Breaking Down Barriers: Young Adult Interest and Use of Telehealth for Behavioral Health Services

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ABSTRACT

OBJECTIVES: Use of telehealth for behavioral health services has increased since the start of the COVID-19 pandemic. This study examines which young adults in Rhode Island were using these telehealth services and are interested in its use.

METHODS: This cross-sectional web-based survey was administered in the midst of the COVID-19 pandemic, from May to October 2020.

RESULTS: Results suggest sexual and gender minorities and those with low social status were more likely to access these services, highlighting its effectiveness at reaching disadvantaged young adults. Those with mental health symptoms were more likely to utilize telehealth, but those with substance use were not.

CONCLUSIONS: There is a missed opportunity to target substance use telehealth services to this willing and interested population. Continued coverage and use of telehealth for mental health and substance use services is essential in breaking down barriers to care for young adults in Rhode Island.

KEYWORDS: telehealth, young adult, behavioral health, Rhode Island

INTRODUCTION

Nationwide shutdowns and rampant viral cases due to the COVID-19 pandemic have prevented many people from receiving in-person healthcare.[1] The measures taken to decrease the spread of the virus, such as self-isolation and quarantine, have taken a devastating toll on psychological health, increasing the prevalence of depression, anxiety, and substance use.[2] When patients need to connect with healthcare professionals, but in-office visits are not feasible, telehealth becomes a necessary means to increase access to care. Telehealth not only eliminates the need for transportation, but it minimizes the time needed by patients to receive care and advances effective coordination of care, overcoming geographical barriers and matching patients with providers fit to care for their unique needs.[3] The term "telehealth" encompasses clinical and non-clinical remote healthcare delivery and is used for both physical and behavioral health.[4] The focus of this study is on the use of telehealth specifically for behavioral health services.

Before the pandemic there were multiple barriers preventing both healthcare professionals and patients from providing and receiving remote medical care, which included confidentiality issues, difficulty establishing provider-patient relationships, prescriptions that require a face-to-face visit, and lack of substantial insurance reimbursements.[5] These barriers explain why only 17% of mental health providers used telehealth on a daily basis before the COVID-19 pandemic.[6] The investment of over $450 million dollars by the Federal Communications Commission COVID-19 Telehealth Program worked to overcome these barriers by providing fully functional platforms to connect professionals and patients for healthcare services.[7] Combined with changes to reimbursement policies, this funding has contributed to increased telehealth utilization in the United States, with 40% of mental health providers using this technology on a daily basis and serving the majority of their caseload remotely during the COVID-19 pandemic in July 2020, more than double the prevalence of telehealth use compared to before the COVID-19 pandemic.[6,7]

Although telehealth services have been around since 2004, usage has significantly increased by 2020 when travel restrictions were established due to the COVID-19 pandemic.[8,9] Blue Cross & Blue Shield of Rhode Island (BCBSRI), one of the largest providers in the state, has been covering telehealth services since 2014.[4] In addition to private payers, Medicaid, which covers one third of Rhode Island's population, began covering fee-for-service and managed care telehealth services for both physical and behavioral health in March 2020.[10] Offering telehealth services decreases the cost of care to the patient in terms of time and money by allowing them to receive services from wherever they are while covered by all insurance providers in Rhode Island.[4] The Office of the Health Insurance Commissioner (OHIC) made temporary telemedicine health benefit changes on April 15, 2020, requiring all Rhode Island insurance providers to cover telehealth services. As of May 8, 2020, patients are being charged copayments, but are not being charged the full amount of service with reduced out of pocket payments.[11]

There is an abundance of research on telemedicine, but there is a lack of research on the utilization of telehealth services specifically for behavioral health treatment, as well

as telehealth use among the young adult population since the COVID-19 pandemic.[12] Young adults exhibit some of the riskiest behaviors in terms of substance use and high rates of mental illness. In 2019, 29.21% of Rhode Island young adults aged 18–25 experienced any mental illness in the past year and 18.06% experienced a substance use disorder.[13]

In this study we examined which young adults in Rhode Island were using these telehealth services and reported being interested in using telehealth for behavioral health services, as well as how young adults perceive the quality of behavioral health telehealth services as compared to traditional in-person healthcare. Understanding the reach, interest, and satisfaction with behavioral telehealth services among the young adult population can allow for more targeted telehealth services and inform provider practices and health insurance coverage policies based on the unique needs of this population.

