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RESEARCH ARTICLE

The audiological rehabilitation of workers with hearing loss in the UK: a qualitative study of workers' perspectives

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ABSTRACT

Purpose: Unaddressed hearing loss can adversely affect employment and day-to-day work-life. Efficient and effective audiology support can help optimise hearing in the workplace. This study explores the audiological rehabilitation experiences of workers with hearing loss (WHL).

Materials and methods: Twenty-four WHL with experience of a wide range of audiology services across the UK participated in semi-structured interviews. Interviews were analysed using inductive thematic analysis.

Results: Three main themes were generated: Theme 1: mixed experiences with audiology services (subdivided into two subthemes and four sub-subthemes). Theme 2: audiology role in work support (subdivided into three subthemes). Theme 3: "I think support could be improved if…" (subdivided into two subthemes).

Conclusion: The audiological rehabilitation for working-age adults with hearing loss needs improvements to deliver sufficient support and quality care. Some of the barriers to having better-functioning hearing healthcare require fundamental standards in healthcare quality, such as access to services, staff (including audiologists) deaf awareness, information and technology support, and personalised care that considers work-life needs. Further research is required to evaluate the feasibility and cost-effectiveness of improvements, such as support that extends beyond hearing aid care, whether from audiology or non-audiology services.

> **IMPLICATION FOR REHABILITATION**
> - Workers with hearing loss need audiologists' support to address their work life needs beyond hearing-aids care.
> - Improving audiologists' competencies, audiology departments' efficiency and developing relevant resources may promote better healthcare for workers with hearing loss.
> - Audiologists, employers, workers, and the healthcare system need to collaborate in developing person-centred solutions to sufficiently assist workers with hearing loss.

Introduction

The number of workers with hearing loss (WHL) is increasing globally, mainly because people are living and working longer [1]. Many people spend a significant time of their day at work, and WHL can feel vulnerable in the labour force because the work conditions they face are more challenging than for people with normal hearing [2–5]. WHL put effort into communicating effectively and coping in the workplace [2,6,7], yet many continue to struggle and face work-life difficulties, including performing certain work tasks, maintaining productivity, and sustaining control of their jobs [5,8,9]. The disadvantages of hearing loss in work-life are coupled with the lack of work adjustments made by employers [7,10,11] and a lack of clarity around who should support WHL

[12]. The little available evidence on audiology support from audiologists' perspectives suggests that audiological rehabilitation for WHL needs improvement [12]. Effective support for WHL is essential. Ideally, the support should incorporate practical, affordable and person-centred work-life assistance. Providing effective audiological rehabilitation could alleviate difficulties for WHL, avoid potential detriments such as job loss, and improve quality of life. It could also minimise the detriments to businesses and the economic impact on the person and the wider society [13].

There is little available research on the general experiences of WHL at the workplace and regarding their healthcare. There is even less research on the perspectives of WHL regarding their employment in the modern job market and their audiological rehabilitation.

A few international studies have focused on exploring the impact of hearing loss on work-life and developing vocational rehabilitation programmes [5,14,15], but these studies have not dealt with the challenges faced by WHL before, during and after audiological consultations. The research on audiological rehabilitation has mostly investigated audiologists' perspectives [12], with only a few narratives of WHL [16]. More recently, a few studies have investigated hearing device uptake and use among WHL [17,18].

Jennings and Shaw [16] studied the narratives of three workers to identify the extent to which they had access to information, technology and support for their hearing loss. The data were analysed to identify steps that would help them with their work performance and productivity. The three participants reported their attempts to self-manage their hearing loss in terms of accessing information and services, and two of them eventually lost their jobs. The authors called for an interdisciplinary approach to developing better needs assessment of WHL and better information-sharing by agencies. This kind of narrative analysis is important in providing an in-depth understanding of the lived experiences of the participants, but it tells only a part of the story as the reality is far more complex.

Another investigation of seven older workers asked about their audiological rehabilitation [19]. They reported that their audiologists neither asked about nor supported work-life needs, which supports what many audiologists reported in our recent study [12]. The evidence from these studies indicates deficiencies in implementing a person-centred approach and inadequate audiological rehabilitation for WHL. Therefore, it is important to identify the facilitators and barriers to efficient and effective support for WHL, which can include a large number of factors, such as technology uptake and use, audiologists' perceptions of their role, and service and healthcare system efficiency. Commonly, audiology support focuses on the hearing aid provision, but extending this to provide holistic, personalised and extended support, including advanced hearing technologies, specific needs support and counselling may prove beneficial and improve the ability of WHL to communicate and cope in the workplace.

The uptake, use and benefits of the various hearing devices among WHL are under-investigated, especially in the area of assistive listening devices (ALDs). There are continuous advancements in hearing technologies that could help tasks in the workplace, such as the use of the latest hearing aids with Bluetooth connection ability and ALDs that help telephone calls and improve hearing and communication in meetings. A recent cross-sectional investigation of hearing aid use among 36 WHL indicated that their satisfaction with hearing aid use was good; however, satisfaction was also proportional to their ratings of their audiologists' competence [17]. At the same time, the little available evidence from audiologists suggests deficiencies in effective support of WHL that principally stem from a lack of knowledge about the issues that WHL face. There is a lack of specialist skills to address work-related issues and an inability to keep up with the continuously advancing hearing technologies [12,19]. Advanced hearing technologies that assist work-life, in particular, seem to be underutilised because of many factors, including audiologists' lack of knowledge and expertise in prescribing and fitting them, as well as funding constraints, especially for ALDs [12]. Research that could lead to clear evidence-based guidance for audiologists in technological support for WHL is needed.

Van Leeuwen et al. [18] examined the uptake of hearing aids and ALDs among WHL, finding their uptake to be influenced by the sense of job control (the degree of control over tasks performed at work) among males, in addition to sociodemographic factors, such as increased uptake of devices among married WHL. This study highlights the importance of taking into account the influence of demographic factors on audiological rehabilitation, work-life, and well-being. Factors relating to the workers themselves, such as their demographics, are key, but at the same time, factors relating to audiologists and audiology services are also highly important and have been greatly overlooked in previous research.

Zuriekat et al. [12] interviewed a sample of audiologists who discussed the challenges they perceived in their consultations with WHL, highlighting the need to extend their knowledge and training about employment and hearing loss, and how to better support working-age adults in work-life. The audiologists also gave suggestions for improvements to general healthcare and audiology services. These included strengthening communication networks between audiology and other services such as social services, ear, nose and throat specialists and Access to Work (ATW) governmental scheme, and improving resources and funding for WHL care. The audiologists' perspectives presented a picture of suboptimal WHL support but this picture remains incomplete without examining the perspectives of WHL on the hearing healthcare they receive.

Exploring the perspectives of WHL would help obtain a broader and more in-depth understanding of the improvements needed in the audiological rehabilitation of WHL than can be found using only audiologists' perspectives. Both perspectives would enable identification of the common needs for service improvements, as well as the differing needs of both groups. Finally, comparing and contrasting the perspectives of both WHL and audiologists may clarify the extent to which both perspectives are in agreement, as well as increase confidence in the evidence from both groups, which is considered a form of validation in qualitative research [20]. Audiologists' perspectives were explored in a previous publication [12], whereas the current study explored the audiological rehabilitation for WHL from their perspective. The aim was to gain insights into key issues faced by WHL about the care and support provided by their audiology services, which can then be used to develop targeted service improvements.

There were two main research questions:

1. What are the experiences and views of WHL regarding their audiological rehabilitation?
2. What do WHL believe enables or prevents effective support by their audiology services?

