#### **ORIGINAL ARTICLE**

# **Optimal Healing Environments**

优化愈合环境

Entornos de curación óptimos

Bonnie R. Sakallaris, PhD, RN, *United States*; Lorissa MacAllister, BSW, AIA, NCARB, LEED, EDAC, *United States*; Megan Voss, DNP, RN, *United States*; Katherine Smith, MPH, *United States*; Wayne B Jonas, MD, *United States* 

## **Author Affiliations**

Samueli Institute, Alexandria, Virginia (Drs Sakallaris and Jonas, Ms MacAllister and Ms Smith); University of Minnesota Pediatric Blood and Marrow Transplantation Center, Minneapolis (Ms Voss).

> Correspondence Bonnie R. Sakallaris, PhD, RN BSakallaris@SIIB.org

#### Citation Global Adv Health Med. 2015;4(3):40-45. DOI: 10.7453/gahmj.2015.043

# Kev Words

Optimal healing environments, OHE, salutogenesis, patient-centered care, whole-person, whole-systems

#### Disclosures

The authors completed the ICMJE Form for Disclosure of Potential Conflicts of Interest, and Drs Sakallaris and Jonas, Ms MacAllister, and Ms Smith disclosed receipt of the grant described in the "Acknowledgments" section of the article. Ms Voss had no potential conflicts to disclose.

## **INTRODUCTION**

There is universal agreement that a healing environment is desirable for patients and for providers. What constitutes a healing environment is open to discussion and depends on individual perspectives. The Samueli Institute coined the term Optimal Healing Environment (OHE) in 2004 to describe a healthcare system that is designed to stimulate and support the inherent healing capacity of patients, families, and their care providers. An OHE consists of people in relationships, their health-creating behaviors, and the surrounding physical environment.1 The OHE framework (Figure) is a conceptual framework applicable to health professionals; patients, their families, and significant others; healthcare organizations; and healthcare systems. As an organizing framework, the 8 concepts contained in the 4 environments of the OHE framework provide direction to patients, families, care providers, and organizations to optimize the potential for healing. Each of the environments and constructs of the OHE framework work synergistically to support and stimulate health creation and healing (a concept known as salutogenesis).

Samueli Institute defines healing as "a holistic, transformative process of repair and recovery in mind, body, and spirit resulting in positive change, finding meaning, and movement towards self-realization of wholeness, regardless of the presence or absence of disease." The OHE framework was designed to elevate healing and health creation to be as important as disease identification and cure. If strategically implemented, the tenets of the OHE framework serve to hardwire the commitment to person-centric practice and engagement of innate healing abilities into the culture of the organization. Several assumptions are foundational to the OHE framework. First, healing and cure are distinct but com-

plementary processes. Cure is defined as the elimination of disease or disease symptoms in contrast to healing that can occur when cure is not possible. Although healing and cure can occur in isolation, integration of healing and curing processes is essential for the fulfillment of the human potential for healing. Second, humans are complex, multidimensional beings, and cohesion of body, mind, and spirit is a hallmark of healing. Third, individuals are influenced by and influence each other and their physical environments. Finally, attending to each of the constructs in the OHE framework ensures a holistic, person-centered approach to health creation and healing and leads to professional fulfillment and joy in work.

#### **HISTORY**

A decade ago, more than 50 of the nation's leading healers and innovators came together to envision an idealized healing environment. The healers, nurses, physicians, mind-body practitioners, spiritual care experts, and integrative care practitioners developed and refined the concept of an OHE and came to consensus on 7 recommended components outlined in Table 1.2

The resultant 7-construct OHE framework was tested in multiple healthcare settings and clinical situations. Eight innovative organizations were evaluated against the OHE framework, investigating the rationale for creating an OHE, the anticipated outcomes as a result of the innovations, and the resultant improvements. In each case, authentic and transformational leadership was key to creating a culture of healing. Each of the 8 organizations took a unique approach, but all had executive champions committed to a mission of healing.<sup>3</sup> The case studies influenced the institute to reorganize the framework into four environments and eight constructs (Figure).



Figure Optimal Healing Environments framework.

