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To cite this article: Barbra H. B. Timmer, Rebecca J. Bennett, Joseph Montano, Louise Hickson, Barbara Weinstein, Jane Wild, Melanie Ferguson, Jack A. Holman, Valeri LeBeau & Lisa Dyre (2023): Social-emotional well-being and adult hearing loss: clinical recommendations, *International Journal of Audiology*, DOI: [10.1080/14992027.2023.2190864](https://doi.org/10.1080/14992027.2023.2190864)

To link to this article: <https://doi.org/10.1080/14992027.2023.2190864>



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Published online: 24 Mar 2023.



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DISCUSSION



Social-emotional well-being and adult hearing loss: clinical recommendations

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ABSTRACT

Aim: Best-practice in audiological rehabilitation takes a holistic client- and family-centred approach and considers hearing care in the context of personal well-being. Hearing loss not only impairs the ability to hear, but can also compromise the ability to communicate, thus negatively impacting both social and emotional well-being. Hearing care professionals play a key role in fostering their client's well-being. This paper aims to provide evidence-based recommendations to ensure inclusion of social-emotional well-being in audiological rehabilitation clinical practice.

Methods: A review of current research and expert opinion.

Results: This guide proposes a 5-step plan which includes: identifying the client's social-emotional well-being; including family members in audiological rehabilitation; incorporating social-emotional needs and goals in an individualized management plan; relating identified hearing needs and goals to rehabilitation recommendations; and using counselling skills and techniques to explore and monitor social-emotional well-being. Each component of the 5-step plan is discussed and clinical considerations are presented.

Conclusion: These comprehensive recommendations provide guidance to hearing care professionals looking to ensure clients' social-emotional well-being are considered throughout the rehabilitation journey.

ARTICLE HISTORY

Received 27 September 2022
Revised 17 January 2023
Accepted 5 March 2023

KEYWORDS

Social-emotional; well-being; hearing loss; audiological care

Introduction: the intersection of social-emotional well-being and hearing loss



Hearing loss is a common chronic health condition, primarily managed with hearing devices (e.g. hearing aids, cochlear implants). However, research evidence increasingly demonstrates that hearing devices may not be sufficient to optimise an individual's ability to meet their personal listening and communication goals (Boothroyd 2007; Hickson et al. 2014). What has been recommended is a holistic client-centered approach, taking the focus off the technology and targeting the end goal of improving communication and participation in an effort to positively influence social and emotional well-being (Saunders et al. 2021).

The benefits of an approach that recognises individual well-being in health care is not a recent development. In 1947, the World Health Organisation convened to form its constitution, and as part of this, define concepts of health and well-being. At that stage, well-being was defined as “a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity” (World Health Organization 1948). Despite its formulation over 70 years ago, this definition recognises the important role that social-emotional well-being plays in an individual's life and well-being has been more recently beautifully summarised as “feeling good and functioning well” (Ruggeri

et al. 2020). Feeling good, or emotional well-being, includes the positive emotions of happiness and contentment, as well as emotions such as interest, engagement, confidence, and affection while functioning includes not only physical functioning relating to health but also has a strong social component that includes having a sense of purpose and experiencing positive relationships (Huppert 2009).

This definition of well-being in relation to health in general is also pertinent to the lived experience of hearing loss as its consequences manifest as physical, social and mental impacts. Hearing loss not only impairs the ability to hear, but can also compromise the ability to communicate, thus negatively impacting both social and emotional well-being (Bennett et al. 2022; Heffernan et al. 2016; Vas, Akeroyd, and Hall 2017). For adults with hearing loss, hearing care professionals play a vital role in fostering their clients' social-emotional well-being by supporting their hearing function through various audiological rehabilitation options and approaches. Addressing the social and emotional well-being of adults with hearing loss is thus the focus of this paper.

From a social-emotional perspective, impaired ability to comprehend auditory information and maintain conversations may compromise one's motivation to interact with others. Individuals with hearing loss often avoid and/or withdraw from potentially

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difficult social situations, such as those that may result in feelings of embarrassment or shame (Bennett et al. 2022; Heffernan et al. 2016). Finding these interactions no longer rewarding, people with hearing loss can begin to socially disconnect and become isolated and/or lonely, which in turn can impact their social well-being (Heffernan, Withanachchi, and Ferguson 2022; Peelle and Wingfield 2016; Pichora-Fuller 2016). The reduction of engagement with social contacts can result both in a decline of an individual's social network size and a decrease in the number of interactions with those contacts (Montano and AlMakadma 2012). Lack of social connections or being physically or objectively disconnected from others is an index of the extent to which an individual is socially isolated. Feeling subjectively and/or emotionally disconnected is an indicator of loneliness. Loneliness has been defined as the discrepancy between one's actual or desired level of social connections/engagement with others (Hawkey and Cacioppo 2003; Holt-Lunstad, Smith, and Layton 2010). While often thought of as affecting older adults, social isolation and loneliness can affect adults at any age. Ramage-Morin (2016) found social isolation was more common among 45–59-year-olds than among people over 60 years. Remaining socially connected is protective of one's health and well-being and is directly linked to longevity (Haslam et al. 2018).

