



Alzheimer's Awareness



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The Role of Genetics

While Alzheimer's disease can affect anyone, scientists have found that genetics can play a significant role in determining a person's risk — especially in certain rare forms of the disease.

Understanding how hereditary factors influence Alzheimer's can help families make informed decisions about their health, though it's important to remember that genes are only part of the story.

TWO TYPES OF GENETIC RISK

There are two categories of genes that can influence Alzheimer's disease: risk genes and deterministic genes.

Risk genes, like APOE-e4, are the most common. People who inherit one copy of this gene variant have a higher chance of developing Alzheimer's, and

those with two copies face an even greater risk. However, not everyone with APOE-e4 will develop the disease, and many without it still may — meaning it's a risk factor, not a guarantee.

Deterministic genes, on the other hand, directly cause Alzheimer's. These are extremely rare and are linked to early-onset familial Alzheimer's, which typically appears before age 65. Mutations in genes such as APP, PSEN1 and PSEN2 almost always result in the disease if inherited. This form of Alzheimer's accounts for less than one percent of all cases.

CONSIDERING GENETIC TESTING

Genetic testing is available, but it's not recommended for everyone. Most experts advise against routine genetic testing for the general public, especially since a positive result — particularly for APOE-e4 — cannot predict if or when someone will develop Alzheimer's. The information can be emotionally difficult to process and may have implications for insurance or privacy.

However, genetic counseling and testing may be appropriate for people with a strong family history of early-onset Alzheimer's, especially if multiple relatives were diagnosed before age 65. A genetic counselor can help families understand their risk and explore options for testing in a supportive environment.

GENES AREN'T DESTINY

While genetics contribute to Alzheimer's risk, lifestyle and environmental factors also play a crucial role. Physical activity, healthy eating, mental stimulation and good cardiovascular health are all associated with a lower risk of cognitive decline, regardless of genetic background.

Ongoing research continues to explore how genes interact with these other factors. Scientists hope that a better understanding of genetic pathways will lead to more targeted treatments and preventive strategies in the future.

For now, the takeaway is clear: having a family history of Alzheimer's may increase risk, but it doesn't determine your future. Knowledge, early planning and healthy habits can make a powerful difference.

Global Impact

Alzheimer's disease affects millions of people worldwide, placing an enormous emotional, social and economic burden on families and health care systems.

As populations age, especially in low- and middle-income countries, the global effect of Alzheimer's is expected to grow substantially in the coming decades. International efforts are underway to share data, improve care and find better treatments.

WORLDWIDE TRENDS AND RISING PREVALENCE

According to the World Health Organization, more than 55 million people around the globe are currently living with dementia, with Alzheimer's disease accounting for up to 70 percent of those cases. By 2050, that number is projected to exceed 139 million. The sharpest increases are expected in countries where access to memory care and early diagnosis remains limited.

In wealthier nations, earlier diagnosis and greater public awareness have helped some families get support sooner. However, stigma remains a barrier to treatment in many cultures, and differences in how memory loss is perceived can delay care.



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CROSS-CULTURAL APPROACHES TO CARE

Caring for people with Alzheimer's looks different around the world. In some cultures, multigenerational households provide the bulk of caregiving support, with

elders remaining at home rather than entering formal memory care facilities. In others, community-based care models or day centers are more common.

In Japan, where more than 28 percent of the population is

over 65, the government has developed a national dementia strategy that includes training "dementia supporters" in neighborhoods to help people live safely and with dignity. In Scandinavian countries, dementia villages have

emerged as a model of compassionate, independence-focused care. These settings allow residents to continue daily routines in safe environments with minimal disruption to their sense of normalcy.

GLOBAL COLLABORATION IN RESEARCH

International collaboration is vital to advancing Alzheimer's research. Groups like the Alzheimer's Disease Neuroimaging Initiative (ADNI) and the Global Alzheimer's Association Interactive Network (GAAIN) work across borders to share data, accelerate clinical trials and build a clearer picture of disease progression.

