



# Knowledge Development in Ghanaian Nursing Institutions Using Carper's Ways of Knowing

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**How to cite this paper:** Adu-Assiamah, S. (2022) Knowledge Development in Ghanaian Nursing Institutions Using Carper's Ways of Knowing. *Open Access Library Journal*, 9: e9135.

<https://doi.org/10.4236/oalib.1109135>

**Received:** July 24, 2022

**Accepted:** August 15, 2022

**Published:** August 18, 2022

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## Abstract

Nursing model is fundamental in the establishment of nursing knowledge. Nurses are unaware of the inherent science and art of nursing knowledge thus unable to formulate appropriate knowledge in their fields of practice. The pattern of knowing in nursing aids with knowledge acquisition, development and implementation within the perspectives and relevance of the profession. Exploring the patterns of knowing in the training of nursing as well as clinical experiences can contribute to further articulation and accumulation in the development of nursing knowledge. Knowledge development in nursing can be developed through standardized training, problem-based learning, reflective practice and clinical mentorship. In conclusion, Carpers' ways of knowing can be an effective guide to the development of knowledge in nursing.

## Subject Areas

Nursing

## Keywords

Nursing, Patterns of Knowing, Knowledge

## 1. Introduction: Understanding Carpers Ways of Knowing

Nurses need knowledge to render care to their patients. Carper's theory on the pattern of knowing was a ground breaker in the science of nursing that expanded the theoretical base of nursing, understanding on the knowledge and concept needed in a practice-oriented discipline such as nursing [1]. Knowledge alone, however, does not improve patients' outcomes and treatment satisfaction. There is a need for nurses to imbibe the science of nursing, the art of nursing and the moral of the profession to achieve quality patient outcomes and increased respect from patients and other health care professionals [2]. The know-

ledge of nursing is largely influenced by nurses' interactions and experiences with patient however rationalist argue that the only source of knowledge is reason rather than experience [3]. Carpers' work was extremely relevant and timely as nursing was under much influence by positivist view that reality is one that can be empirically tested and verified. Her work helped nursing to gain its identity as a body of knowledge [1]. However, human concerns and experiences are difficult to formalize though it is a core mandate of nursing [4]. This therefore made carpers pattern of knowing a great achievement in nursing literature as her theory gave legitimate claims to the actions of nurses. It expanded nurses' perspective in understanding patient-oriented discipline like nursing [5]. Knowing leads to knowledge and this can elevate the practice of nursing in Ghana and globally. Carper assumed the patterns of knowing provided the unique perspective of the nursing discipline. This was refuted by Boykin et al, who were of the view that it is the conception of nursing that provides nursing knowledge rather than the patterns of knowing [5]. A nurse who knows the ways of a profession is able to perceive, receive and understand information pertaining to him and the work or learning environment [6]. This knowing translates to knowledge and he is able to express what he knows as well as be able to effectively communicate his facts with others [7]. Knowing in nursing therefore exposes the uniqueness of the discipline as a distinct profession in a multidisciplinary health care delivery system. Knowledge of nursing is "empirical, factual, objectively descriptive and generalizable" [8]. The article aimed to explore practical ways of knowledge development in Ghana using the Carpers ways of knowing.

## **2. Fundamental Patterns of Knowing**

### **2.1. Empirics: The Science of Nursing**

Empirical knowing as the science of nursing hold a firm assumption that knowing is expressed as scientific competence. Its purpose is to describe, explain and predict nature and social phenomena [9]. It is rooted in scientific knowledge such as theories, research and formal writings. The knowledge generated is abstract in nature, measureable and exposed to public testing and analysis. It requires nurses to be conscious problem solvers using scientific evidence and logical reasoning [10]. Empirical science believes in using the physical senses to understand and express reality of what is known [3]. The science of nursing provides it with the data base and recognitions as a professional as an academic discipline [9]. Nursing knowledge is built on theories, laws, principles, and models to quantify specific attributes of a phenomenon. Nursing through Carper broadened the legitimate way of inquiry, hypothesis testing including inductive and deductive reasoning and phenomenological descriptions [5]. Carper is of the view that nursing needs to expand its scientific knowledge as it has not achieved a scientific paradigm. This is supported by Chinn et al; whose theory reflects that nursing theory hold an ideal scientific inquiry but when tested against these ideals it is proved inadequate [9]. This is due to the use of other patterns of

knowing in nursing which cannot be interpreted with empirical reality however if the same theories are being judge as a whole, their impact in knowing expands beyond the traditional scientific ideals. Holistic approach to knowledge development in nursing affirmed that health and wellbeing is no longer addressed according to observable characteristics and behaviours only but it is related to the entity of human life process and reflects the individuals' values and beliefs [8] [9].

