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EDITORIAL

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Guideline for Authors

Philippine Nurses Association, Inc.

Vision
By 2030, PNA is the primary professional association advancing the welfare and development of globally competent Filipino nurses.

Mission
Championing the global competence, welfare, and positive and professional image of the Filipino nurse.

Core Values
• Love of God and Country
• Caring
• Quality and Excellence
• Integrity
• Collaboration

Fortifying Nursing Practice Through Research and Utilization

Fortifying refers to strengthening the foundation of something. In relation to the nursing profession, it can mean strategies to to impart vigor, to increase effectiveness, to strengthen and protect against opponents’ attack; or to strengthen mentally or morally (http://www.definitions.net). One of the strategies that can fortify our nursing profession is the conduct of research and utilizing these findings derived.

There is no escaping the reality that nurses need to fortify the nursing profession through the conduct of research. We belong to a practice profession thus, research is essential in developing and refining knowledge that can be used to improve practice. We need to use research findings to determine the best way to deliver services and to ensure that the greatest number of people receive services. A step forward after the conduct of research is research utilization, which is the use of knowledge typically based on a single study. This leads us further to a higher step of fortifying nursing practice by moving on to an evidence-based practice (EBP). EBP takes into consideration a synthesis of evidence from multiple studies/evidences and combines them with clinical expertise and patient preferences and values. The call towards building a EBP quality improvement and health care transformation calls for practice adoption; education and curricular realignment; model and theory development; scientific engagement in the new fields of research; and development of a national research network to study improvement (Munhall, 2012). Our journey with EBP has long started but we have yet to make an impact, as I am of the belief that much has yet to be done.

This issue features articles that showcase initiatives and efforts to fortify our nursing profession. Borromeo’s article on the Life and Times of Anastacia Giron-Tupas, whose story tells the evolution of Philippine nursing and is inextricably linked to the history of the Philippine Nurses Association. I join forces with Borromeo’s belief that nurses “can learn from the exemplary leadership practices and behaviors that helped her succeed to bring Philippine nursing out of the dark.” Fortifying nurses and our profession entails understanding our roots, and this historiography provides “the unique perspective and context that spurred Anastacia Giron-Tupas to become an agent of change”.

Four nurses’ voices from the field echoed in this issue. I so particularly appreciate Celiz and Estacio’s reflections on nursing research, paradigms and perspectives in the conduct of nursing research. Celiz never thought of herself other than being a positivist, but she realized that she needs to be “more assertive in my creativeness. I should learn not to fear “out-of-the-box” thinking. For starters, I have to improve on my teaching strategies with the realization that some of my students may be constructivists as well.” On the other hand, Estacio’s The Colors of Paradigms and Perspectives: Recognizing Complexities, Contentions, and Transitions narrates his coming to grips to the various ways of knowing. “The trajectory of finding truth (or several truths) persists and may continue to persist through time. The very nature of knowledge generation and research must not focus on discovering the truth, but with how the findings become the key to current problems and their acceptability in addressing issues.” These voices from young nurses add to fortifying nursing through the development of nursing knowledge using various lenses. The third voice, Leyva’s Nursing Perspective on Climate Change and Planetary Health explores the links between human activity, climate change and planetary health. He identifies nurses’ role in climate-smart health systems and in building community resilience. He calls for planetary health as an opportunity for collaboration. Santos’ voice on the Philippine Nurses’ Association (PNA) and its mandate as the Accredited Professional Organization is a reminder of what our organization has represented all these years, what it represents to day and the future as its centennial year approaches.

The original research articles in this issue are nurse researchers’ contribution to fortify our nursing profession.
Cura’s *Development of Framework for Clinical Nursing Research Fellowship in the Philippines* is a research study using a sequential non-dominant mixed method design; he posits that fellowship programs serve as alternative means to bridge the gap between undergraduate education and nursing practice. He found that the CNR Fellowship Program framework contained “contextually-relevant core competencies in clinical nursing research that are needed to augment basic nursing research education and to benefit clinical nursing practice.” De leon and De leon’s *Assessment of Health Care Needs of Older Persons with Type 2 Diabetes Mellitus* assessed the health care needs of older persons’ physical, cognitive, functional and self-care abilities and determine relationship of these to their profile as bases for a Diabetes Self-management Education training module for diabetes educator.

Garma and Kuan’s *Goal Attainment Theory-Based Empowerment for Chronically Ill Older Persons in the Community* tested the effects of the goal attainment theory-based empowerment (GATE) on self-efficacy and health empowerment among chronically ill older persons in the community and showed positive effects. Ablog et al.’s *Effect of Psychoeducation on Self-esteem and Self-efficacy among College Students* suggest that efforts are needed to further explore the usefulness and utilization of psychoeducation at the community and professional levels. His research revealed “that both psycho-education models (informational and comprehensive) showed evidence of effectiveness in increasing the self-esteem and self-efficacy levels of college students.” Santos’ *Staff Nurses’ Competency and Patients’ Satisfaction in an Accredited Maternity Hospital: Basis for Enhancement Program* reveals that though nurses are competent and satisfied, he suggests enhancement programs to fortify nursing practice. Manaran & Cueva’s *Relationship Between Level of Readiness for Self-directed Learning and Learning Styles of CEU Nursing Students* fortifies nursing practice by acknowledging the need to assess the level of readiness of student nurses for self-directed learning and their learning styles. Roces’ concept analysis on *Dyspnea Among Patients with Advanced Lung Cancer* shows that “despite the frequency and complexity of this symptom, little research has been conducted to specifically identify effective treatment in patients with advanced lung cancer.” Roces’ recommends further investigations in this area to assert the total dyspnea experience could be influential in regards to the quality of life in patients with advanced lung cancer.

Lauro et al.’s article on the experiences of oncology nurses as they wave through misery, hope and beauty on caring for cancer patients, provides another lens of understanding nursing phenomenon. The only qualitative research study in this issue, this article showed that “health-related quality of life interventions were essential in nursing care among cancer patients. In addition, it may be of value for nursing leaders to provide specified training programs for oncology nurses working on issues relevant to the HRQoL intervention skills.”

As earlier stipulated, we need to utilize these findings as a springboard to a higher form of fortifying the nursing profession. For this to happen, a culture of inquiry and innovation must be evident across all areas where we practice. We need to adopt research utilization as a practice standard for nurses or as integral part of professional accountability, and that it will result in improved social sciences interventions and outcomes. This culture of inquiry and innovation manifest itself with questioning historical practices, exploring evidence-based literature and implementing practice changes to ensure that care is safe, effective and provides the best care to partners/customers (Fineout-Overholt & Melnyk, 2005; Ackley, et al., 2008).

The challenge is for us to adopt approaches in conducting research that is critical, reflective and rigorous (Holloway & Galvin 2017). The PJN will continue to be a channel for research dissemination so that we and our colleagues may utilize and translate findings of research and EBP projects within our organization at all levels. Let us continue to develop sustainable mechanisms to support and enable research-based practice.

**References**


President’s Message

Nursing is caring. That is, and will always be the core of nursing – the denial of self for the welfare of others.

Given this, nursing is also multi-faceted and thus continuously evolves and adapts – to changing needs and demands, towards its constant goal of delivering quality care. As fast as we acquire new skills and knowledge to meet these demands; more information, better technology, rising needs, will ask of us to do even more. A whole-hearted embrace of the role of research in nursing keeps us focused on this path. Research has for its ultimate goal, in nursing and outside of it, quality of life. We acquire new knowledge and use it to improve lives. Because we practice on so many levels in so many different areas, the need for research and research utilization is never more underscored than now. As a global profession, we cannot and should not be limited to knowledge that is considered basic where we are.

From available technology to cultural nuances, to demographics and healthcare environment, the ability to adapt and provide the best care possible is hinged on optimal utilization of research. It is the degree of comfort with, and actual assimilation of research in one’s practice that facilitate the transition from one geographical workplace to another, and one level of proficiency to the next.

Professionally, and even in life generally, we do not stop learning. A mindset that we know all we need to know, or that nobody knows more than we do, limits (if not blocks) personal and professional growth. For a young nurse in her twenties who ventures to practice halfway across the globe after two years with her local hospital, the discovery of the vast amount of information outside of her current arsenal can very daunting and even discouraging. Embracing the reality that there will always be something new that best practices constantly evolve, will keep her stable, and allow her to grow – opening opportunities for her to master her craft, specialize, and be able to define career path she can take for the next 30, 40 years of her professional career.

It bears repeating that the basics of nursing will be constant, but it cannot be overemphasized that the assimilation of new knowledge, technological advances, best practices, may also mean the difference between the nurse and a globally-competitive transformative practitioner in healthcare. Evidence-based nursing is not a concept we crawl through in college and forget as soon as we are done with it. From Florence Nightingale’s rudiments to contemporary applied researches undertaken purposely to solve practice problems and improve healthcare delivery, it is here to stay.