#### Table 1 Components of an Optimal Healing Environment<sup>2</sup>

- 1. Conscious development of intention, awareness, expectation and belief in healing;
- Transformative self-care practices that facilitate personal cohesion and the experience of wholeness and well-being;
- Techniques that foster healing presence based on compassion, love, and awareness of interconnectivity;
- 4. Development of listening and communication skills that foster trust and a bond between practitioner and patient;
- Instruction and practice in health promotion behaviors that change lifestyle to support self-healing and the development of social support:
- Responsible application of integrative medicine via collaborative practice supportive of healing processes; and
- 7. The physical space in which healing is practiced.

In 2009, nursing leaders convened to examine the OHE framework's relevance to nursing practice, and a follow-up symposium was held in 2011 to highlight advances and innovations in creating OHEs. Each of these symposia informed the tenets of the OHE framework and guided continued testing and refinement of the framework. Researchers employed concept analysis methodology to refine and operationalize construct definitions (Table 2) and assess tool development.

What follows is the most current description of an OHE with definitions and exemplars.

## THE INTERNAL ENVIRONMENT

An OHE begins with the individual and his or her internal environment. The internal environment consists of our most private thoughts, hopes, and expectations and our emotions, intentions, and beliefs. The internal environment acknowledges the individual as a complex, multidimensional being, a whole person, mind-body-spirit. Understanding each dimension and the interplay between mind, body, and spirit are crucial to health creation and healing. The internal environment is vital to healing because our thoughts, emotions, and spirit have a direct effect on our bodies, our choices, and our relationships. What does it take to optimally prepare an individual's inner environment to heal or receive healing? Healing is optimized when the inner environment is grounded in intentions to heal and to be healed. Healing is fostered by inner beliefs and expectations that healing and wellness can and will occur. Individual readiness for healing is also optimized when the power of the mind-body-spirit connection is strengthened and utilized to promote wholeness and optimize performance. The constructs of the internal environment are healing intention and personal wholeness.

Healing intention is a conscious and benevolent mental activity (thought) purposefully directed toward health, wellbeing, healing, or highest good for one's self or another. Healing intentions go on inside an individual as a prelude to interactions<sup>4</sup> and can be expressed internally or manifested externally by words, behav-

iors, and/or actions. Healing intentions can be formed by providers, patients, and family members or can occur over distance and between strangers.<sup>5</sup> They can be directed toward one's self or others. Jean Watson, PhD, RN, AHN-BC, FAAN, advocated for the integration of intentionality and caring consciousness to access the universal life-spirit energy into the caring-healing process. This process requires the individual to pause and actively cultivate intentionality and authentic caring resulting in an increased sensitivity to what is most important in our lives and work.<sup>6</sup>

Intentions can be focused for good or for evil; healing intention is directed toward healing or the highest good.

Intentionality requires self-awareness and especially insight into one's own suffering and full acceptance of one's self.<sup>7</sup> It is important that care providers continuously scrutinize their motivations and intentions for engaging in healthcare and reset their intentions through mindfulness practices and development of a deeper understanding of their spiritual beliefs.

Patients and families come to healthcare providers with hopes, expectations, and beliefs. Healing intention can be manifest in care through holistic assessment of these hopes and expectations for healing and incorporating those hopes into the plan of care. Healers can communicate their healing intentions to patients through caring actions, healing energy, communication of unconditional love, confidence, and belief in healing. Patients demonstrate healing intention through sharing their hopes and beliefs and demonstrating motivation to change.<sup>4</sup> A common form of healing intention is prayer.

Personal wholeness is the congruence of body, mind, and spirit experienced through relationship with self and others, resulting in completeness and wellbeing. The Personal wholeness is both a defining attribute and a consequence of healing. As a construct of the internal environment, personal wholeness represents the opportunity to prepare healers and healees for healing through practices that foster cohesion of body, mind, and spirit. InterSpiritual spiritual guide Janet Quinn, PhD, RN, FAAN, states that no matter where the proposed intervention enters mind-body-spirit, it impacts all dimensions and the whole is changed. To enhance innate healing abilities, the interactions between mind, body, and spirit should be strategically and therapeutically managed.

