

Audiology Update



January 2024

Welcome to the latest copy of the Audiology Update. The aim of this publication is to bring together a range of recently published research and guidance that will help you make evidence-based decisions.

Accessing Articles

The following abstracts are taken from a selection of recently published articles.

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Please contact Holly if you would like more information, or further evidence searches: holly.cook3@nhs.net.

New NICE Guidance

Cryotherapy for chronic rhinitis

Interventional procedures guidance [IPG771]

Published: 14 September 2023

<https://www.nice.org.uk/guidance/ipg771>

Otitis media with effusion in under 12s

NICE guideline [NG233]

Published: 30 August 2023

<https://www.nice.org.uk/guidance/ng233>

Electrical stimulation of the pharynx for neurogenic dysphagia

In development [GID-IPG10212]

Expected publication date: 23 January 2024

<https://www.nice.org.uk/guidance/indevelopment/gid-ipg10212>

Updated NICE Guidance

Hearing loss in adults: assessment and management

NICE guideline [NG98]

Published: 21 June 2018 Last updated: 02 October 2023

<https://www.nice.org.uk/guidance/ng98>

Genedrive MT-RNR1 ID Kit for detecting a genetic variant to guide antibiotic use and prevent hearing loss in babies: early value assessment

Health technology evaluation / Reference number: HTE6

Published: 30 March 2023

Last updated: 10 August 2023

<https://www.nice.org.uk/guidance/hte6>

A Selection of papers from Medline and CINAHL (most recent first)

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1. Exploding Head Syndrome among patients seeking help for tinnitus and/or hyperacusis at an Audiology Department in the UK: A preliminary study

Item Type: Journal Article

Authors: Aazh, Hashir;Stevens, Jenni and Jacquemin, Laure

Publication Date: 2023

Journal: Journal of the American Academy of Audiology

Abstract: Background: Exploding Head Syndrome (EHS) is characterised by hearing a sudden loud noise or experiencing a sense of explosion in head during the transition of sleep-wake or wake-sleep. The experience of EHS shares similarities with tinnitus, where an individual perceives a sound without any sound source. To the authors' knowledge, the possible relationship between EHS and tinnitus has not been explored.; **Purpose:** Preliminary assessment of prevalence of EHS and its related factors among patients seeking help for tinnitus and/or hyperacusis.; **Research Design:** Retrospective cross sectional study Study sample: 148 consecutive patients who sought help for tinnitus and/or hyperacusis at an audiology clinic in the UK.; **Data Collection and Analysis:** The data regarding demographics, medical history, audiological measures and self-report questionnaires were collected retrospectively from the patients' records. Audiological measures comprised of pure tone audiometry and uncomfortable loudness levels. The self-report questionnaires which were administered as a part of standard care comprised of the tinnitus handicap inventory (THI), numeric rating scale (NRS) of tinnitus loudness, annoyance and effect on life, Hyperacusis Questionnaire (HQ), Insomnia Severity Index (ISI), Generalized Anxiety Disorder (GAD-7), and Patient Health Questionnaire (PHQ-9). To establish presence of EHS, participants were asked "Do you ever hear a sudden, loud noise or feel a sense of explosion in your head at night?"; **Results:** EHS was reported by 8.1% of patients with tinnitus and/or hyperacusis (n = 12 out of 148). The patients with and without EHS were compared, but no significant relationships were found, between the presence of EHS and age, gender, tinnitus/hyperacusis distress, symptoms of anxiety or depression, sleep difficulties, or audiological measures.; **Conclusions:** The prevalence of EHS in a tinnitus and hyperacusis population is similar to that in the general population. While there does not seem to be any

association with sleep or mental factors, this might be due to the limited variability in our clinical sample (i.e., most patients exhibited high level of distress regardless of EHS). Replication of the results in a larger sample with more variety of symptom severity is warranted.; Competing Interests: The authors declare that they have no conflict of interest. (American Academy of Audiology. This article is published by Thieme.)

Access or request full text: <https://libkey.io/10.1055/a-2084-4808>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37130567&custid=ns023446>

2. Application of the truth and reconciliation model to meaningfully engage deaf sign language users in the research process

Item Type: Journal Article

Authors: Anderson, Melissa L.; Riker, Timothy and Wilkins, Alexander M.

Publication Date: 2023

Journal: Cultural Diversity & Ethnic Minority Psychology 29(1), pp. 15-23

Abstract: Objectives: One of the most underrepresented public health populations is the U.S. Deaf community- a minority group of 500,000 + individuals who communicate using American Sign Language (ASL). Research on Deaf health outcomes is significantly lacking due to inaccessible research procedures and mistrust of researchers that stems from historical mistreatment of Deaf people (i.e., Audism).; **Methods:** Following the Truth and Reconciliation Model, we hosted three Deaf community forums between October and November 2016 across New England. We invited attendees to share their experiences in the research world and make recommendations about how researchers can better include Deaf people in their studies. A select group of hearing researchers served as representatives of the research community and to issue a formal apology on behalf of this community.; **Results:** Forum attendees (n = 22; 5% racial/ethnic minority; 59% female) emphasized the following themes: Research conducted within general population samples is not an activity in which Deaf people can or will be included; a general mistrust of hearing people, including hearing researchers; researchers' frequent failure to communicate study results back to the Deaf community or the community-at-large; and a tendency of researchers to directly benefit from data provided by Deaf participants, without making any subsequent efforts to return to the community to give back or provide useful intervention.; **Conclusions:** Many injustices and forms of mistreatment are still ongoing; therefore, we recognize that our team's efforts to foster an open dialogue between the research community and the Deaf community must be an ongoing, iterative practice. (PsycInfo Database Record (c) 2023 APA, all rights reserved).

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3. Children using a unilateral cochlear implant and contralateral hearing aid: bimodal hearing outcomes when one ear is outside the UK (NICE 2009) audiological criteria for cochlear implantation - a single site case-control study

Item Type: Journal Article

Authors: Bruce, Iain; Schaefer, Simone; Kluk, Karolina; Nichani, Jaya; Odriscoll, Martin; Rajai, Azita and Sladen, Mark

Publication Date: 2023

Journal: BMJ Open 13(6), pp. e071168

Abstract: Introduction: In the new revised National Institute for Health & Care Excellence (NICE, TA566, 2019) guidelines for cochlear implantation (CI) have clearly stipulated that the hearing loss must be bilateral. Prior to this revision, children and young people (CYP) with asymmetrical thresholds have been considered for unilateral CI when one ear was in audiological criteria. Children with asymmetrical hearing loss represent an important cohort of potential CI candidates, who will continue to be prevented from benefiting from CI unless evidence is produced to support implantation and maximise subsequent benefit. The aim of this study is to evaluate the 'real-life' hearing performance in a group of children who have received a unilateral CI and who have hearing thresholds in the contralateral ear that are outside the current UK NICE 2019 audiological criteria for CI. The contralateral ear will be aided using a conventional hearing aid (HA). The outcomes from this 'bimodal' group will be compared with a group of children who have received bilateral CI, and a group of children using bilateral HA, to extend the current knowledge about the different performance levels between bilateral CI, bilateral HA and bimodal hearing in CYP.; **Methods and Analysis:** Thirty CYP aged 6-17 years old, 10 bimodal users, 10 bilateral HA users and 10 bilateral cochlear implant users will be subjected to a test battery consisting of: (1) spatial release from masking, (2) complex pitch direction discrimination, (3) melodic identification, (4) perception of prosodic features in speech and (5) TEN test. Subjects will be tested in their optimal device modality. Standard demographic and hearing health information will be collected. In the absence of comparable published data to power the study, sample size was determined on pragmatic grounds. Tests are exploratory and for hypothesis generating purposes. Therefore, the standard criterion of $p < 0.05$ will be used.; **Ethics and Dissemination:** This has been approved by the Health Research Authority and NHS REC within the UK (22/EM/0104). Industry funding was secured via a competitive researcher-led grant application process. Trial results will be subject to publication according to the definition of the outcome presented in this protocol.; **Competing Interests:** Competing interests: None declared. (© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.)

Access or request full text: <https://libkey.io/10.1136/bmjopen-2022-071168>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37339839&custid=ns023446>

4. Assessing parent interaction with deaf infants: A quantitative survey of UK professional practice

Item Type: Journal Article

Authors: Curtin, Martina; Morgan, Gary; Cruice, Madeline and Herman, Rosalind

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders 58(4), pp. 1148-1167

Abstract: Background: Between 90% and 95% of deaf children are born to hearing parents who often need support with how to adapt their communication. Parent-child interaction (PCI) is an important predictor of deaf children's future language development. It is therefore necessary for professionals to assess parents' strengths and needs to identify areas for intervention. Qualified teachers of the deaf (QToDs), speech and language therapists (SLTs), psychologists, and national deaf child and adolescent mental health (NDCAMHS) professionals

