Technological Competency as Caring in Nursing: Maintaining Humanity in a High-Tech World of Nursing

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Abstract

This paper is grounded on the theoretical view of Technological Competency as Caring in Nursing, a middle-range theory based on wholeness of persons, and their dependency with technologies for human care. Within this middle-range theory is technological knowing - the process of nursing in which technologies are used to know human beings as persons and maintains their humanity in a high-tech world of nursing. The use of technologies in contemporary nursing practice often leads to valuing human beings as objects of care rather than as participants in their care. Nevertheless in practicing technological knowing, wholeness of persons is appreciated thus maintaining the persons’ humanity in a high-tech world of nursing practice.

Keywords: Technological competency, technological knowing, nursing, maintaining Humanity, wholeness of persons

Introduction

Can nursing practice that is based on the theory of Technological Competency as Caring in Nursing (Locsin, 2005) maintain or preserve humanity in an overwhelmingly technological world? Essentially, this question is focused on the future of human beings as largely dependent on an environment that is conducive to human living and of human beings as basically human in nature. How do we assure these conditions? As conducive to human living as our current world needs to be, it is often the efficiency of things used, re-used, replaced, or recycled that generates the impetus for continuing the maintenance or preservation of humanity, particularly within the realms of a highly technological world. Thus, preserving humanity must be the mantra of future nursing - if it is to sustain and maintain its essential value, meaning, and practice in a technologically-demanding world of human care.

The purposes of this paper are to describe the meaning of ‘maintaining humanity in a technological world,’ to describe technological competency as caring in Nursing, and to explain the ontology of technological knowing as a process of knowing persons as nursing. In considering these purposes, some philosophical questions that impact the theoretical underpinnings of

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the theory are addressed such as “what makes a human being? Is it the completeness of being human from a view of the sum-of-parts? or is it the person’s wholeness - appreciated as more than and different from the sum of its parts!”? Wanting to be Human

In the film *Bicentennial Man* the question about being and becoming human was addressed. What are the essential composites of a human being – lacking these would be the reason for questioning humanity. The core of the soul makes human beings whole, not simply the completeness of parts. If the former occurs will replacing the function of the composite part foster a revitalized view of the human being as person? Or perhaps, because of the new composition of parts to make a whole new understanding of being human can be considered or initiated (Bevan, 1998). Will the concept of being human change, and therefore of ‘humanity’?

Replacement Parts: Completing Human Beings

*A gift of life – one has to die so that an ‘other’ may live.*

Replacement parts become a gift of life for many human beings. These parts can be *mechanical* as in artificial pacemakers or other instruments and gadgets that hasten the function of the organic parts, or *biological* parts – transplanted organs from other human beings (or sometimes from non-human biological species such as animals). Other than the physical composition of human beings is the person - who are always whole. This philosophical view allows the practice of contemporary nursing to be recognized as focused on patients as persons who are participants in their care rather than simply objects of nurse care. As such, nurses and patients are mutually engaged in the planning and implementation of the nursing care. Instead of *doing for* the patients, the nurse is now able to *do with* the patients.

Persons are living human beings with hopes, dreams, and aspirations. Human beings are unpredictable because they have the capacity to think, imagine, innovate, and create. As such, persons are not automatons or robots who can be programmed to perform. Yet, the objectification of persons becomes an ordinary occurrence in situations in which the practice of nursing is merely understood as achievement of tasks. This exists when persons are viewed as objects and therefore only recipients of care. Describing nursing practice as the completion of tasks does not serve the profession well. Nurses value technological competency as an expression of caring in nursing. Otherwise, the image of the robot-nurse as one who simply facilitates completion of tasks for people, undeniably will make a nurse an automaton.

**Technological Competency as Caring in Nursing**

Observing humanity to preserving it in a world dominated by technology currently influences human healthcare. Therefore, it is important for nurses to capture for their patients the greatest benefit of using these technologies. The implication is that with technology, wherever and in whatever environment it is presented can result in mediating and transforming the technology for the person – the nurse and the person being nursed.

Technological competency as caring in nursing is the skilled demonstration of intentional, deliberate, and authentic activities by nurses who practice in environments requiring technological expertise. The practice model that is crucial to contemporary nursing is one in which the caring in nursing can be expressed through technological competency (Locsin, 2005,
2009). Should it matter that the expert nurse is technologically competent? The following assumptions guide the understanding of the process of knowing persons and the practice of technological knowing in order to preserve and maintain persons’ humanity.

Technological Competency as Caring in Nursing

Assumptions of the Theory:

- Persons are caring by virtue of their humanness. In this understanding, caring is expressed in many ways, and in nursing, caring is the substantive focus of the discipline, instead of the act or emotion one may portray towards another person. In this assumption, ‘persons are caring’ is studied as integral to the practice of nursing.

- The ideal of wholeness is a philosophical perspective that allows the recognition of human beings as persons, complete in their being, regardless of composite parts. This ideal allows the nurse to focus nursing as a shared lived experience between the nurse and the person being nursed, rather than focusing on fixing the person or completing the person’s lack or missing ‘parts.’

- Knowing persons is a continuous process in which the nurse and nursed focus on appreciating, celebrating, supporting and affirming each other, allowing each other a mutual knowing as participants in the care, instead of being underscored as aspects of care like objects of our care.

- Technologies of health and nursing are aspects of care that allows nurses to know human beings more fully as persons – as participants in their care, rather than as objects of our care.

- Nursing as a discipline and a professional practice provides the critical view of nursing as integral to the practice of health care, thus facilitating human health and wellness.

