Special Article

Telepsychiatry & Mental Health of American Indian & Alaska Native Youth: Program, Cultural, & Curricular Considerations for Psychiatric-Mental Health Advanced Practice Registered Nurses

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Abstract

Introduction: COVID-19 has increased the use of telehealth in healthcare. The World Health Organization and the Health Resources and Services Administration have both acknowledged the value of telemedicine in improving access to care for vulnerable populations, including rural youth. Telepsychiatry may be especially beneficial for the three million Native American youth who live in isolated areas. However, due to geography, a scarcity of providers, and cultural stigma, they do not have easy access to primary and mental health care.

Aim: The purpose of this paper is to investigate the potential benefits of telepsychiatry for Native American youth living in rural and isolated areas who have limited access to primary and mental health care due to geography, provider shortages, and cultural stigma. In particular, the role of psychiatric-mental health nurse practitioners is investigated.

Results: Telepsychiatry via mobile devices is a viable intervention for geographically isolated Native youth with limited access to computers and stable Internet connectivity. Telepsychiatry research outcomes emphasize the potential for improved mental health outcomes among Native American youth and a clear role for psychiatric-mental health nurse practitioners.

Conclusion: By engaging in telepsychiatry with Native American populations, psychiatric-mental health nurse practitioners have the opportunity to fill a current void. For the successful implementation of telepsychiatry to address mental health disparities among Native American youth, these practitioners would require training and support.

Keywords: Telepsychiatry, mental health, American Indian, Alaska Native, nurse practitioner, nurse

Introduction

Telehealth has emerged as a transformative healthcare modality during the SARS-CoV-2 (COVID-19) pandemic. Guenther et al. (2021) define telehealth as “synchronous, or real-time care delivery, through videoconferencing or telephone, and asynchronous, which uses store-and-forward technologies to transmit images and patient information securely, remote patient monitoring, and mHealth (mobile health)” (p. 322). The World Health Organization (WHO) and the Health Resources Service Administration (HRSA) have both recognized telehealth, or telemedicine, as a means to increase access to care for vulnerable populations (Johnson et al., 2021).

Telemental health, or telepsychiatry, refers to the “use of telemedicine to provide mental health assessment and treatment at a distance” (Hilty et al., 2013). Telepsychiatry may include evaluations, therapy, education, and medication management (Duncan et al., 2020). Clients may connect with healthcare providers through their personal computers, smartphones, and tablets. Telepsychiatry is most often utilized with adult populations; however, its benefits to pediatric psychiatric populations is increasingly noted (Benavides-Vaello, Strode, & Sheeran, 2013). For rural youth, like the three million Native American youth living in rural, isolated locations, telepsychiatry may be of particular benefit. American Indian/Alaska Natives (AI/AN) have
disproportionately higher rates of mental illness, including substance use disorders, post-traumatic stress disorder, suicide, conduct disorders, and attachment disorders (Census Bureau, 2015; Heart et al., 2011; Office of Mental Health, 2017). However, they lack ready access to primary and mental health services due to geography, limited providers, and cultural stigma.

This paper begins with a snapshot of health disparities among Native populations, particularly youth, in the United States. Then, the role of telepsychiatry to meet the mental health needs of Native American youth is discussed. In contrast to school- and library-based telepsychiatry, telepsychiatry via mobile devices is offered as a tenable intervention for geographically-isolated Native youth who have limited access to computers and stable Internet connectivity. A brief discussion of the research-based outcomes from telepsychiatry is included. The paper concludes with how psychiatric mental health nurse practitioners may fill the current void by engaging in telepsychiatry with Native American populations and the requisite training they would require to be successful.

**Mental Health Disparities among AI/ANs**

Over the past several decades, terminology used to refer to indigenous peoples in the Americas has changed often. Terms like Indian, Native American, Inuit, Eskimo, American Indian, among others, are ubiquitous and confuse well-intentioned readers at times. For this reason, we offer the definition of Indian (American Indian/Alaska Native) as defined by Section 4 of the Indian Health Care Improvement Act (IHCIA, 25 U.S.C. §1603) and the Indian Self Determination and Education Assistance Act (ISDEAA, 25 U.S.C. §450b):

any person who is a member of an Indian tribe, as defined in subsection (d) hereof, except that, for the purpose of sections 102 and 103, such terms shall mean any individual who (A), irrespective of whether he or she lives on or near a reservation, is a member of a tribe, band, or other organized group of Indians, including those tribes, bands, or groups terminated since 1940 and those recognized now or in the future by the State in which they reside, or who is a descendant, in the first or second degree, of any such member, or (B) is an Eskimo or Aleut or other Alaska Native, or (C) is considered by the Secretary of the Interior to be an Indian for any purpose, or (D) is determined to be an Indian under regulations promulgated by the Secretary....