Similar to challenging social interactions, research has long identified that hearing loss can lead to emotional distress (Héту et al. 1988) and therefore impact emotional well-being. Hearing loss can cause the situation-specific experience of negative emotions such as frustration, annoyance and embarrassment (Heffernan et al. 2016; Nachtegaal et al. 2009). Longer term impacts on emotion, beyond situation-specific experiences, may also be evident and result in fatigue (Holman et al. 2021) and anxiety (Contrera et al. 2017). Emotional well-being relies on the ability to perceive one's own emotions and the emotions in others. The ability to correctly perceive emotions has also been shown to be diminished by hearing loss (Picou et al. 2018).

The impact that hearing loss may have on an adult's social and emotional well-being can be varied. For example, while Bennett et al. (2022) identified numerous and diverse social and emotional difficulties experienced by their participants with hearing loss, Muñoz et al. (2021) found less than a quarter of their participants reported low social or emotional well-being. It is therefore important that hearing care professionals adopt an individualised approach to evaluating and addressing their client's social-emotional well-being in clinical practice.

Implementing a social-emotional well-being approach in audiology clinical practice

There are a number of aspects to consider when operationalising a social-emotional well-being approach in hearing care. Table 1 sets out a 5-step plan ensuring that the audiological rehabilitation journey for adults with hearing loss supports their hearing needs within the context of their broader social and emotional well-being. Approaches that support the five steps are described. The next sections of this paper address the five components of the social-emotional well-being plan in detail by first presenting pertinent research and then providing clinical considerations for each step of the plan.

Step 1: Identify the client's social-emotional well-being

Hearing care professionals can employ a range of approaches and tools to ascertain and identify their client's social-emotional

Table 1. The 5-step plan to ensure inclusion of social-emotional well-being in audiological rehabilitation clinical practice.

Step 1: Identify the client's social-emotional well-being.

- Use a range of approaches, such as direct questioning, probing and self-report screening surveys.
- Refer for psychological support and other health care professionals where necessary.
- Encourage and support other health care professionals to identify the social-emotional well-being of individuals with hearing loss.

Step 2: Include family members.

- Integrate family members in all aspects of audiological rehabilitation.
- Consider the use of online/tele-practice tools if clients and/or family members cannot attend in person.

Step 3: Incorporate social-emotional needs and goals in an individualised management plan.

- Collaborate with clients and their families and document the client- and family-centered hearing, communication and well-being needs and goals on a written and verbal individualised management plan.
- Document any agreed actions and interventions on the management plan and include the rationale for choices made.
- Ensure all interventions and support approaches are related to the individual and family needs, and explain what each intervention is aiming to achieve.
- Review the goals and actions identified in the personalised management plan during review or follow-up appointments.
- Ensure that outcomes following intervention are measured.
- Agree how to address any goals that have not been met.

Step 4: Relate the identified hearing and social-emotional needs and goals to recommendations, including hearing devices and auditory, communication and social training.

- Recommend hearing devices, if appropriate, and consider all device options such as hearing aids, implantable aids and hearing assistive technologies. Ensure hearing device recommendations are teamed with training on device management.
- Ensure the care plan extends beyond hearing technology and consider the client's social-emotional well-being in providing recommendations.
- Recommend communication training for clients, either individual or group, in-person or, for clients who are competent with using the internet, online.
- Recommend auditory and speech perception training with familiar and unfamiliar voices, in quiet and in noise.
- Include counselling approaches such as referral to peer- to-peer support groups or online forums.

Step 5: Use counselling skills and techniques to explore and monitor the client's social-emotional well-being.

- Ensure an appropriate balance between counselling skills through information provision and counselling approaches that address emotional adjustment throughout the patient's hearing care journey.

well-being. These can include asking direct questions and probing and other counselling approaches used to elicit information. Professionals may also choose to incorporate questionnaires. Validated questionnaires useful for clinical practice include brief emotional well-being screening questionnaires such as the Patient Health Questionnaire-4 (PHQ4) (Kroenke et al. 2009). As psychological flexibility has been linked to well-being and the ability to cope with chronic health conditions, hearing care professionals could consider using the hearing-specific Acceptance and Action Questionnaire-Adult Hearing Loss (AAQ-AHL) questionnaire that can provide insights into psychological well-being (Ong et al. 2019). Other hearing-specific questionnaires are available designed to explore social participation, such as the Social Participation Restrictions Questionnaire (SPaRQ) (Heffernan, Coulson, and Ferguson 2018). The SPaRQ explores participation restrictions in the domains of Social Behaviours (i.e. problems with performing actions in a social context due to hearing loss) and Social Perceptions (i.e. negative thoughts and feelings experienced in a social context due to hearing loss). The 19-item self-

Table 2. Auditory wellness rating scale and action-oriented recommendations.

