Housing Considerations for the Aged

Abigail Pace

Department of Family and Consumer Sciences, Liberty University

FACS 300: Interior Design III

Professor Lisa Campbell

January 28, 2022

Housing Considerations for the Aged

It is a designer's job to understand the needs and considerations of the client to successfully design a home. As people age, an important aspect of designing a home is keeping a person's independence while ensuring they are safe and secure. In scripture, Paul writes, "Let each of you look not only to his own interests, but also to the interests of others" (*English Standard Bible*, 2001/2016, Philippians 2:4). Christians have the responsibility of caring for those around them, especially the elderly. Interior designers get to do this by designing housing where a client can age with the home. Interior designers get to create a space that is safe and functional while keeping the space comfortable and beautiful. This paper explores major considerations for the elderly such as memory care, ambulatory, and diminished vision as well as how these each pose their own challenges and how they can be improved upon by good design.

Memory Care

Aging presents many challenges; one, in particular, is memory care. As a person ages, they are bound to have certain parts of their memory diminish and day-to-day activities seem more ambitious. It is important designers recognize these things and create a space that a client can age in, as these things are bound to happen. Janis Kent (2017) phrases it this way, "If we develop the space now so that it is either accessible or easily adaptable for future modifications, changes in the future will be less onerous" (p. 282).

As memory diminishes, an aging person may not understand or agree with some design considerations to keep them safe. The designer's job is to keep the client safe and secure while allowing them to enjoy and feel comfortable in the space. This can be a challenge but Scripture says, "Do not rebuke an older man harshly, but exhort him as if he were your father. Treat younger men as brothers; older women as mothers, and younger women as sisters, with absolute

purity" (*English Standard Bible*, 2001/2016, 1 Timothy 5:1-2). Instead of becoming frustrated at the challenge, each elderly person is to be treated like a mother or father. For interior designers this looks like selecting design solutions that they would want their parents to have if it was them in the position of the client. Mothers and Fathers pass down an abundance of wisdom to their children; designers get to give back a small portion of wisdom through informed design decisions.

The spatial layout of a building can help ease the stress and confusion of patients with memory loss. Well-built architecture can provide orientation by arousing the senses in many different ways (Metzger, 2018). While wide-open layouts can be great for mobility, having some closed-off areas are helpful for feelings of safety and security. Wide-open spaces can be daunting for a patient with dementia or Alzheimers. Having small groups or sections within a home that are still easily maneuverable can prevent confusion. Some nursing homes and care facilities call these dementia clusters. Victor Regnier (2018) states:

Dementia clusters use references to iconic residential rooms and activities like the kitchen, the hearth, the garden, the porch, and the living room to provide a familiar context for daily activity. Conversely, a nurse's station, hospital-like finishes, and institutional furnishings can make a place seem foreign and frightening. Consolidating the nurse's station with the kitchen has made it easier to manage small groups. Today computers monitor health, medications, and food preferences and are located in quiet alcoves or in each resident's room. (p. 73)

It may appear that open spaces would be the best for the elderly but with more research, it is clear that there is a balance between a space being too open versus too confined. It is the interior designer's responsibility to research and look at previous studies to determine what will be most beneficial for their client.

A crucial element for a person with memory loss is reinforcing familiarity. Oftentimes confusion is paired with memory loss; designers can help alleviate this confusion by placing things in a space that can spark memories. Reginer (2018) states:

Unique pieces of furniture, artwork, and accessories placed in visible locations can sometimes be effective landmarks for those with low to mid-level impairment. Shadow boxes with family photographs and salient objects are often placed near resident entry doors to cue them. These objects also introduce the resident to the staff, other residents, and other visitors by communicating important aspects of their life (p. 73-74).

Small elements such as pictures of family and friends can make a huge difference in a person's mental health and well-being. If there is an at-home nurse taking care of an elderly patient, having the nurse's picture somewhere in the home with a description can help with reinforcement of who they are.