Ruth Thelma P. Tingao, RN, MAN, MM
National President
On Her Own Initiative: A Study of the Life and Times of Anastacia Giron-Tupas

Anastacia Giron-Tupas (AGT) is among the most revered nursing leaders of the Philippines. Although she lived in the distant past, her life story is instructive of how nurse leaders take a role in leading the nursing profession and society into the future. Her story tells the evolution of Philippine nursing and is inextricably linked to the history of the Philippine Nurses Association. She lived through three wars and was confronted by the most challenging of circumstances, and yet, not only did she manage to persevere, she actually succeeded beyond all reasonable expectations.

The most compelling reason for why her life must be chronicled is so readers might gain insight and wisdom that may permit us to better achieve our collective goal of advancing nursing, health, health care, and ultimately, society. She, and our early nursing leaders, were confronted with complex leadership challenges as they positioned nursing in uncharted territory. How she dealt with these challenges is a key that must be unlocked.

In her book, “The History of Nursing in the Philippines,” there is a passage that describes how Anastacia Giron-Tupas approached life in general. When it became clear that she needed additional knowledge to be able to contribute significantly, she embarked on a trip to the United States “on her own initiative,” (1952, p. 164). This habit of taking matters into her own hands is a hallmark of her character.

She is, from all accounts, an exemplary leader. Exemplary nurse leaders are activists of change who strive for a better future for nursing, health, health care, and society (Forrester, 2016). It is hoped that we can learn from the exemplary leadership practices and behaviors that helped her succeed to bring Philippine nursing out of the dark. Additionally, her life story can serve to jog our collective memory so that we can rally around a worthy cause and finally achieve the unity that has so far eluded our profession.

This historiography’s aim is to understand the unique perspective and context that spurred Anastacia Giron-Tupas to become an agent of change.
To truly appreciate her story, a few caveats are offered. Nursing history is slowly being transformed from an inward-looking and triumphalist form of professional apologiectomy, to a robust and reflective area of scholarship (Rafferty, Robinson & Elkan, 1997). To come up with a balanced view of Anastacia Giron-Tupas’ life and times, we necessarily consulted with references that offered different perspectives. These perspectives emerged from the cross-fertilization of ideas. The range of perspectives included in this biography provides an important prism through which insights and analyses can be drawn. As one delves deeper into history, one cannot help but come to terms with the influence of political interests in how circumstances unfold.

Additionally, we intentionally set Anastacia Giron-Tupas’ story within a historical context, with sensitivities for prevailing social, religious, economic, and political conditions at the time, in order to enable us to interpret or analyze her actions, rather than merely judge her and her peers by contemporary standards. Context can help us to understand what motivated her actions. This approach is thought to provide us with a fuller appreciation of her narrative.

The First Ten Years (1890 – 1900)

Anastacia Giron-Tupas was born in Laoag, Ilocos Norte on August 24, 1890. She lived during the time of transition from the collapse of Spanish rule in 1898 after the Spanish-American war (1896 – 1898) and the eventual acquisition of the Philippines by the Americans. This period was right when she was growing up, at the cusp of Spanish colonialism and the American civilizing mission to prepare Filipinos for independence. The former’s driving force was Christian conversion, the latter’s was preparation for independence (Planta, 2008).

Anastacia Giron-Tupas lived during a time of translation of great discovery in healthcare. The utility of the Germ Theory of disease and antibiotics in its cure, were only beginning to be appreciated. During this transition, inadequate public health conditions in the Philippines had been reported since the American takeover from Spain in 1898. Contaminated water supplies and poor sewage systems, increased urbanization, insufficient and inefficient basic health care and vaccination programs, and inept administration were all identified as contributing variables to poor health in the early decades (Heiser, 1909; Lara, 1924; Padua & Tiedeman, 1922).

The strategies for governance under the Americans were actualized through public health (i.e., sanitation, health, hygiene, medical and scientific institutions), as well as growth of the medical and health professions. Public health progress was used to gauge Filipinos’ readiness for independence.

The first ten years of the American colonial occupation of the Philippines laid the groundwork, which included the establishment of a civil government, the introduction of the public-school system, the organization of provincial governments, the settlement of friar lands, the reestablishment of the judiciary, and the promotion of public health (Planta, 2008). In 1899, when she Anastacia was nine years old, elections were held with voting rights restricted to the educated class.

Initially, however, American doctors, nurses, scientists, and public health officials were brought in. They believed that they could transport their own medical ideas and practices to the Philippine colony. They came with advanced new theories of medical knowledge, such as the germ theory of disease, which identified microorganisms as the cause of specific diseases. At the time that all these were happening, there were no building codes. The unsanitary disposal of human waste aggravated the regular occurrence of cholera and smallpox. Beriberi, dysentery, malaria and tuberculosis were rampant. The generally poor sanitary conditions bred rat infestations (Plantar, 2008).

Nursing and hospital development were established by American missionary workers and medical providers almost immediately after the United States’ possession of the Philippines in an attempt to improve the health conditions of the Filipino people (Rafferty et al., 1997).

Most of these early nursing reform efforts were subsidized and sponsored by individual hospitals or by particular interest groups. As Giron-Tupas observed, “The profession of nursing was unknown before the American occupation” (1952, p. 41).

The Next Ten Years (1900 – 1910)

The American civil government was established in 1901, when Anastacia was only 11 years old. This year marked the beginning of formal efforts to establish and organize public health work in the Philippines.

On July 1, 1901, the Philippine Commission passed Act No. 157, creating a permanent Insular Board of Health for the Philippine Islands (Planta, 2008). On the same day, Act No. 156 was passed, establishing a Bureau of Government Laboratories. This laboratory served as a venue for biological and chemical studies, and vaccine production (Dayrit & del la Cruz, 2002).

In December of 1901, the Board of Health became decentralized to enhance the coverage of public health services in the provinces. During this time, legislation to regulate the practice of medicine, surgery, dentistry and pharmacy, was passed to curb the proliferation of local healers.

One of the first preventive measures of the Board of Health was the passage of Act No. 309, the Vaccination Law, which provided for the compulsory vaccination of all Filipinos (Worcester, 1902).
From June 1900 to August 1902, public health services were organized in the provinces. Col. Mervin Maus, the first Commissioner of Public Health, noticed that apart from the health problems of the country, competent human resources were in dire need. There was a lack of qualified medical personnel, efficient health inspectors, and qualified staff (RPC, 1902).

From 1901 to 1913, while still in school, Anastacia became steeped in the American efforts to promote health among Filipinos, specifically through the public-school system and the school children who became the agents of public health work (Planta, 2008). The educational system was considered to be the most important medium for public health work and all primary schools were required to include elementary principles of personal hygiene, house sanitation, and the causes of and measures for the prevention of communicable diseases in the curriculum (Bureau of Education, 1928).

Hygiene was taught in public schools throughout the Philippines. Children were taught the “dangers of raw vegetables, impure water, poorly ventilated houses, a sedentary way of life, and deformed posture. Every child was enjoined to carry a clean handkerchief, drink at least a cup of milk every day, sleep between 10 and 12 hours each night under a mosquito net, bathe daily, wear shoes, wash hands before eating, never touch food and defecate fastidiously” (Anderson, 2002, p. 708). One could surmise that Anastacia’s interest in the health sciences began to take root during this phase of her life.

At the time, there were no proper hospitals, trained medical personnel, and an asylum for the insane (Planta, 2008). The mentally ill were roaming the streets or tied to house posts (Planta, 2008).

In 1899, Dr. Guy L. Eddie was head of the Board of Health instituted births, marriages, and deaths registries, which were all formerly under the jurisdiction of parish priests (Worcester, 1906). Victor Heiser, who was Chief Quarantine Officer and later Director of the Bureau of Health from 1905 to 1913, bemoaned the lack of statistical data and advocated for a birth registry and a proper burial area (Heiser, 1910; Planta, 2008).

The Pensionado Act of 1903 (Act 854) was passed which allowed Filipino nursing students to study in the United States (Wayne, 2015). This piece of legislation was aimed at ensuring a steady supply of health care professionals with the necessary knowledge and skills for eventual self-rule.

However, the leaders realized that the practice of sending Filipinos to the United States for training and education was not sustainable. As early as 1903, E.C. Carter, the Philippine Commissioner of Health at the time, had already recommended the establishment of a training school for Filipino nurses to the Philippine Commission (Choy, 2003). But it was not until Mary Coleman, Dean of Women at the Philippine Normal School, lobbied for it that the establishment of a nursing school was seriously considered. (Giron-Tupas, 1952).

In October 1905, the Philippine Commission passed Act 140, the Reorganization Act, which abolished the Board of Health and created the Bureau of Health for the Philippine Islands. The goal of this move was to cede the administration of public health work to the civil government.

The American health professionals viewed tutelage of Filipinos for their eventual self-rule and their public health work efforts as a mission. Lavinia Dock, who co-authored the first history of nursing in the United States and who have been writing toward the end of the nineteenth century, wrote:

“To establish the Filipino physically is to ensure their future effectiveness and prosperity. It should be the basis of all the educational work of the islands. To decrease the high infant mortality, to stamp out smallpox, cholera, tuberculosis, malaria, hookworm, beriberi, and many other diseases which are retarding the progress of the Filipinos is absolutely necessary in order to build scientific and industrial education on a substantial foundation” (Dock, 1912, p. 317).

