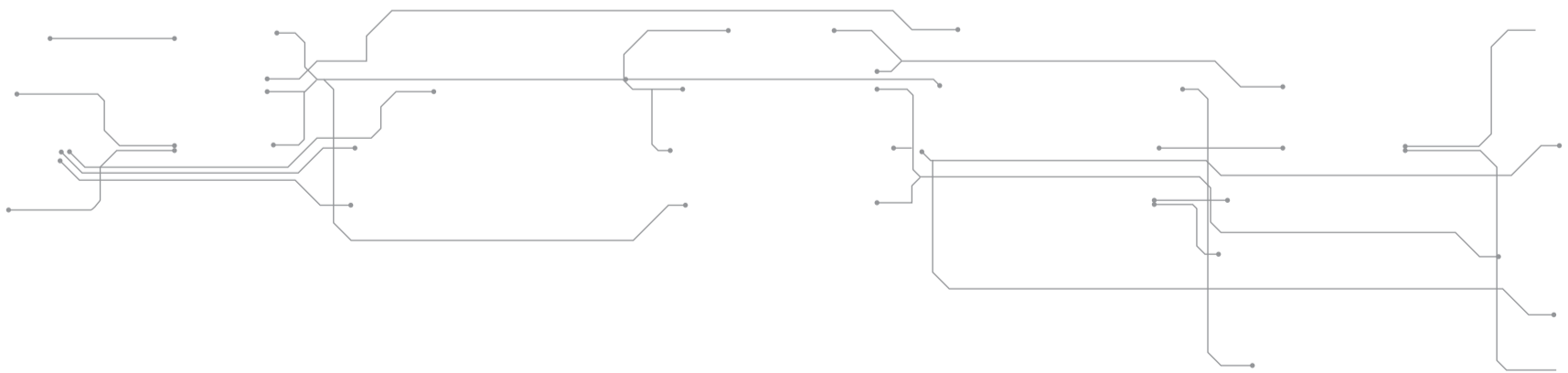


CHAPTER

2

THEORETICAL BACKGROUND

This chapter deals with the history of healing environments and the current change of focus in healthcare, which brings to attention the needs and well-being of patients. It is suggested that an interior environment has an effect on patients. This is guided by the introduction of optimal healing environments supported by evidence-based theories. This chapter also identifies the tangible elements of healing environments and their intangible effects.



Jain Malkin, a leader in the field of healing environments, stated (Kreitzer et al., 2015):

“There is no doubt that the quality of an environment can enhance or retard healing.”

2 . 1 THE HISTORY OF HEALING ENVIRONMENTS

This approach to healing dates back thousands of years, to a time when Greek temples were uniquely designed to immerse patients in nature, music and art – all of which were known to restore harmony and promote healing (Kreitzer et al., 2015). In the 19th century, Florence Nightingale spoke of the importance of natural light, fresh air, touch, diet, noise control, and spirituality as a recommended environment for the healing process to take place in. She asserted that healthcare providers should, *“...put the patient in the best possible condition so that nature can act and healing occur”* (Florence Nightingale, 1860, cited in Kreitzer et al., 2015).

Florence Nightingale recognised the importance of the internal environment, she declared:

“People say the effect is only on the mind. It is no such thing. The effect is on the body, too. Little as we know about the way in which we are affected by form, by colour, and light, we do know this, that they have an actual physical effect. Variety of form and brilliancy of colour in the objects presented to patients, are actual means of recovery.” (Florence Nightingale, 1860, cited in history, 2016)

She also stated (Florence Nightingale, 1860, cited in Kreitzer et al., 2015),

“To heal, one must be sound in body, mind, and spirit.”

Healing is an ancient concept that is now being revitalised through an improved understanding in the light of modern science (Samueli Institute, 2011, p.7).

2 . 2 HEALTHCARE AWAKENING

Healthcare is evolving at a rapid pace: change is occurring on almost every front as healthcare organisations, patients, families and remunerators all seek enhanced experiences, safety, outcomes and satisfaction (Steelcase Health, 2015, p.5).

As a result, the attention of healthcare providers has been redirected to the growing body of knowledge that demonstrates the benefits of a healing environment (Kreitzer et al., 2015). This new focus moves beyond the aspect of only curing illness to include patient wellness and well-being.

Healthcare providers, environmental psychologists and interior designers share a growing realisation of the significance of the environment to the healing process. This raises questions regarding so-called traditional, institutionally designed healthcare spaces, which express little empathy for the wellness of patients, as long as the level of care is superb (Ulrich, 1992; Devlin & Arneill, 2003, p.665).