Simple touches such as color selections and additional technology can have a profound impact on the well-being of the client as they age. Technology is constantly changing and evolving. Interior designers can implement technological changes to guarantee a secure residence for an aging population. Adding user-friendly up-to-date technology to the home can alleviate stress from the elderly person but also the family as well. Objects, furnishings, materials, and finishes can impact the well-being of the aged. Douglas A. Singh (2009) expresses, "For patients with Alzheimer's sharp color contrast and patterns can be disturbing. Pastel colors tend to work best for these patients" (p.228). Correct selection of colors promotes reliability and reassurance.

Researching the impact of memory loss can better inform design decisions and result in a successful design to age in place.

Ambulatory

As people age, the ability to move around safely and comfortably becomes more challenging. It is commonly heard of an elderly person tripping or falling due to excess clutter on the floor, poor lighting, or even a small plane change such as a rug. Statistics show, "The primary cause of unintentional injury-related death is trips and falls (41% of the population over the age of 73) and second greatest cause in those aged 60 to 72" (Kent, 2017, p. 282). It is an interior designer's responsibility to create a safe residence that prevents as many injuries as possible. As a person ages, the use of canes or wheelchairs becomes more normal, and the considerations for a design of a residence changes based on the needs of the client to keep the space safe while not feeling impersonal, or cold. Victor Regnier (2018) states:

Muscle and gait problems account for 24% of fall incidents, while environmental hazards such as wet floors, poor lighting, and bed height account for between 16 and 27%. The best way to understand the problem is through a physical health evaluation that assesses risks (p. 21).

Designers are able to assess these risks and select objects, furnishings, materials, and finishes based on the needs of the elderly. Design considerations for mobility can include things such as technology, storage, seating, grab bars, outdoor spaces, etc.

Lighting also plays an important role in moving around safely and comfortably. Natural sunlight is known to be beneficial to a person's mood and overall health. Research shows, "A 60-year-old requires 3 times the amount of light as a 20-year-old...[and]...[t]ime for light-to-dark adaptation increases from 30 minutes in a 20-year-old to over 45 minutes in a 60-year-old"

(Kent, 2017, p. 285). As a person ages, natural lighting is crucial in mood and the ability to move around. Considering something like a courtyard space or sunroom can significantly improve the mental state of a client as they age in their home. Where there is a lack of lighting, sleep can be negatively affected; additionally, there can be an increase in depression and falls that would have otherwise been prevented. (Singh, 2009). Singh (2009) states, "As their sight and visual activity decline, the elderly require higher levels of illumination, but glare must be minimized. Glare can lead to agitation, confusion, anger, and falls" (p. 217). Interior designers are responsible for having a space well-lit and providing as much natural light as possible. Most glare can be controlled by window treatments as well as finishes for walls and floors. A well-lit space that minimizes glare drastically minimizes falls, creating a space that is optimal for moving around safely.

A huge factor for designers to consider is to prevent a space from feeling impersonal. Oftentimes designers use ADA requirements as the minimum for what should be done, however, these requirements are based on a commercial space. ADA requirements are created to serve a wide range of people instead of customizing the design to an individual's needs. This is the reason designers should look at the specific needs of the client to make the space most accessible and comfortable for them. Mitton and Nystuen (2016) expand on this idea, stating:

Although ADA covers bathroom design in detail, this legislation does not create guidelines for private residence. Some designers and students use the ADA guidelines as default design standard for residential bathroom design, but doing this does not necessarily result in the best solution for a given client or situation. This is because ADA guidelines are meant to serve as the standard for a wide range of individuals whereas

design of private residences often require special design features for a particular client. (p.73)

When designing residential homes for the elderly it is crucial to make the space functional and comfortable for that specific individual. Meeting and exceeding the requirements serves not only the immediate needs of a wheelchair user but serves the future needs of an aging and mobile population (Mitton & Nystuen, 2016). Designers can consider things such as bi-fold doors for a greater clearance space at closets, pull-down rods, and mounting heights for shelves and storage. Designers also consider the locations of all the rooms and clearance spaces (Mitton & Nystuen, 2016). When interior designers make design decisions best suited for the client, the client is able to age successfully and functionally in their home.

