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Adolescent health brief

Mental Healthcare Utilization, Modalities, and Disruptions During Spring 2021 of the COVID-19 Pandemic Among U.S. Adolescents

Celeste Campos-Castillo, Ph.D.^{a,*}, and Linnea I. Laestadius, Ph.D., M.P.P.^b^a Department of Sociology, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin^b Joseph J. Zilber School of Public Health, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin

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 A B S T R A C T

Purpose: The COVID-19 pandemic fomented a mental health crisis among adolescents. The present study contributes a national snapshot of mental healthcare utilization, including disruptions, barriers, and modalities, among U.S. adolescents.

Methods: Logistic regressions analyzing self-reports from a representative sample (N = 532) of 13–17-year-olds recruited from the AmeriSpeak Teen Panel during Spring 2021.

Results: Few demographic characteristics were associated with disruptions. Text-based communication/chat was most prevalent among minoritized racial and ethnic groups. Parental support was positively associated with finding private space for telehealth visits. Black adolescents were less likely to report in-person visits. Among those unable to receive care, Black adolescents preferred in-person visits.

Discussion: Policies enacted to facilitate access to text-based communication/chat should continue to limit disruptions and promote racial equity. Additional efforts should target improving access to in-person visits among Black adolescents. Clinicians should encourage parent/guardian collaboration to facilitate access to private space for telehealth visits.

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 IMPLICATIONS AND
 CONTRIBUTION

Several reports document the mental health crisis among adolescents during the COVID-19 pandemic. The present study contributes a national snapshot of mental healthcare utilization among U.S. adolescents, showing the need to support a broad range of telehealth modalities and improve access to in-person visits for racial equity.

The coronavirus disease (COVID-19) pandemic has fueled a mental health crisis among U.S. adolescents [1], raising concerns about disruptions to mental healthcare. Factors contributing to the crisis, including school closures, structural racism, and death of caregivers, disproportionately impact adolescents from minoritized racial and ethnic groups [1,2]. As the pandemic continues, the cumulative effects of these stressors are intensifying anxiety and depression, particularly among older adolescents [3]. While telehealth modalities more amenable to adolescents (e.g., Apple FaceTime, WhatsApp) became accessible [4], barriers such as

unmet care preferences and privacy concerns risk exacerbating racial and ethnic disparities [5,6]. Moreover, an increased screen time during the pandemic [7] may raise parental/guardian concerns and limit adolescents' telehealth access. Little is known about mental healthcare utilization during the pandemic among U.S. adolescents from their perspective [5,6], including modalities used, disruptions, and the role of parental support. The present study aims to address these gaps to assist policymakers, clinicians, and families in facilitating adolescents' access to care.

Conflicts of interest: The authors have no conflicts of interest to declare.

* Address correspondence to: Celeste Campos-Castillo, Ph.D., University of Wisconsin-Milwaukee, 3210 N. Maryland Ave., Milwaukee, WI 53201.

E-mail address: camposca@uwm.edu (C. Campos-Castillo).

Methods

We conducted virtual cognitive interviews in January 2021 with 10 adolescents to pretest the full survey. The resulting

cross-sectional online survey (Supplement A) was conducted in English from March to May 2021 with 540 (784 invited, 68.9% completion rate) adolescents aged 13–17 years from the National Opinion Research Center's AmeriSpeak Teen Panel. The National Opinion Research Center's institutional review board approved the study. Parents/guardians and their children provided informed consent and assent, respectively.

Respondents self-reported mental healthcare utilization, if that care had been disrupted due to COVID-19, and whether losing care was due to preferring in-person visits. Respondents reporting they did not lose care specified modalities, which were not mutually exclusive: voice call, video call, text-based communication/chat, internet support group, and in-person. Those reporting any of the first four stated whether they were confident about finding a private place for the visit.

Binary logistic regressions determined how demographics (gender, race and ethnicity, age, and annual household income), mental health (score on the 4-item Patient Health Questionnaire [8]), and parental support (factor score of 8-items from the Family Support Inventory [9], Table A1) were associated with the above responses from the 532 respondents without missing data. All analyses used Stata 16.1, weighting data to be nationally representative based on estimates from the Current Population Survey (except for frequency calculation). $p < .05$ was considered statistically significant (two-sided).

