



Published in final edited form as:

J Adolesc Health. 2020 November ; 67(5): 645–648. doi:10.1016/j.jadohealth.2020.08.006.

Mental Health Needs Among Lesbian, Gay, Bisexual, and Transgender College Students During the COVID-19 Pandemic

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Abstract

Purpose: The abrupt closure of universities across the U.S. in March 2020 may have sent some lesbian, gay, bisexual, and transgender (LGBT) college students home to unsafe or unaccepting families and environments. The objective of this study was to examine the mental health needs of LGBT college students in the U.S. during the COVID-19 pandemic.

Methods: We fielded a rapid-response online survey in the spring of 2020. We recruited 477 LGBT-identifying college students aged 18–25 years by contacting LGBT-serving organizations on 254 college campuses and through targeted social media advertising.

Results: Nearly half (45.7%) of LGBT college students have immediate families that do not support or know their LGBT identity. Approximately 60% of sampled LGBT college students were experiencing psychological distress, anxiety, and depression during the pandemic.

Conclusions: Health-care providers, college and university administrators, and campus counseling centers should take swift action to ensure that LGBT students receive mental health support during the pandemic.

Keywords

COVID-19; LGBTQ health; College health

The COVID-19 pandemic has created additional stressors in everyday life, including social isolation and insecurities in housing, finances, and food [1,2]. Recent studies have also raised concerns about the health and well-being of college-aged students. According to a previous study of 725 students, 35% reported COVID-19 symptoms but few (<5%) received

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Conflicts of interest: The authors have no financial sources or conflicts of interest to report.

tests and most (95%) were sheltered in place at home [3]. Other research has documented elevated levels of depression and anxiety among college students during the COVID-19 pandemic [4–6]. These stressors may be greater risk factors for vulnerable populations, including lesbian, gay, bisexual, and transgender (LGBT) individuals, who already report worse mental health outcomes as a result of discrimination, stigma, and experiences of rejection because of their sexual orientation or gender identity [7–9]. One study has provided qualitative evidence from chat-based support groups that LGBT youth feel “stuck at home with unsupportive parents” during the COVID-19 pandemic [10]. Less attention has been given to the subset of LGBT college students who may be experiencing unique challenges due to their sexual orientation and/or gender identity. In particular, the abrupt closure of U.S. colleges and universities in March 2020 may have sent many LGBT students home to unsafe or unaccepting environments [11]. The closure of colleges and universities may have also resulted in other unfavorable factors for self-quarantine, including limited access to LGBT-specific campus resources and distance from their affirming social networks.

Methods

From April 24 to June 5, 2020, we recruited 477 LGBT college students aged 18–25 years to participate in a rapid-response online survey on their health and well-being during the COVID-19 pandemic. Participants were recruited through email listservs, outreach to LGBT student organizations, LGBT office directors and/or diversity officers at 254 colleges and universities, and targeted social media advertisements via Facebook and Instagram. Participants resided in 47 states and Puerto Rico. We calculated descriptive statistics and estimated the prevalence of three mental health outcomes: (1) frequent mental distress (i.e., 14 days of “not good” mental health in the past 30 days) [12]; (2) generalized anxiety disorder using the GAD-2 criteria [13]; and (3) major depression based on the Patient Health Questionnaire 2-item (PHQ-2) screening instrument [14]. Then, we estimated multivariable logistic regression models to identify the risk factors for frequent mental distress, anxiety, and depression among LGBT college students. Fully adjusted models simultaneously controlled for sexual orientation, gender identity, age, race/ethnicity, ability to receive mental health if needed during the pandemic, the degree to which participants’ lives were disrupted by COVID-19, concerns about COVID-19, whether the participant, family or a friend had previously tested positive for COVID-19, and the immediate family’s (defined as parents and siblings) awareness and support of the participant’s LGBT identity. Logistic regression results are presented as adjusted odds ratios (aOR) with 95% confidence intervals (CI). This study was deemed exempt by the Vanderbilt University Institutional Review Board and is part of a larger forthcoming study that includes focus groups and qualitative analyses.

Results

Table 1 presents the descriptive statistics of our study sample aged 18–25 years. Most LGBT college students in our sample described their sexual orientation as gay, lesbian, bisexual, or queer. The mean age was 20.7 years, and approximately 30% of the sample was nonwhite. Most LGBT college students reported that their lives were disrupted by the COVID-19 pandemic by a fair amount or a great deal. More than half of the LGBT college students

were very or extremely concerned about the COVID-19 pandemic. Approximately 17% of LGBT students had previously tested positive or knew a family member or friend who tested positive for COVID-19. Almost half (45.7%) of LGBT college students have immediate families that do not support or know their LGBT identity.