## 2.2. Aesthetic: The Art of Nursing

Aesthetic knowing refers to the art and act of nursing expressed through the actions, conduct, attitude and interactions of nurses with the patient and her environment. It is based on the "direct feeling of experience" [8]. It involves what to do without conscious deliberation, deep appreciation of the meaning of a situation beyond its face value. The aesthetic pattern of knowing is the art of nursing and is the form of technical and manual skills used in carrying out nursing duties as well as being able to meet specific client needs. Aesthetics knowing brings together all the element of nursing care situation to meaningful levels. It is unique and subjective [8] [9].

To demonstrate the art of nursing, the nurse must perceive the nature of a clinical situation wholly without biases and responds with skilled actions, intuition and empathy [11]. Prior to the advance of nursing knowledge, nurses discharged their duties through "on the job" training and apprenticeship. The duty of the nurse was rooted in routine daily activities with little focus on formal knowledge development [8]. Over the century, nursing has evolved in knowing and has documented clinical practices and procedure to guide the profession [12]. It greatly expresses the caring imbedded in nursing. Caring is a human experience based on aesthetic quality which expresses the nurse-patients relationship. This makes people to realize their common human experiences and widen their understanding of the world, human connections and interactions [13].

Aesthetic knowing contributes significantly to the development of nursing knowledge in Ghana. For example, in Ghana, most nurses learn how to perform some major nursing procedures on the job. Nurses and midwives gain mastery of procedures during practice in the wards as established staff or trainees. Benner stated knowledge derived can be described in language and practice. It is the meaning derived from knowledge and experience that changes our views of how nurses might know their patients [12]

## 2.3. Personal Knowing

Personal Knowing focus on how the nurse accept self that is saturated in self-knowledge, independence and confidence aimed at promoting wholeness and integrity in a personal encounter [8]. It involves becoming conscious of one's self over time as we interact with colleagues, patients and students. Personal knowing is difficult to understand and teach to others. It is developed and

enhanced by the nurse practicing with scientific knowledge, good ethical principles, insight about self and the environment as well as the consciousness to develop herself in knowing [8] [9] [14].

In order to gain knowledge, the nurse must reflect on activities of her practice and be opened to learn from her daily experiences with her environment. For nurses to be knowledgeable they must reconcile their professional responsibility and relationship with their patient as well as evidenced based practices [13] [14]. Personal knowing creates a therapeutic bond between the nurse and the patient. For this bond to enhance patient wellbeing, requires internal processes that cover communication, building rapport and transaction between the nurse and the patient [2]. Patient recovery from illness, maintaining wellness and effective coping process of clients depends on the kind of therapeutic relationship that exists between the client and the nurse [15].

The therapeutic relationship that exists between the nurse and clients depends on the kind of rapport established at the first encounter between the nurse and the client. Once the nurse is able to accept the client situation with feelings, emotions, needs, strength, and weakness, then the nurse will care and have compassion for the client. This will open up the client to engage with the nurse better and provide better information to aid the nurse in planning for nursing care [16].

Personal knowing approach to knowledge acquisition is based on experience, patience, empathy, confidence, and self-knowledge through interaction with the client “knowing that and knowing how” [17]. Personal as well as aesthetic patterns of knowing are used in the development of knowledge in the humanistic nursing model and emotional intelligence. This offers a framework of practice in a therapeutic nurse patient relationship. It also highlighted a concept derived from phenomenological experiences of patients to enhance clinical nursing practice [10].

#### **2.4. Ethics: The Moral Component**

Ethics refers to the concept of moral values in nursing [8]. It guides and directs the conduct and behaviours of nurses in their practice. This pattern goes beyond the knowledge of code of ethics of the profession to include “moment to moment moral judgement according to motives, intentions and personal characteristics” [8] [9].

It requires experiential knowledge of the social values of the nurse in her immediate environment and the world as a whole. It demands of the nurse to have intellectual and ethical reasoning to conform to society views. The ethics of knowing focuses on obligatory social values, rights and responsibilities of the nurse, codes of conducts in nursing, and confronting and resolving conflicts. Dialogue rather than codes and standards is required to analyses an ethical decision [3].

The main source of ethical codes in nursing stems from a professional standards and ethical codes, understanding and appreciating philosophical prin-

ciples of social ethics such as fairness, respect for patient, patient as a unique individual and equity [17].

### 3. Importance of Carper's Theory

- 1) Formally express nursing knowledge;
- 2) Provide professional and discipline identity;
- 3) Convey to others what nursing contributes to the health care system;
- 4) Creates expert and effective nursing practice.

