

TOWARD AN UNDERSTANDING OF NURSING KNOWLEDGE DEVELOPMENT

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Abstract

As nurses, we seek to better understand how to apply nursing knowledge in our daily practice. Nowadays, the term philosophy is widening used in many areas, including nursing. However, there is existence of unclear understanding about nursing knowledge development derived from standpoint of philosophical and methodological perspectives. This article discusses about this issue and mainly focus on empiricism, post positivistic view, the philosophy of Buddhism and an example related to asthma.

Keywords: nursing knowledge development; philosophy; wisdom

Overview about nursing knowledge from philosophical view

The etymology of philosophy is rooted from the Greek and Latin with the meaning of wisdom or knowledge. Generally, philosophy studies about universal phenomena which are abstract and ultimate that people concerns through the long history consist of the nature of existence, knowledge, morality and purpose ([Bruce, Rietze, & Lim, 2014](#)). In context of nursing, philosophy describes system of nurse's belief and perspectives about profession in nursing practice, scholarship and research at clinic, family and community setting ([Gortner, 1990](#)). Philosophies of nursing have been started for over a century ([Rutty, 1998](#)). So, how is nursing knowledge derived from philosophy? There is diversity philosophical orientations identified relevance to nursing knowledge development, such as

“empiricism, pragmatism, paradigmatic historicism, and science as a problem solving, feminism, phenomenology, hermeneutics, critical theory, and post-structuralism” ([Gunawan, 2016](#)).

In the view of holism, the health of human beings is interrelated combination among bio-psycho, social and spiritual dimensions. Therefore, holistic nursing practice also is integration of knowledge from various sources ([Hanucharunkul & Turale, 2017](#)). Although knowledge is formed and built from science by scientific results ([Gortner, 2000](#)), nurses encountered experience in everyday practice by evaluating the truth of an observation, or determining the best course of an action, or other practices ([Bruce et al., 2014](#)). Contrarily, Carper pointed out four patterns of nursing knowing from philosophical foundation of knowledge development, named: empirics,

personal knowledge, anaesthetics, and ethnics. ([Carper, 1999](#)) Although initial problem was primarily related to only one pattern, these four patterns are interrelated in clinical practice, created comprehension in nursing outlook ([Hanucharunkul & Turale, 2017](#)). Following Caper, Chinn and Krammer identified the fifth pattern. That is emancipatory knowing which combines between “traditional social ideas and the developing dimension of nursing knowledge”. This pattern not only positively changes the workplace environment but also effectively impacts on outcomes for patients and nurses ([Hanucharunkul & Turale, 2017](#)). Generally, all these philosophical perspectives influence comprehensive nursing knowledge development and all of them have two dimensions, including epistemology and ontology.

Epistemology focuses on the development, identification and validation of knowledge to answer ([Bruce et al., 2014](#)) questions about how knowledge occurs, how people develop knowledge, what justification is and methods to explore human lived experience ([Cody & Mitchell, 2002](#)). In nursing, nurses trust in valid and reliable knowledge as well as verifiable knowledge related to phenomena identified. Meanwhile, the ontological dimension which is the nature of the entities represented in the metaparadigm, concentrates on the nature of nursing, personhood, environment, health and illness ([Bruce et al., 2014](#)). This dimension connects both knowledge and practice. Academic research and nursing theory development have tended to be a noticeable focus in discussion of nursing knowledge for a long time ([Chinn, 2010](#)). The nature of nursing knowledge is integrated, thus dimension of ontology from philosophical perspective is a main root to complete combination of theory and practice ([Chinn, 2010](#); [Gunawan, 2016](#)).

Empiricism and nursing knowledge development

Valuing nurse's philosophical viewpoint from paradigms is crucial to understand the growth of nursing as a discipline. Empiricism is one of

common nursing paradigms which is important to explore nursing knowledge development under philosophy aspect ([Elizabeth J. Monti & Martha S. Tingen, 1999](#)). Empiricism is equal to positivism and illustrates through a mechanistic, reductionist and quantitative ([Gortner, 1990](#)). This paradigm is considered as science today. Additionally, it plays a vital role in applying nursing theory and is a link between nursing practice and theory ([Polifroni & Welch, 1999](#)). The ontological assumption of empiricism is that there is a reality which is independent of context and truth could be established ([Elizabeth J. Monti & Martha S. Tingen, 1999](#)). Science builds and forms knowledge from scientific results. The final product of science is theory ([Carper, 1999](#); [Gortner, 2000](#)). On that way, empirical knowledge is generalized into laws and theories and is used to predict phenomena in nursing discipline. And as a circle, empirical knowledge based on the sources of theories and research ([Carper, 1999](#); [Gortner, 2000](#)). To make clear about contribution of empiricism in nursing knowledge development, it could be presented in three sessions as following:

(1) In nursing practice

According to Guba & Lincoln, empiricism was based on the assumption that known could be verified through the senses; the epistemological claimed that reality came from senses without bias; it was indeed relevant to every practicing nurse because such issues were rooted in the way in which nursing practice was organized and actualized. In nursing practice, based on the assumption of empiricism, nurses might perform actions by understanding or knowing the end goal of their actions ([Guba, 1994](#)).

