### Telepsychiatry in Underserved Populations

**Challenges of Child and Adolescent Psychiatric Care During the Pandemic and Beyond**

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#### Introduction

Telepsychiatry has been growing in popularity over the past decade. There is particular hope that telepsychiatry will provide a means of delivering high quality mental healthcare to communities with limited resources.1 Within child and adolescent psychiatry, studies have suggested that telepsychiatry provides equal quality of care as face-to-face encounters.2 The COVID-19 pandemic has provided an abrupt, unanticipated expansion of telehealth, and this unplanned experience has provided some insights in the challenges of telepsychiatry in underserved populations.

The impediments include lack of access to high quality internet, limitations in available technology, and insufficient private space for sessions. Without addressing these social inequalities in low-income urban communities, telehealth may not be an acceptable alternative to face-to-face encounters.

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#### Available Technology

The availability of broadband internet has little impact if the patient does not have a device to stream video on. Approximately 12% of households in NYC have no home computing device of any kind such as a computer, tablet, or smartphone, and 7% of households report only having access to a smartphone to meet their online needs.3 Children are even less likely to have a person device and so often rely on a parents’ smartphone for telehealth sessions. This can lead to the jarring experience of having a session abruptly halted by an incoming phone call that cannot be ignored, or a shortened session when there are competing demands on time with a shared device. Even under ideal circumstances, a smartphone screen is small, and the video/sound quality may be poor, creating a substandard interface of mental healthcare delivery.

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#### Limitations and Future Directions

There is currently little research into the use of telemedicine in low-income urban communities. One of the foundational studies supporting child and adolescent psychiatric telehealth was conducted in a clinical setting with adequate technology and staff able to help children step-by-step with the encounter.2 The APA supports the effectiveness of telehealth for children based on a study using a 90% white population from rural Washington and Oregon and provided high bandwidth internet.2 Our experience in the Bronx has caused us to question whether these findings are generalizable.

Further investigation of telehealth in low-income, urban communities is needed before drawing conclusions on the effectiveness of telehealth services for this population. It is essential to consider and address barriers to care before widespread implementation of telepsychiatry as an alternative to in-person care. While telehealth may afford equal care to some, it would be inappropriate to assume that telehealth affords equal care to all.

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#### Internet Quality

Many children and adolescents of low-income lack home internet access completely, or, if they do have internet service, the quality is low. In New York City (NYC) as a whole, 31% of households lack a home broadband subscription. This number is even higher in low-income households with 56% of the lowest income households in NYC lacking broadband. This discrepancy is unevenly distributed across race and ethnicity. Approximately one third of Black and Hispanic families lack broadband compared to 21% of White families. A high-quality internet service is needed to ensure an uninterrupted video visit. Without broadband, treatment sessions are impacted by frozen video, dropped calls, and poor sound. Without any internet, patients are forced use cellular data with risk for treatment-limiting monetary consequences when data plans are exceeded.

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#### Private Space

Another important requirement for effective telehealth is a private space to maintain confidentiality. In many urban, low-income communities such as the Bronx, overcrowding severely limits the availability of private space. Percentage of households in NYC considered overcrowded, defined as a household containing more than one person per room, rose to 8.8 percent in 2013 (compared to 7.6 percent in 2005). The largest proportion of crowded dwellings observed in New York City is in the Bronx, where 12.4 percent of all dwelling units were crowded in 2013, up from 11.1 percent in 2005.4,5 Performing psychiatric telehealth in such homes presents a meaningful challenge. We have found that children and adolescents feel less comfortable speaking about personal difficulties when other members of the household are present in the room. This has a particular impact on the ability of providers to ask sensitive questions, such as those concerning safety and substance use.

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