HHIE-S Score	Auditory Wellness Rating Scale	Action-oriented Recommendation
0 or 2 4 or 6	Excellent Good	Health care professionals should encourage their clients to remain active and engaged (a form of social prescription) and to monitor their auditory wellness over time. Persons completing the auditory wellness screen should be advised that if they note a change in scores they should schedule an appointment with their hearing care professional.
8 to 14	Fair	The client may be on the cusp of needing some assistance when communicating with others to maximise encounters and relationships. Selected communication strategies may help, such as face the speaker so that facial expressions and lip movements are visible; sit within three to six feet of others; ask others to take turns when they speak to make it easier to follow the conversation; minimise any noise or distractions in the room when speaking with others; and make sure to let physicians know when a hearing loss exists. Clients should consider seeing a hearing care professional for a baseline hearing test and find out about the range of intervention options available. Seeking advice from a hearing care professional, remaining active, seeing friends and family, and participating in volunteer activities is very important for maintaining auditory wellness.
16 to 22 24 to 40	Poor Very Poor	Health care professionals should highlight the importance of scheduling an appointment with a hearing care professional for a hearing test and to learn about the variety of hearing care intervention options available. Hearing interventions enable persons with hearing loss to continue to socially engage and interact with family and friends more easily in all listening environments. Clients who are hearing aid users and find auditory wellness diminished should schedule an appointment to discuss the additional options available.

report measure can therefore be used to explore the social-emotional impact of hearing loss. A brief 5-item version of the SPaRQ (the Social Isolation Measure, SIM) was designed specifically to provide a clinical tool to measure social isolation (Heffernan, Habib, and Ferguson 2019). The screening version of the Hearing Handicap Inventory for the Elderly (HHIE-S) (Ventry and Weinstein 1983) is also commonly used and incorporates 10 hearing-specific questions examining social and emotional impacts of hearing loss. Individuals respond yes (4), sometimes (2), or no (0) to the 10 questions; the higher the score the more social-emotional issues a person experiences.

Recently Humes (2021) advocated for adults with hearing loss to self-screen their auditory wellness, defining excellent auditory wellness as excellent auditory functioning or no auditory disability. Humes (2021) suggests a model where older adults self-assess their auditory wellness with referrals and recommendations grounded in the client's ability to take action depending on their perception of how their hearing difficulties impact social function and emotional well-being. The auditory wellness check described by Humes (2021) includes completion of the screening version of the HHIE-S with the resulting score corresponding to auditory wellness categories from poor to excellent. Table 2 proposes an adaptation by Weinstein of the Humes (2021) auditory wellness recommendations to include recommendations for health care professionals based on the individual's auditory wellness score. Hearing care professionals can use the auditory wellness rating scale to connect well-being to hearing when counselling their clients.

Aside from hearing care professionals, other health care workers also have a role to play in identifying individuals at risk for, or already experiencing, reduction in social-emotional well-being. In 2020, the US National Academy of Sciences, Engineering and Medicine (NASEM) (National Academies of Sciences 2020) called on health care providers to identify persons who are socially disconnecting. As noted earlier, age-related hearing loss has been identified as a potential modifiable trigger for loneliness and social isolation (Holt-Lunstad 2017; Weinstein, Sirow, and Moser 2016; World Health Organisation 2021). In their consensus report, the NASEM specifically included hearing loss, as measured by self-report or via behavioural measures, as a potential underlying risk factor necessitating referral to the appropriate health care professional.

Hearing care professionals who embrace a holistic approach to audiological rehabilitation and address clients' social-

emotional well-being should build networks with other health care providers to support them in the identification of individuals who would benefit from referral to hearing care services. The recommendations in Table 2 can also be shared by hearing care professionals with other health care professionals in their networks to encourage screening for auditory wellness.

Clinical considerations

- Hearing care professionals can use a range of approaches to monitor their clients' social-emotional well-being. They can also promote the use of screening tools with clients, encouraging them to self-monitor auditory wellness and identify when they might need to re/access hearing healthcare services for support.
- Hearing care professionals can take an active part in raising awareness and ensuring the health professionals in their communities are able to identify when hearing and communication difficulties may be impacting negatively on social-emotional well-being. The auditory wellness rating scale is a time- and cost-effective tool for screening or monitoring auditory wellness.

Step 2: Include family members in audiological rehabilitation

The activity limitations and participation restrictions experienced by adults with hearing loss often depend on the context of the communication situation (Meyer et al. 2016). Contextual factors can be those in both the person's immediate and broader environments. The most influential players in the immediate environment are those who are closest to the person with hearing loss, typically their family. Family in this context is broadly defined, extending beyond biological relationships and including any person who plays a significant role in an individual's life. Individuals in the broader environment might include friends within the community, casual acquaintances, recreational encounters, shopkeepers or even health care providers.

In adult audiological practice, family-centered hearing care is advocated for three main evidence-based reasons. First, family support has been found to be a key reason why adults seek help for hearing loss and obtain hearing aids when they do seek help

(Meyer et al. 2014; Singh and Launer 2016). Second, positive family support is associated with improved outcomes with hearing interventions such as hearing aids (Hickson et al. 2014) and communication training (Preminger and Yoo 2010). Finally, and arguably most importantly, family themselves experience third party disability because of the hearing loss and this can be reduced if they also receive audiological care (Barker, Leighton, and Ferguson 2017; Preminger and Meeks 2012; Preminger, Montano, and Tjørnhøj-Thomsen 2015; Scarinci, Worrall, and Hickson 2012).

Incorporating family into clinical practice allows hearing care professionals to support successful hearing loss management and attend to the social-emotional well-being of clients and their families. In order to successfully offer family-centered hearing care services, a practice philosophy that ensures an holistic approach to embedding family-centered hearing care to be established (Ekberg et al. 2021). A family-centered care philosophy attempts to incorporate family into all aspects of client care from the initial scheduling of an appointment, history, assessment, rehabilitation, through to follow-up care. In recommending hearing devices, hearing care professionals should therefore also encompass the needs of the individual's family members. Involving family in the decision and educating them on proper use of devices can be key to an individual's success with such technologies (Hickson et al. 2014).

