



## Patterns of Knowing in Breast Cancer Screening among Minority Women in the United States: Theoretical Application

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**Abstract:** Carper identified four fundamental patterns of knowing in nursing, empirics, esthetics, personal knowing, and ethics, which are necessary for the teaching, practice, and research. A different method of analysis is required to find evidence, understand each pattern and develop knowledge about each pattern. In this paper the authors try to apply types of knowing into a suggested model about the behaviors and barriers to breast cancer (BC) screening among minority women in the United States.

### Introduction

Nursing leaders have been working constantly to develop nursing knowledge by using different ways of knowing to guarantee improvements in health care and nursing practice; the term knowing is concerned with understanding the self and the world (Chinn & Kramer, 2015). After examining the literature, Carper developed four fundamental patterns of knowing including the pattern of empirics, which refers to the science of nursing; the pattern of aesthetics which refers to the art of nursing; the pattern of ethics, which refers to the moral knowledge in nursing; and the personal knowing which refers to knowing the self and the others (Carper, 1978). The pattern of unknowing was developed by Patricia Munhall to explore and understand the meaning of an experience to the patient (Munhall, 1993). Finally, the sociopolitical pattern of knowing was developed by Jill White to address the sociopolitical environment and interaction between the nurse and the patient (White, 1995).

The goal of this paper article describes a model of nursing knowledge that builds from Carper's initial formulation. The application model in this paper begins with an interpretation of Carper's four original knowledge patterns: empirics, ethics, esthetics, and personal. The suggested model apply each one of the six patterns of knowing to the health behaviors and barriers to breast cancer (BC) screening among minority women in the United States.

### The Pattern of Empirics

Empirical knowing is referred to as the science of nursing, which aims to explore, describe, explain and predict phenomena in nursing as there is a need to constantly develop the empirical knowledge in nursing (Carper, 1978). Carper (1978) said that theory development and research endeavors are employed to produce explanations to classify and organize knowledge; factual evidence is needed to control those explanations. She also stated that since health is a dynamic process that changes continuously over time, there is always a need to conduct research to identify variations in health or levels of wellness, and to generate theories and models (Carper, 1978). Carper (1992) stated that it is necessary to quantify empirical data as this allows objective measurements which generate evidence; multiple observers should be able to replicate and validate this evidence to produce empirical, objective, factual and generalizable data. Cullum (1998) suggested that this pattern is consistent with evidence-based practice movement in nursing, which is important to provide holistic nursing care. Chinn and Kramer (2011) explained that this pattern, empirics, is represented by two questions, "What is this?" and "How does it work?" Therefore, research and practice-based methods should be integrated together to strengthen nursing practice; in addition, systematic methods of inquiry, represented in research, should be followed to test theoretic relationships, and generate concepts to replicate and validate empirical phenomena (Chinn & Kramer, 2015).

### Empirical Knowing in Breast Cancer Screening among Minority Women

In BC screening, health behaviors and barriers among minority women in the United States (US) are assessed and identified based on empirical research and systematic investigation. Based on facts and evidence, the American Cancer Society (ACS) found out that BC is the most common cancer among women in the United States (ACS, 2012). The office of Health Information and Research (2011) showed that the rates of BC screening for non-Hispanic white women who are 40 years and older were 50.6%; compared to 40.5% for African American women, 34.7% for Asian



American women, 36.3% for Hispanic women, and 12.5% for Native-American women in 2000 to 2001, indicating 20% to 75% lower rates for minorities. The Office of Health Information and Research (2011) also showed that in California, women with insurance have an overall breast cancer screening of 64%; however, approximately 70% of those women are white. Both of the ACS (2012) and the United Nations (2011) agreed that this problem of minority having less BC screening needs to be investigated further to identify health behaviors and barriers to BC screening to have a better understanding of this phenomenon; therefore, effective interventions to improve their utilization of BC screening testing can be identified and implemented.

