

Table 62: Clinical evidence profile: hearing aids versus no hearing aids for mild to moderate hearing loss in adults

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Hearing aids	no hearing aids or placebo hearing aids	Relative (95% CI)	Absolute (95% CI)		
Hearing-specific health-related quality of life (follow-up: range 6 weeks to 16 weeks; assessed with: HHIE (range 0 to 100)) ^a												
3	randomised trials	serious ^{b,c,d,e}	not serious	not serious	not serious	none	385	337	-	mean 26 lower (42 lower to 11 lower)	⊕⊕⊕○ MODERATE	
Health-related quality of life (follow-up: range 2 months to 16 weeks; assessed with: WHO-DAS II (range 0 to 100) or SELF (range 54 to 216))												
2	randomised trials	serious ^{b,e}	not serious	not serious	not serious	none	281	287	-	SMD 0.38 SD lower (0.55 lower to 0.21 lower)	⊕⊕⊕○ MODERATE	
Listening difficulty (follow-up: range 6 weeks to 2 months; assessed with: PHAP (range 0 to 1) or APHAB (range 0 to 100))												

Quality assessment							№ of patients		Effect		Quality	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Hearing aids	no hearing aids or placebo hearing aids	Relative (95% CI)	Absolute (95% CI)		
2	randomised trials	serious ^{b,c,d,e}	not serious	not serious	not serious	none	293	241	-	SMD 1.88 SD lower (3.24 lower to 0.52 lower)	⊕⊕⊕○ MODERATE	
Adverse effect - noise-induced hearing loss												
1	randomised trials	not serious	not serious	serious ^f	very serious ^f	none	Adverse effects related to pain were measured in one study: none were reported.				⊕○○○ VERY LOW	
Adverse effect - noise-induced hearing loss												
1	randomised trials	not serious	not serious	serious ^f	very serious ^f	none	Adverse effects related to noise-induced hearing loss were measured in one study: none were reported.				⊕○○○ VERY LOW	

Abbreviations: **CI**: Confidence interval; **SMD**: Standardised mean difference; **RR**: Risk ratio

Explanations

- ^a Hearing Handicap Inventory for the Elderly (HHIE), Self Evaluation of Life Function (SELF), World Health Organisation Disability Assessment Schedule II (WHO-DAS II) , Profile of Hearing Aid Performance (PHAP), Abbreviated Profile of Hearing Aid Benefit (APHAB)
- ^b Quality of evidence downgraded by 1 level because unclear or high risk of selection, performance and detection bias.
- ^c We considered downgrading for inconsistency due to observed statistical heterogeneity but did not apply this. The data consistently showed large beneficial effects of using hearing aids for mild to moderate hearing loss despite the apparent differences in study designs and populations. Our confidence in the size of the effect is not affected.
- ^d We considered downgrading due to indirectness as some data were obtained after a short follow-up period (six weeks) but did not apply this. Large beneficial effects were observed regardless of duration of follow-up.
- ^e We considered downgrading due to indirectness as some analyses included data from male military veterans but we did not apply this. Effect sizes were consistent within each outcome despite differences in study samples and designs (small beneficial effect for HRQoL; large beneficial effect for hearing-specific HRQoL and listening ability).
- ^f Very serious imprecision as the sample size was very small. There was serious indirectness because only people with mild to moderate Alzheimer's disease were included in the study

Quality assessment							No of patients		Effect		Quality	Importance
No of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Hearing aids versus no/placebo hearing aids	Control	Relative (95% CI)	Absolute		
Hearing-specific health-related quality of life -												
1	randomised trials	serious	no serious inconsistency	serious	serious	none	104	50	-	MD 10.54 lower (15.26 to 5.82 lower)	⊕○○○	CRITICAL
Hearing-specific												
2	randomised trials	serious	no serious inconsistency	no serious indirectness	no serious imprecision	none	281	287	-	MD 33.43	⊕⊕⊕○	CRITICAL
Health-related quality of life (WHO Disability Assessment Schedule 2.0 (range 0-100, lower is better))												
1	randomised trials	serious	no serious inconsistency	no serious indirectness	serious	none	189	191	-	MD 6.46 lower (9.38 to 3.54 lower)	⊕⊕○○	CRITICAL
Health-related quality of life (Self-evaluation of Life Function (range 0-100, lower is better))												
1	randomised trials	serious	no serious inconsistency	no serious indirectness	serious	none	92	96	-	MD 4.8 lower (10.09 lower to 0.49 higher)	⊕⊕○○	CRITICAL
Listening ability (Profile of hearing aid performance (PHAP, range 0-1, lower is better))												
1	randomised trials	serious	no serious inconsistency	no serious indirectness	no serious imprecision	none	104	50	-	MD 0.15 lower (0.2 to 0.1 lower)	⊕⊕⊕○	IMPORTANT
Listening ability (Abbreviated profile of hearing aid benefit (APHAB, range 0-100, lower is better))												
1	randomised trials	serious	no serious inconsistency	no serious indirectness	no	none	189	191	-	MD 33.1 lower (35.68 to 30.52 lower)	⊕⊕⊕○	IMPORTANT