The Phonak Expert Circle on Family-Centered Hearing Care identified key strategies in a position statement about how to make audiological adult practice inclusive of the needs of families (Singh and Launer 2016):

- Invite a family member along to audiological appointments.
- Set up the physical environment so that family are comfortably included in the consultation.
- Start the appointment by letting the client and the family member know that input will be sought from both of them.
- Set joint hearing and well-being goals with client and family. The Goal Partnership Strategy has been developed explicitly for this purpose (Preminger and Lind 2012).
- Present options for rehabilitation that address the needs and goals of both the client and family.
- When developing the treatment plan, aim for shared decision-making with client, family and clinician as equal partners in the process.
- Remember that the client and the family are the experts who live with the hearing loss every day.
- Actively encourage involvement of family at all stages of the care process.
- Measure outcomes of interventions for both the client and the family. Two family measures are the Significant Other Scale – Hearing; (SOS-HEAR) (Scarinci et al. 2009) and the Hearing Impairment Impact – Significant Other Profile (HII-SOP) (Preminger and Meeks 2012).
- Make the entire clinic family-centered with buy-in from all stakeholders, including clinicians, front-of-house staff and management.

The shift towards tele-practice and online health provision in hearing care has given new ways of involving family in audiology appointments (Montano et al. 2018). For example, the use of tele-audiology can be an effective means to provide hearing aid orientation allowing the client to be present within their own home environment, with their chosen partners, working on the

devices they need to pair to their hearing aids without trying to recall the instructions provided during a recent clinic visit.

Clinical considerations

- Hearing care professionals should aim to include family within all aspects of hearing care throughout the client's journey. They should work with the client to identify key communication partners and family members and facilitate their inclusion at every stage.
- The use of tele-audiology should be considered for all aspects of the adult rehabilitation journey and can be a key element in supporting the inclusion of family in hearing care.
- The key strategies within the Phonak Expert Circle on Family-Centered Hearing Care could be used to ensure delivery of family-centered care and audiological practice that is inclusive of the needs of families.

Step 3: Incorporate social-emotional needs and goals in an individualised management plan

Key to delivering appropriate audiological rehabilitation is ensuring that hearing care professionals can support clients and their families to explore and identify their hearing, communication and well-being needs as well as being able to deliver rehabilitation and relevant information that is tailored for the individual's specific needs. Central to implementing a social-emotional approach is the use of a personalised, iterative care plan, also called an individualised management plan. Best practice guidelines in a number of countries have endorsed the use of management plans as have professional organisations such as the American Speech-Language-Hearing Association and the British Society of Audiology (British Society of Audiology 2017; NHS Scotland 2009). A personalised care plan can be an interactive document and include subheadings such as: (i) agreed needs; (ii) planned actions; (iii) completed actions; and (iv) outcomes. These recommendations were also adopted in the National Institute for Health and Care Excellence quality standards for assessing and managing hearing loss in adults 18 years and over (National Institute for Health and Care Excellence (NICE)), (2019).

While standard pure-tone and speech audiometric testing measure hearing acuity, other measures are required to explore the impact that hearing loss can have on an individual in everyday situations (Timmer, Hickson, and Launer 2015). As Granberg et al. (2014) concluded, self-report measures are required to explore the participation restrictions experienced by an adult with hearing loss. To ensure a full picture of the individual's hearing needs is gained, and in order to establish appropriate goals, hearing care professionals should consider the use of self-report measures. For example, questionnaires like the previously-mentioned HHIE-S or SPaRQ can help to identify clients' difficulties and needs. Open-ended tools such as the Client Oriented Scale of Improvement (COSI) (Dillon, James, and Ginis 1997) can help to structure and individualise their goals. The impacts of hearing loss, and the resulting individual needs, may vary considerably and should take into consideration the client's lifestyle and life stage.

Much of the hearing healthcare research in adults has focussed on the lifestyle and life stage of 'older adults', for which the age bracket varies, typically from around 60 years and above (Meyer and Hickson 2012). This focus on older, predominantly

retired adults is not surprising given the steady increase in hearing loss with age, particularly after the age of 50 years (Agrawal, Platz, and Niparko 2008). However, even though the prevalence of hearing loss is lower in working-aged adults compared to older adults, there are substantial numbers of working-aged adults with hearing loss greater than 20 dB HL (WHO 2021).

A number of reviews relating to the challenges that working-aged adults face report similar findings on social-emotional consequences, reduced employment opportunities and barriers at work, and recommend accommodations that can assist in the workplace, both in terms of technologies and work colleagues, and personal attributes (Granberg and Gustafsson 2021; Punch 2016; Zuriekat et al. 2021). An individualised care plan needs to consider the client's lifestyle and performance needs, and the contextual aspects and demands of their frequent listening situations.