The above definition vaguely reminds us of the history of oppression and termination experienced by AI/NA people in the United States. Their need for identification and protection remains paramount in efforts to counter centuries of colonial cultural eflacement. These groups’ struggles are not limited to cultural survival, but also include struggles to attain basic standards of living for self-actualization. For example, almost 30% of Native Americans live in poverty, or twice the national poverty rate (Austin, 2013; United State Census Bureau, 2017).

When compared to other American teens, Native youth experience significant and persistent health disparities (Gone & Trimble, 2012). AI/AN youth have higher teen birth rates (Hamilton et al., 2009), four times the likelihood of being diagnosed with chlamydia (CDC, 2008), and higher rates of nicotine, alcohol, and illicit drug use (National Survey on Drug Use and Health, 2007; Whitesell et al., 2012). AI/AN males and females between 15-24 die at two and five times the rate as White peers, respectively (CDC, 2021). For AI/AN teens, violence (e.g., homicide), suicide, and unintentional injuries account for 75 percent of their causes of death (U.S. Surgeon General, 2001).

AI/ANs also have a high prevalence of behavioral/mental health problems (Bagalman & Heisler, 2016). In comparison to 18% of the general population, more than 20% of AI/ANs reported mental illness (Whitesell et al., 2012). AI/AN youth have the highest rate of depression among any ethnic group. Suicide is among the leading causes of death for AI/AN youth. Of particular concern, the rate of completed suicides among AI/AN adolescent females is four times that of their White peers (SAMHSA, 2014). Suicide is the second cause of death for AI/ANs between 10-34 years old (CDC, 2021).

The aforementioned health problems are attributed not only to poverty and dissolution of cultural and social capital, but also to discrimination within healthcare and education due to misunderstood cultural differences (HHS, 2016). For example, many Native peoples do not distinguish physical and psychological concerns. Therefore, they may not feel that their ailments can be addressed by
Western medicine. Being isolated from tribal lands, where most healthcare clinics run by the government’s Indian Health Service are typically located, limits their access to services. Further, 15% of AI/ANs do not have insurance or rely on public coverage (40%), and limited funds for travel further dissuade AI/ANs from seeking treatment (HHS Office of Minority Health, 2019). For these reasons, AI/AN youth tend to seek assistance from spiritual/traditional healers.

**Telepsychiatry for Isolated AI/AN**

Telepsychiatry appears to offer a promising means to address the mental health needs of rural populations, like AI/AN youth. Behavioral health professionals can be located anywhere, yet AI/AN populations in remote areas can still receive equivalent services (Human & Wasem, 1991; Shore et al., 2007). In fact, technology-based healthcare interventions with Native American tribes have historical precedent. In the 1970s, health stations with minimally trained staff connected Sioux Indians with healthcare providers via video equipment (Rincon, 2019). In 2008, the Indian Health Service established the Tele-Behavioral Health Center of Excellent (TBHCE). Synchronous televideo appointments were offered through dedicated bandwidth connections at tribal health care facilities on reservations (Hays et al., 2014). More recently, estimates show that AI/ANs utilizing telebehavioral health programs through the Indian Health Service in 2013 saved over $300,000 in travel and 16,450 hours of missed work or school (TBHCE, n.d.).

Unfortunately, there are barriers to implementing technology-based interventions with Native American populations in many cases. For example, Parkhurst et al. (2015) noted that there is a widespread lack of physical infrastructure on Native American reservations. Further, Native American populations tend to have poor digital literacy. Only 68% of native American household's report having a computer (CPS, 2012) and just more than half have high-speed Internet (NTIA, 2014).

**Schools & Libraries**

Schools and libraries on Native American lands offer the most numerous, stable, and common means to access the Internet for communities. While these locations are accessible to the public, and visited quite often by pediatric populations, each has its own limitations when considering telemental health. First, public schools and Native Americans, in particular, have a strained historical relationship. Many Native American children were forced to attend government-operated boarding schools where they were assimilated into White culture. Many native Americans still view public schools as a foreign, outside presence that overlooks their culture, language, and history of oppression.

