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A Practice Theory Approach to Understanding the Interdependency of Nursing Practice and the Environment Implications for Nurse-Led Care Delivery Models

Miriam Bender, PhD, RN; Martha S. Feldman, PhD

Nursing has a rich knowledge base with which to develop care models that can transform the ways health is promoted and valued. However, theory linking the environment domain of the nursing metaparadigm with the real-world environments where nurses practice and patients experience their health care is tenuous. Practice theory is used to foreground the generative role of nursing practice in producing environments of care, providing the basis for a metaparadigm relational proposition explicitly linking nursing practice and environment metaparadigm domains. A theoretical and empirical focus on the significance of nursing practice dynamics in producing environments of care that promote health and healing will strengthen present and future nursing care models. **Key words:** care models, nursing metaparadigm, nursing practice, nursing theory, practice environment, practice theory, work environment

THE NURSING profession has been challenged to address the demand for health care quality and identify models of care that consistently improve patients' health and quality of life. Nursing knowledge of the nature of health and people's experiences of health and illness make the profession well situated to develop and implement care delivery models that can fulfill the goal of health care quality and safety.

tients, their health, nursing practice, and the environment interact to improve health care quality and safety. Without an explicit theoretical basis to guide the organization of nursing care delivery to improve patient health, implementation of nursing-led care models will have varied and potentially unpromising outcomes.

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The propositions of the nursing metaparadigm explicitly link nursing practice with patients and their health and link patients' experience of their health with their physical and social environment. These propositions have been empirically tested, creating a rich

health, nursing practice, and the environ-

ment-defines the nursing profession's

disciplinary focus and forms the basis for

nursing knowledge, theory, and practice.

Effective nursing-led care delivery models

of the future must articulate the ways pa-

metaparadigm-person,

body of knowledge that describes how nursing practice influences patient health and how patient's social and physical environments influence their experiences of health. What is not proposed, and is therefore much less clear, is the way nursing practice is linked to the environment. For example, the environment where patients experience their health care is in many instances (perhaps the majority of instances) the same physical and social environment where nurses practice, and yet there is scant theory and little empirical evidence highlighting the multiple connections and overlapping natures of this patient and nurse-filled environment of care. Furthermore, there has been little examination of the relationship between these overlapping environments, nursing practice, and patient care, particularly the influence of nursing practice and these overlapping environments on patient health outcomes. What are the patterns of interactions that "make" these overlapping environments more or less healing? What nursing practices strengthen these patterns? What are the consequences of these relationships and patterns of interactions? We do not yet know the answers to these questions, yet must if we are to propose and enact nursing-led care delivery models that consistently improve patient health.

To help answer these questions, we take as an intellectual springboard Patricia Benner's research on nursing practice. Patricia Benner expanded nursing knowledge by challenging the paradigm that had previously been defining, and limiting, nursing practice. Benner called for an explicit articulation of the "goods specific to nursing practice and the skills that allows nurses to achieve them"4(p195) and highlighted the ways an inadequate understanding of nursing practice led to impediments in nursing knowledge and the practice of caring for patients. She helped redefine what it means to be a professional nurse and provided a clear path for articulating and therefore making visible professional nursing practice.

In this paper, we follow Benner's lead and challenge the current understanding of the nursing metaparadigm, which considers nursing practice and the environment as distinct and unlinked domains. We believe that this artificial distinction has limited the scope of nursing practice and diminished the nursing profession's capacity and authority to establish models of care that promote health and a healing patient experience. We argue that there is a fundamental and inseparable relationship between nursing practice and the environment, and that the "goods specific to nursing practice" include the constitution of environments of care. We believe that the explicit linkage of nursing practice and environment will refine the nursing paradigm, promote new avenues for nursing knowledge, and expand the scope of nursing practice. It will frame inquiry toward understanding patterns of actions that create more or less healing environments of care and a consideration of how nursing practice can potentially strengthen these patterns. This knowledge is critical for developing and refining nurse-led models of care, understanding that that nurses engage, though their practice, in the creation of environments of care that influence patient health and well-being.

The organization of the paper is as follows. We provide a brief history of the nursing metaparadigm, focusing on the environment domain. We describe the overlapping environments where patients experience their health care and where nurses practice and show how they are currently understood in the nursing literature as independent of each other, in line with current organizing principals of the nursing metaparadigm. We reconceptualize nursing practice and environment as mutually constituted. This reconceptualization is based in practice theory, which we introduce and describe. Practice theory is used to (1) understand the duality of practice and environment and through that understanding (2) develop a proposition that asserts the interdependency of the nursing practice and environment metaparadigm domains. Our aim is to articulate and make visible the interconnectivity of nursing practice and environment and shift understanding

of environments as constituted *in* practice. We explore the consequences of this shifting understanding of practice as environment, highlighting the novel connections and inquiries this shift generates, and propose the ways "practice as environment" can strengthen nursing care delivery models of the future.