The following is a summary of recommendations or actions to address the hearing needs and social-emotional well-being of working adults that could improve barriers relating to communication, social attitudes and workplace infrastructure and organisation:

- Workplace accommodations such as telephone aids and other assistive devices, safety measures, modification of job tasks, use of electronic communication (email and teleconferences with subtitling) and reduction of noise where possible.
- Considerations during virtual or online meetings, such as the use of virtual platforms that have live captioning and ensuring cameras are switched on during virtual presentations or discussions, to allow use of speech reading cues.
- Encourage a buddy system, provide accommodations in the workplace to support communication and advocacy, and engage with good communication strategies.
- Minimise psychological and physical stresses by ensuring an appropriate balance between job demand and job control, accommodation for tasks, recovery and consistent social and general support.

While some of the recommendations above may also address certain needs of older adults, the older population may present with distinct needs such as:

- Ensuring intervention options match the client's mobility and dexterity, their domestic and social support status and ability to self-care.
- Recognition of current and future cognitive well-being and functioning.
- The impact of other chronic health conditions and how these impact the client's attitudes towards addressing hearing and communication difficulties.
- The role of and interaction with other health professionals and the need to support the client in their ability to effectively communicate.

For all lifestyles and life stages, personal strategies for individuals with hearing loss should include anticipating and preparing for challenging situations, and building skills and self-advocacy in seeking advice and support. Hearing care professionals have an important role in supporting their clients to identify relevant personal strategies and incorporating these as goals in an individualised care plan.

When documenting recommendations in an individualised management plan, hearing care professionals should also consider how they will assess the effectiveness of their recommended interventions. Outcome assessment is a key part of evidence-based clinical practice and an important aspect in monitoring progress within an individualised management plan (Turton et al. 2020). Many of the tools described previously to identify hearing needs, such as the HHIE, SPARQ and COSI, can also be used to measure outcomes post-intervention and the SpaRQ can also be used to indicate changes in social behaviours and perceptions and therefore in social-emotional well-being. The use of these, or other outcome measures, can highlight the need for further interventions or could be a guide to setting new goals as earlier goals are met.

Clinical considerations

- Hearing care professionals should explore and understand the social and emotional impacts of hearing loss and communication difficulties with each individual and their family member and develop a list of agreed needs and actions or interventions that aim to address these needs. Questionnaires can help to identify difficulties, needs and to individualise goals.
- Hearing care professionals and their clients should co-develop an individualised management plan that includes agreed-upon needs and goals and the recommended actions and interventions that aim to meet those needs or achieve those goals.
- Adaptations to service delivery should include considering adapting appointments in terms of times and length, the availability of appropriate resources, and adapting recommendations to meet clients' needs and preferences.
- The individualised management plan should be in the client's record and a copy should be provided to the client. The plan should be a 'living' document that can be updated as new needs are identified or as interventions are implemented and goals are met.
- A holistic management plan should also incorporate a means of measuring outcomes and effectiveness of interventions in meeting an individual's needs, so that additional or alternative interventions and rehabilitation can be considered. Validated tools should be used to collect and record these client-reported outcomes.

Step 4: Relate the identified hearing needs and goals to recommendations – hearing devices

Addressing a client's social-emotional well-being during the audiological care journey includes linking their hearing needs and goals to recommended technology and other interventions. The provision of hearing devices is often central to audiological rehabilitation. Technologies such as hearing aids or cochlear implants can be used for all levels of hearing loss to restore or support auditory perception while ensuring listening comfort and optimising sound quality (Ferguson et al. 2017; Timmer, Hickson, and Launer 2015; Turton et al. 2020). Although primarily targeting the improvement of hearing speech signals, hearing devices can also increase the awareness of warning and environmental sounds.

Aside from supporting hearing and communication function, the fitting of hearing devices has also been shown to support the social-emotional well-being of adults. In a study of hearing aid

and cochlear implant recipients, Contrera et al. (2016) found a significant improvement in mental health and emotional well-being at 6-months and 12-months post-fitting for the cochlear implant users, and in mental health well-being 12-months post-fitting for the hearing aid users. Mental health well-being in this study incorporated aspects such as vitality, social function, role limitations due to emotional problems, and general mental health perception domains. The benefits of hearing devices are not limited to addressing emotional well-being, but also extend to social well-being. A literature review by Ellis, Sheik Ali, and Ahmed (2021) found all relevant studies reported improved social isolation and loneliness scores following hearing intervention, although the number of studies cited was small.

Social events can involve very complex acoustic situations limiting audibility and possibly social interaction for all listeners but especially for those with hearing loss. Even those who are well fitted with hearing aids and/or cochlear implants may experience consequential communication difficulties listening at a distance, in group conversations, with poor acoustics, and with high and undulating background noise. Hearing Assistive Technology Systems (HATS), also called Assistive Listening Devices (ALDs), are technologies that support safety and/or provide connectivity with the environment (Holmes, Saxon, and Kaplan 2000). They can be used along with or integrated into personal amplification systems or perform as standalone technologies. Examples of HATS include remote microphones and streamers that connect to personal hearing devices and provide an improved signal to noise ratio; induction loop systems; amplification systems for televisions or telephones, and multisensory alerts for smoke alarms, doorbells, telephone ringers, and baby and other monitors. The use of hearing device accessories such as wireless remote microphones has been shown to significantly improve speech understanding in adverse acoustical environments (Chen et al. 2021; Thibodeau 2020). Research has shown that this technology – especially that which adapts to changing signal-to-noise ratios – can increase audibility and therefore promote continued social engagement and well-being (Thibodeau 2020; Vroegop et al. 2018).