Second, connectivity and availability outside normal operating hours further limit tribal access (Jorgensen et al., 2014), a real concern given the large distances one may have to travel. The technology available at schools and public libraries are still not sufficient to cover the needs of the public currently. Reassigning some of these limited technologies to yet another service may not be possible.

Third, both schools and libraries further limit potential patient use due to mistrust and community disapproval (Jensen & Mendenhall, 2018). Situating mental health services at public locations adds to concerns over “public surveillance.” Shame associated with seeking outside assistance, coupled with embarrassment over mental health struggles, may run counter to the culture of self-sufficiency and self-preservation among tribes (Cremers et al., 2014; Franz et al., 2010; Smalley & Warren, 2012). While such issues may be tampered in more populous environments, reservations in tribal communities tend to be less populated and more insular. Individuals know one another and one another's families, for better or worse. Individuals who may use technology dedicated to health services, particularly during devoted times with a psychiatric healthcare provider, in schools or libraries, may be judged by other residents.

**Mobile Devices**

Mobile devices, such as smartphones, may offer an alternative to location-based technologies. Parkhurst et al. (2015) found that 86% of Native Americans are cell phone users. Rushing and Stephens (2011) also note that 75% of Native American youth research health information via cell phones, including mental health topics such as substance use, depression, anxiety, and suicide. Over 80% of Native youth in the Pacific Northwest own a cell phone; 91% have used a cell phone.
(Rushing & Stephens, 2011). This percentage is higher than the national average among teens.

One benefit to mobile device use is that services can be accessed privately when and where the individual is available (Bennett & Glasgow 2009; Coyle et al. 2007; Lustria et al. 2009; Portnoy et al., 2008). As part of Project Red Talon (2009), tribes in the Pacific Northwest have started to investigate mobile technologies to support the health of their youth. Cell phone use in healthcare has already been shown to cut costs, shorten times to receive help, help to disseminate health information, remind patients to take medications, and provide psychological support (Gurol-Urganci et al., 2009). Expanding the use of mobile devices to incorporate synchronous video chat during a telepsychiatry visit is not an unrealistic goal.

Outcomes from Telepsychiatry

Evidence-based outcomes associated with the use of telepsychiatry have been overwhelmingly positive. In fact, over 75% of patients using telehealth during the COVID-19 pandemic reported that they were extremely satisfied with their experience (Guenther et al., 2021). AI/AN telepsychiatry patients report greater levels of privacy and confidentiality (TBHCE, n.d.). The APA (n.d.) includes the following positive outcomes associated with telebehavioral health services: increased access to mental health specialty care, reduced use of emergency services, reduced delays in care, improved continuity and follow-up, reduced time traveling and away from work/school, and reduced stigmatization of mental health (Gardenier et al., 2021; Smith & Sathshur, 2016). Telepsychiatry patients were 2.5 times more likely to keep their appointment in comparison to in-person sessions (TBHCE, n.d.). Particularly applicable to marginalized communities, telehealth has been linked to involvement in decision-making about healthcare and increased sense of empowerment (Greahlish et al., 2005).

Specific to youth, Ellington (2013) reported a parental satisfaction survey on both the telepsychiatry modality and the psychiatric provider; results showed high levels of parental satisfaction overall. In a systematic review of research on community-based electronic, mobile, or telehealth interventions with vulnerable populations from 2009-2018, Parker et al. (2018) found no negative patient outcomes, or consequences, associated with the interventions.

Use of telepsychiatry for providers is beneficial as well. Providers report that travel time to patients across large geographic areas is greatly reduced. They report that telehealth operations are less costly (Hilty et al., 2018). They confirm that the increasing power of technology allows them to see the majority of a patient’s body and hear them as well as being in the office setting. Reimbursement has quickly developed to support telemedicine services. Parity legislation exists in 28 states for telemedicine through Medicaid (State of the States Report, 2019). And, the Coronavirus Aid, Relief, and Economic Security (CARES) Act was passed in 2020, thereby expanding telehealth practice. Most notably, it dissolved the requirement that a provider must have seen a patient in person within the past three years in order to establish a telehealth relationship going forward (American Telemedicine Association, 2020). It remains unclear, however, whether these waivers will remain once the pandemic subsides.