THE NURSING METAPARADIGM

The nursing metaparadigm expresses the unifying focus of nursing as a professional discipline, driving the movement toward a shared professional understanding of the human health experience and how nursing practice can improve these experiences.5 The nursing metaparadigm has been traditionally represented by the following 4 generally agreed upon central concepts: person, nursing/caring practice, health, and environment.6 Person involves not just patients, but their families, caregivers, and communities,7 and includes the embodied person as well as personal meanings.8 The nursing/caring practice concept has evolved considerably over time to describe the reflexive, interpersonal, knowledgeable, and relational processes between nurses and persons (from patients to communities) that promote healing outcomes.9 Health, considered from a nursing rather than medical orientation, concerns patients' health-related quality of life as well as the physical and social determinants of illness and health.8 The environment is conceptualized as the physical surroundings of the patient to include significant others as well as the settings where patients receive their health and nursing care.3

The propositions of the nursing metaparadigm explicitly link nursing practice with patients and their health and link patients' experience of their health with their physical and social environment.³ What is not proposed, and is therefore unclear, is the way nursing practice is linked to the environment, especially "the settings in which nursing occur."^{3(p6)} Although many nurse theorists broadly declare the settings where patients receive their health care (which include the settings in which nursing occurs) to be within the environment domain, their indepth articulation of the environment domain focuses almost exclusively on the patient-inthe-world experiencing their health, and not on the patient-and-nurse-in-the-health caresetting experiencing health and nursing care. The reasons for this are not clear-the "settings in which nursing occur" would appear to be an environment where nurses could, through their practice, directly influence the patient's experience of health and therefore be considered a vital focus of theory and practice. A history of the evolution of the environment domain helps understand this anomaly.

The environment domain of the nursing metaparadigm

Kleffel¹⁰ describes the conceptualization of the environment domain over time. Florence Nightingale expansively defined and directed nursing practice to improve physical, social, political, cultural, and economic environments as a means of improving the health of individuals. Physical nursing practice was directed toward manipulating the immediate physical environment so that individual patients could heal. Political and cultural nursing practice was directed toward facilitating social and economic policies that enabled global improvements in sanitation, water, food, and housing distribution, among other elements, to create healthful community environments.

This broad understanding of the environment domain of nursing knowledge and practice unfortunately narrowed over time as nursing practice moved away from the public and community setting and shifted toward the hospital setting throughout the 1930 to 1940s, mirroring the shift in the setting for the ill from homes to hospitals. According to Kleffel, this "narrowing" of the setting for nursing practice eventually resulted in a "lack of consciousness of the broader environment" of health, which resulted in nurses "regarding it as outside their domain of action in practice,

education and research." ^{10(p102)} The environment, in relation to nursing practice, consequently narrowed to include only the immediate situation of the patient and not the broader settings in which nursing practice and patient care occurred.

The patient environment

In the 1970s, Jacqueline Fawcett began the work of explicitly articulating the 4 domains of the nursing metaparadigm. She broadly described the environment domain as the environment in which a person/family/community exists.11 Subsequently, others have advanced this conceptualization, focusing on theory and research expanding the environment domain to include the interrelatedness of the physical and social environment in creating peoples' experiences of health. As an example, 1 study during this period of advancement12 revealed important associations between patients' experiences of health, manifested as perceived vigor, and their person-environment interactions. This work strengthened the nursing metaparadigm by expanding the theoretical and empirical associations between domains and the propositions that link people, their health, and the environment. However, it is important to note that this theoretical and empirical expansion of the environment domain did not establish or propose linkages to nursing practice. In fact, the vast majority of the literature examining the environment of care in relation to nursing practice and patient health treat it as important to nursing practice, but not a focus of nursing practice.

The overlapping patient and nurse environment

In a recent synthesis, Andrews et al¹³ articulate 3 different conceptualizations of the environment from a nursing perspective—(1) elements external to nursing practice, which include patients and factors affecting their health; (2) the interactions between internal "inside the patient" states such as mental

and physiological dispositions and the external "outside the patient" physical world; and (3) the inseparable interrelationship between these internal and external states. They conclude that on a basic level the environment domain can be understood as contexts that are important but external to nursing clinical practice. Yet on a deeper level they acknowledge that the environment can be understood as the internal features and contexts where nurses work to include the immediate patient surroundings such as physiological and psychological state of the patient, as well as more external features such as institutional policies, management, and culture of the environments in which nurses practice and patients experience their health care. This is an important advancement in the conceptualization of the environment because it explicitly links the patient and nurse in an overlapping environment of care.