The unsanitary ways of Filipinos were viewed as not only the main cause for their being “diseased” but also the reason for them being “carriers of disease” (Planta, 2008). Americans also viewed Filipinos as the repositories of malarial and endemic parasites, including the “germs of tuberculosis” (Anderson, 2000, p. 240) and as “incubators of leprosy” (Anderson, 1995, p. 100). New practices, like regular handwashing, vaccination and quarantine, were embedded in the system. Certain dietary interventions were also implemented during this period like introducing milk, vegetables, and unpolished rice that were not previously part of an average Filipino diet. These practices were enforced to create healthy Filipinos capable of self-rule.

Americans began training the first Filipino nursing students in 1907 under the Philippine Training School for Nurses. The latter underwent mostly the same curriculum as their American counterparts, although some adjustments were made that made the curriculum more relevant, such as adding “nursing of tropical diseases” and “industrial and living conditions in the islands” (Dock, 1012).

From 1900 to 1907, the Philippine Commission headed by Taft became the governing body of the Philippines. As the governing body, the Philippine Commission served as the legislative branch of the Philippines and wielded law-making power. In 1907, the Philippine Assembly was established and the Commission functioned as the upper house of a bicameral body, while retaining executive legislative powers over tribal territory.
(Plana, 2008). Dean Worcester, member of the Schurman Commission (1899-1901) and then later appointed Secretary of the Interior (1901-1913), was appointed in charge of public health. Trinidad Pardo de Tavera, the Filipino physician who was also a member of the Taft Commission, was appointed Chairperson of the Committee of Public Health. President Taft had a “policy of attraction,” which enabled other Filipinos to be appointed members of the Philippine Commission (Worcester, 1914).

On 20 May 1909, Act No. 1931 appropriated Php20,000 for training and nursing instruction at the Philippine Normal School (Heiser, 1909). Under this Act, students at least nineteen years old, of good and sound physical and mental health, good moral character, good family and social standing, with recommendations from three different persons who were well known in the community, and who have completed the intermediate course in the public schools, were qualified to study to become nurses.

In 1910, the Philippine General Hospital (PGH) was established and it served as the university hospital of the College of Medicine and Surgery of the University of the Philippines. During this time, the administration of the Philippine Training School for Nurses (PTSN) was transferred from the Philippine Normal School to the PGH and became the Philippine General Hospital School of Nursing (PGHSN). (PGHSN, 1916; Choy, 2003). The curriculum for the first batch of nursing students included the basic subjects of practical nursing, materia medica, massage, and bacteriology. There were also courses on medicine, communicable diseases, and operating room techniques. Anastacia entered the PGHSN in 1911 and would have undergone studies guided by this curriculum. She eventually graduated in 1912.

Contributions During the Next 10 Years (1911 – 1920)

Soon after Anastacia Giron graduated in 1912, she was immediately employed as staff nurse at the Philippine General Hospital on January 1, 1913.

Right at about this time, the Americans, under the leadership of Governor-General Francis Burton Harrison, began its “civilizing mission” by implementing the policy of Filipinization of the colonial bureaucracy beginning in 1913. This policy paved the way for Filipinos who were trained and educated either in the American-established medical and health institutions in the Philippines or in American universities to take over the American-established health and medical government institutions in the Philippines.

From NCCAOFilipino nurses, sponsored by philanthropic institutions like the Rockefeller Foundation, the Daughters of the American Revolution, and the Catholic Scholarship Fund, for example were sent to the United States as early as 1911 to further their training and return to the Philippines with the American nurse practice views and methods (Brush, 1997).

Under these circumstances and taking advantage of the Pensionado Act, Anastacia Giron (See Fig. 2), at the age of 24, left the Philippines to study in the United States using her own resources (Giron-Tupas, 1952). She sailed for the United States in 1914 to complete post-graduate courses in hospital work at the New England Hospital for Women and Children, in Boston, Massachusetts, and the School of Public Health and of Social Work in Philadelphia, Pennsylvania. Mr. Teodoro R. Yangco provided her with a scholarship for her course at the School of Social Work and Public Health (Giron-Tupas, 1952).

In 1914, the faculty of the school changed its name to “The Pennsylvania School for Social Service.” At the same time, they broadened the approach to extend to seven headings: 1) fundamental social institutions, including the family, the church, the school, industry, and government, 2) social problems, including immigration, race relations, and criminology, 3) practical aspects of social work, including case work, placing-out work, institutional care, juvenile offenders, and mental hygiene, 4) occupational problems including women and children in the school place and dangerous occupations for men, 5) neighborhood social agencies, including methods of organization, recreation, schools, and settlement houses, 6) community health, including child hygiene, health of the adults, housing and sanitation, and...
hospital social services, and 7) the organization and management of social agencies, including advertising, financing, standards, and social legislation (Lloyd, 2008). Knowledge gained in these courses eventually shaped Anastacia Giron’s thinking and provided a holistic perspective of how standards of nursing may be instituted in the Philippines.

While she was in the United States, Figure 2. AGT in her 20s she visited various hospitals and health centers and was guided by Miss Jane A. Delano, who was then Director of the Nursing Service of the American Red Cross. Upon her return in 1917, Anastacia Giron was appointed Chief nurse and superintendent of the Philippine General Hospital (Giron-Tupas, 1952).

Trained in the United States or in the American-established educational institutions in the Philippines, Filipino doctors, nurses and public health workers gained recognition and status among their countrymen. Armed with the qualifications and equipped with the necessary training to direct the American-established centers of higher education, medical schools, and scientific and research institutions in the Philippines, these Filipinos, among them Anastacia, asserted their right to lead and administer public health work in the country. Some Americans, however, did not fully believe in the Filipinos’ capabilities for readiness for independence, Americans who were opposed to Filipinos taking over the health service were convinced that it would take only a short time for Filipino incapacities to manifest, so it was up to leaders like Anastacia to prove them wrong.

As Superintendent and Chief Nurse of the School of Nursing, Anastacia received a compensation of three thousand pesos a year (P3,000) (See Fig. 3). The salary also included subsistence, quarters, and laundry. At the time, the President of the Philippines was Manuel L. Quezon who received a compensation of P12,000 per annum. Senators were compensated at P4,000 per annum, representatives P3,000 per annum. The Governor-General was Francis Burton Harrison, appointed on Sept 2, 1913, who was compensated at P36,000.

It can be safely surmised that Anastacia Giron was one of, if not the highest paid, nursing leaders during her time. She was receiving the equivalent of the salary of a member of Congress. Salary is one of the dimensions of career equity, and comparatively, Anastacia Giron’s salary reflected her esteemed status in the civil service at a time when gender inequality was the norm. Her high

In 1915, Act No. 2493 was promulgated amending the Medical Law (Act No. 310) to regulate the practice of nursing. This law provided for the registration of graduate nurses under the Bureau of Health. No examinations nor fees were to be paid in order to become a registered nurse. Nurses merely had to enlist. Applicants needed to be at least 20 years old at application and should be of good physical health and moral character (Giron-Tupas, 1952).

In 1916, the Democrats again won the presidency. On August 29, 1916, the United States Congress passed the Jones Law. This was the first formal and official declaration that the United States intended to grant independence to the Philippines. Thus, the “filipinization” of Philippine institutions were put on the fast track.

Institutions in Manila were replicated in the provinces so that access to needed services became possible. In 1917, Anastacia Giron founded the Southern Island Hospital School of Nursing in Cebu and became its first superintendent administering the school from 1918 – 1928 (Giron-Tupas, 1952).

The first attempt to legalize the practice of nursing in the Philippines was made by the Director of Health in 1913, but this was not acted upon by the Philippine Legislature (WHO, 2013).

Anastacia Giron, among other leaders, thought that a more satisfactory control of the practice nursing would eventually raise the standard of the profession. She was concerned about the low bar of entry into the nursing profession, so she worked to elevate the academic requirements of candidates to the College of Nursing. The previous qualification for taking up a nursing
degree was an elementary graduate. The bill increased the requirement to a secondary course graduate.

Thus, in August of 1918, at her urging, Dr. Fernando Calderon, the Director of the Philippine General Hospital, who was deeply interested in the advancement of nursing and nursing education in the Philippines, constituted a committee to explore the enactment of a law to regulate the practice of nursing.

The committee was composed of five members, three nurses, one physician, and one pharmacist: AGT served as the chair of this committee, whose recommendations framed the enactment of Act No. 2808 or the First Nurses Law, regulating the practice of the nursing profession in the Philippine Islands. The bill was sponsored in the Philippine Legislature by Representative Alejandro de Guzman of Pangasinan (Giron-Tupas, 1952).

This law also provided the holding of examinations for the practice of nursing on the 2nd Monday of June and December of each year. It also led to the creation of a Board of Examiners for Nurses.

In 1919, Anastacia Giron served as Secretary-Treasurer of the Board of Examiners for Nursing (See Figure 4). She resigned from the Board of Examiners for Nurses effective July 31, 1924 (Annual Report of the Governor General of the Philippine Islands, 1924).

**Figure 4. Members of the Board of Examiners for Nursing, 1923.**

Her Most Productive Years (1920 – 1930)

In 1920, the first board examination for the nurses in the Philippines, was administered. A physician, Dr. Juan R. Cabarrus, served as the first executive officer of the Board of Examiners for Nurses (Giron-Tupas, 1952).

