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COMMENTARY

Lessons Learned: Pediatric Telemental Health in a Rural Medical Center in the Age of SARS-CoV-2

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Approximately 20% of the US population resides in rural areas.[1] Equity of access to mental health care services in these locations is often compromised by geography, distance to care providers, socioeconomic status, lack of trust in the mental health care system, and a shortage of mental health providers.[2] Primary care clinicians manage a large proportion of mental health, especially in rural areas.[3] Children in rural areas have been reported to have a higher prevalence of mental health challenges and lower probability of receiving needed mental health care compared to urban residents.[4] Telemental health services have been considered as a means to bridge this gap but are not fully optimized in primary care.

In March 2020, due to the SARS-CoV-2 pandemic, social distancing guidelines were encouraged to mitigate virus spread. This created an urgent need to conduct a majority of pediatric visits remotely. We anticipated an increased need for mental health services during this outbreak. Children's reactions to prior disasters have included depression, interpersonal issues, post-traumatic stress disorder (PTSD), and academic difficulties. The necessary social isolation within infectious disease disasters is also thought to negatively affect mental health.[5,6] The General Ambulatory Pediatric (GAP) clinic at 1 of 5 pediatric locations within our rural academic tertiary care center serves 18,000 children in the community and built an infrastructure to use teleconsultations for eligible mental health visits. The GAP clinic consists of 13 general pediatric clinicians and 1 behavioral health clinician. Despite guidelines from the American Telemedicine Association,[7] the transition to telemental health was not seamless, especially as it occurred in the midst of a disease outbreak unlike the world has seen in modern times. In February, the month prior to widespread social distancing guidelines, GAP had no telehealth visits and by April, the percentage had increased to 82% of the visits (n = 795). To evaluate the success of our telehealth program, we held several discussions with our group to better understand the attitudes, constraints, and practices around provision of mental health. The 3 main themes that emerged in these discussions were concerns about lack of patient privacy, inadequate infrastructure, and a lack of widely distributed, specific, and standardized telemental health protocols. This commentary shares lessons from our experience and advocates for improved infrastructure for telemedicine in rural areas, and for achieving better provider comfort through widespread and standardized guidelines for the provision of telemental health.

Need to Protect Patient Privacy

Patient privacy was a major concern raised by our group. During visits, providers seeing adolescents for mental health issues could not guarantee the level of privacy that patients had access to in their homes. Prior to the pandemic, mental health visits often involved screening tools to evaluate depression, anxiety, substance use, and

suicidal ideation. Assessing such sensitive subject matter through telehealth where there is uncertainty about patient privacy was concerning. A secure method of distribution of these screening tools remained a point of contention as completion of these surveys during visits may be wasted time and completion prior to visits with parental oversight may compromise patient privacy. Not only did this compromise HIPAA standards we were accustomed to, but there were potential dangers to compromising the private health information of an adolescent who may face consequences from guardians. Even if screening tools are sent out, processes in terms of who is to review these surveys, when they need to be reviewed, and next steps for time-sensitive issues are unclear. Further compromise of HIPAA standards came from technological challenges of the telehealth platform malfunctioning. This was met with our providers having the choice to connect via telephone or to use non-HIPAA compliant formats, such as Facetime, in order to have video capability.

Need to Strengthen Infrastructure and Guidelines for Pediatric Telemental Health

Another major area of concern was inadequate infrastructure for the provision of optimal telemental health care for our population. This included technological constraints and inequitable access of resources. As mentioned, providers became accustomed to confronting technological difficulty on a daily basis. During visits, technology sometimes failed from patients struggling with the setup, poor connections due to lack of access to broadband Internet, cell phone usage in locations without WiFi, and an overburdened telehealth platform, among others. While a telehealth helpline was made available, solutions to the problem were often not effectively found within the 30 minutes of allotted appointment time. Other telehealth challenges that compromised care and rapport included frozen video, poor audio, and inability to read nonverbal cues. We also identified inequity in access to telemedicine in our population. Such access implies a certain level of wealth and education that some of our population most at risk for a mental health issue do not have.

Finally, we noted provider stresses from a lack of standardized, specific, and widespread guidelines for usage of this platform for mental health care. For example, our group expressed concerns that calls alerting us of mental health issues had dropped. We felt a blindness as to the degree of increasing burden of mental health problems in the community at the start of the pandemic. As a result, several providers started proactively reaching out to families that they considered higher risk for mental health challenges. However, there remained a lack of standard practice or group consensus that left providers making their own individual decisions as to how to handle their panel of patients. The pandemic does not halt acute mental health crises, and although providers felt there may be less reports of mental health emergencies, when encountered they faced uncertainty in best practices of getting acute mental health patients into emergent care without fear of loss to follow-up. In an already overwhelmed emergency department in a pandemic, ensuring safety and follow-up was a concern.

Future Directions

From our experience, we emphasize that for rural pediatric mental telehealth services to be successful and sustainable, infrastructure for carrying out these visits must be improved. Although telemental health's uptake drastically increased due to dire need during the time of SARS-CoV-2, it may not be the preferred modality by providers if issues of workflow, privacy, and access are not addressed. Telehealth has the potential to increase much needed access to pediatric mental health care, especially in rural areas.

There is a need for establishing improved infrastructure that facilitates consistent and uninterrupted teleconferencing encounters for rural populations. This includes investing in broadband Internet, working on equitable access to telehealth equipment, and improved security features in available videoconferencing applications. Patient privacy continues to be one of the most consistently recognized barriers to provision of telemental health services to adolescents and we advocate for a centralized policy to carry out these visits in a secure manner. Along with provision of user-friendly technology, telemental health training programs and widespread guidelines need to be established to help primary care providers incorporate best practices for all patients.

Post-pandemic, providers see telehealth as a tool for follow-up visits and as a general augment to in-person visits. It is not viewed as "one size fits all"—many point to its inequities as the reason they would feel wholly uncomfortable for it to become a standard in delivering mental health care. As is, it is unlikely that telemental health services in primary care will be sustained at high rates post-pandemic. This may ultimately come at the cost of continued inequities in access to mental health, especially in rural areas.

Lessons Learned

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