To relate client's need to recommendations, hearing care professionals should include an explanation of appropriate devices and their potential benefits and limitations, within the discussion about management and intervention options (National Institute for Health and Care Excellence (NICE)), (2018). Any recommendations made regarding hearing devices need to consider the client's ability to manage them successfully. Audiologists impart information to clients and families about a broad range of topics relating to the ear and hearing condition as well as intervention options such as hearing devices and their management. The hearing care professional's challenge is to provide sufficient information yet to not overwhelm the client and their families. Information transfer in the audiology setting has been described as 'information dumping' (English 2008), with hearing aid owners only able to recall between 25 and 65% of information provided during the consultation four weeks later (Ferguson et al. 2015; Reese and Hnath-Chisolm 2005). Health literacy guidelines should be adhered to for any written information to ensure optimal readability (Caposecco, Hickson, and Meyer 2014; Looi et al. 2022). Importantly, hearing aid owners have indicated that the amount and technicality of information they prefer when acquiring hearing aids differs between individuals (Bennett et al. 2018b; Grenness et al. 2014; Laplante-Lévesque et al. 2013).

For these reasons, a client-centered care approach to hearing device recommendations should include consideration by the

hearing care professional of their client's ability to self-manage their hearing loss and devices. Client-centered care for the management of chronic illness such as hearing loss should incorporate strategies that encourage self-management of the condition if appropriate (Holman and Lorig 2004). Whereas traditional hearing device management training offers information and technical skills (Reese and Hnath-Chisolm 2005), in contrast, self-management education teaches problem-solving skills, where the objective is to empower and prepare individuals to self-manage their hearing loss and associated problems. The benefits of self-management skills are demonstrated in their association with successful hearing aid outcomes (Barker, Atkins, and de Lusignan 2016).

Hearing care professionals should also consider involving family members in facilitating self-management. Educating family members on proper use of hearing devices can be key to an individual's success with such technologies (Hickson et al. 2014). To promote self-management of hearing loss for clients and their family members, hearing care professionals can provide self-administered hearing aid skills and knowledge using multimedia material, such as C2HearOnline and the individualised and interactive m2Hear. Smartphone apps have also been shown to support hearing aid management (Timmer, Launer, and Hickson 2020). Surveys can also play a role in promoting self-management, such as the self-administered version of the Hearing Aid Skills and Knowledge Inventory (HASKI-self) (Rebecca J. Bennett et al. 2018a) or the Hearing Aid Skills and Knowledge survey (HASK) (Saunders et al. 2018). Multimedia resources and surveys facilitate self-assessment of hearing aid skills and knowledge, and subsequent identification of areas requiring additional training. C2Hear, m2Hear and HASKI-self include information and tips on how to perform specific skills, providing feedback, thereby facilitating self-education. These also include descriptions of how to troubleshoot hearing aid-related problems as they arise.

Clinical considerations

- It is important for hearing care professionals to inform their clients about the range of hearing technologies available to them such as hearing aids, cochlear implants and HATS and how they may be of benefit to them. These discussions should be in the context of, and in reference to, the individual hearing and communication needs identified by the individual and their family within their specific management plan.
- Suitability of a particular hearing device or HATS can alter with lifestyle and/or hearing technology changes, for example new hobbies, technology improvements or life event changes may make specific hearing technologies a more suitable intervention. Hearing care professionals should consider the changing needs and opportunities for clients and adapt the individual management plan accordingly.
- Hearing care professionals should also consider including the individual's family members in the decision-making about devices and in the information provision and rehabilitation to support their use.
- Hearing care professionals could improve their client's management of hearing devices by asking how much detail they would prefer to receive, checking to ensure they understand what is being discussed, providing written information,

multimedia online resources and surveys, and using simple language.

Step 4: Relate the identified hearing needs and goals to the recommendations – auditory, communication and social training

There is an important role for hearing care professionals to play in supporting persons with hearing loss to develop auditory, communication and social skills to overcome the participation restrictions caused by hearing loss. The provision of such programs along with hearing aids has been shown to be more cost-effective at improving the burden of disease for hearing loss than the provision of hearing aids alone (Abrams, Chisolm, and McArdle 2002; Hogan et al. 2020). Auditory training exercises can also have the potential to mediate the detrimental effects of social withdrawal and/or isolation. Auditory skills training is the process of improving auditory skills through structured, repetitive listening exercises to train the brain to interpret auditory stimuli in order to understand spoken language. Studies have shown that auditory training may improve speech perception in quiet and in noise (Olson, Preminger, and Shinn 2013; Whitton et al. 2017) and reduce listening effort (Kuchinsky et al. 2014). The improved skills and use of strategies learned from auditory training could boost communication confidence and re-engagement in social interactions. For example, Castiglione et al. (2016) showed that auditory training resulted in a positive impact on social isolation and depression.

Importantly, training and communication programs are not only helpful for the person with hearing loss, but also for their communication partners (Hickson, Worrall, and Scarinci 2006; Preminger 2003). Auditory training can serve to strengthen relationships as the quality of an individual's interactions with their family and loved ones deepens and strengthens those relationships. Auditory training sessions that targeted speech perception training and understanding a spouse's recorded speech were found to improve speech discrimination of a familiar speaker and self-reported decrease in communication difficulty as measured by the COSI (Tye-Murray et al. 2016).