The difference between the curing and the healing processes. Not only to focus on the current curing aspects but to consider the important healing aspect as well, defined as the relief of the symptoms of a disease or condition, (Merriam Webster, 2015, cited in Samueli Institute, 2011, p.1) but on healing itself. Healing is differentiated from curing by the definition being; the process of making or becoming sound or healthy again, in both mind, body and spirit (Samueli Institute, 2011, p.1). Sharing this vision, is the Samueli Institute (2001, p.1), with their mission being *“...to transform health care through the scientific exploration of wellness and whole-person healing.”* (Samueli Institute, 2011, p.1)

2 . 3 HEALTHCARE’S SHIFT TO A HUMAN-CENTRED APPROACH

The perspective of the new healthcare design approach is more human-centred. It perceives the human body as being central to an experience - whether this be a spatial- or sensory experience or medical treatment. Furthermore, an increased awareness of the importance of ergonomics in these environments has led to it becoming an integral part in contemporary design strategies.

Schweitzer, Gilpin and Frampton stated that *“the ‘ambience’ of a space has an effect on people using it”* (2004, p.71). The design of healthcare environments has begun to include aesthetic enhancements in an attempt to reduce stress and anxiety; improve patient satisfaction; and promote health and healing.

2 . 4 EVIDENCE-BASED THEORIES

Research has demonstrated the benefits of healing environments (Kreitzer et al., 2015). The Journal article by Dijkstra, K, Pieterse, M and Pruyn, A compiled a list of 30 papers of authors that produced evidence-based theory, that revealed certain changes in the design of healthcare environments had positive effects on patients such as decrease in stress, shorter hospitalization and less pain medication (Dijkstra et al., 2006).

By identifying the elements and principles that impact the healing environment, evidence-based research can be applied to strengthen the design implementation. Although the application of evidence-based theories to design has already brought about changes within healthcare environments demonstrated in the papers mentioned above, this is not yet implemented within the healthcare sector of South Africa.

Healthcare environments are currently designed to accommodate only the treatment of illness. This approach leads to the numbing of one’s senses and the development of negative associations with these institutions. But researchers have been finding that changes and additions to the physical- and social environment, which keep the patient’s well-being in mind, can positively influence treatment outcomes (Davidson & Bar-Yam, n.d. ; Ulrich, 1984). Likewise, healthcare professionals are observing more and more that *“sensitive design can enhance recovery and shorten hospital stays”* (Lemprecht, 1996, p.123, cited in Devlin & Arneill, 2003, p.665).

2 . 5 IDENTIFYING INTANGIBLE AND TANGIBLE ELEMENTS

In order to bring about change in the design of healthcare environments, the elements of the built and natural environment that inherently promote healing and health need to be identified. Applying the knowledge thus gained will in turn *“provide a positive context”* in the creation of optimal healing environments (Schweitzer et al., 2004, p.71).

Certain elements within design may either help or hinder healing. Environments impact health by influencing the behaviour and actions of, as well as the interactions between, patients, their families and medical staff. This is illustrated in table 2.1 below.

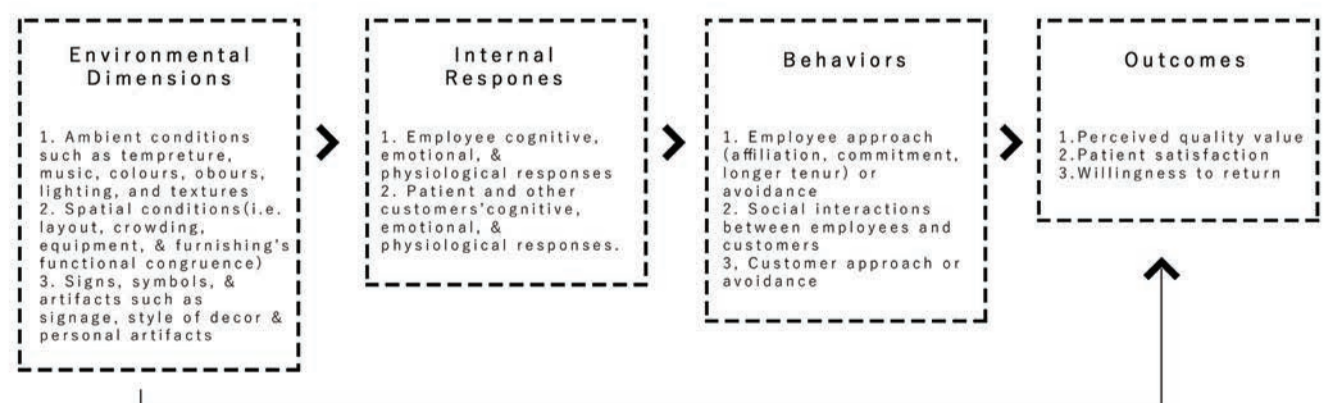


Diagram 2.1 Consumer and employee responses to Environmental influences (Fottler et al., 2000:96)

Thus, four intangible qualities that are affected by environments are (Schweitzer et al., 2004, p.73):

- Wholeness and energy
- Healing relationships
- Health promotion
- Collaborative treatment.

The elements of the physical environment that have been researched and considered in healing design systems are identified as (Schweitzer et al., 2004, p.77):

- Personal space
- The sensory environment
- Environmental complexity
- Fresh air and ventilation
- Light (natural and artificial)
- Colour
- Viewing nature
- Experiencing nature
- Arts, aesthetics, and entertainment
- Positive distractions - humour and entertainment.