### Empirical Research Findings

Research revealed that ethnic minorities and immigrants continue to underutilize BC screening; ethnic groups, such as African American, Hispanic, Asian, and Middle Eastern immigrant women, did not go for BC screening and early detection as much as Caucasian women did (Alford, Schwartz, Soliman, Johnson, Gruber & Merajver, 2009; Borrayo, Hines, Byers, Risendal, Slattery, Sweeney, & Baumgartner, (2009); Engelman, Cupertino, Daley, Long, Cully, Mayo, Ellerback, Geana, & Greiner, 2011; Kgawa-Singer, Tanjasiri, Foo, Tran, & Valdez, 2006; Reiter & Linnan, 2011). Reiter and Linnan (2011) conducted a cross-sectional research study to characterize BC screening behaviors, and to identify barriers to getting recommended BC cancer screening tests among African American women. The researchers stated that they used the screening recommendations of the American Cancer Society in determining adherence to guidelines. Mammography is the most accurate tool available to detect BC at an early stage; it is recommended to be done every year starting at age 40; a clinical breast exam (CBE) is to be done every three years for women in their 20s or 30s, and every year for women starting at age 40; and an optional breast self exam (BSE) every month for women starting in their 20s (ACS, 2012). The researchers followed the systematic approach to achieve the goals of the study as they selected 1123 African American women who completed the baseline and screening tests questionnaires. Statistically significant results showed that 70% of those women reported their most recent mammogram within the last year, which is still lower than that of white women. The researchers suggested that all African American women should adhere with BC screening as they have higher mortality rates from this disease than white women. The most frequently reported barriers included not knowing which test to have, lack of physician recommendation, not knowing

when to have the test, worrying that the test may find cancer, cost, and embarrassment. It was suggested that interventions to increase BC screening among this minority group should be implemented as a step to reduce the disparity in BC screening based on the results of the study. The results of this study were consistent with the those of the previous literature that investigated minority women; the statistically significant results showed that ethnicity influences health beliefs and behaviors as non-white women still have lower rates of BC screening than white women (Alford, et al., 2009; Kudadjie-Gyamfi, Consedine, Magai, Gillespie, & Pierre-Louis, 2005; Lee, Tripp-Reimer, Miller, Sadler, & Lee, 2007; Orom, Kiviniemi, Underwood, Ross, & Shavers, 2010; Schwartz, Fakhouri, Bartoces, Monsur, & Younis, 2008). Lee, et al. (2007) examined the health behaviors and beliefs of American Korean women about BC screening; the results revealed that Korean American women believed that stress, family history of cancer, and improper diet were the major causes of BC. Women with these beliefs were less likely to get BC screening testing than the women who did not mention such beliefs; the Korean American women believed that God and destiny help them cope with stress emotionally and physically, and that perhaps lowers their risk to cancer. Similarly, Petro-Nustas (2001) found out that Jordanian women also tend to believe that everything comes from God which makes BC screening unnecessary. Schwartz, et al. (2008) conducted an exploratory study on 365 Arab American women (ARW) in the metropolitan Detroit, where the largest population of the Middle Eastern immigrants reside, to determine the factors associated with mammography, and beliefs and knowledge about mammography screening. The Health Belief Model was used to explain and predict health behaviors. Results showed that women who did not have a mammography had no education, no health insurance, were unmarried, and had been in the US for 0-10 years, and were from Iraq. The study confirmed that ARW had mammography less frequently than the other populations in Michigan; they also were the least to have one among all other ethnic groups. The need for further research for this ethnic group was acknowledged to explore barriers to BC screening considering the significantly low prevalence of mammography every 1-2 years.

Empirical research can also be utilized to develop instruments (Cyrus-David, King, Bevers, & Robinson, 2009). Cyrus-David et al. (2009) developed and refined the Breast Cancer Risk Reduction Health Belief (BCRRHB) scale through studying a population of 265 medically underserved women of low socioeconomic status, and ethnic minority. Evidence in this study



suggested that the BCRRHB is valid and reliable to be used to identify barriers to BC screening, and health screening behaviors in this population (Cyrus-David, et al., 2009).

### **Evidence-based Practice**

Evidence-based practice depends on systematic reviews in which thorough integration of research studies on a clinical problem is done; evidence about a clinical problem is gathered, and carefully evaluated to draw conclusions about effective practice and clinical implications (Polit & Beck, 2008). Integrating findings of quantitative research through statistical analyses is a technique called meta-analysis, which is objective and treats all the findings as one piece of information; the individual studies are the sample of participants in this case (Polit & Beck, 2008). Vernon, McQueen, Tiro, and Junco (2010) conducted a systematic review and meta-analysis to reveal the most effective interventions to enhance repeat BC screening; 25 studies were included; 19 of them recruited women from ethnic minorities. The results outlined the importance of sending reminders, use of education, motivation and counseling, and use of barriers-specific and multiple intervention strategies to promote repeat BC screening.