Major drug trials increasingly include participants from multiple countries to better understand how treatments perform across genetic backgrounds and health care systems. In addition, organizations such as the World Dementia Council and Alzheimer's Disease International advocate for unified global strategies to tackle the crisis.

As Alzheimer's continues to challenge health systems worldwide, researchers and policymakers are emphasizing the importance of culturally informed care, equitable research and early intervention strategies.

Tackling the disease will require cooperation not just between scientists and doctors, but across continents and cultures.

Activities to Engage

Staying connected with a loved one who has Alzheimer's disease can be challenging, especially as communication and memory decline.

Meaningful engagement remains possible at every stage of the disease, however.

Simple, personalized activities can help spark joy, reduce agitation and preserve a sense of dignity and purpose.

FAMILIAR ROUTINES AND GENTLE CONVERSATION

Establishing a consistent daily routine provides comfort and structure. Regular meal-times, walks and quiet moments can offer a sense of normalcy. Even when memory fades, many people still respond to familiar patterns and voices.

Conversation should focus on the present moment or long-term memories, which are often more accessible than recent ones. Instead of asking, "Do you remember?" try open-ended prompts such as, "Tell me about your favorite holiday" or "What did you enjoy doing when you were younger?" Listening without correcting helps create a positive, supportive atmosphere.

HANDS-ON ACTIVITIES AND CREATIVE EXPRESSION

Tactile and visual activities



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can be especially effective. Sorting objects by color or shape, folding towels, arranging flowers or working with modeling clay can offer satisfaction and calm. For those who once loved gardening, tending to potted plants can be both soothing and familiar.

Art and music are powerful tools for expression. Singing along to favorite songs, looking through photo albums or painting with watercolors can

awaken positive emotions and stimulate memory. Even non-verbal individuals may respond to rhythm, melody or the feel of a paintbrush.

GAMES, MOVEMENT AND SHARED PURPOSE

Games tailored to the individual's abilities can encourage mental stimulation and enjoyment. Picture bingo, matching cards, simple puzzles and reminiscence-based trivia can

offer both fun and cognitive engagement. Physical movement is also important — gentle stretching, guided dance, chair yoga or short nature walks can boost mood and circulation.

Engagement doesn't need to be complicated. Folding laundry together, helping set the table or baking cookies from a familiar recipe can provide a shared sense of purpose. These moments reinforce the

feeling of being needed and involved.

Above all, the goal is to focus on what the person still enjoys and can do, rather than what they've lost. Patience, creativity and love go a long way in maintaining connection. Even short, simple interactions — a touch, a smile, a song — can make a meaningful difference in the day of someone living with Alzheimer's.

Sleep Disturbances

Sleep issues are common among individuals with Alzheimer's disease, particularly as the condition progresses.

Many caregivers report that their loved ones have difficulty falling asleep, staying asleep or experience increased confusion and agitation in the evening — a phenomenon often referred to as “sundowning.” These disturbances can take a toll on both the person with Alzheimer's and those caring for them.

COMMON SLEEP CHALLENGES

As Alzheimer's affects the brain, it disrupts the body's natural sleep-wake cycle. This can lead to daytime napping, nighttime wakefulness and restless behaviors during what should be quiet hours. Some individuals may wake up disoriented and wander, increasing the risk of falls or injury.

Factors contributing to sleep disturbances may include pain, medication side effects, anxiety, depression or changes in the brain that affect melatonin production. A lack of physical activity or mental stimulation during the day can make it harder to sleep at night.

UNDERSTANDING SUNDOWNING

Sundowning refers to increased confusion, irritability, anxiety or restlessness that



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typically occurs in the late afternoon or early evening. It may cause pacing, shadowing (following a caregiver closely), yelling or even aggression. While the exact cause of sundowning is unclear, it may be linked to fatigue, changes in lighting, hunger or overstimulation.

For caregivers, sundowning can be especially challenging, as it tends to occur at the end of a long day. Creating a calm, predictable evening routine and reducing noise or clutter

can help ease symptoms. Drawing curtains before dusk and using soft lighting may also lessen disorientation caused by shifting daylight.