regularly support families with deaf children. With no current evidence-based tool available to assist with the assessment of PCI in deafness, it is important to gather information on current professional practice as this may differ from known practices within research.; **Aims:** To survey the practices of UK-based professionals in the assessment of PCI where the deaf infant is aged 0-3 years. Professionals were QToDs, SLTs, psychologists or psychiatrists and professionals working at NDCAMHS services.; **Methods & Procedures:** After a pilot phase, an 85-item survey was distributed electronically through a range of professional and social media networks. Survey items were based on a systematic review of PCI with deaf infants. Survey questions were focused on parent behaviours that were assessed, methods of assessment, goal planning and service provision. Analysis was conducted using descriptive and inferential statistics.; **Outcomes & Results:** A total of 190 professionals from across the UK completed part 1 of the survey; this decreased to 148 in part 4. Respondents were primarily female, hearing, used spoken English and had 16 years or more experience. Results indicate that PCI is routinely assessed by a large proportion of professionals and there is a substantial overlap in which parent behaviours are assessed. Some parent behaviours are assessed that do not feature in the research. Methods of assessment are informal and predominantly consist of observation and note making, with professionals using their own skills and experience to analyse interaction. Goal setting practices were largely similar between professionals, with many jointly deciding goals with parents.; **Conclusions & Implications:** This survey highlights the range of parent behaviours assessed by UK professionals in PCI with deaf children aged 0-3. This survey provides valuable information about and for professionals who assess PCI and set intervention goals with parents. Information from research and professional practice is important to consider in the design of a future PCI assessment. Implications are included for future research in this area.; **What This Paper Adds:** What is already known on this subject Parental involvement is one of the greatest predictors of deaf children's language outcomes. With many deaf children born to hearing parents, parents often need guidance with how to facilitate effective communication. A recent systematic review identified the range of parent behaviours and methods used to analyse PCI in international research studies, but little evidence or guidance exists on how professionals assess this phenomenon in practice. What this study adds This is the first survey to generate large, valuable practice-based evidence for the assessment of parents' communication behaviours as they interact with their deaf infants aged 0-3. The survey recruited a range of multidisciplinary professionals working on interaction within this field: SLTs, qualified teachers of the deaf, psychologists or psychiatrists, and professionals working within deaf child and adolescent mental health services. The study reports on which behaviours these professionals assess and how, and includes information on the goal setting behaviours of practitioners. Most respondents were highly experienced; the survey, therefore, reveals expert practice within the field. What are the potential or actual clinical implications of this work? We recommend the following practice: (1) incorporate a range of parent-based behaviours in PCI assessments, including establishing joint engagement and parental sensitivity, as well as communication-focused behaviours; (2) video record PCI assessments where possible to enable professionals and parents to watch and reflect together; (3) following assessment, set parent-focused goals in collaboration with families, ensuring parents' skills, particularly their strengths, are considered. All primary caregivers should be included in the process where possible; and (4) reassess PCI regularly (at least termly) to monitor and encourage families' progress. The timing of reviews should be discussed between parent and professional. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12849>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36708287&custid=ns023446>

5. An ethnography study exploring factors that influence social isolation in care home residents living with dementia and hearing loss

Item Type: Journal Article

Authors: Dhanda, Nisha and Pryce, Helen

Publication Date: 2023

Journal: BMC Geriatrics 23(1), pp. 593

Abstract: Background: Hearing loss and dementia are highly prevalent conditions amongst older adults living in residential care. The consequences of living with these conditions may include social withdrawal and reduced communication opportunities. We sought to examine patterns of communication and interaction in residential care and explore resident, staff, and relative perspectives within two care homes located in Birmingham, UK. This enabled an understanding of how communication environments contributed to social isolation.; **Methods:** This work used ethnography methodology to explore mechanisms that created and maintained social isolation in older adults living with dementia and hearing loss. A planning and engagement phase took place in four care homes. This was followed by an environmental audit, observations, and interviews. Data generated were analysed using Grounded Theory methods.; **Results:** There were 33 participants (16 residents, 11 care staff, and six relatives) who took part in the observations and interviews. Residents experienced social isolation through lack of meaningful conversation with others and being misunderstood. Additionally, observations of residents' interactions informed the overall findings. A Grounded Theory model was employed to explain the core phenomenon of social isolation. The main contributors were internal and external barriers to communication, and reduced opportunities for meaningful conversation.; **Conclusions:** There is a wide range of social isolation that care home residents experience. This was not always associated with the severity of hearing loss but rather communication ability. Simple interventions such as staff dining with residents and focussing on improving communication could reduce social isolation within residential care settings. (© 2023. BioMed Central Ltd., part of Springer Nature.)

Access or request full text: <https://libkey.io/10.1186/s12877-023-04296-0>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37749500&custid=ns023446>

6. Women with hearing loss show increased dementia risk and brain atrophy

Item Type: Journal Article

Authors: Fitzhugh, Megan C. and Pa, Judy

Publication Date: 2023

Journal: Alzheimer's & Dementia (Amsterdam, Netherlands) 15(4), pp. e12499

Abstract: Hearing loss is a modifiable risk factor for dementia. However, it is unknown whether risk differs by sex. Study 1 used Cox proportional hazard models to examine sex differences in the association between hearing loss (measured by speech-reception thresholds) and dementia risk. Study 2 examined how 2-year changes in hearing is associated with changes in brain volume in auditory-limbic regions. Both studies used UK Biobank data. Women with poor hearing had the greatest risk of dementia, whereas women and men with insufficient hearing were at similar risk. Men with poor hearing did not have increased risk. Presence of social isolation/depressed mood minimally contributed to dementia risk in men and women. Women, but not men, with hearing loss had greater atrophy in auditory and limbic regions compared to normal hearing women and men. Women with hearing loss show greater risk of dementia and brain atrophy, highlighting the need to examine sex-specific mechanisms.; **Competing Interests:** The authors declare no conflicts of interest. Author disclosures are available in the supporting information. (© 2023 The Authors. Alzheimer's & Dementia:

Diagnosis, Assessment & Disease Monitoring published by Wiley Periodicals LLC on behalf of Alzheimer's Association.)

Access or request full text: <https://libkey.io/10.1002/dad2.12499>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38026760&custid=ns023446>

7. Reasons for the non-use of hearing aids: perspectives of non-users, past users, and family members

Item Type: Journal Article

Authors: Franks, Inga and Timmer, Barbra H. B.

Publication Date: 2023

Journal: International Journal of Audiology , pp. 1-8

Abstract: Objective: Hearing loss in the older adult population is a significant global health issue. Hearing aids can provide an effective means to address hearing loss and improve quality of life. Despite this, the uptake and continued use of hearing aids is low, with non-use of hearing aids representing a significant problem for effective audiological rehabilitation. The aim of this study was to investigate the reasons for the non-use of hearing aids.; **Design and Study Sample:** A cross-sectional survey was used to investigate the reasons given for the non-use of hearing aids by people with hearing loss (n = 332) and family members (n = 313) of people with hearing loss in Australia, the UK, and USA.; **Results:** Survey results showed that hearing aid non-users generally cited external factors as reasons for non-use, whereas family members reported non-use due to attitudinal barriers. Past users of hearing aids and family members of past users both identified devices factors as barriers to use.; **Conclusions:** Differences in reasons for non-use may provide further insight for researchers and clinicians and help inform future clinical practice in addressing the low uptake and use of hearing aids by people with hearing loss and the role of family members in audiological rehabilitation.

Access or request full text: <https://libkey.io/10.1080/14992027.2023.2270703>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37870394&custid=ns023446>

8. Criteria and Terminology Applied to Language Impairments (CATALISE): A qualitative exploration of dissemination efforts to guide future implementation

Item Type: Journal Article

Authors: Gallagher, Aoife L.;Island, Kezia and O Shea, Julia

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders 58(5), pp. 1799-1813

Abstract: Background: Developmental language disorder (DLD) is a condition which affects an individual's ability to use and understand language. Terminological confusion, and the use of non-evidence-based

diagnostic criteria has impacted access to services for this population for several decades. Changes in terminology and diagnosis were proposed as part of a UK-based consensus study, Criteria and Terminology Applied to Language Impairments (CATALISE), in 2016 and 2017. Since the publication of the recommendations, there have been active efforts across several English-speaking countries to support uptake of these recommendations into policy and practice.; **Aims:** The aim of the study was to explore the experiences of individuals who have been leading the dissemination of the CATALISE recommendations since their publication in 2017. The study was undertaken to inform future implementation efforts aimed at facilitating the adoption of the recommendations into policy and practice.; **Methods & Procedures:** Researchers, practitioners and parents from nine countries were recruited to the study (n = 27). Online focus groups and semi-structured interviews were conducted using topic guides informed by the Consolidated Framework for Implementation Research. Inductive thematic analysis was undertaken. Preliminary findings were member-checked prior to completion of the analysis.; **Outcomes & Results:** CATALISE recommendations were described as partially adopted by participants. Dissemination strategies included building a coalition, conducting educational meetings, and developing educational materials. Common barriers to implementation related to the complexity and compatibility of the recommendations, and practitioner confidence. Four themes were identified across the data set to guide future implementation efforts: (a) ride the wave, craft the narrative (b) reach across the divide, be brave (c) create space for multiple voices and, (d) support for speech and language therapists on the front line.; **Conclusions & Implications:** Individuals with DLD and their families should be included in future implementation planning. Engaged leadership is essential to address issues of complexity, compatibility, sustainability and practitioner confidence if CATALISE recommendations are to be integrated into service workflow and processes. Implementation science can provide a useful lens to progress future research in this area.; **What This Paper Adds:** What is already known on this subject Dissemination efforts have been undertaken to facilitate the uptake of recommendations from a UK-based consensus study (CATALISE) in relation to developmental language disorder since publication across several countries. What this study adds to existing knowledge The required changes in diagnostic practice are complex to implement. A lack of compatibility with healthcare processes and low practitioner self-efficacy were also identified as a challenge to implementation. What are the potential or actual clinical observations of this work? Parents and individuals with developmental language disorder need to be engaged as partners in future implementation planning. Organisational leaders need to facilitate the contextual integration of the changes within service systems. Speech and language therapists require ongoing case-based opportunities to enhance their confidence and clinical reasoning skills to implement CATALISE recommendations successfully in their everyday practice. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12912>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37300436&custid=ns023446>

