

Does the configuration of a mild hearing loss effect the benefit received by adults fitted with bilateral hearing aids?

Chloe.tanton@nhs.net
Hannah.cooper@ucl.ac.uk

Chloe Tanton and Hannah Cooper



Introduction

- Mild hearing loss is the most prevalent of all degrees of hearing loss¹.
- People report negative effects of mild hearing loss, such as feeling excluded from group situations, however, hearing aid uptake is low for this population. Moreover, PTA is not necessarily a good predictor of hearing aid satisfaction.
- There is limited evidence as to the benefit of hearing aids for this population, and it is not known whether the benefit of hearing aids is affected by the configuration of mild hearing loss.

Objective:

To investigate whether the configuration of a mild hearing loss has an effect on the benefit received from hearing aids using the International Outcome Inventory for Hearing Aids (IOI-HA)² as the outcome measure.

Methods

- A retrospective review was carried out at Mid and South Essex NHS trust of adults fitted with hearing aids with a mild hearing loss.
- 205 adults (49% male; 51% female) met the inclusion criteria set.
- Audiograms were classified into four different configurations of hearing loss³ (figure 1).
- Total score and individual question scores on the IOI-HA were analysed.

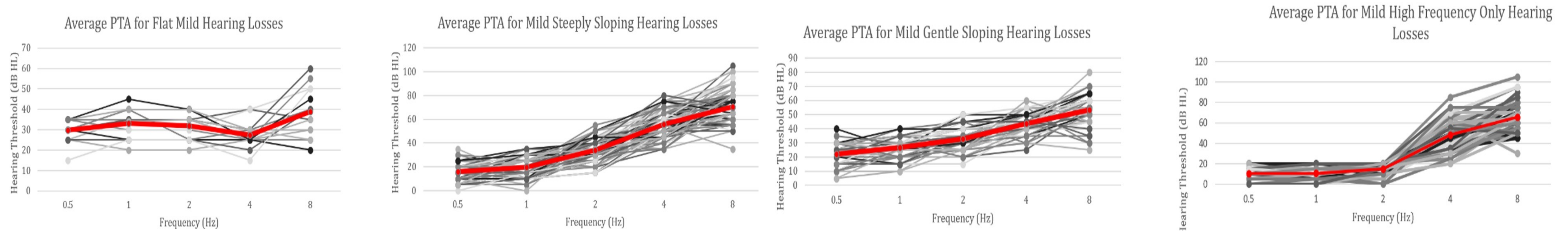


Figure 1: configurations of mild hearing loss. Grey scale lines represent individual data. Bold red lines indicate mean thresholds

Results

There were no significant differences in the benefit received from hearing aids regardless of the configuration of hearing loss, $H(3) = 4.250$, $p = 0.236$ (figure 2). However, the scores for all configurations of hearing loss exceeded the norms of the IOI-HA considerably (figure 3).