Materials and methods

Design

A pragmatic qualitative approach was utilised to gather the perspectives of WHL in order to develop ideas for relevant improvements in audiologic healthcare and to suggest directions for future research. The first author (MZ) conducted one-to-one semi-structured interviews with twenty-four WHL who were working and receiving audiological care in the UK. All participants signed a consent form and completed a questionnaire that collected details of the participants' demographics, hearing loss, audiological services, and work contexts. All interviews were audio-recorded, transcribed verbatim and thematically analysed by the first author. Ethical approval was obtained from the Research Ethics Committee of the Institute of Sound and Vibration Research (47185) at the University of Southampton, UK.

Participants

The current study was advertised through the Internet. Adverts were posted on social media platforms such as hearing loss blogs,

Facebook, LinkedIn, Twitter and Instagram, as well as on websites of hearing loss charities and organisations. A few working-age participants had their details available on hearing research mailing list for the Institute of Sound and Vibration Research at the University of Southampton and were approached by email. Purposive sampling was used to recruit the WHL. The sampling included 24 adults. The inclusion criteria were (1) adults of working age (18 to 65 years old), (2) adults with hearing loss verified by pure-tone audiometry, (3) adults who had at least one consultation with an audiologist in the UK and (4) the participants were working, either paid or voluntary. No exclusion criteria were set for gender, ethnicity, nationality, work type or experience to encompass heterogeneity in the sample and gather common perspectives [21]. Table 1 summarises the participants' characteristics.

Interviews

Five interviews were carried out face-to-face, seven were conducted through online video calling, six participants chose to be interviewed by telephone, and another six chose instant messaging. The researcher introduced herself as a PhD student and explained the purpose of the research. Semi-structured interviews were conducted using an interview guide that comprised three open-ended questions (Appendix A). Prompts were used when needed to elicit in-depth information. Reflexive notes were taken during and after the interviews. Four pilot interviews were initially conducted and analysed and discussed with the research team to refine the questions. As minimal changes were made to make the questions clearer, the pilot interviews were included in the final analysis.

Although the data were saturated at 15 interviews, 24 participants were interviewed to reach the required information power [22], as this is an explorative study with broad aims and is focused on an under-researched topic where theory is lacking. Variation

in sampling also is a suitable strategy when the goal is to gather information on common perspectives and behaviours [21]. Therefore, a larger sample was sought so that data could be collected from participants with a wider variety of demographic characteristics such as gender, hearing loss characteristics, and work type.

Analysis

The audio-recorded interviews were transcribed verbatim. The text was copied from the instant messaging interviews as written. Inductive thematic analysis according to Braun and Clarke was used [21,23]. This included (1) familiarization through transcribing the interviews, reading repeatedly and writing notes, (2) forming initial codes across the whole dataset, (3) generating themes by organizing key and relevant ideas in initial codes, (4) refining and reviewing the themes by rereading the coded extracts and evaluating them, (5) naming the themes and clearly defining them and (6) writing the report. Some grounded theory analysis techniques were also used while forming the initial codes because they help remain close to the details of the participants' perspectives [24]. These included "word coding," "line by line coding," "sentence coding" and making comparisons. The interview transcripts were kept in NVIVO software (Version 12). Inductive coding was performed, and the codes were organised and regrouped to form the final themes and subthemes, and each was named and defined in a coding manual.

The code-recode procedure [25] was used to check for analysis consistency. The researcher examined the data and analysed it on one day, and later, on another day, analysed it again without looking at the previous analysis. Both analyses were then compared to check for similarity. This re-coding was conducted repeatedly and resulted in no different results, and hence it helped in

Table 1. Participants characteristics.

Number	24
Age	Range: 22-62 years, Mean: 45.8 Standard deviation: 12.9
Gender	Female: 18 Male: 6
Number of audiologist appointments	One appointment only: 2
	Two to nine appointments: 7
	Ten or more appointments: 15
Usage of hearing technology	Hearing aids: 19
	Cochlear implants: 1
	Both a hearing aid and a cochlear implant: 3
	None: 1
Type of service	NHS service: 17
	Independent company: 3
	Both independent company and NHS service: 4
Type of work	Full time: 14
	Part time: 9
	Voluntary work: 2 (one of them was also a part-time worker)
Participants' work at the time of the interview	P 1 Academic scientific research assistant, P 2 Care worker in the healthcare system, P 3 Pharmacy dispenser, P 4 Childcare play worker in an educational facility, P 5 Customer assistant in a supermarket, P 6 E-commerce manager in footwear and clothing marketing, P 7 Sales assistant in a retail shop, P 8 Production technician in biotechnology, P 9 Regional information coordination and outreach worker for charity for aged veterans with deafness, P 10 Senior clerical assistant in an educational facility, P 11 Senior product development manager in a company and part-time tutor for lip-reading and managing hearing loss classes, P 12 Curricular assistant in an educational facility, P 13 Tribunal member in the justice system, P 14 Events funder in a hearing loss charity, P 15 Contracts manager in an administrative company of computer software, P 16 Social worker in healthcare, P 17 Secretary/administrator in a commercial company, P 18 Meat inspector in the agriculture industry, P 19 Configuration specialist in the defence system, P 20 Civil servant in agricultural policy, P 21 Social care worker in a care agency and cleaner in private, P 22 Administrator in civil services, P 23 and P 24 Fellow surgeons in a hospital

confirming the consistency in performing the analysis. The results were also shared with the participants to ensure that their perspectives were conveyed correctly. Participant validation is a valuable tool in qualitative research to validate the results and enhance the credibility and trustworthiness of the data [26]. Seven participants responded, and all confirmed that the results corresponded with their experiences. The researcher discussed the process step-by-step with the research team (peer examination), all of whom have experience in qualitative research and clinical audiology practice. Peer examination helped to validate the information as accurate and also helped to ensure the credibility of the themes that were developed [27]. Finally, comparing the results with audiologists' perspectives from a linked study [12] showed a convergence of perspectives which further verified the result.

Results

To ensure comprehensive reporting of the results, the Consolidated Criteria for Reporting Qualitative Research (COREQ) checklist was used [28] (Appendix B). Three main themes subdivided into seven subthemes and 4 sub-subthemes were generated, as shown in Figure 1. These are elaborated upon and supported by quotations from the interviews.

Each participant was assigned a number as a unique and anonymised identifier available at the end of the quotation. Abbreviations for below mean age (BMA) and above mean age (AMA) were used to indicate these distinctions. Participants who

had less or more than 10 appointments were indicated by < 10 appointments and ≥ 10 appointments respectively.

Theme 1: mixed experiences with audiology services

Most WHL had experienced both positive and negative experiences during their hearing care journey, and sometimes even within the same appointment. However, overall they made more negative than positive comments, attributing these to the factors discussed in the following two subthemes.

Subtheme 1.1: "it depends who you see"

The WHL perceived the different audiologists they encountered to vary widely in characteristics such as deaf awareness, audiology skills, experience, active listening, attitude, empathy, approachability and person-centredness. They discussed their audiologists' willingness to listen to their work problems and concerns, whether or not they welcomed questions and answered them, and the extent to which audiologists gave information and support, especially with regard to their work-related needs. Deaf awareness issues, in particular, came up frequently and strongly as a problem. Most participants focused on talking about some audiologists not being attentive to deaf-aware communication practices such as facing patients.