(2) Nursing theory

Giuliano claimed that empiricism was a bridge linked nursing theory to nursing practice. In other words, empiricism is essential for nursing science to substantiate claims regarding nursing care and responses of human beings in situation of health and illness as well as to provide explanatory models; to test and to generate theory (([Giuliano, 2003](#))). Testing

hypothesis by empiricism allows relationships in theories to be valid. Therefore, establishment of valid relationships enables theories to be used in explainable, predictive and prescriptive notions that are essential and relevant for clinical practice. Orem's Self Care Deficit Nursing Theory is the prime example that Orem used the empiricism to create this theory which has been applying widely in nursing research and practice ([Jackson, 2015](#)).

(3) In nursing research

Empiricism is based on the assumption that methodologies associated with empiricism are the scientific methods. Those methods focus on the experiments, controls, objectivity, precise measurements and quantification of data ([Elizabeth J. Monti & Martha S. Tingen, 1999](#)). The empiricism contributes to nursing research as facilitating the development and testing of hypotheses, intervention comparisons, and the setting up relationships between variables. Quantitative methods often are used in adherents of the empirical paradigm. Research methodologies commonly employ in empirical paradigm include experimental studies, surveys, and the evaluation of secondary-source data such as systematic review ([Gillis & Jackson, 2002](#)). Generalizability in empirical research allows relationships to be extrapolated to larger population or different situation, which would be advantageous in nursing practice and nursing research ([Giuliano, 2003](#)).

(4) In nursing education

Nursing education based on "knowledge or reality is obtained through the senses and observations" as assumption of empiricism. Nursing practice courses are constructed to allow the students learn by observing, doing and experiencing nursing reality in laboratories and clinics. Since the world of nursing have been rapidly evolved and changed, it is more important for students learn how to transfer knowledge from a situation to others. Finally, nurse students can make decisions by critical thinking specific to a situation. In nursing graduate education, based on assumptions of empiricism, nursing doctoral students could be able to formulate

their own worldview of phenomenon, can describe what nursing is and its phenomena of concern and delineate differences between nursing perspective and other professional disciplines ([DiBartolo, 1998](#)). By getting knowledge at the same time with other courses such as nursing theory development or advanced research, nursing doctoral students are able to develop and test hypotheses and theory, make comparison among interventions, and establish relationships between variables.

However, many nursing scientists consider empiricism often cannot reflect the values and beliefs of nursing discipline. Focusing of empiricism paradigm on holism, person-centred care, and understanding of human experience is impossible ([Geanellos, 1997](#)). In empiricism paradigm ([Guba, 1994](#)), researchers try to control confounding variables in order to expand the validity of the study results but it is not easy in nursing science when we study on the humans. Additionally, if researchers control numerous factors, they may miss the important context; hence the study results may become artificial and has low generalizability. Those issues make nursing scientists think that person in empiricism studies is more like a machine than a human being who has interaction with the environment ([E. J. Monti & M. S. Tingen, 1999](#)). Furthermore, empiricism is not aware of aesthetics, ethics and personal knowledge which cannot always be verified. Since human is very complex, they are emotional and have their own behaviour that are almost unable to predict and measure, so total certainty is impossible ([Mitchell & Cody, 1992](#)). Therefore, contemporary empiricism is necessary in nursing field. In the 1980s and 1990s contemporary empiricism came as a way to broaden the scope of empiricism ([Giuliano, 2003](#)).

Contemporary empiricism and nursing knowledge development

Contemporary empiricism is also called post positivism, a paradigm that can be applied to the scientific observations by empirical methods within appropriate contexts. Interpretative knowledge is also one of

accounts of contemporary empiricism ([Giuliano, 2003](#)). The methodology of contemporary include: experimental/manipulative, falsification of hypothesis, and may include qualitative methods ([Giuliano, 2003](#)). There are three major assumptions underlying contemporary empiricism:

(1) Predictability versus universality. Total predictability is impossible. And contemporary empiricism seeks only for further understanding rather than to complete this understanding, a phenomena in all its complexities ([Weiss, 1997](#)). It clearly states that there is no universal existing theory that can explain every phenomenon, and the goal of scientific knowledge is to constantly enhance our understanding by different methods of enquiry, rather than to seek the definite facts for all time. This is the major difference between contemporary and traditional empirical approaches ([Giuliano, 2003](#));

(2) Knowledge to improve nursing science. Nursing science needs to generate knowledge in order to help explained human reaction and predicted the effectiveness of nursing interventions which are the essence of nursing social value. Observation and description of a phenomenon is important in understanding and developing knowledge which could be done by qualitative research ([Giuliano, 2003](#));

(3) Analysis and synthesis. Breaking down the whole into parts and analysing each piece carefully would help nurses understand its properties deeply. Constantly, synthesising various aspects into a whole can help nurses grasp the value of the parts in the holistic event ([Giuliano, 2003](#)).

