

Artigo de opinião

“Knowing Persons as Caring”: The Process of Nursing Grounded in the theory of Technological Competency as Caring in Nursing

Rozzano C. Locsin¹, RN; PhD, FAAN

Dr. Locsin is *Professor Emeritus* at Tokushima University Graduate School of Biomedical Sciences, Tokushima, Japan, and *Professor Emeritus* of Florida Atlantic University, Boca Raton, FL, USA.

As a nurse theorist and scholar of caring science in nursing, he authored the middle-range theory, *Technological Competency as Caring in Nursing* published by Sigma Theta Tau International Press in 2005. As a nurse scholar, researcher, and nurse educator, he held the *Lillian O. Slemp Endowed Chair in Nursing* at the University of Texas Pan American, in Edinburg, Texas, and the inaugural *John F. Wymer, Jr., Distinguished Professor of Nursing* at Florida Atlantic University in Boca Raton, Florida. In 2003 he was awarded the *Edith Moore Copeland Founders Award* by Sigma Theta Tau International Honor Society of Nursing.

Dr. Locsin was a Fulbright Scholar to Uganda, a recipient of the Fulbright Alumni Initiative Award, and a Fulbright Senior Specialist in Global and Public Health and International Development as well. He was appointed the USAID Science, Technology, Research and Innovation for Development (STRIDE) Visiting Professor in 2013 to the Philippines..

He is directs the Technological Competency as Caring in Nursing Institute at Tokushima University, a member of the Philippine-American Academy of Science and Engineering (PAASE), and the Japan Academy of Nursing Science. In 2006 he was inducted Fellow of the American Academy of Nursing (FAAN).

Introduction

Being technologically competent is being caring. This is a generative statement derived from the theory of *Technological*

Competency as Caring in Nursing (Locsin, 2005). It is a common understanding that the *raison d’etre* of gaining proficiency with technologies in nursing is basically to efficiently use these technologies as

requisite in the practice of nursing in a highly technological and demanding nursing environment. This understanding is most timely now, more than ever before.

The philosophical and theoretical underpinnings of the theory allow for the appreciation of technological competency as an expression of caring in nursing. Such appreciation is founded on Competency as an attribute of caring according to Roach (2002), and an assumption of the theory within Boykin and Schoenhofer's (2001) *Nursing as Caring* theory, in that persons are caring by virtue of their humanness.

Being competent allows the nurse to engage in a shared relationship in order to know the other more fully as caring person. It is understood that a nurse who is technologically competent and is placed in a setting demanding technologic competence will often focus more on mastering the technology. While this is so, it may be critically dangerous when the nurse is technologically ill-equipped or technologically incompetent, and ignores

knowing the person as caring person. As technological competency is an expression of caring in nursing, knowing persons as caring through technological competency is expected of nurses.

Classification of Contemporary Technologies Influencing the Theory

Contemporary technologies can be classified according to the following dimensions:

- *Technology as completer of human beings* to re-formulate the ideal human being, such as replacement parts, either mechanical (prostheses) or organic (transplanted organs); Technology as machine technologies, e.g. computers and gadgets enhancing nursing activities to provide quality patient care, such as Penelope or Da Vinci in the Operating Theatres (Locsin, 2018).
- *Technology as machine technologies.* Machine technologies such as computers and gadgets enhance

nursing activities. These machines, hi-fidelity technologies like simulators, or low fidelity technologies such as thermometers allow nurses to know the person more fully in the moment.

- *Technologies that mimic human beings* and human activities to meet the demands of nursing care practices, e.g. cyborgs (cybernetic organisms) or anthropomorphic machines and robots such as ‘nursebots’ or ‘robo nurse’ (Locsin, & Barnard, 2007). The logical positivistic philosophical view has provided us with a way to understand ‘completeness of human beings’ as the sum of all the parts. Wholeness is understood as ‘having all the parts complete the human being’. Within this view, technological advancements have succeeded in producing human parts to complete human beings. These artificial or mechanical, electronic and inorganic parts, or organic human parts such as transplanted organs or regenerated or restored biotechnologies are currently

highly regarded and raved about (Locsin & Ito, 2018).

- *Other Technologies*

Importantly, there are technologies that focus on replacing the nurse – not because the human nurse is or will be obsolete, but that nursing care is beginning to demand more from human persons. One of these demands include a practice of nursing that highlights a technologically competent nurse as critically essential to human health care who practices nursing by knowing persons as caring. This leads to the theory of Technological Competency as Caring in Nursing. In explaining the theory, two topics will be highlighted, the assumptions of the theory, and the process of “Knowing Persons as Caring” (Locsin, 2018).

The Theory of Technological Competency as Caring in Nursing

Technology has the potential to bring the patient closer to the nurse by enhancing the nurses’ ability to know more about the

person. Conversely, technology can also increase the gap between the nurse and client as exhibited by the conscious disregard of the patient as person, and ignorance of the nursing imperative to know the patient as person.