> You'd think that audiology would be more deaf-aware, really. It depends who you see. The first time, the audiologist immediately turned around so that I could see her face and lipread her, but quite often, audiologists
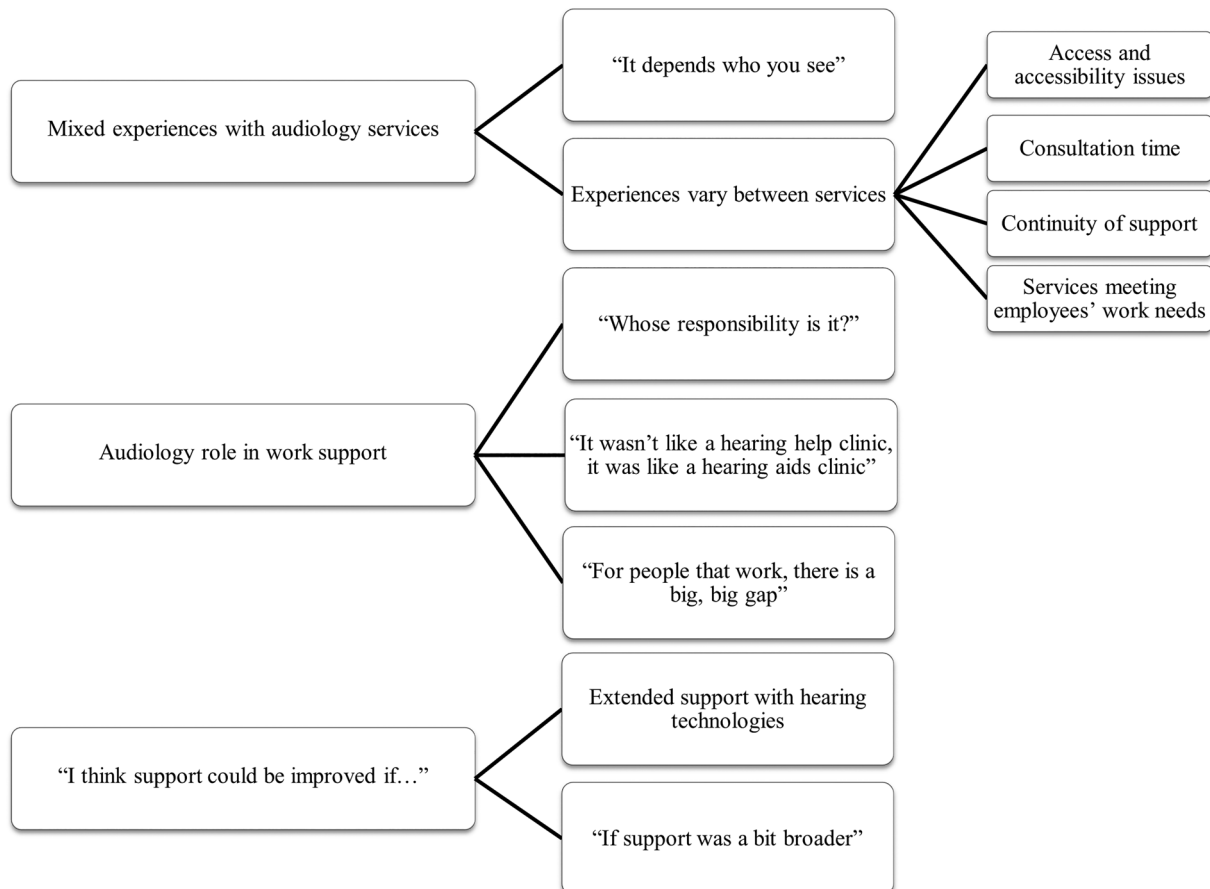

Figure 1. The developed themes and subthemes.

talk to the computer screen and not face the patient. (P 11, AMA, ≥ 10 appointments)

It was helpful that he took the time to listen to why I was there and what I was finding hard — hearing colleagues in meetings and on the phone. (P 6, BMA, ≥ 10 appointments)

Subtheme 1.2: experiences vary between services

The participants also reported different experiences with different hearing care services (independent companies vs. NHS services, cochlear implant services vs. adult rehabilitation services, and between the different audiology departments within the NHS). The largest differences were on the ease of access to appointments, hearing accessibility when attending appointments, time available for the appointment, continuity of care, and the ease with which the participants could get their needs met, including obtaining hearing technology support.

Sub-subtheme 1.2.1: access and accessibility issues

The majority of the WHL indicated that it was harder to get an appointment with an NHS audiologist than one employed by a private audiology service. Firstly, the WHL need a referral to audiology services from their general practitioner causing longer waiting times that affected their work-life. The second reason it was hard to get an appointment was because of difficulty in contacting some NHS audiology departments by telephone, and the lack of an efficient email system. This was a particular struggle for cochlear implant users.

Through the NHS, you have to get referred. It can be a long wait for a hearing test, over 6 months. (P 7, BMA, < 10 appointments)

We struggle with accessing healthcare. It's not as simple as phoning up, if you cannot hear on the phone. (P 8, AMA, ≥ 10 appointments)

Many reported not hearing their names when they were called in the waiting area and feeling unable to communicate with their audiologists or to do the hearing test because of noise in the department.

It's actually quite hard for me to do the hearing test. It's quite noisy and there's no display board when they call your name in the waiting area. It's quite easy to miss them calling your name. (P 11, AMA, ≥ 10 appointments)

Sub-subtheme 1.2.2: consultation time

Some of the participants felt that their experiences were dependent on the services' consultation time limit. Some of the participants who reported positive experiences at appointments attributed this to their service allowing longer appointment times that facilitated more productive interactions. For example, participants who had both a cochlear implant and a hearing aid tended to report better experiences with cochlear implant appointments compared to hearing aid appointments, because the former had more time and the audiologists were more inclined to listen and ask questions about coping and improvement.

The cochlear implant centres are amazing… They have the time to talk to me. Can't fault. But room for improvement for the hearing aids… They just generally try to hurry you along instead of spending time with you. (P 2, AMA, ≥ 10 appointments)

Sub-subtheme 1.2.3: continuity of care

The WHL discussed the lack of adequate follow-up by their NHS audiologists, especially compared to NHS follow-up for children with hearing loss. They also felt that they were more likely to see the same audiologist in independent service and cochlear implant services, in contrast to the hearing aid clinics at the NHS, where most of the time they would see someone different at each appointment. Some of them expressed that this was inefficient as well as impersonal.

Every time I went {NHS hospital}, you'd see somebody else so there was no continuity of care. They don't really know you compared with the audiologist you always see, they're just looking at it more technically than personally. (P 1, BMA, ≥ 10 appointments)

Sub-subtheme 1.2.4: services meeting employees' work needs

A few participants expressed feelings that their NHS audiology services were not supporting their work needs, which led them to see audiologists in independent companies. Many commented that independent companies were superior in offering work-specific help, but that they were costly, especially regarding their better range of hearing technologies, including hearing aids and ALDs, and cosmetically better or invisible hearing aids to use at work. Overall, the participants' work-life was positively influenced by the use of hearing technologies despite limitations in noisy workplaces. Yet, they felt that improvements to hearing aid services were needed, and wanted further help with ALDs as well as demanding improvements of the referral system, criteria, and funding of the NHS cochlear implants services to help better their work-life.

I felt the NHS was not meeting my needs. The private audiologists were really helpful in maximising my communication at work. They were able to tell me about different types of assistive listening devices to help with groups etc. (P 16, AMA, ≥ 10 appointments)

Theme 2: audiology role in work support

The WHL discussed how they perceived audiology services in general, and whether those perceptions came from their own beliefs and expectations or were based on their experience. There were three subthemes.

Subtheme 2.1: "whose responsibility is it?"

The interviews revealed that some of the participants were completely unsure of who was responsible to help them with hearing in the workplace, and others found themselves just muddling through the process of finding that out. Some wondered whether it was their audiologists' job to assist, and many were tentative about asking their audiologists for work-life assistance. Some also indicated that there seemed to be a blurred interprofessional role regarding support for WHL. It was unclear whether this support should come from their audiologist or other professions or bodies, such as local councils, government organisations, community support, social workers, hearing therapists, occupational therapists or charities.

