JUNE IS
ALZHEIMER'S & BRAIN
Awareness Month

The National Association of
NURSE PRACTITIONERS
in WOMEN'S HEALTH

POSITION STATEMENT

Brain Health Is Women's Health

The National Association of Nurse Practitioners in Women's Health (NPWH) supports collaborative action to establish brain health as a crucial aspect of women's healthcare. A comprehensive approach includes promoting brain health, detecting cognitive impairment (CI) in patients to facilitate early intervention, and identifying and addressing the needs of caregivers for loved ones with CI.

NPWH advocates for ongoing research to identify modifiable factors that influence brain health, enhance early diagnosis of CI, develop effective prevention and treatment strategies, and support individuals with CI and their families and caregivers. NPWH acknowledges the limited research on biological sex differences and psychosocial influences specific to women's brain health and calls for further research focused on these areas.[1,2] Additionally, NPWH calls for more research in regard to transgender and gender diverse influences on brain health. Finally, NPWH supports legislation and policies that ensure access to essential resources for individuals with CI and their caregivers, families, and healthcare providers.

BACKGROUND

There are multiple definitions of brain health. Advanced knowledge has expanded our definition to include social and environmental factors. Broadly, brain health is a term used to describe healthy cognitive function.[3,4] More specifically, brain health is defined as "a continuous state of attaining and maintaining the optimal neurologic function that best supports one's physical, mental, and social well-being through every stage of life."[5] Brain health is influenced by genetics, environmental, psychological, and psychosocial factors, as well as ethnocultural factors.[6-8] Although cognitive function, which refers to memory, speech, language, judgment, reasoning, and planning and thinking abilities, is central to brain health, this broader definition integrates factors essential to sustaining optimal brain health across the lifespan.[3,9] Changes in these functions may indicate CI and range in severity, progressiveness, and treatment options. *The Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5), provides diagnostic categories of minor and major neurocognitive disorders (NCDs) that are useful in describing the range in severity of CI. Minor NCDs also referred to as mild cognitive impairment (MCI) include conditions by which the individual has mild but measurable changes in cognitive function that are noticeable to the person affected and to family members and friends but do not affect the individual's ability to carry out everyday activities.[3] MCI may or may not be progressive. Approximately 12% to 18% of

people age 60 years or older have MCI.[10] Major NCDs encompass impairment characterized by decline in at least two cognitive domains (ie, loss of memory, attention, language, and visuospatial or executive functioning) severe enough to affect a person's ability to perform everyday activities. The individual also may exhibit behavioral and psychological symptoms.[3] Dementia is a commonly used term for major NCD.

Alzheimer's disease (AD), a progressive degenerative brain disease, is the most common cause of dementia.[3] Most of the statistics on dementia reflect data related to AD. In 2024, approximately 7 million United States residents age 65 years or older were living with AD.[3] In the US, the economic impact of AD and other dementias was estimated to be 345 billion dollars in 2023.[11] With an increasingly aging population, the Alzheimer's Association predicts the number of individuals diagnosed with AD will reach 13.8 million by 2060.[3] The key to mitigating this disease is prevention, early detection and diagnosis, and prompt treatment.

Changes to the brain, whether due to injury, disease process, or environmental impact, occur over time and impact the neurons in the brain, resulting in changes in motor and memory functioning. Alzheimer's-related brain changes may begin 20 or more years before symptoms occur.[3] Recognized nonmodifiable risk factors for cognitive decline and AD include advancing age, genetics, and family history.[3] No definitive strategies exist to prevent AD, but recent research has demonstrated that more than one third of US dementia cases are associated with eight modifiable risk factors: physical inactivity, depression, smoking, low educational attainment, diabetes, hearing loss, midlife obesity, and midlife hypertension.[3,12] These categories were further divided into three groups over the lifespan: early life, middle life, and later life and lifelong risk factors.[13] (See Box 1)

BOX 1. MODIFIABLE RISK FACTORS FOR ALZHEIMER'S DISEASE AND RELATED DEMENTIAS[13]

LIFE COURSE	RISK FACTORS
Early life	• Low/lower educational attainment
Middle life	• Hypertension–mid and later life • Diabetes • Obesity • Smoking • Hearing loss
Later life & Lifelong	• Depression • Physical inactivity

Note: Early life is defined as age < 45 years, middle life as 45–65, and later life as > 65 years.

For women, the brain undergoes various stages of change across the lifespan, including hormonal shifts during puberty, pregnancy, menopause, and aging. These changes can significantly influence brain structure, function, and vulnerability to neurologic diseases.[14] Women are at a higher risk for several brain-related conditions compared to men, including AD, depression, and anxiety disorders.[15] When diagnosed with AD, women are more likely to decline rapidly.[16,17] The impact of hormonal fluctuations, particularly during menopause, has been shown to influence cognitive decline and increase vulnerability to conditions like dementia.[18,19] Social determinants, such as caregiving roles and socioeconomic factors, often disproportionately affect women, further exacerbating risks related to brain health.[19,20] Therefore, gender-specific aspects are an important consideration in the brain health of women.