The nurse environment

There is a growing acceptance that the environment in which nurses practice, or what has been termed the practice or work environment, is an important factor influencing the ways nursing care is delivered and how that care affects patient health. 14,15 A nursing-oriented concept analysis of the practice environment defines it as the environment where nursing practice takes place, which has boundaries and structures that together shape the context for practice.16 Research on practice environments from a nursing perspective began in earnest in the 1980s and focused on acute care practice environments. The majority of this research aimed at better understanding elements of practice environments that make them "good places for nurses to work."17 This was in part because of a looming nursing shortage and fears that hospitals would not be able to attract the nurses they needed to care for patients.

Practice environment elements were originally identified through nursing policy and task force directed research^{18,19} and include nursing participation in hospital affairs,

nursing knowledge-oriented care delivery, manager support, staffing, and nursephysician relationship. This work was translated into a survey instrument20 that has been used in a plethora of studies to show the relationship between practice environment elements, nurse satisfaction, and patient health outcomes. Although this research has identified elements important to a professional nursing practice environment and to patient health outcomes, it must be noted that it represents practice environments independently of nursing practice. In fact, nurse autonomy, or a nurse's ability to deliver patient care based on nursing knowledge and expertise, did not rise to the level of a practice environment subdomain in factor analysis conducted as part of the survey validation; 20,21 nursing practice was not conceptualized, and therefore did not load, as an integral part of the practice environment.

Problematizing the separation of nursing practice and environment

The practice environment is currently understood to hinder or promote the true expression of nursing practice but is not something nurses actually direct their knowledge and practice toward. The implication of this understanding is that nursing practice is considered something that can be thwarted by competing environment demands (such as organization policies, physician orders, and technology use), and it is the job of others (managers and leaders) to focus on ways to reduce these competing demands if nurses are to practice to the full extent of their knowledge and abilities.

Davina Allen's^{22,23} work highlights the theoretical and practical issues the schism between nursing practice and environment has prompted. Allen argues for a redefinition of the nursing mandate based on a synthesis of field research observing nursing practice in the environment of care. Her research found that the overarching picture of nursing work to emerge is that of health care mediation, rather than current metaparadigm conceptu-

alization of nursing practice as "emotionally intimate, therapeutic"23(p42) patient care. Allen found that nurses for the most part "broker, interpret, translate and communicate clinical, social and organizational information that are highly consequential for patient diagnoses and outcomes."23(p45) Allen categorizes these health care mediation activities, accomplished in the service of patient care but not explicitly directed at patients, to include mediating professional boundaries, communicating information, and rationing resources, among other activities. Allen concludes that nursing practice as currently conceptualized in the metaparadigm domain (reflexive, relation-based patient care) is mostly absent in the field evidence and argues that it is this discrepancy between theory and practice that results in nurses not being educated to practice to their full professional abilities.

The assumption Allen makes visible is that the primary nursing activities identified, engaging with the practice environment to care for patients, are not considered nursing practice from a nursing metaparadigm perspective. She highlights the distinction between reflexive, interpersonal, relational nursing practices directed at the patient (ie, current theory of the nursing mandate) and the majority of the things nurses are actually doing to mediate the patient's hospital environment in service of the patient. By doing this, she makes visible the overlapping nature of the practice and patient environment and describes how nursing practice is targeted at these overlapping environments to "reconcile the requirements of healthcare organizations with those of the patients."23(p45) She argues for a new definition of nursing practice that considers the nurse's relationship to the practice environment and suggests that the nursing profession should redirect its focus to the "context" in which care is delivered, rather than on the quality of individual nurse-patient caring, 22,23 to more accurately describe the "goods specific to nursing practice and the skills that allows nurses to achieve them."

Bishop and Scudder also articulate a connection between nursing practice and the environment of care when they state "the nurse is in a privileged position for fostering communal decisions that the moral sense requires. The nurse is an advocate of communal decisions that bring together expert medical advice and treatment, sound hospital policy and procedure, and the realizable hopes and aspirations of the patient into the concrete practice of health care that fosters the wellbeing of the patient."24(p42) In this understanding of nursing practice, the environment of care is considered the raw materials for practice, which the nurse uses to produce the best conditions for patient health, that is, an optimal patient environment. The environment of care includes elements such as hospital policies that are not considered outside the scope of nursing practice, but rather important elements the nurse needs to incorporate into practice to accomplish the goal of producing patient environments that improve their experience of health.

The need to reconceptualize nursing practice and environment

As Davina Allen and others have begun to make visible, nurses engage with the practice environment to "reconcile the requirements of healthcare organizations with those of the patients." However, the nursing metaparadigm does not currently account for these empirical observations and does not promote conceptualization of this important body of practice evidence. The current conceptualization of practice and environment objectifies the environment and sequestrates the practice,25 creating 2 distinct domains of research, with discreet foci of interests, which ultimately have led to an incomplete body of knowledge that ignores a wide swath of actual nursing activities, the dynamics of nursing activities and the environment of care, the consequences of those dynamics, and the implications for patient health outcomes.