By the 1920s, the United States embarked on a massive internationalization effort. Rather than sending Filipino nurses to the United States to learn American methods, medical, nursing and public health experts were sent to travel to the Philippines as social and cultural missionaries (Brush, 1997).

In 1922, the Rockefeller Foundation’s International Health Board (IHB) commissioned American nurse Alice Fitzgerald to serve as “special member” and nursing adviser on the Staff of Philippine Governor-General Leonard Wood (Minutes of the IHB, 1922 in Brush, 1997). She was tasked to survey the nursing conditions in the Philippines in preparation for the establishment of a Central School for Nurses under the University of the Philippines and to introduce public health nursing to the Philippine Island hospital nursing schools. Ms. Fitzgerald was the former director of the division of nurses of the League of Red Cross Societies and had served with the American Red Cross throughout Europe (Brush & Stuart, 1994). Fitzgerald was assigned to select and train 150 nurses to serve in different parts of the Philippines (Fitzgerald, 1922).

Her arrival was in response to Dr. Victor Heiser’s 1921 Public Health Survey of the Philippines and his expose of the Islands’ alarming prevalence of malaria, tuberculosis, and other contagious diseases as well as escalating infant mortality rates. In that report, Heiser highlighted the necessity for American intervention as a key solution to health care reorganization because he lacked confidence in the Filipinos’ ability to manage their own affairs (Brush, 1997). This is how Heiser (1916) put it:

“The dead spirit seems to pervade everything. Business men state they can get no action on anything were a Filipino is in charge. I suggest that a person responsible for the nursing service in the Philippines ought to make an inspecting trip to the various places in which nurses are stationed with the hope of stimulating better work” (Heiser, 1916, p. 570).

In addition, Heiser concluded that one of the obstacles to the transformation of the Philippine Health Service was the “lack of properly trained public health nurses” (Heiser, 1921, p. 5). He concluded that the demand for nursing would increase as the general health of the Filipino people declined. The few existing schools of nursing were not adequately equipped to meet the demand. He then argued for the need for an American nurse
The move of Filipino nurses to organize echoed worldwide. Efforts during the ICN Congress held in Montreal, Canada on July 8 – 13, 1979, Montenegro Delgado, a classmate of Anastacia Tupas, as its first Filipino Nurses Association was organized. They elected Rosario Nursing. 150 nurses represented different nursing groups and specialties in different hospitals and organizations. The second class was admitted in 1923 and was funded by the Philippine Legislature. Of the 67 who enrolled, 60 were pensionados, and the rest were funded by the Philippine Health Service (PHS).

Among the long “to-do” list of Alice Fitzgerald as she embarked on her two-year assignment in April 1922, was her plan to organize a National Nursing Organization for the Philippine Islands to “stimulate professional esprit de corps (Brush & Stuart, 1990, p. 197).” Choy (2003) points out, however, that the idea to organize Filipino nurses was not solely Fitzgerald’s, but was one that was brewing among Filipino nursing leaders at the time.

**Founding of the Filipino Nursing Association (1922)**

On August 1, 1922, the Post-Graduate School of Public Health Nursing opened under its first director, Anastacia Giron. The first course of instruction intended to train public health nurses in the Philippines was launched on August 1, 1922 primarily in response to the call for more public health services in the cities and rural areas (Giron-Tupas, 1952). Moreover, they were tasked by the then Governor General to help decrease infant mortality and general death rate through education and prevention (Giron-Tupas, 1952). There were 30 enrollees funded by the PHS from different hospitals and organizations. The second class was admitted in 1923 and was funded by the Philippine Legislature. Of the 67 who enrolled, 60 were pensionados, and the rest were funded by the Philippine Health Service (PHS).

On October 15, 1922, a meeting of nursing leaders was held in the Nurses’ Dormitory of the Philippine General Hospital School of Nursing. 150 nurses represented different nursing groups and schools. Anastacia Giron presided over the meeting, and the Filipino Nurses Association was organized. They elected Rosario Montenegro Delgado, a classmate of Anastacia Tupas, as its first President. Alice Fitzgerald served as an advisor (Choy, 2003). Lillian Weiser, who was Chief Nurse and Superintendent of St. Luke’s Hospital, also participated as honorary members (Choy, 2003). It was the precursor of the Philippine Nurses Association (PNA) and was incorporated in 1924. The International Council of Nurses accepted the FNA as one of the member organizations during the ICN Congress held in Montreal, Canada on July 8 – 13, 1929 (Brush & Stuart, 1990). The FNA became the Philippine Nurses Association (PNA) in 1966, when the office at 1663 F.T. Benitez St., Malate, Manila, was inaugurated.

The move of Filipino nurses to organize echoed worldwide. Efforts to distinguish nurses from other groups and to seek credibility and legitimacy within society became more prevalent. Nurses, following the footsteps of more established professions like medicine and law, began to organize, to standardize educational requirements, to establish journals, and to persuade legislatures to pass registration and licensing laws. The FNA, for example, established its own journal, “The Filipino Nurse,” which became the “Philippine Journal of Nursing.” In 1922, Act 3025 was passed by the Fifth Legislature to amend certain sections of Act 2808, entitled “An Act Regulating the Practice of Nursing Profession in the Philippine Islands,” which required yearly registration of all nurses practicing the profession (Giron-Tupas, 1952).

In 1923, Governor-General Wood recognized the value of nurses in the Philippines when he said: “The public health nurse is not an expense but a wise investment. The dividends are human lives. There is no province that cannot afford to spend money to save the lives of its people. This is what the public health nurse will accomplish.” (Wood, 1923, p.1). Because of their dedication to their work, Filipino nurses became significant in promoting public health work and an increase in the number of nurses was expected (Planta, 2008).

At around this time, however, a falling out occurred between Ms. Fitzgerald and her protégé, Anastacia Giron, when it was found that the latter secretly married Dr. Alberto Tupas, an instructor in the College of Medicine and Surgery at the University of the Philippines, against school policy. Once discovered, the newly wedded Ms. Tupas was asked to resign from her position as the PGH Superintendent of Nurses. Ms. Fitzgerald did not believe that marriage and a career could coexist. She asserted, in a letter to Dr. Heiser, “a married woman cannot take the position of Superintendent of Nurses as that is certainly a full-time job” (Fitzgerald, 1923). Fitzgerald viewed Giron’s marriage as amoral and a threat to her own personal and professional agenda (Brush, 1997). Fitzgerald’s views reflected American attitudes about marriage being incompatible with complete devotion to the necessary service and sacrifice of a nursing career (Brush, 1997).

Ms. Tupas continued to serve at the Post-Graduate School of Public Health Nursing, despite resigning from the PGH. In 1923, the course in Public Health Nursing was transferred to the Philippine General Hospital, housed in a new building (Giron-Tupas, 1952). In 1929, the school was incorporated as a unit of the University of the Philippines. She was the first director of the UP School of Public Health Nursing, a department she founded, which came to be known as the premier school of public health nursing in the Philippines. She led a team of faculty members who formulated and created the first curriculum for the Bachelor of Science in Nursing, the first time the degree was offered in the Philippines.
From 1930 Onwards

Under the watchful stewardship of Ms. Tupas, the UP School of Public Health Nursing became the premier school of nursing and produced the best graduates in public health nursing.

During this period, Ms. Tupas began to enjoy the fruits of her labor, serving in the UP School of Public Health. She was, by this time, a prominent member of society seen in the company of personalities such as Ms. Aurora Aragon Quezon, wife of the Philippine president, Manuel L. Quezon (1935 – 1944) (Figures 5 & 6).

The first group of nurses graduated from the BSN program in 1938. The School of Public Health Nursing continued to train public health nurses until the outbreak of World War II, when, like other branches of the University, it had to close due to the troubled conditions prevailing at the time (Giron-Tupas, 1952).

World War II (September 1, 1939 – September 2, 1945)

Coming just two decades after the last great global conflict, the Second World War was the most expansive, involving more than 30 countries and resulting in more than 50 million deaths. It was sparked by Adolf Hitler’s invasion of Poland in 1939, which dragged on for six years, until the Allies defeated both Nazi Germany and Japan in 1945 (History.com, n.d.).

The idea that health was a “responsibility and right” of being a citizen was only put forward toward the latter half of the twentieth century when countries were rising from the ruins of the war (Amrith, 2006). At the same time, there were new technologies and drugs, specifically antibiotics, that became available after the Second World War. These factors led to the vision of a world free from disease and the World Health Organization (WHO) declaring that health was a “fundamental human right.”

Governments, therefore, were tasked to be primarily responsible for ensuring the welfare of their populations, with health as one of the ultimate ends (Foucault, 2006).

By the time that Anastacia Giron-Tupas was in her 40s, a lively discourse about the progressive role of governments and the shift in perspective that the citizenry deserved a healthy life, had already taken root. This view was in contrast to earlier notions that colonial subjects were viewed as “native bodies”, who could be part of a productive labor force for economic progress and thus, needed to be kept healthy through transformation into “bodies” of hygienic citizens (Amrith, 2006).

On July 4, 1946, Philippine Independence was achieved through the signing of a Treaty of General Relations (1946) that relinquished American sovereignty over the Philippine Islands.

