

Correlation of psychosocial support concerns and depression in Deaf adults at Nairobi and Kajiado Counties, Kenya

Joyce W. Ngugi¹, Dana Basnight-Brown² and Josephine N. Arasa³

¹Candidate, Doctor of Psychology, PsyD, Clinical Psychology,

United States International University-Africa, Nairobi, Kenya, joyce.w.ngugi@gmail.com

²Associate Professor and Research Scientist, Center for Cognitive and Developmental Psychology,

dana.basnightbrown@gmail.com

³Associate Professor of Psychology, USIU-Africa, jarasa@usiu.ac.ke

Abstract

The Deaf are considered persons with disabilities owing to societal stigma resulting in inequality and discrimination. The sequential mixed methodology utilized a cross-sectional approach, with interviews translated and administered in Kenyan Sign Language. The MMSE screened for mental status, while PHQ-9 assessed for depression and WSAS for Psychosocial Support Concerns (PSS) concerns. Researcher-designed in-depth interviews explored qualitative themes. In addition, Focus Group Discussions, ethnographic observation checklist, and mental health providers' key informant interviews corroborated data. Deaf adults (N=100, 83% response rate) reported inadequate counseling access (62%) while 55% reported no depression. However, 45% depicted clinically significant depression levels, with a notable 28% of Deaf adults also indicating suicidality. Content analyses revealed family, socioeconomic welfare and stigma as the topmost PSS concerns. The study found a significant positive correlation between depression and overall PSS concerns at 0.225 ($p=0.024$), and home management PSS concern with depression at 0.253 ($p=0.011$). ANOVA analyses revealed statistically significant differences between the depression categories' effects on PSS concerns, $F = 3.22$, $p = .026$. T-tests analyses

indicated that means for None and Mild Depression ($M=8.93$, $SD=8.80$) were significantly lower than for Severe depression, $t(13) = -3.16$, $p = .007$, 95% CI [-15.15, -2.85]; and Moderately Severe ($M=12.64$, $SD=7.40$) were significantly lower than for Severe depression, $t(13) -2.67$, $p = .019$, 95% CI [-9.57, -1.00]. The study implications are to design Deaf-friendly assessments. The study recommends Deaf-centric interventions and for further study, national census on Deaf mental health and development of instruments normed for Kenyan Deaf populations.

Overview of psychosocial determinants of depression in Deaf adults

Psychosocial support (PSS) concerns are correlated with depression disorder, the latter considered by the World Health Organization (WHO) a psychosocial disability of international concern, and the leading contributor of Disability-Adjusted Life Years (DALYs) globally. Deaf adults globally do not fully access general health as well as mental health, including specialized Clinical Psychology services such as assessment, prevention, counseling and other interventions.

Kenyan Sign Language (KSL) is a natural, visual language used by the Deaf, and the third national language in Kenya. It consists of finger-spelling and signs representing words, concepts, objects; gestures and idiomatic expressions and other attributes are used; its own grammar and syntax does not follow that of the spoken language (Ndurumo, 2008). Owing to the societal access barriers of communication, language and information, Deaf people cannot fully access written English, whose comprehension is accessible based on a person's ability to read and understand the majority spoken language.

Too often, deaf and hard of hearing people face literacy obstacles, which prevent personal and professional goal attainment (Braswell-Burris, 2010). Obstacles to literacy permeate health and wellbeing outcomes, and continue despite the numerous access and support services provided to deaf and hard of hearing people, such as note taking assistance, preferential

seating, classroom amplification, interpreters, real time captioning services and so on (Braswell-Burris, 2010) Consequently, English reading and writing can present as a barrier for deaf people's life goals.

Deaf adults' psychosocial support concerns and depression study

Correlation study introduction

Deaf adults in Kenya face numerous psychosocial support concerns that may be risk factors for depression morbidity and mortality. These include, but are not limited to, concerns in work, home management, social leisure activities, private leisure activities, and family and relationships (Mundt et al., 2002).