There are two major tenets of contemporary empiricism, including deductive reasoning and inductive reasoning. Deductive reasoning is mostly positivist or quantitative while inductive reasoning is qualitative ([Weiss, 1997](#)). Hanucharurnkul and Turale (2017) stated that the nature of nursing knowledge was integrated of various methods in

conducting research; therefore, today nurse scholars use both qualitative and quantitative methods to solve and get answers for nursing problems in order to achieve comprehensive knowledge development and desirable outcome.

Buddhism and nursing knowledge development

As mentioned earlier, nurses work with human beings and belief and spiritual are important components of health and well-being. Each person, depending on her/ his nation, ethic and culture has each religion which is great impact to the way people live and practice their health. Buddhism has a long association with the healing arts and connection with modern medicine. The Buddha revealed three “signs” of human suffering of a kind encountered in medical practice on a daily basis, including old age, sickness, and death ([Keown, 2012](#)). The Buddhist worldview believes in karma as the relation between acts/ reasons and its subsequent consequences ([Ratanakul, 2004](#)). The Four Noble Truths in the Buddhist philosophy state that (1) life entails suffering; (2) suffering has an obvious cause; (3) ending of suffering is possible; (4) a path leading to the end of suffering is given ([Keown, 2012](#)). Base on the four truths, an example of medical analogy is given following contemporary Indian medical practice, in which (1) making a diagnosis; (2) establishing an aetiology of the disease; (3) determining a prognosis and (4) providing a plan of treatment and care ([Keown, 2012](#)).

Additionally, the Buddha states that well-being is the interactive result of good karma in the past and vice versa therefore, the Buddha also emphasizes respect to diet, exercise, alcohol and avoidance of stress ([Keown, 2012](#); [Ratanakul, 2004](#)). Evidently, we can see the influence of Buddhism on the way of life, health-related beliefs and health behaviour management. As a result, it would be benefit if nurses integrate Buddhism principles into nursing care for people generally and Buddhist practitioners specifically ([Chinnawong, 2007](#)). Understanding about Buddhism once has been applying in nursing care would help nurses

have ability to provide religiously apposite care for patients who are practice that religion.

For example, in Vietnamese context, Buddhism practitioners do not eat any kind of meat in the first day and the fifteen day of a month following lunar calendar. Therefore, when nurse takes care for those patients, nurse must consider about this issue in diet plan ([ElGindy, 2005](#)). Consequently, the patient's quality of life is improved and they are more satisfied with nursing care ([Chan, Poon, & Hegney, 2011](#)). Actually, nurses have realized that it is worthwhile to listen the voices of religion and apply religion in nursing care, not just only about meditation, psychological care but also physical care as previous example ([McCaffrey, Raffin-Bouchal, & Moules, 2012](#)).

An example of empirical, post positivistic paradigms and Buddhism perspective to asthma health issue

As we know, asthma is one of the major non-communicable diseases with the prevalence of asthma is increasing worldwide. It was estimated that 235 million people had suffered from asthma globally in recent years and approximately 383 thousand deaths due to asthma in 2015 ([WHO, 2017](#)). Vietnam is a developing country in ASEAN area. According to Joint Annual Health Review, asthma is one of main burden diseases ([MOH, 2016](#)). Although asthma cannot treat permanently, it can be prevented by management behaviour related to control asthma triggers such as smoke, mites, diet and cold weather ([Friend & Morrison, 2015](#)).

Applying empirical perspective, a suppose question could be, what are factors related to behaviour management among asthmatic patients? There are several studies have been conducted to explore factors related to asthma management behaviour with some theories that can explain patient's behaviour such as Self-Management or Precede and Proceed model common-sense model. In this study, the researcher can set hypotheses about relationships between some significant factors and asthma management behaviour based on

literature review and theory. The quantitative method can be used through reliable and valid tools to test proposed hypotheses. Hence, data analysis is done statistical methods to test hypotheses.

Applying contemporary empiricist view, the research also can observe what patients do to manage their asthma and also go in-depth interview or group discussion to get data to answer the research question that what they do and why they do those actions of asthmatic management? Understanding gained from qualitative research can be used to develop new theory that describe phenomenon of asthma management among asthmatic sufferers.

Applying the Buddhism perspective, the researcher may raise a question that "what are differences between group of Buddhist patients and non-Buddhist patients?" An answer may get that Buddhist patients may have higher awareness and practice in control asthma triggers such as smoke – a leading cause of asthma attack because the fifth precept of Buddhism for Buddhistic practitioners is taking in toxicating substances such as drug or drink or smoke, etc. Hence, understanding about religion will help nurse predicted about patient's behaviours.

Conclusion

This paper provides the insight of knowledge of all philosophy approaches in nursing knowledge development. However, we can recognise that using philosophy propose nurses may better understand the role, function, and thinking philosophically to the worldview. Philosophy is not only understood as relevant but vital to our discipline and professional practice.

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Author Contribution

This is the original work of the corresponding author.

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