Post-War Accomplishments and Beyond (1947-1978)

In October of 1947, a Division of Nursing under the Department of Health was created. This breakthrough was largely due to the efforts of the Filipino Nurses Association. Senator Geronima T. Pecson was the sponsoring legislator for the law creating the division. The main purpose of this Division included 1) the coordination and networking of nurses under the Department of Health, 2) the making of policies and setting of standards for nursing service in the Department, 3) program planning for the development of nursing service in the different bureaus and units under the Department, 4) rendering of professional guidance and counseling to nurses, 5) recruiting of nurses for the bureaus and other units of the Department, and 6) to establish linkages and networks with other agencies (Giron-Tupas, 1952).

She also began to amass educational degrees. Aside from a Graduate in Nursing degree which she obtained from the Philippine General Hospital School of Nursing in 1912 and a...
It is hoped that Anastacia Giron-Tupas’ story will inspire men and women to lead nursing and society into a better future and that more nurses will follow in her footsteps. She exemplified courage, bravery, fearlessness, open-mindedness, and innovation. She was a true nursing visionary. Her lived experience has value for us as she advanced nursing and society during her time, and she, therefore, has had a lasting effect on us, both as citizens and as nurses in contemporary society. We are, after all, the “better future” that she and other nursing leaders envisioned as the motivation for their actions. It is clear from her narrative that she has had a significant and enduring impact on the nursing profession, health, health care, and society in the Philippines. It is worthy to note that, all these she accomplished, on her own initiative.

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bravery, fearlessness, open-mindedness, and innovation. She more nurses will follow in her footsteps. She exemplified courage, It is hoped that Anastacia Giron-Tupas' story will inspire men and PNA for being its founder and as the "Dean of Nursing" in the advancement of the nursing profession in the Philippines. A marker was laid in front of the capitol of Laoag in 1985 to honor her retirement in 1963, served as the Dean Emeritus of the College of Nursing of the Philippine Women's University.

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Goal Attainment Theory-Based Empowerment for Chronically Ill Older Persons in the Community

Abstract

Empowerment programs focusing on chronically ill older persons remain limited, fragmented, complex in approach, and lacking in nursing theoretical background. The aim of the study was to test the effects of the goal attainment theory-based empowerment (GATE) on self-efficacy and health empowerment among chronically ill older persons in the community. This is a quasi-experimental with non-equivalent control group pre-test post-test study. Older persons aged 60 years old and above living in an urban community with at least one chronic condition namely hypertension, coronary artery disease and diabetes mellitus were recruited in two health centers. The participants were randomized into control and intervention groups. The GATE intervention integrated Imogene King’s goal attainment theory and empowerment principles in a phone-assisted follow-up. Data were collected at baseline and four weeks after the intervention. A total of 59 participants completed the study. Both intervention (n= 30) and control groups (n= 29) were homogenous in baseline characteristics except for personal monthly income. The intervention group had significantly higher health empowerment than the control group after four weeks. Although self-efficacy did not differ between the groups, there was a significant increase in the intervention group from baseline. Preliminary findings showed that GATE improves health empowerment and self-efficacy of chronically ill older persons in the community. Goals of chronic disease management should be shaped by the older person’s health goals and life situation. Further studies are needed to explore the use of nursing theory, empowerment framework and technology in caring for older persons with chronic conditions.

Keywords: Health empowerment, goal attainment theory, chronic care, gerontologic nursing
Introduction

Chronically ill older persons suffer from multiple unmet needs, role transitions, poor quality of life and increased demand for health services (Cheng, 2012). Their self-efficacy to manage the demands of their health condition is poor, due to the lack of participation in their treatment regimen and limited health choices (Chan et al., 2015). Poor self-efficacy and lack of control on personal health increase the risk of comorbidities, frequent hospitalizations, decline in functional ability and well-being (Lorig & Ritter, 2014). Empowerment is one of the innovative approaches that fosters a sense of control in decision-making and goal-setting, thereby, increasing the level of self-efficacy and perception of being empowered (World Health Organization, 2012).

Empowerment models are currently being used in the management of chronic diseases among older persons because they prefer to stay home as long as possible (Shearer, Fleury & Belyea, 2010). An empowerment approach nurtures an older person’s active participation in health care decisions by integrating their own priorities, goals, resources, culture and lifestyle in the health management (Anderson & Funnell, 2010). However, empowerment interventions for older persons have inconsistent conceptualizations in literature, are not adequately defined in empirical studies, and lack explicit nursing theoretical frameworks (Shearer et al., 2012; Fotoukian et al., 2014). To date, studies that explore the applicability of a nursing theory-driven empowerment intervention for older persons with chronic conditions in the community remain scant. The use of technology such as phone calls to complement empowerment interventions has been recommended because of its practicality and cost-effectiveness in addressing the complexity and life-long management of chronic illness (Forbes & While, 2009).

The increasing prevalence of chronic diseases in the growing aging population stimulates discussion regarding ways to empower older persons. The Department of Health (2012) identified diseases of the heart and vascular system (i.e., coronary artery disease, hypertension) and diabetes mellitus as the leading chronic conditions affecting older persons age 60 years and above. About 80% of them have at least one chronic condition, 50% have at least two and 10% suffer from four or more chronic diseases, with the odds of developing comorbidities increasing with age (Centers for Disease Control, 2011). This study aimed to test the effects of a goal attainment theory-based empowerment (GATE) intervention on the self-efficacy and health empowerment of older persons diagnosed with chronic condition living in the community.

Methodology

Design

The study utilized a quasi-experimental with a non-equivalent control group pre-test post-test design. Participants in the intervention group were the recipients of the GATE intervention for a four-week period in addition to routine care. The control group had the routine care that includes health education, curative aspect and referrals. Data were collected at baseline and four weeks after the intervention from June to August 2016.

Setting and Participants

A convenience sampling technique was utilized. Inclusion criteria for participation were: (1) a community-dwelling individual aged 60 years or older; (2) seeking out-patient consultation in a health center; (3) must have a medical diagnosis of at least one chronic condition namely hypertension, diabetes mellitus and coronary artery disease for the past six months at the time of the interview as indicated in the medical record; (4) ability to read and speak Filipino; (5) has access to a cellular phone at home; and (6) intact cognitive functioning (minimum cut-off score 3-4 errors) as evaluated by a Short Portable Mental Status Questionnaire. Exclusion criteria were those who were severely ill (i.e., on dialysis, chemotherapy), diagnosed with acute, life threatening comorbidities, have sensory deficits in hearing/speaking and psychomotor impairment, and known psychiatric problems.

The study was conducted in two (2) health centers in National Capital Region, which were conveniently selected.

Sample size

The G*Power software (Germany; version 3.1.9.2) was used to estimate the required sample size. The effect size was based on a previous study on empowerment program that reported a value of 0.72 (Chen, 2014). To reach 80% power and a 0.72 effect size with an alpha value of 0.05, a minimum sample size of 32 participants in each group was required. A total of 59 participants completed the study. Attrition rates were 14% and 16.67% in the control and intervention group, respectively. The study has a power of 77.58%.

Instruments

All instruments used in the study were in Filipino. Translation of tools was carried out by the University of the Philippines Manila Sentro ng Wikang Filipino.

1. Sociodemographic and clinical profile questionnaire. This tool developed by the researcher described patient factors in terms of age, sex, highest educational attainment, civil status, social support, personal monthly income, living arrangement, comorbidities and prescription maintenance medications.
2. Self-Efficacy to Manage Chronic Disease Scale. This six-item scale covers the domains of self-efficacy in chronic disease management such as symptom control, role function, emotional functioning and communicating with healthcare providers. It measures confidence in doing tasks regularly at present through a ten-point scale with 1 being not confident and 10 being totally confident. Higher mean score indicates higher self-efficacy. Pre-testing of scale registered a Cronbach’s α of 0.90.

3. Health Empowerment Scale. This scale measures satisfaction and dissatisfaction related to health, identification and achievement of personally meaningful goals, application of systematic problem-solving process, coping with the emotional aspects of living with health, stress management, appropriate social support, self-motivation, and making cost/benefit decisions about making behavior changes. It was selected for its brevity and ease of administration, thereby reducing the chance of non-response due to poor concentration. The instrument comprises of eight items, scored on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Higher mean score is equivalent to higher level of health empowerment. The HES reflects Asian culture and can be applied in understanding the construct among Asian older persons with diverse ethnicity (Park & Park, 2013). Pre-testing of the tool showed a Cronbach’s α of 0.938.

Pilot study

The study protocol underwent pilot study. The protocol was presented to a panel of five (5) experts comprised of a nurse clinician with background in gerontologic nursing, a nurse educator whose specialization focuses on empowerment in community health nursing, a nurse-theorist on health empowerment, and a physician. Level of agreement among experts was determined.

GATE intervention

The Goal Attainment Theory-based Empowerment (GATE) intervention is a patient-centered nursing intervention that facilitates chronically ill older persons in taking control of their health by purposeful participation in setting and attaining their health goals. In addition to the routine care, the GATE integrates health goal-setting and phone-assisted follow-up for four weeks.

