



2026 Mission

Perfect Our Success Recipe
Every Day, With Every Interaction...
Practice The Golden Rule & Use the Tools
Your Talents, Our Teamwork

That's 

Better Hearing is Better Healthcare

Amplify
Your
Influence



EDUCATE WELL MONTHLY

JANUARY	FEBRUARY	MARCH
Vision Loss	Heart Disease	Kidney Disease
APRIL	MAY	JUNE
Ototoxicity	Better Hearing & Speech	Dementia
JULY	AUGUST	SEPTEMBER
Noise-Induced Hearing Loss	Cognitive Decline	Risk of Falls
OCTOBER	NOVEMBER	DECEMBER
Depression	Diabetes	Tinnitus

Care to Share Daily

Start With Why: Monthly Targets, Well-Aligned

Why is Depression our October topic?

Hearing loss may worsen existing difficulties associated with psychosocial and functional abilities during older age, increasing likelihood of developing depression.

Reduction in depressive symptoms was observed after the use of hearing aids. ...this positive effect of aural rehabilitation... on neuroplasticity...in working memory..., as well as improvement in self-motivation, self-esteem and self-confidence.⁵

⁵ Castiglione A, Benatti A, Velardita C et al (2016) Aging, cognitive decline and hearing loss: effects of auditory rehabilitation and training with hearing aids and cochlear implants on cognitive function and depression among older adults. *Audiol Neurotol* 21(suppl 1):21–28. <https://doi.org/10.1159/000448350>

Pearls of Wisdom™ – Sound Research



SOUND RESEARCH
Quality of Life Focus:
Depression Awareness
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Reference Terms
CES-D – Center for Epidemiologic Studies Depression
HI – Hearing Impairment / HL – Hearing Loss
VL – Vision Loss
DSL – Dual Sensory Loss
OR – Odds Risk
RR – Relative Risk
MDD – Major Depressive Disorder
PHQ-9 – Patient Health Questionnaire for depression

INTRODUCTION AND PUBLIC HEALTH IMPORTANCE

Mental health is a key component in the health and well-being of older adults and refers to the “state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community” (World Health Organization, 2013).¹

Depression is a major contributor to healthcare costs associated with older populations, and is projected to be the leading cause of disease burden in older populations by the year 2020.² The prevalence of depression in patients aged 65 and older may be as high as 40% in hospitalized and 30% in nursing home patients, and 8–15% in community settings.³

The reported percentages of those with visual impairment or combined visual and hearing impairments who experience depression or its symptoms have ranged from 28% to 43%, while percentages for the general population are reported to be between 8% and 16%. This represents a major public health concern for these populations, as the experience of depression or symptoms of depression can negatively impact all areas of a person's life.⁴

Unipolar depressive disorders have been reported as the leading cause and adult-onset hearing impairment (HI) as the second leading cause of years of life lived

with disability among adults in high-income countries.⁵

Besides reduced ability to enjoy music and other sounds that we appreciate, hearing loss may produce social isolation, distorted communication, and, in some cases, stigmatization, all of which can affect mental health and quality of life.⁶

Persons with visual impairments or combined visual and hearing impairments are more likely to have lower income and education levels, poorer health, and be members of racial/ethnic minority groups. They are also more likely to have additional chronic conditions, diseases, or disabilities, including major depression.⁷

In old age, both depression and chronic diseases have high prevalence and depression and chronic diseases may induce the development of each other. Therefore, it is important to investigate the relationship between chronic diseases and risk for depression in old age.⁸

Public awareness of DSL is also not widespread and in turn, rehabilitation options have not been well-explored in many countries.¹

Unsurprisingly, a number of studies have consistently demonstrated a strong link between co-occurring vision and HL, often referred to as dual sensory loss (DSL), and depressive symptoms.⁹

KEY RESEARCH STATISTICS

After pooling these studies, there were 172 and 1114 subjects with poor and good hearing respectively, and those with poor hearing had significantly higher risk for depression (OR: 1.92, 95% CI: 1.12–3.29) (Fig. 3). The significant OR and RR showed that poor hearing was an important risk factor for depression in old age.⁸

Still, other authors examined the incidence of depressive symptoms in a large group of Japanese

patients aged 65 years and older. After 3 years, they noted a 19.6% rate of depression in the group with hearing handicaps versus 8.0% in normal controls. They thus concluded that hearing loss was predictive of future depression with an odds ratio of >2.0.¹⁰