METHODS

Sample

The Rhode Island Young Adult Survey (RIYAS) was a web-based survey administered from May through October 2020. Eligible participants resided in Rhode Island for at least part of the year, were aged 18–25, and spoke English or Spanish. Recruitment was via paid Instagram ads geo-referenced to Rhode Island and limited to 18–25-year-olds. Recruitment was also supplemented by posts to Facebook community groups and email to three institutions of higher education in the state. This survey collected information about mental health, substance use behavior, and sociodemographics. Surveys took 15 minutes on average and respondents received $10 electronic Amazon gift cards. Of the 546 completed surveys, 528 (97%) provided valid race/ethnicity data and were included in the analytic sample. This study was approved by the Johnson & Wales Institutional Review Board.

Measures

Telehealth Measures. Past month use of telehealth for behavioral health issues was assessed by "yes" or "no" response to the survey question, "Telehealth refers to health services offered electronically, usually by phone or web-based software. During the past 4 weeks, have you had a telehealth appointment related to substance use or mental health?" Among those who reported past month use of telehealth, they were asked about telehealth service quality, "How would you rate the quality of these substance use or mental health telehealth services relative to traditional in-person health services?" Responses were categorized as "same or better" versus "worse." Interest in using telehealth services was assessed by "yes" or "no" response among all respondents to the question, "If telehealth services were easily accessible, would you be interested in accessing these services for substance use or mental health?"

Mental Health Measures. Past week depressive symptoms were assessed via the validated Center for Epidemiologic Studies Short Depression Scale, a continuous score based on 10 items with responses on a 4-point Likert scale.[14] A cut-off score of 10 or more was considered depressive disorder.[15] Anxiety symptoms were assessed via the validated Generalized Anxiety Disorder-7, a screening tool for past two-week anxiety among the general adult population.[16] A continuous score was generated based on 7 items with responses on a 4-point Likert scale. A cut-off score of 10 or higher was used to identify those with likely anxiety disorder.[17] Suicide ideation was measured by "yes" or "no" response to the survey question, "During the past 12 months, did you ever seriously consider attempting suicide?"

Substance Use Measures. Lifetime prevalence of over-the-counter (OTC) drug misuse, prescription drug abuse, and heroin use were assessed by the following: (1) "Have you ever used over-the-counter medication for non-medical reasons?" (2) "Have you ever used prescription drugs not prescribed to you?" and (3) "Have you ever used heroin (junk, h, tar, boy)?" Harmful drinking was assessed by the validated AUDIT score generated from 10 items.[18] Scores of 8 or more were considered harmful drinking.[19]

Sociodemographic Measures. Sexual and gender identity was categorized as heterosexual male, heterosexual female, or sexual and gender minority (SGM). SGM includes anyone who identifies as neither male nor female or not as heterosexual. Race/ethnicity was dichotomized as white, non-Hispanic versus non-white or Hispanic. Age was continuous. Social status was assessed via the MacArthur Scale of Subjective Social Status, which assesses perceived social status relative to others in their community, where 1 indicates "worst off" and 10 indicates "best off".[20]

Statistical Analysis

Descriptive and bivariate statistics were assessed by telehealth use (**Table 1**; **Figure 1**) and interest in telehealth (**Table 2**; **Figure 2**). Bivariate tests included chi-square tests for categorical variables and t-tests for continuous variables. Descriptive statistics were used to report telehealth service quality. Adjusted odds of using telehealth were calculated using multivariable logistic regression for each mental health measure and each substance use measure while controlling for sociodemographic variables (**Figure 3**). Statistical significance was assumed at a threshold of $p<0.05$ and all analyses were conducted using Stata version 15.[21]