While auditory training helps to improve access to speech cues and speech discrimination, communication education programs generally include training and skills development in relation to improving access to visual cues (facing each other, body language and lip-reading), reducing the distance between speakers, using context (following the theme or context of the conversation), managing the listening environment (improving lighting or reducing background noise), and asking for clarification or repetition.

As part of the client's individualised management plan, hearing care professionals should explore their client's preferred mode of delivery of auditory and communication programs. Such programs may be delivered in-person (Lowe et al. 2023), online or in digital formats (Lawrence et al. 2018). Some communication programs can be delivered as individual (Hickson et al. 2019) or group in-person sessions (Hickson, Worrall, and Scarinci 2007), as group online sessions (Thorén et al. 2014), or as self-led learning supported by online materials (Ferguson et al. 2019) and smartphone apps (Ferguson 2017).

Aside from participating in auditory and communication programs, clients can also benefit from social coaching. Social coaching is a developmental approach to working and interacting with other people. It can help people develop their personal capabilities, interpersonal skills, and capacity to understand and empathise with others. Social coaching helps clients to develop the

skills and confidence to make them more sociable (Stelter 2007) and will also consider self-awareness, assertiveness, interpersonal skills, verbal communication, and non-verbal communication (Gresham 2002). Hearing care professionals provide social coaching to their clients in a variety of structured and unstructured ways, including within individual or group sessions. Aspects of social coaching are embedded in communication education programs such as the evidence-based Active Communication Education (ACE) program (Hickson, Worrall, and Scarinci 2007). Specific behavioural skills developed within audiological social coaching may include waiting your turn to speak, moderating the volume and tone of your voice, asking for clarification, joining a group, managing frustration or embarrassment, respecting other people, not interrupting, asking for help, and understanding the social cues of other speakers in the group.

One of the most common topics coached on is *assertiveness*. Perceived stigma around hearing loss can sometimes cause people to choose not to disclose their hearing difficulties within certain environments or to certain people. The role of the hearing care professional is to help clients understand stigmatisation and the potential benefits of disclosure of hearing loss and assertiveness within challenging listening environments. Another common topic of social coaching is that of emotional self-regulation. It is common for people with hearing loss to experience frustration or embarrassment within social situations. Heightened feelings can further hamper the ability to hear and think clearly. The hearing care professional can support their clients by raising awareness of heightened feelings and teaching techniques to assist emotional self-regulation, such as consciously attending to breathing, relaxation techniques, awareness of body sensations, meditation, self-expression (art, music, dance, writing), and use of caring and nurturing self-talk.

More recently hearing care professionals have looked towards psychology literature for evidence-based tools to support social coaching. *Activity scheduling* is an effective behavioural treatment for improving mood through alleviating social isolation (Cuijpers, Van Straten, and Warmerdam 2007). In this approach clients learn how to increase the frequency with which they engage in pleasant activities; increasing positive interactions with their environment lifts their mood and reinforces these positive social behaviours. Activity scheduling has been adapted for the audiology setting to help clients overcome social withdrawal associated with hearing loss. Together, the client and hearing care professional (i) identify specific goals for the week/month (specific social activities that the client wishes to attend), (ii) describe how the client will set up these activities (e.g. make a booking, call a friend), (iii) visualise how they will engage within these activities (e.g. how to modify the environment for effective communication, or be assertive towards specific individuals), (iv) consider what might go wrong, and problem solve how they might overcome these obstacles should they arise, and (v) clearly document the plan and then implement it (Beck 2021).

Hearing care professionals should also consider the use of social prescribing when creating an individualised management plan with their client. Social prescribing is designed to help people identify their social needs and develop action plans aimed at improving personal well-being (Carnes et al. 2017). Connecting clients with a local peer support group is a form of social prescribing which has the potential to lower the stress of hearing and communication challenges because the members are typically experiencing similar frustrating communication situations. Additionally, the relationships formed with peers could positively impact well-being. Participation in group communication

training programs such as ACE (Hickson, Worrall, and Scarinci 2007) also contains elements of social prescribing as well as social coaching and promoting self-management. Hogan et al. (2015) suggested that hearing care professionals should incorporate social prescribing into practice and identify those clients for whom residual disability and the social impacts of hearing loss remains even with the use of hearing devices. Their data support the concept of social prescribing as an indirect way of supporting or extending hearing health care by engaging secondary service organisations to help alleviate the social concerns concomitant with hearing loss (South et al. 2008).

Clinical considerations

- Hearing care professionals should consider use of communication education, auditory training and social skills programs either as an alternative to or in conjunction with hearing devices.
- Hearing care professionals should actively include these options as part of individualised management plans. They can do this through discussion with clients, referrals to programs or groups or by delivering this support themselves.
- The provision of auditory, communication and social skills programs can be in-person, or through multimedia or online resources.
- Hearing care professionals could also consider setting up and supporting such programs within their local areas and communities, for example, through audiology volunteer peer support schemes.