The intervention was based from Imogene King’s goal attainment theory. It was anchored on a philosophical standpoint that the nurse and the chronically older person act as open, dynamic systems which interact purposefully. The intervention linked the practice methodology of King (1995) on mutual goal setting, exploration and agreement of means to achieve goals, transaction and attainment of goals, with the empowerment principles in chronic disease, which involve reflecting on relevant personal health experience, discussing the roles of emotions, engaging in systematic problem-solving, answering clinical problems, and providing feedback (Anderson & Funnell, 2010).

The GATE was initially delivered by a trained nurse intervener through a face-to-face interaction during the out-patient consultation of the participant. The participant was encouraged to identify a personal health goal that he/she wanted to accomplish in the following weeks. The health goal was reflected in a goal-oriented action plan that included the resources and commitment to achieve the goal. The nurse intervener recorded the health goal in the tracking sheet and the participant’s progress was followed up by way of weekly phone calls. One week after the interview, a phone call was initiated by the nurse intervener as a follow-up mechanism. The phone call lasted for 10-20 minutes and was usually scheduled based on the participant’s most convenient time. Each participant had a total of four phone calls throughout the duration of the study.

Ensuring Intervention Fidelity

Several mechanisms were conducted to ensure that intervention fidelity was observed. A study protocol served as a blueprint to ensure consistency in implementation. A standardized step-by-step process and phone script highlighting the essential elements and concepts of goal attainment theory and empowerment principles were developed. Three nurse interveners were given training on the empowerment protocol using a competency-based instructional design. The training focused on the theoretical components of the intervention and implementation of GATE that was consistent with the theoretical perspective. The researcher and the nurse interveners met on a weekly basis to discuss consistency in the implementation of protocol, problems encountered and assessment of data sheets.

Data Collection

A screening checklist was utilized in recruiting study participants. A computer generated random number table determined by the statistician was used to number envelopes. Participants randomly picked a sealed enveloped which determined their group assignment.

Baseline sociodemographic and clinical profile, self-efficacy and health empowerment of the participants were determined prior to randomization. Data collectors, blinded to groups, personally collected data at baseline and four weeks post-intervention.

Ethical Considerations

The ethics review board of University of the Philippine Open University - Faculty of Management and Development Studies granted ethical clearance to conduct the study. Written informed consent was obtained from all study participants. A risk-benefit assessment was also conducted. The intervention protocol was...
deemed as a low-risk, empowerment-based clinical feedback intervention. Likewise, permission to use the research instruments was obtained from their respective authors.

Data Analysis

Descriptive statistics was used to report the participants’ sociodemographic and clinical characteristics. The homogeneity of participant characteristics between the control and intervention groups was analyzed using Levene’s test and chi-square test for categorical variables. Normality test was verified using Shapiro-Wilk’s test. Self-efficacy between the groups were compared using independent t-test. Likewise, self-efficacy within each group was analyzed using dependent t-test. On the other hand, Mann-Whitney U test was used to compare the health empowerment between the groups. Health empowerment within the group was compared using Wilcoxon-signed rank test. Effect size was also reported.

The level of significance was preset at 0.05. Data were analyzed using Statistical Package for the Social Sciences (SPSS) version 23 software. Data from participants who completed the study were subjected to statistical analysis. Data sets were compared for completeness, inconsistency and accuracy. If discrepancies were identified, data entries were compared with raw data. All variables have no missing values.

Results

Baseline Characteristics

The average age of the sample is 65 years old (SD= 10.9, range 60-76). The sample belongs to young-old individuals (60-74 years old). Majority of the sample is female (66 %), married (44 %), unemployed (61 %) and high school graduates (42 %). Most of the participants have a personal monthly income of less than Php 5,000 and below (49 %). They depend on financial help from their loved ones (n= 40) and pension or government support (n= 19). More than half (69 %) of the sample lives in an extended family. Fifty-six percent (56 %) of which are the head of the household and primary decision-maker. The sample is mostly Roman Catholic (88 %). Social support, which was determined in a mathematical aggregate of score of 6 as to civil status, presence of person to whom to confide, and level of support received was sufficient (M= 4.57).

Half of the sample (49 %) has low comorbidity with at least 1-2 medical conditions. Hypertension (n=40), diabetes mellitus (n= 30) and coronary artery disease (n=18) are the top medical conditions. The leading comorbidities of the sample was supported by the review of maintenance medications which showed that anti-hypertensives (n= 45), oral hypoglycemic (n= 25) and antilipidemics (n= 23) as the most common maintenance drugs the older persons are taking at home.

At the outset, the sample registered moderate self-efficacy (M= 6.38) and moderate health empowerment (Mdn= 3.30). Test of homogeneity indicated that all baseline group characteristics between the control and intervention groups are comparable except for personal monthly income (p < 0.029).

Self-efficacy

Baseline self-efficacy of the intervention group increased after four weeks (p < 0.001, d= 0.61). A significant decrease was observed in self-efficacy within the control group after four weeks (p < 0.001, d= 0.28). Comparing the two groups, the self-efficacy after four weeks did not significantly differ (p > 0.152, d= 0.38). The effect size of 0.61 in the intervention group suggests that the difference is of moderate practical significance.

Health Empowerment

In the control group, health empowerment did not significantly differ from baseline after four weeks (p > 0.228, r = 0.22). On the other hand, pre-intervention health empowerment of the intervention group increased significantly after four weeks (p < 0.001, r = 0.73). By comparison, the health empowerment in the intervention group was significantly different than those in the control group after four weeks (p < 0.023, r = 0.30). An effect size of 0.73 in the intervention group shows high practical significance.

<table>
<thead>
<tr>
<th>Table 1. Clinical profile of the sample.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chronic Conditions</strong></td>
</tr>
<tr>
<td>n</td>
</tr>
<tr>
<td>Hypertension</td>
</tr>
<tr>
<td>Diabetes mellitus</td>
</tr>
<tr>
<td>Coronary artery disease</td>
</tr>
<tr>
<td>Hypercholesterolemia</td>
</tr>
<tr>
<td>Eye problems</td>
</tr>
<tr>
<td>Musculoskeletal problems</td>
</tr>
<tr>
<td>Liver cirrhosis</td>
</tr>
<tr>
<td>Prostate problems</td>
</tr>
<tr>
<td>Skin diseases/ allergy</td>
</tr>
<tr>
<td>Pulmonary tuberculosis</td>
</tr>
<tr>
<td>Thyroid problems</td>
</tr>
</tbody>
</table>

<p>| <strong>Maintenance Medications</strong>             |</p>
<table>
<thead>
<tr>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antihypertensives</td>
</tr>
<tr>
<td>Oral hypoglycemics</td>
</tr>
<tr>
<td>Antilipidemics</td>
</tr>
<tr>
<td>Anticoagulants</td>
</tr>
<tr>
<td>Cardiac drugs</td>
</tr>
<tr>
<td>Insulin</td>
</tr>
<tr>
<td>Antitubercular agents</td>
</tr>
<tr>
<td>Pain medications</td>
</tr>
<tr>
<td>Vitamins</td>
</tr>
</tbody>
</table>
Discussion

This is a preliminary study that tested the effects of an empowerment intervention, based on Imogene's King goal attainment theory on self-efficacy and health empowerment among older persons with chronic conditions in the community. The intervention group had significantly higher health empowerment than the control group after four weeks. Although self-efficacy did not differ between the groups, there was a significant increase in the intervention group from baseline.

Self-efficacy is increasingly recognized as an integral component in chronic care as it is a pre-requisite in effective self-management (Freund et al., 2011). Self-efficacy is an individual’s judgment or confidence of his or her capabilities to organize and execute courses of action that are goal-oriented (Resnick, 2008). Bandura (1997) identified sources of enhancing personal self-efficacy, namely performance accomplishments, vicarious experience, verbal persuasion, and physiologic state. The improved self-efficacy in the intervention group likely resulted from skill mastery, use of problem solving strategy, and verbal and social persuasion as integral components of the intervention protocol. The finding was congruent with similar empowerment programs tested on chronic diseases such as diabetes and renal disease that increased the self-efficacy of patients (Chen et al., 2014). A moderate effect size conformed to earlier systematic reviews, which showed that empowerment programs have high practical significance in terms of enhancing self-efficacy among older patients with comorbid, chronic disease (Chow & Wong, 2014).

In the contrary, the significant decrease in self-efficacy within the control group can be attributed to the lack of structured follow-up mechanism evident in the standard care being delivered. The non-significant difference on the self-efficacy between the control and intervention groups can be explained by several factors. The duration, frequency and intensity of the GATE intervention protocol as compared to the standard care may have limited opportunity to strengthen one’s self-efficacy. However, a systematic review indicated that most empowerment interventions that lasted for at least 4-6 weeks are considered sufficient to affect clinical health outcomes among older persons (Chen, 2011). Small sample size, nurse and patient-related factors may have also contributed to the non-significant difference. Moreover, self-management experience of the participants as a result of the years living with chronic illness, the socio-cultural environment and healthcare context may also have influenced self-efficacy.