9. Diagnostic procedures of paediatric speech and language therapists in the UK: Enabling and obstructive factors

Item Type: Journal Article

Authors: Harvey, Hannah

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders 58(5), pp. 1454-1467

Abstract: Background: Extensive variation in the terminology used for paediatric diagnoses across the speech

and language therapy research literature is an internationally recognized problem. Little is known, however, about how and how often diagnoses are given in a clinical context. In the UK, speech and language therapists (SLTs) identify and support children who have speech and language needs. To understand and address clinically rooted terminological issues that may directly impact clients and families, there is a need for exploration of how the diagnostic process is operationalized in practice.; **Aim:** To identify, from the perspective of SLTs, areas that present as enabling and obstructive factors to conducting diagnosis in clinical practice.; **Methods & Procedures:** Taking a phenomenological approach, 22 paediatric SLTs were interviewed using a semi-structured format. Thematic analysis revealed a number of factors that were either classified as 'enabling' or 'obstructive' to their diagnostic processes.; **Outcomes & Results:** Participants were often hesitant to provide a diagnosis to families and universally reported the need for targeted guidance, which accounts for the demands of current clinical practice, to guide their diagnostic process. Four enabling factors were identified from participant data: (1) working to a medical model, (2) the availability of collegiate support, (3) recognizing the benefits of diagnosis,, and (4) relating to the needs of the family. Seven themes portrayed obstructive factors in practice: (1) the complex presentation of clients, (2) the risk of giving a 'wrong' diagnosis, (3) participants' uncertainty about diagnostic criteria, (4) insufficient training, (5) service models, (6) concerns about stigma and (7) not having enough clinical time. The obstructive factors created dilemmas for participants and resulted in hesitancy to give a diagnosis, potentially contributing to delays in diagnosis experienced by families as reported in previous literature.; **Conclusions & Implications:** Of paramountcy to SLTs were the individual needs and preferences of their clients. Practical barriers and areas of uncertainty increased hesitance to diagnose, which may inadvertently preclude families from accessing resources. Recommendations include more widely accessible training in diagnostic practice, guidelines to support clinical decision-making, and a greater understanding of client preferences with regard to terminology and its potential relationship with social stigma.; **What This Paper Adds:** What is already known on the subject Inconsistency in terminology for paediatric language diagnoses has been broadly discussed, mostly in reference to variation within research literature. The Royal College of Speech and Language Therapists' (RCSLT) position statement on developmental language disorder (DLD) and language disorder made recommendations for SLTs to use these terms in clinical practice. There is some evidence that SLTs face challenges in operationalizing diagnostic criteria in practice, particularly given financial and resource constraints. What this paper adds to existing knowledge SLTs disclosed several issues that either supported or were obstructive to the practice of diagnosing paediatric clients and delivering this information to families. Whilst most SLTs faced constraints related to the practicalities and demands of clinical practice, a number also held reservations about the impact of a lifelong diagnosis for young clients. These issues resulted in considerable avoidance of formal diagnostic terminology, in favour of description or informal terminology. What are the potential or actual clinical implications of this work? If diagnoses are not given, or if SLTs are using informal diagnostic terms as an alternative strategy, clients and families may experience reduced opportunities to yield benefits associated with a diagnosis. Clinical guidance that specifically addresses the prioritization of time and provides directives for clinical action in instances of uncertainty may support SLTs to feel confident in giving diagnoses. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

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10. Outcomes from a community speech and language therapy service treatment waiting list: The natural history of 525 children with identified speech and language needs

Item Type: Journal Article

Authors: Hesketh, Elizabeth;White, Paul;Simkiss, Doug and Roulstone, Sue

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders 58(5), pp. 1510-1525

Abstract: Background: Understanding the natural history of developmental speech and language impairments can support the selection of children whose difficulties are persistent rather than transitory. It can also provide information against which the effectiveness of intervention can be evaluated. However, natural history data are difficult to collect ethically. Furthermore, as soon as an impairment is identified, the behaviour of those around changes, thus creating some level of intervention. Longitudinal cohort studies, where intervention is minimal, or the control arm of randomized trials have provided the best evidence. However, occasional opportunities arise where service waiting lists can provide data about the progress of children who have not received intervention. This natural history study arose within an ethnically diverse, community paediatric speech and language therapy service in the UK where levels of social disadvantage are high.; **Aims:** To identify (1) the characteristics of the children who attended initial assessment and were selected for treatment; (2) the differences between children who did and did not attend reassessment; and (3) the factors associated with outcomes.; **Methods & Procedures:** A cohort of 545 children were referred and assessed as in need of therapy. Due to resource constraints, intervention was not available for an average of 12 months. Children were invited to attend for a reassessment of need. Initial and follow-up assessments were conducted by experienced clinicians using service guidelines and the Therapy Outcomes Measures Impairment Scale (TOM-I). Descriptive and multivariate regression analyses examined child outcomes for changes in communication impairment, demographic factors and length of wait.; **Outcomes & Results:** At initial assessment, 55% of children presented with severe and profound communication impairments. Children offered appointments at clinics in areas of high social disadvantage were less likely to attend reassessment. By reassessment, 54% of children showed spontaneous improvement (mean TOM-I rating change = 0.58). However, 83% were still judged to require therapy. Approximately 20% of children changed their diagnostic category. Age and impairment severity at initial assessment were the best predictors of continuing requirement for input.; **Conclusions & Implications:** Although children do make spontaneous progress post-assessment and without intervention, it is likely that the majority will continue to be assigned case status by a Speech and Language Therapist. However, when evaluating the effectiveness of interventions, clinicians need to factor in the progress that a proportion of the caseload will make spontaneously. Services should be mindful that a lengthy wait may disproportionately impact children who already face health and educational inequalities.; **What This Paper Adds:** What is already known on the subject Data from longitudinal cohorts (where intervention has been minimal) and the no treatment control arms of randomized controlled trials have provided the best evidence of the natural progression of speech and language impairments in children. These studies provide a varied rate of resolution and progress depending on the case definitions and measurements used. What this study adds to existing knowledge Uniquely, this study has evaluated the natural history of a large cohort of children who had been waiting for treatment for up to 18 months. Data showed that, over a period of waiting for intervention, the majority of those identified as a case by a Speech and Language Therapist remained a case. Using the TOM, on average children in the cohort made just over half a rating point progress during their waiting period. What are the potential or actual clinical implications of this work? The maintenance of treatment waiting lists is probably an unhelpful service strategy for two reasons: first, the case status of the majority of the children is unlikely to change whilst they await intervention and thus children and their families are subjected to further limbo waiting time; second, the dropout from the waiting list may disproportionately affect children who are offered appointments in clinics where there are higher levels of social disadvantage, thus exacerbating inequalities in the system. Currently, a suggested reasonable outcome of intervention is a 0.5 rating change in one domain of TOMs. Study findings suggest this is insufficiently stringent for a paediatric community clinic caseload. There is a need to evaluate spontaneous improvement which may occur in other TOM domains (i.e., Activity, Participation and Wellbeing) and to agree an appropriate change metric for a community paediatric caseload. (© 2023 Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12877>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37189292&custid=ns023446>

11. Comparison of Diagnostic Profiles of Deaf and Hearing Children with a Diagnosis of Autism

Item Type: Journal Article

Authors: Hodkinson, Rachel;Phillips, Helen;Allgar, Victoria;Young, Alys;Le Couteur, Ann;Holwell, Andrew;Teige, Catarina and Wright, Barry

Publication Date: 2023

Journal: International Journal of Environmental Research and Public Health 20(3)

Abstract: There is limited research comparing the presentation of autism in deaf and hearing children and young people. These comparisons are important to facilitate accurate diagnosis, as rates of misdiagnosis and delay in diagnosis amongst deaf children and young people are high. The aim of this study was to compare diagnostic assessment profiles of a UK cohort of autistic deaf and hearing children and young people. The Autism Diagnostic Interview-Revised-Deaf adaptation was completed with the parents of 106 children and young people (deaf children = 65; hearing children = 41). The majority of items explored showed no significant differences between deaf and hearing children and young people. Differences were found in peer relationships, where autistic deaf participants were less likely to respond to the approaches of other children or play imaginatively with peers. These findings need to be taken into consideration by clinicians in the assessment process.

Access or request full text: <https://libkey.io/10.3390/ijerph20032143>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36767509&custid=ns023446>

12. Cultural competence in NHS hearing aid clinics: a mixed-methods case study of services for Deaf British sign language users in the UK

Item Type: Journal Article

Authors: Hulme, Celia;Young, Alys;Rogers, Katherine and Munro, Kevin J.

Publication Date: 2023

Journal: BMC Health Services Research 23(1), pp. 1-13

Access or request full text: <https://libkey.io/10.1186/s12913-023-10339-4>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=EPTOC174318813&custid=ns023446>

13. Language outcomes from the UK-CDI Project: can risk factors, vocabulary skills and gesture scores in infancy predict later language disorders or concern for language development?

Item Type: Journal Article

Authors: Jago, Lana S.;Alcock, Katie;Meints, Kerstin;Pine, Julian M. and Rowland, Caroline F.

Publication Date: 2023

Journal: Frontiers in Psychology 14, pp. 1167810

Abstract: At the group level, children exposed to certain health and demographic risk factors, and who have delayed language in early childhood are, more likely to have language problems later in childhood. However, it is unclear whether we can use these risk factors to predict whether an individual child is likely to develop problems with language (e.g., be diagnosed with a developmental language disorder). We tested this in a sample of 146 children who took part in the UK-CDI norming project. When the children were 15-18 months old, 1,210 British parents completed: (a) the UK-CDI (a detailed assessment of vocabulary and gesture use) and (b) the Family Questionnaire (questions about health and demographic risk factors). When the children were between 4 and 6 years, 146 of the same parents completed a short questionnaire that assessed (a) whether children had been diagnosed with a disability that was likely to affect language proficiency (e.g., developmental disability, language disorder, hearing impairment), but (b) also yielded a broader measure: whether the child's language had raised any concern, either by a parent or professional. Discriminant function analyses were used to assess whether we could use different combinations of 10 risk factors, together with early vocabulary and gesture scores, to identify children (a) who had developed a language-related disability by the age of 4-6 years (20 children, 13.70% of the sample) or (b) for whom concern about language had been expressed (49 children; 33.56%). The overall accuracy of the models, and the specificity scores were high, indicating that the measures correctly identified those children without a language-related disability and whose language was not of concern. However, sensitivity scores were low, indicating that the models could not identify those children who were diagnosed with a language-related disability or whose language was of concern. Several exploratory analyses were carried out to analyse these results further. Overall, the results suggest that it is difficult to use parent reports of early risk factors and language in the first 2 years of life to predict which children are likely to be diagnosed with a language-related disability. Possible reasons for this are discussed.; **Competing Interests:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. (Copyright © 2023 Jago, Alcock, Meints, Pine and Rowland.)

