Current Perceptions of Practicing Audiologists Regarding Teleaudiology Education and Training

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Introduction

- The use and or practice of telemedicine within the field of audiology is known as teleaudiology.
- There are many ways in which audiologists have utilized telemedicine including remote hearing screening, remote device programming, and the synchronous review of otoscopy and immittance testing (Krumm & Syms, 2012, Bhutta, 2018, Swanepol & Clark 2018).
- Benefits of teleaudiology include convenience, accuracy, and cost/time effectiveness. Despite potential patient benefits related to teleaudiology, when surveyed, only 31 out of 422 audiologists reported using it (Schonfeld,2016).
- Audiologists surveyed identified several barriers to teleaudiology implementation including lack of education and training, lack of infrastructure and licensure, and reimbursement issues (Ravi et al., 2018).
- While lack of education and training has been identified as a barrier to implementation of teleaudiology services, there is little known about education and training for telehealth practices in the field of audiology.
- **Therefore, the purpose of this study was to learn more about audiologists' perceptions about and experiences with education and or training opportunities that are available.**

Research Question and Hypothesis

- Q1: What are the current perceptions of practicing audiologists regarding the state of teleaudiology education and training?
- H1: Currently audiologists perceive there is very little formal training for teleaudiology services, even though there are increasing opportunities to incorporate teleaudiology into practice.

Methods

Survey:

- 16 question survey was developed using Qualtrics software
- Demographic questions, questions about teleaudiology practices, teleaudiology training/education experience, need for training/education, and barriers to teleaudiology practice
- Participants solicited using social media groups with a large membership of practicing audiologists
- Responses were analyzed descriptively with additional analyses based upon demographic factors such as years of experience, educational background, and work setting to determine if any factors affected response rates

Participants: 336 practicing audiologists

The survey was posted online in two audiology Facebook groups and participants were encouraged to share the link with their colleagues.

- Across all demographics factors evaluated, including education level (Figure 1) the responses regarding teleaudiology services offered were very similar.
- Hospital group offers slightly more remote services but same for ubran/rural settings (Figure 2)
- Services most frequently offered remotely included counseling and hearing aid fittings
- Most reported on-the job training for teleaudiology services
- Least interested in the graduate courses as form of training and education (Figure 3)

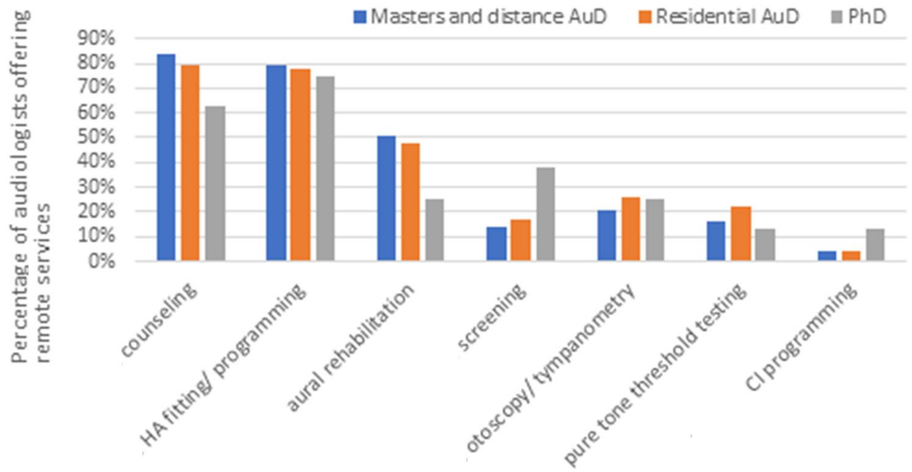

Figure 1. Remote services offered by respondents based on level of education obtained