Health empowerment is another relevant outcome among older population in many Asian countries, particularly in the Philippines, due to increasing prevalence of chronic illness in aging population, changes in family structures, and evolving collaborative models of health care delivery (Sung, 2001). Health empowerment is a cognitive state characterized by perceptions of control regarding one’s own health and health care (Park & Park, 2013). Anderson and Funnel (2010) suggested that the outcome of empowerment-based intervention should include a measurable increase on the patient’s ability to make an autonomous, informed decision. The GATE intervention assisted the older persons to use their innate ability to gain mastery over their disease through education and setting behavioral goals determined by themselves. The core processes involved in GATE intervention, such as reflecting on experience, discussing emotions and feelings, engaging in problem-solving process, addressing clinical questions and goal-setting empowered participants to make decisions pertinent to their goal.

In relation to the local setting, it was reported that older persons in Ilocos Norte were only aware of their disease condition and of the prevailing mode of healthcare limiting their active participation in the management of their health condition (Dela Vega, 2016). The collaborative model of the GATE intervention fostered active participation through goal-setting. In a similar study, a health empowerment intervention tested among community dwelling-older persons significantly improved their perceptions of being empowered, purposeful participation in goal attainment, and well-being (Shearer, Belyea & Fleury, 2017).

Table 2. Subject characteristics, self-efficacy and health empowerment at baseline.

<table>
<thead>
<tr>
<th>Background Characteristics</th>
<th>Control (n = 29)</th>
<th>Intervention (n=30)</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>n (%) / M (SD)</td>
<td>n (%) / M (SD)</td>
<td>0.559</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td>0.648</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td>0.998</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Civil status</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Widowed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Never married/single</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Separated</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cohabiting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest educational attainment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No formal education</td>
<td></td>
<td></td>
<td>0.510</td>
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<tr>
<td>Elementary graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High school graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post graduate education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal monthly income</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 2,500</td>
<td></td>
<td></td>
<td>0.029</td>
</tr>
<tr>
<td>2,501-5,000</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>5,001-10,000</td>
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<td>10,001-20,000</td>
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</tr>
<tr>
<td>20,001-30,000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30,001 and above</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Social support</td>
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<td>0.569</td>
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<td>Comorbidities</td>
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<tr>
<td>Low (1-2)</td>
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<td>0.065</td>
</tr>
<tr>
<td>Moderate (3-4)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>High (5 and up)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td>0.063</td>
</tr>
<tr>
<td>Health empowerment</td>
<td></td>
<td></td>
<td>0.972</td>
</tr>
</tbody>
</table>

**b** significant at the 0.05 level

Table 3. Self-efficacy in the control and intervention groups.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control group</th>
<th>Intervention group</th>
<th>t</th>
<th>p</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>6.86</td>
<td>1.28</td>
<td>5.92</td>
<td>2.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>6.54</td>
<td>0.97</td>
<td>7.00</td>
<td>1.41</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td>2.45</td>
<td>0.001*</td>
<td>-6.80</td>
<td>0.001*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between group</td>
<td>1.45</td>
<td>0.152 ns</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*a* significant at the 0.01 level

**b** significant at the 0.05 level

**ns** non-significant
Discussion

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Table 4. Health empowerment in the control and intervention groups.

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Control group</th>
<th>z</th>
<th>p</th>
<th>Intervention group</th>
<th>U/Z</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health empowerment</td>
<td>Mdn</td>
<td></td>
<td></td>
<td>Mdn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>3.75</td>
<td></td>
<td></td>
<td>3.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post-test</td>
<td>3.38</td>
<td></td>
<td></td>
<td>3.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Within group</td>
<td>1.21</td>
<td>0.228</td>
<td>ns</td>
<td></td>
<td>3.99</td>
<td>0.001</td>
</tr>
<tr>
<td>Between group</td>
<td></td>
<td>2.27</td>
<td>0.023</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* a significant at the 0.01 level
  b significant at the 0.05 level
  ns non-significant
However, a phone-delivered empowerment intervention based on a nursing theory, Rogers’ Science of Unitary Human Beings, facilitated self-care management, but not purposeful participation in goal attainment (Cisar, Shearer & Greenberg, 2007). This conflicting finding is attributed to the difference in the target population to where the phone-delivered empowerment intervention was applied. Nurse-led empowerment interventions based on models of caring, significantly improve perceived health empowerment among patients with chronic illness, such as hypertension (Chang et al., 2012). On the other hand, the nature of the routine care the control group received demonstrates a generic approach to chronic disease management. Such approach impedes older persons to share their personal health goals and limits their capacity to make health decisions. To the best of our knowledge, this study is the first to give evidence on the effect of an empowerment intervention using a nursing theoretical framework delivered through phone call on behavioral outcomes among older persons in the local context.

Empowerment interventions promote positive physical, psychosocial and behavioral health outcomes (Anderson & Funnell, 2010). Drawing from a nursing theoretical perspective, this study that highlighted goal attainment as an empowerment strategy for older persons with chronic conditions living in the community significantly improved the study participants’ self-efficacy and health empowerment in managing their health condition.

Limitations

The study has several limitations. The study focused on the process of goal setting and attainment as an empowerment strategy, but no longer evaluated the nature and types of health goals, and if these goals were achieved or not. Cautious interpretation of findings is warranted because of the halo effect, wherein patients who consented to participate in the study may already be health conscious and have better self-efficacy and health empowerment at the outset. More importantly, the role of drop-out rates, which was higher in the intervention group, needs to be investigated on how it affects the efficacy of the intervention in real clinical setting. Methodologic limitations, which include the study design and setting, non-probability sampling technique, and small sample size limit the generalizability of findings. The likelihood of treatment contamination is possible because participants reside in a single community where they interact regularly. The mediating role of previous self-management health experience also needs to be explicated. Statistical rigor can be further strengthened by using more robust statistical tests in treating the difference of means and increasing the power.

Conclusion

The study demonstrated preliminary evidence on the effectiveness of goal-setting as an integral component of an empowerment intervention delivered through phone calls. The GATE intervention significantly improved the health empowerment of chronically ill older persons. Although self-efficacy did not differ between the groups, it must be noted that there was a significant increase in the intervention group. It is recommended that goals of chronic disease management for older persons living in the community should neither be shaped by the health care professionals nor restricted to generic medical outcomes, but rather be discussed and personalized with every patient, according to their own particular health goals, priorities and life situation. Further studies are needed to explore the use of nursing theory, empowerment framework and technology in caring for older persons with chronic illness.

Acknowledgment

We express gratitude to the panel members of this master’s thesis for their substantial inputs: Prof. Rita C. Ramos, Dr. Edmund J.Y. Pajarillo, Deputy Director Ms. Cecilia G. Pena, Prof. Fritz Gerald Jabonete and Prof. Queenie Ridulme, and to the UP Open University Master of Arts in Nursing faculty. We also thank Prof. Rosalinda Cruz-Earnshaw and Prof. Elisea dela Cruz for their insights in the study conceptualization. We also acknowledge the comments from the speakers/reviewers of the 12th National Medical Writing Workshop and 5th Writeshop for Young Researchers.

Conflict of Interest

We declare no conflict of interest.

Postscript

The study was accepted for oral presentation during the Philippine Nurses Association 94th Foundation Anniversary & 59th Nurses Week Celebration and Annual National Convention last October 17, 2016 at Crowne Plaza Manila Galleria, Ortigas Center, Quezon City. It was also accepted for oral presentation during the 10th Manila Doctors College of Nursing Research Congress held at Manila Tytana Colleges, Pasay City on January 18, 2017. The manuscript was reviewed during the 12th National Medical Writing Workshop and 5th Writeshop for Young Researchers sponsored by Philippine Council on Health Research and Development and Philippine Association of Medical Journal Editors held last August 7-8, 2017 at Pan Pacific, Manila.


Centers for Disease Control and Prevention. (2011). Healthy aging helping people to Live long and productive lives and enjoy a good quality of life. National Center for Chronic Disease Prevention and Health Promotion Division of Adult and Community Health: USA.


About the Authors

Mr. Paul Froilan U. Garma works as a nurse clinician, training and research coordinator at the University of the Philippines Manila Philippine General Hospital. His clinical experiences include adult acute and critical care and midwifery practice. He finished his Bachelor of Science in Nursing, magna cum laude, at the Far Eastern University Manila as a University Scholar. He obtained his Master of Arts in Nursing (Major in Adult Health), dean’s list, from the UP Open University through a scholarship grant.

Dr. Letty G. Kuan is a Professor Emeritus of the University of the Philippines Manila College of Nursing, and is an active member of Southeast Asia Bioethics Board and Network of Outstanding Teachers Education (NOTED) of Metrobank Foundation. She mentor-advises MA and PhD students in the University of the Philippines, University of Santo Tomas, Cebu Normal University, Cebu Doctors’ University, Father Saturnino Urios University, San Pedro College and Stillman University.
The Predictors of Quality of Life Among Selected Adults with Chronic Kidney Disease on Hemodialysis

Abstract

This study examined the relationship of predictors like age, weight, treatment adherence, social support and educational level on the QOL scores: Physical Composite Score (PCS), Mental Composite Score (MCS), & Kidney Disease Component Summary (KDCS). The respondents, adult CKD patients on hemodialysis in a private tertiary hospital in the Philippines were chosen through convenience sampling. A validated Filipino version of Kidney Disease Quality of Life Short Form Version 1.3 was utilized. Bivariate correlation and multiple linear regression were then used in data analysis. It is concluded that PCS might be predicted by treatment adherence while social support and educational level could be predictors to MCS. It was found out that rare treatment adherence can seemingly have a positive effect with MCS. For KDCS, treatment adherence and social support showed positive correlation, while age shown inverse relationship, unlike with previous studies. Nurses and other healthcare providers should consider the impact of these significant predictors when rendering care for adult HD patients in order to improve their quality of life.