These assumptions guide the nurse to practice nursing from the theoretical view of technological competency. As a nursing practice process, technological knowing (Locsin, 2009) involves knowing persons through technologies of health and nursing which are significantly used to know persons more fully as whole and complete in the moment. As a practice process (see Figure 1), its use is dependent upon its theoretical grounding - in technological competency as caring in nursing (Locsin, 2005).

While technology has the potential to bring the patient closer to the nurse by enhancing the nurses’ ability to know the person more fully (Locsin & Purnell, 2007), conversely, technology can also increase the gap between the nurse and nursed by the nurse’s conscious disregard of the patient as person, and ignorance of the nursing imperative to know the patient as person. In many situations, nurses have felt that advanced technology may distance them from patients because they need to pay such close and extensive attention to the equipment. Nevertheless, it is through such equipment that critical information can be retrieved allowing nurses to focus more on being with the person who is being nursed.

Nevertheless, the possibility exists that the nurse predict, and prescribe nursing for the one nursed. When this occurs, these situations can lead nurses to appreciate persons more as objects of care than as persons who can participate in their care. Such situations occur when the nurse assumes to “have known” the one nursed.

There is great demand for a practice of nursing that is based on the authentic desire to know human beings fully as persons and not just as objects of care. Challenging the nurse through authentic intentions and desires to know persons in their wholeness is using every creative, imaginative, and
innovative way possible to appreciate and celebrate persons in their wholeness. Only with expertise in technologies in practice settings is technological competence realized as caring in nursing.

![Figure 1. Technological Knowing in Nursing](image)

**Description of the Process of Nursing:**

The value of nursing theory is often judged by the influence it provides in assuring quality practice. It informs the nurse about who is the person being cared for, frequently through a prescribed process based on the theory. The process of ‘knowing persons as nursing’ is grounded in the theory of Technological Competency as Caring in Nursing (Locsin, 2005). Four circuitous steps illustrate the way that the process guides nurses in their nursing. These steps are knowing, designing, participative engaging, and furthering knowing. Figure 1 illustrates the process.

A. Knowing: The process of knowing person is guided by technological knowing. Persons are appreciated as participants in their care rather than as objects of care. The nurse enters the world of the other. In this process, technology is used to magnify the aspect of the person that requires revealing - a representation of the real person. The person’s status change moment to moment - person is dynamic, living, and cannot be predicted.

B. Designing: Both the nurse and the one nursed (patient) plan a mutual care process from which the nurse can organize a rewarding nursing practice and care experience that is responsive to the patient’s desire for care.

C. Participative engaging: The simultaneous practice of conjoined activities which are crucial to knowing persons. In this stage the alternating rhythm of implementation and evaluation occurs. The evidence of continuous knowing, implementation and participation is reflective of the cyclical process of knowing persons.
D. Verifying: The continuous, circular process demonstrates the ever-changing, dynamic nature of knowing in nursing. Knowledge about the person that is derived from knowing, designing, and engaging further informs the nurse and the one nursed.

Communicating Nursing Practice

With technological knowing as process of nursing, communicating the co-created moment between the nurse and the one nursed is essential if nursing is to maintain the humanity of persons in a high-tech world of health care. As perceptive as the nurse can be of the nursing situation, the technological knowing of persons within the phenomenon of being cared for with technologies, and of nurses caring for persons with these technologies can be understood and communicated in myriad ways, thus influencing the maintenance of humanity in a technological world.

Future Research

Particular nursing phenomena are derived from aspects of the theory providing focus on nursing knowledge development through nursing research. These nursing phenomena include, lived experiences of persons who are caring for persons with technologies; lived experiences of persons who are being cared for and are dependent upon technologies; technological dependence and ethical dilemmas; cloning and persons with bioengineered parts, genetically enhanced and the development of “future” humans and post-humans; burn-out phenomenon and the prospect of using robots to replace human nurses; a call for Nurse Administrators to consider technological engagements for nurses in high tech environments; and the universality of technological competency as caring in various nursing settings.

Currently, two nursing phenomena are being addressed as the foci of nursing research: Experiences of persons ‘caring for’ those who are in situations of intensive care (Kongsuwan and Locsin, 2011); and experiences of persons who are ‘being cared for’ with technologies such as life-saving cardiac care devices (Locsin, Campling, Purnell Tulloch, Kissel, & Wilson, 2010).

Concluding statement:

And so the discovery is set anew giving nurses more reasons to know the meaning of being human, the understanding of the sphere of influence of Technological Competency as Caring in Nursing (Locsin, 2005), and the reality of human existence in an advancing technological world. In knowing who persons are, and as nurses, one needs to have new eyes, new lenses through which to view the contemporary world - so that future selves and the humanity that is so dearly valued can be preserved, albeit as techno sapiens, or post humans. It is through technological competency as caring in nursing that nurses will be able to leap through the advancing world of technology with new discoveries, appreciating humanity more within a visioning of a nursing in a contemporary human world.

The demand is great for a practice of nursing that is based on the authentic desire to know human beings fully as persons rather than as objects of care, a concept far removed from the idea of humanoid robots. Challenging the nurse to know persons in their wholeness means using every possible creative, imaginative, and innovative way to appreciate and celebrate their intentions to live fully and grow as a human being. Nurses need to return to what nursing practice must be; a uniquely human service for humans that is served by, not controlled by, the human
technological creations, thus the appreciation of maintaining the influence of technological competency as caring in nursing within a high-tech world of Nursing.

References:


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