I never thought audiologists were responsible for assisting in any way with things related to work. (P 8, AMA, ≥ 10 appointments)

There is no professional you can talk to about hearing equipment for work. You don't always know who to ask. (P 12, AMA, ≥ 10 appointments)

Subtheme 2.2: "it wasn't like a hearing help clinic; it was like a hearing aids clinic"

Many WHL perceived audiology services as just hearing aid services that had little, if anything, to do with their work-life. They perceived audiology services as places for fitting and fixing

hearing aids. Some of the WHL had expectations beyond hearing aid care that were unmet, such as the need for personalised care, psychosocial support, counselling, self-management and coping support.

> It's purely, "Let's try and get your hearing adjusted to the hearing aids". (P 12, AMA, ≥ 10 appointments)

> There needs to be more to it than just hearing aids. It would almost be a mixture of practical and emotional and psychological scores, person centred. (P 13, AMA, ≥ 10 appointments)

Subtheme 2.3: "for people that work, there is a big, big gap"

The participants perceived a healthcare gap in WHL assistance by audiology and non-audiology services. Most of the participants felt that audiologists should play an important role in helping with employment issues and problems with hearing in the workplace, however many stated that the support they received was inadequate, whether in terms of audiologists discussing work difficulties or offering practical help. Many of the participants believed that the reasons why audiologists did not discuss work-related difficulties included time pressure, funding issues, and lack of interest.

> They're {audiologists} just so busy to talk to me, which is quite bad really because that's the kind of situation where they could, you know, "Well have you got problems at work?" or "Have you got technology?". (P 14, BMA, ≥ 10 appointments)

Even though there were audiologists who did ask about work, and WHL who asked outright for work-life support, this did not seem to alter the amount of support they received. Some of the participants expressed feeling that audiology services focused more on older people and children, and only a few reported experiencing good and specific care for their work problems, such as advice about disclosing hearing loss at work, lip-reading classes, dealing with noisy environments, and information about charities and government schemes specifically for hearing technologies and work.

> I don't think an audiologist ever asked me, "Is it difficult at work? Can you still go to the meetings? Can you do work?" They never really talked about some of this assistive listening equipment, or reading lips, or what adjustments you might need to make at work. They don't think about the whole person. What some tend to do is just give you loads of leaflets aimed at older people. What's this got to do with me? I do believe there's a big gap in the middle, where people don't think about what hearing loss means for work. (P 11, AMA, ≥ 10 appointments)

The participants also discussed the role of non-audiology services in supporting them, especially the government Access to Work (ATW) scheme, with which they had varied experiences. Many indicated that although the scheme was helpful, it had many drawbacks. To them, ATW help was not perceived as personalised, had a lengthy pathway that affected their work lives, and many of the participants had found out about ATW through the internet or other people, not through their audiology services.

> Access to Work, I don't think they have a full understanding what the client really needs. (P 9, AMA, ≥ 10 appointments)

> A friend told me about Access to Work. (P 13, AMA, ≥ 10 appointments)

> P 19: I had my Access to Work assessment in January and last week was the first time I had all the equipment in place to be able to make the phone call.

> Interviewer: Six months?

> P 19: Yeah, and my colleagues had been having to step in and help me, which I have not liked at all, but I received my first full phone call last week and that was a major step forward. (P 19, AMA, ≥ 10 appointments)

Finally, one participant noted that hearing loss organisations were geared more towards helping the older adults with hearing loss.

> I've also reached out to hearing organisations, but they always seem to be geared up towards people who are retired… Also, the times that they meet are always during working days. (P 15, BMA, < 10 appointments)

Theme 3: "I think support could be improved if …"

The participants offered their views regarding the key ways in which audiology services could be improved.

Subtheme 3.1: extended support with hearing technologies

Most of the participants expressed a desire for extended support with hearing technologies, whether from audiology or non-audiology services. They pointed out their need for extra information to get hearing devices and support to better deal with them. They also requested an easier introduction to hearing aids in terms of loudness, and learning how to clean and wear them. A couple of the WHL asked for a real-life-like setting when fitting hearing aids and more follow-up for adjustments until the programming was right for them.

> When you get HAs {hearing aids}, you are testing them in a very quiet room with just the audiologist speaking to you. When you leave and hear people's shoes on the hard floor and outside, you get a real feel for whether your HAs have been set up ok. But then, the appointment is over. It would be great to have some kind of outdoor simulation that audiologists play when they fit HAs. (P 6, BMA, ≥ 10 appointments)

One participant requested support for self-management, in terms of being taught how to adjust his hearing aids without needing to see an audiologist for every adjustment.

> I would prefer if… there is way they can help me to keep adjusting the hearing aids by myself rather than needing the audiologist every time. (P 24, BMA, < 10 appointments)

A few talked about their need to be offered cosmetically appealing hearing aids. A couple of the younger female WHL wanted coloured hearing aids, and another couple of male WHL requested discrete in-canal hearing aids.

> I would like colours, but not all services offer colourful hearing aids. So, if I got sent somewhere that only did a beige one, I'd be devastated. I'd be like, "No, I'm not wearing them at work. Get me some red ones, and I'll be fine". (P 1, BMA, ≥ 10 appointments)

A few others wanted affordable ALDs because they are generally very expensive to buy privately and not offered by the NHS. A few others mentioned that they wanted to be trained on devices through hands-on demonstrations. Finally, one cochlear implant user argued that all audiologists should be trained to refer service users for cochlear implants if it could benefit work life so that more people with hearing loss could benefit.

> There needs to be a lot more training with all local audiologists about when they can and should refer for cochlear implants. That's definitely

an area that audiologists need to improve on. (P 19, AMA, ≥ 10 appointments)

Subtheme 3.2: "if support was a bit broader"

The participants called for individualised support that is holistic and tailored to their own particular needs. It was suggested that audiologists should not behave in autopilot mode with all WHL. Audiologists should ask for more information about WHL lives and work struggles of WHL. They should receive training to deliver care in a personalised manner without relying solely on the WHL to request what they want because workers do not always know what they need or what sort of help is available.

> Interviewer: How would you like your audiologist to help you?
>
> P 9: Maybe ask how we've been getting on at work. All the different needs. Audiologists need to have that knowledge to find out more what's out there for each individual really, like how to cope, Access to Work with technology, microphones. I shouldn't really know what I need. But they're waiting for me to say what I need, and most of those deaf people don't know that. (P 9, AMA, ≥ 10 appointments)

Most of the other suggestions relate to the challenges they faced in their audiological rehabilitation journey that have been discussed in previous themes. The suggestions are listed with supporting quotations in Appendix C. In summary, they asked for better informational support, counselling, and psychosocial support, specifically in the work context. Also, the participants wanted more follow-up sessions with their audiologists, and to be seen by the same audiologist each time as far as possible. They need audiology services to be more convenient and approachable, with better consideration of accessibility issues for people with hearing loss. They also called for improving the communication between the services supporting them including audiology, Access to Work and their employers. They suggested that audiologists should be able to visit their workplaces to offer better advice and recommendations. They also suggested forming hearing loss hubs, support groups, and joined-up units within their audiology services (one place that can offer all forms of support). Finally, they requested telephone workshops to be offered by their audiology services as telephone use is a common struggle for WHL.

Discussion

This study highlights the experiences and views of WHL about their audiological rehabilitation. The participants worked in a variety of jobs and were cared for by a wide range of audiology services across the UK, yet they experienced similar challenges when seeking support and shared common key perspectives regarding their audiological rehabilitation. The participants' responses centred around the challenges they faced in accessing audiology services and interacting with audiologists and service providers. Although many positive experiences were recorded, negative ones prevailed. Figure 2 demonstrates a range of the issues and difficulties the participants encountered in the different stages of their audiological rehabilitation journey.

