Exploring connections between social connectedness and suicidal behavior in a Deaf population with co-occurring substance use disorder.

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I. Abstract

The Deaf Off Drugs & Alcohol (DODA) Program provides culturally appropriate cessation and recovery services via e-therapy to Deaf individuals with substance use disorders (SUD). Analysis of intake data revealed that the prevalence of lifetime suicide attempts among prelingually Deaf members (n=108) of this population was 41.5%, which is significantly higher than rates (15-30%) reported for other disabled groups with SUD. Analyses revealed that gender, age, and past mental health diagnosis were predictors of suicidality, with females (p=0.002), younger individuals (p=0.009), and those with a mental health diagnosis (p<0.001) reporting higher rates of past suicide attempts. There was a marginally significant relationship between communication with immediate family members and suicidality (p=0.076), with Deaf individuals who stated that they did not communicate with family during childhood more likely to report past suicide attempts. When compared to a hearing population also in SUD treatment at the same facility, DODA consumers were less likely to have social support (p=0.05). Since social connectedness is considered a protective factor for suicide, we propose that communication barriers during development, and a lack of access to the tools necessary to build social support, may contribute to an increased risk of suicidal behaviors in adulthood. These findings may suggest more than a risk factor, and point to alternative explanations of suicidal behavior in this population.

II. Population

The population consisted of prelingually Deaf participants (n=108) from several different Midwestern states. The reasons for this wide distribution included a very low incidence of individuals who are D/deaf per geographic region, and lower incidence of D/deaf persons with a co-occurring SUD. Although the DODA program served 149 consumers during the life of the grant, this number also included Hard of Hearing (HOH) consumers, as well as individuals whose onset of deafness occurred after they had acquired language. These individuals (n=42) were eliminated from the dataset for this analysis.

Demographics

The sample included 62 men (57.4%) and 46 women (42.6%). The mean age was 39.64 years (-10.90) and ranged from 19 to 76 years of age at the time of intake. Sixty-eight participants (63%) identified themselves as Caucasian, 22 participants (20.4%) as African American, six participants (5.6%) as Latino, and 12 (11.1%) chose not to respond. Mean years of education were 12.16 years (±1.738), and 84 participants (77.8%) reported a high school diploma or equivalent. Twenty-six participants (24.1%) were employed at least part time at the time of intake.

II. Suicidality

Suicidality Rates for DODA Participants

The prevalence of lifetime suicide attempts among prelingually Deaf members (n=108) of this population was 41.5%, which is significantly higher than rates (15-30%) reported for other disabled groups with SUD. Ideation was also higher than expected compared to comparable groups.

Suicidality and Gender

Prevalence of lifetime suicide attempts and ideation was higher among females, which is comparable to data from hearing populations. This is in contrast with completed suicides which are more common among males in the general population.

Suicidality and Social Connectedness

A majority of participants (n=75) reported having communication with at least one family member during childhood. However, an alarming 27% (n=28) reported no communication with family members during childhood. Participants who communicatd with family were less likely to attempt suicide.

Suicidality and Mental Illness

A total of 49 participants (47.6%) reported being diagnosed with a mental illness in the past. These participants reported past suicidal behavior more often than those without, and were significantly more likely to report a past suicide attempt (p=0.0001) as well as past suicidal ideation (p=0.001) compared to participants without past reported mental health diagnosis.

Suicidality and Age

The largest age group represented was 35-44 years of age. For suicidal ideation the youngest age group had the highest reported rate; however alarmingly high rates were prevalent throughout the population. Similarly, suicide attempts were common, but age played a bigger role.

III. Suicidality (continued)

IV. Recovery Support

The participants in the DODA program received comparable services to hearing participants in a similar SUD program also delivered by e-therapy. The technology Assisted Care (TAC) program serves consumers in treatment for SUD and were asked some of the same questions at baseline.

V. Social Connectedness and Support

VI. Conclusions

We concluded that social connectedness and social support were significant predictors of suicidality on this population, despite a small sample. The results were clinically significant and future research should further explore the relationship between social connectedness at present as well as communication and social connectedness during childhood. Such studies are difficult, particularly for a population that is historically disenfranchised from medical treatment, and uses language/communication styles that differ from the population at large. Additionally, the wide geographic distributions of the deaf population makes this a difficult population to study with larger samples. Perhaps future studies could be done electronically, and include nationally representative data.

VII. Acknowledgments

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Logistic Regression suggests that participants’ past suicide attempts could be predicted with a model including gender, age, past mental health diagnosis. This is in keeping with what is already known about the general population. Additionally, our model includes a variable that looks at whether or not a person reported that they had someone to turn to when they were in trouble, and whether or not they had a member of their immediate family to communicate with during childhood.

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Social Support Groups

*TAC participants were not questioned regarding past suicidal ideation or attempts.

V. Social Connectedness and Support

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