The estimates from sensory loss adjusted analysis indicated that participants identified with DSL (bD2.17, SED0.39, p <0.001) and HL only (bD1.14, SED0.32, p <0.001) had elevated levels of depressive



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symptoms compared to those with no sensory loss. Participants with DSL had significantly higher levels of CES-D scores compared to those with HL (Mean Difference D 1.03, SED 0.34, p D 0.003).¹¹

The estimated prevalence of moderate to severe depression (PHQ-9 score, ≥10) was 11.4% (95% CI, 10.1%–13.0%) for adults with any self-reported HI and 5.9% (5.3%–6.6%) for those without HI. Among those with HI, the prevalence of depression was 9.0% (95% CI, 7.5%–10.8%) for men and 14.7% (12.7%–16.9%) for women. The estimated prevalence of depression was higher among adults with HI than in those without HI and higher among women than among men.⁵

Depressive symptoms (assessed according to the MHI) were significantly higher in subjects with mild bilateral hearing loss (OR) 51.83, 95% confidence interval (CI) 51.18–2.83) after multi-variable adjustment, although subjects with moderate to severe hearing loss (10.2%) did not have a higher likelihood of depressive symptoms than those with normal hearing (OR 51.20, 95% CI 50.66–2.17).¹³

The strongest effects were estimated for depression and self-esteem among young men. In this group, a 50-dB hearing loss for low frequencies, which is a very serious impairment, on average produces a 0.5-SD increase in depression and 0.5-SD loss of self-esteem in addition to slight effects produced by medium and high-frequency hearing loss.⁸

Women with hearing loss were more likely to report depressive symptoms as assessed according to the MHI. Furthermore, women younger than 70 (n515, 40.5%) with any level of hearing loss were substantially more likely to have depressive symptoms than women younger than 70 without hearing loss (multi-variable adjusted OR 54.76, 95% CI 51.93–11.72).¹³

There was also an association between the degree of HL and depressive symptoms scores, with higher PTA thresholds predicting higher CES-D scores.¹¹

In relation to DSL, Capella-McDonnell (2005) estimated that out of a total sample of 6089 participants, 7.3% had DSL of whom 35% had depression.¹³

There is an increase in depression at the point of first report of DSL, and a substantially faster increase in depression from that point forward until approximately 5 years later, compared to males without sensory loss.⁷

Hearing aid use was associated with reduced odds of MDD (OR=0.35, 95% CI: 0.14–0.90) and any depressive symptoms (OR=0.33, 95% CI: 0.14, 0.77) in the fully adjusted model (Table 2).¹⁴

Subjects who reported using a hearing aid for a minimum of 1 hour per day had a significantly lower likelihood of having depressive symptoms (according to the CES-D-10) than non-frequent users (0.1 h/d; multi-variable adjusted OR0.32, 95% CI0.14–0.76).¹²

KEY RESEARCH RESULTS AND DISCUSSION

This study demonstrated that bilateral hearing loss is significantly associated with depressive symptoms. Several possible mechanisms might explain this relationship. Hearing loss in older adults may lead to greater dependence on caregivers, loneliness, and ultimately poorer quality of life and depression.¹³

In the present study based on a nationally

representative sample, HI was significantly associated with an increased risk of depression in adults of all ages, but was most pronounced in those aged 18 to 69 years.⁵

It appears counterintuitive that a rather mild functional hearing loss, which to a large extent may be restored by hearing aids, is more important to mental health

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and well-being than losing hearing altogether, even if somewhat impaired in the first place.⁹

Most notably, participation levels in socially engaging and mentally stimulating activities fully explained the increased depressive symptoms experienced by adults with sensory loss.¹¹

Our meta-analysis showed that in old age, both poor hearing and vision were associated with depression and also were risk factors for depression.⁹

Regarding incident sensory loss, the present findings illustrated that the first observed occurrence of HL and DSL coincided with a jump in the level of depressive symptoms. In contrast, no increase in the level of depressive symptoms was observed at the first observed occurrence of VL.¹¹

The curvilinear growth pattern exhibited in depression following DSL is indicative of an adjustment process taking place. Experiencing DSL causes an initial

spike in depression, as expected with the onset of a disability, which is often a traumatic experience that causes increased stress for the individual.¹⁵

Young people with a less severe hearing loss than what is normal for old people may suffer from being different in terms of not being fully able to function as expected for people at their age. The effects are stronger among men than among women, perhaps because career expectations for men result in stronger feelings of being disabled at work among hearing-impaired men.⁶

Our results demonstrate that hearing aid use is significantly associated with reduced odds of MDD and any depressive symptoms, consistent with prior studies.¹⁴

