

Tailored health literacy interventions for people with deafness and hearing loss: an ongoing systematic review

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1. Purpose

Worldwide, deafness and disabling hearing loss (DHL) are estimated to be among the five major causes of disability. Health literacy (HL) is a well-established social determinant of health. DHL people have lower HL and lower health outcomes than non-hearing disabled counterparts. To inform a pilot national-based project on appropriate HL interventions for people with DHL, we aimed to explore scholarly articles through a systematic review.



2. Materials and methods

Research questions:

- **Q1.** Are tailored health literacy interventions effective at improving health literacy for people with deafness or DHL?
- **Q2.** What kind of health literacy interventions (i.e., approaches, methods, materials) are most effective at improving health literacy for people with deafness or disabling hearing impairment?

Our search strategy included five databases: MEDLINE, EMBASE, ERIC, Web of Science and the Cochrane Library.

The Population, Intervention, Comparison and Outcome model is as follows:

3. Results

The initial search yielded 1,207 records.

After duplicate removal, 838 were screened by title and abstract. Of those, only 32 (4%) were included into the qualitative synthesis, exploring the following health-related topics.



- **P** DHL people over 5 years old;
- I all types of broadly defined HL interventions, both in traditional and digital forms;
- **C** no comparison, comparison with baseline HL measures, passive or active comparison;
- "direct" outcomes (health behaviours, healthrelated quality of life and health-related metrics), and "proxy" outcomes (healthrelated knowledge, attitudes, decision-making skills, and beliefs).

Inclusion: all peer-reviewed records, written in English after 2000.

Reporting: PRISMA 2020 statement.

- **Risk of bias** (Cochrane): ROBINS-I for non-randomized studies; RoB 2.0 for RCTs.
- Data synthesis: no meta-analysis planned due to heterogeneity; qualitative synthesis will follow the SWiM guidelines.

Protocol: PROSPERO CRD42021255513.

Preliminary answers

- **Q1.** Overall, yes. Nevertheless, the analyzed literature is vastly heterogeneous in defining validated and standardized outcomes.
- Q2. Active learning and participatory approaches seem to be more effective than "standard" health education schemes.

4. Conclusion

Research in context

Researchers need to foster standardized approaches to HL measurement and adequate outcome evaluations for the DHL population, which is still highly neglected.

A pilot national project

Our findings allowed us to implement a pilot national project to disseminate health-related content through interactive video sessions with experts on different topics: infodemics and vaccines, mental health, physical activity, nutrition,



rare diseases, sexual and reproductive health.