Table 2 presents the prevalence and aORs of mental health conditions among LGBT college students aged 18–25 years during the COVID-19 pandemic. More than 60% of the sampled LGBT college students were experiencing frequent mental distress, anxiety, or depression. Compared to cisgender men, transgender students were much more likely to report frequent mental distress (aOR = 3.41; 95% CI = 1.31–8.86). LGBT college students unable to receive mental health care because of stay-at-home orders were more likely to report frequent mental distress (aOR = 2.30; 95% CI = 1.17–4.56) and depression (aOR = 2.43; 95% CI = 1.24–4.74). LGBT students whose lives were disrupted “a great deal” were more likely to have frequent mental distress (aOR = 2.37; 95% CI = 1.20–4.66) and anxiety (aOR = 2.13; 95% CI = 1.09–4.14). Similarly, those who were extremely concerned about COVID-19 were more likely to have frequent mental distress (aOR = 1.84; 95% CI = 1.21–2.79), anxiety (aOR = 1.77; 95% CI = 1.17–2.69), and depression (aOR = 1.71; 95% CI = 1.15–2.56) compared to those who were not concerned about COVID-19. Finally, LGBT students with unsupportive families were more likely to exhibit frequent mental distress (aOR = 1.83; 95% CI = 1.13–2.95) compared to students with families supporting their LGBT status.

Discussion

To overcome the high prevalence of frequent mental distress, anxiety, and depression among LGBT students, colleges and universities should ensure that LGBT students receive mental health support during the COVID-19 pandemic. First, campus counseling centers should provide telehealth options with flexible hours that are extended until the return of in-person classes and referral services to low- or no-cost providers in the student’s place of residency. Second, identity-based affinity groups should leverage virtual platforms to sustain a sense of community when possible. Relatedly, colleges and universities should utilize campus, community, or national LGBT resources to provide privacy-enabled asynchronous digital content, webinars, and/or podcasts for students and families from unsupportive households. Third, universities should seek to eliminate any closure-related stressors by providing housing accommodations and financial resources to those expressing need. Financial resources should not be solely based on the parental/family information attained through traditional financial aid processes, as separation from one’s parental household may be a necessary option for students to remain physically and emotionally safe. Finally, health-care providers should be mindful of the mental health needs of LGBT college students who may have returned home to unsafe or unaccepting environments. Primary care providers may be the first point of contact for LGBT college students seeking mental health care in their communities until they return to campus. To ensure welcoming environments, health-care providers who are less familiar with the needs of LGBT populations should seek avenues to educate themselves on LGBT issues, such as enrolling in online continuing medical education (CME) modules that focus on LGBT patient populations [15].

Limitations of this study include its nonprobability sampling, selection bias, small sample sizes, and limited generalizability. Our study may be missing LGBT college students who are currently homeless, lacking Internet access, or are not comfortable responding to an LGBT-focused online survey in their homes. In addition, since we leveraged the networks of LGBT college centers and organizations to facilitate data collection, our findings may best reflect the experiences of LGBT college students better affiliated with the LGBT community at their college. Nevertheless, our study is one of few investigations identifying the mental health needs of LGBT college students during the COVID-19 pandemic, which are substantial based on our results.

References

- [1]. Nelson LM, Simard JF, Oluyomi A, et al. US public concerns about the COVID-19 pandemic from results of a survey given via social media. *JAMA Intern Med* 2020;2328:19–21.
- [2]. Oosterhoff B, Palmer CA, Wilson J, Shook N. Adolescents' motivations to engage in social distancing during the COVID-19 pandemic: Associations with mental and social health. *J Adolesc Health* 2020;67:179–85. [PubMed: 32487491]
- [3]. Cohen AK, Hoyt LT, Dull B. A descriptive study of coronavirus disease 2019–related experiences and perspectives of a national sample of college students in spring 2020. *J Adolesc Health* 2020;67:369–75. [PubMed: 32593564]
- [4]. Zhai Y, Du X. Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Res* 2020;288:113003. [PubMed: 32315885]
- [5]. Huckins JF, DaSilva AW, Wang W, et al. Mental health and behavior of college students during the early phases of the COVID-19 pandemic: Longitudinal smartphone and ecological momentary assessment study. *J Med Internet Res* 2020;22:e20185. [PubMed: 32519963]
- [6]. Cao W, Fang Z, Hou G, et al. The psychological impact of the COVID-19 epidemic on college students in China. *Psychiatry Res* 2020;287:112934. [PubMed: 32229390]
- [7]. Gonzales G, Przedworski J, Henning-Smith C. Comparison of health and health risk factors between lesbian, gay, and bisexual adults and heterosexual adults in the United States: Results from the national health interview survey. *JAMA Intern Med* 2016;176:1344–51. [PubMed: 27367843]
- [8]. Feinstein BA, Goldfried MR, Davila J. The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *J Consult Clin Psychol* 2012;80:917–27. [PubMed: 22823860]
- [9]. Meyer IH. Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychol Bull* 2003;129:674–97. [PubMed: 12956539]
- [10]. Fish JN, McInroy LB, Pacey M, et al. “I’m kinda stuck at home with unsupportive parents right now”: LGBTQ youths’ experiences with COVID-19 and the importance of online support. *J Adolesc Health* 2020;67:450–2. [PubMed: 32591304]
- [11]. Brown S COVID-19 sent LGBTQ students back to unsupportive homes. That raises the risk they won’t return. *The Chronicle Higher Education*. 2020. Available at: <https://www.chronicle.com/article/Covid-19-Sent-LGBTQ-Students/248633>. Accessed June 21, 2020.
- [12]. Zahran H, Kobau R, Moriarty D, et al. Self-reported frequent mental distress among adults — United States, 1993–2001. *Morb Mortal Wkly Rep* 2004; 53:963–6.
- [13]. Plummer F, Manea L, Trepel D, McMillan D. Screening for anxiety disorders with the GAD-7 and GAD-2: A systematic review and diagnostic meta-analysis. *Gen Hosp Psychiatry* 2016;39:24–31. [PubMed: 26719105]
- [14]. Lüwe B, Kroenke K, Gräfe K. Detecting and monitoring depression with a two-item questionnaire (PHQ-2). *J Psychosom Res* 2005;58:163–71. [PubMed: 15820844]
- [15]. AMAEdHub. LGBTQ health, diversity & Inclusion online course. Available at: <https://edhub.ama-assn.org/pages/lgbtq-course>. Accessed July 2, 2020.