RESULTS

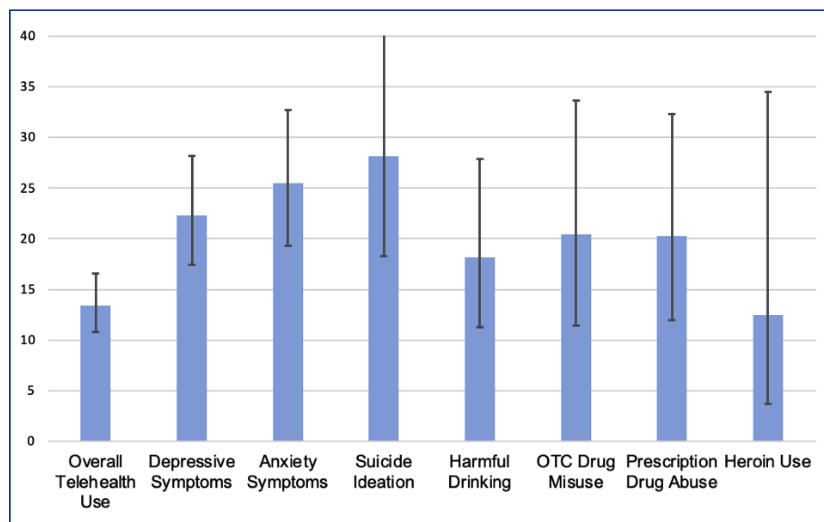
The analytic sample (N=528) was predominantly white, non-Hispanic (68.4%) and heterosexual female (53.0%), though a large portion of SGMs were represented (26.9%). Among those who used telehealth for substance use or mental health in the past month (13.4%), 73.2% reported that

Table 1. Prevalence of Rhode Island Young Adult Telehealth Use by Sociodemographics

	No Telehealth Use		Telehealth Use		P-values
	N	%	N	%	
Sexual and Gender Identity					**<0.001**
Heterosexual Male	101	95.3	5	4.7	
Heterosexual Female	253	90.4	27	9.6	
SGM	103	72.5	39	27.5	
Race/Ethnicity					0.134
White, non-Hispanic	307	85	54	15	
Non-White or Hispanic	150	89.8	17	10.2	
Mean Age (95% CI)	20.5	20.3, 20.7	20.8	20.3, 21.4	0.213
Mean Social Status (95% CI)	6.37	6.22, 6.52	5.89	5.47, 6.3	**0.025**

SGM = Sexual and gender minorities

Figure 1. Prevalence of Young Adult Telehealth Use by Mental Health and Substance Use



OTC = Over-the-counter

telehealth service quality was comparable to or better than traditional in-person services. Use of telehealth for substance use or mental health in the past month was particularly common among SGMs, making up 54.9% of those who reported past month telehealth use. While 13.4% of young adults reported use of behavioral telehealth services in the past month, 46.0% reported interest in accessing those same services. Those with depressive symptoms, anxiety symptoms, and suicide ideation were all more likely to utilize telehealth services. However, those who engaged in harmful drinking, misuse of over-the-counter drugs, abuse of prescription drugs, or any heroin use were not more likely to use telehealth services (**Table 1**; **Figure 1**).

Bivariate results for telehealth use were consistent when assessing interest in using telehealth services for substance use or mental health, except for abuse of prescription drugs. Specifically, while those who abused prescription drugs were not more likely to use telehealth (p=0.086), they were more likely to be interested in telehealth use (p=0.011) (**Table 2**; **Figure 2**). Multivariable logistic regression models controlling for sociodemographics showed that those with depressive symptoms and anxiety symptoms had greater odds of using telehealth, while those with suicide ideation, harmful drinking, over-the-counter drug misuse, abuse of prescription drugs, or any heroin use did not (**Figure 3**).