Diminished Vision

Eyesight declines as a person ages. Most people do not become blind, but the ability to distinguish similar colors, plane changes, and things from afar becomes a challenge. Victor Regnier (2018) states, "The main problems appear to be a decreased ability to 1) see objects clearly, 2) focus on objects at different distances, 3) see at low light levels, and 4) distinguish colors" (p. 14). Interior designers must examine how diminished vision plays a huge role in the color schemes, materials, and objects chosen when designing for aging in place. Sharp color contrasts are helpful for the elderly in distinguishing plane changes. For example, painting a bathroom wall a blue color can help someone see the plane changes where the counter extends for a white sink or a toilet and allows dark gray grab bars to stand out. These design considerations promote safety and avoid feelings of confusion or frustration.

Diminished vision can also affect eye sensitivity to light. As stated previously, glare is a problem that arises for those with diminished vision and is something that should be considered by designers. Regnier (2018) states:

Glare can be avoided by using indirect fixtures or pendant lighting that block a direct view of the lighting source. Because of the yellowing of the cornea, colors like blue and green appear gray and can run together. The 60-year-old eye needs twice as much light to see as well as a younger adult and for those over 80 three times the amount of light is necessary. So higher light levels, simplified lettering, and more brightly lighted public spaces can help. (p. 14)

Designers can help mitigate this problem by choosing finishes and materials that are anti-reflective. Lighting is crucial as people age so it is the designer's job to balance natural light with additional lighting fixtures. Kent (2017) suggests, "Balance daylight with artificial light, which eliminates glare and high contrast from shadows caused by direct sunlight and clear glazing. Provide gradual changes in the lighting level from one room to another, and provide contrast in finishes not lighting" (p. 285). Successfully balancing natural light with artificial light creates an optimal environment to prevent accidents from happening.

With vision lacking, texture plays an important role in ensuring the comfort of an individual. Something like a wood finish for handrails instead of metal feels inviting and warm rather than isolated and cold. This simple design change also allows an elderly person to feel independent and in control rather than feeling restricted by the safety guards of an institution. Designers are able to study these simple design changes, and as a result, positively impact the client's social behavior and certain clinical outcomes (Singh, 2009). Playing with different textures instills a feeling of being welcomed while still providing the needed safety.

Conclusion

There are things that affect everyone as they age; there are changes in mobility, memory, and vision that can be stressful to navigate. Interior designers get to bring comfort through creating a beautiful and functional space to age with the client. Designers are responsible to use research to inform their design decisions to create a successful residence. The Lord commands believers to "Stand up in the presence of the aged, show respect for the elderly and revere your God. I am the Lord" (*English Standard Bible*, 2001/2016, Leviticus 19:32). Designers follow this command from the Lord by standing in the gap for the elderly and being advocates for loving the environment they are aging in. Furthermore, researching design decisions based on less mobility, memory loss and diminished vision allow interior designers to make informed selections that result in a successful design for their client to age with.

References

- English Standard Version Bible. (2016). Crossway Bibles. (Original work published 2001)
- Kent. (2017). ADA in details: interpreting the 2010 Americans with disabilities act standards for accessible design. Wiley.
- Metzger, C. (2018). Building for dementia. Jovis Berlin.
- Mitton, & Nystuen, C. (2016). *Residential interior design a guide to planning spaces* (3rd ed.). Wiley.
- Park, J., & Porteus, J. (2018). *Age-Friendly housing: Future design for older people* (1st ed.). RIBA Publishing. https://doi.org/10.4324/9780429345920
- Regnier, V. (2018). Housing design for an increasingly older population: Redefining assisted living for the mentally and physically frail. John Wiley & Sons.
- Singh, D. (2009). *Effective management of long term care facilities*. Jones & Bartlett Learning.