Access or request full text: <https://libkey.io/10.3389/fpsyg.2023.1167810>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37397291&custid=ns023446>

14. Association between hearing aid use and all-cause and cause-specific dementia: an analysis of the UK Biobank cohort

Item Type: Journal Article

Authors: Jiang, Fan;Mishra, Shiva Raj;Shrestha, Nipun;Ozaki, Akihiko;Virani, Salim S.;Bright, Tess;Kuper, Hannah;Zhou, Chengchao and Zhu, Dongshan

Publication Date: 2023

Journal: The Lancet.Public Health 8(5), pp. e329-e338

Abstract: Background: Dementia and hearing loss are both highly prevalent conditions among older adults. We aimed to examine the association between hearing aid use and risk of all-cause and cause-specific dementia

among middle-aged and older-aged adults, and to explore the roles of mediators and moderators in their association.; **Methods:** We used data from the UK Biobank, a population-based cohort study, which recruited adults aged 40-69 years between 2006 and 2010 across 22 centres in England, Scotland, and Wales. We used Cox proportional hazards models to estimate hazard ratios (HRs) and 95% CIs between self-reported hearing aid use status (hearing loss with or without hearing aids) at baseline and risk of dementia (all-cause dementia, Alzheimer's disease, vascular dementia, and non-Alzheimer's disease non-vascular dementia). Dementia diagnoses were ascertained using hospital records and death-register data. We also analysed the roles of mediators (self-reported social isolation, loneliness, and mood) and moderators (self-reported education and income, smoking, morbidity, and measured APOE allele status).; **Findings:** After the exclusion of people who did not answer the question on hearing difficulties ($n=25\,081\,5.0\%$) and those with dementia at baseline visit ($n=283\,0.1\%$), we included 437 704 people in the analyses. Compared with participants without hearing loss, people with hearing loss without hearing aids had an increased risk of all-cause dementia (HR 1.42 95% CI 1.29-1.56); we found no increased risk in people with hearing loss with hearing aids (1.04 0.98-1.10). The positive association of hearing aid use was observed in all-cause dementia and cause-specific dementia subtypes (Alzheimer's disease, vascular dementia, and non-Alzheimer's disease non-vascular dementia). The attributable risk proportion of dementia for hearing loss was estimated to be 29.6%. Of the total association between hearing aid use and all-cause dementia, 1.5% was mediated by reducing social isolation, 2.3% by reducing loneliness, and 7.1% by reducing depressed mood.; **Interpretation:** In people with hearing loss, hearing aid use is associated with a risk of dementia of a similar level to that of people without hearing loss. With the postulation that up to 8% of dementia cases could be prevented with proper hearing loss management, our findings highlight the urgent need to take measures to address hearing loss to improve cognitive decline.; **Funding:** National Natural Science Foundation of China and Shandong Province, Taishan Scholars Project, China Medical Board, and China Postdoctoral Science Foundation.; **Competing Interests:** Declaration of interests AO has received consulting fees from Medical Network Systems (MNES) and payment from Kyowa Kirin, outside the submitted work. All other authors declare no competing interests. (Copyright © 2023 Elsevier Ltd. All rights reserved.)

Access or request full text: [https://libkey.io/10.1016/S2468-2667\(23\)00048-8](https://libkey.io/10.1016/S2468-2667(23)00048-8)

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37062296&custid=ns023446>

15. Age-related hearing loss and dementia-related neuropathology: An analysis of the United Kingdom brains for dementia research cohort

Item Type: Journal Article

Authors: Katanga, Jessica A.;Hamilton, Calum A.;Walker, Lauren;Attems, Johannes and Thomas, Alan J.

Publication Date: 2023

Journal: Brain Pathology (Zurich, Switzerland) 33(6), pp. e13188

Abstract: Age-related hearing loss frequently precedes or coexists with mild cognitive impairment and dementia. The role specific neuropathologies play in this association, as either a cause or a consequence, is unclear. We therefore aimed to investigate whether specific dementia related neuropathologies were associated with hearing impairment in later life. We analysed data on ante-mortem hearing impairment with post-mortem neuropathological data for 442 participants from the Brains for Dementia Research Cohort. Binary logistic regression models were used to estimate the association of hearing impairment with the presence of each dementia-related neuropathology overall, and with specific staged changes. All analyses adjusted for age and sex, and several sensitivity analyses were conducted to test the robustness of findings. Presence and

density of neuritic plaques were associated with higher odds of hearing impairment ante-mortem (OR = 3.65, 95% CI 1.78-7.46 for frequent density of plaques). Presence of any LB disease was likewise associated with hearing impairment (OR = 2.10, 95% CI 1.27-3.48), but this did not increase with higher cortical pathology (OR = 1.53, 95% CI 0.75-3.11). Nonspecific amyloid deposition, neurofibrillary tangle staging, overall AD neuropathology level, and cerebrovascular disease were not clearly associated with increased risks of hearing impairment. Our results provide some support for an association between dementia-related neuropathology and hearing loss and suggest that hearing loss may be associated with a high neuritic plaque burden and more common in Lewy body disease. (© 2023 The Authors. Brain Pathology published by John Wiley & Sons Ltd on behalf of International Society of Neuropathology.)

Access or request full text: <https://libkey.io/10.1111/bpa.13188>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37551936&custid=ns023446>

16. Outcomes from 7 years of a direct to audiology referral pathway

Item Type: Journal Article

Authors: Katiri, Roulla;Sivan, Nina;Noone, Anthony;Farrell, Eric;McLoughlin, Laura;Lang, Bronagh;O'Donnell, Bronagh and Kieran, Stephen M.

Publication Date: 2023

Journal: Irish Journal of Medical Science 192(3), pp. 1341-1347

Abstract: Background: The direct to audiology via ENT referral pathway was designed to enhance patient access to audiology services. The pathway is recommended in the Otolaryngology Head & Neck Surgery: a model of care for Ireland report, published in 2019.; **Aims:** This study aimed to review the outcomes of all patients that attended our institution over the last seven years.; **Methods:** A retrospective review of the direct to audiology referral service from March 2014 to December 2021 was conducted. Outcomes were defined by the pathway each patient took following attendance at the audiology clinic. Patients were either (i) discharged, (ii) referred for hearing aid(s) or (iii) identified as candidates for further diagnostic assessments, including a follow-up at the ENT outpatient clinic.; **Results:** During the time frame, 419 patients were triaged to the pathway. The average wait time was 13 days. The average age was 53 years (range 16-96 years, SD = 6.1). Approximately 34% (n = 143) of all patients referred were discharged back to the GP by the audiologist, but 66% (n = 276) presented with 'red flags' and needed further investigation in the ENT clinic, with 30% (n = 73) ultimately requiring imaging studies. Over half (n = 254, 61%) were referred for hearing aids.; **Conclusion:** The direct to audiology initiative has proven effective at reducing waiting times for ENT patients solely in need of audiological intervention. Approximately one-third of these referrals to the ENT service can be assessed comprehensively in the audiology clinic, thereby reducing the demand for ENT clinics, enhancing service provision and expediting onwards referral for amplification. (© 2022. The Author(s), under exclusive licence to Royal Academy of Medicine in Ireland.)

Access or request full text: <https://libkey.io/10.1007/s11845-022-03145-0>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36056228&custid=ns023446>

17. Patient-healthcare provider communication and age-related hearing loss: a qualitative study of patients' perspectives

Item Type: Journal Article

Authors: Lu, Lorita Lee Mei;Henn, Patrick;O'Tuathaigh, Colm and Smith, Simon

Publication Date: 2023

Journal: Irish Journal of Medical Science

Abstract: **Background:** The prevalence of age-related hearing loss (ARHL) significantly increases in people aged 60 and older. Medical errors are frequently reported because of communication breakdown, especially for patients with ARHL.; **Aims:** This qualitative study focuses on identifying the communication challenges faced by people aged over 65 with ARHL and potential ameliorative strategies based on the participants' personal experiences.; **Methods:** Thirteen participants, attending a support service for older adults with hearing loss in the South of Ireland, were recruited using convenience sampling. Semi-structured interviews were conducted with participants. Interviews were audio-recorded and transcribed using NVivo 12 software. Braun and Clarke's thematic analysis methodology was used to identify themes arising from two main study domains: difficulties faced during the most recent healthcare interaction and suggestions for improving overall healthcare communication.; **Results:** Older adults with hearing loss identified general mishearing, lack of awareness and use of medical terminology to be the cause of ineffective communication. Raising awareness of the impact of presbycusis on clinical interaction among healthcare professionals was cited as being of crucial importance. Other helpful strategies include repeat and rephrase, use of written information, providing context, minimizing ambient noise, continuity of care, longer consultation length and good body language.; **Conclusion:** Effective clinical communication can be achieved through a clear understanding of the patient's perspective. Healthcare providers should be made aware of the hearing issues and associated communication difficulties posed, within the context of the development of patient-centred strategies to improve patient safety. (© 2023. The Author(s).)

Access or request full text: <https://libkey.io/10.1007/s11845-023-03432-4>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37386348&custid=ns023446>

18. A randomised controlled clinical trial to assess the benefits of a telecare tool delivered prior to the initial hearing assessment

Item Type: Journal Article

Authors: Maidment, D. W.;Heffernan, E. and Ferguson, M. A.

Publication Date: 2023

Journal: International Journal of Audiology 62(5), pp. 400-409

Abstract: **Objective:** To assess the benefits of the Ida Institute's Why improve my hearing? Telecare Tool used before the initial hearing assessment appointment.; **Design:** A prospective, single-blind randomised clinical trial with two arms: (i) Why improve my hearing? Telecare Tool intervention, and (ii) standard care control.; **Study Sample:** Adults with hearing loss were recruited from two Audiology Services within the United Kingdom's publicly-funded National Health Service. Of 461 individuals assessed for eligibility, 57 were eligible to participate.; **Results:** Measure of Audiologic Rehabilitation Self-efficacy for Hearing Aids (primary outcome)

scores did not differ between groups from baseline to post-assessment (Mean change Δ]= -2.28; 95% confidence interval CI]= -6.70, 2.15, p = .307) and 10-weeks follow-up (Mean Δ = -2.69; 95% CI = -9.52, 4.15, p = .434). However, Short Form Patient Activation Measure scores significantly improved in the intervention group compared to the control group from baseline to post-assessment (Mean Δ = -6.06, 95% CI = -11.31, -0.82, p = .024, ES = .61) and 10-weeks follow-up (Mean Δ = -9.87, 95% CI = -15.34, -4.40, p = .001, ES = -.97).;

Conclusions: This study demonstrates that while a patient-centred telecare intervention completed before management decisions may not improve an individual's self-efficacy to manage their hearing loss, it can lead to improvements in readiness.