### 4. The Challenges of Knowing in Nursing

- 1) Nursing involves processes of complex interaction;
- 2) Nurses in practice know more than they can communicate with others;
- 3) Historically, what nurses know has not been well communicated and documented;
- 4) Empirical knowledge partially reflects nursing knowledge this can be known when all forms of knowing are integrated and valued.

## 5. Application of Carper's Theory in Knowledge Development in Ghana

### 5.1. Standardized Training and Examination

The nursing and midwifery council as a regulating authority for nursing and midwifery education in Ghana must ensure that all nursing and midwifery training colleges are certified with the required trainers and logistics. This will ensure the standard of teaching and learning is maintained at the optimum [18]. Ghana's clinical nursing education is hampered by overreliance on clinical placement centers and use of more teacher-centered teaching approach. These make facilitating the development of clinical competencies ineffective among student nurses [19].

The council should structure its training to expose trainees to more clinical practice. It is from these exposures that student nurses get to put in practice scientific knowledge gained in the classroom, demonstrate the practical and artistry works of nursing, develop the sense of intuition and personal knowing in the care of the patient. Soft skills have become the oxygen needed to resuscitate the seemingly dying nursing care quality. Nursing and midwifery council should incorporate more soft skills into the nursing curriculum [20].

### 5.2. Problem Based Learning

Problem based learning institutes a system of instructional methods in which learners work in small groups to solve a problem [21]. Learners are given scenarios from which they apply the four patterns of knowing to solve problems identified. This method of teaching though time consuming creates the avenue for learners to generate knowledge and become well-informed in a subject they lacked knowledge on. The students are able to retain acquired knowledge, au-

tonomy and professional identity [21]. The adaptation of problem based learning is a manifestation that there are other ways of learning from ones experience. The integration of imaginative and creative learning avenues in the classroom or in clinical setting will enhance the knowing capacity of the student nurse or professional [16].

### **5.3. Clinical Supervision and Mentorship**

Clinical supervision leads to knowledge development by allowing exchange between practicing professionals to facilitate the development of professional skills [20]. An experienced nurse guides a colleague through activities she had mastery over. She uses teach back and return demonstrations to guide and support the learner through the process. In order for the nurse to impact knowledge and improve the knowing of other, she must know the science of the procedure or activity, be able to skillfully demonstrate and guide the colleague to use her own understand to express and exhibit what she has learn. This new concept that has been thought and learnt must be documented to serve as reference to other professional.

Supportive supervision and mentoring has become an innovative tool for learning among professional nurses and novice nurses. Peer mentoring has a strong relationship with personal and professional growth and development. Characteristics of peer mentoring process such as shared learning, shared caring, reciprocity and commitments allows for growth and knowledge sharing [22] [23].

### **5.4. Structured Reflective Practice**

Reflecting on an event helps learners and professionals to evaluate how an experience has changed their way of knowing and impacted knowledge. Reflective practice makes the nurse look beyond her self-knowing and seeks for deeper, comprehensive evidenced based practice to guide her should a similar incident occur. The nurse must use all patterns of knowing to make good judgment on her action and proceed to know the best way to manage herself. Reflective practices should be documented. Reflective learning in nursing can improve the ways professional and novice nurses deliver patient care and improve decision making capacity when exposes to similar phenomenon [7].

### **5.5. Publication of Evidenced Based Research and Making It Available to Clinical Nurses**

Nursing research has a tremendous influence on current and future of professional nursing practice making it an important component of the educational process [24]. Though the role of the nurse has expanded greatly over the years, nurses have a primary duty of being the patient advocate and providing optimal care using evidence obtained from research [24]. Pilot and beck (2006) stated that nursing research is “a systemic inquiry designed to develop knowledge

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about issues of importance to nurses, including nursing practice, nursing education and administration” [25]. Research serves as a medium for the development of knowledge by document what is known or has been learnt from experience.

### **5.6. Intuition in Care of Patients**

Intuition is state of emotional awareness without rational thinking. Intuition is gaining acceptance as a legitimate form of knowledge in clinical nursing [26]. Greater use of intuition can provide nurses and students with learning experience and teach them to be more sensitive towards patient care and wishes. The use of intuition in Ghana by nurses is wildly acclaimed but less documented. Documentation of intuitive knowing can advance knowledge development in Ghana. Nurses must take the initiative evidence to advance their knowledge gained in this aspect of care. This can help nurses gain in-depth knowledge and information related to various topics, gain understanding and newer methods in dealing with patient problems, develop and upgrade nursing standards as well as improve the overall patient outcomes.