Practices focused on engaging the mind-body-spirit to improve health and promote healing include interventions that evoke the relaxation response, such as guided imagery and meditation. Mindfulness, especially, can reduce stress and increase personal wholeness. There is a growing body of literature supporting mindfulness-based stress reduction as an intervention that can reduce clinician burnout and have a positive effect on stress-related disease processes.<sup>9-11</sup> The emerging science of placebo and nocebo supports the assumptions and principles of the internal environment.<sup>1</sup>

#### Table 2 OHE Constructs and Definitions

#### INTERNAL ENVIRONMENT

Healing Intention A conscious and benevolent mental activity (thought) purposefully directed toward health, wellbeing, healing, or highest good for one's self or another. Healing intention is manifest in the care setting in various ways, including setting intentions, prayer, and assessing patient hopes and expectations for healing and incorporating those hopes into the plan of care.

Personal Wholeness The congruence of mind, body, and spirit, experienced through relationship with self and others, resulting in completeness and wellbeing. Mind-body-spirit congruence is enhanced through mind-body practices and interventions and attending to

# INTERPERSONAL ENVIRONMENT

Healing Relationships

Healing relationships are the connections between persons who hold an intention for healing to occur. The attributes that distinguish a healing relationship from other positive relationships are that the connection is intentional and covenantal in nature and the connection involves positive emotional engagement and provides mutual benefit.

Healing

Healing organizations are driven by a mission to promote healing and health creation. They provide appropriate structures, Organizations processes, and resources to stimulate and support healing through intention, relationships, person-centered strategic planning and shared decision-making. Healing organizations optimize the potential for wellbeing of their employees and the people they serve.

## BEHAVIORAL ENVIRONMENT

Healthy Lifestyles A healthy lifestyle involves making choices in diet, activity, relaxation, stress reduction and sleep that create and maintain health. A healthy lifestyle is a way of life that optimizes potential for maximal healthy life years.

Integrative Care

Integrative care is team-based care that is person-focused and family-centered and incorporates multidisciplinary care providers at their highest skill level. Integrative care blends the best of complementary therapies with conventional medicine in order to enhance self-care skills and ameliorate suffering.

#### EXTERNAL ENVIRONMENT

Spaces

Healing spaces incorporate evidence-based design and healing principles to optimize and improve the quality of care, outcomes, and experiences of patients and staff. Healing spaces use physical design to enhance the individual's innate

Ecological Sustainability Organizations and individuals can foster ecological sustainability by reducing their footprint and supporting the health of the planet. The chemical impact and energy use of their operations is considered. Products or practices that are resource-intensive can be replaced with more ecologically friendly, less harmful, and cruelty-free alternatives.

#### THE INTERPERSONAL ENVIRONMENT

Healing occurs in relationship4 and the interpersonal environment deals with relationships on a personal, professional, and organizational level. Healing relationships and healing organizations are operationalized in the interpersonal environment. In 2005, the Samueli Institute gathered a group to understand at a deep level the importance of healing relationships in an OHE. The experts at this symposium explored the key elements of communication, social landscapes, and professional and patient education in healing relationships.12

A healing relationship is the foundation of clinical care and essential for healing to occur. 13 Explorations of healing experienced by patients and practitioners consistently emphasize the relationship between healer and healee. Gauthier<sup>14</sup> identified relationships as facilitators of healing near the end of life.14 Beach and Inui stated that "all illness, care, and healing processes occur in relationship"15(pS3) and according to Quinn, the healing relationship is a factor in the outcomes of both conventional and complementary therapies. 16 The Samueli Institute defines healing relationships as the connections between persons who hold an intention for healing to occur. Healing relationships are distinct from other positive relationships in that the connections between the individuals are covenantal in nature, the connection involves positive emotional engagement and the relationship is mutually beneficial.

