

Mhealth hearing screening for children by non-specialist health workers in communities*

Increasing access to hearing health care and education while reducing program costs can be achieved with comparable success utilizing non-specialist community health workers.



Objective



Determine if equitable services and outcomes are achieved for hearing screenings.

Methodology



6805 children screened using the hearScreen™ smartphone application

2-group comparison of screening outcomes

- Audiometrically trained school health nurses
- Screening at schools or medical offices
- Non-specialist community healthcare workers with minimal training
- Screening in homes and community centers



Indepth outcome analysis by child age and gender, headphone type, test duration and environmental noise levels was performed.

Results

Key findings

1

No significant difference in screening outcomes between groups

2

Three factors may influence higher referral rate:

- ▶ Noise at 1kHz
- ▶ Age
- ▶ Test duration

Considerations

Considerations for practice

Lack of hearing health care resources in a community can delay hearing screenings and subsequent hearing intervention for children in need.

With appropriate training and testing equipment, community health care workers can help bridge the gap in resources by providing quality hearing screening services.



* Dawood, N., Asmail, F. M., Louw, C., Et Swanepoel, D.W. (2020) Mhealth hearing screening for children by non-specialist health workers in communities, *International Journal of Audiology*, DOI: 10.1080/14992027.2020.1829719