

Introduction

Many physiological changes occur as we age. The main causes of disability are, between other, hearing loss, visual loss and motor skills loss. These issues, both related and unrelated to natural ageing, can lead to difficulties in carrying out activities of daily living and have an impact on the medical care and dependency of patients who are in loss of autonomy. What about the hearing care pathway? Is adherence to hearing aid fitting jeopardized? Do visual or dexterity disorders or ageing have an impact on the use, adoption and maintenance of hearing aids? Handling or management of hearing aids requires good visual acuity, good coordination of the upper limbs, precision of movement, controlled and stable pinch force and good sensitivity of the fingertips. A visual and/or fine motor deficit may make hearing aid insertion, battery changing or maintenance more difficult.

Objective

The aim of this systematic review is to provide an exhaustive description of the difficulties encountered by elderly hearing-impaired patients with hearing aids, who are losing their autonomy or are in a situation of dependence created by a visual and/or motor deficit associated with hearing loss. Knowledge of these difficulties could enable preventive or corrective action to be taken in order to improve use of hearing-impaired patients with motor and/or visual loss.

Materials and Methods

Our search identified 1994 articles and 70 met our criteria and were included in our systematic review (Fig. 1).

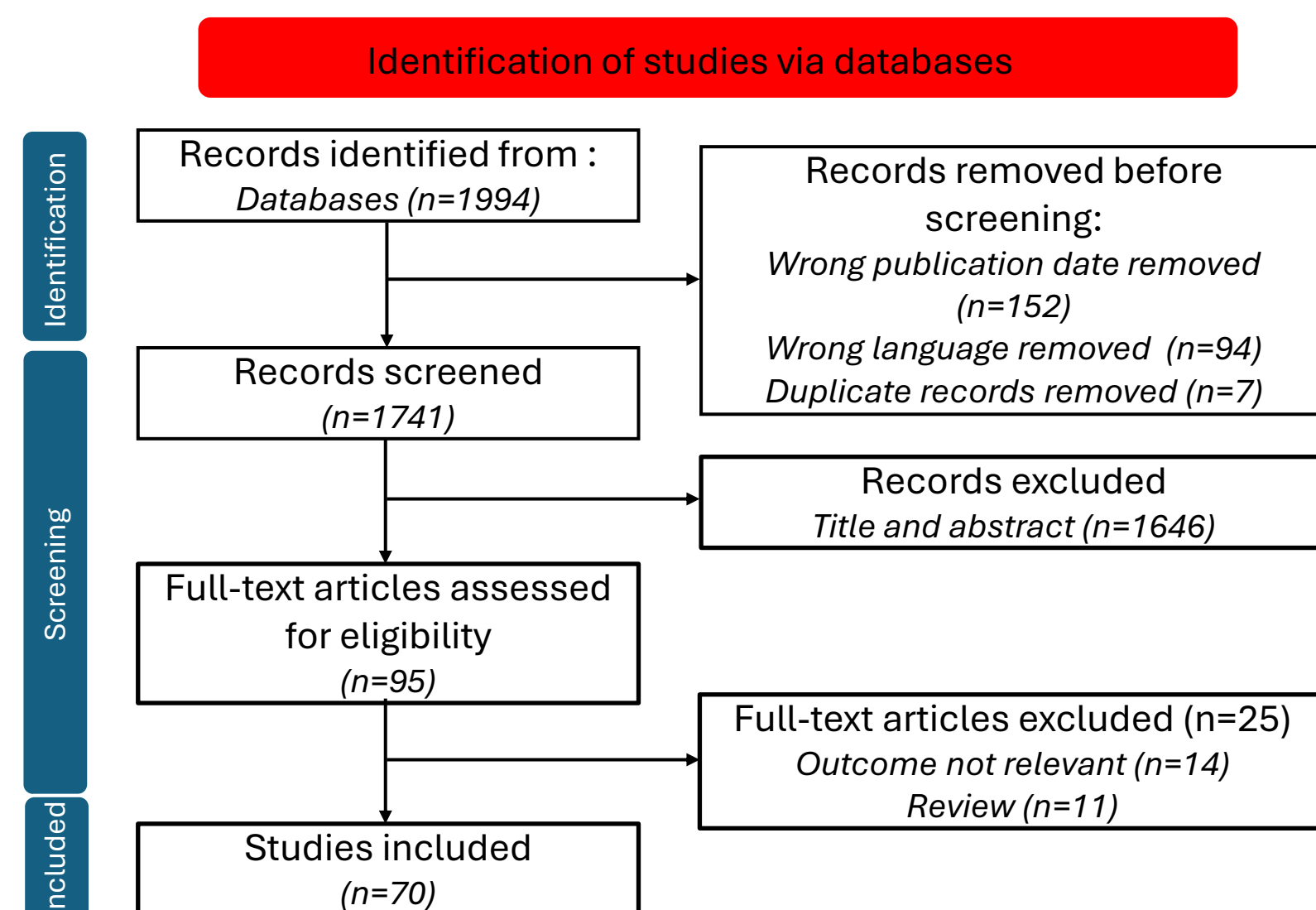


Fig 1. : PRISMA 2020 flow chart diagram for updated systematic reviews which included searches of databases and study selection. Last date of search is August 2024