Healing relationships develop deliberately and

require skillful communication, emotional self-management, attention to the power gradients inherent in clinical relationships, and the ability to be truly present in the encounter. All of these skills are critical for the most important element in the healing relationship: trust. Trust develops over time and as a result of many acts of kindness, respect, and integrity. The ability to inspire trust requires congruency between personal and public morals or disciplinary ethics.<sup>17</sup> This congruency allows the patient to predict the practitioner's likely moral responses based on their moral character. 18 There are promising programs to develop these skills and combat the problems of compassion fatigue and empathy degradation endemic in our clinical environment. For example, mindfulness training appears to increase clinician resilience and improve their communication skills. 19-23 Specific communication skill-development programs have been shown to be effective in improving clinician-patient relationships and in turn to improve patient outcomes.24-27

Healing relationships also occur outside of the clinical encounter. Social support is critical to health and wellbeing. There is significant evidence of the positive impact of social support from clinicians and from family on behavior change, mortality and morbidity.28-32 Close social relationships such as marriage appear to facilitate better health and decrease mortality.<sup>33-36</sup> An OHE potentiates these relationships and supports social support and family cohesion in times of acute crisis through policies that encourage family presence and adaptive physical environments that maintain social relationships rather than separate the patient from his or her social support system.

Healing organizations are driven by a mission to promote healing and health creation. They provide appropriate structures, processes, and resources to stimulate and support healing through intention, relationships, person-centered strategic planning, and shared decision-making. Healing organizations optimize the potential for the wellbeing of their employees and the people they serve.

Samueli Institute evaluations of organizations against the OHE framework revealed the importance of authentic and transformational leadership to develop a culture of excellence, focus the organization on the mission of healing, and ensure consistency of focus in resource allocation and decision making.37 Healing organizations are relentless in their focus on the people they serve: patients, family, and staff members. Healing organizations incorporate key stakeholders in their decision-making process and push decisions to levels most impacted by those decisions.<sup>38</sup> Healing organizations set expectations at all levels for collaborative teambased care. They provide resources and create structures that facilitate team cohesion and caring behaviors.<sup>39</sup> Healing organizations attend to the health and wellbeing of the employees and affiliated clinical providers.<sup>40</sup>

Cape Coral Hospital in Florida, a member of the Lee Memorial Health System, is an exemplar of a healing organization. In 2013, the leadership team at Cape Coral Hospital used the OHE framework to focus and guide their strategic plan. All strategies and tactics were linked to a construct of the OHE framework. The commitment to creating an OHE led to consistency of purpose, vision, and values that was communicated to staff at all levels and to associated physicians.

The change in the organization's culture was visible to all stakeholders and led to increased physician engagement and loyalty, a 4-point improvement in employee engagement scores, increased community engagement in the hospital and the medical campus, and more positive attention from the Lee Memorial Health System leadership team.

## THE BEHAVIORAL ENVIRONMENT

The behavioral environment is made up of those actions we take on behalf of ourselves or others to create health and promote healing by enhancing our innate ability to heal. An optimal behavioral environment supports the practice of healthy lifestyles and the application of integrative healthcare.

Healthy behaviors enhance wellbeing and prevent, treat, or even cure disease. 41,42 What you eat, how much you move, and your ability to manage stress have profound effects on your health and ability to heal. A healthy lifestyle is one that incorporates adequate amounts and types of exercise, a nutritious and balanced diet, relaxation and stress management, a balance

of work and leisure, sufficient sleep, and creative outlets. An OHE provides education, training, and support for healthy lifestyles, attending to the needs of patients, family members, and staff. Consistent with the principles of healing relationships and organizations, patient participation in the creation and implementation of healthy lifestyle interventions is an effective way to change unhealthy behaviors.<sup>43</sup>

Integrative health coaching (IHC) is a comprehensive approach to promoting healthy behavior change. IHC considers patients holistically, supporting them across the entire behavior journey. 44-46 As a model of educational and clinical innovation aimed at patient empowerment and lifestyle modification, IHC is aligned well with the tenets of an OHE. 46 An OHE encourages clinicians to role model healthy lifestyle behaviors. Clinicians struggle with the same issues as the general population and need social and organizational support to role model healthy behaviors. 47-49

Integrative care is team-based care that is personfocused and family-inclusive and incorporates multidisciplinary care providers at their highest skill level. An OHE provides care that is driven by the person's hopes, expectations, beliefs, cultural norms, and life goals. The motto "Nothing about me without me"50 is the rallying cry of the person-centered care movement. Acknowledging the person as the key decision-maker in his or her care supports appropriate self-care and acknowledges each person's rights and responsibilities to make his or her own decisions and exercises autonomy. Person-centered healthcare systems combine the best in medical diagnosis and treatment with self-care that is educational and ecological. Person-centered healthcare systems balance health creation and disease management; create partnerships between experts and laypersons, generalists and specialists; and tap into the talent of individuals, allowing each to participate to the fullest extent of his or her abilities.