Step 5: Use counselling skills and techniques to explore and monitor the client's social-emotional well-being

Counselling is a learning-oriented process occurring within an interactive relationship, with the aim of helping a person resolve difficulties or decide issues impacting on social, emotional or psychological well-being. Within audiology, the term “counselling” is often used to broadly describe the assistance provided for the challenging emotions and life situations faced by people with hearing loss in an effort to facilitate realistic and clearly understood goals and improve quality of life (Flasher and Fogle 2012). While it is important to clarify that hearing care professionals are not trained to provide therapeutic counselling in the same way that a psychologist/counsellor does, hearing care professionals are experts in the management of hearing loss and its related issues. This not only includes learning about rehabilitation options, but also, addressing the social-emotional impact that hearing loss may have on an individual. Traditionally, counselling has been thought to be broken down into two areas for hearing care professionals: *informational* and *personal adjustment* counselling. Since counselling has now become a core content of academic training and is included in the majority of educational programs, delineating counselling into those traditional areas limits the breadth and scope of what is actually involved in audiology practice. Clinically, we recommend that a more appropriate description of counselling in this context is that hearing care professionals engage with their clients using various *counselling skills*, and apply a variety of *counselling techniques* for support.

Counselling skills are a core component of a clinician's way of engaging with a client while delivering any type of assessment or intervention service. Skills are necessary to identify issues related to the impact of hearing loss and the identification of the social-emotional components that may be present.

Counselling skills underpin how a hearing care professional engages with a client and communication partners, builds rapport, effectively listens to their needs, performs appropriate assessments, identifies rehabilitation goals, co-designs the rehabilitation plan, and supports the client and family on their rehabilitation journey. Counselling is a central component of the role of the hearing care professional. Without effective counselling skills, a hearing care professional may undermine their clients and negatively impact intervention progress (Muñoz 2018).

Hearing care professionals use a diverse range of counselling skills to guide their general interactions with clients (Bennett et al. 2020; Bennett et al. 2022; Meibos, Muñoz, and Twohig 2019). These skills include, but are not limited to:

- Active listening (giving the client your full attention),
- Encouraging the client to talk about their experiences and emotions (use of conversation openers and asking appropriate questions),
- Responding appropriately (both verbally and non-verbally, such as use of paraphrasing and reflection),
- Validating the client/family thoughts, feelings, and experiences,
- Listening to the client's agenda, rather than their own,
- Engage with families in ways that are respectful of the client's autonomy,
- Maintaining an open and accepting approach to discussing social, emotional and mental health concerns,
- Remaining respectful of different client/family world views/values and interact empathetically and without judgement.

In this way, counselling is not a single intervention delivered at a single point in time, rather, are used by hearing care professionals during every client encounter.

Counselling techniques are specific approaches (often drawn from psychology theory) that help clients change or accept their thinking patterns and behaviours, and improve their coping skills.

The purpose of applying specific counselling techniques is to improve the quality of life for individuals with auditory disorders and/or communication needs through alleviation of the social-emotional distress associated with hearing loss, audiological assessment, and audiological interventions. Hearing care professionals use a diverse range of counselling techniques when supporting clients, including, but not limited to, motivational interviewing (Rollnick, Miller, and Butler 2007), motivational tools (Ferguson et al. 2016), narrative therapy (DiLollo and Neimeyer 2020), Acceptance and Commitment Therapy (Molander et al. 2018) and Cognitive Behavioural Therapy (CBT) (Aazh and Moore 2018). Motivational interviewing helps individuals to identify reasons or motivations for seeking treatment, explore ambivalence regarding hearing loss management options, and facilitates behaviour change (Ferguson et al. 2016; Whicker et al. 2019). Narrative therapy directs the conversation between a client and hearing care professional to eliciting the client's strengths, competencies, and solutions (Furlonger 1999). Acceptance and Commitment Therapy uses approaches such as acceptance training, life goals and values and willingness to build new coping strategies (Westin et al. 2011). CBT aims to build strategies by identifying and changing aspects of a client's attitudes and behaviour to better cope with the negative consequences of hearing loss (Kaldo et al. 2007).

Hearing care professionals may use these techniques in ways that adhere to their original design (based on psychology theory) or they may use modified techniques that draw on the original

models. Individual counselling techniques are frequently not restricted to one specific theory but rather embraced as a source for hearing care professionals to influence their ability to help clients manage their hearing loss. For example, hearing care professionals are not typically trained or certified to provide cognitive behavioural therapy CBT to treat tinnitus, but their familiarity with the goals and CBT process, can be useful when counselling a client who may need some relaxation to reduce stress.

Clinical considerations

- Hearing care professionals should blend counselling support and audiological support within service provision. For example, a client may feel excluded during group conversations among friends and may benefit from both technology interventions, such as directional or wireless microphones, as well as hearing care professional-delivered counselling techniques, such as information provision (e.g. in relation to managing the acoustic environment), social coaching (e.g. helping them learn how to insert themselves into and interact within challenging social situations), or narrative therapy (e.g. helping them to come to terms with the limitations of issues related to their hearing loss).
- Clinicians should integrate a combination of audiological support, counselling techniques and skills when designing and delivering hearing services, ensuring that counselling forms part of the professional relationship from identification of hearing loss throughout all rehabilitation processes.

Conclusion

This paper provides a brief overview of the importance of recognising the social-emotional impacts that hearing loss could have on an adult. The authors present current research and propose five steps to guide hearing care professionals in addressing clients' social-emotional well-being throughout the audiological rehabilitation process and provide clinical considerations in implementing the 5-step plan.

Disclosure statement

No potential conflict of interest was reported by the author(s).

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