IMPLICATIONS AND CONTRIBUTION

In response to the COVID-19 pandemic, colleges abruptly closed which may have confined lesbian, gay, bisexual, and transgender (LGBT) students to unaccepting environments. This study documents the mental health needs of LGBT students during the pandemic. Approximately 60% of sampled LGBT students were experiencing psychological distress, anxiety, and/or depression.

Table 1

Descriptive statistics of lesbian, gay, bisexual, and transgender (LGBT) college students, 18–25 years old

	Sample size (n)	Percent (%)
Sexual orientation		
Gay/lesbian	99	20.8
Bisexual	91	19.1
Queer	104	21.8
Pansexual	66	13.8
Asexual	51	10.7
Questioning	33	6.9
Other	33	6.9
Gender identity		
Cisgender man	74	15.5
Cisgender woman	202	42.4
Transgender	43	9.0
Gender nonconforming	120	25.2
Other	38	8.0
Age		
Mean, in years	477	20.7
Race/ethnicity		
White	292	61.2
Black or African American	44	9.2
Hispanic/Latinx	63	13.2
Asian or Pacific Islander	66	13.8
Other	12	2.5
Able to receive mental health care if needed		
Yes	279	58.5
No, because of cost	84	17.6
No, because of stay-at-home orders	61	12.8
No, because of other reasons	53	11.1
Life disrupted by COVID-19		
Not at all or not much	61	12.8
A fair amount	237	49.7
A great deal	179	37.5
Concerned about COVID-19		
Not concerned or moderately concerned	227	47.6
Very or extremely concerned	250	52.4
Participant, family, or friend tested positive for COVID-19		
No	394	82.6
Yes	83	17.4
Immediate family supportive of participant's LGBT identity		
Supportive	177	37.1

	Sample size (n)	Percent (%)
Neither supportive or unsupportive	82	17.2
Unsupportive or family does not know	218	45.7

Source: Online sample of LGBT identified young adults from April 24 to June 5, 2020.

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Table 2

Prevalence and adjusted odds ratios of mental health conditions among lesbian, gay, bisexual, and transgender (LGBT) college students, 18–25 years old