### **5.7. Nursing Clinical Audit**

Nursing audit is an essential means to evaluate the performance of nurses in Ghana and globally. Auditing of nursing works creates the avenue for in depth understanding of nursing care and practice. It provides a means to improve documentation, nursing practice and knowledge sharing [27]. The empirics and aesthetics of nursing practices are scrutinized and this in the long run improves personal knowing and ethics of the profession. Unfortunately, nursing documentation is limited and inadequate for evaluating of actual care given [28]. Nursing clinical audits help identify areas for making practice more efficient and advancing clinical practice. The availability of nursing documentation will enhance nursing practices in the ward as well as clinical researches.

### **5.8. Patient Advocacy and Increasing Involvement in Decision Making**

Patient advocacy is a strategy use by the nurse to assist a patient based on his needs as identified during their interaction. Though advocacy can be performed by all health workers, nurses have adopted the role based on their close relationship with patients [2]. The nurse perceives and envisions possible challenges a patient might have or develop based on data available and transform it into medical and non-medical perception. Carper states that this helps the nurse to understand the patients’ needs and envision useful actions according to the desired outcomes [8] [11]. This help the nurse advocate for alternative intervention they think are necessary for patient care and recovery [4]. Literature search on nurses’ advocacy role yielded little results. Though nurses maybe performing this role well there is little documentation to ascertain its effectiveness and impact on patient care [2]. Lack of documentation of nurses’ advocacy roles in Ghana

limits ones efforts in determining how impactful this duty has yielded to knowledge development in Ghana. In summary, nursing institutions can adopt Carpers ways of knowing to develop and advance the carrier of nursing in Ghana.

## 6. Conclusions

Exploring critically the four patterns of knowing, it can be firmly concluded that, all the patterns of knowing are interconnected and gives a broader insight into their ontology and epistemology. They are dependent on each other and interrelated in a wide range of practices [29].

All the patterns of knowing have equal importance in the practice and sharing of experiences in nursing. All patterns are unique and offer a special distinctive aspect of knowing that is useful in knowledge development in Ghana and beyond.

Additional observation made during this write up was the fact that, regardless of how experienced and exposed a nurse is in the field of practices, she daily learns new things from her environment that add to her knowledge and improve her ways of knowing.

In order for the Ghanaian nurses to add up to knowledge development, there must be an attitudinal change in our documentations and knowledge sharing. Nurses must document findings in their day-to-day practices and share their experience with others. Nurses must be interested in research works especially in the field of nursing.

## Conflicts of Interest

The author declares no conflicts of interest.

## References

- [1] Wolfer, J. (1933) Aspects of Reality and Ways of Knowing in Nursing; in Search of an Integrating Paradigm. *Journal of Nursing*, **25**, 141-146. <https://doi.org/10.1111/j.1547-5069.1993.tb00770.x>
- [2] Dadzie, G., Aziato, L. and Aikins, A. (2017) "We Are the Best to Stand in for Patients": A Qualitative Study on Nurses' Advocacy Characteristics in Ghana. *BMC Nursing*, **61**, Article No. 16. <https://doi.org/10.1186/s12912-017-0259-6>
- [3] Jacobs-Kramer, M.K. and Chinn, P.L. (1988) Perspective on Knowing: A Model of Nursing Knowledge. *Scholarly Inquiry for Nursing*, **2**, 129-139.
- [4] Tanner, C.A., Benner, P., Chesla, C. and Gorden, D.R. (1993) The Phenomenology of Knowing the Patient. *Image—The Journal of Nursing Scholarship*, **25**, 273-280. <https://doi.org/10.1111/j.1547-5069.1993.tb00259.x>
- [5] Boykin, C.A., Parker, M. and Schoenhofer, S. (1994) Aesthetic Knowing Grounded in an Explicit Conception in Nursing. *Nursing Science Quarterly*, **7**, 158-161. <https://doi.org/10.1177/089431849400700407>
- [6] Polifroni, C. and Marylouise, W. (1999) Perspectives on Philosophy of Nursing: An Historical and Contemporary Anthology. Lippincott Williams and Wilkins, Philadelphia.
- [7] Bonis, S. (2008) Knowing in Nursing: A Concept Analysis. *Journal of Advanced*