STRATEGIES FOR BETTER SLEEP

There is no one-size-fits-all solution, but several strategies can help promote healthier sleep patterns:

- Keep a regular daily schedule with consistent bedtimes and wake-up times.
- Encourage outdoor activity

and exposure to natural light during the day.

- Avoid caffeine, alcohol and large meals close to bedtime.
- Provide a comfortable, quiet sleep environment with minimal distractions.
- Use nightlights or motion-sensor lighting to reduce fear during nighttime waking.

If sleep issues persist or significantly affect quality of life, caregivers can reach out to a health care provider. In some

cases, a medical evaluation may reveal an underlying condition such as sleep apnea or restless leg syndrome. Medication may be considered, but non-drug approaches are usually recommended first.

Caring for someone with Alzheimer's includes managing their rest as well as their waking hours. Supporting good sleep benefits the individual with dementia and it can give exhausted caregivers a much-needed chance to rest and recharge.

A Dementia-Friendly Home

As Alzheimer's disease progresses, the home environment plays a critical role in maintaining comfort, safety and independence.

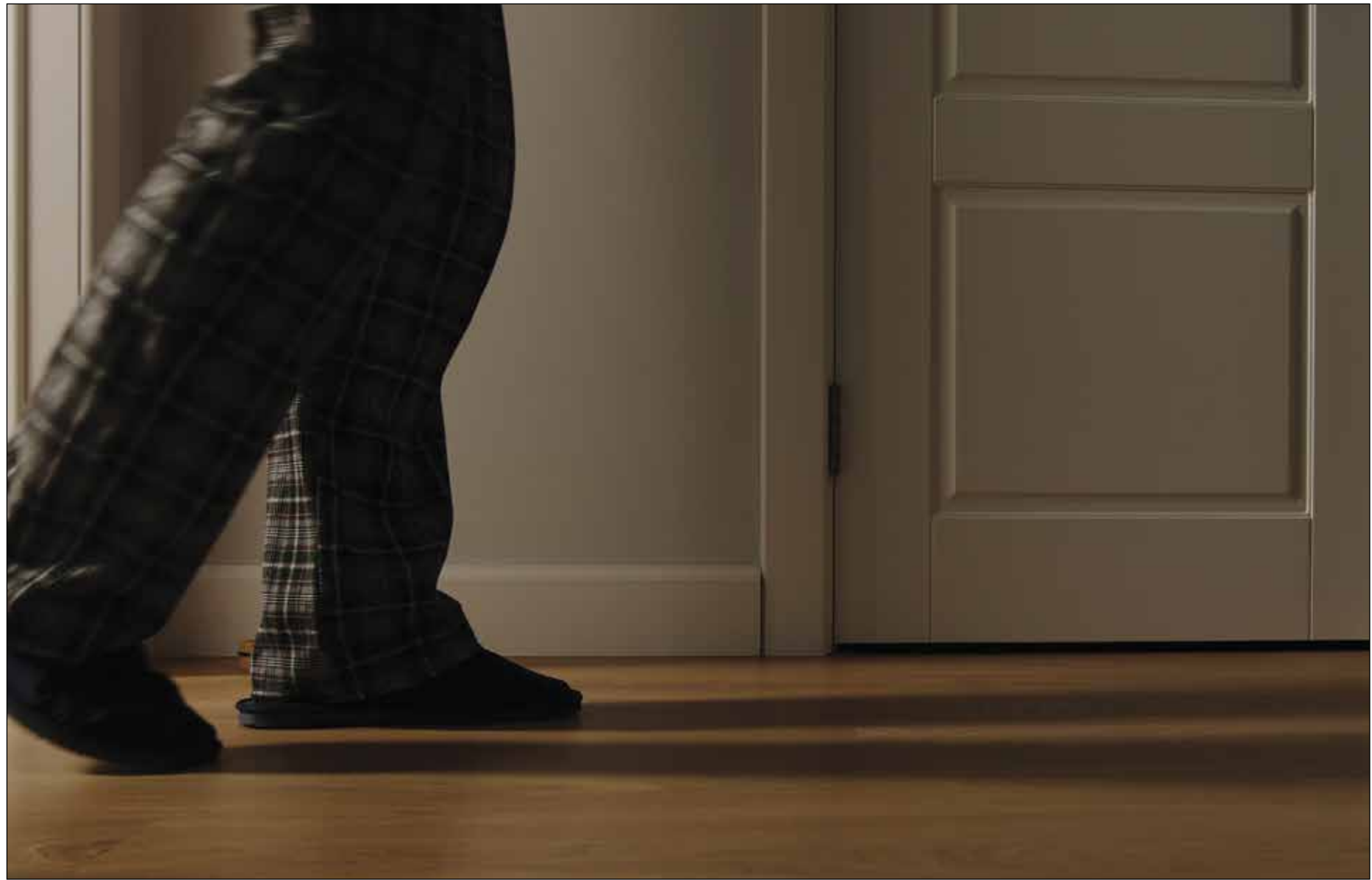
Thoughtful modifications can help reduce confusion, prevent accidents and make everyday tasks easier for individuals living with dementia. Many of these changes are simple and affordable, yet they can significantly improve quality of life for both the person with Alzheimer's and their caregivers.