The results of this study that explored WHL perspectives, and a previous study that explored audiologists' perspectives [12], suggest that both agreed that work-life is important and should be considered in audiology appointments for WHL. Nevertheless, both expressed being passive in talking about work-life or finding solutions to address work-life difficulties in their audiology appointments. This shows a mismatch between their thoughts and their behaviour during the appointments. The results also gave insight into the facilitators and barriers to audiological rehabilitation of employees with hearing loss, as well as painting a picture of hearing-aid-focused rehabilitation. The following sections will elaborate on these aspects.

Mismatch between understanding and behaviour for both the WHL and audiologists

From this current study of WHL and a previous study on audiologists [12], there appears to be a mismatch between what both, WHL and audiologists, said happened in their appointments and the views both expressed.That is, both groups thought audiology support should consider work-life needs, but that did not match their behaviours during the consultations (most of the WHL and audiologists were not actively discussing and addressing work-life hearing needs). The WHL may have been tentative in elaborating on work-life difficulties and the assistance they required. In parallel, most of the audiologists were hesitant to ask WHL about work difficulties and did not set goals relating to this in the management plan, despite understanding that audiology support needs to address the work-life challenges of WHL [12]. This mismatch could indicate that worker–audiologist interactions and decision-making about work issues can sometimes be ineffective and differ based on the individuals involved rather than there being a general approach or straightforward following of recommended guidance. Especially since there is no guidance specific to the working age group. It is possible that audiologists were not given sufficient training, experience, recommendations or guidance to clarify their role in advising on solutions for hearing difficulties in the workplace [12]. The workers also were not clear on what to expect from their audiologists or whose responsibility it was to help them with work difficulties as this study indicated.

This perceived ambivalence regarding the responsibility of both WHL and audiologists was noted by previous research [19] and highlights the need for clearer guidance from the healthcare system. Current guidance for audiologists, such as that provided by the NHS or the British Society of Audiology, mostly relies on the abundant evidence from studies focusing on older adults [29]. Similarly, suggestions for improving NHS audiology services generally centre around children and older adults with hearing loss, rather than working-age adults. Only one document was found to deal very briefly with individuals transitioning from childhood into adulthood [30]. The health system and audiology services within it, therefore, need to pay much more attention to improving the help available to adults either of working age or in employment. National guidelines would be a good first step towards this.

Facilitators and barriers in audiological rehabilitation of workers with hearing loss

The factors found to affect the quality of audiological rehabilitation for WHL are identified in terms of the factors related to WHL themselves, audiologists, audiology services (NHS, cochlear implant and independent audiology services) and the health system, community and government. Many of the barriers constitute fundamental healthcare quality benchmarks, such as access to services, deaf awareness behaviours in audiology staff, information support, and audiologist competencies. These factors were identified from the WHL perspectives and audiologists' perspectives from the previous study [12] and were joined and mapped in Figure 3. The perspectives of both groups are complementary, and combining them has generated a broader understanding of the issues and boosted confidence in the study findings.
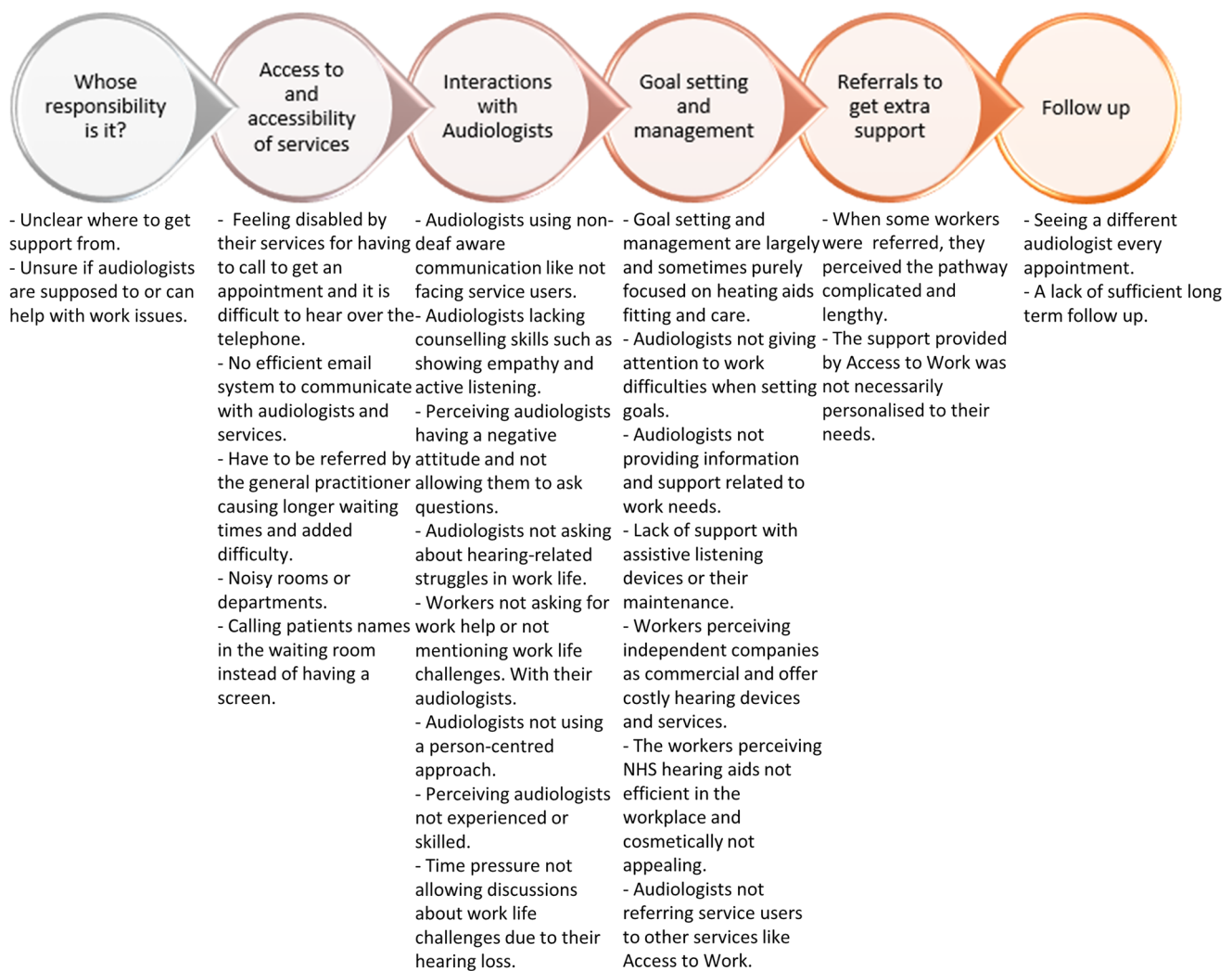
Figure 2. The barriers to hearing healthcare at the different stages of workers' hearing care journey.

WHL factors

Factors at the WHL level were reported by audiologists in our previous study and were discussed there [12]. Some of these factors include audiologists finding workers challenging to deal with due to their specific work needs, being more informed and having high expectations.

Audiologists' factors

The perspectives of WHL that audiologists demonstrated a lack of *deaf awareness* are significant. This finding mirrors recent research in which hearing aid users described difficult communication experiences with audiologists who were not sufficiently deaf-aware [31]. Another study also reported low satisfaction among deaf-blind individuals because of a lack of professional awareness of deaf-blind issues among opticians, audiologists and ear, nose and throat specialists [32]. The participants in the current study indicated that not all audiologists were difficult to interact with, and some of their experiences were pleasant. However, it seems crucial to train professionals on deaf awareness and to develop an awareness of WHL perspectives. This would help them to respond more to WHL needs and provide better patient experiences.