In many patient care situations, nurses have felt that advanced technology may distance them from patients because they need to pay such extensive attention to the equipment. However, with data derived from technological equipment, critical information can be retrieved that allow nurses to focus on caring while also being with the patient. Therefore, “technological competency as caring” is expressed as the skillful or proficient demonstration of intentional, deliberate, and authentic activities by experienced nurses who practice in environments requiring technological expertise in order to know persons as caring. The practice model that is crucial to contemporary nursing is one in which caring in nursing can be expressed through technological competency (Locsin,

2005, 2016; Macalam, & Locsin, 2020).

Assumptions of the Theory:

1). Persons are caring by virtue of their humanness. This assumption underscores that all human beings are caring. 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 (Locsin, 2016).

2). The ideal of wholeness is a philosophical perspective that allows one to recognize human beings as a person, complete in his/her 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.’ (Locsin, 2016).

3). Knowing persons is a continuous process in which the nurse and nursed

focus on appreciating, celebrating, supporting and affirming each other, allowing each other to know each other mutually, as participants in the care, instead of being underscored as aspects of care like being objects of our care (Locsin, 2016).

4). Nursing as a discipline and a professional practice provide the critical view of nursing as integral to the practice of health care, thus facilitating wellness of human beings as persons (Locsin, 2016).

5). 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 (Locsin, 2016).

Universal Technological Domain

This domain is appreciated as where all nursing within the technological conceptualizations reside; the continuous demonstration of ever-changing dynamics of knowing persons as caring (Locsin, & Purnell, 2015). To illustrate this continuous knowing process, a Mobius representation

is selected (Figure 1, Locsin, 2017). The Mobius demonstrates that a certain movement does not go ‘back’ to its original point, but rather change directions (from one side of a surface to another but without moving the surface). This feature describes the process of Nursing – moving through the Universal Technological Domain.

Illustrating the Process of Knowing Persons as Caring

How will the nurse practice nursing? The process of nursing, guided by the theory of Technological Competency as Caring in Nursing, shares three distinct processes which are co-extensive with each other – being that in knowing persons as caring, the three processes of *technological knowing, designing, and participative engaging* illustrate how well nurses and the one nursed understand the purposes of nursing. In this process, technology provides the mechanism through instrumentation to derive representative data of the persons being nursed and

cared for.

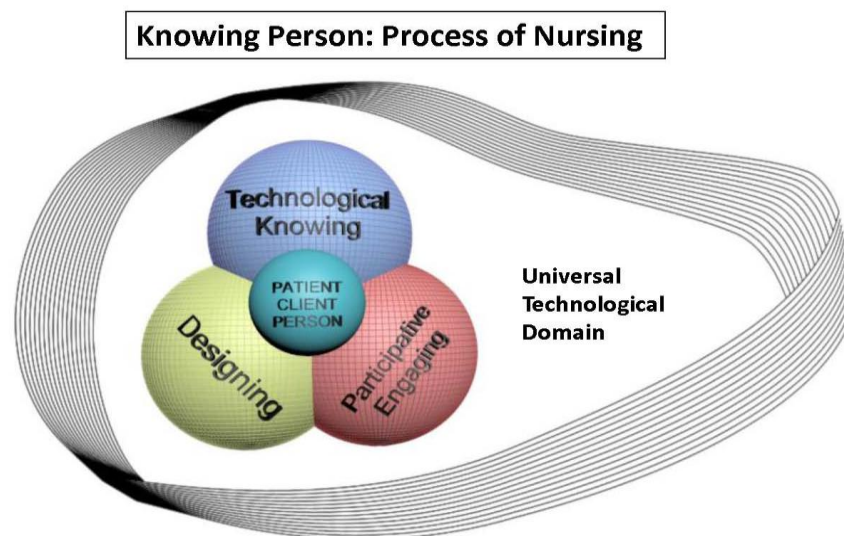


Figure 1. The Theory of Technological Competency as Caring in Nursing and the Process of Knowing Person within the Universal Technological Domain © 2014

Locsin, R. (2017). The coexistence of technology and caring in the theory of Technological Competency as Caring in Nursing. *The Journal of Medical Investigation*, 64, 160-164. Technological Knowing.

The process of knowing involves a dynamic process in which persons are known as participants in their care rather than as objects of care. In this process, the nurse enters the world of the other using technology to reveal aspects of the person - essentially what is known becomes a representation of the real person. The information derived from knowing the person is only relevant for the moment, for

the person can change moment to moment and is unpredictable.

Mutual Designing

Both the nurse and the one nursed (patient) together plan a care process from which the nurse can organize a mutually rewarding nursing practice that is responsive to the patient's desire for care.

Participative Engaging

The simultaneous practice of relating with one another. The critical feature is alternating rhythms. The evidence of continuous knowing is reflective of the continuous recursive process of knowing persons as caring.

Being Cared-for by Technological Machines

What is it like to live dependent lives while being cared for by technological machines? Will technology provide the essential values of living? Evidences of human care can be described and explained within the theoretical and conceptual contexts grounded in the theory of Technological Competency as Caring in Nursing.

To illustrate the nursing that transpires as knowing persons as caring, an expression of the human person's encounter with the nurse, a situation that resonates well with our nursing practice, is hereby narrated as a story about a patient in an intensive care unit and her nurse.