PREVENTING ACCIDENTS

A key priority in dementia-friendly design is minimizing hazards. Falls are a major concern, so removing loose rugs, improving lighting and installing handrails in hallways and bathrooms can reduce risk. Nightlights in bedrooms and bathrooms help prevent disorientation after dark.

In the kitchen, consider childproof latches on cabinets, stove knob covers and clear labels on commonly used items. Store cleaning products, sharp utensils and medications in locked or out-of-reach areas. Adjust water temperature settings to prevent burns.

Wandering is another risk for people with Alzheimer's. Install door alarms or motion



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sensors to alert caregivers if someone tries to leave. Use secure locks that are difficult for the person with dementia to operate but easy for caregivers in case of emergency.

COMFORT AND ORIENTATION

The home should be a place of comfort and familiarity. Consistent layout and minimal clutter help reduce confusion. Use contrasting colors for walls, furniture and floors to improve visibility

and depth perception. Simple signage with both words and pictures can label rooms or identify important items like the bathroom, refrigerator or closet.

Personal touches such as family photos, favorite blankets or familiar music can soothe anxiety and create a sense of continuity. Avoid mirrors in areas where they might cause distress, as some individuals with dementia may no longer recognize their own reflection.

SUPPORTING DAILY ROUTINES

Helping a person with Alzheimer's maintain independence is easier when their surroundings support daily habits. Keep frequently used items in the same location. Consider open shelves or clear containers for easy access. Simplify clothing by removing complex outfits and organizing them by day or occasion.

In bathrooms, install grab bars, a raised toilet seat and a

shower chair to make hygiene safer and more manageable. Use visual cues to support routines — such as laying out clothes in order of use or using color-coded drawers.

Creating a dementia-friendly home is about more than safety — it's about supporting dignity and reducing frustration. With a few intentional changes, caregivers can transform the home into a supportive space where loved ones can continue to thrive and participate in daily life.

Navigating a Diagnosis

Receiving an Alzheimer's diagnosis can be overwhelming.

For many individuals and their families, it marks the beginning of a journey filled with uncertainty, fear and emotional upheaval. Alongside the practical concerns about care and planning, the emotional effect can be just as profound — and just as important to address.