In summary, the current metaparadigm conceptualization has generated significant blind spots in inquiry and practice. It is necessary to reorient and reinterpret the relationship between nursing metaparadigm domains if this gap is to be addressed and nursing knowledge promoted and expanded. In the following sections, we introduce practice theory and show how practice theory provides a way of reconceptualizing the link between nursing practice and the environment to promote more holistic inquiry and practice.

PRACTICE THEORY

Practice theory offers a new way of understanding and explaining social phenomena. The philosophical premise of practice theory is that the social world is brought into being through practices. Practice theory centrally places activities as an empirical object of consideration and source of knowledge. The focus of practice theory is on dynamics and relations, which makes it an appropriate lens for examining nursing practice. Practice theory is a continuation of earlier philosophical discourse by Marx, Heidegger, Wittgenstein, and others rediscovering the consequentiality of "everydayness" in producing the world, and action as the basis for explaining intelligibility and rationality.26 These and other philosophers highlighted the gaps in the explanatory power of objective and subjective oriented philosophies. Objective ontologies of the world could not explain "the active dimension or interpretation and decision making in everyday life."26(p53) Subjective ontologies, meanwhile, could not explain "why the world appears both as a given field of objective meaning and as an arena of negotiation and strategic action."26(p54)

Practice theory emerged from more recent philosophical work in what has been named social praxeology, 27 which aims to remove the boundary between subject and object as distinct phenomena. Instead, practice theory acknowledges the relationship between subject and object, or structure and practice—one does not come before the other, but rather both exist recursively, that is, they exist only and always in relation to each other. 28 Structures are not considered

independent entities, but rather ongoing constructions built and rebuilt continuously through actions. Structure therefore cannot be conceived without foregrounding the role of human actions in producing it. Structures, such as environments of care, are always being created and recreated through social activity, with the possibility for reproducing stability or producing change with every action.

This recognition of the inherent relationship between structure and action rejects the assumption of the separation of subjective and objective, aiming to "redefine and reintegrate concepts that have [previously] been partitioned and polarized."28(p1242) The rejection of dualisms means questions of causality, or "what comes first," are replaced by questions of relationality.26 It does not argue that practices create ways of organizing or vice versa, but that practices and ways of organizing are implicated in each other; they are mutually constituting.28 Most importantly, this continuous coproduction of practice and environment means neither is static or stable, but rather they are constantly being refreshed, adapted, or perpetuated.

Scholars studying organizations have found practice theory to be a useful analytic tool for understanding and explaining the dynamics of these complex and constantly changing systems.²⁸ An important part of this analysis is moving past assumptions of structures as discrete entities, able to be boxed up and considered independently of their use. Take, for example, the concept of resource. Although it has long been noted that having more resources or the right resources is important to organizations, practice theorists show the importance of focusing on how assets such as time, money, knowledge, and materiality are used as resources and what specifically they are resourcing. They argue that the ways assets are used is what turns them into resources—resources are not stable entities, but rather potentialities that are enacted through the processes in which they are used. More consequentially, resources are only resources while they are being usedthey exist only in practice.29 This is the essence of mutual constitution. The asset exists but only becomes a resource through practice. The practice exists but only becomes resourceful as it enacts the asset as a resource. The implication of this conceptualization is its explanatory power in describing how and why resources are taken up or resisted in organizations on the basis of how and why people actually use the resource in practice.

LINKING NURSING PRACTICE AND THE ENVIRONMENT

Building on practice theory, environments of care can be understood as *embedded* in the activities and practices occurring through them, rather than a manifest structure independent of the activities occurring within them. Nursing practices take up the environment in ways that make it more or less conducive to caring for patients just as the environment constrains and enables nursing practices (see Figure 1).

The mutual constitution of practice and environment: an illustration

A scenario is developed here to show how practice theory helps understand the ways



Figure 1. The duality of nursing practice and environment.

nursing practice constitutes environments of care and how they condition future practice. We hope it also illustrates the implications of not understanding this conceptualization of the nursing metaparadigm. Consider a scenario many nurses can identify with; missing items needed in the service of patient care. A nurse is in the middle of a busy day taking care of her patients at a community hospital. She needs gauze to change her patient's dressings but realizes there is no gauze left in the supply room. "Darn it, this ALWAYS happens lately when I work towards the end of the week," she mutters. Thinking quickly, she calls a nurse friend in the unit upstairs and asks, "Do you have any gauze I can grab?" The friend asks incredulously, "You are out AGAIN?" "Yes, I can't talk about it now, do you have some or not?" The friend does, so the nurse rushes up the stairs (the elevators are always so slow), grabs the gauze, and rushes back downstairs. This has taken 25 minutes total, and now she wonders if she will have time to take her lunch break. After she changes the dressings, she does have a moment to sit in the break room and eat some lunch. Two other nurses are in there as well. The nurse starts a conversation-"Can you believe we are out of gauze again, I swear somebody HAS to start doing a better job stocking this place!" "I know" replies another nurse, "I've gotten to the point where I keep a stash in my locker: you can borrow some when we are working together, just let me know." The third nurse chimes in, "Yeah, I told a person stocking the room about the problem a month ago, but nothing happened." The first nurse, now done eating her lunch, responds as she walks out the room, "I know, it just kills me, we are always forced to grab our own stuff, nobody cares, its like they just don't want us to do our job!" The nurse leaves the break room and everyone is left with a vague feeling that their unit is always letting them down somehow, making it harder and harder for them to care for their patients every day.