Résultats

- Manual dexterity disorders due to ageing, visual loss or fine motor skill impairment are one of the reasons for irregular hearing aid use. From this systematic review, 4% to 40% of irregular-user express that difficulties using hearing aids is a barrier for using it. (Fig. 2)
- Among the problems encountered by hearing aid users, difficulty in handling is present in 24 to 42% of cases (Fig. 3).
- The large prevalence difference between the studies is due to different age in studying populations. For patients aged over 75, handling difficulties are a growing problem that limits the use of hearing aids and increases the problems associated with them.

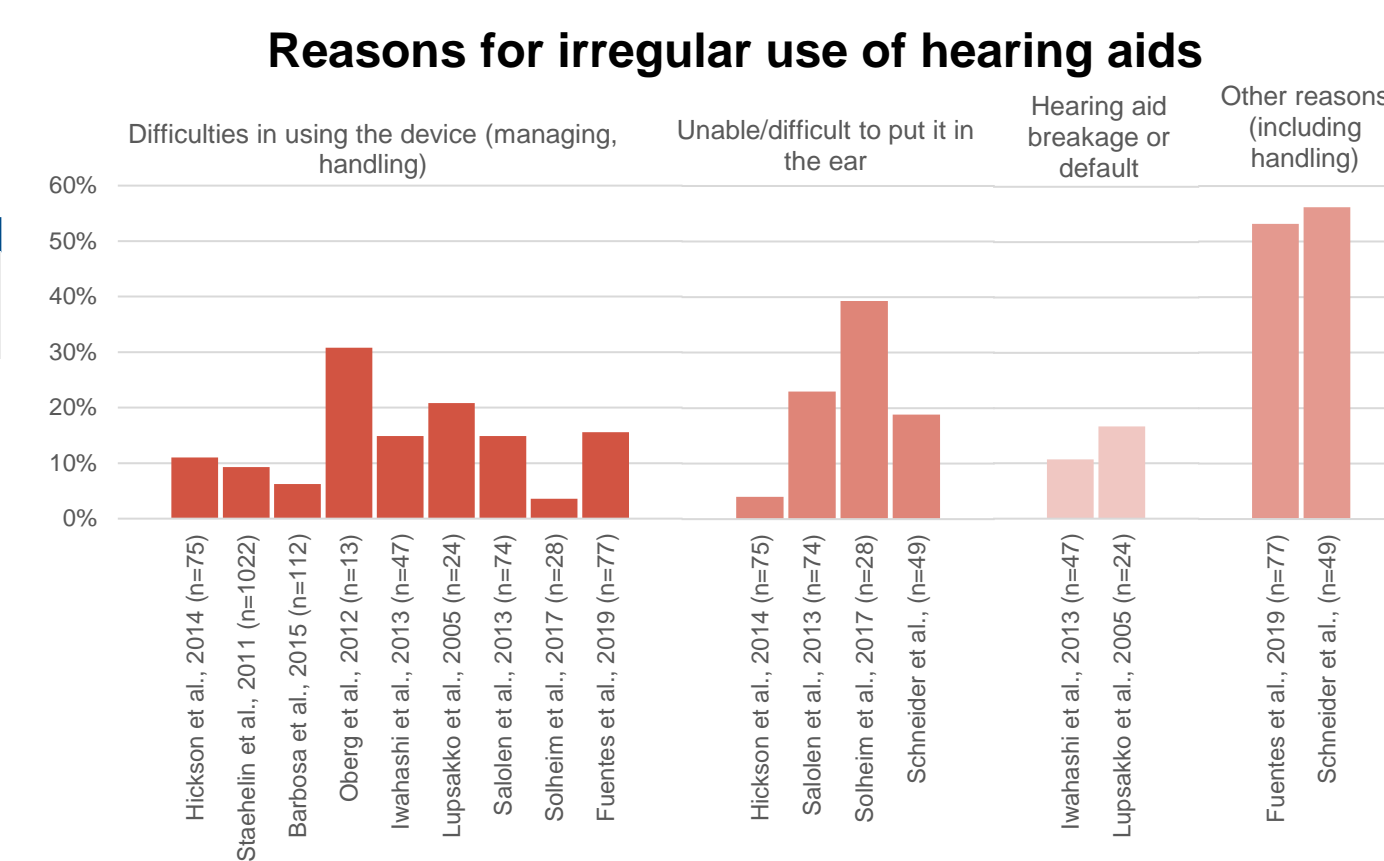


Fig. 2 : Reasons for irregular use of hearing aids with different statement expressed by hearing aid irregular users (hearing aid owners who do not use their hearing aids or under-user hearing aid owners)