The goal of the Ngugi (2021) study was to determine whether psychosocial support concerns are correlated to depression in Deaf adults in Nairobi and Kajiado County, Kenya. The study had three objectives, namely, to describe the PSS concerns; to assess the prevalence and severity of Major Depression symptoms and disorder; and to establish the relationships between categories of PSS concerns and depression among Deaf adults in Kenya.

Correlational Study Sample Characteristics

The study was located in Nairobi and Kajiado Counties of Kenya, East Africa. The participants totaled 120, of which only 100 participants' data were analyzed, with 70 in Nairobi County and 30 in Kajiado County and consisting 55 males and 45 females, majority of whom (68%) were youth aged between 18 and 35 years. All participants were Deaf or Hard of Hearing, KSL fluent, of any occupational or employment status; aged 18 to 65 years old; and with no cognitive impairment as screened by the Mini-Mental Status Exam (Folstein et. al., 1975).

Correlational Study Method

Ethical standards were adhered to by the principal investigator by collaborating in conducting research with Deaf individuals and sign language communities (Harris et al., 2009). Prior to data collection, elaborate recruitment and mobilization allowed potential participants to understand the aims and enhance trust in the process of knowledge co-generation for Deaf community mental health concerns. Instruments were back-translated into KSL and two Deaf research assistants were trained and deployed, one in each county.

Participants signed the consent form and proceeded to view the printed questionnaires, which were researcher-administered in Kenyan Sign Language for about 45 minutes to one hour per participant. The Mini-MSE was followed by PHQ-9, WSAS and finally the semi-structured interview schedule. A covert ethnographic observation checklist was also filled after each session, along with the researcher's diary for purposes of reflexivity. Participants were debriefed at the end of each survey. In addition, two Focus Group Discussions of conveniently sampled Deaf adults as well as mental health providers' key informant interviews corroborated the data from the individual interviews.

Correlational Study Results

The thematic and content analyses confirmed the five psychosocial support concerns' categories. Additionally, the findings further elaborated novel rich descriptions and in-depth nuances of each of the five WSAS categories as experienced by the participants in the current context. Content analyses revealed that socioeconomic welfare and stigma emanating from the family of origin were the topmost concerns contributing to inadequate empowerment for

independent living of Deaf adults. Particularly, the Deaf community culture norms strengths involved meeting frequently, which revealed the buffering role of Deaf friends.

Depression prevalence among Deaf adults in Nairobi and Kajiado counties revealed higher average depression levels at 46% in Nairobi County as compared to Kajiado County at 24%, as measured by the PHQ-9. Further, an average functioning score of 9.37 (SD 1.16) indicated clinically significant levels of moderate depression for 55% (55) of participants. However, it is notable that a considerable number of 45% of participants had clinically significant depression levels at Moderate and Severe, while 28% amongst those depressed also indicated suicidality.

The WSAS measures five items that affect social impairment. Regarding the PSS category of Family and Relationships, participants reported dismal relationships with their Hearing family-of-origin members thus as adults, chose to marry and interact primarily with Deaf friends. Although stigma from Hearing family-of-origin members remained the biggest concern, few participants reported satisfying relationships. Participants reported poor socio-economic welfare under the Work, and Home Management PSS concern categories. Regarding the Social Leisure Activities and Individual Leisure Activities PSS concern areas, the Deaf seemed to thrive largely because they could choose a range of Deaf-friendly activities, which boosted their health and well-being.

Overall, there was a weak positive correlation between psychosocial support concerns and depression at 0.225 ($p=0.024$). While the other four PSS factors were not significant, namely Family and Relationships, Work, Social leisure activities and Private leisure activities, the PSS concern of home management significantly correlated with depression at 0.253 ($p=0.011$).

Correlational Study Discussion

Since 90% of deaf or hard of hearing children are born to hearing parents, it is highly probable that a deaf child's first exposure to language will not be the natural sign language, but rather a fragmented model of the spoken language of hearing parents (Braswell-Burris, 2010). Because native language learning is not intact to assure second language learning, a perpetuating cycle of language difficulties for deaf children begins (Braswell-Burris, 2010).

