

Textile Design Considerations from a Nursing Perspective

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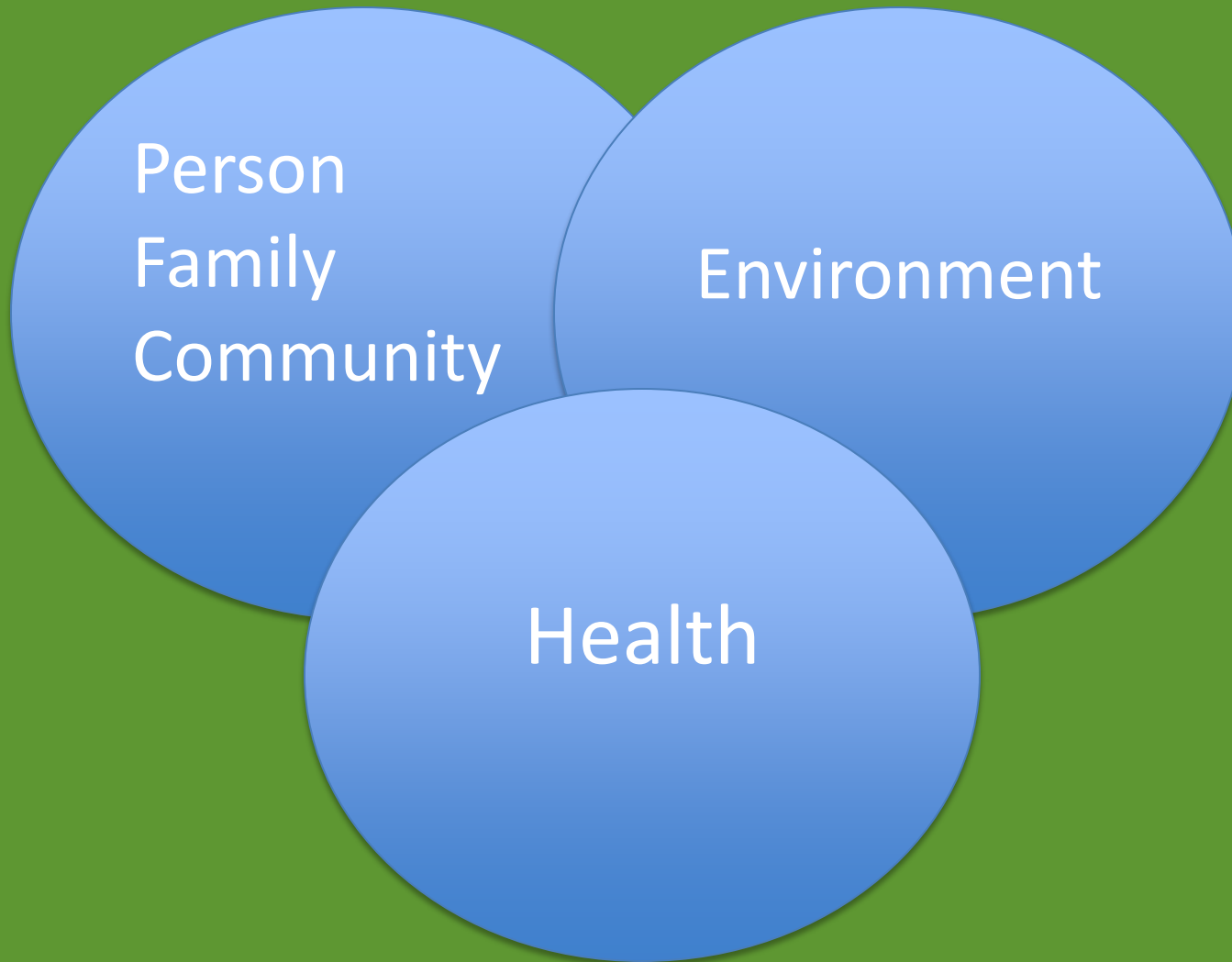
Sustainable Textiles and Medical Protection

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The Nursing Perspective



The Environment as target for Therapeutics

- Increase elements that support independence, function, well-being, and health
- Decrease elements that optimize independence, function, well-being, and health

The Therapeutic Environment

- Physical
- Social
- Safety
- Structure/routine
- Cues to function
- Level of stimulation