In this scenario, the nurses did not experience themselves as acting on nursing knowledge and practice to affect the environment of care. Instead, they felt frustrated by what they saw as a lack of attention by others to the environment to make it better for them to care for their patients. The nurse's narrowly defined understanding of their nursing practice (nurse-patient interactions) created a situation where their capacity to influence the environment of care through their practice appears to be nonexistent. Yet these nurses were in fact reproducing an environment that requires heroic actions to produce mundane resources necessary for caring for patients. The nurses' actions are oriented to mediating a static environment in which gauze is not readily available. No consideration was given toward actions to create an environment in which gauze is readily available for anyone who needs it. These nurses did, in fact, create environments in which gauze was available to them alone. Each nurse had practices for solving the immediate issue; keeping a "stash" in a locker, knowing individual nurses elsewhere, etc. These practices, however, re-enact an environment that is an obstruction to the nursing practices that involve caring for patients.

These individualized actions were considered nonnursing activities that needed to be accomplished as quickly as possible to "get back to" nursing practice. Because these individualized, stopgap actions were not perceived as nursing activities, they never rose to the level of professional nursing practice with a patient-focused purpose. The consequences included reinforcement of the nurse's short-term, individualized actions toward distinct "environmental" problems at hand and keeping a cycle of "we don't have gauze" in play. It is important to understand how the meaning of gauze shifts when comparing nursing practice independently from the environment and nursing practice as constituting environments of care. In the latter conceptualization, gauze is not a "thing" that by its absence signifies the burden of an environment hostile to nursing practice. Rather, when considering nursing practice as constituting the environment of care, gauze becomes an element of patient healing and therefore an important focus

for nursing practice. The need to focus on gauze is not any more separated from nursing practice than changing the patient's gauze dressings. Missing gauze does not prompt the *cessation* of nursing practice until it is in the hands of the nurse, but rather the *initiation* of professional nursing practice to make gauze consistently part of the conditions of practice.

Exploring the duality of nursing practice and environment

Practice theory makes explicit that structure is not separate from action; structure does not exist without being enacted through practice. Structure emerges into existence in the interactions between people and things, which have consequences that condition subsequent interactions. This means actions are never meaningless; they influence further action and the conditions for future action. Structures, such as the environment of care, are therefore never a "given"; nurses through their practice are always meaningfully constituting the conditions of the environment of care along with patient and other health care provider actions. There is no externally defined environment that nurses and patients populate and act within, but rather the environment is embedded in their activities and practices.

Practice theory helps us understand that the activity of environment constitution needs to be foregrounded and explored to provide a more accurate understanding of the conditions and practices of an environment of care that more or less produces positive health outcomes. By studying the "structuring" rather than the structure, the environment becomes visible for what it actually is, a continuous tangle of interrelated practices and conditions for practice.

Practice theory helps illuminate how nurses, the largest sector of the health care workforce, can be considered significant drivers of health care structures through their practices. Making this relationship explicit is therefore a critical starting point for understanding how to get to good environments through practice, a rich topic for nursing knowledge and practice. Paying explicit attention to nursing practice in action will provide a significant body of knowledge about the full scope of nursing practice, how it is enacted, and how it produces and conditions environments of care that more or less promote health and healing. Attention to ways nurses use or do not use traditionally defined infrastructures such as resources, leadership, or technology, how nurses actually organize their care because of or despite formal care delivery models, how nurses adapt or adopt organizational change, how nurses devise and refine workarounds, etc, will generate understanding of the conditions and consequences of nursing practice in promoting patient health and healing.

Contrasting independence with interdependency of nursing practice and environment

This new understanding of the duality of nursing practice and environment can now be fruitfully contrasted against current conceptualizations to identify how each emphasize certain connections, inquiries, and practices over others. Current theory and research on practice environments (mostly in the hospital setting where patients receive their acute needs health care) focus on the "things" necessary to create an environment that nurses can then populate and practice within. Nursing practice is considered a mediator of patient health. The path is for the most part linear and unidirectional, from structure to process to outcome. Bad environments make nursing practice difficult, and good environments make nursing practice easy. Partial or thwarted nursing practice negatively influences patient health outcomes, whereas fully engaged nursing practice positively influences patient health outcomes. No meaning is ascribed to nursing practice contributing to the environment where all this occurs. In this conceptualization, nursing practice becomes in effect powerless to shape the environment of care.

