

Use of the APHAB in randomized-controlled trials and longitudinal studies

Jin Hyung Park (1), Jessica Huddleston (1), Cecilia Wilkerson (1), Molly Donnell (1), Katie Rock (1), Anna Marie Jilla (1), Carole Johnson (1)

(1) HERO Lab; Dept Com Sci & Dis; Univ OK HSC

Objectives: To present a protocol for using the Abbreviated Profile of Hearing Aid Benefit (APHAB) in randomized, controlled trials (RCTs) and longitudinal studies (LSs).

Background: RCTs and LSs are needed to assess the efficacy of hearing aids. The APHAB has not been used in the types of experimental designs, is relatively long, is difficult to score, and can be confusing for the elderly to complete. Nevertheless, it is a psychometrically sound outcome measure of acoustic benefits from hearing aids.

Methods: The APHAB was used in an RCT combined with a LS (APHAB completed before the fitting; 8-weeks post-fitting (PF) [treatment group]; 8-weeks unaided [control group]; 6-months PF; and 1-year PF) to investigate the short- and long-term health-related quality of life and acoustic benefits of entry-level advanced digital hearing aids for unserved and underserved patients in a community hearing aid bank. Accommodations were developed to ensure patients' understanding of and validity in completion of the self-assessment scale. A computerized, round-robin protocol was developed to ensure reliability and validity of scoring.

Results: The APHAB was successfully used with this disadvantaged population. Patients' pre-fitting ratings were used as the baseline for all PF comparisons to reduce the cognitive load necessary to complete unaided and aided versions of the APHAB in the same session. Pitfalls included missing data. In addition, benefit scores were not influenced by any change in unaided ratings across time due to using a single baseline. Scores were input into a computer program independently by two-to-three assistants for cross-check in data entry and scoring. Inter-scorer reliability > 95%.

Conclusions: The protocol for the use of the APHAB in our RCT and LS has been successful with this diverse patient population. RCTs and LSs are needed to provide evidence in the benefits to be derived from the use of amplification.