



Speech, Language & Hearing in Older Age

March 2019

Hearing Loss in Older Adults- It's Effect on Mental Health

https://sagelink.ca/hearing_loss_in_older_adults_its_effect_on_mental_health

The author discusses the challenge of hearing loss as an invisible disability that can result in significant challenges in the lives of older adults.

Hearing Screening in Older Adults: Hearing Handicap Inventory for the Elderly Screening Version (HHIE-S)

https://sagelink.ca/hearing_screening_in_older_adults_hearing_handicap_inventory_for_the_elderly_screening_version

This "try this: Best Practices in Nursing Care to Older Adults" handout provides an introduction to the HHIE-S and information on how to interpret scores.

Caring for Older Patients who Have Significant Hearing Loss

https://sagelink.ca/caring_for_older_patients_who_have_significant_hearing_loss

The authors use a case study approach to illustrate the possible adverse outcome associated with hearing loss in older adults. Potential approaches and resources are suggested.

Tackling Hearing Loss to Improve the Care of Older Adults

https://sagelink.ca/tackling_hearing_loss_to_improve_the_care_of_older_adults

This article reviews some of the communication challenges to tackle when caring for older adults in an acute care setting.

How do Aging and Age-Related Hearing Loss Affect the Ability to Communicate Effectively in Challenging Communicative Conditions?

https://sagelink.ca/how_do_aging_and_age-related_hearing_loss_affect_the_ability_to_communicate_effectively

The authors described a study investigating whether older adults are as able as younger adults to make 'clear speech adaptations' in challenging conditions, whether these adaptations were affected by hearing status and if these adaptations were as effective as those utilized by younger adults. They conclude that there is a need to consider the impact of presbycusis on speech production and communication effectiveness.

Comorbidities of Hearing Loss and the Implications of Multimorbidity for Audiological Care

https://sagelink.ca/comorbidities_of_hearing_loss_and_the_implications_of_multimorbidity_for_audiological_care

This literature review examined the association between hearing loss and other health conditions with consideration of the management of hearing loss in a multimorbidity context.

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Hearing Loss and Depression in Older Adults

https://sagelink.ca/hearing_loss_and_depression_in_older_adults

This article discusses an investigation of the impact of hearing rehabilitation to mitigate the effects of hearing loss on depression.

The Impact of Hearing Loss on the Quality of Life of Elderly Adults

https://sagelink.ca/the_impact_of_hearing_loss-on_the_quality_of_life_of_elderly_adults

The authors argue that optimal management of hearing loss includes an evaluation of quality of life (QoL) status and assessment.

Association Between Hearing Impairment and Self-Reported Difficulty in Physical Functioning

https://sagelink.ca/association_between_hearing_impairment_and_self-reported_difficulty_in_physical_functioning

This article discusses a research study undertaken to determine whether hearing impairment is associated with multiple categories of self-reported physical functioning in a cross-sectional, nationally representative sample of older adults 70 years and older.

Hearing Loss and Cognitive Decline Among Older Adults

https://sagelink.ca/hearing_loss_and_cognitive_decline_among_older_adults

The authors conducted a prospective observational study to determine if there is an association between hearing loss and accelerated cognitive decline.

Hearing Loss and Cognition in the Baltimore Longitudinal Study of Aging

https://sagelink.ca/hearing_loss_and_cognition_in_the_Baltimore_Longitudinal_Study_of_Aging

This article describes a cross-sectional cohort study of older adults aimed at determining the relationship between hearing loss and cognitive function.

Hearing Loss and Incident Dementia

https://sagelink.ca/hearing_loss_and_incident_dementia

The authors conducted a prospective study of 639 participants of the Baltimore Longitudinal Study of Aging to determine if hearing loss is independently associated with incident all-cause dementia.

Aging, Hearing Acuity, and the Attentional Costs of Effortful Listening

https://sagelink.ca/aging_hearing_acuity_and_the_attentional_costs_of_effortful_listening

This article investigated the consequences of divided attention when impacted by hearing difficulty.

The Stigma of Hearing Loss https://sagelink.ca/the_stigma_of_hearing_loss

This publication explored the dimensions of stigma experienced by older adults with hearing loss and those they frequently communicated with to target interventions which promote engagement and positive aging.

Speech Problems with Dementia https://sagelink.ca/speech_problems_with_dementia

This webpage includes a video clip which helps learners understand and recognize speech changes and declines through the stages of dementia.

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Treating Clients with Primary Progressive Aphasia: 7 Tips for the Speech-Language Pathologist https://sagelink.ca/treating_clients_with_primary_progressive_aphasia

This webpage highlights key ways to support those with Primary Progressive Aphasia and their carepartners.

