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Theory Connections

A practical application of Katharine Kolcaba's comfort theory to cardiac patients

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ABSTRACT

Nursing approaches to care as based on Katharine Kolcaba's (2003) middle range nursing theory of comfort are discussed in reference to patients' suffering from symptoms related to the discomfort from cardiac syndromes. The specific intervention of "quiet time" is described for its potential use within this population as a comfort measure that addresses Kolcaba's four contexts of comfort: physical, psychospiritual, environmental and sociocultural. Without realizing it, many nurses may practice within Kolcaba's theoretical framework to promote patient comfort. Explicit applications of comfort theory can benefit nursing practice. Using comfort theory in research can provide evidence for quiet time intervention with cardiac patients.

Nurses strive to provide comfort to their patients in whatever environment they practice. A key approach to providing for physical and emotional comfort is to create an environment conducive to healing – a major principle of nursing first stated by Nightingale (1859). Nightingale's philosophy was to place the patient in the best condition for the natural processes of healing to occur. Along with fresh air, sunshine, adequate nutrition, and other factors, she recommended *quiet* as essential for healing. However, in looking at the environment in which we practice nursing, we see that it may not be optimal for nature to act in beneficial ways for our patients. We, as providers of care, have yet to observe a time in which patients on a cardiac unit are not subjected to noise, interruptions, as well as a myriad of monitoring alarms.

Comfort theory is a middle range theory developed by Kolcaba (2003) that has as a foundation Nightingale's environmental principles of providing care (Selanders, 1998). This theory can be used to enhance the environment of patients in cardiac care through the use of a "quiet time" intervention. A loud and chaotic environment can negatively affect healing process of patients. The purpose of this article is to describe comfort theory as applied in care of cardiac patients and to demonstrate the use of a specific intervention called quiet time, derived from comfort theory, to improve cardiac patients' experiences of comfort across four domains of care. We also call attention to the need for research into the effectiveness and use of this theory-based intervention.

1. Case study 1

It has been shown that rest promotes healing, recovery, and well-being (Tullmann & Dracup, 2000). However, the hospital environment presents unique challenges for patients to obtain rest periods. Consider the following case of a patient admitted to the hospital with diagnosis of suspected acute coronary syndrome:

> John arrived at the emergency department with complaints of chest pain. He is certain this is the "big heart attack" his father had. He is taken to the main emergency department, which is one large area with stretchers aligned side by side with only a curtain between each stretcher offering minimal to no privacy. It seems that someone appears every five minutes to check his blood pressure, draw blood or ask him more questions about his health history. The noise of the other patients, staff and monitoring equipment is so loud it is difficult for him to hear the providers' questions. Time passes. Now John has been in the emergency room for over 12 hours and he has not rested. When he finally starts to close his eyes and relax the nurse's aide begins placing him on a different monitoring device, with no explanation, just the statement, "You are going upstairs." The cardiac floor where he arrives is not much quieter. John is placed in a four-person room. Both patients on the other side of the room have their televisions on and one of the IV pumps continuously alarms. John is feeling discomfort in his chest similar to what he felt in the Emergency Department. He has been unable to contact his wife because the battery on his cell phone went dead. He is anxious about what will eventually happen to him.

This case is devoid of any comfort measures provided by John's care providers and results in the escalation of his chest pain and

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anxiety. Sleep deprivation and anxiety are all precursors that can trigger increased heart rates and elevation of blood pressure, which in turn can cause additional workload to the myocardium and lead to exacerbations of chest discomfort. This brief case presentation alerts us to the potential usefulness of a theory on comfort in everyday practice, and to the relevance of a specific intervention that promotes quiet time in cardiac care.

2. Comfort theory

Kolcaba (2010a,b) created a conceptual framework (Fig. 1) to show broadly how her comfort theory fits into the flow of care in the practice setting. Comfort was described as the product of holistic nursing practice. Fig. 1 illustrates that regardless of the patient and family needs for health care, there is always a place for the assessment and promotion of health care regarding comfort needs.

Kolcaba's theory of comfort was first developed in 1991 when she conducted a concept analysis to examine the literature from multiple disciplines on comfort (Kolcaba & Kolcaba, 1991). The analysis generated three forms of comfort and four contexts of holistic human experience from which a taxonomic structure was created as a map to guide areas of patient comfort for assessment in practice and for measurement in research.

In comfort theory, specific concepts in the theory are organized in terms of three forms and four contexts of comfort. The three forms of comfort are *relief*, *ease*, and *transcendence*. Patients experience a sense of *relief* when their individual comfort needs are met. Patients are at *ease* in situations that enable them to be calm or content. The comfort state of *transcendence* occurs when a person rises above their challenges. The four contexts in which comfort is experienced are *physical*, *psychospiritual*, *environmental*, and *sociocultural*. The *physical* concerns bodily sensations and homeostatic mechanisms, the *psychospiritual* pertains to the internal awareness of self, the *environmental* is the external surroundings and conditions, and *sociocultural* refers to interpersonal and societal relationships (Kolcaba & Fisher, 1996).

