

DESIGNING A HEALING ENVIRONMENT BY REMOVING STRESS BARRIERS

FAST FACTS

- According to the American Psychological Association (APA), 71% of Americans say that they are at their lowest point mentally and emotionally.
- Additionally, the APA states that 1 in 4 health care workers have been seeking emotional support since the start of the pandemic.
- One third of all Americans have clinical anxiety or depression, according to the United States Census Bureau.
- Stress has a profound influence on health and is linked to coronary vascular disease, obesity, diabetes, and autoimmune disorders (Djuric et al., 2010).
- Stress is also a key link to social determinants to health (Prather, 2020).

WHAT IS THE ENVIRONMENT?

The word environment comes from the French word “enviro” which means encircling. We can think about the environment as the surroundings, conditions, circumstances or objects in and around which a person, animal, or plant lives and operates.

Four types of environments:

The environment includes all things around us. Starting with ourselves at the inner core as sensory beings, the environment includes all aspects of our senses—sounds, sights, touch, taste, and smell. To achieve and practice whole-person health, a person will need to be fully supported by the environment, which should be optimized to reduce or minimize stress.

1. Personal Environment

Your personal environment is the space in which you live and work from dusk to dawn.

2. Collaborative/Relational Environment

The spaces where you commune with others to form spiritual, educational, and casual connections. This environment creates supportive spaces to allow people to come together more easily and gather. Humans are social beings that rely on cooperation and engagement to survive. Think ahead before your next meeting and set the stage to create the interaction you want by adjusting your environment.

3. Human-made Environment

Built environments to support human needs for all to inhabit. We spend 90% of our time indoors, and so many of our daily

activities occur within fabricated environments. Think about your daily activities and how you move from one to the next, and assess if you have the tools you need to easily move through these areas as a seamless transition throughout your day.

4. Natural Environment

All things occurring naturally in the environment, both living and non-living. Nature is the origin of all environments; the rhythm of nature creates an environment of continuous evolution. This is evident by the effect circadian rhythms have on important functions in human bodies, such as body temperature, hormonal changes, and eating habits, according to the National Institute of Health. As living creatures, we need to tap into that continuous evolution to open us up to the greatest possibilities in our own growth. Think through how you can bring nature into your environment at all stages to keep a finger on the rhythms of nature.

WHAT IS STRESS?

Stress is the feeling of being overwhelmed. Scientists do not have a universal definition, but when we experience stress, it blocks our body’s ability to heal and causes us to experience physical and cognitive symptom.

A few signs of stress:

- fear
- aggression
- anger
- anxiety
- depression
- irritability
- frustration
- sadness

Physical symptoms we may experience:

- aches and pains
- headaches
- indigestion
- heart palpitation
- nausea
- sweating
- shallow breathing

Exploring Stress as an Environmental Barrier

Three triggers in the environment that can bring about stress that may impact health:

1. **Sensory triggers:** Visual, auditory triggers that can affect one of the five senses.

Example:

For some, the sound of a slamming door could trigger a stress response.

How to minimize this trigger:

Focus on engaging your environment - work methodically through each sense and ensure you are supporting the behavior and mood you are trying to emulate, such as adding a soft closure on a door to create a healthier space.

2. **Ideological triggers:** Adaptive responses, personal beliefs, or ideologies that become triggered due to something in the environment.

Example:

Hoarding or surrounding oneself with familiar objects can sometimes be used to create a sense of control or comfort.

How to minimize this trigger:

Identify one primary positive object to use when comfort is needed. Additionally, gradually create small decluttering habits to ensure that the changes are adopted and maintained.

3. **Sensory triggers:** Physical/actual environment causing unhealthy outcomes that generate stress.

Example:

The COVID-19 pandemic is a great example of how our physical environment, both indoors and outdoors, can be a source of great stress on our minds and bodies.

How to minimize this trigger:

Create access and presence of nature. When designing a space, ensure that there is nature visible in multiple key areas of the environment. This can be done by bringing plants into an indoor space, creating visual opportunities to view nature through a window, or adding pictures of nature.

When we design an environment that support the person, it will minimize the physical and physiological influences of stress.

Applied to Practice: Insights for a Health Care Practitioner as a Tool for Practice

Relationships and Communication

Communication

As practitioners, we must evaluate communication needs from each person's perspective: staff, patient, caregiver. Regardless of who you're communicating with, open and honest communication is critical for the creation of safe spaces. When intending to achieve behavioral change or engagement from a patient or colleague, it is best to remove all barriers and allow for communication to happen without a hierarchy or command in the conversation. Begin by sitting eye to eye to create a feeling of equality and signal that they are heard and supported. It is vital to have an environment that supports easily learning from others at the same level, as well as having them try out behavioral changes in a way that is safe and supported.