Integrative care blends the best of healing-oriented practices with conventional medicine in order to enhance self-care skills and ameliorate suffering. Integrative health systems (IHS) and integrative medicine (IM) are terms used to describe care that involves the best of both conventional and nonconventional methods to promote health, prevent disease, and relieve symptoms. Integrative care is a fusion of two cultures: conventional allopathic care and nonconventional or alternative care. IHC aims for optimal synthesis of biological, psychological, mind-body, energy, and spiritual therapies addressing each patient's needs and preferences. IHC and IM reflect the use of evidence-based healing practices at different levels of coordination or integration into the total plan of care.

The University of Minnesota Pediatric Blood and Marrow Transplantation Center in Minneapolis is an exemplar IHS. Children from around the world with life-threatening illnesses seek integrative care at the center. A decision was made in 2014 to incorporate integrative therapies into the team-based care from the time

of diagnosis throughout the trajectory of care. An advanced practice nurse clinician with a doctorate of nursing practice in integrative health and healing sees patients and their families after diagnosis in the outpatient clinic and incorporates integrative therapies and healing practices into their overall plan of care.

On the inpatient unit, nurses are educated to apply the principles of integrative nursing. Integrative mursing is a whole-person, whole-systems framework that includes a set of principles that are aligned with the concepts of OHE and at the University of Minnesota is the care delivery model of the entire hospital.<sup>53</sup>

The treatment of the pediatric blood and marrow transplant patient is often so complex that he or she requires the integration of multiple disciplines into the plan of care. One such child, a 4-year-old male with a complicated posttransplant course, suffered physical complications including respiratory failure and severe hemorrhagic cystitis with bladder spasms. He was a beloved brother, son, grandson, nephew, cousin, and friend; there were many symptoms that needed to be addressed beyond the physical. As a multidisciplinary team, palliative care, social work, chaplaincy, and members of the integrative health and wellbeing team came together to support this patient alongside the blood and marrow transplant and critical care nurses and pediatricians.

By placing this child in the center of care, the team was able to coordinate healing practices that addressed his feelings, fear, anxiety, stressors, sadness, and need for comfort. By including family members in these healing practices, relationships were strengthened. The mind-body-spirit healing that occurred within this familial unit was a powerful example of how leveraging a wide range of therapeutic modalities and team members can help to meet the needs of the whole patient.

## THE EXTERNAL ENVIRONMENT

The external environment consists of the physical environment where we work, live, and play and the impact of our presence on the planet as a whole. Healing spaces support healing intention and healing relationships. All of one's daily activities happen in a place that stimulates the occupant either negatively or positively.<sup>54</sup> The intent behind the work of external environment is to create a positive physical environment that cohesively supports the mind, body, and spirit to find peace, rest, and vitality. Healing spaces evoke a sense of cohesion of mind, body, and spirit, support healing intention, and foster healing relationships. Mindfully using our resources to positively impact human and planetary health is central to ecological resilience. This is done through the creation of healing spaces and the appropriate use of the resources of our planet to be ecologically resilient.

A healing space may first be considered or defined by its ambient qualities including light quality, sounds, air quality, and temperature.<sup>55</sup> The physical environment can cause or mitigate stress. Healing spaces evoke feelings of serenity and calm and decrease the stress of a chaotic environment.<sup>56</sup> Further work has been done within the field of evidence-based design research looking at the role the environment has on health-related outcomes.<sup>57</sup> These outcomes include body (injuries, effectiveness, infections, errors, sleep) and mind (satisfaction, privacy) components, as well as some that span both body and mind (stress).

The role of the healing environment is to reverse stress or harm and create a supportive space for healing to occur. Healing environments are not just aesthetically pleasing or pleasant spaces but support the engagement of its occupants internally, interpersonally, and behaviorally. The design research and works of note look primarily at supporting a pathogenic model of symptom management for the physical environment that supports health. Outside of the role of nature, there has been little scientific evidence supporting the restorative qualities of the environment related to healing.