The three types of comfort and the four contexts of care can be incorporated into a hospital's model of care (Kolcaba, Tilton, & Drouin, 2006). In addition, this taxonomy of comfort can be applied to specific patient cases to delineate various comfort needs of the patient.

3. Comfort theory applied to care of cardiac patients

Kolcaba's Comfort Theory is readily applicable to cardiac patients. Table 1 presents an example of applying comfort theory to the case study of John and his comfort needs. Data from the case study were entered into the 12 cells of the table, organized according to the four contexts of care and the three types of comfort needs. John's specific comfort needs are indicated in the *relief* column. Entries in the *ease* column point to interventions for promoting a sense of calm or contentment in John. Patient-based expressions in the *transcendence* column highlight John's expressed concerns that need to be addressed to foster his sense of empowerment and ability to overcome the challenges of the illness. Comfort is dynamic and an ever-changing state, and the entries in the table may also change over the course of a patient's hospital stay.

4. Quiet time intervention

A quiet time intervention has significant potential for not only reducing noxious stimuli but also for creating opportunities for needed privacy and supportive interactions. Research findings have shown that quiet time can improve patient outcomes and increase consumer satisfaction with acute care health services, both of which are of increasing importance in the contemporary health care environment (Gardner, Collins, Osborne, Henderson, & Eastwood, 2009). Other research findings indicate that quiet time in a chaotic, noisy neuro-intensive care unit can create an atmosphere of recuperation (Dennis, Lee, Woodard, Szalaj, & Walker, 2010).

The quiet time intervention has not yet been studied in the emergency department. However, the taxonomy of data from the cardiac care case in Table 1 indicates targets where this intervention can be especially relevant to care of cardiac patients. A quiet time protocol was derived from comfort theory to promote comfort across the four contexts of care.

In the physical domain, quiet time can help minimize events in the cardiac care setting that have detrimental physical effects on an already compromised patient. Of particular concern is a patient's sleep, which is essential for multiple physiological and psychological processes. Numerous mechanical devices as well as hospital routines and procedures can significantly impair a patient's ability to sleep. Sleep deprivation has been linked to rising incidence of patient falls, confusion, and increased use of medication and restraints (Mazer, 2006).

Long established recommendations from the U.S. Environmental Protection Agency, Office of Noise Abatement and Control (1974) state that the hospital noise levels should not exceed 45 decibels. However, studies have shown that the peak hospital noise levels exceed 90 decibels, which is similar to the levels of heavy truck traffic. Prolonged effects of excessive noise exposure on patients and staff alike can have deleterious effect on their health and well-being (Christensen, 2007). The chemical epinephrine and other endogenous stimulants are released in response to environmental stimuli, which in turn increase the patient's heart rate and blood pressure (DeKeyser, 2003). Quiet time interventions can prevent stimulation of the sympathetic nervous system that occurs with an environment of

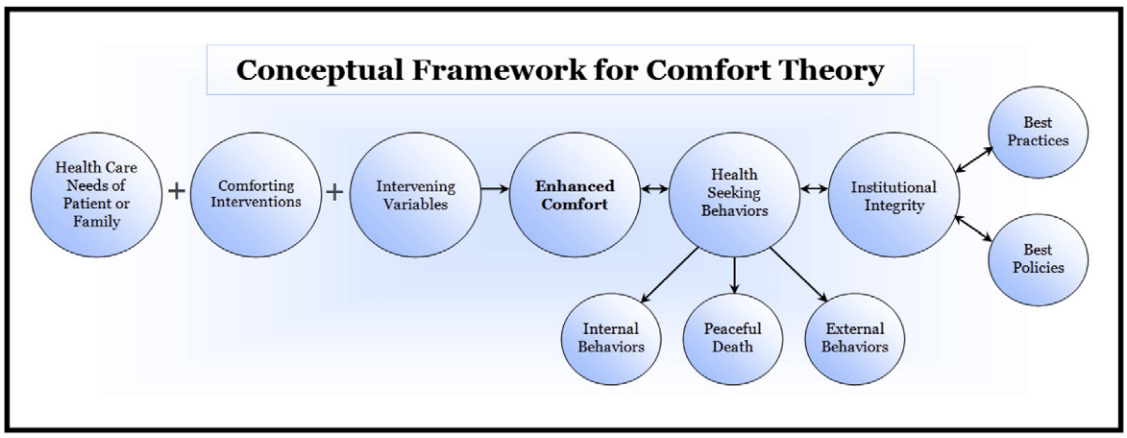

Fig. 1. Reprinted with permission from Katharine Kolcaba, *The Comfort Line, 2010.*