Boutin (2008) suggests that the social divide between deaf and hearing people is a result of cultural misunderstandings and communication barriers between them in society, further alienating deaf people from achieving well-being outcomes. Paris and Granger (2008) further noted that those deaf people with the least access to social capital are in fact the same individuals who would benefit the most from the help, sympathy, fellowship and health benefits it offers.

Correlational Study Conclusion

The paper concludes that from Objective One, there are 45% of Deaf adults with clinically significant depression levels, and from Objective Two, there are numerous psychosocial support concerns were identified per category, in the following ranking from highest to lowest: Family and Relationships in the highest level, Work and Home Management both in the second highest degree, Social Leisure Activities and Private Leisure Activities both in the lowest levels. In addition, 75% of participants were found to have depression, with an average depression severity index of mild level.

According to Objective Three, there is an overall positive correlation of the psychosocial support concerns, with a significant relationship of the PSS factor of Home Management with depression. Therefore, the Deaf are most likely to encounter access barriers in psychosocial

support, with their variously identified concerns exacerbating depression. In these settings, it seems emotional functioning is somewhat suppressed to sustain the more enduring relationships with Hearing people necessary for survival, although amidst stigma, discrimination and oppression. Negative affective states, including depression, often emerge from stigmatized identities of Deaf adults (Carter & Mireles, 2016).

The inadequate access to psychosocial support resources could be a plausible explanation for both the Deaf-friendly and Deaf-challenged experiences. Responses, and reviews about access in healthcare reported extra-stressful and scary experience of health care access as the norm, because there is limited readiness in provision of mental health services tailor-made for the Deaf. This may result in low trust and suspicion by the Deaf consumers, creating a vicious cycle of even further limited access.

As an indirect outcome of this study, the Deaf-centric tools, procedures and ethical clinical research guidelines were developed for Kenya Deaf mental health programs. In addition, the qualitative aims of action research are achieved, with most participants reporting awareness of benefits of mental health access.

Correlational Study Recommendations

Examining effective practices to developing and implementing normed clinical research instruments to assess Deaf populations is critical to the mental health and well-being of Deaf adults in Kenya.

Adaptations of English messages in oral/aural formats are needed (Ndurumo, 2008), such as addition of visual aids and color contrasts to aid psycholinguistic processing for Deaf people. The researcher recommends that Kenyan Sign Language (KSL) classes are taught alongside Deaf

culture, so more hearing-able people can learn KSL for total inclusion of the deaf and hearing communities.

REFERENCES

- Boutin, D. (2008). Persistence in postsecondary environments of students with hearing impairments. *Journal of Rehabilitation, 74*(1), 25-31.
- Braswell-Burris, P. (2010). *Factors affecting the academic and personal success of deaf or hard of hearing students*. San Diego State University. Unpublished Thesis.
- Harris, R., Holmes, H., & Mertens, D. (2009). Research ethics in sign language communities. *Sign Language Studies, 9*(2), 104-131.
- Morford, J., Wilkinson, E., Villwock, A., et al. (2011). When deaf signers read English: Do written words activate their sign translations? *Cognition, 118*, 286-292.
- Ndurumo, M. (2008). Sign language interpreting with special reference to Swahili. *The Africa Annals of the Deaf, 2008, 1*. Retrieved January 24, 2012 from http://www.firsteternal.com/africanad_nov2008index.html
- Ndurumo, M. (2009). Towards effective policy for academic excellence in education of the deaf. *The Africa Annals of the Deaf, 2008, 1*. Retrieved January 24, 2012 from http://www.firsteternal.com/africanad_nov2008index.html
- Obasi, C. (2008). Seeing the deaf in "deafness". *Journal of Deaf Studies, 13*(4), 455-465.
- Parris, A. & Granger, T. (2008). The power and relativity of social capital. *Journal of Vocational Rehabilitation, 29*(3), 165-171.
- Wilson, K., Miles, S. & Kaplan, I. (2008, February). Working with deaf children and their communities worldwide. *Deaf Child Worldwide*. www.eenet.org.uk