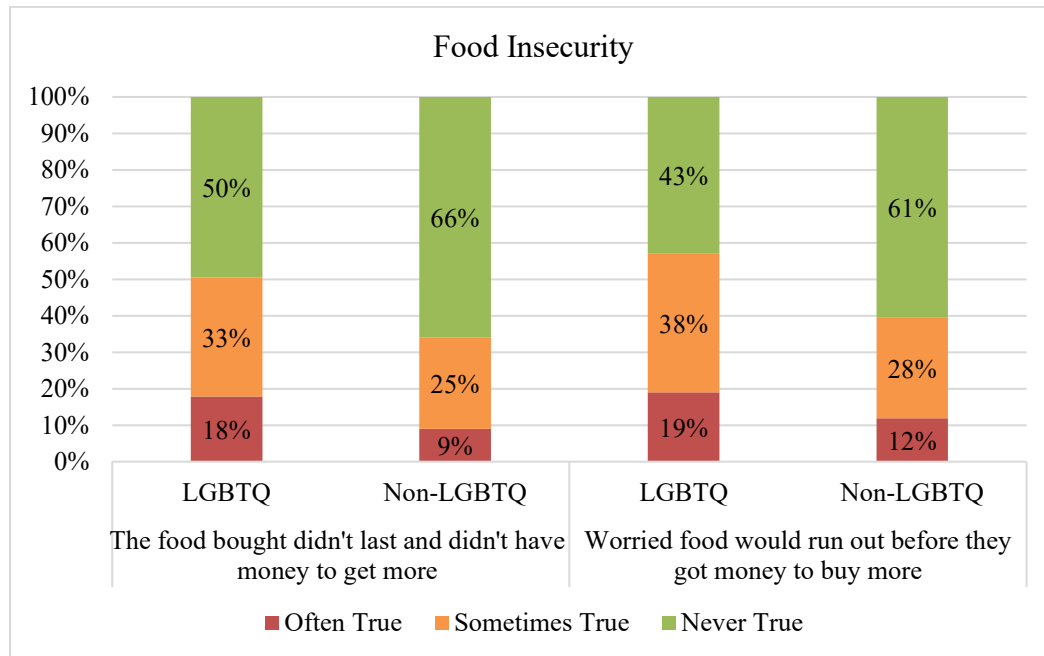


Figure 1. Food Insecurity During COVID-19

LGBTQ individuals were employed at a lower rate than non-LGBTQ adults at the start of the pandemic. Both LGBTQ and non-LGBTQ people saw the similar change in full-time employment during the pandemic. However, there was potentially more unemployment among LGBTQ adults before and during the pandemic, as seen in Table 3.

Table 3. Changes in Employment

	Beginning of 2020	During COVID-19	Difference
LGBTQ Adults			
Employed full time	42%	35%	-7%
Employed part time	19%	18%	-1%
Not employed, looking for work	15%	17%	2%
Retired	8%	9%	1%
Disabled and not looking for work	10%	10%	0%
Something else	6%	10%	4%
Non-LGBTQ Adults			
Employed full time	46%	39%	-7%
Employed part time	14%	14%	0%
Not employed, looking for work	8%	14%	6%
Retired	17%	18%	1%

Disabled and not looking for work	8%	8%	0%
Something else	6%	8%	2%

Among LGBTQ adults, 43% reported their household income decreasing some or a lot and 21% reported their income decreased a lot. Comparatively, 37% of non-LGBTQ adults' incomes decreased some or a lot. Respondents were then asked to look ahead to a year from when they took the survey and think about whether their household will be better off financially, worse off, or about the same. Twenty percent of LGBTQ adults said they thought their household will be worse off financially a year from when they took the survey, compared to 18% of non-LGBTQ adults.

4. Conclusions and Discussion

It is critical that researchers and public authorities have access to information that may help protect and support the most vulnerable individuals and communities during times of crisis. The significantly higher COVID-19 positive test results (3.6% LGBTQ vs 1.2% non-LGBTQ) are especially concerning because of the higher smoking average. Smoking is linked to a number of respiratory and tobacco-related illnesses, including chronic obstructive pulmonary disease (COPD), cancer, and cardiovascular disease,¹⁰ all of which have been associated to a higher risk of COVID-19-related complications.¹¹

Overall, the findings of this study are consistent with previous research, which shows that LGBTQ people experience more mental health and financial instability than non-LGBTQ adults both inside and outside of the pandemic environment. Recognizing COVID-19's disproportionate impact on LGBTQ persons helps to ensure that efforts to provide healthcare and address inequalities during the pandemic are included.

¹⁰ Hafeez H., Zeshan M., Tahir M.A., Jahan N., Naveed S. Health care disparities among lesbian, gay, bisexual, and transgender youth: A literature review. *Cureus*. 2017;9(4):e1184. doi: 10.7759/cureus.1184.

¹¹ Zheng Z., Peng F., Xu B., Zhao J., Liu H., Peng J. Risk factors of critical & mortal COVID-19 cases: A systematic literature review and meta-analysis. *J. Infect.* 2020 doi: 10.1016/j.jinf.2020.04.021.