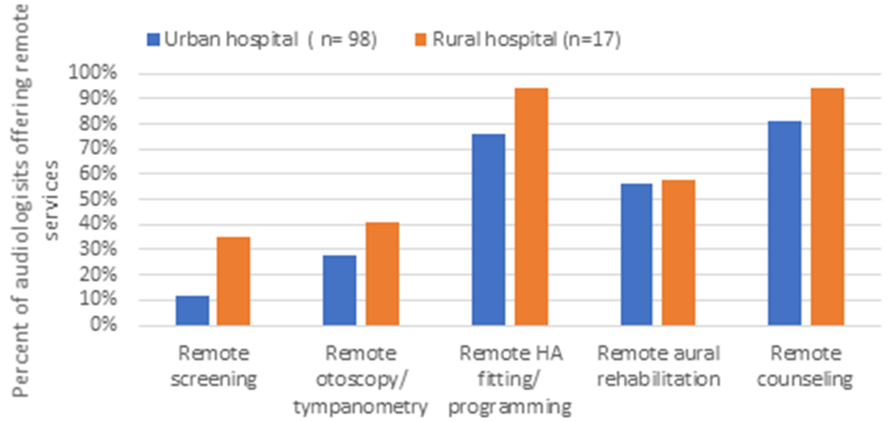

Figure 2. Teleaudiology services offered by rural vs urban hospital based audiologists

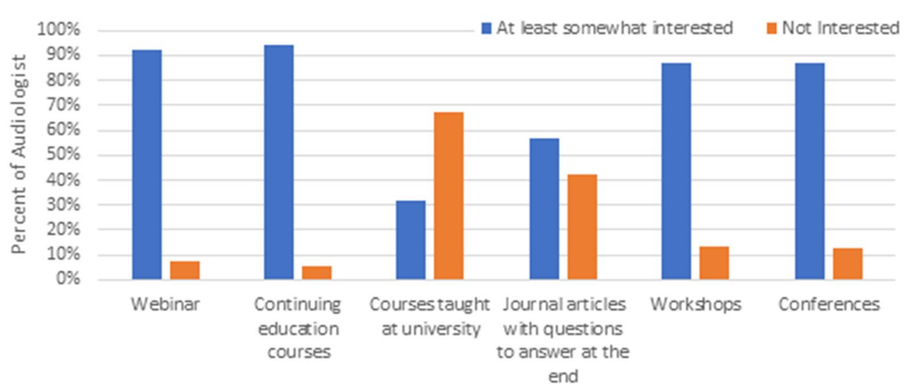

Figure 3. Interest levels for various forms of tele audiology training/education

Discussion

- Across all groups, audiologists are performing teleaudiology more frequently than expected.
- The amount of services performed could have been affected by COVID-19.
- There was an expectation of recent graduates providing more teleaudiology services, in fact they report using the least across groups.
- This could be due to lack of training in graduate courses.
- There was an expectation of audiologists with distance Au.D. to offer telehealth more because of exposure to virtual classes and technology driven services.
- Most audiologist get training on the job.
- There is a perceived lack of adequate education and training for teleaudiology as reported by participants.
- A majority of participants are interested in training.
- Most are interested in webinars or workshops.
- More accessible training could lead to increased teleaudiology offerings.

Limitations and Future Directions

COVID –19

This survey was developed before the COVID –19 pandemic. It was posted in June 2020, after most clinics had been able to reopen. It is possible that the number of audiologists offering teleaudiology services increased. Some participants may have answered the survey with how they had practiced pre COVID and some may have answered based on how they practice during COVID. This could cause some over reporting or underreporting of services and not accurately reflect the amount or frequency of services offered. Now that clinicians have a reason to use telehealth more frequently (having fewer people going in or out of the office) they might be more inclined to keep using teleaudiology in the future.

To expand on the current research, it might be interesting to have a survey directed at graduate students to see how tell if/ how teleaudiology is addressed in their course work. A national curriculum review could also be completed to get a better idea if teleaudiolgy is taught in any graduate audiology programs.

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