How does this understanding play out in reality? It has contributed to the chasm recognized between nursing theory and practice, where the ways the nursing profession has conceptualized and teaches nursing practice is not aligned with the actual experiences of nurses in their practice. 22,30 It makes invisible the actual contributions nurses make every day producing environments of care. The theoretical independence of nursing practice and environment has led conceptually and methodologically to findings that are preconfigured and separate-because we have not linked nursing practice to the environment theoretically, we have not considered the ways they ARE linked empirically and have instead studied them in isolation from each other. Why is this problematic? Consider that more than 10 years of research on structures and processes to improve patient care quality and safety have unfortunately produced limited evidence of structures or practices that consistently produce better care outcomes, that scant research has focused on mechanisms of positive patient outcomes, and that the majority of studies have not relied on or developed robust theory to guide knowledge production.31

A METAPARADIGM PROPOSITION LINKING NURSING PRACTICE AND THE ENVIRONMENT

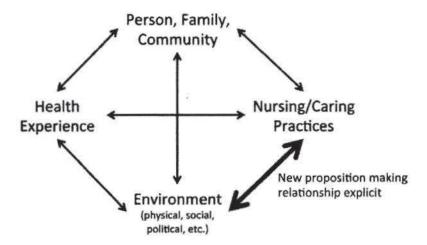
It is important to make explicit the theoretical link between nursing practice and the environment that has been explored in this paper. There are currently 4 relational propositions of the nursing metaparadigm.³ Proposition 1 links person and health. Proposition 2 links health and environment. Proposition 3 links nursing practice and person and health. Proposition 4 links person, health, and the environment. There is currently no proposition linking nursing practice to the environment, and the interdependency of practice and environment has not been well articulated in nursing science and practice. This has led to limited understanding of the ways nursing

practice is integral to the constitution of environments of care. As Davina Allen and others have begun to make visible, nurses engage their environments to produce environments of care that "reconcile the requirements of healthcare organizations with those of the patients." However, the nursing metaparadigm does not currently account for these empirical observations and does not promote conceptualization of this important body of practice evidence.

This paper argues for a relational metaparadigm proposition that explicitly links nursing practice and the environment-the discipline of nursing is concerned with nursing practices that are beneficial to the environments where people are experiencing their health. The language of the proposition is aligned with the other metaparadigm relational propositions and articulates the interdependency of practice and environment and the accountability of the nursing profession to conceptualize and empirically examine this relationship (see Figure 2). The proposition explicitly foregrounds nursing practice as consequential to the environmentenvironments of care, home and community environments, the national policy environment, and even the socially constructed environments that influence how we perceive "health," "illness," and "health care."

Implications for education and practice

A proposition articulating the relationship between the nursing practice and environment domains of the nursing metaparadigm is the first step toward creating knowledge and awareness of nurses' critical role in shaping environments of care through their nursing practice. By explicitly linking nursing practice to the environment in the nursing metaparadigm, nurses become authorized to target their practice to the service of creating beneficial environments of care, as well as focusing directly on the patient. The implications are empowering. They emphasize the fact that nurses have stakes in the game at all levels of care (not just the patient-nurse



The discipline of nursing is concerned with the following relational propositions linking metaparadigm domains:

- 1. The ways people experience their health
- 2. The patterning of people's health experience within their environment
- 3. Nursing/caring practices that are beneficial to people and their health experiences
- 4. The ways people and their environment influence each other
- Nursing/caring practices that are beneficial to the environments where people are experiencing their health

Figure 2. A proposition explicating the relationship between nursing practice and the environment domains of the nursing metaparadigm.

interaction) to ensure health care reflects a nursing orientation to health and promotes a positive experience of health. If nursing practice is 1 of many actions through which environments of care are produced, then it becomes a professional responsibility to educate nursing students about their critical role in constituting the environments where they will practice throughout their careers and for practicing nurses to understand and accept accountability for their practices in creating the environment of care where patients are experiencing their health care. It becomes necessary to reconsider concepts current in nursing education and practice such as leadership, quality improvement, and novice-to-expert practice and broaden their scope to incorporate an explicit linkage to the nursing profession's environmental production capacity. Leadership, for example, becomes more than a resource provided by managers/leaders to nurses to promote optimal nursing practice, or a skill that nurses enact to promote professional standing in

the health care community. Leadership can also be understood as a professional capacity to engage in solving the problems that are embedded in practice and thereby constantly transforming the environment of care. For example, through nursing "leadership" missing gauze becomes a focus for nursing practice and not a thing that disables nursing practice; leadership is of-a-piece with practice and not an added-value skillset.