- Nursing*, **65**, 1328-1341. <https://doi.org/10.1111/j.1365-2648.2008.04951.x>
- [8] Carper, B. (1978) Fundamental Pattern of Knowing in Nursing. *Advances in Nursing Science*, **1**, 13-23. <https://doi.org/10.1097/00012272-197810000-00004>
- [9] Chinn, P.L. and Kramer, M.K. (1999) Theory and Nursing; a Systemic Approach. 5th Edition, Mosby Year Book Inc., St. Louis.
- [10] Cody, W. (2006) Philosophical and Theoretical Perspectives for Advanced Nursing Practice. 4th Edition, Jones and Bartlett Publishers Inc., London.
- [11] Jenny, J. and Logan, J. (1992) Knowing the Patient: One Aspect of Clinical Knowledge. *Journal of Nursing Scholarship*, **24**, 254-258. <https://doi.org/10.1111/j.1547-5069.1992.tb00730.x>
- [12] Benner, P. (1982) From Novice to Expert. Addison Wilson, Menlo Park. <https://doi.org/10.2307/3462928>
- [13] Smith, M.J. (1992) Enhancing Esthetic Knowledge: A Teaching Strategy. *Advance Nursing Science*, **14**, 52-59. <https://doi.org/10.1097/00012272-199203000-00008>
- [14] Stein-Parbury, J. (2009) Patient and the Person. Interpersonal Skills in Nursing. 4th Edition, Churchill Livingstone, London.
- [15] Thorne, S. (2020) Rethinking Carper's Personal Knowing for 21st Century Nursing. *Nursing Philosophy*, **21**, e12307. <https://doi.org/10.1111/nup.12307>
- [16] Ingram, N. (1994) Knowledge and Level of Consciousness: Application to Nursing Practice. *Journal of Advanced Nursing*, **20**, 881-884. <https://doi.org/10.1046/j.1365-2648.1994.20050881.x>
- [17] Arnone, J.M. and Fitzsimons, M. (2015) Plato, Nightingale, and Nursing: Can You Hear Me Now? *International Journal of Nursing Knowledge*, **26**, 156-162. <https://doi.org/10.1111/2047-3095.12059>
- [18] Nursing and Midwifery Council of Ghana (2022) NMC Who We Are. MIS Team. <https://nmc.gov.gh/web/home-mobile>
- [19] Salifu, D.A., Heyman, Y. and Christmal, C.D. (2022) Teaching and Learning of Clinical Competence in Ghana: Experiences of Students and Post Registration Nurses. *Healthcare*, **10**, Article 538. <https://doi.org/10.3390/healthcare10030538>
- [20] Laari, L., Anim-Boamah, O. and Boso, C.M. (2021) Integrated Review of Soft Skills the Desirable Traits and Skills in Nursing Practice. *Research Square*, 1-19. <https://doi.org/10.21203/rs.3.rs-605637/v1>
- [21] El-Shaer, A. and Gaber, H. (2014) Impact of Problem Based Learning on Students Critical Thinking Dispositions, Knowledge Acquisition and Retention. *Journal of Education and Practice*, **5**, 74-85.
- [22] Glass, N. and Walter, R. (2000) An Experience of Peer Mentoring with Student Nurses: Enhancement of Personal and Professional Growth. *Journal of Nursing Education*, **39**, 401-405. <https://doi.org/10.3928/0148-4834-20000401-05>
- [23] Foolchand, D. and Martitz, J.E. (2020) Experience of Nurses Regarding the Clinical Mentoring of Student Nurses in Resource-Limited Settings. *Health SA*, **25**, Article No. 1434. <https://doi.org/10.4102/hsag.v25i0.1434>
- [24] Tingen, M.S., Burnett, A.H. and Zhu, H. (2013) Importance of Nursing Research. *Journal of Nursing Education*, **48**, 167-170. <https://doi.org/10.3928/01484834-20090301-10>
- [25] Polit, D.F. and Beck, C.T. (2006) Essentials of Nursing Research: Methods, Appraisal and Utilization. 6th Edition, Lippincott Williams & Wilkins, Philadelphia.
- [26] Holm, A.L. and Severinsson, E. (2016) A Systemic Review of Intuition—A Way of

Knowing in Clinical Nursing? *Open Journal of Nursing*, **6**, 412-425.

<https://doi.org/10.4236/ojn.2016.65043>

- [27] Taiye, B.H. (2015) Knowledge and Practice of Documentation among Nurses in Ahmadu Bello University Teaching Hospital Zaria, Kaduna State. *Journal of Nursing and Health Science*, **4**, 1-6.
- [28] Hassan, N.A., Mostafa, M.E. and Ibrahim, R.E. (2018) Assessing Nurses Knowledge and Auditing Their Practices Regarding Nursing Care Documentation. *Port Said Scientific Journal of Nursing*, **5**, 95-112. <https://doi.org/10.21608/pssjn.2018.33187>
- [29] Khuan, L. (2006) Inquiry into Ways of Knowing in Nursing. *Journal of Malaysian Nurses Association*, **2**, 14-16.