Nature is a key component of healing environments. The ability to integrate nature through gardens or views to gardens has been shown to reduce stress and improve the cohesion of mind, body, and spirit. 13,58,59 An exemplar in the field of healing spaces is Fort Belvoir Community Hospital in northern Virginia. This facility was designed using evidenced-based design practices. Instead of being one large building, the building is broken into smaller buildings with gardens placed in between buildings and a glass-lined connecting corridor with comfortable seating areas that afford beautiful views of nature and lots of natural light. With the smaller narrow buildings and vast expanses of window openings, there are views to nature through most every space. Additionally, there is nature-based artwork throughout the facility. A nature-based environment helps to facilitate calming and restorative space.

Ecological resilience restores the pathways of nature through supported healthy interactions with the physical environment. Mindfully using our resources positively impacts human and planetary health. The work of sustainability has focused extensively on doing less harm. This includes recycling, energy conservation, and chemical management. Moving from sustainability to ecological resilience is the next step in the effort to have a healing environment. The work of ecological resilience looks at restoring green spaces; for example, transforming a parking lot into an active public park. Another example would be the selection of products that have minimized the use of chemicals. Choosing chemical-free food not only restores farmland but also supports the health of the person eating the food. These examples further define the role of the external environment as a support of healing practices. They cannot heal in isolation, but they can support a fully-integrated healing environment.

## **OPTIMAL HEALING ENVIRONMENTS**

Our understanding of OHEs has matured over the past decade. The OHE framework has been exposed to multiple methods of scrutiny from concept analysis,

To view or download the full text article visit: www.gahmj.com/doi/full/

10.7453/gahmj.2015.043

ℚ

systematic reviews, survey research, and case study analysis. The current framework with 4 environments and 8 constructs will be featured in a series of articles in this journal over the next 18 months. Concept analysis, case studies, and survey results will provide deeper understanding of the constructs and provide operational guidance to clinicians and administrators.

We all deserve an OHE at home, at work, and when we need care. As healers and healers, we enter into healing relationships with healing intentions and the expectation that personal wholeness and meaning result from our work and our care. We deserve the best of Eastern and Western medicine in the setting of a healing space.