In addition to deaf awareness, the participants favoured audiologists who paid *attention to their difficulties at work* and showed *patient-centred traits*. The WHL valued it when their audiologists enabled them to work out what support they would like by sharing information about available help and not confining support to hearing aid provision. This was expected because patient satisfaction with healthcare is associated with patient-centred services [33,34] and is of particular importance for those with chronic illnesses [35]. Similarly, the WHL had positive experiences with the audiologists who demonstrated good *counselling skills*. Counselling in audiological rehabilitation can improve coping with hearing loss in the workplace [36] but it is thought to be omitted from appointments [37] and is demanded by WHL in this and previous research [38].

Audiology services factors

At the level of audiology services, *access and communication* barriers were fundamental issues raised by the WHL. In properly addressing these, a wider investigation into access and communication issues could be made across other healthcare fields. Despite a recent NHS commissioning report calling for easy-to-access hearing services [39], this study and related research indicate that challenges remain [40,41]. Some services and audiologists may be disabling WHL in their hearing healthcare journey instead of supporting them. The quality of services could be much improved by introducing more deaf-aware options for service access (e.g., allowing appointments to be made online or by email instead of telephone). The reasonable adjustment of services for
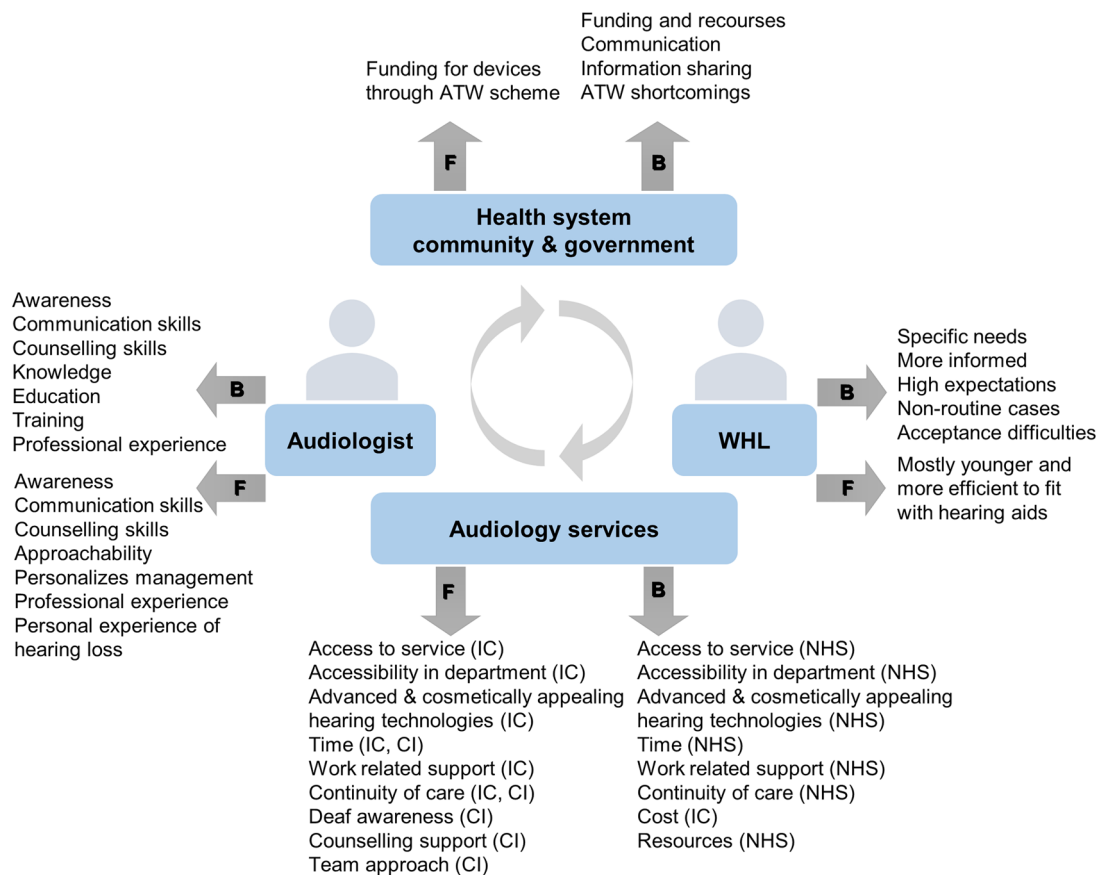
Funding and recourses
Communication
Funding for devices   Information sharing
through ATW scheme   ATW shortcomings

F   **B**

**Health system
community & government**

Awareness
Communication skills
Counselling skills
Knowledge   Specific needs
Education   **B**   More informed
Training   **B**   High expectations
Professional experience   Non-routine cases
                  Audiologist   **WHL**   Acceptance difficulties

Awareness   Mostly younger and
Communication skills **F**   **F**   more efficient to fit
Counselling skills   with hearing aids
Approachability
Personalizes management   **Audiology services**
Professional experience
Personal experience of   **F**   **B**
hearing loss

Access to service (IC)   Access to service (NHS)
Accessibility in department (IC)   Accessibility in department (NHS)
Advanced & cosmetically appealing   Advanced & cosmetically appealing
hearing technologies (IC)   hearing technologies (NHS)
Time (IC, CI)   Time (NHS)
Work related support (IC)   Work related support (NHS)
Continuity of care (IC, CI)   Continuity of care (NHS)
Deaf awareness (CI)   Cost (IC)
Counselling support (CI)   Resources (NHS)
Team approach (CI)

Figure 3. The facilitators and barriers affecting WHL audiological rehabilitation as perceived by the WHL and audiologists from a previous study [12]. ATW: Access to Work; B: Barrier; CI: Cochlear implant services, F: Facilitator; IC: Independent companies; NHS: National health services; WHL: Workers with hearing loss.

people with disabilities is a legal requirement under the Equality Act 2010. Given that audiology services will be aware that their service users have hearing disabilities, difficulties in access and accessibility can be considered discriminatory and against the Equality Act of 2010. According to the Office for National Statistics [42], 96% of all UK households had access to the Internet in 2019, making it a worthwhile option to have an efficient email or online system to contact service providers.

Other solutions could also make audiology rehabilitation more efficient for workers. For example, *telehealth* has advanced significantly in recent years and has the potential to overcome barriers of time and accessibility. It is important to note that the interviews were conducted just before the COVID-19 lockdown and that access to audiology services may have changed as a result of the lockdown measures at that time. The pandemic has led to many accelerated shifts in how the NHS and independent companies work including changes that could be positive, such as improving online support, or negative, such as delays in receiving hearing care, hearing device maintenance and support. It would be useful and worthwhile to investigate the use of tele-audiology and multimedia videos for WHL, such as the C2Hear resources, and their benefits for diagnosing workers and managing their care packages in future research.

Continuity of care constitutes an additional issue affecting the effectiveness of audiological rehabilitation. The participants expressed a preference for building a relationship with the same audiologist at each consultation and to be followed up continuously. It appeared there was a much higher likelihood of this happening in independent audiology appointments than in the NHS. Each appointment found many of the WHL re-explaining their difficulties and work context to a different audiologist in

time-limited consultations. Research in the healthcare field has found numerous benefits of continuity for the clinician-patient relationship, including increased patient and staff satisfaction, greater accountability, increased trust within the clinician-patient relationship, improved disease management and treatment compliance and better health outcomes [43]. Regarding the benefit of continuity of care on hearing device-related outcomes, no research explored that [44]. But hearing aid users valued continuity as it allows them to build trust and rapport with audiologists [31].

Health system, community and government
Another health system factor was the need for *better collaboration and communication* between audiologists, ATW, other healthcare professionals such as occupational therapists and social workers, and employers. Moreover, the roles of audiologists and other professionals in supporting patients' work-life seem to be blurred and require re-defining in order to establish clear standards of care and encourage interprofessional communication and knowledge sharing. Collaborative work in adult rehabilitation for adults has been endorsed by the NHS [30] but may need further focus on the population of working-age adults.

