Evidence-based audiological practice in Sweden - a national survey

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AIMS

This national survey aimed to investigate clinical practice patterns and perceived workplace conditions for evidence-based clinical practice among the Swedish audiologist work force, and to analyse whether they differ from results of a previous survey conducted 10 years previously.

POPULATION

452 Swedish audiologists (16% male, 84% female) constituting 35% of the total Swedish audiologist work force. 416 (91%) of the respondents worked in clinical settings.

METHODS

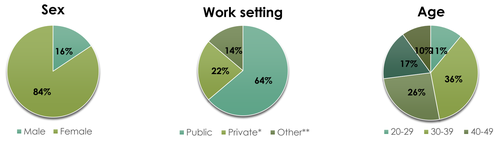
An online survey was conducted by the professional body The Swedish society of audiologists (SvAf) in 2023, inviting all licensed audiologists in Sweden, regardless of membership in the society or current work status, to participate. The survey was advertised via SvAf's website, Facebook, e-mails to members and by word of mouth.

Some questions were repeated from a previous national survey conducted in 2012 (Brännström et al., 2013), allowing for a 10-year comparison. Comparisons were also made of audiologists working in public versus private hearing care clinics. In Sweden, most private hearing care providers are under contract by the local county council. Responses from completely private clinics were few, and were excluded from this study.

Chi-squared tests were used to analyse differences. Additionally, 95% confidence intervals were calculated.

RESULTS

Fig. 1

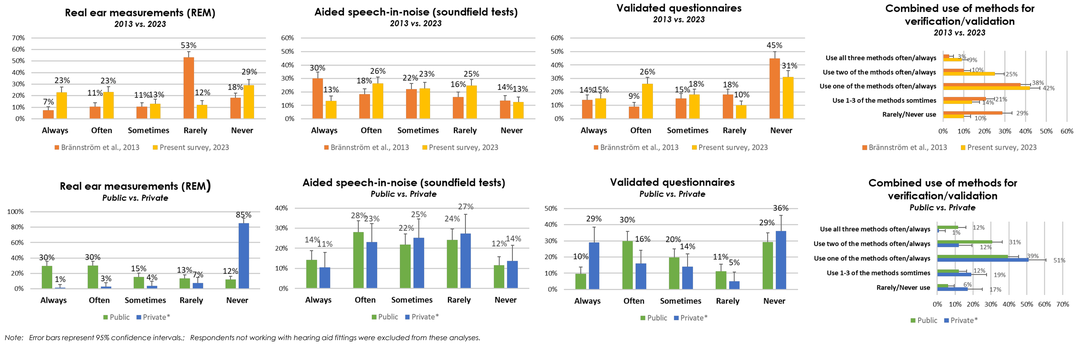


Comment:
The respondents of the survey were representative of the Swedish audiologist work force in terms of age and sex. There was a slight, statistically significant overrepresentation of responses from the public sector.

*Private clinics delivering hearing services commissioned by public healthcare system
**Includes audiologists working in universities, in hearing aid manufacturers etc. These are not included in the graphs below.

Fig. 2

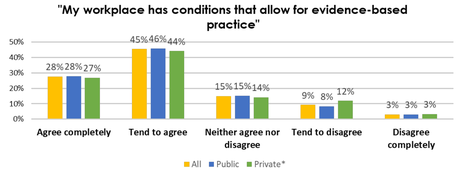
"How frequently do you use any of the following methods to verify/validate the hearing aid fitting?"



Note: Error bars represent 95% confidence intervals.; Respondents not working with hearing aid fittings were excluded from these analyses.

Fig. 3

"To what extent do you agree with the following statement?"



Comment:

- Figure 2: The orange/yellow bars show an increase in the routine use of REMs and validated questionnaires, but a decrease in the use of soundfield measuerments, over the last 10 years ($p<0.001$).
  76% use at least one of the methods often/always today, compared to 50% in 2013.
- The green/blue bars demonstrate significant differences between public and private clinics. REMs are rarely used at all by audiologists in private clinics. However, questionnaires seem to be used more. There was no significant difference in the use of soundfield measurements. .
- Figure 3: indicates no differences between audiologists in public versus private clinics, in terms of of perceived workplace conditions for evidence-based practice.

INTERPRETATION

Swedish audiologists are required by law to work according to evidence-based methods. According to ISO 21388:2020, accepted as a Swedish standard, both verification and validation should be carried out routinely. This was fulfilled by only 34% in the present survey. Thus, although there has been a positive development over the last decade, far from all follow evidence-based guidelines. This data set offers possibilities for identifying factors that may contribute to the gap between professional standards and practice, such as workplace conditions and hearing care service delivery model.

CONCLUSIONS

The use of evidence-based procedures for verifying and validating hearing aid fittings has increased substantially since 2013, and the majority of Swedish audiologists report that they have adequate conditions for evidence-based practice at their workplaces, Still 1 in 4 rarely/never *or* only sometimes use these procedures, and there is a difference between audiologists in public versus private clinics.

TAKE-HOME MESSAGE

Significantly more Swedish audiologists routinely verify/validate hearing fittings using evidence-based procedures now than 10 years ago.

46% of the respondents perform REMs routinely, nearly twice as many as in 2013

73% of the respondents agree completely or tend to agree that their workplace offers the right condition for evidence-based practice.

References
Brännström, K.J., Båsjö, S., Holm, L., Larsson, J., Lood, S., Lundå, S., Notsten, M., & Turunen Taheri, S. (2013). Korrigerad artikel: Audionombarometern 2012. Audionomtidningen, 4.

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