


Dementia-Friendly Design Considerations

Knowledge to Practice Recommendations:

LIGHTING



Alzheimer Knowledge Exchange

AKE Design and Dementia Community of Practice • Tuesday, January 26, 2010

LIGHTING, a Design Intervention



Design and Dementia CoP

- **WHAT:** Sharing, promoting and facilitating the integration of evidence-informed dementia friendly design to improve care for persons with dementia
- **HOW:** Series of webinars to share collective wisdom, insight, and effort in brainstorming, researching, and/or creating practical dementia friendly knowledge to practice resources to aid in the adoption best practice
- **WHY:** To improve quality of life and dementia care through improved environmental design of care settings (including physical, social, and emotional design components)

Learning Objectives

- Highlight the importance of lighting for persons with dementia and the positive on mood and responsive behaviours
- Outline a set of 'Knowledge to Practice' recommendations based on quality literature and practice knowledge
- Learn from one another about the trials and successes of implementing lighting interventions

Research and Evidence

- A supportive environment (both physical and social) are key social determinants of health and identified as a key component to full engagement in community¹
- Changes related to aging and cognition
- Importance of “Place” and “Familiar”

¹WHO, 2002; Health Canada, 2006; Roundtable for Future Planning, 2006

It's Important and It's Complex...

- There is a continual balance between many factors related to design:
 - Knowledge of the individual needs for the resident, but the challenge to implement
 - Compliance and legislated standards
 - Time and resources to implement
 - Challenge to make changes to already established design of buildings

So, now that we know this...

How do we develop constructive strategies to assist persons with dementia to make sense of their environment and improve their sense of well-being?

Dementia-Friendly Design Considerations

- series of ‘Knowledge to Practice Recommendations’
- important physical design elements to facilitate the process of persons with dementia and their caregivers to make sense of their environment and improve well-being
- living or dynamic documents (continually edited and updated) by the AKE Design and Dementia Community of Practice
- emerging quality evidence and the integration of both practice-based and experiential knowledge of those caring for persons with dementia

Dementia-Friendly Design Considerations

1. Light Intensity & Colour
2. Task Lighting
3. Natural Light
4. Adapting to Transitions in Lighting
5. Day and Night Lighting
6. Avoiding Misperception
7. Individual Preferences
8. Maintenance Standards

LIGHTING Knowledge to Practice Recommendations

LIGHT INTENSITY & COLOUR

- **RECOMMENDATION:** Lighting with a high colouring rendering index providing 30-70 foot candles (1 foot candle = 10 lux) for indoor illumination in main areas of LTC including living rooms, resident rooms, bathroom, tub, and activity areas
- *Strategies include:*
 - lighting that mimics natural sunlight such as incandescent or new fluorescent T8 lamps

LIGHTING Knowledge to Practice Recommendations

TASK LIGHTING

- **RECOMMENDATION:** Task lighting (direct illumination) of vertical surfaces at higher levels than ambient lighting, on average 700 lux
- *Strategies include:*
 - task lighting in areas of interest
 - warm or daylight type table or stand lamps

LIGHTING Knowledge to Practice Recommendations

NATURAL LIGHT

- **RECOMMENDATION:** Access to natural light (e.g., windows, outdoor activities, greenhouse activities) and windows overlooking outdoor areas to promote well-being
- *Strategies include:*
 - windows to overlook a focus like a bird feeder or woods vs. parking lot which may promote exit seeking
 - positive "centres of focus" (e.g., aquarium, mural) near any windows where views are deemed to be poorly located

LIGHTING Knowledge to Practice Recommendations

ADAPTING TO TRANSITIONS IN LIGHTING

- **RECOMMENDATION:** Graduated lighting from indoors to outdoors
- *Strategies include:*
 - awnings
 - brighter interior lights in entrance ways

LIGHTING Knowledge to Practice Recommendations

DAY AND NIGHT LIGHTING

- **RECOMMENDATION:** Lighting is able to be adjusted throughout the day and act as a cue for day time and night time for persons with dementia
- *Strategies include:*
 - dimming corridor lighting in the evening

LIGHTING Knowledge to Practice Recommendations

AVOIDING MISPERCEPTION

- **RECOMMENDATIONS:** Lighting has even distribution throughout an area and surfaces are free from glare
- Elimination of pooled lighting and shadows which create false illusions of depth
- *Strategies include:*
 - using multiple lighting sources and avoiding lighting from below
 - changing the height and angle of the light
 - using frosted versions of lamps or light fittings such as lamp shades to screen or reflect the light
 - using sheers on windows to filter natural day light when needed

LIGHTING Knowledge to Practice Recommendations

INDIVIDUAL PREFERENCES

- **RECOMMENDATION:** Individual preferences for lighting are respected and balanced with safety
- *Strategies include:*
 - desk lamps or dimmers for built in flexibility to accommodate individual needs

LIGHTING Knowledge to Practice Recommendations

MAINTENANCE STANDARDS

- **RECOMMENDATION:** Appropriate practices including lighting policies and maintenance standards in place
- *Strategies include:*
 - regular cleaning of residents glasses to maximize eyesight
 - pulling down shades; dimming lights at bedtime
 - well lit areas to avoid shadows
 - ensuring lights are immediately replaced, not turned off in high traffic areas
 - appropriate signage for lights that should remain on throughout the day
 - ensuring windows are kept clean and bushes around windows are trimmed back to minimize shadows and increase light
 - well lit signs with directional/way finding cues

Review

- Lighting is an important design feature to the quality of life for persons living with dementia because:
 - dissipate shadows
 - reduce mood disturbances
 - positively affect eating
 - optimize communication opportunities
 - encourage well-being
 - increase natural activities (illumination)

You are invited to get involved!!!
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