Regarding *government-related factors*, both the audiologists in the previous study [12] and the WHL in the current study appreciated the presence of government-funded and charity support *via* the ATW scheme. The resources dedicated to providing work-specific support in audiology services are clearly limited, making ATW a valuable addition. Nevertheless, the participants' perspectives on this initiative revealed many barriers. It was clear that there was a range of difficulties in accessing ATW, many of which centred

around audiologists' lack of knowledge and consequent under-signposting of the scheme [12]. Moreover, if referred, the WHL encountered long waiting times to get the scheme's support, which may then be disconnected from the audiologist's advice [12], and was often not personalised to meet individual needs as perceived by both WHL and audiologists [12]. It was felt that the ATW funding could be used more efficiently, and therefore re-evaluating and improving this resource could be worthwhile.

Hearing aid-focused care

Regarding hearing technologies, the evidence from WHL, audiologists' perspectives and previous research indicate that hearing technology can assist in the workplace but limitations in noisy work situations may lead to non-use [4,12,14,16,36,45–47]. NHS hearing aids were not perceived as advanced nor as cosmetically appealing, as the ones from independent audiology companies according to the WHL and audiologists [12]. However, recent advances in the hearing technologies offered by the NHS and advances in the general industry of hearing technology are promising. Hearing aids on the market can now be connected to smartphones, which has been found to be beneficial by NHS users in one study since loudness and other features can be controlled *via* an app [48]. Such advances can empower self-management and coping in the workplace and were demanded by WHL. Some hearing aids can now be adjusted remotely by the audiologist, which may help patients when they are challenged by noisy situations at work. Previous research has suggested that remote and digitally controlled hearing aids and devices have promising outcomes [49]. ALDs, tele-audiology and smartphone-connected hearing aids are likely to be very empowering in terms of self-management and coping. However, audiologists need to be more informed and up-to-date [12] so they can inform patients about technological options and signpost them to services that provide them. Further, more research focused on hearing technology cost-effectiveness and benefit in work-life is still needed.

The evidence also pinpoints an issue relating to referrals for cochlear implants, whereby the work needs of patients are not considered in the NHS criteria for cochlear implants as WHL and audiologists indicated [12]. Evidence from the current study and previous research shows that having a cochlear implant plays a major role in helping individuals get into employment, improves their satisfaction with audiology services [50] and improves work satisfaction and well-being [47]. Therefore, revisiting the criteria and improving workers' access to implant services appears worthwhile.

Limitations

First, most of the participants were recruited online. Online recruitment is time and cost-efficient and can reach more people compared with traditional hospital-based recruitment. However, it can lead to recruiting a biased sample, which influences the results [51]. The participants may turn out to share specific characteristics or motives for participation, such as dissatisfaction with healthcare services. On the other hand, willingness to participate in a study may indicate higher motivation to be active in identifying needs and issues and in finding solutions. Follow-up quantitative research can be conducted to see whether the themes identified in this research can be generalised more widely.

Second, the effect of external factors on the healthcare experiences of WHL is not captured in the current study, including social and demographic factors, the specifics of hearing loss (such as childhood/acquired hearing loss or sign/English language user), personality and attitudes, patients' relationship with family, friends and employers. The present study has included a larger sample of WHL with a heterogeneous range of demographics such as age and job type and the results could be more transferable compared with previous research [10]. Still, further research is needed to explore whether the different groups have differences in experiences. Employers' perspectives also are needed for a fuller picture.

Third, the current study included only one participant who did not use any hearing technology. It would have been better if the study had included more non-technology users to understand why they had not sought audiology support. Therefore, it is worth exploring their perspectives in future studies. Finally, the data analysis could have utilised an independent coder, however, the code-recode procedure, peer examination and participants' validation helped in checking the analysis' and results' quality as explained in the analysis section.

Conclusion

The current study explored the experiences and perceptions of a sample of adult WHL regarding their audiological rehabilitation. The main shortcomings that seem to affect the different stages of the audiological rehabilitation journey start from ambiguity regarding who should support WHL in work-life. This then leads to issues around service access and accessibility, interactional and communication difficulties with audiologists, and deficiencies in individualised work-related support and the continuity of care. The present study suggests that up-to-date hearing technologies can play an important role in improving the workplace experiences of WHL and assist them to function better at work, but there remains room for improvement, especially regarding audiologists' knowledge of, and ability to, recommend ALDs and other advanced hearing technologies for workers. Furthermore, there is a need for increased government funding to obtain person-tailored hearing support including technologies designed for the workplace.

Ensuring that WHL are adequately supported is a shared responsibility. Audiologists, other healthcare professionals and the healthcare system, as well as both employers and patients themselves, all need to take an active role in collaborating and finding shared and person-centred standards of care and solutions. Audiologists and employers can facilitate an individual's adjustment in the workplace. The government, healthcare system and charities can support by defining roles, establishing or considering working-age adults in adult rehabilitation guidelines, as well as improving interprofessional communication, resources and funding. Acknowledging the perspectives and needs of WHL and audiologists, and using these to drive service improvement initiatives, could be key to supporting workers with personalised, quality care and improving their well-being.

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Appendices

Appendix A. The main interview questions

Can you tell me about your appointments with your audiologists?

Currently, how well do you feel supported by your audiologists?

In an ideal world, how would you like audiologists to support you?

Appendix B. The consolidated criteria for reporting qualitative research (COREQ) checklist

Topic	Item no	Guide Questions/Description	Additional information	Reported on page No
Domain 1: Research team and reflexivity				
Personal characteristics				
Interviewer/facilitator	1	Which author/s conducted the interview or focus group?	Margaret Zuriekat (MZ)	9
Credentials	2	What were the researcher's credentials? E.g. PhD, MD	Margaret Zuriekat: PhD, MSc, MBBS, CHSOtorhinolaryngology (Certificate of higher specialisation in medicine (Otorhinolaryngology)). Safa Alqudah: PhD, BSc. Hannah Semeraro: PhD, BSc.Victoria Watson: PhD, MSc, CS.Daniel Rowan: MSc, PhD.Sarah Kirby: PhD, MSc, BSc. Melanie Fergusson: PhD, MSc, BSc, CCC-A.	–
Occupation	3	What was their occupation at the time of the study?	Margaret Zuriekat: PhD student.Safa Alqudah: Associate Professor in Audiology. Hannah Semeraro: lecturer in Audiology. Victoria Watson: Senior teaching fellow (Audiology)Daniel Rowan: Associate professor in Audiology and Director of programs (Audiology)Sarah Kirby: Associate professor in psychology. Melanie Ferguson: Associate professor in brain and hearing.	9 (reported just for the first author MZ)
Gender	4	Was the researcher male or female?	female	–
Experience and training	5	What experience or training did the researcher have?	MZ was trained through several qualitative research workshops offered by the University of Southampton. She also attended a qualitative research course (module) before conducting the research which covered the principles of qualitative research in detail.Some of the other authors (Sarah Kirby and Vicky Watson) are experienced in qualitative research and published audiology qualitative research papers. They helped in training MZ on how to conduct the research.	–
Relationship with participants				
Relationship established	6	Was a relationship established prior to study commencement?	Only for the purpose of the research.	–
Participant knowledge of the interviewer	7	What did the participants know about the researcher? e.g., personal goals, reasons for doing the research	All the participants had the research topic explained and knew that the interview is for research purposes and is part of a PhD study.	9
Interviewer characteristics	8	What characteristics were reported about the interviewer/facilitator? e.g., bias, assumptions, reasons and interests in the research topic	No interviewer-related biases were identified.	–
Domain 2: Study design				
Theoretical framework				