After all, a growing literature is still required to address the interactions between ethnicity, demographic, and psychological characteristics to systematically examine and understand the origins of health behaviors (Kudadjie-Gyamfi, et al., 2005). The oncology nurses should be knowledgeable about evidence-based practice and research outcomes as this influences their assessment of minority women. Those nurses should understand that minority populations have different needs, behaviors and beliefs toward BC screening, and that there is a need to overcome barriers and promote compliance of minority women with the ACS guidelines of breast cancer screening.

### **The Pattern of Aesthetics**

Aesthetic knowing is referred to as the art of knowing, which also involves the technical skills in nursing practice; it is subjective and gained from experience rather than systematic research (Carper, 1978). Aesthetic knowing emphasizes on employing intuition and empathy, which is experiencing another's feelings without getting attached, to understand the meaning of what is seen (Carper, 1978). Furthermore, Carper (1978) stated that nurses gain more understanding to their patients if they become more perceptive and empathetic; and that this understanding will give the nurse more options when planning and rendering nursing care. Chinn and Kramer (2015)

said that aesthetic knowing in nursing is related to finding deep meanings of a situation, and requires utilization of creative resources. The critical questions for aesthetic knowing are "What does this mean?" and "How is it significant?" (Chinn & Kramer, 2015). Expression of aesthetic knowing can be done through art, such as poetry, photographs, and storytelling, which transforms experiences and adds appreciation and inspiration to the discipline to guarantee wholeness of nursing care in the discipline (Chinn & Kramer, 2015). Hunter (2002) also suggested poetry as an aesthetic expression for nursing, and encouraged its use as it offers the opportunity to gain new understanding and meaning about the profession and clients; it also clarifies the relationship between the nurse and the patient as it represents the uniqueness of human experiences.

### **Aesthetic Knowing in Breast Cancer Screening among Minority**

Sandelowski (+) argues that Carper's aesthetic knowing is represented by qualitative research which aims to describe the subjective experience and understand the unique meaning. Qualitative research, the phenomenological method, allows understanding the essence and meaning of a lived experience (Creswell, 2009). This kind of research is powerful to explore subjective experiences and to gain insights about the participants' actions and motivations (Creswell, 2009; Polit & Beck, 2008).

### **Qualitative Research as Aesthetic**

A body of qualitative literature investigated women's perceptions and meaning of BC screening and mammography to them (Keogh, McClaren, Apicella, & Hopper, 2011; Puschel et al., 2010; Thomas & Usher, 2009; Wilkinson, Deis, Bowen, & Bokhour, 2011). Thomas and Usher (2009) recruited 36 White non-Hispanic, Hispanic/Latina, African American, and Native American women, age 42 and older, with no history of breast cancer to gain understanding of life experiences of those women concerning their breasts, mammography screening, and current mammography behaviors. The findings revealed that all the women who had a mammogram in the past two years, regardless of ethnicity, shared stories about the influence of the media on their body image if they were diagnosed with breast cancer, and these same women had a relative or a friend with breast cancer and died from it which affected their decision to get a mammogram done. The study also revealed some barriers related to these women's experiences that occurred during adolescence, such as media influence, teasing about their breasts, and family norms and values.



The researchers suggested that this study exhibits the need to consider the influence of past experiences on women's current BC screening behaviors, especially among ethnic minority groups. In addition,

Puschel, et al. (2010) reached similar findings in their qualitative study which aimed to understand barriers and facilitators for BC screening in Latin American women in Chile. The results demonstrated that having symptoms and/or finding lumps were the main facilitators of getting BC screening; while fatalism, secrecy and embarrassment about breast cancer were significant cultural factors that had an impact on their decision to seek BC screening. Utilizing culturally appropriate strategies to promote BC screening were encouraged to prevent advanced breast cancer.