In our hands, general health perception, social functionality and vitality, along with mental well-being and emotional perception, all improved with hearing aid use.¹⁰

PRACTICAL AND CLINICAL APPLICATIONS

Furthermore, by describing these relationships between psychological health and HI, we hope to engage the clinicians caring for our veterans in a more active role in screening for HI and depression, thereby improving HRQOL.¹⁷

Thus, older adults may be at increased risk of depression if they do not have sufficient resources available to cope with the restricted independence and communication difficulties caused by sensory declines.¹¹

Additionally, we found that self-reported HI was significantly associated with increased odds of depression in each of our 3 major racial/ethnic groups: Hispanics, non-Hispanic blacks, and non-Hispanic whites.⁵

In summary, VL and HL are highly prevalent among older adults and their co-occurrence may compound their respective impacts on health and functioning,

thereby exerting strong effects on the mental health and wellbeing of those affected. Visual cues can provide an important compensatory mechanism for hearing-impaired adults, and, conversely, auditory cues for adults with visual impairment.¹¹

The focus on adaptable variables is important because of their potential to be included in interventions and their potential ability to offer individuals some control in reducing their experience of depressive symptoms.⁷

The principal contribution of audiometric HL to increased depressive symptoms suggests that hearing assistive technologies and hearing rehabilitation programs may help to reduce the impacts of DSL. This evidence base can inform health policy which is needed to encourage improved awareness and screening of sensory loss and comorbidities among older adults.

3

There is a need for health professionals and care practitioners to be sensitive to the combined effects of vision and HL on mental health and wellbeing.¹¹

The National Council on the Aging found that people with HI who did not use hearing aids more often stated that they had sadness, depression, worry, anxiety, paranoia, less social activity, emotional turmoil, and insecurity. In that study, both those with HI (56%) and their family members (66%) reported benefits from hearing aid use in terms of better relationships at home, more confidence, and better relationships with others.¹⁸

Technological advances in hearing aids and exemplary customer care might do more than improve

hearing capacity and favor the observed long-term compliances. The mood, social life, general health and overall mental profile of patients also stand to benefit. Sufficient attention to the special needs of older patients should therefore lead to a wider use of hearing aids and to a better quality of life for elderly patients.¹⁷

We should therefore be conscious in planning future social and health services and expect that many older persons will experience hearing loss that could predispose them to depressive symptoms. Early recognition of these symptoms could lead to interventions or rehabilitation that may be of practical assistance in retaining a higher quality of life.¹⁴

Disclaimer: Research excerpts provide helpful references for those interested in learning more about these important healthcare topics. They are intended to empower providers, patients and loved ones with additional input for personal consultation. For those seeking additional educational references, it is suggested they research specific topics of interest via publicly available resources such as pubmed.gov or Google Scholar. Please personally consult with expert health providers to make well-informed decisions.

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Educational Handout

DEPRESSION RISK AWARENESS



HEARING HEALTH DECISIONS

IN THE U.S., IT IS ESTIMATED THAT **37 MILLION** ADULTS HAVE SOME DEGREE OF **HEARING LOSS**,
WHILE **22 MILLION** SUFFER FROM SOME FORM OF **DEPRESSION**.^{[1][2]}

DID YOU KNOW?

Your ears can be a "window to your mind"
and hearing loss may increase depression risk, especially for those younger than 70 years.^[3]

RESEARCH INDICATES^[4]

THOSE WITH SENSORY LOSS,
ESPECIALLY BOTH HEARING AND
VISION, EXPERIENCE DEPRESSIVE
SYMPTOMS MORE THAN THE
GENERAL POPULATION.

MORE ACUTE NEED FOR TIMELY
HEALTHCARE INTERVENTION
WHEN INCREASED SENSORY
LOSS CONSTRAINS DAILY
FUNCTIONALITY.

HEARING HEALTH PROVIDERS CAN
PLAY A KEY ROLE IN REFERRING
THOSE WITH DEPRESSIVE
SYMPTOMS TO MENTAL AND
VISION HEALTH EXPERTS.

One's capacity to succeed with these lifestyle goals may
reduce the degree to which hearing loss increases depression risk and anxiety.

Effectively handling
activities of daily living



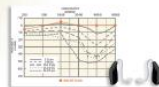
Consistently engaging
in social activities



Enjoying mentally
stimulating hobbies



Ensuring best corrected
hearing and visual abilities



TALK TO YOUR HEARING, VISION AND MENTAL HEALTH EXPERTS
ABOUT HOW FOLLOWING THEIR CARING GUIDANCE CAN HELP IMPROVE QUALITY OF LIFE.