DISCUSSION

The purpose of this study was to explore the prevalence and interest in using telehealth for mental health and substance use services among young adults in Rhode Island. Sexual and gender minorities and those with lower social status were more interested in and more likely to use telehealth for mental health and substance use services. Young adults who suffer from mental health symptoms were at higher odds of using telehealth services than those who suffer from substance misuse. Interest in telehealth was highly prevalent and interest was more likely among those with prescription drug abuse even though they were not more likely to use telehealth. Young adults who utilized behavioral telehealth in the past month were overwhelmingly satisfied with the services.

Telehealth to Achieve Health Equity

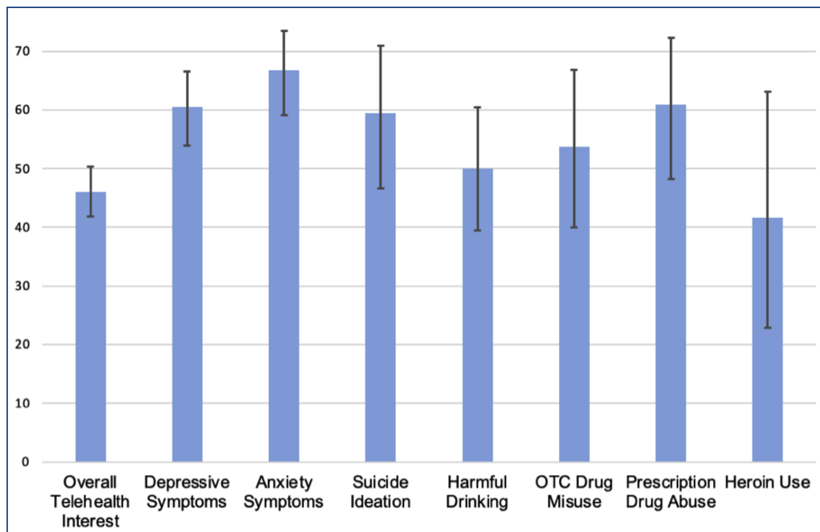
While disadvantaged groups such as sexual and gender minorities and people with low social status are less likely to access in-person care, this study showed that these young adults were more likely to seek care through telehealth services.[22,23] Telehealth services allow these clients to feel more comfortable than in traditional, in-person setting.[24] This includes disadvantaged patients' ability to access providers with culturally competent care in regards to culture, race/ethnicity, gender, and sexual orientation. Lower social status patients are also able to limit time out of work and need for childcare and caregiving responsibilities which would be necessary for in-person care.[3] Existing literature shows that patients are very satisfied with their telehealth experience and that one third of patients prefer telehealth over traditional, in-person services.[25] While it is important to note that those in poverty and racial/ethnic minorities have lower rates of smartphone ownership, home broadband internet access, and digital literacy,[3] telehealth for disadvantaged young adults still helps to overcome traditional barriers to care and moves toward achieving equity in access.

Table 2. Prevalence of Rhode Island Young Adult Telehealth Interest by Sociodemographic

	No Telehealth Interest		Telehealth Interest		P-values
	N	%	N	%	
Sexual and Gender Identity					<0.001
Heterosexual Male	72	67.9	34	32.1	
Heterosexual Female	160	57.1	120	42.9	
SGM	53	37.3	89	62.7	
Race/Ethnicity					0.362
White, non-Hispanic	190	52.6	171	47.4	
Non-White or Hispanic	95	56.9	72	43.1	
Mean Age (95% CI)	20.4	20.1, 20.7	20.7	20.4, 21.0	0.096
Mean Social Status (95% CI)	6.5	6.29, 6.71	6.08	5.89, 6.27	**<0.001**