The oncology nurses need to employ their professional experience and intuition to understand the meaning of the experience, concerning BC screening and barriers, to every unique minority woman. Nurses do not stereotype or make assumptions; however, they can imagine what is possible but not real yet, and what can happen if something is not done (Chinn & Kramer, 2015). The nurse knows that every minority woman is unique, and should be assessed thoroughly, and educated about BC screening guidelines to promote adherence to BC screening. Having empathy and focusing on the unique needs of the woman will help nurses better connect with her, which will help the women better accept and understand the teaching. Instruments have been developed to guide the nurse through this assessment especially if she is inexperienced, , such as the BCRRHB scale (Cyrus-David, et al., 2009).

### **Caring and Art in Aesthetic Knowing**

Wagner (2008) discussed the concept of caring as being part of the aesthetic approach and aesthetic knowing in nursing; she also suggested that art is capable of educating people about the meaning of life experiences and relationships, and facilitates discovery of new possibilities. Therefore, the nurse shows a caring attitude toward these women and empathizes with them to better understand the meaning of BC screening experience to them, and to implement culturally-sensitive strategies to effectively teach them about the screening tests and adherence guidelines. Skaer, Robinson, Sclar, and Harding (1996) found out that learning BSE from a health care professional has been associated with greater BSE compliance. Teaching these women how to perform BSE appropriately is related to expressing aesthetic knowing as art involves technical and mechanical skills that are needed in the discipline to achieve results (Chinn & Kramer,

2015), especially that this kind of teaching can involve drawing and/or showing photographs to clarify the procedure.

### **The Pattern of Ethics**

Ethical knowing is referred to as the moral component; nursing clinicians may have to make decisions based on what is right or wrong for the patient concerning care, treatment of the disease, or even promotion of health (Carper, 1978). Although Carper (1978) acknowledged the importance of traditional principles and ethical codes, she argued that because of the complexity of the ethical issues in the current health care system, sometimes these codes fail to help in making a decision or appear to cause contradictions, which causes uncertainty. Therefore, nurses resort to the moral code which guides their ethical conduct to determine the specific set of actions to be taken in a specific, concrete situation (Carper, 1978). When making a moral decision, nurses also need to consider the primary principles of obligation, which is what should be done, and respect for human life (Carper, 1978). In addition, Carper (1978) emphasized that conserving life, promoting health, and relieving suffering are the responsibilities of the nursing discipline; and that nursing actions should promote patient's independence. To be able to make moral decisions, Carper (1978) suggested that the nurse should understand all philosophical aspects regarding what is good, what is wrong, and what is desired; and should take responsibility for these decisions. Carper (1992) said that ethical knowing is part of personal values and involves critical exploration of what is cherished and desired by one's moral goals and motives. Chinn and Kramer (2011) said that nurses bring their own moral system and understanding to practice; they begin asking "Is this right?" and "Is this responsible?" to value and clarify the acts of caring. They also suggested that ethical knowledge evolves through the processes of dialogue and justification (Chinn & Kramer, 2015). In addition, Chinn and Kramer (2011) said that all nursing actions are considered moral statements; and that although ethics and morality are used interchangeably in the literature, ethics is a discipline that tries to decide what is right and what is wrong; it is head work expressed in ethical codes, theories, principles, rules, and laws; as for morality, it is heart work expressed in behavior, grounded in values, and firmly embedded in character. Nevertheless, ethics and morality are interrelated as one of them can be used to judge and evaluate the standards of the other.

### **Ethical Knowing in Breast Cancer Screening among Minority**

#### **Respect for Autonomy**

In BC screening research, many studies showed that lack of physician's recommendations, and lack