Implications for nursing-led care delivery models

We can now extend the interdependency and mutual constitution of practice and environment to consider the organization of nursing practice into care models that promote patient health and healing. Instead of asking "how can the practice environment be modified to make it more compatible for nursing practice," as much the current nursing workforce research does, a more fruitful line of inquiry becomes "how does nursing

practice contribute to creating an environment of care that optimizes health and well being?" How might answers to this question facilitate the development of nursing-oriented models of care that patients, nurses, and the multi-professional health care team all consider healing and health promoting?

Nursing models of care become more holistic when they explicitly incorporate environment-constituting practice and acknowledge the ways nursing practice creates the conditions for future practice and opportunities for health and well-being. New concepts such as translational mobilization, 32 in which nurses organize resources and materials through their practice to maintain functional clinical environments for patients, become essential to consider when developing models for health care organization and practice. Other concepts such as "the built environment"33 and "nursing ecological models"34 also become useful. The built environment expands on conceptual linkages between health, people, and the environment and encourages nursing inquiry toward understanding pathways linking the environment to health outcomes. In nursing ecology, the environment is considered a component that needs to be included in decisions about health care structures and processes to account for its influence in health outcomes. Both concepts begin the work of integrating an environmental perspective into health care structures and processes and can be expanded to identify the ways nursing practice is not only beneficial to uncover the dynamics of environment, health care processes and outcomes, but the ways the environment is also inherently embedded in nursing, patient and community practices and is refreshed or reproduced through these practices into the conditions for health and health outcomes.

Nursing care models of the future that consider the ways nurses through their practice create physical and social environments of care will foreground dynamics and capacities rather than traditionally conceptualized and distinct structures and processes. Nursing

care models of the future will explicitly incorporate environment transformation as an inherent dynamic of practice. Concepts such as "nurse-environment ratios" or "environmentproduction nursing" become interesting foci for investigation and integration into models of care. They raise new ways of thinking about the organization of nursing practice, for example, the transportability of nursing practice in creating dynamic environments of care in the home, the community, the mobile clinic, or the ways technology can be enacted through nursing practice to create entirely new virtual environments of care even when "nurses and patients no longer meet in proximate space."35(p64) Finally, and perhaps most importantly, nursing care models of the future will leverage understanding that practices constitute environments and the conditions for future practice; not just nursing practice but medical practice, patient practice, ancillary staff practice, phlebotomy practice, finance and insurance practice, policy practice, etc. Each of these professions has a "recognized practice environment,"36 and it becomes essential for nursing to fully understand how this tangle of multi-professional environments and practices interact to produce health care and outcomes if these dynamics are to be successfully leveraged into nursing care models of the future. The work may be challenging, but the rewards include more dynamic and holistic environments of care, better practice and better care.

CONCLUSION

In this paper, we critically examined the current conceptualization of the nursing metaparadigm and identified an important gap, the lack of a conceptual and propositional link between nursing practice and the environment, which are notably the only 2 metaparadigm domains not yet linked through a relational proposition. We explored the literature to help explain this conceptual gap. We then used a practice theory lens to reorient understanding of the environment

metaparadigm domain and to conceptualize the interdependency of nursing practice and the environment. The constitutive nature of nursing practice in creating environments of care was explicitly acknowledged. A relational metaparadigm proposition that explicitly links nursing practice and the environment was developed. This expanded understanding of nursing practice and environment is necessary to identify, theorize, and promote nursing practices that are beneficial to the environment of care as part

of an explicitly proposed domain of nursing knowledge and practice. A focus on the mutual constitution of nursing practice and the environment will facilitate the development of holistic models of care that better integrate the dynamics of practice and the conditions for health into the organization of health care delivery. It is these nursing-oriented models of care that will be successful in consistently organizing care that patients, nurses, and the multi-professional health care team consider healing and health promoting.

REFERENCES

- Institute of Medicine. The Future of Nursing: Leading Change, Advancing Health. Press NA, ed. Washington, DC: Institute of Medicine; 2011.
- Institute of Medicine. Future of Nursing Research Agenda. Washington, DC: Institute of Medicine; 2011:1-9.
- Fawcett J, Desanto-Madeya S. Contemporary Nursing Knowledge: Analysis and Evaluation of Nursing Models and Theories. 3rd ed. F. A. Philadelphia, PA: Davis Company; 2012.
- Benner PE, Tanner CA, Chesla CA. Expertise in Nursing Practice: Caring, Clinical Judgment, and Ethics.
 2nd ed. New York, NY: Springer Publishing Company; 2009.
- Newman MA. Prevailing paradigms in nursing. Nurs Outlook. 1992;40(1):10-13, 32.
- Fawcett J, Watson J, Neuman B, Walker PH, Fitzpatrick JJ. On nursing theories and evidence. J Nurs Scholarsh. 2001;33(2):115-119.
- Schultz PR. When client means more than one: extending the foundational concept of person. Adv. Nurs Sci. 1987;10(1):71-86.
- Thorne S, Canam C, Dahinten S, Hall W, Henderson A, Kirkham SR. Nursing's metaparadigm concepts: disimpacting the debates. J Adv Nurs. 1998;27(6): 1257-1268
- Sherwood GD. Meta-synthesis of qualitative analyses of caring: defining a therapeutic model of nursing. Adv Pract Nurs Q. 1997;3(1):32-42.
- Kleffel D. The evolution of the environmental metaparadigm of nursing. In: Andrist LC, Nicholas PK, Wolf KA, eds. A History of Nursing Ideas. Sudbury, MA: Jones & Bartlett Publishers; 2005:97-108.
- Fawcett J. The metaparadigm of nursing: present status and future refinements. *Image J Nurs Sch.* 1984;16(3):84-87.
- Fontana JA. The emergence of the personenvironment interaction in a descriptive study of vigor in heart failure. Adv Nurs Sci. 1996;18(4): 70-82.