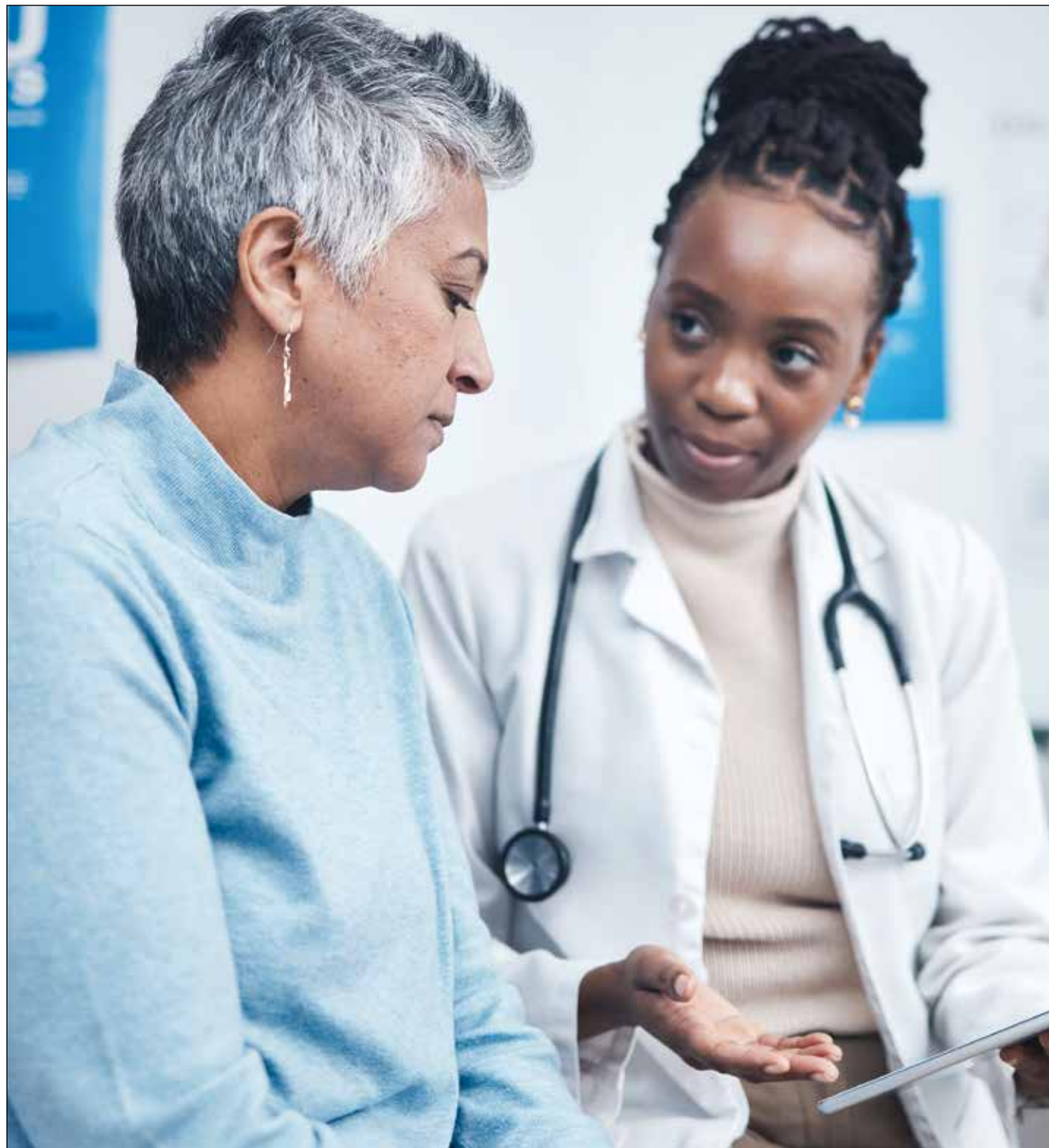
FEAR, SHOCK AND GRIEF

Whether the diagnosis comes early in the disease or after a long period of concern, it often triggers an immediate wave of fear and shock. People may worry about losing their independence, forgetting loved ones or becoming a burden. For family members, the realization that someone they love is facing a progressive and incurable illness can bring feelings of helplessness and deep sadness.

It's also common to grieve the future — the loss of plans, memories and roles that may shift over time. This anticipatory grief can surface before major changes occur, especially for spouses and adult children. Acknowledging these feelings is the first step in processing them.