of knowledge about BC and BC screening were important barriers among minority women (Gierisch, O'Neil, Rimer, DeFrank, Bowling, & Skinner, 2009; Politi, Clark, Rogers, McGarry, & Sciamanna, 2008; Reiter & Linnan, 2011; Wang, Mandelblatt, Liang, Yi, Ma, & Schwartz, 2009; Williams, Mabiso, Todem, Hammad, Hill-Ashford, Hamada, Palamisono, Robinson-Lockett, & Zambrana, 2011). For these women to be autonomous, and to have respect for their autonomous choices to perform or not perform BC screening, they need to have enough knowledge and understanding of the significance of BC screening. The principle of respect for autonomy is considered a morality principle that acknowledges the right to hold views, take actions based on personal beliefs and values, and make decisions (Beauchamp & Childress, 2009). Therefore, it is the responsibility of the oncology nurses to reinforce good communication with these women who should not be judged based on ethnicity, culture, socioeconomic status, or level of education. Gierisch, et al. (2009) assessed BC screening status among 596 Black and non-Hispanic white women; four categories of barriers were identified including lack of knowledge and not thinking that mammography is required, being too busy, forgetting about the appointments, and cost. The researcher recommended that health care professionals need to spend more time and take extra care in discussing mammography benefits and risks, and screening guidelines. Politi, et al. (2008) investigated the relationship between patient-provider communication, barriers to BC screening, and the on-schedule BC screening among women from different ethnicities. The findings revealed that women who reported provider's communication about screening tests were more likely to be on-schedule than those who did not report this kind of communication. The study recommended conducting more research to find out more about how patient and provider characteristics may affect communication. Borrayo, et al. (2009) suggested that language, other than English, can be a barrier to communication and to adhering to BC screening guidelines as language acculturation was found to be an enabling factor to using BC screening services.

Evaluating personal feelings, values and beliefs help oncology nurses to predict biases and deal with moral issues that may influence interactions with patients, perceptions, or decisions of these patients.

### **Social Justice**

Social justice is another significant issue in BC screening which can be related to both of the ethical and sociopolitical knowing. The concept of justice is interpreted as fairness, equitability, and

appropriateness of the way the person is treated (Beauchamp & Childress, 2009). Certain discriminatory properties, such as race, gender, national origin, and social status have served unfairly as bases of distribution in the society (Beauchamp & Childress, 2009). Disparities in health care among racial/ethnic women and those with low socioeconomic status are still significant in BC screening in the United States (Borrayo, et al., 2009; Gierisch, et al., 2009; Kalager et al., 2009; Peek & Han, 2004). Engelman, et al. (2011) stated that BC screening continues to be particularly underutilized by underserved minority women and in the rural communities where BC is diagnosed at a later stage. Overcoming barriers to BC screening in these communities need to utilize culturally-sensitive strategies and resolve unique mammography access issues (Engelman, et al., 2011; Vernon, et al., 2010).

### **Racial Discrimination**

Perceived discrimination among minority women or cultural racism is another issue that may overlaps with the sociopolitical issues. Racism takes place when people are divided into groups based on their race and allocating societal goods and resources to those groups that are considered superior (Bonilla-Silva, 1996). Williams and Mohammed (2009) said that perceived ethnic or racial discrimination is increasingly getting empirical attention as a factor that can affect health behaviors and contribute in disparities in health. Crawley, Ahn, and Winkleby (2008) examined cross-sectional data from 2003 and 2005 California Health Interview Surveys to investigate BC screening behaviors among African-American, American-Indian/Alaskan-Native, Asian, and Latino respondents who reported perceived medical discrimination compared to those who did not report it. The results revealed that women who reported perceived discrimination were less likely to be screened for BC compared to those who did not report it. Therefore, the oncology nurses should not be judgmental; and need to show professionalism, integrity, and credibility to be able to reach out and help these women. Respecting confidentiality and privacy of these women, and being truthful to them will contribute in building a trust relationship, which is important to reach out to them.

### **The Pattern of Personal Knowing**

Personal knowing refers to knowing the "self" and the others; it involves interactions and relationships between the nurse and the patient (Carper, 1978). It concerns knowing and actualizing of the concrete self to achieve the therapeutic use of self in which the nurse rejects treating the patient as an object and strives instead to establish an authentic



relationship with them; in this relationship, the nurse accepts that the others have freedom to create themselves and that every patient is unique in their behaviors and traits (Carper, 1978). Carper (1978) suggested that this knowing promotes wholeness and encourages engagement rather than detachment. Moch (1990) stated that personal knowing involves the discovery of self and the others through one's own practice, experience, and reflection; it requires integration of science, practice and art. Three components of personal knowing were identified by Moch, including the experiential component which involves being aware of one's feelings and generating meaning from experience through using intellectual and spiritual processes; the interpersonal component which involves interactions with the others and expressing feelings to one another which enhances awareness about the situations; and the intuitive component which involves using intuition to better understand patient's responses and situations (Moch, 1990). Chinn and Kramer (2015) defined personal knowing as a dynamic process that allows expression of authenticity and becoming a whole, and it is represented by two questions, "Do I know what I do?" and "Do I do what I know?" They said that well-developed personal knowing requires opening to world and the others, and interactions with the others through telling personal stories and use of genuine self; use of stories is important in personal knowing as it conveys the essence of the experience and enhances meaningful interpersonal connections (Chinn & Kramer, 2015).