Relationships

Relationship building begins with trust and feeling safe. In health care practice, shifting from communicating with the patient to examining their needs to be seamless. The environment must provide the ability to shift between both of those situations easily, while also providing personal dignity and empowerment for that patient and family member to shift between those two activities. Anticipate those interactions and the steps that need to be taken so both you and your patient feel comfortable and maintain their dignity.

Sensory Influences

Air Quality

Health care workers have the [highest percentages of asthma](#) among major industry groups because of the intense cleaning products used. Now, there are products available that allow for people to clean and keep the air as healthy as possible without the use of antiquated harsh chemicals, which can be an environmental stress trigger for many patients, loved ones, or providers. Anticipate those interactions and the steps that need to be taken so both you and your patient feel comfortable and maintain their dignity.

Sound

While sound and decibel levels have been a primary concern in health care environments, it has been demonstrated through evidence that it is not necessarily the volume that triggers stress—it is the fluctuation of sounds which are the most disruptive to sleep. Noise is a stressor for most individuals, specifically disturbing noises, such as intrusive conversations or equipment alarms (Hagerman et al, 2005; Novaes, Aronovich, Ferraz, & Knobel, 1997; Topf & Thompson, 2001). Create an environment that smooths out those peaks of abrupt sounds to ensure optimal support. This stressor can also cause the feeling of being unsafe for many patients. It's important to ensure conversations can stay private. If patients can hear someone else's conversation about protected medical information, they may believe their own information is unsafe or shared with others.

Ergonomics

Ergonomics, while important, are a part of a larger conversation around the importance of universal access. This includes universal support of all people at all levels to easily navigate the environment, such as providing door openings large enough for wheelchairs, tabletops at various height levels, and gender-neutral bathrooms so all people feel welcome.

Temperature

Air temperature is important, but more important is the amount of fresh air in all rooms. This is especially vital due to COVID-19. Create environments with increased air circulation that keeps people awake and engaged.

Surrounding Aesthetics

The ability to calm the mind and body is another key component of the internal environment. This could also be explained as the absence of stress. External factors can suggest or help to promote a greater sense of calm through the use of light, color, and sounds (Rashid and Zimring, 2008).

Light levels can help reduce stress as well. Having a variety of lights that are at ground level to above one's head will help to further define the space and soften the harshness that is found in point-lighted environments. Light levels and light wavelength can increase or decrease stress, strain the eyes, and can also increase frequency of errors in high concentration tasks such as medication dispensing (Buchanan, Barker, Gibson, Jiang & Pearson, 1991).

Sense of Personal Control

Giving a patient more control over their environment can help reduce stress and promote healing.

A personal territory creates a sense of security for the patient and a stronger identity of self (Altman, 1970). This ability to create a sense of personal space can improve the transition from hospital to home. It has been shown to improve healthful behaviors and outcomes while in the hospital (Edney & Uhlig, 1977). A clear

sense of self and identity is a key component of internal domain needed to create personal wholeness. When a patient enters the hospital, their identity may feel lost, especially because a patient may be referred to only by their diagnosis. The loss of identity can impact one's ability to heal through their personal loss of control. Control over your own environment aids in one's ability to reduce stress, especially within the hospital environment. For example, the ability to control the ambient environment of lighting and room temperature has been shown to reduce stress (G.W. Evans, 1982). Conversely, when a person is not able to control the environment, it can increase stress (G.W. Evans & McCoy, 1998).

A Tie to Home or Familiar Elements

Familiar Elements

MacAllister et al. (2016) explored the role the environment played in healing and found that the home or familiar elements within the environment provided a supportive environment for them to heal. This included maintaining the rhythm of their natural daily activities, including watching a television program, enjoying art and nature, reading the paper, etc. Objects and spatial elements can provide support and comfort. Having a chair that reminds them of a loving grandparent will reduce stress.

Gratitude

While care is delivered in an environment by multiple people, it is important to recognize the individual contributions made to support the patient. Ensure that everyone is supported and celebrated for the part they played in patient care.

Restoration and Nature

It is vital to provide a low-stimulation space that is free from stress triggers to allow one's body to restore and heal. The view can be a source of agitation or relaxation. Views of nature (either real or images) and access to natural daylight have been well researched in their impact in health-care environments. As Ulrich identified in his early work, patients in rooms with views to nature recovered from surgery more quickly and also required less pain medication than those in rooms without a view (Ulrich, 1984). Work environments have shown similar impacts on job satisfaction and health issues for staff that had access to natural views (Kaplan, 1993). Integrating nature in the health-care environment has been shown to reduce stress (Devlin & Arneill, 2003). For a room to be a healing space it needs to support lower stress levels, and views to nature can assist in achieving that goal. While all health-care spaces cannot have an ideal view, strategically deploying natural views in spaces that are stressful can lower stress levels.

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