Telepsychiatry & Culturally-Competent Nurse Practitioners

Nurse practitioners have historically led the care of underserved populations, particularly in rural communities (APNA, 2019; Ellington & Repique, 2013; Finley, 2019; Phoenix, 2019). Psychiatric mental health advanced practice registered nurses number almost 18,000 in the United States, comprising around 26% of psychiatric prescribers (Beck et al., 2020). Telehealth training and education for these providers appears like a value-added approach to providing care to vulnerable populations. The American Association of Nurse Practitioners and the National Organization of Nurse Practitioner Faculties support telehealth. However, practitioners must have the requisite knowledge to practice this modality, hence the need for curriculum integration.

Currently there is no mandate to require telehealth education in nurse practitioner studies. Similarly, there are no guiding standards to incorporate or assess telehealth within a nursing curriculum, even though the modality is supported by the American Association of Nurse Practitioners (Chike-Harris, 2021). Most nurse practitioners have no formal education or training in the use of telepsychiatry even though the National Organization of Nurse Practitioners reports that nearly 93% of nurse practitioners are involved in telehealth services.
Practitioner Faculties (NONPF) recommends integrating telehealth education into nurse practitioner curricula (2018). However, 70% stated that additional education in telehealth would be beneficial to their practice. The authors concluded that there is great interest among PMHNPs in telehealth, and more standardized education should be developed (Baird, Whitney, & Caedo, 2018).

Guenther et al. (2021) note that the five steps to curriculum integration include 1) identifying telehealth competencies for students, 2) reaching a consensus on domains and content areas in which to integrate telehealth, 3) surveying program directors based on previous steps findings, 4) identifying the telehealth content required of all graduate nursing students, and 5) identifying placement for telehealth content in each track by associated faculty. In their review of integrating telehealth education in healthcare provider curricula, Chike-Harris et al. (2021) mention that programs may infuse telehealth training via experiential learning opportunities (Gray & Rutledge et al., 2014; Malloy, 2016; Rudolph, 2017), electives (Brockes et al., 2017; Bulik & Shokar, 2010), team-based approaches (Erickson et al., 2015), or required courses (Rutledge et al., 2014).

Increasing access to mental health services for AI/AN youth is a notable first goal. However, addressing the needs of these youth is not as simple as connecting on Zoom, Doximity, or another telehealth platform. Technological advances do not erase the reality that only 0.1% of psychiatrists identify as American Indian or Alaska Native (SAMHSA, 2015). When the video goes live in a telepsychiatry session, AI/AN youth will almost certainly be discussing their issues with a provider who does not look like them, does not understand their culture, or has even visited their area. For this reason, any training in telepsychiatry should also be embraced as an opportunity to develop practitioners’ cultural competence. Due to the historical distrust of Western institutions, providers who aim to work with AI/AN youth should be prepared to interact with diverse beliefs, values, and behaviors.

Culturally competent healthcare practices are shown to enhance the efficacy of care services, enhance preventative care, reduce care disparities across populations, and promote patient trust and health responsibility (Husson University, 2019). While a full discussion on developing cultural competence is beyond the scope of this paper, providers working with AI/AN youth can start with the following:

1) acknowledge that oral communication is how vital information is shared,
2) use non-medical language when possible,
3) ask open-ended questions, and
4) confirm patient understanding through “teach back” (Abrishami, 2018).

Merging oral traditions and modern technology is not impossible. Digital storytelling has previously been used with Native Americans in the Great Plains (De Mars, 2010). Participants were able to tell their personal stories on film (Palacios, 2012) and linked to an increase in health literacy about suicide and other dual diagnoses (e.g., Wexler et al., 2013).

**Conclusion:** AI/ANs struggle with poverty, educational attainment, employment stability, and health more than other ethnic group in the United States (Gone & Trimble, 2012). Native American youth, in particular, are additionally vulnerable. Their mental health disparities, as highlighted in this paper, stem from the combination of unique social and environmental factors, including poverty, stigma, and historical trauma. Telepsychiatry services may increase access to convenient, cost-effective, and health inducing systems of care that can act as a preventative measure particularly for those who are unable to access healthcare readily in the United States. However, the need for trained providers remains. While nurse practitioners are primed to meet the needs of the most vulnerable, they will require experience with culturally competent telehealth practices to realize the possible outcomes. In addition to the skills and knowledge associated with telehealth, these individuals must also understand the laws, regulations, and policies surrounding telehealth (Garber & Chike-Harris, 2019).

**References**