### Reflection in Personal Knowing

Personal knowing also involves the unique perceptions of the person and deep reflection on interactions with the others as well as the responses of the others to them (Chinn & Kramer, 2015). Bonis (2009) stated that reflection on experience has been the focus of various patterns of knowing and research to improve patient care in clinical and community settings. Bonis (2009) examined 134 papers of which 97 are from nursing between 1978 to 2007 to analyze the concept of knowing, the results identified several attributes of personal knowing including knowing is gained through personal experience, knowing is unique to each individual nurse, knowing originates from reflection on personal experience which allows integration of empirical knowledge and personal application of that knowledge, and knowing patient's unique perspectives and responses to health experience allows the nurse to understand the reality of the patient and develop a plan of care based on that reality. Furthermore, the results showed that the nurse who is able to understand cultural perspectives of the patient is better able to provide culturally-sensitive care; the results

emphasized that knowing involves a chance to reflect on personal experiences to gain new knowledge, it involves interactions with the world, and that ongoing reflection on professional experiences has led to development of knowing in nursing.

### Personal Knowing in Breast Cancer Screening among Minority

The oncology nurses need to understand her/his "self" first so they will not be afraid to understand the ambiguities and authentication of their patients. The nurse establishes a personal relationship with these women and their families to better understand their unique cultural perspectives and responses to BC screening; this enables the nurse to make decisions about the care, to contribute in overcoming any preexisting cultural barriers, to motivate them to adhere with BC screening guidelines, and to rectify any cultural misconceptions about the effectiveness of the screening testing. The nurse also reflects on the care that she delivers and patients' responses to ensure continuity of BC screening. Reflection empowers the nurse as it validates care given to the patient based on meaningful patient/family responses (Schaefer, 2002).

### Knowing the Patient

Making a clinical decision was described by the nurses to be much easier if they knew their patients well which also helped them to avoid making medical errors (Jenks, 1993). Betancourt, Flynn and Ormseth (2011) investigated the relationship between cultural beliefs about healthcare professionals, perceptions of mistreatment, mistreatment-related emotions, and continuity of BC screening among women who reported healthcare mistreatment; 313 Anglo and Latino American women from Southern California were recruited. It was hypothesized that the cultural differences between healthcare professionals and their diverse patients are likely to affect the interactions between healthcare professionals and their patients; and that the healthcare professionals' cultural beliefs, behavioral expectations regarding patients, as well as lack of understanding of their patients' culture may influence how they treat and interact with diverse patients and effectiveness of care they provide. The results revealed that perception of mistreatment was associated with anger for both groups of women which affected the continuity of care especially among Anglo women; perceptions of mistreatment were strongly associated with cultural beliefs regarding healthcare professionals. The researchers suggested that healthcare professionals must pay special attention to developing relationships with these women to ensure continuity of care and adherence



to BC screening testing. Therefore, personal knowing through interactions, personal relationships within the professional responsibilities, as well as reflection on patients' responses and feelings of anger will help the oncology nurse to recognize patients' cultural diversity and their perceptions of mistreatment; consequently promote continuity of BC screening among these women.

### **Knowing the others**

Jenks (1993) suggested that knowing peer nursing staff is important in personal knowing as establishing personal relationships with fellow nurses is necessary to facilitate group decision making and to judge the efficacy of information provided by the other nurses. Besides, knowing the physicians in a professional relationship was identified as an important influencing factor in decision making when the physician's input is required (Jenks, 1993). In the BC centers, collaboration among nurses and physicians ensures that all healthcare professionals know their patients as unique individuals to improve care and adherence to BC screening which leads to introducing holistic care taking the body, mind, and spirit into consideration (Chinn & Kramer, 2015). After all, knowing the patient well allows the nurse to introduce more specific, authentic and individualistic care, and to select appropriate therapeutics based on the patient's unique situation, readiness, resources and responses (Meleis, 2007).