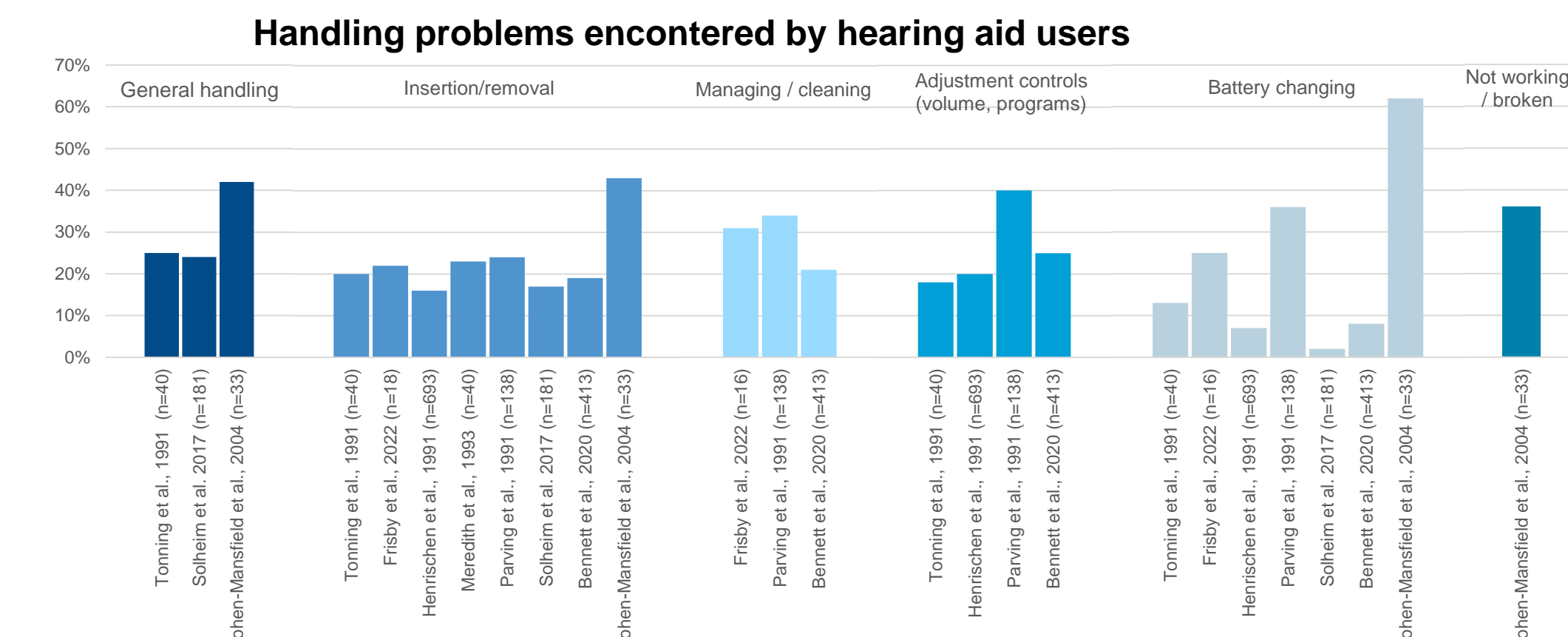


Fig. 3 : Handling problems express by hearing aid users during follow-up appointments.

Conclusion

Problems with dexterity related to ageing, fine motor skills or visual impairments lead to difficulties with the handling and maintenance of hearing aids. These difficulties are significant reasons for irregular use of hearing aids, especially in the older age groups. Studies published in recent years show that neglecting to hearing aid use has a negative impact on cognitive status, social isolation and mortality. It is crucial to find hearing aid solutions that improve compliance in hearing-impaired patients with co-morbidities related to dexterity who are at increased risk of accelerated cognitive decline. Research into the auditory management of patients in nursing homes is also to be explore.

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