

ORAL SESSION 4: COMMUNICATION AND GOVERNANCE

Leveraging Over-the-Counter Hearing Technology & Older Adult Peers Educators to Increase Access: Lessons from HEARS

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Purpose Age-related hearing loss is highly prevalent, affecting 2/3rds of adults 70 years and older (Lin, Thorpe, Gordon-Salant & Ferrucci, 2011). Although hearing loss is increasingly recognized as core to health, function, and well-being for individuals, families, and societies, traditional clinic-based hearing care has not adequately addressed the growing global burden and disparities in care that exist (Nieman & Lin, 2017). Recent national and inter-national efforts, including the 2020 WHO World Report on Hearing, highlight reduction of hearing care disparities as a public health imperative. Directly resulting from such efforts, a national-level legislation passed in the United States in 2017 that created the designation of over-the-counter (OTC) hearing aids, which are expected to debut on the consumer market in 2020. To meet the global burden of hearing loss among older adults, affordable, accessible technologies, such as OTC hearing aids, along with the implementation of task sharing, through the incorporation of community health worker (CHW) models, aim to improve hearing care access, particularly for vulnerable populations (Suen et al., 2019). The application of user-centered design to increase the feasibility and acceptability of OTC hearing technology and associated instructional materials by older adults, care partners, and providers with diverse levels of expertise is critical to realizing the promise of community-delivered hearing care. **Method** Through a community-engaged development process, we developed the HEARS intervention, which is designed to be delivered by CHWs, specifically older adult peer educators. The HEARS model maximizes accessibility through multiple domains, including peer-to-peer mentoring, theory-driven methods to enhance self-efficacy, incorporation of principles of designing for older adults, and low-cost, user-centered OTC hearing technology and instructional materials. We conducted a prospective, randomized control pilot, with a 3-month delayed treatment group as a waitlist control, that assessed feasibility, acceptability, and preliminary efficacy of this first-in-kind community-delivered, affordable, and accessible intervention for older adults with hearing loss. Outcomes were assessed at 3 months, comparing immediate and delayed groups, and pooled to compare the cohort's pre- and 3-month post-intervention results. **Results and Discussion** All participants completed the study (n=15). The program was highly acceptable: 93% benefited, 100% would recommend the program, and 67% wanted to serve as future program trainers. At 3 months, the treated group (n=8) experienced fewer social and emotional effects of hearing loss, and fewer depressive symptoms as compared to the delayed treatment group (n=7). Pooling 3-month post-intervention scores (n=15), participants reported fewer negative hearing-related effects (effect size=-0.96) and reduced depressive symptoms (effect size=-0.43). Utilizing low-cost, over-the-counter listening devices, delivered in the community, the mean change in hearing handicap and the effect size compares to improvements seen with hearing aids provided through traditional clinic-based care models. Following the development of a user-centered train-the-trainer program, older adult peer educators (n=2) were successfully trained to provide the HEARS intervention and achieved comparable results. The HEARS intervention is feasible, acceptable, low-risk, and demonstrates preliminary efficacy and is currently under-going a larger, randomized controlled trial. Lessons learned from HEARS, which relies on OTC technologies, used by older adults, taught by older adults, provides critical insights to the general advancement of technology access and use by older adults.

References

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