- Andrews GJ, Moon G. Space, place, and the evidence base: part II—rereading nursing environment through geographical research. Worldviews Evid Based Nurs. 2005;2(3):142-156.
- Jennings BM, Melcis AI. Nursing theory and administrative practice: agenda for the 1990s. Adv Nurs Sci. 1988;10(3):56-69.
- Jennings BM. Research on the care environment: celebrating signs of success, posing questions to advance future investigations. Res Nurs Health. 2009;32(4):361-365.
- Mccormack B, Kitson A, Harvey G, Rycroft-Malone J, Titchen A, Seers K. Getting evidence into practice: the meaning of "context." J Adv Nurs. 2002;38(1):94-104
- Aiken LH, Smith HL, Lake ET. Lower Medicare mortality among a set of hospitals known for good nursing care. Med Care. 1994;32(8):771-787.
- McClure M, Poulin M, Sovie MD, Wandelt M. Magnet Hospitals: Attraction and Retention of Professional Nurses. American Nurses Association, ed. Kansas City, MO: American Nurses Association.
- American Association of Colleges of Nursing. Hallmarks of the professional nursing practice environment. J Prof Nurs. 2002;18(5):295-304.
- Lake ET. Development of the practice environment scale of the Nursing Work Index. Res Nurs Health. 2002;25(3):176-188.
- Leiter MP, Spence Laschinger HK. Relationships of work and practice environment to professional burnout: testing a causal model. *Nurs Res.* 2006; 55(2):137-146.
- Allen D. Re-reading nursing and re-writing practice: towards an empirically based reformulation of the nursing mandate. Nurs Ing. 2004;11(4):271-283.
- Allen D. What do you do at work? Profession building and doing nursing. Int Nurs Rev. 2007;54(1): 41-48.
- Bishop AH, Scudder JR. Nursing ethics in an age of controversy. Adv Nurs Sci. 1987;9(3):34-43.

- Orlikowski WJ, Scott SV. 10 sociomateriality: challenging the separation of technology, work and organization. Acad Manage Ann. 2008;2(1): 433-474.
- Nicolini D. Practice Theory, Work, and Organization. Oxford, England: Oxford University Press; 2012.
- Wacquant L. Toward a social praxeology: the structure and logic of Bourdieu's sociology. In: Bourdieu P, Wacquant L, eds. An Invitation to Reflexive Sociology. Oxford, England: Blackwell; 1992;3-59.
- Feldman MS, Orlikowski WJ. Theorizing practice and practicing theory. Organ Sci. 2011;22(5):1240-1253.
- Feldman MS. Resources in emerging structures and processes of change. Organ Sci. 2004;15(3):295-309.
- Maben J, Latter S, Clark JM. The theory-practice gap: impact of professional-bureaucratic work conflict on newly-qualified nurses. J Adv Nurs. 2006;55(4): 465-477.
- Shekelle PG, Wachter RM, Pronovost PJ, et al. Making health care safer II: an updated critical analysis of

- the evidence for patient safety practices. Evid Rep Technol Assess (Full Rep). 2013;(211):1-945.
- Allen D, Allen D. Re-conceptualising holism in the contemporary nursing mandate: from individual to organisational relationships. Soc Sci Med. 2014;119(C):131-138.
- DeGuzman PB, Kulbok PA. Changing health outcomes of vulnerable populations through nursing's influence on neighborhood built environment: a framework for nursing research. J Nurs Scholarship. 2012;44(4):341-348.
- Laustsen G, Laustsen G. Environment, ecosystems, and ecological behavior: a dialogue toward developing nursing ecological theory. Adv Nurs Sci. 2006;29(1):43.
- Sandelowski M. Visible humans, vanishing bodies, and virtual nursing: complications of life, presence, place, and identity. Adv Nurs Sci. 2002;24(3):58-70.
- Andrews GJ, Evans J. Understanding the reproduction of health care: towards geographies in health care work. *Prog Hum Geog.* 2008;32(6):759-780.