Nurse practitioners (NPs) who provide healthcare for women who are midlife and older have a critical role in the early recognition of CI. Early signs and symptoms include problems with memory or language, noted deficit in personal or instrumental activities of daily living, and concerns reported by the patient or informant.[21] Medicare requires a cognitive assessment for signs of dementia as a component of the annual wellness visit.[22] Use of a validated tool for a structured evaluation is indicated if signs or symptoms of CI are present.[23] Several initiatives have provided lists of validated cognitive assessment tools and recommendations and strategies NPs can use to address brain health and CI.[24] (See Box 2) Medicare covers a separate visit when a more thorough review of cognitive function and design of a care plan is indicated.[22]

BOX 2. RESOURCES FOR ASSESSMENT OF BRAIN HEALTH AND COGNITIVE IMPAIRMENT

- Alzheimer's Association Cognitive Screening and Assessment https://alz.org/professionals/healthcare-professionals/cognitive-assessment
- Alzheimer's Association Medicare Annual Wellness Visit Algorithm for Assessment of Cognition. https://www.alz.org/getmedia/c606ba9e-fb5b-45c8-bad0-d0764b4da66e/alzheimers-well-visit-algorithm.pdf
- Gerontological Society of America KAER Brain Health Expert Advisory Panel. 2024. The GSA KAER Toolkit for Brain Health. A resource for primary care teams. https://www.kaerbrain.org
- National Institute on Aging. Assessing Cognitive Impairment in Older Patients. 2023. https://www.nia.nih.gov/health/health-care-professionals-information/assessing-cognitive-impairment-older-patients
- National Institute on Aging. What is brain health? 2025. https://www.nia.nih.gov/health/brain-health/what-brain-health

Early diagnosis of dementia is integral to patient and family counseling, advanced care planning, and consideration of supportive therapies. The years from diagnosis to death may be fraught with poor health and disability, resulting in loss of independence and, over time, a significantly lowered quality of life.[11]

The impact of this disease on quality of life extends to those who provide unpaid care for loved ones with dementia. In 2023, more than 11,000 family members and friends provided this care, which represented 18 billion unpaid hours, costing $347 billion.[3] Approximately two thirds of these informal caregivers were women, and over one third of these women were daughters of the individuals with dementia.[3] Although about 1 in 3 caregivers are age 65 or older, the average age of caregivers is 51.[3,25] About 1 in 4 caregivers are part of the "sandwich generation," which means that they are caring not only for a parent but also for children younger than age 18.[3,26]

Caregiving tasks include helping with instrumental activities of daily living (eg, shopping, providing transportation) and assistance with personal activities of daily living (eg, bathing, dressing, feeding). In addition, caregivers may coordinate healthcare and support services, and, as dementia progresses, caregivers often must manage behavioral symptoms of the disease (eg, aggressive behavior, wandering).[3] Such tasks can take an emotional and physical toll on caregivers. Their financial status also may be impacted if they must adjust or leave employment and pay for healthcare services for themselves and their care recipient.[3,11,27] Often, the needs of these caregivers go unrecognized and unattended.

A call to action has arisen to transform policies and practices affecting the role of informal caregivers as a major source of care for a growing population of older adults with dementia. A strategic national-level action plan will be required to address the needs of these caregivers. Policies to create evidence-based training for informal caregivers specific to the care of individuals with dementia, provide support such as expanded family leave and job protection for working caregivers, and fund evidence-based caregiver services are critical. Policies must recognize the needs and values of a diverse population of caregivers and those in their care.[25,27,28] (See Box 3)

BOX 3. RESOURCES FOR CARING FOR CAREGIVERS

- Alzheimer's Association https://www.alz.org
- Alzheimer's Foundation of America https://alzfdn.org/caregiving-resources/
- Dementia Careblazers https://careblazers.com/about/
- Family Caregiver Alliance https://www.caregiver.org
- Hartford Institute for Geriatric Nursing (HIGN). Preparedness for Caregiving Scale https://hign.org/consultgeri/try-this-series/preparedness-caregiving-scale
- HIGN. The Modified Caregiver Strain Index (MCSI) https://hign.org/consultgeri/try-this-series/modified-caregiver-strain-index-mcsi
- UCLA Alzheimer's and Dementia Care Program https://www.uclahealth.org/dementia/

IMPLICATIONS FOR WOMEN'S HEALTHCARE AND NP PRACTICE

Nurse practitioners who provide healthcare for women of all ages are well situated to address brain health as a component of women's health at annual well-woman visits or if cognitive function concerns are present at other visits. These NPs are likely to see a significant number of informal caregivers because women comprise the greatest proportion (61%) of the 19 million informal caregivers in the US.[25] NPs are pivotal in identifying individuals in the caregiver role and addressing their physical and emotional health needs.

RECOMMENDATIONS

Nurse practitioners who provide healthcare for midlife and older women, as well as women who may be caregivers for loved ones with dementia, should:

- Raise the topic of brain health as part of women's health during routine healthcare visits;
- Address risk factors for cognitive decline that may be reduced with lifestyle changes (eg, nutrition, physical activity, cognitive training, smoking cessation);
- Include a question about memory or cognition on health risk questionnaires;
- Observe for signs and symptoms of CI;
- Use an evidence-based protocol for diagnostic evaluation and/or referral for further evaluation if indicated;
- Include a question about any caregiving responsibilities in the health assessment;
- Offer additional screening for caregivers to assess preparedness for caregiving and caregiver strain;
- Develop health system partnerships to connect patients with dementia and their caregivers with community agencies to identify needs and access help;
- Collaborate with patients, caregivers, and the healthcare team to facilitate decision making and planning (eg, living arrangements, advance care planning, end-of-life care) that address the changing needs of affected patients and families; and
- Advocate for local, state, and national policies that address the needs and values of individuals with dementia and their caregivers.

NPWH WILL PROVIDE LEADERSHIP TO ENSURE THE FOLLOWING:

- Continuing education programs and other resources are available for NPs to learn and update knowledge regarding brain health, dementia, and caregiver needs.
- Ongoing collaborative engagement with a variety of stakeholders occurs to address brain health and caregiving issues as important components of an older women's health agenda.
- Research moves forward in all aspects of brain health to prevent dementia, treat existing impairment, and better support caregivers.
- Policies effectively support individuals and families to cope with the physical, emotional, and financial burdens of dementia.

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