#### REFERENCES

- r. Jonas WB, Chez RA, Smith K, Sakallaris B. Salutogenesis: the defining concept for a new healthcare system. Glob Adv Health Med. 2014;3(3):82-91.
- Jonas WB, Chez RA. Toward optimal healing environments in health care. J Altern Complem Med. 2004; 10(Suppl 1):S1-S6.
- Christianson JB, Finch MC, Findlay B, et al. Reinventing the patient experience: strategies for hospital leaders. Chicago: Health Administration Press; 2007.
- Miller WL., Crabtree BF, Duffy MB, Epstein RM, Stange KC. Research guidelines for assessing the impact of healing relationships in clinical medicine. Altern Ther Health Med. 2003; 9(3 Suppl):A80-A95.
- Zahourek RP. Healing: through the lens of intentionality. Holist Nurs Pract. 2012; 26(1):6-21.
- Watson J. Intentionality and caring-healing consciousness: a practice of transpersonal nursing, Holist Nurs Pract. 2002;16(4):12-9.
- Schmidt S. Mindfulness and healing intention: concepts, practice, and research evaluation. J Altern Complement Med. 2004; 10(Suppl 1):S7-S14.
- Quinn JF. The integrated nurse: way of the healer. In: Kreitzer MJ, Koithan M, editors. Integrative nursing. New York, NY: Oxford University Press; 2014.
- Kornhaber RA, Wilson A. Building resilience in burns nurses: a descriptive phenomenological inquiry. J Burn Care Res. 2011;32(4):481-8.
- Mealer M, Burnham EL, Goode CJ, Rothbaum B, Moss M. The prevalence and impact of post traumatic stress disorder and burnout syndrome in nurses. Depress Anxiety. 2009;26(12):1118-26.
- Mealer M, Jones J, Moss M. A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. Intens Care Med. 2012;38(9):1445-51.
- Chez RA, Jonas WB. Developing healing relationships: foreword from the organizers. J Altern Complement Med. 2005;11:S-1-S-2.
- Miller WI, Crabtree BF. Healing landscapes: patients, relationships, and creating optimal healing places. J Altern Complement Med. 2005;11(Suppl 1):S41-S49.
- 14. Gauthier DM. The meaning of healing near the end of life. J Hosp Palliat Nurs. 2002;4(4):220-7.
- Beach MC, Inui T. Relationship-centered care. A constructive reframing. J Gen Intern Med. 2006;21(Suppl 1):S3-S8.
- Quinn JF, Smith M, Ritenbaugh C, Swanson K, Watson MJ. Research guidelines for assessing the impact of the healing relationship in clinical nursing. Altern Ther Health Med. 2003;9(3):A65-79.
- Tarlier DS. Beyond caring: the moral and ethical bases of responsive nursepatient relationships. Nurs Philos. 2004;5(3):230-41.
- Pellegrino ED. Toward a reconstruction of medical morality. Am J Bioeth. 2006;6(2):65-71.
- 19. Bazarko D, Cate RA, Azocar F, Kreitzer MJ. The impact of an innovative mindfulness-based stress reduction program on the health and well-being of nurses employed in a corporate setting. J Workplace Behav Health. 2013;28(2):107-33.
- Beach MC, Roter D, Korthuis PT, et al. A multicenter study of physician mindfulness and health care quality. Ann Fam Med. 2013;11(5):421-8.
- Dobkin PL, Hutchinson TA. Teaching mindfulness in medical school: where are we now and where are we going? Med Educ. 2013;47(8):768-79.
- 22. Fortney L, Luchterhand C, Zakletskaia L, et al. Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: a pilot study. Ann Fam Med. 2013;11(5):412-20.
- Goodman MJ, Schorling JB. A mindfulness course decreases burnout and improves well-being among healthcare providers. Int J Psychiatr Med. 2012;43(2):119-28.
- Fisher MJ, Broome, ME, Friesth BM, et al. The effectiveness of a brief intervention for emotion-focused nurse-parent communication. Patient Educ Couns. 2014;06(1):72-8.
- 25. Frankel RM, Stein T. Getting the most out of the clinical encounter: the four habits model. J Med Pract Manage. 2001;16(4):184-91.
- Rao JK, Anderson LA, Sukumar B, et al. Engaging communication experts in a Delphi process to identify patient behaviors that could enhance communication in medical encounters. BMC Health Serv Res. 2010;10:97.