Practice Standards and Guidelines for Acquired Cognitive Communication

Disorders https://sagelink.ca/practice_standards_and_guidelines_for_acquired_cognitive_communication_disorders

This publication outlines the standards of practice for all Speech-Language Pathologists in Ontario when providing services to individuals who present with acquired cognitive communication disorders.

Age-Related Hearing Loss https://sagelink.ca/age-related_hearing_loss

This fact sheet overviews how we hear, why people lose their hearing as they age, tips for prevention, assessment and treatment.

Effects of Aging and Adult-Onset Hearing Loss on Cortical Auditory Regions

https://sagelink.ca/effects_of_aging_and_adult-onset_hearing_loss_on_cortical_auditory_regions

This paper discusses the evidence of aging and adult-onset hearing loss and negative impacts on the structure and function of cortical auditory regions.

Working Memory, Age and Hearing Loss: Susceptibility to Hearing aid Distortion

https://sagelink.ca/working_memory_age_and_hearing_loss

This article describes a study which aimed to determine the effects of cognitive ability (working memory) on individual listeners' responses to distortion caused by frequency compression applied to noisy speech.

The Cognitive and Behavioral Consequences of Hearing Loss, Part 1

https://sagelink.ca/the_cognitive_and_behavioral_consequences_of_hearing_loss_part_1

This publication discusses the connection between hearing loss and cognitive decline.

The Cognitive and Behavioral Consequences of Hearing Loss, Part 2: Evaluation and Treatment https://sagelink.ca/the_cognitive_and_behavioral_consequences_of_hearing_loss_part_2

This publication advocates for patients with cognitive symptoms to be evaluated for hearing loss, overviews hearing loss treatments and introduces the potential of cognitive behavioral therapy in combination with auditory training.

Age-Related Hearing Impairment and Frailty in Alzheimer's Disease:

Interconnected Associations and Mechanisms https://sagelink.ca/age-related_hearing_impairment_and_frailty_in_AD_interconnected_associations_and_mechanisms

The authors state that age-related hearing loss is a substantial marker for frailty in older age and is also a contributing factor to cognitive disorders such as Alzheimer's disease.

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Hearing Impairment and Incident Dementia and Cognitive Decline in Older Adults: The Health ABC Study

https://sagelink.ca/hearing_impairment_and_incident_dementia_and_cognitive_decline_in_older_adults

The authors describe a prospective analysis where they quantified the association of hearing impairment with incident dementia as well as domain-specific cognitive decline in memory, perceptual speed and processing speed.

Aging, Cognitive Load, Dementia and Hearing Loss

https://sagelink.ca/aging_cognitive_load_dementia_hearing_loss

This study offers a brief literature review on the issues and prospects relating to the unique relationship between hearing and cognitive decline, with a general introduction to the main topics before focusing on rehabilitation training with hearing aids and cochlear implants to combat cognitive decline.

Hearing Impairment is Associated with Smaller Brain Volume in Aging

https://sagelink.ca/hearing_impairment_is_associated_with_smaller_brain_volume_in_aging

The authors of this article studied the relationship between hearing impairment and brain volume in a large elderly cohort.

Speech-Perception Training for Older Adults with Hearing Loss Impacts Word Recognition and Effort

https://sagelink.ca/speech_perceptions_training_for_older_adults_with_hearing_loss_impacts_word_recognition_and_effort

This article describes a study examining the impact of speed-perception training on word recognition effort in older adults with hearing loss.

Working Memory Training and Speech in Noise Comprehension in Older Adults

https://sagelink.ca/working_memory_training_and_speech_in_noise_comprehension_in_older_adults

The authors investigated the efficacy of adaptive working-memory training in 24 older adults to examine the effect of cognitive training.

Overview of Central Auditory Processing Deficits in Older Adults

https://sagelink.ca/overview_of_central_auditory_processing_deficits_in_older_adults

The aim of this article is to provide an overview of assessment and rehabilitative approaches for central auditory processing deficits in older adults.

Sensory-Cognitive Interactions in Older Adults

https://sagelink.ca/sensory-cognitive_interactions_in_older_adults

The authors describe different models to explain sensory-cognitive interactions with a focus on age-related changes in older adults.

Hearing, Cognition, and Healthy Aging: Social and Public Health Implications of the Links Between Age-Related Declines in Hearing and Cognition

https://sagelink.ca/hearing_cognition_and_health_aging_social_and_public_health_implications_of_the_links

This publication discusses the evidence regarding the associations between age-related hearing loss and other age-related health issues and describes how social factors influence and are influenced by age-related hearing loss to guide new approaches to audiologic practice.