THE WEIGHT OF STIGMA

Alzheimer's disease still carries a social stigma in many communities. Some individuals withdraw or stop participating in social



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activities after a diagnosis, fearing embarrassment or misunderstanding. Others may encounter people who dismiss or minimize their abilities, even in the early stages of the disease.

Alzheimer's International

publishes annual research on Alzheimer's. In 2024, they focused on the stigma associated with the disease. Some of their findings included:

- 65% of health and care professionals incorrectly believe dementia is a normal

part of aging. 80% of the general public believe dementia is a normal part of aging, a dramatic increase compared to 66% in 2019.

- 88% of people living with dementia indicate experiencing discrimination.

- Over a quarter of people globally incorrectly believe there is nothing we can do to prevent dementia, with that number increasing from 20% in 2019 to 37% in lower- and middle-income countries.

- Over 58% of the general public believe dementia is caused by an unhealthy lifestyle.

Stigma can lead to delayed diagnoses, as individuals and families may avoid seeking help due to fear or shame. Open conversations and public education are key to reducing stigma and encouraging support. People living with Alzheimer's still have thoughts, emotions and contributions to make — and they deserve to be treated with respect and dignity.

FINDING SUPPORT AND STRENGTH

Support groups, counseling and educational resources can be lifelines in the early months after diagnosis. Whether in person or online, connecting with others going through similar experiences helps combat isolation and build resilience. Mental health support is just as important as medical treatment.

It's helpful to focus on what remains possible. Many people with Alzheimer's continue to enjoy hobbies, meaningful relationships and daily routines, especially with support. Early planning can empower individuals to make decisions about their future care, legal arrangements and quality of life while they are still able.

Technology Tools

Advances in technology are transforming the way caregivers support loved ones with Alzheimer's disease.

From GPS trackers to smart-home systems, new tools are helping individuals maintain independence while giving caregivers peace of mind.

These innovations offer practical solutions to everyday challenges, making it easier to stay safe, organized and connected.