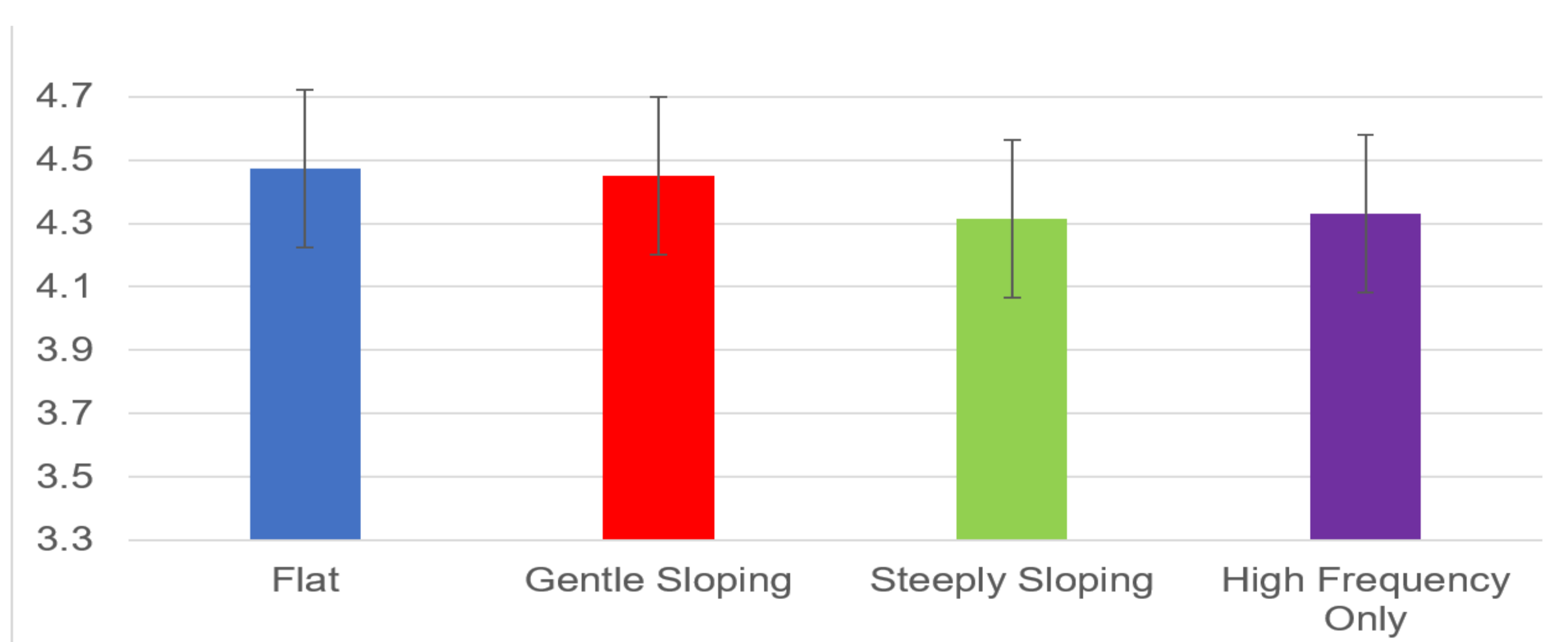


Figure 2: benefit received from hearing aids for different configurations of mild hearing loss

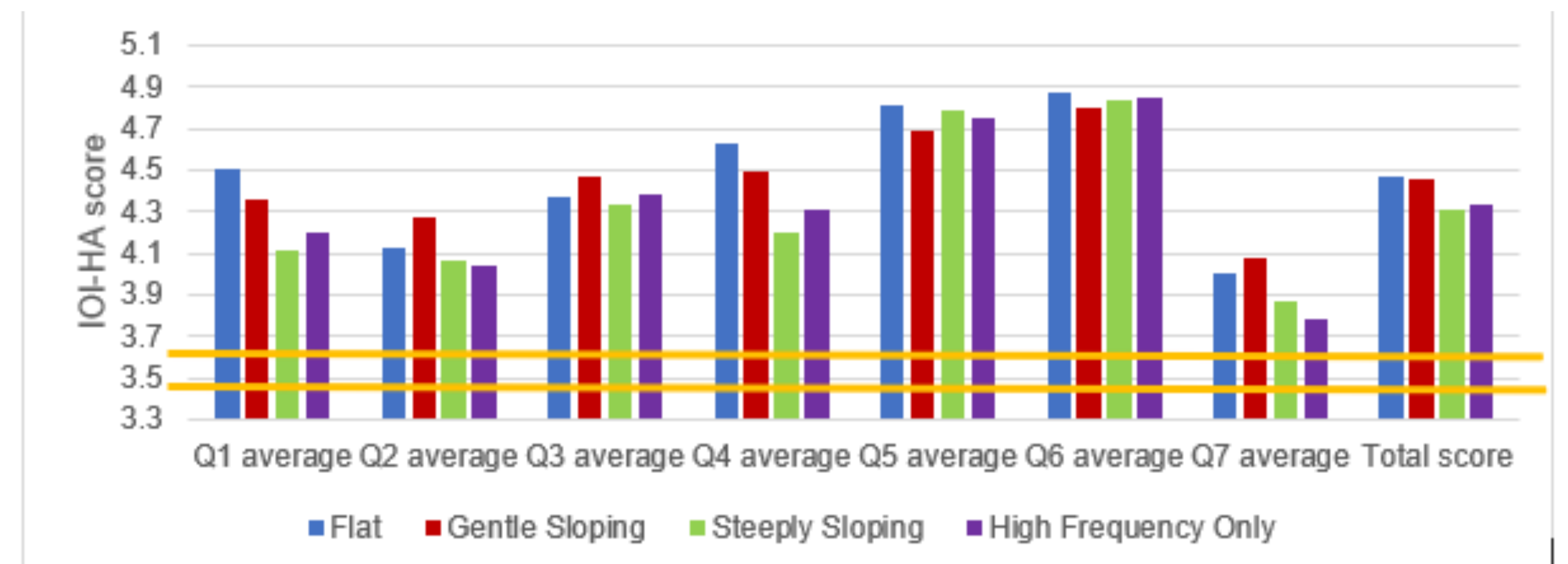


Figure 3: IOI-HA questions scores for each configuration of mild hearing loss. The yellow lines indicate normative data for the IOI-HA.

Conclusions

- Hearing aids can provide benefit to adults with a mild hearing loss regardless of the configuration of hearing loss.
- Audiologists and patients alike should feel confident that benefit can be achieved from hearing aids with a mild hearing loss.

References

¹ World Health Organisation (2004). The Global Burden of Disease. Geneva: WHO ²Cox, R. M., & Alexander, G. C. (2002). The International Outcome Inventory for Hearing Aids (IOI-HA): psychometric properties of the English version. *International journal of audiology*, 41(1), 30-35. Cox, R. M., Alexander, G. C., & Beyer, C.M. (2003). Norms for the international inventory for hearing aids. *Journal of American Academy of Audiology*, 14(08)403-413. ³Demeester, K., Van Wieringen, A., Hendrickx, J. J., Topsakal, V., Franssen, E., Van Laer, L., ... & Van de Heyning, P. (2009). Audiometric shape and presbycusis. *International journal of audiology*, 48(4), 222-232. World Health Organisation (2004). The Global Burden of Disease. Geneva: WHO



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