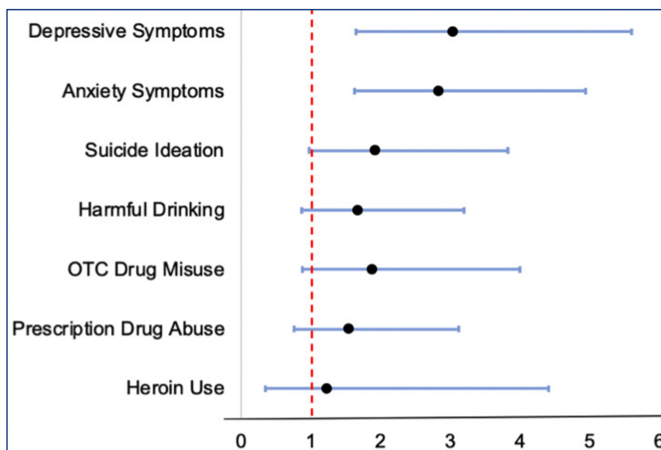
SGM = Sexual and gender minorities

Figure 2. Prevalence of Young Adult Telehealth Interest by Mental Health and Substance Use



OTC = Over-the-counter

Figure 3. Adjusted Odds of Using Telehealth among Rhode Island Young Adults



*AORs adjusted for sexual and gender identity, race/ethnicity, social status, and age

A Missed Opportunity: Substance Use Telehealth

Telehealth is an effective treatment delivery method for substance use disorder (SUD).[26,27] Patients with SUD who use telehealth for their treatment report that they were highly satisfied with their experience and that it is comparable to traditional, in-person services.[27] Studies show that delivering SUD treatment via telehealth mitigated historical barriers to care such as transportation, thus increasing access to care and treatment retention.[28] Our findings show that young adults who misuse substances were willing and interested in using telehealth services for treatment but the prevalence of use among this population does not reflect their interest. There was a missed opportunity for young adults with SUD in terms of increasing access and retention to care. During the COVID-19 pandemic, temporary coverage and guidance for prescribing controlled medications, such as buprenorphine, via telehealth were established in Rhode Island.[11,28] Making these changes permanent and educating providers on the policies regarding prescriptions of buprenorphine and methadone via telehealth can increase the retention and effectiveness of SUD treatment. In addition to educating providers, implementing supportive resources for young adults with SUD can improve the overall treatment of SUD. Supportive resources for SUD telehealth treatment can include mobile crisis support, telehealth case management and psychotherapy.[29]

Limitations

This study is not without limitations. This is a convenience sample of young adults in Rhode Island, was disproportionately female, and is likely not representative of the young adult population. Those with the most severe mental health and substance abuse symptoms were probably less likely to respond to this voluntary web-based survey. The self-reported nature of the survey may have led to under-reporting of undesirable behaviors such as engaging in substance misuse. Despite these limitations, this study offers novel insight into the use and interest of behavioral telehealth among young adults in Rhode Island.

Recommendations

The use of telehealth for mental health and substance use services is vital to decreasing barriers to care for disadvantaged populations. Disadvantaged populations can be reached by continuing telehealth coverage for individuals

enrolled in Medicaid, since Medicaid covers about one third of the Rhode Island population.[10,30] BCBSRI has made strides in increasing telehealth accessibility by keeping cost-sharing low and only charging copays, which should be replicated by all insurance providers.[4] Implementing provider incentives can increase the number of prescribers who can treat SUDs via telehealth by equipping offices with telehealth compatible technology.[31,32] There is no difference in coverage for mental health and substance use telehealth services; however, there are differences in utilization between the two groups. Further studies on the utilization and effectiveness of telehealth in comparison to in-person traditional mental health and substance use services is needed.

CONCLUSIONS

The prevalence and interest in telehealth use for mental health and substance use services is high among young adults in Rhode Island, especially in low social status and sexual and gender minority groups. Young adults with mental health symptoms were more likely to use telehealth services than those with substance use disorder, showing a missed opportunity to engage with this interested and willing population. Implementing policies and resources to support young adults with SUD via telehealth is crucial to breaking down barriers to care. Expanding coverage and increasing the use of behavioral telehealth is a vital step in making care more feasible and accessible to disadvantaged populations.

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