SAFETY THROUGH TRACKING AND MONITORING

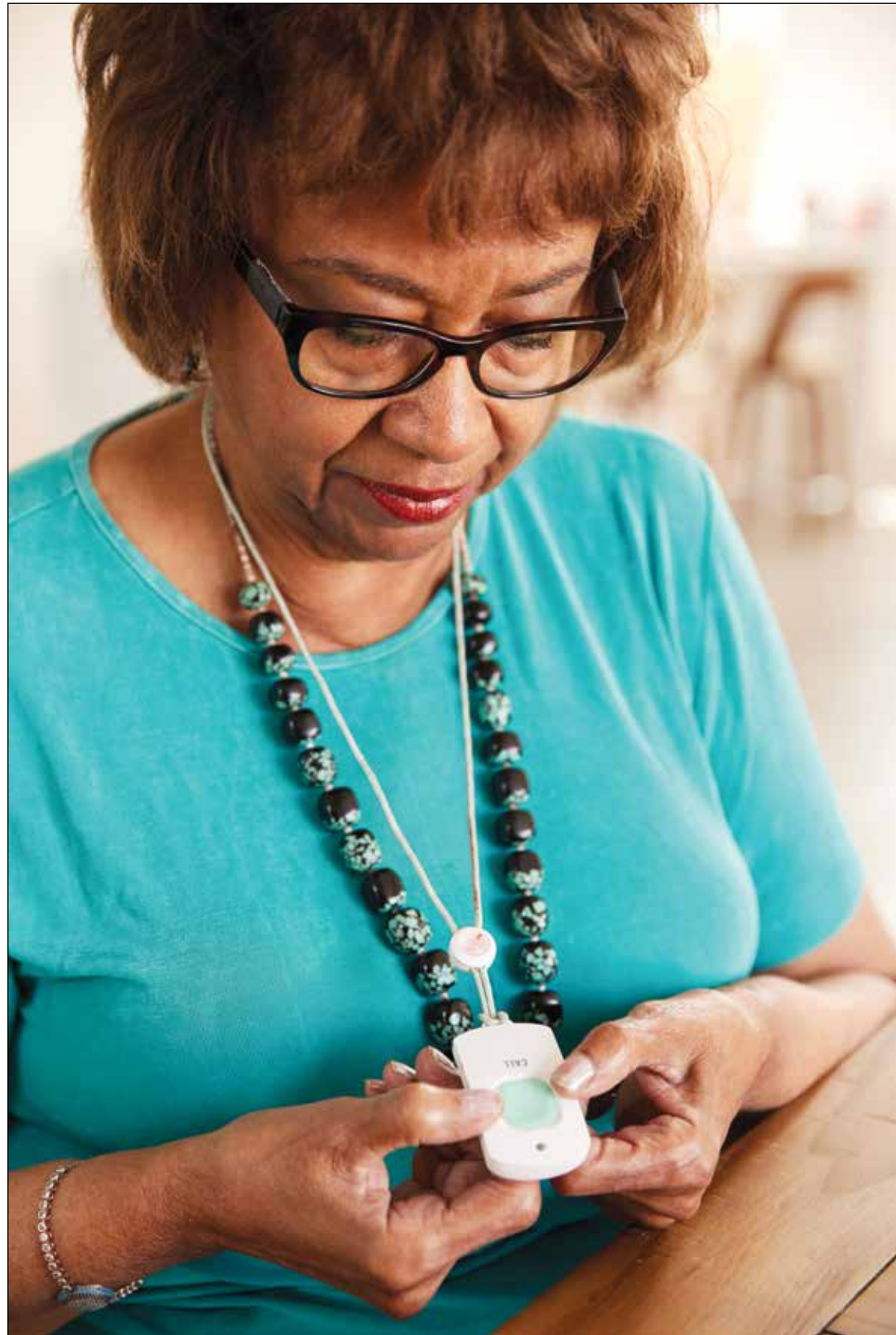
One of the biggest concerns for caregivers is wandering — a common behavior among those with Alzheimer's. GPS-enabled devices, such as wearable trackers or smartwatches, allow families to locate a loved one quickly if they become lost. Some models include geofencing features that send alerts if the person exits a designated area.

Smart-home systems can also enhance safety. Motion detectors, door alarms and stove shut-off devices help caregivers monitor activity remotely. These tools are especially useful for those in the early to mid stages of the disease who still live at home but need supervision.

SUPPORT APPS AND DEVICES

Mobile apps offer valuable assistance for both patients and caregivers. Medication reminder apps help ensure doses aren't missed, while digital calendars can keep track of appointments, tasks and important events.

Some apps use voice prompts or visual cues, making them easier to navigate for those with cognitive impairment.



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Other programs support memory retention and engagement. Reminiscence apps feature music, photos and

videos from past decades that can spark conversation and emotional connection.

Brain games and cognitive training apps may offer light mental stimulation, though their long-term effectiveness is still being studied.

Robotic technology is a growing field that offers support to people with Alzheimer's. These robots use artificial technology to do things such as deliver an umbrella when it is raining, vacuum the house, provide medication reminders or even provide some companionship in the form of small robotic pets.

STAYING CONNECTED AND INFORMED

Video calling platforms and messaging apps help individuals with Alzheimer's stay connected to friends and family, especially when in-person visits aren't possible. Simple tablet interfaces designed for seniors reduce the complexity of technology and focus on ease of use.

Caregivers can benefit from technology. Online support groups, caregiver forums and mobile health record systems allow for easier coordination and access to resources. Some platforms let caregivers securely share updates with family members or health care providers, streamlining communication.

While technology can't replace human care and interaction, it can ease the burden of caregiving and improve quality of life. Choosing the right tools depends on the individual's stage of Alzheimer's and their comfort with technology. Involving them in the decision-making process whenever possible can help maintain a sense of autonomy.

As new innovations continue to emerge, technology offers growing potential to help individuals with Alzheimer's live safer, more connected lives — and to support those who care for them every day.