### **The Pattern of Unknowing**

Munhall (1993) supported Carper's patterns of knowing but suggested that knowing leads to a form of confidence that may lead to closure; therefore, she stressed the importance of the art of the unknowing to enable the nurse to engage in authentic encounters with the patient. Unknowing allows the nurse to realize that she/he does not know or understand the patient or their subjective world when they first meet; this requires the nurse to be open and interact with the patient with unknowingness (Munhall, 1993). Furthermore, unknowing allows the nurse to care and empathize with the authentic, individualized patient to better understand the essence of the situation to them (Munhall, 1993). Therefore, de-centering by setting aside personal assumptions and generalizations is an essential process that encourages the nurse to focus on the patient who should be able to clarify their own perspectives without interruptions or alternative interpretations (Munhall, 1993). Munhall identified two dangers to the nurse's subjectivity which are intersubjective conjunction and intersubjective disjunction. Intersubjective conjunction occurs when the nurse and the patient share same attitudes and perceptions about the

experience which may end any further exploration or other alternatives, or may establish a defensive solution; as for the latter, intersubjective disjunction, it occurs when there is disparity and disagreement with the perceptions of the nurse and the patient, and the nurse believes that she/he knows best and tries to change the meaning of the experience to the patient (Munhall, 1993). However, to avoid these two problems, Munhall (1993) suggested that the nurse should continue the care with an attitude that allows exploring alternatives solutions and interpretations. Chinn and Kramer (2015) argued that although Munhall's unknowing has its own distinctive concepts, it is similar to personal knowing as both share the importance of relationships, interactions, and meaning of experiences.

### **Unknowing in Breast Cancer Screening among Minority**

Ethnicity and culture can impact on BC screening and cause development of some barriers. Puschel, et al. (2010) conducted a qualitative study to understand the facilitators and barriers to breast cancer screening in Latina American women. One participant said 'I feel uncomfortable when a man has to do the exam, I always ask for a woman'; another woman said 'I don't like to be exposed, it is really the first time I feel I can openly talk about this'; and another stated 'Breast care is so private and I feel so scared of having breast cancer'. Secrecy, embarrassment and fatalism were significant cultural barriers that affected the women's decision to get a mammogram done. Confidences in the staff and dignity during the screening testing were important facilitating factors. In the BC centers, some of the female oncology nurses have experienced being screened for BC and have probably shared some perceptions about the meaning of the experience with their patients. However, this female nurse should put aside her views, perceptions, experiences, and generalizations about BC screening testing and ask the patient about the essence of their experience, and about what we should know about them as unique individuals. The female nurse in this case should be careful not to perform intersubjective conjunction which deprives the patient of the opportunity to explore more options and alternatives; she should also avoid intersubjective disjunction which drives the nurse to choose for the patient without involving them because she thinks she knows best. The nurse should treat the patient with an open attitude to know what she does not know about their subjective world and culture. Unknowing requires sensitivity and openness about the lives experiences of these women.



### Sociopolitical Knowing

White (1995) supported Carper's four pattern of knowing but added the sociopolitical pattern which focuses on the broader socio-political context of the relationship between the patient and the nurse in nursing as a practice profession (White, 1995). It involves the society, culture, politics, and organizational processes that can impact people who are involved in the caring process, such as the patient and the nurse, and the profession itself (White, 1995). White (1995) said that culture affects how each person understands the disease and health which forms the sociopolitical context of the person. However, the sociopolitical context of the profession stresses the importance of engaging in policy planning and decision making about health matters that interest the public as nursing should have a voice in health decisions (White, 1995). White (1995) also said that nurses should explore and identify the alternative constructions of health care as sociopolitical knowing is essential for the nursing's future in this economically-driven world. Therefore, sociopolitical knowing raises the critical question of whose voice is heard and whose voice is silenced, and encourages shared governance and movement toward equity (White, 1995).