These intangible qualities and elements are further studied in Chapter 7.

The Samueli Institute collaborated with multiple partners in developing a system framework to assess healing practices in healthcare settings. This was done by identifying elements of both the internal and external environments. The table (in Infographic 2) highlights the ability of external environments and typology to directly affect internal environments (Samueli Institute, 2011, p.14). Design elements (right-hand column) can enhance the creation of healing spaces; encourage the practice of healthy lifestyles and create spaces that allow certain experiences and relationships to take place (middle columns). This then results in intangible, internal enhancement of mind, body, spirit and energy (left-hand column). Thus, tangible design can have intangible effects through spatial literacy.

This is part of the Samueli Institute's mission, which is *"to transform healthcare through the scientific exploration of wellness and whole-person healing"* (Samueli Institute, 2011, p.1). Their goal is to make wellness and healing as important as curing and to ultimately transform healthcare worldwide (Samueli Institute, 2011, p.18).

The field of interior design has the opportunity to make a meaningful contribution to the healthcare environment of South Africa. It is clear that such a contribution to the current environment can have a significant positive impact on the health outcomes of patients (Schweitzer et al., 2004, p.80).

2 . 6 OPTIMAL HEALING ENVIRONMENTS (OHE)

The concept of OHE was brought back to light in 2011 by the Samueli Institute; their aim being to make healing as important as curing (Samueli Institute, 2011). According to Fottler et al. (2000), an excellent healing environment reinforces excellent clinical quality, but an inferior environment can detract from fine clinical care (Fottler et al., 2000).

After a decade of experience in creating and managing optimal healing environments (OHEs) with a scientifically-based, sensitive and compassionate approach to healing for cancer patients and their loved ones, Jeremy R Geffen wrote a journal article, titled *Creating Optimal Healing Environments for Patients with Cancer and Their Families*. He stated that optimal cancer care necessitated a balance between the required scientific knowledge; statistical analysis and rational thought on the one hand and wisdom, kindness, compassion, and love on the other hand. He further stressed that finding and maintaining this balance is one of the most important challenges inherent in creating OHEs for cancer care (Geffen, 2004, p.93).

2 . 7 THE IMPORTANCE OF THE SERVICE SETTING IN HEALTHCARE ENVIRONMENTS

The service setting is important to health service executives for several reasons:

- Firstly, it provides an opportunity to meet or exceed customer expectations in the overall healthcare experience.
- Secondly, it can create or enhance the moods of both patients and medical staff.
- Thirdly, the environment could serve as a negative background for some service experiences, in contrast the setting may form part of the service itself and help create a more pleasant and memorable experience.
- Lastly, the setting may contribute to the creation of a "healing environment."

Taken as a whole, the quality of the healthcare setting can positively influence patient satisfaction and not only ease willingness to return but also increase the desire to recommend the experience to others (Fottler et al., 2000, p.93).

A Swedish architect designed a unique healing centre in Sweden. He was convinced that the experience of architecture could be an important part of the healing process and went on to state that for:

"...patients who are out of balance and whose life energies are weakened by illness, the facility can provide a sense of living order. That facility should provide evidence of thoughtful concern for human needs and should be responsive, and alive. A place where the healing community is made visible"
(Fottler et al., 2000, p.95).

This reveals once again the great impact of designed environments on the curing and healing processes. It also shows that both these processes are of equal importance. It is therefore vital to create a healing to curing continuum within healthcare environments, which supports and improves both medical procedures and patient well-being.

2 . 8 THE RETURN ON INVESTMENT OF OPTIMAL HEALING ENVIRONMENTS

In 2002, as few as 20% of all hospitals included healing environmental factors in their construction plans (Bilchik, 2002). However, ideal evidence-based design supports therapeutic environments by causing a decrease in healthcare costs. For example, Derek Parker (1992) estimated cost savings from better-built healing environments to be in the region of R13 488 294.00 (\$10 million) per year for a 300-bed hospital (i.e., with shorter stays, drug savings, and savings on labour cost). Parker's estimate of this annual financial impact could be upwards of R220—R270 million (\$15m—\$20m) in today's currency terms (Coile, 2002). The effect of healthcare environments was further studied in 1998 by researchers at the Johns Hopkins University. They prepared a comprehensive review of 84 studies relating to the impact of the healthcare environment on patient outcomes. The results indicated that patients that were happier with their healthcare environment used fewer strong medications; were easier to care for; returned to their homes sooner; and recommended the hospital to others (Larson & Kreitzer, 2004, p.5).

This proves that healing environments mean happier, healthier patients, which in turn leads to more recommendations; increased loyalty; and a greater return on investment. A concrete reason is thus provided as to why healthcare facilities are starting to pay attention to their healthcare environments and adopting a more patient-focused approach.



CONCLUSION

This chapter confirms, through evidence-based theories, that the identified tangible design elements (studied further in Chapter 7) have intangible physiological and psychological effects. This proof substantiates the claim that optimal healing environments create a healing to curing continuum – leading to happier, healthier patients and a greater return on investment.