To learn more, please visit: www.nimh.nih.gov

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[1] <http://www.nidcd.nih.gov/health/statistics/Pages/quick.aspx> [2] Illades, Stats and Facts About Depression in America. *Everydayhealth.com* 2013 [3] Li, et al. Hearing Impairment Associated With Depression in US Adults. National Health and Nutrition Examination Survey 2005–2010. *JAMA Internal Medicine* 2014. [4] McDonald, The Effects of Developing a Dual Sensory Loss on Depression in Older Adults: A Longitudinal Study. *Aging Health* 2009

Silence is Lonely

When at first our hearing begins to fade;
Though the signs are foretelling, we may choose to evade.
We tell others they don't speak clearly, they mumble a lot;
My concentration is elsewhere, that's why I ask what.
Please talk a bit louder, your voice is so weak;
I could hear you OK if you'd look at me as you speak.
I can hear you just fine, when you're close at hand;
If you would learn to enunciate, I could understand.
Being with family is one of life's greatest joys;
But don't expect me to hear, with all of that noise.
It's easy to blame others, though it's not really fair;
It's your hearing problem, solve it, show others you care.
He who said "silence is golden" spoke for himself only;
For the hearing impaired, "silence is lonely".

Roy Bain
1996

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Point of Care Display

DEPRESSION RISK AWARENESS



HEARING HEALTH DECISIONS

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THOSE WITH SENSORY LOSS, ESPECIALLY BOTH HEARING AND VISION, EXPERIENCE DEPRESSIVE SYMPTOMS MORE THAN THE GENERAL POPULATION.

MORE ACUTE NEED FOR TIMELY HEALTHCARE INTERVENTION WHEN INCREASED SENSORY LOSS CONSTRAINS DAILY FUNCTIONALITY.

HEARING HEALTH PROVIDERS CAN PLAY A KEY ROLE IN REFERRING THOSE WITH DEPRESSIVE SYMPTOMS TO MENTAL AND VISION HEALTH EXPERTS.

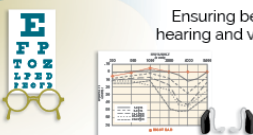
One's capacity to succeed with these lifestyle goals may reduce the degree to which hearing loss increases depression risk and anxiety.

Effectively handling activities of daily living



Consistently engaging in social activities

Enjoying mentally stimulating hobbies



Ensuring best corrected hearing and visual abilities

TALK TO YOUR HEARING, VISION AND MENTAL HEALTH EXPERTS ABOUT HOW:
Following their caring guidance can help improve quality of life.

To learn more, please visit: www.nimh.nih.gov



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TAKE TWO, SHARE ONE →

DEPRESSION RISK AWARENESS

DID YOU KNOW?

HEARING LOSS MAY INCREASE DEPRESSION RISK, ESPECIALLY FOR THOSE YOUNGER THAN 70 YEARS.

Hearing loss may increase the risk of depression.



DEPRESSION RISK AWARENESS

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Hearing loss may increase the risk of depression.

PLEASE TELL

friends and loved ones at risk to contact us for a professional hearing evaluation.



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Made to Stick™ – In Sight, In Mind

Did You Know?



Wellness Referrals



In Practice Protocols



IN-PRACTICE PROTOCOLS Team Training Matters

HEALTHY HABITS AMPLIFY OUR INFLUENCE

We provide the **awareness** and **educational information** patients need, as well as the **personal touch** they deserve.

LET'S TALK ABOUT how hearing loss can increase the risk of depression and its consequences.



ONE CORE FOCUS

Expertly and kindly educate each patient, just like family.

THREE VITAL QUESTIONS

1. Do you have hearing loss?
2. Do you know a loved one with hearing loss?
3. Do you or your loved ones know how hearing loss is related to depression?

PROFESSIONAL RESPONSIBILITY

When we share, we show we care!

"People don't care how much you know until they know how much you care."
- Theodore Roosevelt

OCTOBER 2026						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

DAILY GOAL

Discuss **three vital questions** with each patient to whom this information applies.

Consistent Focus, Healthy Results

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Community Outreach Ideas



- Senior Living Community - Nursing or Wellness Directors, Primary Care Doctors, Geriatricians, Psychologists and Social Workers.

Blindness separates people from things;
deafness separates people from people.

– Helen Keller

Get Aligned and Take the Lead *Way to Grow!*