Results

Of the 532 respondents (descriptives in Table A2), 42.5% ($n = 226$) identified as mental healthcare users. The only characteristic related to self-reported utilization was 4-item Patient Health Questionnaire scores (Table 1), which was positive (adjusted odds ratio [aOR], 1.17; 95% confidence interval [CI], 1.09–1.25). Of mental healthcare users, 30.1% ($n = 68$) reported being unable to receive mental healthcare during the pandemic, which was unrelated to characteristics (Table 1). Among those who lost care, 30.4% ($n = 21$) preferred in-person visits, which was more likely among Black than White respondents (Table 1, aOR, 7.28; 95% CI, 1.32–22.56).

For those who did not lose care, 52.2% ($n = 118$) reported using any one of the telehealth modalities (Table 2). Black (aOR, 7.85;

95% CI, 1.78–34.51), Latino (aOR, 5.27; 95% CI, 1.33–20.74), and those selecting another race (aOR, 12.18; 95% CI, 2.04–20.74) were more likely than White respondents to use text-based communication/chat. Black respondents were less likely than White respondents to use in-person visits (aOR, 0.17; 95% CI, 0.04–0.75), while female respondents were more likely (aOR, 2.44; 95% CI, 1.01–5.87). Parental support was positively associated with video calls (aOR, 1.55; 95% CI, 1.04–2.30), in-person visits (aOR, 1.69; 95% CI, 1.14–2.49), and confidence about finding a private place for telehealth visits (aOR, 2.80; 95% CI, 1.28–6.15).

Discussion

In this cross-sectional survey of U.S. adolescents, we found little demographic variation in self-reported loss of mental healthcare during the pandemic but modest variation in modality among those with uninterrupted access. Consistent with other reports [10,11], approximately half of mental healthcare users turned to telehealth, with text-based communication/chat most prevalent among minoritized racial and ethnic groups. Given mental healthcare stigma among minoritized racial and ethnic communities [12,13], text-based chat can facilitate privacy when adolescents are concerned about caregiver's presence during consultations [14]. Accordingly, these findings warrant supporting policies that enable access to multiple telehealth modalities (e.g., parity in payment from insurers, alternatives to fee-for-service models) to promote equity [15]. Parental support was associated with video visits and confidence in finding a private space, suggesting clinicians should encourage parent/guardian communication to assist with scheduling and maintaining consistent access [5]. Future studies should compare the efficacy of different modalities for youth mental health and evaluate potential demographic variation. Medicaid has an opportunity to lead in these endeavors, since a large portion of its spending on children encompasses mental health [16].

We found Black adolescents who were less likely to report in-person visits, perhaps because structural racism elevates their risks for contracting SARS-CoV-2 and experiencing severe morbidity and mortality [17–19]. Yet, among respondents unable to receive care, Black adolescents were more likely than their

Table 1
Adjusted odds ratios (95% confidence intervals) for self-reported utilization and loss of mental healthcare

| Characteristic | Odds of being mental healthcare user | Of users, odds of losing care during pandemic | Of those losing care, odds of preferring in-person care |
|--------------------------------|--------------------------------------|---|---|
| Gender | | | |
| Male | 1 (Reference) | 1 (Reference) | 1 (Reference) |
| Female | 1.02 (0.62–1.70) | 0.83 (0.38–1.81) | 0.65 (0.16–2.74) |
| Race | | | |
| White | 1 (Reference) | 1 (Reference) | 1 (Reference) |
| Black | 0.95 (0.44–2.04) | 1.12 (0.34–3.66) | 7.28 (1.32–22.56)* |
| Latino | 1.23 (0.64–2.36) | 0.49 (0.178–1.34) | 0.27 (0.04–1.78) |
| Other ^a | 0.99 (0.43–2.29) | 0.52 (0.13–2.08) | 0.05 (0.00–1.71) |
| Age in years | 0.92 (0.76–1.12) | 1.12 (0.82–1.54) | 1.15 (0.60–2.17) |
| Parental support score | 1.16 (0.81–1.66) | 0.78 (0.44–1.37) | 1.21 (0.56–2.65) |
| Log of annual household income | 0.84 (0.56–1.27) | 0.68 (0.38–1.22) | 1.68 (0.48–5.91) |
| PHQ-4 score | 1.17 (1.09–1.25)*** | 0.97 (0.86–1.08) | 1.19 (0.95–1.50) |
| Sample size | 532 | 226 | 68 |

PHQ, Patient Health Questionnaire.