Access or request full text: <https://libkey.io/10.1080/14992027.2022.2059713>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=35436167&custid=ns023446>

19. Using a bedside test to detect genetic susceptibility to aminoglycoside-induced hearing loss: Has the future arrived?

Item Type: Journal Article

Authors: May, Meryta L.; Osowicki, Joshua; Gaafar, Duaa and Suthers, Graeme

Publication Date: 2023

Journal: Journal of Paediatrics and Child Health 59(1), pp. 9-11

Abstract: Aminoglycosides are among the most commonly prescribed antibiotics in hospitalised Australian adults and children. A proportion of individuals with an underlying genetic predisposition to aminoglycoside-induced hearing loss (AIHL) can develop bilateral sensorineural hearing loss that is immediate and profound after just a single standard dose of an aminoglycoside. A recent publication described the use of a rapid point-of-care test (POCT) in a neonatal nursery in the United Kingdom for real-time detection of infants at risk of AIHL, in whom exposure to aminoglycosides could then be avoided. This proof of concept study should provide a catalyst for further development of similar assays that would be suitable for Australia's genetically diverse population. The barriers to mitigating the impact of AIHL on Australian children are not primarily technical, but involve a lack of data on the prevalence of the MT-RNR1 mutations in our current neonatal and paediatric populations and intensive care nurseries. (© 2022 The Authors. Journal of Paediatrics and Child Health published by John Wiley & Sons Australia, Ltd on behalf of Paediatrics and Child Health Division (The Royal Australasian College of Physicians).)

Access or request full text: <https://libkey.io/10.1111/jpc.16302>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36465032&custid=ns023446>

20. The genetic contribution of the X chromosome in age-related hearing loss

Item Type: Journal Article

Authors: Naderi, Elnaz; Cornejo-Sanchez, Diana; Li, Guangyou; Schrauwen, Isabelle; Wang, Gao T.; Dewan, Andrew T. and Leal, Suzanne M.

Publication Date: 2023

Journal: Frontiers in Genetics 14, pp. 1106328

Abstract: Age-related (AR) hearing loss (HL) is the most common sensory impairment with heritability of 55%. The aim of this study was to identify genetic variants on chromosome X associated with ARHL through the analysis of data obtained from the UK Biobank. We performed association analysis between self-reported measures of HL and genotyped and imputed variants on chromosome X from ~460,000 white Europeans. We identified three loci associated with ARHL with a genome-wide significance level ($p < 5 \times 10^{-8}$), ZNF185 (rs186256023, $p = 4.9 \times 10^{-10}$) and MAP7D2 (rs4370706, $p = 2.3 \times 10^{-8}$) in combined analysis of males and females, and LOC101928437 (rs138497700, $p = 8.9 \times 10^{-9}$) in the sex-stratified analysis of males. In-silico mRNA expression analysis showed MAP7D2 and ZNF185 are expressed in mice and adult human inner ear tissues, particularly in the inner hair cells. We estimated that only a small amount of variation of ARHL, 0.4%, is explained by variants on the X chromosome. This study suggests that although there are likely a few genes contributing to ARHL on the X chromosome, the role that the X chromosome plays in the etiology of ARHL may be limited.; **Competing Interests:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. (Copyright © 2023 Naderi, Cornejo-Sanchez, Li, Schrauwen, Wang, Dewan and Leal.)

Access or request full text: <https://libkey.io/10.3389/fgene.2023.1106328>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36896235&custid=ns023446>

21. Managing comorbid cognitive impairment and hearing loss in older adults: a UK survey of audiology and memory services

Item Type: Journal Article

Authors: Omar, Rohani;Kuo, Louise;Costafreda, Sergi G.;Hall, Amanda;Forbes, Marina;O'Brien, John,T. and Schilder, Anne G. M.

Publication Date: 2023

Journal: Age and Ageing 52(5)

Abstract: Background: midlife hearing loss is a potentially modifiable risk factor for dementia. Addressing comorbid hearing loss and cognitive impairment in services for older adults may offer opportunities to reduce dementia risk.; **Objective:** to explore current practice and views amongst UK professionals regarding hearing assessment and care in memory clinics and cognitive assessment and care in hearing aid clinics.; **Methods:** national survey study. Between July 2021 and March 2022, we distributed the online survey link via email and via QR codes at conferences to professionals working in National Health Service (NHS) memory services and audiologists working in NHS and private adult audiology services. We present descriptive statistics.; **Results:** 135 professionals working in NHS memory services and 156 audiologists (68% NHS, 32% private sector) responded. Of those working in memory services, 79% estimate that >25% of their patients have significant hearing difficulties; 98% think it useful to ask about hearing difficulties and 91% do so; 56% think it useful to perform a hearing test in clinic but only 4% do so. Of audiologists, 36% estimate that >25% of their older adult patients have significant memory problems; 90% think it useful to perform cognitive assessments, but only 4% do so. Main barriers cited are lack of training, time and resources.; **Conclusions:** although professionals working in memory and audiology services felt addressing this comorbidity would be useful, current practice varies and does not generally address it. These results inform future research into operational solutions to integrating memory and audiology services. (© The Author(s) 2023. Published by Oxford University Press on behalf of the

British Geriatrics Society. All rights reserved. For permissions, please email: journals.permissions@oup.com.)

Access or request full text: <https://libkey.io/10.1093/ageing/afad080>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37247401&custid=ns023446>

22. Associations Between Body Composition and Sensorineural Hearing Loss Among Adults Based on the UK Biobank

Item Type: Journal Article

Authors: Pang, Wendu;Li, Junhong;Qiu, Ke;Yi, Xiaowei;Cheng, Danni;Rao, Yufang;Song, Yao;Deng, Di;Mao, Minzi;Li, Xiaohong;Ma, Ning;Chen, Daibo;Luo, Yi;Xu, Wei;Ren, Jianjun and Zhao, Yu

Publication Date: 2023

Journal: Otolaryngology--Head and Neck Surgery : Official Journal of American Academy of Otolaryngology-Head and Neck Surgery 169(4), pp. 875-883

Abstract: Objective: To explore the association between body composition and sensorineural hearing loss (SNHL).; **Study Design:** Cross-sectional study, prospective study and Mendelian randomization (MR) analyses.; **Setting:** UK Biobank.; **Methods:** This cross-sectional study included 147,296 adult participants with complete data on body composition and the speech-reception-threshold (SRT) test. We further conducted a prospective study with 129,905 participants without SNHL at baseline and followed up to 15 years to explore the association between body composition and new-onset SNHL. Multivariable logistic regression and Cox regression models were used. Subgroup analyses stratified by age and sex were performed. We further assessed the causal association between body composition and SNHL using two-sample MR analyses.; **Results:** Our cross-sectional study revealed that fat percentage, especially leg (odds ratio OR] 1.46, $p = .029$) and arm (OR 1.43, $p = .004$), were significant risk factors for SNHL. However, fat-free mass, especially in the arm (OR 0.27, $p < .001$) and leg (OR 0.58, $p < .001$) showed significant protective effects against SNHL, which was substantially consistent with the results of the prospective study. In addition, we found that young women with SNHL were more susceptible to body composition indicators. However, MR analyses revealed no evidence of significant causal association.; **Conclusion:** Fat percentage, especially in the leg and arm, was a significant risk factor for SNHL, whereas fat-free mass, especially in the leg and arm, had significant protective effects against SNHL, however, these associations may not be causal. (© 2023 American Academy of Otolaryngology-Head and Neck Surgery Foundation.)

Access or request full text: <https://libkey.io/10.1002/ohn.323>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=36934447&custid=ns023446>

23. Characterisation of the treatment provided for children with unilateral hearing loss

Item Type: Journal Article

Authors: Patel, Roshni;Hoare, Derek J.;Willis, Karen R.;Tabraiz, Shammash;Bateman, Paul K. and Thornton, Sally K.