Topic	Item no	Guide Questions/Description	Additional information	Reported on page No
Methodological orientation and Theory	9	What methodological orientation was stated to underpin the study? e.g., grounded theory, discourse analysis, ethnography, phenomenology, content analysis	Thematic approach with some grounded theory methods borrowed.	9
Participant selection				
Sampling	10	How were participants selected? e.g. purposive, convenience, consecutive, snowball	Purposive sampling.	8
Method of approach	11	How were participants approached? e.g. face-to-face, telephone, mail, email	Most contacted the researcher by email after the researcher sent an email to their audiology departments or saw the research advertised in the British Academy of Audiology Horizons magazine, and the Ida Institute Learning Hall webpage. A few audiologists who were known to the researcher were approached verbally.	8
Sample size	12	How many participants were in the study?	24	8
Non-participation	13	How many people refused to participate or dropped out? Reasons?	Non	–
Setting				
Setting of data collection	14	Where was the data collected? e.g. home, clinic, workplace	Data was collected via online video calls (Skype, Facetime) or through the telephone or instant massaging or face to face in a professional location e.g. a meeting room in the University of Southampton.	9
Presence of non-participants	15	Was anyone else present besides the participants and researchers?	No	–
Description of sample	16	What are the important characteristics of the sample? e.g. demographic data, date	Presented in Table 1 in the manuscript.	Table 1
Data collection				
Interview guide	17	Were questions, prompts, guides provided by the authors? Was it pilot tested?	Yes, in Appendix A. Yes, the few initial interviews were conducted for piloting in the final analysis.	Interview guide in Appendix A Piloting mentioned in page 9
Repeat interviews	18	Were repeat inter views carried out? If yes, how many?	No	–
Audio/visual recording	19	Did the research use audio or visual recording to collect the data?	Audio-recording	9
Field notes	20	Were field notes made during and/or after the interview or focus group?	Yes	9
Duration	21	What was the duration of the interviews or focus group?	This study incorporated varied methods of interviewing including instant messaging and the duration was not calculated.	–
Data saturation	22	Was data saturation discussed?	Yes	9
Transcripts returned	23	Were transcripts returned to participants for comment and/or correction?	Yes	10
Domain 3: analysis and findings				
Data analysis				
Number of data coders	24	How many data coders coded the data?	Only the first author MZ.	4
Description of the coding tree	25	Did authors provide a description of the coding tree?	Yes	10-19 and Figure 1
Derivation of themes	26	Were themes identified in advance or derived from the data?	It was derived from the data (inductive approach).	9
Software	27	What software, if applicable, was used to manage the data?	Yes	9
Participant checking	28	Did participants provide feedback on the findings?	Yes. The results were sent to all the participants and 7 responded with feedback.	10

Topic	Item no	Guide Questions/Description	Additional information	Reported on page No
Quotations presented	29	Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number	Yes	11-19
Data and findings consistent	30	Was there consistency between the data presented and the findings?	Yes	–
Clarity of major themes	31	Were major themes clearly presented in the findings?	Yes	11-19
Clarity of minor themes	32	Is there a description of diverse cases or discussion of minor themes?	Yes	11-19

Appendix C. The suggested improvements for WHL hearing healthcare with supporting quotations

Suggested improvements	Example quotations
The WHL indicated that they needed more access to information to be better supported. Many of the WHL reported not receiving information from their audiologists and had to carry out research to help themselves or found out about ways to get help through their friends. The things they said they needed more information on included where to get support from, information about coping methods, sign language, lip-reading, and tools to self-manage and cope at work.	"I spend a lot of my time on the internet researching… like what your rights are at work in case I get any problem… I do know about sort of adjustments you can make now, but only really because I've researched them myself out of interest… It would be nice to be informed which service would support me… They {Audiologists} don't really offer a lot of information and support" P 10"What I would like to see is… some sort of information about knowing what you could use with your hearing aids… it's not always clear, and I think that needs to be clearer for patients. And there is this assumption that for a lot of people who, or other people who are not as aware as I am, that there are other gadgets out there to use. That information is not going out the same way." P 21
The need for counselling and psychosocial support came up frequently. This was noticed to be a particular issue when the WHL discussed the variation in hearing care between the different services (better when seeing independent service audiologists and cochlear implant audiologists, especially because they have time to talk and empathise with them).	Interviewer: "In an ideal world, how would you like your audiologists to support you?"P 16: "I think that NHS audios {audiologists} should offer same level of empathy and support that is found in private audios. Even if they can't see you as often, they can still be supportive." (P 16, AMA, > 10 appointments)
WHL need to be followed up by their audiologists to keep their management up to date and follow up with their audiologist hearing aids adjustment.	"The main thing {needed}, to provide some sort of counselling or coaching on how to cope." (P 12, AMA, > 10 appointments)"I suppose there needs to be a follow-up phone call or something, a month or two after the appointment to see if things were okay or if things were getting better or worse… I'd say some sort of a follow-up connection or contact." P 22
WHL would like their services to be convenient and approachable, taking into account accessibility issues for people with hearing loss. For example, they want to be able to contact their audiology services by email or live chat and directly without needing to be referred by a general practitioner.	"Given that its hearing loss, it would be easier to have an email address to liaise with the audiology office… In an absolute ideal world, being able to contact an audiologist via email or live chat to discuss issues and arrange appointments would be even better!" (P 6, BMA, > 10 appointments)"We need more accessible contacts instead of phones which would make us deaf more independent and not rely on people to call for you." (P 2, AMA, > 10 appointments)
The WHL in this study envisioned a better service if their audiologists could better communicate with other services and their work to improve their situation at work. They mentioned needing their audiologist to work with their workplace, Access To Work, social therapists and have links to employment advisers.	Interviewer: "How would you like your audiologist to support you?"P 2: "To be in contact with Access to Work and support those who need it." (P 2, AMA, > 10 appointments)"Social services currently supply visual doorbell and fire alarms and alarm clocks. Perhaps audiology should work directly with sensory officers to provide this service. It would be good for them {audiologists} to aim to help in workplace issues too. Perhaps even do deaf awareness to employers as the education in this field is virtually non-existent… you know like managers training etc." (P 8, AMA, > 10 appointments)
A few of the WHL in this study expressed the need to receive support through a joined-up unit, one place that can offer all forms of support, including hearing aids, ALD, counselling and psychosocial support.	"A lot of people were saying. This audiology is one service. Equipment is another service. It's not joined. They need some kind of joined up unit… So counselling and support or where the person needs coaching… and equipment where you can get your hearing tested and get your equipment in the same place." (P 12, AMA, > 10 appointments)
Some workers suggested having a hearing loss hub in audiology departments for working people and support groups for working-age people.	"Audiology departments could be expanded to become hearing loss hubs. For example, having full-time volunteers, support groups or community support workers attached who they could refer people to." (P 16, AMA, > 10 appointments)
One participant thought that telephone use essential for many people at work and suggested workshops to help with using the telephone would be helpful.	"Using the phone is pretty key in most jobs… it's a skill about asking closed questions or… how you go about that telephone conversation… Maybe offering telephone workshops as to techniques that you could then use to try and make the best of what your hearing aid is giving you, that would be good." (P 19, AMA, > 10 appointments)
One participant suggested that it would be good if audiologists could visit patients' workplaces to see the work environment and offer tips that could help, as teachers of the deaf do for hard of hearing children in schools.	"I think workplace assessment would help… So that they can understand the environment that you're working in… and how the equipment that you use can be adapted so that the hearing aids are prescribed for you… Surely audiologists should have an understanding of what the equipment can do and its limits and then suggest to the manufacturers how these bits of equipment can be improved for people in work environments. That would be the most useful thing." P 20
Some WHL stated that they would like to be seen by the same audiologist each time as much as possible.	"If you could get continuity care… where you see the same person each time, it would help. I can understand that's not necessarily going to be feasible. Not with the funding and the constraints that the NHS is now working under." (P 19, AMA, > 10 appointments)