Optimal Healing Environments

Michael L. Knecht
Healing Environment Definition

The healing environment is a physical setting and supportive culture that nurtures the physical, intellectual, social and spiritual well being of patients, families, and staff, and helps them to cope with the stress of illness and hospitalization.
Feelings and Biochemistry

In recent years...we have learned that feelings are inseparable from biochemistry. Our thoughts influence our physiology. What we perceive, think, and how well we cope are all set in motion by messages from the brain to the rest of the body. One could say that our brains are writing a prescription for our bodies every minute of every day.”

Jain Malkin

Evidence-Based Design
The Stress Factor
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• Invasion of privacy
“Now I know why they call it the ICU.”
The Stress Factor

- Invasion of privacy
- Loss of control
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- Feelings of helplessness
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The Stress Factor

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- Separation from family/friends
- Uncertainty about care processes
- Uncontrollable noise and interruptions
- Concern about medical errors and cost of care
Physical Response to Stress

- Increased muscle tension
- Increased blood pressure and respiration
- Lowered pain threshold
- Depression
- Insomnia
- Delayed wound healing
- Impact on the immune system
Healing Healthcare Institution

“Curing is scientific, technological, and focused on patients as bodies. Healing is spiritual, experimental, and focused on patients as people. Curing is high tech. Healing is high touch. A healing healthcare institution integrates both dimensions in an overall patient experience.”

Leland Kaiser, PhD
Healthcare futurists and President of Kaiser & Associates
Healing Environment Research

Evidence-Based Design
• Environmental Psychology
• Psychoneuroimmunology
Room With a View

- In a 1994 study researcher Roger Ulrich examined the impact that patient assignment to a room with a window view of a natural setting had on clinical outcomes.

- Ulrich found that patients with a natural view had:
  - shorter postoperative hospital stays
  - fewer negative evaluation comments from nurses
  - fewer moderate and strong analgesic doses
  - lower scores for minor post surgical complications
Recovery Room Patients

In a Swedish study hospital patients in recovery rooms were given different wall views.
• One third of the patients viewed abstract art
One third viewed pictures of landscapes
• One third viewed blank walls
In a Swedish study hospital patients in recovery rooms were given different wall views.

- One third of the patients viewed abstract art
- One third viewed landscape paintings
- A final third viewed blank walls

The study found that the patients who had the view of nature recovered in less time.
Shorter Lengths of Stay

Psychiatric patients with severe and refractory depression experienced significantly lower lengths of stay when placed in bright and sunny rooms.

- 16.9 days in bright and sunny rooms
- 19.5 days in dimly lit and dull rooms
Myocardial Infarction

Myocardial infarction patients in a cardiac intensive care unit stayed a shorter time in sunny vs. dull rooms. Additionally, mortality rates were consistently higher in dull rooms vs. sunny rooms.

Journal of the Royal Society of Medicine
1998 (University of Alberta)
Coronary Bypass

Male coronary bypass patients who received greater social support used less pain medication, were discharged from the surgical intensive care unit sooner, and spent fewer days in the hospital.

J. K. Kiecolt-Glaser
American Psychologist, 1988
Traditional Design

Healing Environment
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- Inflexible schedules and regulations

Healing Environment
- Patients are empowered; have control, options & choice
Traditional Design
- Inflexible schedules and regulations
- Reliance on others to direct care

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- Active patient & family involvement
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- Restricted access to outside

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- Focus on wellness & education
- Access to nature; gardens, water elements, natural light in patient area
Patient Unit of the Future

• Private universal rooms
• Address and front door that is welcoming
• Ample space for families
• Pull out beds in rooms for overnight stay
• In room storage for patients and families
• Desks with computers and internet connection
• Access to healthcare information
• Medications, supplies, and equipment with 10 feet of patient
• In room therapy areas
Patient Unit of the Future

• Art and music meaningful to the patient
• Comfortable furniture- Couches, tables and residential lighting
• Use of glass to link interior and exterior architecture
• Beds facing garden-like environment
• Horticultural therapy
• Family dining spaces
• Laundry services
• Play and rest areas for siblings, children and friends
• Structural spaces that respect human proportion & scale
“Healing Setting”

When participants are lead through a meditation exercise and asked to draw their optimum “healing setting”:

- 75% drew outdoor spaces
- 25% drew interior settings that contain outdoor elements

- Anita Olds, PhD.
  
  Director of Child Care Design Institute in Boston, MA
Cost Savings

Architect Derek Parker used a 300 bed hospital with a 66% occupancy (198 beds) and 1991 industry figures to calculate the potential saving of introducing a healing environment.

Parker estimated savings of $118.00 per patient day, or approximately $8.5M per year.
Elements of a Healing Environment
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• Options and choices
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- Access to social support
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- Connection to nature
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- Positive distractions
Elements of a Healing Environment

- Options and choices
- Access to social support
- Connection to nature
- Positive distractions
- Elimination of environmental stress
Elements of a Healthy Community

- Options and choices
- Access to social support
- Connection to nature
- Positive distractions
- Elimination of environmental stress