Publication Date: 2023

Journal: Frontiers in Pediatrics 11, pp. 1197713

Abstract: Background: Children with permanent unilateral hearing loss (UHL) are an understudied population, with limited data to inform the guidelines on clinical management. There is a funding gap in healthcare provision for the children with UHL in the United Kingdom, where genetic screening, support services, and devices are not consistently provided or fully funded in all areas. They are a disparate population with regard to aetiology and their degree of hearing loss, and hence their device choice and use. Despite having one "good ear", some children with UHL can have similar outcomes, socially, behaviourally, and academically, to children with bilateral hearing loss, highlighting the importance of understanding this population. In this longitudinal cohort study, we aimed to characterise the management of the children with UHL and the gaps in the support services that are provided for the children in Nottingham, United Kingdom.; **Methods:** A cohort study was conducted collecting longitudinal data over 17 years (2002-2019) for 63 children with permanent congenital confirmed UHL in a large tertiary regional referral centre for hearing loss in Nottingham, United Kingdom. The cases of UHL include permanent congenital, conductive, mixed, or sensorineural hearing loss, and the degree of hearing loss ranges from mild to profound. The data were taken from their diagnostic auditory brainstem responses and their two most recent hearing assessments. Descriptors were recorded of the devices trialled and used and the diagnoses including aetiology of UHL, age of first fit, degree of hearing loss, when and which type of device was used, why a device was not used, the support services provided, concerns raised, and who raised them.; **Results:** Most children (45/63; 71%) trialled a device, and the remaining 18 children had no device trial on record. Most children (20/45; 44%) trialled a bone-conduction device, followed by contralateral routing of signal aid (15/45; 33%) and conventional hearing aids (9/45; 20%). Most children (36/45; 80%) who had a device indicated that they wore their device "all day" or every day in school. Few children (8/45; 18%) reported that they wore their device rarely, and the reasons for this included bullying (3/8), feedback from the device (2/8), and discomfort from the device (2/8). Only one child reported that the device was not helping with their hearing. The age that the children were first fitted with their hearing device varied a median of 2.5 years for hearing aids and bone-conduction devices and 7 years for a contralateral routing of signal aid. The length of time that the children had the device also varied widely (median of 26 months, range 3-135 months); the children had their bone-conduction hearing aid for the longest period of time (median of 32.5 months). There was a significant trend where more recent device fittings were happening for children at a younger age. Fifty-one children were referred by the paediatric audiologist to a support service, 72.5% (37/51) were subsequently followed up by the referred service with no issue, whilst the remaining 27.5% (14/51) encountered an issue leading to an unsuccessful provision of support. Overall, most children (65%, 41/63) had no reported concerns, and 28.5% (18/63) of the children went on to have a documented concern at some point during their audiological care: five with hearing aid difficulties, five with speech issues, four with no improvement in hearing, three facing self-image or bullying issues, and one case of a child struggling to interact socially with friends. Three of these children had not trialled a device. We documented every concern reported from the parents, clinicians, teachers of the deaf, and from the children themselves. Where concerns were raised, more than half (58.6%, 10/18) were by schools and teachers, the remaining four concerns were raised by the family, and further four concerns were raised by the children themselves.; **Conclusion:** To discover what management will most benefit which children with permanent UHL, we first must characterise their treatment, their concerns, and the support services available for them. Despite the children with UHL being a highly disparate population-in terms of their aetiology, their device use, the degree of hearing loss, and the age at which they trial a device-the majority report they use their device mostly in school. In lieu of available data and in consideration of the devices that are available to them, it could be useful to support families and clinicians in understanding the devices which are most used and where they are used. Considering the reasons for cessation of regular device use counselling and support services would be vital to support the children with UHL.; **Competing Interests:** The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest. (© 2023 Patel, Hoare, Willis, Tabraiz, Bateman and Thornton.)

Access or request full text: <https://libkey.io/10.3389/fped.2023.1197713>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37559951&custid=ns023446>

24. How differences in anatomy and physiology and other aetiology affect the way we label and describe speech in individuals with cleft lip and palate

Item Type: Journal Article

Authors: Pereira, Valerie J. and Sell, Debbie

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders

Abstract: Background: Speech in individuals with cleft lip and/or palate (CLP) is a complex myriad of presenting symptoms. It is uniquely associated with the structural difference of velopharyngeal insufficiency (VPI), together with a wide and heterogeneous range of other aetiologies which often co-occur. The nature of the speech sound disorder (SSD) including VPI may also change over the course of an individual's care pathway. Differences in terminology and approaches to analysis are currently used, resulting in confusion internationally. Additionally, current diagnostic labels and classification systems in SSD do not capture the complexity and full nature of speech characteristics in CLP.; **Aims:** This paper aims to explore the different aetiologies of cleft palate/VPI speech and to relate aetiology with speech characteristic(s). In so doing, it attempts to unravel the different terminology used in the field, describing commonalities and differences, and identifying overlaps with the speech summary patterns used in the United Kingdom and elsewhere. The paper also aims to explore the applicability of current diagnostic labels and classification systems in the non-cleft SSD literature and illustrate certain implications for speech intervention in CLP.; **Methods and Procedures:** The different aetiologies were identified from the literature and mapped onto cleft palate/VPI speech characteristics. Different terminology and approaches to analysis are defined and overlaps described. The applicability of current classification systems in SSD is discussed including additional diagnostic labels proposed in the field.; **Outcomes and Results:** Aetiologies of cleft palate/VPI speech identified include developmental (cognitive-linguistic), middle ear disease and fluctuating hearing loss, altered oral structure, abnormal facial growth, VPI-structural (abnormal palate muscle) and VPI-iatrogenic (maxillary advancement surgery). There are four main terminologies used to describe cleft palate/VPI speech: active/passive and compensatory/obligatory, which overlap with the four categories used in the UK speech summary patterns: anterior oral cleft speech characteristics (CSCs), posterior oral CSCs, non-oral CSCs and passive CSCs, although not directly comparable. Current classification systems in non-cleft SSD do not sufficiently capture the full nature and complexity of cleft palate/VPI speech.; **Conclusions and Implications:** Our attempt at identifying the heterogeneous range of aetiologies provides clinicians with a better understanding of cleft palate/VPI speech to inform the management pathway and the nature and type of speech intervention required. We hope that the unravelling of the different terminology in relation to the UK speech summary patterns, and those used elsewhere, reduces confusion and provides more clarity for clinicians in the field. Diagnostic labels and classification require international agreement.; **What This Paper Adds:** What is already known on the subject Speech associated with cleft palate/velopharyngeal insufficiency (VPI) is a complex myriad of speech characteristics with a wide and heterogeneous range of aetiologies. Different terminology and speech summary patterns are used to describe the speech characteristics. The traditional classification of cleft palate/VPI speech is Articulation Disorder, although evidence is building for Phonological Disorder and contrastive approaches in cleft speech intervention. What this paper adds to existing knowledge This paper explores the range of aetiologies of cleft palate/VPI speech (e.g., altered oral structure, abnormal facial growth, abnormal palate muscle and iatrogenic aetiologies) and attempts to relate aetiology with speech characteristic(s). An attempt is made at unravelling the different terminology used in relation to a well-known and validated approach to analysis, used in the United Kingdom and elsewhere. Complexities of current

diagnostic labels and classifications in Speech Sound Disorder to describe cleft palate/VPI speech are discussed. What are the potential or actual clinical implications of this work? There needs to be a common language for describing and summarising cleft palate/VPI speech. Speech summary patterns based on narrow phonetic transcription and correct identification of aetiology are essential for the accurate classification of the speech disorder and identification of speech intervention approaches. There is an urgent need for research to identify the most appropriate type of contrastive (phonological) approach in cleft lip and/or palate. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd behalf of Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12946>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37650488&custid=ns023446>

25. Sociolinguistic Variation in Mouthings in British Sign Language: A Corpus-Based Study

Item Type: Journal Article

Authors: Proctor, Heidi and Cormier, Kearsy

Publication Date: 2023

Journal: Language and Speech 66(2), pp. 412-441

Abstract: Mouth activity forms a key component of all sign languages. This can be divided into mouthings, which originate from words in the ambient spoken language, and mouth gestures, which do not. This study examines the relationship between the distribution of mouthings co-occurring with verb signs in British Sign Language (BSL) and various linguistic and social factors, using the BSL Corpus. We find considerable variation between participants and a lack of homogeneity in mouth actions with particular signs. This accords with previous theories that mouthings constitute code-blending between spoken and signed languages-similar to code-switching or code-mixing in spoken languages-rather than being a phonologically or lexically compulsory part of the sign. We also find a strong association between production of plain verbs (which are body-anchored and cannot be modified spatially) and increased mouthing. In addition, we observe significant effects of region (signers from the south of the United Kingdom mouth more than those from the north), gender (women mouth more than men), and age (signers aged 16-35 years produce fewer mouthings than older participants). We find no significant effect of language background (deaf vs. hearing family). Based on these findings, we argue that the multimodal, multilingual, and simultaneous nature of code-blending in sign languages fits well within the paradigm of translanguaging. We discuss implications of this for concepts of translanguaging, code-switching, code-mixing, and related phenomena, highlighting the need to consider not just modality and linguistic codes but also sequential versus simultaneous patterning.

Access or request full text: <https://libkey.io/10.1177/00238309221107002>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=35903821&custid=ns023446>

26. Speech sound disorder or DLD (phonology)? Towards a consensus agreement on terminology

Item Type: Journal Article

Authors: Stringer, Helen;Cleland, Joanne;Wren, Yvonne;Rees, Rachel and Williams, Pam

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders

Abstract: Background: The publication of phase 2 of the CATALISE project in 2017 clarified terminology for children with developmental language disorder (DLD) or delay but unintentionally muddled the water for children with unintelligible speech. A diagnostic label of DLD (phonology) indicates poor prognosis and phonological disorder that persists into middle childhood. However, in contrast to other diagnostic labels that fall under the overarching term of speech sound disorder (SSD), DLD (phonology) does not elucidate the characteristics of the child's speech nor does it point us in the direction of appropriate intervention.; **Aims:** The aim of this paper is to discuss terminology in SSD leading to an evidence-based model which builds on the model of DLD developed in CATALISE, supports descriptive diagnosis and signposts intervention.; **Methods:** Following a focused review of literature proposing or describing terminology for SSD, an expert group of researchers in developmental SSD proposed a revised model of existing terminology. Groups of UK speech and language therapists (SLTs) who provide services for children with SSD were asked to comment on its acceptability and feasibility.; **Discussion:** A three-level terminology model was developed. This comprised an overarching Level 1 term; Level 2 terms that differentiated SSD of unknown origin from SSD with associated or underlying conditions; and specific diagnostic terms at Level 3 to support further assessment and intervention decisions. Consulted SLTs generally expressed agreement with the proposed terminology and a willingness to adopt it in practice.; **Conclusions:** Existing terminology for childhood SSD provides a good basis for clinical decision-making. A modified version of Dodd's (2005) terminology was found to be acceptable to UK SLTs. There is an evident overlap of SSD with CATALISE terminology. However more detailed and specialist terminology than 'DLD (phonology)' is required to support clinical decision-making. It is proposed that endorsement by the UK Royal College of Speech and Language Therapists would obviate the need for a Delphi process.; **What This Paper Adds:** What is already known on this subject Over nearly a hundred years, as our knowledge and understanding of speech sound disorder (SSD) has increased, so has the terminology that is used to describe those disorders. Current terminology not only describes subtypes of SSD but can also signpost us to effective interventions. With the publication, in 2017, of phase 2 of CATALISE a new term of 'developmental language disorder (DLD) (phonology)' was introduced with the unintentional consequence of challenging more specific descriptive terms for SSD. What this paper adds In the context of CATALISE and DLD (phonology), the history and nature of SSD terminology are reappraised. Building on the model of DLD developed in CATALISE, a tiered model that supports descriptive diagnosis and signposts intervention is proposed for discussion. Clinical implications of this study The proposed model of terminology for SSD provides descriptive and detailed labels that will support accuracy in differential diagnosis of developmental SSD by speech and language therapists. Furthermore, a decision-making tree for SSD demonstrates the pathway from diagnostic use of the terminology to the selection of evidence-based, effective interventions. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12989>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=38059693&custid=ns023446>

27. Hospital Admission Profile Related to Inner Ear Diseases in England and Wales

Item Type: Journal Article

Authors: Taybeh, Esra' O. and Naser, Abdallah Y.