	Frequent mental distress		Anxiety		Depression	
	Prevalence (%)	aOR (95% CI)	Prevalence (%)	aOR (95% CI)	Prevalence (%)	aOR (95% CI)
All sampled LGBT college students	61.0	NA	65.0	NA	60.4	NA
Sexual orientation						
Gay/lesbian	38.4	1.00 [Reference]	51.5	1.00 [Reference]	51.5	1.00 [Reference]
Bisexual	64.8	2.72 (1.38–5.36)*	62.6	1.31 (.68–2.54)	55.0	1.07 (.56–2.06)
Queer	66.4	2.76 (1.42–5.35)*	71.2	1.87 (.96–3.61)	64.4	1.62 (.85–3.10)
Pansexual	71.2	3.05 (1.43–6.49)*	68.2	1.30 (.62–2.74)	68.2	1.63 (.78–3.41)
Asexual	68.6	2.55 (1.12–5.81)*	66.7	1.17 (.52–2.62)	66.7	1.61 (.72–3.59)
Questioning	69.7	2.77 (1.09–7.04)*	78.8	2.73 (1.004–7.42)*	63.6	1.34 (.55–3.26)
Other	60.6	1.68 (.66–4.31)	69.7	1.48 (.58–3.80)	60.6	1.01 (.41–2.48)
Gender identity						
Cisgender man	36.5	1.00 [Reference]	48.7	1.00 [Reference]	47.3	1.00 [Reference]
Cisgender woman	58.4	1.21 (.63–2.33)	62.9	1.30 (.68–2.48)	56.9	1.10 (.58–2.07)
Transgender	79.1	3.41 (1.31–8.86)*	76.7	2.30 (.92–5.76)	74.4	2.31 (.94–5.65)
Gender nonconforming	69.2	1.63 (.79–3.37)	70.0	1.56 (.75–3.21)	65.0	1.25 (.62–2.55)
Other	76.3	2.62 (.96–7.14)	79.0	2.93 (1.05–8.13)*	73.7	2.35 (.89–6.16)
Age						
In years	NA	.92 (.82–1.03)	NA	1.01 (.90–1.13)	NA	.91 (.82–1.01)
Race/ethnicity						
White	64.0	1.00 [Reference]	67.8	1.00 [Reference]	59.9	1.00 [Reference]
Black or African American	61.4	.79 (.37–1.65)	68.2	.87 (.41–1.85)	63.6	1.12 (.55–2.29)
Hispanic/Latinx	57.1	.68 (.36–1.28)	68.3	.91 (.48–1.73)	66.7	1.22 (.65–2.27)
Asian or Pacific Islander	48.5	.44 (.23–.82)*	51.5	.40 (.22–.74)*	51.5	.67 (.37–1.21)
Other	75.0	2.18 (.47–10.18)	41.7	.21 (.06–.81)*	75.0	2.11 (.51–8.72)
Able to receive mental health care if needed						
Yes	55.9	1.00 [Reference]	60.2	1.00 [Reference]	54.8	1.00 [Reference]
No, because of cost	65.5	1.46 (.82–2.58)	70.2	1.54 (.87–2.73)	65.5	1.49 (.86–2.57)

	Frequent mental distress			Anxiety			Depression		
	Prevalence (%)	aOR (95% CI)		Prevalence (%)	aOR (95% CI)		Prevalence (%)	aOR (95% CI)	
No, because of stay-at-home orders	72.1	2.30 (1.17–4.56)*		73.8	1.78 (.91–3.50)		75.4	2.43 (1.24–4.74)*	
No, because of other reasons	67.9	1.38 (.69–2.78)		71.7	1.61 (.79–3.30)		64.2	1.24 (.64–2.41)	
Life disrupted by COVID-19									
Not at all or not much	45.9	1.00 [Reference]		52.5	1.00 [Reference]		52.5	1.00 [Reference]	
A fair amount	56.5	1.46 (.77–2.76)		62.0	1.51 (.81–2.81)		57.4	1.21 (.67–2.23)	
A great deal	72.1	2.37 (1.20–4.66)*		73.2	2.13 (1.09–4.14)*		67.0	1.58 (.83–3.02)	
Concerned about COVID-19									
Not concerned or moderately concerned	53.7	1.00 [Reference]		58.2	1.00 [Reference]		53.7	1.00 [Reference]	
Very or extremely concerned	67.6	1.84 (1.21–2.79)*		71.2	1.77 (1.17–2.69)*		66.4	1.71 (1.15–2.56)*	
Participant, family, or friend tested positive for COVID-19									
No	60.9	1.00 [Reference]		63.5	1.00 [Reference]		58.1	1.00 [Reference]	
Yes	61.5	1.13 (.64–1.99)		72.3	1.71 (.96–3.06)		71.1	1.81 (1.03–3.17)*	
Immediate family supportive of participant's LGBT identity									
Supportive	53.1	1.00 [Reference]		58.2	1.00 [Reference]		54.8	1.00 [Reference]	
Neither supportive or unsupportive	58.5	1.09 (.59–2.00)		68.3	1.39 (.76–2.56)		64.6	1.18 (.65–2.13)	
Unsupportive or family does not know	68.4	1.83 (1.13–2.95)*		69.3	1.58 (.98–2.54)		63.3	1.29 (.82–2.03)	

Source: Online sample of LGBT-identified adults from April 24 to June 5, 2020.

aORs were obtained from multivariable logistic regression models adjusting for all the covariates listed in the table simultaneously. Frequent mental distress is defined as reporting 14 days of “not good” mental health (which includes stress, depression, and problems with emotions) in the past 30 days. Anxiety is defined as scoring three or greater based on the two-item general anxiety disorder (GAD-2) screening instrument. Depression is defined as scoring three or greater using the two-item patient health questionnaire (PHQ-2) screening instrument.

aOR = adjusted odds ratio; CI = confidence interval.

* $p < .05$.