Health Care Environments

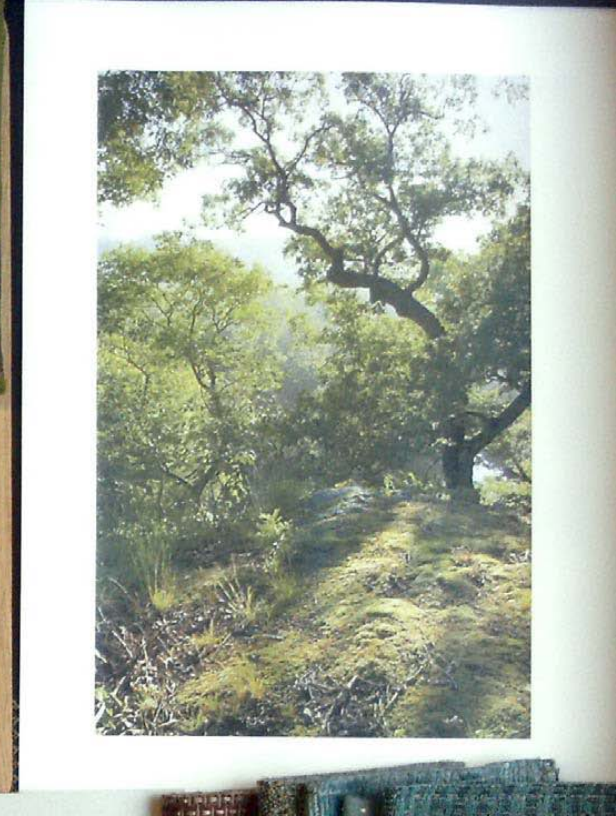
- Hospitals
- Ambulatory Care
- Long term care
 - Skilled Nursing Facilities
 - Assisted Living
 - Retirement housing
- Hospice
- Outpatient surgery, day care
- Homes

Traditional Selection Criteria

- Cleanability, infection control
- Fire safety
- Durability
- Aesthetic appeal
- Triple bottom line: balance environmental, social and economic criteria

Forest Scheme

CO
Architects



First, do no harm

- Healing environments
- Promoting health for occupants, the local community and global health
- Free of hazards
- Infection control
- Fire safety
- Toxicity

A safe environment

- Minimize hazards
- Ensure security
- Promote comfort
- Enhance function

Universal design

- Access
- Layout
- Height
- Edges
- Color
- Light
- Assistive features
- Safety





Environmental elements

- Lighting
- Finishes
- Flooring
- Furniture
- Functional wall space
- Access to the outdoors/nature

Environmental considerations

- Lighting levels – task, ambient light
- Sensory stimulation and overload
- Direction and location cues, signage
- Contrast or lack of contrast
- Obstacles
- Noise/distraction
- Soft elements – sound mitigation

Environmental considerations

- Dignity
- Identity
- Privacy and public space
- Home-like vs. institutional

Sensory changes with age

- Lens thickens – difficult to make sharp distinctions
- Lens yellows – blue seen as grey
- Cataracts – blurring
- Macular degeneration – lose central vision
- Glaucoma – tunnel vision
- Hearing loss – sound distortion

Visual cues

- Carpet borders
- Art
- Sitting area



Dining room





Environmental elements for persons with dementia

- Difficulty interpreting environment/cues
- Optimal level of stimulation
- Connection – history, interest
- Safety/barriers
- Contrast
- Choices
- Mirrors

Linoleum confusion



Eating

- Plates with contrast rim
- Size appropriate to meal
- Attractive place setting with border
- Music, low distraction noise
- Appropriate utensils



Wandering

- Safe path
- Interest along the way
- Indoor-outdoor areas (non-poisonous plants)
- Historical meaning – art, quilts
- Dementia friendly elements – soft toys, baby clothes, activity boards

Clothing



- Adapted fashion
- Sensory change – neuropathy – arthritis
 - Easy closures - velcro
- Dementia – fewer choices, matching themes, comfort, seasonal
- Disabilities – seams, ease of dressing

Clothing

- Non-skid soles, washable shoes
- Suspenders or elastic waist vs. belt
- Tube socks without heels
- Camisoles or vest instead of bra
- Wrap-around skirt
- T-shirt or slip-on blouse
- Avoid layers, back closure, one-piece

Sleeping

- Lighting (no distortion)
- Temperature
- Distraction
- Comfortable bedding

Green Materials Hierarchy for Health Care

1. Do not use materials that contribute to the formation of persistent organic pollutants
2. Do not use materials that contain or emit highly hazardous chemicals
3. Use sustainability sourced bio-based or recycled and recyclable materials
4. Do not use materials manufactured with highly hazardous chemicals

Rossi and Lent, 2006

Sources

- http://www.healthybuilding.net/healthcare/HCWH-CHD-Designing_the_21st_Century_Hospital.pdf
- www.gghc.org
- <http://www.pharosproject.net/>