



Designing for Alzheimer's disease

In the third of our series of posts marking [World Alzheimer's Month](#), we look at designing for people affected by this disease.

Although our projects at CDG have involved interior design within elderly care home settings, we are not experts in designing for people affected by this disease.

However, our designers have curated information on this important subject to share how some basic interior design choices can help to create a more comfortable environment for those living with Alzheimer's or other forms of dementia

People living with Alzheimer's Disease see the world differently. Whether they are living at home or in a dementia care community, it's important that their living space is a place where they can feel at ease.

Contrasting colours

Older people in general need up to three times as much contrast to locate objects than younger people. Too many neutral shades in a room can add to the confusion experienced as a result of memory loss. Combine light and dark colours, such as yellow and blue. Also keep in mind that warm tones can be seen more easily. Skirting boards and handrails could contrast with the colour of the floor or the wall they are fixed to as this helps them to be located. Care must be taken with colour selection as using bright colours or stereotypical colours such as beige can easily make a building look like an institution rather than a home.

Textures and graphics must be true to what they are. If a railing or table looks like wood, but doesn't feel like wood, it can be alarming for those with dementia. Because two separate signals are being sent to the brain – one from touch and one from sight – the person is left with feelings of unease and confusion.

Memory prompts

Safe indoor setting that mimics the urban environment of the 1950s can spark and engage long term memory. Design elements such as vintage storefronts, retro signage and activities from the time period can stimulate happy memories.

An interactive environment is designed to help capture part of the life and preserved cognitive function that remains intact for these individuals, ultimately enabling them to feel calm, confident and secure.

Incorporate mementos from the past into the room design. For example, a 1950s radio or a poster displaying a favourite childhood movie or items associated with work may trigger memories that were difficult to recall.

Effective lighting

Avoid lights that twinkle or sparkle as this can increase confusion and cause falls. Don't incorporate bulbs that emit too much bright light; consistent light throughout a room allows for greater physical access for those with poor eyesight and mobility problems

Good quality lighting is essential in dining areas to ensure that older residents with degrees of visual impairment can comfortably enjoy their meal. Important issues to be considered include lighting levels, glare, depth of perception and flexibility. Studies have shown that older individuals can require three times as much light as younger individuals. For older people who might have decreased pupil reaction time and less elasticity of the lens, adapting quickly to changes in lighting level can become more difficult and create a sensitivity to glare.

Even and Consistent Lighting

One of the most important things to think about when lighting a memory care facility is the elimination of light and dark spots throughout a space. Dark spots can feel ominous to the brain and may cause distress to residents. Even and consistent lighting will help residents move more easily throughout a space. Making sure lights are evenly spaced, and are providing the right amount of light, is key.

Colour

The colour of light is often not considered when designing for dementia. However, it can arguably be one of the most helpful hints to the body's circadian rhythm. Our bodies are wired to react to the natural light and this same reaction can be recreated using artificial lighting. Warm reds and oranges in the morning help imitate the sun and wake up the body. White light at midday exemplifies the sun at its brightest. Repeating red and orange light again at night can help mimic the sunset and help the body settle into sleep.

Reducing visual/physical barriers

To ensure that residents are safe and free to move throughout the space without assistance there must be no visual barriers on floor surfaces. This allows for more safe and unrestricted movement throughout dining areas and the care home.

If a person has poor vision and depth of perception, changes in floor colour can be misinterpreted as a hole or a step, creating an unnecessary obstacle. Floors should also be completely flat and level with no steps, even between the interior and exterior of the building. Doors to safe exterior spaces should never be locked and should have glass panes to invite residents to see what is on the other side.

Think about the design of amenities which capitalise on redundant space and integrate activities such as cooking and gardening into existing spaces. Some homes only provide one room to cater for all group activities and have to include seating areas, televisions as well as furniture for eating. Open plan spaces like these create a burden on residents to interact

with each other continuously. Studies of areas like this have shown that they lead to increased withdrawal, conflict among residents and staff burnout. It is essential that rooms have single functions so that residents can choose the activities they want to be a part of and so that sensory information can be tailored to improve recognition of what is going on. Having separate dining areas also allows layouts and decor to be customised to reflect the specific function of the room. Room function can be modelled on the relationships that exist in a typical domestic home in the UK. The dining area is located beside the kitchen, the patio is located outside the kitchen door and the garden extends out from the patio.

Objects can also help residents make connections about what events happen in certain areas. For example, a unique painting or sculpture in the dining room may trigger a connection between the item and the act of eating. Or, a connection might be that certain activities, like television watching or puzzles, take place near the piano. These hints can help residents maintain a sense order and understanding.

Controlling stimuli

As dementia progresses, a person can begin to have difficulty concentrating on a meal and become sensitive to excessive sensory stimulation. Dining areas that contain too many people, have high levels of noise or simply have too many visual distractions such as people passing by, can be stressful and distracting. If a person is over-stimulated they may try to leave but be unable to articulate the reasons why they wish to do so. In an effort to avoid such situations, people may demand to stay in their rooms, alienating themselves from social contact with others. To remove excess stimuli from the eating environment it is key that service areas are located outside the dining area. Spaces can be broken up using moveable dividers. The dividers at a height that allows people to see over them when standing. Staff can therefore see easily into the space but there is more privacy and less distraction for the residents when seated. The partitions are mobile so that spaces can be divided according to different needs on any given day. It is important to remember that some people will need more privacy to focus on a meal while others will be more socially active. Positive stimuli can also be important. In this layout the dining area is a part of the kitchen so that smells and sounds associated with mealtimes can start to stimulate appetite.

Controlling noise levels

Noise levels can be controlled by using sound absorbent materials in the space. Items such as curtains and other soft materials can reduce noise. In some European care homes, cork is used as flooring as it looks very domestic, is cleanable but is also sound absorbent and absorbs impact if a person falls. For residents who may need a toilet due to incontinence, locating a toilet near to the dining room is advisable. This offers reassurance and allows people who have limited mobility to feel more comfortable about eating with others in a social space.

With thanks to the following websites:

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<https://www.worldalzmonth.org/>

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<https://www.progressiveae.com/interiors-for-memory-care/>