Publication Date: 2023

Journal: Healthcare (Basel, Switzerland) 11(10)

Abstract: Background: Due to an expansion in the usage of medications (such as anticancer therapies), increased exposure to noise, and an increase in life expectancy, the prevalence of inner ear disease-related hearing loss is rising. Diseases of the inner ear are frequently accompanied by other conditions, such as chronic heart failure, systemic inflammation, arterial hypertension, and cerebrovascular disease. The aim of this study was to investigate the profile of hospital admissions linked to inner ear diseases in England and Wales.; **Method:** This was an ecological descriptive study using public medical databases in England and Wales. Diagnostic codes for diseases of the inner ear (H80-H83) were used to identify all hospital admissions. Between 1999 and 2020, the chi-squared test was used to assess the difference between the admission rates.; **Results:** From 5704 in 1999 to 19,097 in 2020, the total annual number of hospital admissions increased by 234.8%, which corresponds to a 192.3% increase in the admission rate from 10.94 (95% CI 10.66-11.22) in 1999 to 31.98 (95% CI 31.52-32.43) in 2020 per 100,000 people, $p < 0.01$. "Disorders of vestibular function" and "other inner ear diseases" were the most frequent causes of hospital admissions due to inner ear diseases, accounting for 47.6% and 43.6%, respectively. The age range of 15 to 59 years accounted for 42.3% of all diseases of the inner ear hospital admissions. Around 59.6% of all admissions were made by females. The female admission rate increased by 210.1% (from 12.43 (95% CI 12.01-12.85) in 1999 to 38.54 (95% CI 37.84-39.24) in 2020 per 100,000 people). The male admission rate for diseases of the inner ear increased by 169.6% from 9.37 (95% CI 9.00-9.75) in 1999 to 25.26 (95% CI 24.69-25.84) per 100,000 people] in 2020.; **Conclusion:** Inner ear disease admissions increased markedly in England and Wales during the past two decades. Females and the middle-aged population were at higher risk of being admitted for inner ear diseases. Further cohort studies are warranted to identify other risk factors and develop effective prevention strategies.

Access or request full text: <https://libkey.io/10.3390/healthcare11101457>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37239743&custid=ns023446>

28. Enablers and barriers for hearing parents with deaf children: Experiences of parents and workers in Wales, UK

Item Type: Journal Article

Authors: Terry, Julia

Publication Date: 2023

Journal: Health Expectations : An International Journal of Public Participation in Health Care and Health Policy 26(6), pp. 2666-2683

Abstract: Background: More than 90% of deaf children are born to hearing families who know little about deafness. Benefits from hearing screening at birth are often lost, as families find little information about pathways for deaf children but are key to ensuring deaf children receive relevant language and communication support. Systems surrounding deaf children and family members are crucial for children's health and social development. Experiences of hearing parents raising deaf children and understanding factors that influence families' experience of navigating pathways for deaf children through health and education services are currently underreported.; **Methods:** An exploratory study was conducted in Wales, UK. Twenty participants were interviewed, including 10 hearing parents of deaf children and 10 people who work with deaf children using semistructured interviews. Bronfenbrenner's ecological systems theory was used as a lens to explore the micro-, meso-, exo-, macro- and chronosystems that surround children and families. This study explores

potential supports and barriers in those systems.; **Findings:** Findings are reported under two broad headings: enablers and barriers. Under enablers, it was found that provision of resources, supporting people and knowledge were key factors. Under barriers, a lack of knowledge, lack of provision and battling services and attitudes were key issues that need addressing.; **Conclusion:** Hearing parents of deaf children in Wales, UK reported experiencing a range of enablers and barriers that impact upon their experiences of raising a deaf child. Further provision is needed by policymakers and governments to recognise support needs to improve the outcomes for deaf children.; Patient or Public Contribution: This project was developed from initial discussions with the stakeholder reference group and progressed with the group's deaf panel and hearing parents with deaf children. The project's steering group was involved in study design, recruitment and continuous feedback on all stages of the research process. (© 2023 The Authors. Health Expectations published by John Wiley & Sons Ltd.)

Access or request full text: <https://libkey.io/10.1111/hex.13864>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37694502&custid=ns023446>

29. Does cognitive impairment precede self-reported poor hearing? Results from the English longitudinal study of ageing

Item Type: Journal Article

Authors: Valsechi, Felipe Eduardo;de Paiva, Karina Mary;Hillesheim, Danúbia;Xavier, André Junqueira;Samelli, Alessandra Giannella;de Oliveira, Cesar and d'Orsi, Eleonora

Publication Date: 2023

Journal: International Journal of Audiology 62(8), pp. 787-794

Abstract: Objective: To investigate whether cognitive impairment precedes self-reported poor hearing in adults aged 50 and older over a 14-year period.; **Design:** Biennial longitudinal study.; **Study Sample:** The data came from the English Longitudinal Study of Ageing carried out in England between 2002 and 2016, with 11,391 individuals aged 50 years and older. For this study, ELSA participants who had a positive perception of hearing at the beginning of the analysis in 2002 (n = 8,895) were eligible. The dependent variable was self-reported poor hearing, and the exposure measure was cognitive impairment. The analyses were performed using Generalised Estimation Equations and adjusted for gender, age, educational level, household wealth, smoking, alcohol consumption, depressive symptoms, ADL/IADL disability, physical activity level, diabetes, and cardiovascular disease.; **Results:** The results showed 33% increased odds of self-reported poor hearing in individuals with cognitive impairment. In the fully adjusted model, individuals who presented cognitive impairment in the previous wave had, over time, 10% increased odds (95% CI: 1.02; 1.19) of presenting self-reported poor hearing.; **Conclusions:** The exposure to cognitive impairment was associated with a subsequent self-reported poor hearing. These data represent important tools for improving cognitive and hearing impairment diagnosis and treatment.

Access or request full text: <https://libkey.io/10.1080/14992027.2022.2089740>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=35758100&custid=ns023446>

30. Two-year neurodevelopmental data for preterm infants born over an 11-year period in England and Wales, 2008-2018: a retrospective study using the National Neonatal Research Database

Item Type: Journal Article

Authors: van Blankenstein, Emily;Sodiwala, Tia;Lanoue, Julia;Modi, Neena;Uthaya, Sabita N. and Battersby, Cheryl

Publication Date: 2023

Journal: Archives of Disease in Childhood.Fetal and Neonatal Edition

Abstract: Objective: United Kingdom guidelines recommend all infants born <30 weeks' gestation receive neurodevelopmental follow-up at 2 years corrected age. In this study, we describe completeness and results of 2-year neurodevelopmental records in the National Neonatal Research Database (NNRD).; **Design:** This retrospective cohort study uses data from the NNRD, which holds data on all neonatal admissions in England and Wales, including 2-year follow-up status.; **Patients:** We included all preterm infants born <30 weeks' gestation between 1 January 2008 and 31 December 2018 in England and Wales, who survived to discharge from neonatal care.; **Main Outcome Measures:** Presence of a 2-year neurodevelopmental assessment record in the NNRD, use of standardised assessment tools, results of functional 2-year neurodevelopmental assessments (visual, auditory, neuromotor, communication, overall development).; **Results:** Of the 41 505 infants included, 24 125 (58%) had a 2-year neurodevelopmental assessment recorded. This improved over time, from 32% to 71% for births in 2008 and 2018, respectively. Of those with available data: 0.4% were blind; 1% had a hearing impairment not correctable with aids; 13% had <5 meaningful words, vocalisations or signs; 8% could not walk without assistance and 9% had severe (≥ 12 months) developmental delay.; **Conclusions:** The proportion of infants admitted to neonatal units in England and Wales with a 2-year neurodevelopmental record has improved over time. Rates of follow-up data from recent years are comparable to those of bespoke observational studies. With continual improvement in data completeness, the potential for use of NNRD as a source of longer-term outcome data can be realised.; **Competing Interests:** EVB is funded through a PhD studentship awarded by the Joint Research Committee (CW+ and Westminster Medical School Research Trust). NM directs the Neonatal Data Analysis Unit at Imperial College London and is the chief investigator for the National Neonatal Research Database. NM is a member of the Board of Trustees of the Academy of Medical Sciences, Action Cerebral Palsy, David Harvey Trust, and TheirWorld. NM is a member of the Nestle Scientific Advisory Board; she accepts no personal remuneration for this role. NM has current research grants from the Medical Research Council, National Institute of Health Research, March of Dimes, Chiesi, Takeda, Bayer and Critical Path Institute. NM is president-elect of the European Association of Perinatal Medicine. CB is funded through an NIHR Advanced Fellowship personal award. TS, JL and SU have no conflicts of interest relevant to the work under submission. (© Author(s) (or their employer(s)) 2023. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.)