INTENSIVE CARE

Did you see nurse that you can know me -
The part that is me, my mind and soul is in
my eyes.

These tubes that are everywhere - that is
not me.

The one in my throat is the worst of all -
Now my whole being, the essence of me I
must reflect through my hands but they are
tied down but did you realize that it is
uncomfortable for me or through my eyes
and you do not notice them - except once
today during my bath.

You speak to me and look at the tubes -
Don't you know my thoughts are all over my
face

Don't you realize your thoughts are on your
face -

In your touch and your tone of voice.

I wrote a request on paper you said "I'll take
care
of it for you" your tone said "Why can't this
woman do anything for herself?"

You positioned your hand to count my
pulse but I

Can't say you touched me - you wouldn't hold my hand that I may touch you.

You walked in for the first time today with a grin on your face but your mouth is now tight and you grimaced a lot as you bathed me.

Don't you see nurse that you can know me - I'm not a chart or tubes of medication, monitors or all the other things you look at so intensely - I'm more than that , I'm scared - just look in my eyes.

Sheila Carr (1991)

Furthering the Theory

Our humanity and humanness is fragile. We focus on our capabilities to remain living organisms. Health and illness are one in that both challenges our human naturalness – or natural tendencies to preserve our lives. But, how about the human caring envisaged with technological advancements and encounters that shape the very futuristic notion of being human? The consequences of being human is to be

subject to humanness – including human transformations. However, here lies the wonderment of being human – our ability and capacity to change. Technology would have us believe, can change the world. And by all means our affirmation, celebration, and support of this changing world is infinite, and, we would all die trying to live it.

To advance the theory of Technological Competency as Caring in Nursing and continue to support the process of nursing as knowing persons as caring, nursing phenomena within the theoretical perspective require formalized studies in order to influence the practice of nursing. Some of these phenomena are identified as follows (Smith, & Parker, 2014):

- Experiences of nurses 'caring for' persons with technologies
- Lived Experiences of persons being 'cared for' with technologies
- Ethics & Technological dependence
- Cloning and Bionic Parts and the experience of being with.

- Design and development of instrument to measure technological competency as caring in nursing
- Testing of instrument to measure Patient Experience with Technologies
- Genetics and genomics and the future of humans as posthumans
- Burn out phenomenon and the prospective use of robots in the practice of nursing
- Nursing Administration - calls to care for nurses in high tech environments
- Universality of technological competency as caring in varying nursing settings and cultures

References

- Boykin, A., & Schoenhofer, S. (2001). *Nursing as Caring: A Model for Transforming Practice*. Jones and Bartlett, Sudbury, CT., USA
- Barnard, A., Locsin, R. (2007). *Technology and Nursing: Practice, Process, and Issues*. Palgrave-Macmillan, Co., London, UK
- Carr, S. (1991). Intensive Care. In Boykin, A, & Schoenhofer, S. (2001). *Nursing as Caring: A Model for Transforming Practice*. Jones and Bartlett, Sudbury, CT, USA.
- Locsin, R. (2005). *Technological Competency as Caring in Nursing*. Sigma Theta Tau International Press, Indianapolis, IN, USA.
- Locsin, R. and Barnard, A. (2007). Technological Competency as Caring in Nursing: A Practice Model. In A. Barnard and R. Locsin, *Technology and Nursing: Practice, Process, and Issues*. Palgrave-Macmillan, Co.
- Locsin, R. & Purnell, M. (2015). Advancing the Theory of Technological Competency as Caring in Nursing: The Universal Technological Domain. *International Journal for Human Caring*, 19(2), 50-54.
- Locsin, R. (2016). *Technological Competency as Caring in Nursing*, (rev. Ed). Silliman University Press, Dumaguete City, Philippines.
- Locsin, R. (2017). The coexistence of technology and caring in the theory of

Technological Competency as Caring in Nursing. *The Journal of Medical Investigation*, 64, 160-164.

Locsin, R. (2018). Theory-based nursing practice in the world of anthropomorphic intelligent machines. *Shikoku Acta Medica*, 73(5, 6). 227-232.

Locsin, R., Ito, H. (2018). Can humanoid nurse robots replace human nurses? *Journal of Nursing*. 5(1). 5-1. **DOI:** 10.7243/2056-9157

Macalam, T.M. & Locsin, R. (2020). Humanoid Nurse Robots and Compassion: Dialogical Conversation with Rozzano Locsin, *Journal of Health and Caring Sciences*, 2)1. **DOI:** 10.37719/jhcs.2020.v2i1.rna001

Roach, S. (2002). *Caring: The Human Mode of Being. A Blueprint for the Health Professions* (2nd ed. Rev). Ottawa, Canadian Health Care Association Press. Copy from Archives of Caring in Nursing. Christine E. Lynn College of Nursing, Florida Atlantic University. ARC-005. Sister M. Simone Roach, (1958-2005) used with

permission.

Tanioka, T., & Locsin, R., (2012). Feasibility of developing nursing care robots, *Proceedings of the 8th International Conference on Natural Language Processing and Knowledge*, p. 567-570), Hefei, China