### Sociopolitical Knowing in Breast Cancer Screening among Minority

#### Equal Opportunity to BC screening

Many sociopolitical issues influence BC screening in ethnic minority women. Many studies showed that lack of access to BC screening services, lack of insurance, and cost were important barriers that kept minority women from seeking BC screening (Gierisch, et al., 2009; Palmer, Samson, Batra, Triantis, & Mullan, 2011; Reiter & Linnan, 2011; Wang, et al., 2009). Safety net clinics are an important resource of health care for low income, underserved and uninsured minority populations who seek preventive services such as mammography screening (ACS, 2012). Safety nets are those private or public clinics that provide health services for free for those who cannot pay (Hall, 2009). Palmer, et al. (2011) said that even the safety nets face challenges in BC screening as these clinics refer women who need mammography to Women's Cancer Control Program (WCCP) for free screening; however, WCCP has limited screening slots available and that's why it may take the women a long time to get an appointment especially that alternatives are not available. Also, Palmer, et al. (2011) identified cultural and linguistic barriers that influenced BC screening in the safety nets, yet these clinics failed to provide cultural competency training for their staff and could not utilize Language Link Service to the

fullest which affected communication with these women. It was suggested that this problem of lack of capacity requires policy intervention as funding needs to be increased in order to provide ethnic minority and uninsured women with life-saving screening (Palmer, et al., 2011).

### Culture

Culture is another important issue in sociopolitical knowing that affects BC screening. The Institute of Medicine (2002) defined culture as shared meanings, values and ideas; it is socially created and learned, and it involves patterns of behaviors. Cultural beliefs were found to have a significant impact on BC screening behaviors (Borrayo, et al., 2009; Kgawa-Singer, et al., 2006; Schwartz, et al., 2008; Williams & Mohammed, 2009; Williams, et al., 2011). However, American Cancer Society's facts and figures (2012) showed that underserved women including ethnic minorities have a bigger chance to die from breast cancer as these women are less likely to get screened than white women. Therefore, the oncology nurses need to thoroughly assess minority women's cultural beliefs and implement culturally-sensitive strategies accordingly to guarantee continuity of care. In their systematic review, Masi, Blackman and Peek (2007) showed that nurse practitioners with cultural sensitivity training had a greater chance of motivating minority women to obtain screening mammography through methods, such as showing a culturally-oriented videos that address fear, misconceptions, and knowledge deficit about BC screening. Being culturally-trained also contributes in decreasing health disparities and feelings of discrimination among these women, and consequently reinforcing social justice (Engelman, et al., 2011; Williams & Mohammed, 2009).

The oncology nurses who work with minority women need to know and challenge the constructions of power and authority in health care to provide possibilities and to empower these women.

### Conclusion

Carper (1978) notes that the four patterns of knowing including empirics, aesthetics, ethical and personal are all essential for mastery in the discipline of nursing as none of them by itself is sufficient. Despite the fact that screening and early detection are very important elements in reducing mortality, there is still evident and well-documented racial disparities in BC screening practices (ACS, 2012; The Office of Health Information and Research, 2011). Therefore, I believe oncology nurse practitioners have a big responsibility in decreasing those disparities which can be achieved through utilizing and integrating



all the patterns of knowing when dealing with the ethnic minority populations. Integrating the patterns in the process of knowing is crucial to know the patient well enough to provide comprehensive quality care; experienced and wise nurses utilize the patterns of knowing interchangeably as these patterns are interrelated, interdependent, and overlapped (Mantzorou & Mastrogiannis, 2011).

However, the nurse needs to have an empirical knowledge and be aware of the research and theoretical basis regarding BC screening status, behaviors, and barriers among minority women (empirics); also, the nurse needs to use her/his skills and creativity to employ positive reinforcements to motivate a change in behaviors

(aesthetic); however, the nurse may need to make moral/ethical decisions and should keep in mind ethical considerations while she/he is trying to alter behaviors and reinforce change (ethical); in addition, when the nurses know themselves and their inner resources, they are able to construct an interpersonal therapeutic relationship with their patients (personal). I believe when nurses are not afraid to admit that they do not know the patient well enough, and therefore ask about what they do not know, they are able to acknowledge the patient's authenticity and uniqueness (unknown); and when nurses raise important questions regarding BC screening and their voice is heard, they are able to change policies and consequently change the future of these women (sociopolitical).

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