- Street RL Jr, Makoul G, Arora NK, et al. How does communication heal? Pathways linking clinician-patient communication to health outcomes. Patient Educ Couns. 2009;74(3):295-301.
- Beach MC, Keruly J, Moore RD. Is the quality of the patient-provider relationship associated with better adherence and health outcomes for patients with HIV? J Gen Intern Med. 2006;21(6):661-5.
- Grosso A. Social support as a predictor of HIV testing in at-risk populations: a research note. J Health Hum Serv Adm. 2010;33(1):53-62.
- Neri I, Brancaccio D, Rocca Rey LA, et al. Social support from health care providers is associated with reduced illness intrusiveness in hemodialysis patients. Clin Nephrol. 2011;75(2):125-34.
- Roberts KJ. Physician-patient relationships, patient satisfaction, and antiretroviral medication Adherence among HIV-infected adults attending a public health clinic. AIDS Patient Care STDS. 2002;16(1):43-50.
- 32. Robles TF, Kiecolt-Glaser JK. The physiology of marriage: pathways to health. Physiol Behav. 2003;79(3):409-16.
- Kamiya Y, Whelan B, Timonen V, et al. The differential impact of subjective and objective aspects of social engagement on cardiovascular risk factors. BMC Geriatr. 2010;10:81.
- 34. Manzoli I., Villari P, M Pirone G, et al. Marital status and mortality in the elderly: A systematic review and meta-analysis. Soc Sci Med. 2007;64(1):77-94.
- Rosland AM, Heisler M, Piette JD. The impact of family behaviors and communication patterns on chronic illness outcomes: a systematic review. J Behav Med. 2012;35(2):221-39.
- Strom JL, Egede LE. The impact of social support on outcomes in adult patients with type 2 diabetes: a systematic review. Curr Diab Rep. 2012;12(6):769-81.
- Liao H, Chuang A. Transforming service employees and climate: a multilevel, multisource examination of transformational leadership in building long-term service relationships. J Appl Psychol. 2007;92(4):1006-19.
- 38. Kotter JP. Accelerate! Harvard Bus Rev. 2012;90(11):44.
- Watson J. Caring theory as an ethical guide to administrative and clinical practices. Nurs Adm Q. 2006;30(1):48-55.
- 40. Goetzel RZ, Tabrizi MJ, Roemer EC, et al. A review of recent organizational health assessments. Am J Health Promot. 2013;27(5):TAHP-10.
- 41. Lin JS, O'Connor E, Evans CV, et al. Behavioral counseling to promote a healthy lifestyle in persons with cardiovascular risk factors: a systematic review for the US Preventive Services Task Force. Ann Intern Med. 2014;161(8):56878.
- Spring B, King AC, Pagoto SL, et al. Fostering multiple healthy lifestyle behaviors for primary prevention of cancer. Am Psychol. 2015;70(2):75-90.
- Thomas K, Bendtsen P, Krevers B. Implementation of healthy lifestyle promotion in primary care: patients as coproducers. Patient Educ Couns. 2014;97(2):283-90.
- Simmons LA, Wolever RQ. Integrative Health coaching and motivational interviewing: synergistic approaches to behavior change in healthcare. Glob Adv Health Med. 2013;2(4):28-35.
- Smith LL, Lake NH, Simmons LA, et al. Integrative health coach training: a model for shifting the paradigm toward patient-centricity and meeting new national prevention goals. Global Adv Health Med. 2013;2(3):66-74.
- Wolever RQ, Caldwell KL, Wakefield JP, et al. Integrative health coaching: an organizational case study. Explore (NY). 2011;7(1):30-6.
- Reilly JM. Are obese physicians effective at providing healthy lifestyle counseling? Am Fam Physician. 2007;75(5):738.
- Speroni KG, Williams DA, Seibert DJ, et al. Helping nurses care for self, family, and patients through the nurses living fit intervention. Nurs Adm Q. 2013;37(4):286-94.
- Zapka JM, Lemon SC, Magner RP, et al. Lifestyle behaviours and weight among hospital-based nurses. J Nurs Manag. 2009;17(7):85360.
- Barry MJ, Edgman-Levitan S. Shared decision making—pinnacle of patientcentered care. N Engl J Med. 2012;366(9):780-1.
- Grant SJ, Bensoussan A. The process of care in integrative health care settings—a qualitative study of US practices. BMC Complement Altern Med. 2014;14:410.
- 52. Khorsan R, Coulter ID, Crawford C, et al. Systematic review of integrative health care research: randomized control trials, clinical controlled trials, and meta-analysis. Evid Based Complement Alternat Med. 2011. doi: 10.1155/2011/636134
- 53. Kreitzer MJ, Koithan M, editors. Integrative nursing. New York: Oxford University Press, 2014.
- Ulrich RS. Effects of healthcare interior design on wellness: theory and recent scientific research. J Health Care Interior Des Proc. 1991;3:97-109.
- 55. Harris P, McBride G, Ross C, et al. A place to heal: environmental sources of satisfaction among hosptial patients. J App Soc Psychol. 2002;32(6):1276-99.
- 56. Evans GW. Environmental stress. New York: Cambridge University Press; 1982.
- Ulrich R, Zimring C, Zhu X, et al. A review of the research literature on evidence-based healthcare design. HERD. 2008;1(3):61-125.
- Sherman SA, Varni JW, Ulrich RS, et al. Post-occupancy evaluation of healing gardens in a pediatric cancer center. Landscape Urban Plan. 2005;73(2-3):167-83.
- Ulrich R. View through a window may influence recovery from surgery. Science. 1984;224(4647):420-1.

#### Acknowledaments

This work is supported by the US Army Medical Research and Materiel Command under Award No. W81XWH-06-1-0279. The views, opinions, and/ or findings contained in this manuscript are those of the author(s) and should not be construed as an official Department of the Army position, policy, or decision unless so designated by other documentation.