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Psychiatric disorder prevalence among deaf and hard-of-hearing outpatients

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Abstract

Objectives: To contribute to the dearth of literature on the prevalence rates of psychiatric disorders in deaf adults, this study examined the diagnostic and clinical characteristics of deaf psychiatric outpatients in comparison to hearing psychiatric outpatients.
Methods: Archival clinical data for deaf adults (N=241), treated at a specialized, linguistically and culturally affirmative outpatient community mental health program from 2002 to 2010, was compared to data from a random sample of hearing adult outpatients (N=345) who were treated at the same community mental health center.
Results: In various diagnostic categories, significant differences were seen between the deaf and hearing groups: bipolar disorders (3.7% versus 14.2%), impulse control disorders (15.8% versus 5.2%), anxiety disorders (18.7% versus 30.1%), attention deficit hyperactivity disorder (11.2% versus 4.9%), pervasive developmental disorders (3.3% versus 0.3%), substance use disorders (27.8% versus 48.4%), and intellectual disabilities (10.4% versus 2.9%).
Conclusions: The deaf outpatient group evidenced a different diagnostic profile than the hearing sample. It is suggested that the use of culturally competent and fluent ASL-signing clinicians provides more diagnostic clarity and is encouraged as a best practice for the care of deaf individuals.

Psychiatric treatment and assessment of deaf and hard-of-hearing outpatients are understudied areas that have important clinical ramifications for patients and providers alike. Reliable epidemiologic data are unavailable as the majority of the past studies are decades old, fraught with considerable methodological issues and were primarily conducted on inpatient populations prior to the "deinstitutionalization" movement of the 1980's [1]. Since that time, only two studies have investigated the prevalence of specific psychiatric disorders in the adult outpatient deaf and hard-of-hearing population.

A U.S.-based study examined the diagnostic data from case records of 544 deaf outpatients in the Rochester, New York area and revealed a more restricted range of diagnoses for the deaf outpatient population as compared to the hearing outpatient population [2]. Of note, significantly more deaf outpatients received diagnoses that were "deferred" or "missing." Among Axis I diagnoses, deaf outpatients demonstrated significantly lower rates of substance use and childhood mental disorders. In the deaf outpatient group on axis II, diagnoses of intellectual disabilities were more prevalent and personality disorders were more difficult for clinicians to rule out. Clinical services were provided to the deaf outpatients by a variety of community mental health service providers with varying levels of deaf accessible services. As such, the authors attributed the restricted range and/or deferred diagnostic findings on axis I to inequities in accessibility of service provision and unfamiliarity of clinicians with Deaf culture and American Sign Language (ASL). Lack of cultural sensitivity and ASL-knowledge in hearing clinicians has been reported as a significant contributing factor to the misdiagnosis of deaf people in other research as well [3–7].

In a British study, deaf psychiatric outpatients (n = 238) receiving services from a specialized treatment program for the deaf were compared to hearing outpatients (n = 544)

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who received general outpatient psychiatric services. Overall, the deaf outpatients were significantly more likely to be diagnosed with psychotic disorders, neurotic disorders, stress-related disorders, and somatoform disorders than the hearing comparison group [8]. In contrast, deaf outpatients were significantly less likely to be diagnosed with major depressive or bipolar disorders than hearing outpatients. The study authors argued that the observed differences may be reflective of referral patterns and noted that observed referral rates of deaf individuals to the outpatient service were lower than predicted based upon population estimates. Therefore it may be that only the most seriously ill (i.e. those with psychotic disorders) were able to get through the referral system filters and hence led to an overrepresentation of psychotic disorders in the deaf outpatient population being served.

A recent review article examined European studies on the prevalence rates of mental health problems in the deaf population [9]. Although these studies do not report prevalence rates for specific disorders they do provide evidence that deaf individuals report more problems with anxiety and depressive symptoms as well as more psychotic symptoms than the general population. The higher rates of mental distress in some deaf individuals appear to be partially attributable to deafness-related factors such as etiology, age at onset, cultural identification, communication barriers and language dysfluency. Overall, the review authors conclude that there is sufficient evidence to suggest that deaf individuals have higher rates of mental health problems in comparison to the general hearing population.

Additional research is needed on the characteristics and diagnoses of deaf psychiatric patients that also addresses some of the cultural and linguistic biases that have invalidated past research. The most optimal mental health assessment of deaf people involves clinically skilled, culturally sensitive, ASL-fluent practitioners communicating directly with their deaf patients to minimize misdiagnosis [9,10]. Under these conditions, the potential for bias is minimized by having culturally competent clinicians who are familiar with normative standards for non-psychiatrically ill deaf people and hence can better discriminate between what is and is not pathological in a deaf individual. In contrast, deaf patients diagnosed by non-ASL fluent clinicians with limited experience with Deaf culture are more likely to be assigned “not otherwise specified” and “deferred” diagnoses reflecting diagnostic uncertainty by these clinicians [2,6]. Bias and the potential for miscommunication that are introduced by the inclusion of a third (i.e. an ASL interpreter) or fourth party (i.e. a certified deaf interpreter for patients who are language dysfluent) into the clinician–patient relationship are also avoided when a clinician and patient can communicate directly. Using a certified ASL-interpreter is a must when a clinician is not fluent in ASL but does not rule out the potential for miscommunications that can impact assessment [11]. Lastly, using data from a setting in which signing deaf patients are able to directly communicate with assessing mental health professionals reduces the impact of biases patients may hold about mental health providers and fears of miscommunication. Research has found that deaf people are often mistrustful of health care settings, fear the ramifications of miscommunication with their providers, hold stigmatized beliefs about mental health and lack an adequate fund of health-related knowledge [12–14]. By contrast, deaf people report a preference for sign-fluent clinicians, felt they had more positive interactions and better communication with signing clinicians and had fewer concerns about confidentiality [12,13].

By utilizing data collected from a mental health service specialized for the treatment of deaf and hard-of-hearing people we hope to minimize the above listed biases which can impact the accurate mental health assessment of deaf people [2–7,11–15]. In this research study, the diagnoses of deaf outpatients (n = 241) from the Midwestern U.S. receiving services from a specialized deaf mental health program were compared to hearing outpatients (n = 345) receiving services from general mental health programs. The specialized outpatient program for the deaf consists of a consultant psychiatrist and master’s degree level clinicians who provide assessment, psychotherapy and case management services to the deaf outpatients. All services are conducted in ASL or other patient-preferred communication mode. All staff are bilingual (English and ASL) with the exception of the consulting psychiatrist who utilizes interpreter services. Therapists, direct care staff and clerical staff are either deaf themselves, children of deaf adults (CODAs) who grew up within the Deaf community using sign language or hearing professionals who are fluent in ASL and have sufficient knowledge of Deaf culture. Given the highly trained and specialized nature of the clinicians working in the Deaf Services program, the likelihood for cultural bias and linguistic misinterpretation is minimized and the data are more likely to be representative of the deaf outpatient population. As a result, it is hypothesized that the results will demonstrate greater diagnostic specificity and a wider range of psychiatric diagnoses in the deaf sample than has been documented in past research.

1. Methods

Archival data obtained from the electronic medical record of 586 adult outpatients from a Midwestern community mental health center from 2002 to 2010 were reviewed for this study. A university-based institutional review board examined and approved all study procedures. Informed consent from participants was not required because of the use of archival data. All demographic and diagnostic data except discharge dates were collected during the intake interview using agency-specific semi-structured assessment forms. Assessment procedures were consistent across hearing groups. Initial Axis I and II diagnoses were assigned by the clinician conducting the intake interview and then were