* $p < .05$.

*** $p < .001$.

^a Other includes respondents selecting Asian, two or more races or ethnicities, and another option.

Table 2

Adjusted odds ratios (95% confidence intervals) for self-reported in-person and telehealth visits for mental healthcare and privacy concerns for telehealth

| Characteristic | In-person | Telehealth | | | | |
|--------------------------------|--------------------|------------------|-------------------|---------------------|------------------------|--|
| | | Voice | Video | Text/Chat | Internet support group | Of telehealth users, confident can find private place for telehealth |
| Gender | | | | | | |
| Male | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) |
| Female | 2.43 (1.01–5.87)* | 1.52 (0.62–3.73) | 1.27 (0.58–2.77) | 0.69 (0.24–2.00) | 0.68 (0.21–2.19) | 2.35 (0.82–6.72) |
| Race and ethnicity | | | | | | |
| White | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) | 1 (Reference) |
| Black | 0.17 (0.04–0.75)* | 2.28 (0.53–9.90) | 0.41 (0.08–2.03) | 7.84 (1.78–34.51)** | 5.23 (0.88–31.04) | 2.70 (0.52–13.88) |
| Latino | 0.44 (0.14–1.33) | 0.85 (0.27–2.72) | 0.99 (0.39–2.50) | 5.27 (1.34–20.74)** | 1.69 (0.31–9.08) | 0.64 (0.16–2.50) |
| Other ^a | 0.82 (0.17–3.99) | 1.58 (0.31–7.99) | 1.93 (0.45–8.21) | 12.18 (2.04–72.63)* | 0.67 (0.07–6.28) | 2.52 (0.34–18.68) |
| Age, years | 1.07 (0.74–1.55) | 1.34 (0.96–1.87) | 1.17 (0.88–1.56) | 0.56 (0.35–0.91)* | 0.83 (0.61–1.14) | 1.32 (0.87–2.01) |
| Parental support, score | 1.69 (1.14–2.49)** | 1.43 (0.94–2.18) | 1.55 (1.04–2.30)* | 0.49 (0.17–1.39) | 0.99 (0.62–1.56) | 2.80 (1.28–6.15)* |
| Log of annual household income | 0.81 (0.37–1.74) | 0.94 (0.44–2.02) | 1.02 (0.57–1.82) | 3.16 (1.41–7.10)** | 0.77 (0.28–2.10) | 1.72 (0.68–4.36) |
| PHQ-4, score | 1.02 (0.91–1.15) | 0.99 (0.86–1.13) | 1.11 (0.99–1.24) | 0.97 (0.85–1.11) | 1.04 (0.87–1.24) | 0.90 (0.75–1.08) |
| Sample size | 226 | 226 | 226 | 226 | 226 | 118 |

PHQ, Patient Health Questionnaire.

p* < .05.*p* < .01.****p* < .001.^a Other includes respondents selecting Asian, two or more races or ethnicities, and another option.

peers to prefer in-person visits, indicating the need to support this access, like adopting policies to mitigate COVID-19 spread and helping caregivers requiring assistance (e.g., childcare, transportation) to facilitate visits. Overall, findings highlight the importance of making multiple modalities accessible to connect adolescents to care.

Study limitations include reliance on self-reports, a cross-sectional design, and a lack of details regarding respondents' clinical diagnoses and the nature of their consultations, which studies examining other countries address [20]. Future studies should use claims data to capture additional details and longitudinal designs to show change, including before and during the pandemic.

Despite these limitations, the present study adds a national snapshot of mental healthcare utilization among U.S. adolescents during the pandemic, noting barriers and facilitators to care. Because the pandemic has fomented a mental health crisis among adolescents, it is critical to provide care in ways that facilitate equity. The policy changes that expanded access to telehealth modalities during the pandemic are expected to reverse [14]. The findings reported here warrant advocacy for continued telehealth access to address racial and ethnic disparities in mental healthcare and in coordinating with caregivers to facilitate access.

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Supplementary Data

Supplementary data related to this article can be found at <http://doi.org/10.1016/j.jadohealth.2022.06.012>.

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