Access or request full text: <https://libkey.io/10.1136/archdischild-2023-325746>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37788897&custid=ns023446>

31. Longitudinal assessment of listening skills in UK infants with hearing aids using the LittleEARS[®] auditory questionnaire

Item Type: Journal Article

Authors: Visram, Anisa Sadru;Purdy, Suzanne Carolyn;Kelly, Jack and Munro, Kevin James

Publication Date: 2023

Journal: International Journal of Audiology 62(4), pp. 334-342

Abstract: Objective: To investigate listening skills in infant hearing aid users using the LittIEARS[®] Auditory Questionnaire (LEAQ).; **Design:** Caregivers completed the LEAQ, and hearing aid data logging was recorded, at infant age 3-7 months and 7-21 months.; **Study Sample:** Seventy infant hearing aid users with permanent bilateral hearing loss, no developmental comorbidities, aged 3-7 months at first visit.; **Results:** Infants with mild and moderate losses tended to have scores within the normative range at the early time point (88%), but 29% were below the normative range when older. Thirty percent of infants with severe hearing loss were outside the normative range at the early time point and 60% outside the normative range when older. Infants with profound loss were almost always (95%) outside the normative range. At the later time point, and for infants with severe-to-profound loss, low LEAQ scores were associated with fewer daily hours hearing aid use. Scores were poorer than previous reports in the literature for infant hearing aid users.; **Conclusions:** This study provides further knowledge on infant listening performance and hearing aid use over time that can be used to guide management of individual cases and to develop and audit service quality improvements.

Access or request full text: <https://libkey.io/10.1080/14992027.2022.2048105>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=35468301&custid=ns023446>

32. UK speech and language therapists' assessment of children's expressive language, and functional impairment and impact, following the CATALISE publications

Item Type: Journal Article

Authors: Waite, Hannah; Bates, Sally; Frizelle, Pauline and Oh, Tomasina M.

Publication Date: 2023

Journal: International Journal of Language & Communication Disorders 58(5), pp. 1570-1587

Abstract: Background: In 2016/17, the CATALISE Consortium published the results of a multinational and multidisciplinary Delphi consensus study, representing agreement among professionals about the definition and process of identification of children with Developmental Language Disorder (DLD) (Bishop et al., 2016, 2017). The extent to which the current clinical practice of UK speech and language therapists (SLTs) reflects the CATALISE consensus statements is unknown.; **Aims:** To investigate how UK SLTs' expressive language assessment practices reflect the CATALISE documents' emphasis on the functional impairment and impact caused by DLD, by examining: whether multiple sources of assessment information are gathered; how standardised and non-standardised sources are combined in clinical decision-making, and how clinical observation and language sample analysis are utilised.; **Methods and Procedures:** An anonymous, online survey was carried out between August 2019 and January 2020. It was open to UK-based paediatric SLTs who assess children up to age 12 with unexplained difficulties using language. Questions probed different aspects of expressive language assessment which are referred to in the CATALISE consensus statements and supplementary comments, and asked about participants' familiarity with the CATALISE statements. Responses were analysed using simple descriptive statistics and content analysis.; **Outcomes and Results:** The questionnaire was completed by 104 participants, from all four regions of the United Kingdom, working in a range of clinical settings with different levels of professional experience of DLD. The findings indicate that clinical assessment practices broadly align with the CATALISE statements. Although clinicians carry out standardised assessments more frequently than other types of assessment, they also gather information from

other sources and use this alongside standardised test scores to inform clinical decisions. Clinical observation and language sample analysis are commonly utilised to evaluate functional impairment and impact, along with parent/carer/teacher and child report. However, asking about the child's own perspective could be more widely utilised. The findings also highlight a lack of familiarity with the details of the CATALISE documents among two thirds of the participants.; **Conclusions and Implications:** Assessment practices broadly align with the CATALISE statements, but there is a need for greater clarity regarding terminology and the assessment of functional language impairment and impact. This research should prompt discussion in the profession about how to further develop and adopt expressive language assessment practices which reflect the CATALISE consensus and support effective assessment.; **What This Paper Adds:** What is already known on the subject The CATALISE consortium documents on Developmental Language Disorder (DLD) were published in 2016/17. The extent to which expressive language assessment practice in the United Kingdom reflects the new definition and statements on assessment has not previously been investigated. What this paper adds to existing knowledge This survey indicates that speech and language therapists in the United Kingdom assessing children for DLD mostly balance standardised language test scores with other sources of information in clinical decision-making, and utilise clinical observation and language sample analysis to consider functional impairment and the impact of the language disorder. However, important questions are raised regarding the robustness and objectivity with which these key parameters are currently defined and evaluated. What are the potential or actual clinical implications of this work? Clinicians, individually and at service level, are encouraged to reflect on their assessment of functional impairment and the impact of language disorder and to take steps to incorporate this where necessary. Professional guidance and clinical tools to facilitate robust, objective assessment would support clinical practice that aligns with expert consensus. (© 2023 The Authors. International Journal of Language & Communication Disorders published by John Wiley & Sons Ltd on behalf of Royal College of Speech and Language Therapists.)

Access or request full text: <https://libkey.io/10.1111/1460-6984.12883>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37102426&custid=ns023446>

33. The Development of a UK Culturally Adapted Version of the Person Attuned Musical Interactions Manual: Protocol for a 2-Phase Mixed Methods Study

Item Type: Journal Article

Authors: Waters, Bryony;Orrell, Martin and McDermott, Orii

Publication Date: 2023

Journal: JMIR Research Protocols 12, pp. e43408

Abstract: Background: Previous research has suggested that care home interactions need significant improvements, especially those between staff and residents with dementia. Reasons for the lack of interactions are staff time pressures and residents' language impairments. Although residents may experience reduced language abilities, they can continue to communicate through other forms, including nonverbal communication and music. Person Attuned Musical Interactions (PAMI) is a staff training tool that provides staff with music therapy skill-sharing to promote high-quality interactions between staff and residents using nonverbal communication and music. The tool was originally developed in Denmark. To ensure that the tool is appropriate for UK care homes, a team of researchers in the United Kingdom have culturally adapted the tool.; **Objective:** This study aims to investigate the appropriateness of the adapted UK manual for UK care homes and to explore the impact of PAMI on residents with dementia and care staff.; **Methods:** The project consists of 2 phases, a qualitative field-testing study and a mixed methods evaluation study, which have been developed following the

Medical Research Council's guidelines for complex interventions. Care staff and residents with dementia will be recruited from care homes in Lincolnshire, where the care staff will be trained in the PAMI intervention before implementing the intervention in their daily routines. Fortnightly reflective sessions will be provided throughout the phases to provide supervision and monitoring. The qualitative methods include interviews, reflective session transcripts, diary entries, and resident experience questionnaires. The quantitative outcome measures are residents' music engagement, staff's dementia competence, residents' quality of life, and staff burden. The resident's music engagement will be administered at 9 fortnightly time points. Staff's dementia competence, resident's quality of life, and staff burden will be administered at preintervention and postintervention time points.; **Results:** The study has been funded by The Music Therapy Charity as part of a PhD studentship. The study began recruiting in September 2021. The research team aims to publish the results of the first phase in July to September 2023 and those of the second phase in October to December 2023.; **Conclusions:** This study will be the first to investigate the culturally adapted UK PAMI. Therefore, it will provide feedback on the appropriateness of the manual for UK care homes. The PAMI intervention has the potential to offer high-quality music intervention training to a larger population of care homes who may currently be restricted by finances, the availability of time, and a lack of training opportunities.; International Registered Report Identifier (irrid): DERR1-10.2196/43408. (©Bryony Waters, Martin Orrell, Orie McDermott. Originally published in JMIR Research Protocols (<https://www.researchprotocols.org>), 18.04.2023.)

Access or request full text: <https://libkey.io/10.2196/43408>

URL: <https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=mdc&AN=37071461&custid=ns023446>

34. Adverse health consequences of undiagnosed hearing loss at middle age: A prospective cohort study with the UK Biobank

Item Type: Journal Article

Authors: Xu, Shishi; Hou, Can; Han, Xin; Hu, Yao; Yang, Huazhen; Shang, Yanan; Chen, Wenwen; Zeng, Yu; Ying, Zhiye; Sun, Yajing; Qu, Yuanyuan; Lu, Yu; Fang, Fang; Valdimarsdóttir, Unnur, A. and Song, Huan

Publication Date: 2023

Journal: Maturitas 174, pp. 30-38

Abstract: Objectives: Hearing impairment is common in the middle-aged population but remains largely undiagnosed and untreated. The knowledge about to what extent and how hearing impairment matters for health is currently lacking. Thus, we aimed to comprehensively examine the adverse health consequences as well as the comorbidity patterns of undiagnosed hearing loss.; **Study Design:** Based on the prospective cohort of the UK Biobank, we included 14,620 individuals (median age 61 years) with audiometry-determined (i.e., speech-in-noise test) objective hearing loss and 38,479 individuals with subjective hearing loss (i.e., tested negative but with self-reported hearing problems; median age 58 years) at recruitment (2006-2010), together with 29,240 and 38,479 matched unexposed individuals respectively.; **Main Outcome Measures:** Cox regression was used to determine the associations of both hearing-loss exposures with the risk of 499 medical conditions and 14 cause-specific deaths, adjusting for ethnicity, annual household income, smoking and alcohol intake, exposure to working noise, and BMI. Comorbidity patterns following both exposures were visualized by comorbidity modules (i.e., sets of connected diseases) identified in the comorbidity network analyses.; **Results:** During a median follow-up of 9 years, 28 medical conditions and mortality related to nervous system disease showed significant associations with prior objective hearing loss. Subsequently, the comorbidity network identified four comorbidity modules (i.e., neurodegenerative, respiratory, psychiatric, and cardiometabolic diseases), with the most pronounced association noted for the module related to neurodegenerative diseases

(meta-hazard ratio HR] = 2.00, 95%confidence interval CI] 1.67-2.39). For subjective hearing loss, we found 57 associated medical conditions, which were partitioned into four modules (i.e., diseases related to the digestive, psychiatric, inflammatory, and cardiometabolic systems), with meta-HRs varying from 1.17 to 1.25.;

Conclusions: Undiagnosed hearing loss captured by screening could identify individuals with at greater risk of multiple adverse health consequences, highlighting the importance of screening for speech-in-noise hearing impairment in the middle-aged population, for potential early diagnosis and intervention.; **Competing Interests:** Declaration of competing interest The authors declare that they have no competing interest. (Copyright © 2023 The Author(s). Published by Elsevier B.V. All rights reserved.)

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

Item Type: Journal Article

Authors: Zuriekat, Margaret;Alqudah, Safa;Semeraro, Hannah;Watson, Victoria;Rowan, Daniel;Kirby, Sarah and Ferguson, Melanie

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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.

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