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Induction of Neuroplasticity and Recovery in Post-Stroke Aphasia by Non-Invasive Brain Stimulation https://sagelink.ca/induction_of_neuroplasticity_and_recovery_in_post-stroke_aphasia

This review examined the state of knowledge of post-stroke language recovery including the contributions from the dominant and non-dominant hemispheres. The authors discuss and review the use of inhibitory and excitatory repetitive transcranial magnetic stimulation (rTMS) and transcranial direct current stimulation (tDCS) in patients who experience post-stroke aphasia as rehabilitative tools.

Musical Experience and the Aging Auditory System: Implications for Cognitive Abilities and Hearing Speech in Noise

https://sagelink.ca/musical_experience_and_the_aging_auditory_system

The authors attempted to determine if the positive impacts of music experience in young adults also occurred in an older cohort and potentially offset the age-related decline in speech in noise perceptual abilities and associated cognitive function.

Dysarthria and Quality of Life in Neurologically Healthy Elderly and Patients with Parkinson's Disease

https://sagelink.ca/dysarthria_and_QOL_in_neurologically_healthy_elderly_and_patients_with_PD

This article describes the findings of a cross-sectional study investigating whether speech and voice features are related to Parkinson's Disease (PD) or a normal part of the aging process and any differences in the impact of dysarthria on quality of life between the PD group and the control group.

Non-Invasive Brain Stimulation in Early Rehabilitation After Stroke

https://sagelink.ca/non-invasive_brain_stimulation_in_early_rehabilitation_after_stroke

This paper analyzed the results of non-invasive brain stimulation (NIBS) trials and highlighted different aspects related to the repetitive transcranial magnetic stimulation frequency, transcranial direct current stimulation polarity, the period of stimulation places in acute and subacute ischemic strokes.

Non-Invasive Brain Stimulation in the Treatment of Post-Stroke and Neurodegenerative Aphasia: Parallels, Differences, and Lessons Learned

https://sagelink.ca/non-invasive_brain_stimulation_in_the_tx_of_post-stroke_and_neurodegenerative_aphasia

This review surveyed differences in the mechanisms of language representation between the two etiologies of aphasia and evaluated properties that may define and limit the success of different neuromodulation approaches for primary progressive aphasia and post-stroke aphasia.

Transcranial Direct Current Stimulation in Poststroke Aphasia Recovery

https://sagelink.ca/transcranial_direct_current_stimulation_in_poststroke_aphasia_recovery

This review provides a provide overview of transcranial direct current stimulation (tDCS) and aphasia research. The authors suggest filling the gaps in understanding of the physiological changes induced by tCDS on language networks.

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Palliative Treatment of Dysphonia and Dysarthria

https://sagelink.ca/palliative_tx_of_dysphonia_and_dysarthria

This publication provides an overview of therapeutic options for specific diseases such as ALS, Parkinson's Disease, Multiple Sclerosis, CVA or stroke, head and neck cancer, vocal paralysis and presbyphonia.

Treatment of Dysphonia in Older People: The Role of the Speech Therapist

https://sagelink.ca/treatment_of_dysphonia_in_older_people_the_role_of_the_speech_therapist

This review reviews the prevalence, impact, and nature of voice impairments in older people.

Dysphonia: The Voice of Change

https://sagelink.ca/dysphonia_the_voice_of_change

This information sheet discusses the causes of dysphonia, the physiological changes that can precipitate the condition and the care of the elderly patient suffering from it.

Voice Disorders in the Elderly: A National Database Study

https://sagelink.ca/voice_disorders_in_the_elderly_a_national_database_study

This article describes a retrospective analysis of data from a large national administrative US claims database investigating the type, frequency and factors associated with voice disorders in the elderly.

Voice Changes in Elderly Adults: Prevalence and the Effect of Social, Behavioral, and Health Status on Voice Quality

https://sagelink.ca/voice_changes_in_elderly_adults

The study described in this article investigated the prevalence of dysphonia and risk factors that contribute to vocal quality in older adults. The authors concluded that these factors were mostly associated with social, behavioural and underlying health status variables.

Voice Disorders in the Elderly

https://sagelink.ca/voice_disorders_in_the_elderly

This publication discusses the prevalence of common voice disorders in geriatric patients, their etiology and impact. Vocal therapy and exercises as well as surgical interventions are described.

Presbyphonia: The Aging Voice

https://sagelink.ca/presbyphonia_the_aging_voice

This information sheet is intended for interprofessional providers and overviews contributing factors, tips and treatment considerations.

Voice Therapy for Presbyphonia

https://sagelink.ca/voice_therapy_for_presbyphonia

This pdf presentation overviews the importance of voice to quality of life, how age related changes differ between sexes impacting voice, the prevalence of presbyphonia and treatment options.

The Aging Voice and Differentiating Disease

https://sagelink.ca/the_aging_voice_and_differentiating_disease

This PowerPoint presentation introduces normal effects of aging on the voice, pathological conditions, diagnostic clues and treatment options.