Keywords: Quality of life, chronic kidney disease, hemodialysis

Introduction

In the Philippines, chronic kidney disease (CKD) is the ninth leading cause of death (National Kidney and Transplant Institute, 2014). The prevalence has worsened, affecting one in ten adult Filipinos. More than 7,000 cases of renal failure are recorded every year, with a 10%-15% growth annually (Dela Cruz, 2014). For those living with CKD, the inevitable progression of the disease is burdensome enough. Their patterns of daily living will change and they will have to learn to manage treatment, work and other responsibilities simultaneously (National Kidney Foundation, 2014). The availability of renal replacement therapies (RRT) has helped reduce the severity of symptoms which resulted in longer survival of renal disease patients. However, this

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*1 Holy Angel University - Graduate School of Nursing; St. Luke’s Medical Center - Quezon City; caslanjerland@gmail.com*
therapy is time-draining, and requires intensive fluid and dietary limits, which make it very crucial to assess its outcome in terms of quality of life.

Unfortunately, the QOL of CKD patients is a frequently overlooked consideration in terms of evaluating health (Kimmel, Cohen & Weisbord, 2014). In developing nations like the Philippines, the emphasis of healthcare for these patients is rather inclined on the basics of care and patient survival. However, QOL concepts are now beginning to generate more attention, as variety of factors that have an effect on it need to be taken into account. Bohlke (2008) suggested that in order to offer the best QOL possible to this population, it is important to identify the predictors of QOL for patients on hemodialysis. Research findings are still inconclusive on the “obesity paradox” or the benefits of increasing weight on dialysis (Johansen, Young & Kaysen, 2014). Furthermore, age difference should also be looked into, as it diversifies the experience of having a kidney disease. In addition, the overall effect between educational level on QOL scores is still unclear in literature. Low adherence to treatment and low quality of life needs also investigation, as they still remain as major challenges for healthcare providers.

Nurses need to provide opportunities for these patients to express their perceived quality of life in order to provide a holistic management. This is despite the fact that QOL has been long regarded as a powerful predictor of morbidity and mortality for this population. This study assessed the QOL composite scores in HD patients, in terms of physical, mental and kidney disease component summary. It also identified which among the selected predictors, namely: age, education, weight, social support and treatment adherence significantly affected these scores.

Methodology

Research Design

This descriptive correlational study focused on the relationships of selected predictors (age, education, weight, social support and treatment adherence) to the QOL scales (Physical Composite, Mental Composite and Kidney Disease Summary) of adult CKD patients on maintenance HD.

Respondents and Setting

Convenience sampling was used to select the respondents who met the inclusion criteria: Filipino adults, aged 18 and above; able to read and write; diagnosed with CKD regardless of etiology and stage of the disease; and on maintenance hemodialysis for at least 6 months. The researcher made use of the G-Power in which the calculated sample size was n=115. Respondents for this study were obtained from a tertiary hospital in City of San Fernando, Pampanga, Philippines. The hospital’s hemodialysis unit currently houses 23 machines and caters to an average of 100 patients daily.

Research Instrument

The first part of the instrument contained questions on the respondents’ age, educational level, weight, perceived level of treatment adherence, and level of social support received. For the second part, the adapted Kidney Disease Quality of Life Short Form Version 1.3 (KDQOL-SF 1.3) copies were given. It is comprised of the following subscales: SF-12 scales and the kidney-disease targeted items. A Filipino version of the KDQOL-SF 1.3 has been translated and validated by Bataclan and Dial (2009). The scoring procedure first transforms the raw pre-coded numeric values of items to a 0-100 possible range, with higher transformed scores always reflecting better quality of life. Scores represent the percentage of total possible score achieved. It is believed to be the first time after its validation that this instrument will be used on a full-scale.

Ethical Considerations

Initially, ethical approval for the conduct of the study was obtained from the University Research Council of Holy Angel University. An informed consent was secured from the respondents in observance of confidentiality. The instrument is available on public domain; hence a personal consent from the developer (RAND Corporation) was not warranted (RAND, 2014).

Data Collection Procedure

After gaining the permission from the hospital, the researcher discussed with the respondents the purpose of the study and its procedure. It was the first time that the said instrument was used for actual research purposes from the time that is was validated by its authors. The distribution of the said questionnaire was done after the respondents’ hemodialysis treatment. Data were then organized, and the answers to these questionnaires were filed anonymously.

Data Analysis

Data entry was performed using the RAND KDQOL Scoring Program Version 2.0 and statistical analysis using the IBM SPSS 20.0 statistical software package. The Physical Composite Score (PCS), Mental Composite Score (MCS) and Kidney Disease Component Summary (KDCS) were used as dependent variables. Bivariate correlation was then utilized to establish relationships between the predictor variables and the dependent variables. For this study, the predictor variables were the following: age, weight, treatment adherence, social support and educational level. A Pearson product-moment correlation was used to determine the relationships between the respondent’s age, weight and their respective PCS, MCS and KDCS. For treatment adherence, social support and educational level, a Spearman’s rank-order correlation was performed to test their respective relationships with QOL scales. To predict the value of
the KDQOL scores based on the values of the identified predictors, multiple regression was performed in SPSS. Statistical significance was set at $P < 0.05$ and regression tolerance at 10.

Results

Demographic Profile

A total of 121 respondents completed the adapted Filipino version of KDQOL-SF questionnaire (see Table 1), with a response rate of 96.8% (121 out of 125). Majority of these respondents are middle age adults, with ages within the 49-58 age bracket (22%). All of the respondents have received formal education, and 36% of them have attained college level. Respondents who reported that they receive social support “most of the time” comprise the 34%. A large number (43%) of these respondents have labeled themselves adherent to the treatment process “most of the time”.

Table 1. Demographic Profile of Respondents ($n = 121$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>%</th>
<th>Social Support</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td>Most of the Time</td>
<td>33.88</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>Rarely</td>
<td>32.23</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>Sometimes</td>
<td>27.27</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td>Always</td>
<td>6.61</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>High School Undergrad.</td>
<td>24.79</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>High School Graduate</td>
<td>23.14</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>College Graduate</td>
<td>21.49</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>College Undergraduate</td>
<td>14.88</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>Elem. Graduate</td>
<td>12.40</td>
</tr>
<tr>
<td>Weight</td>
<td></td>
<td>Post-Graduate</td>
<td>3.31</td>
</tr>
<tr>
<td>Treatment Adherence</td>
<td>42.98</td>
<td>Rarely</td>
<td>0.099</td>
</tr>
<tr>
<td>Treatment Adherence</td>
<td>19.83</td>
<td>Social Support: Most of the Time</td>
<td>0.036</td>
</tr>
<tr>
<td>Treatment Adherence</td>
<td>19.01</td>
<td>Social Support: Rarely</td>
<td>0.170</td>
</tr>
<tr>
<td>Treatment Adherence</td>
<td>18.18</td>
<td>Social Support: Always</td>
<td>0.190</td>
</tr>
</tbody>
</table>

Table 2. Mean Scores per Domain and Subscale of the Filipino Version of KDQOL-SF V. 1.3

<table>
<thead>
<tr>
<th>Domain</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney Disease Component Score (KDCS)</td>
<td>51.39</td>
<td>8.35</td>
</tr>
<tr>
<td>SF-12 Mental Composite Score (MCS)</td>
<td>46.56</td>
<td>7.80</td>
</tr>
<tr>
<td>SF-12 Physical Composite Score (PCS)</td>
<td>38.16</td>
<td>9.95</td>
</tr>
</tbody>
</table>

KDQOL-SF Domain and Subscale Scores

The KDQOL-SF of the following subscales: Physical Composite Score (physical functioning, role-physical, bodily pain, and general health); Mental Composite Score (vitality/energy, social functioning, role emotional, and emotional well-being); and Kidney Disease Component Summary (patient satisfaction, social support, sexual function, effects of kidney disease on daily life, burden of kidney disease, cognitive function, symptom /problem list, quality of social interaction, sleep, work status, and dialysis staff encouragement).

As seen in Table 3, there is a strong, positive correlation between treatment adherence and PCS, which was statistically significant ($r = 0.386, p < .001$). Social support ($r = 0.424, p < .001$) and educational level ($r = 0.554, p < .001$) had positive correlation with MCS and were also statistically significant. Treatment adherence ($r = 0.386, p < .001$) and social support ($r = 0.248, p < .001$) also had statistical significance with KDCS. However, age ($r = -0.386, p < .001$) was inversely correlated with KDCS.

For PCS (see Table 4), a positive correlation was noted on treatment adherence (always, most of the time, and sometimes), and negative correlation on the educational level (post graduate). With a score of $b = -10.285, p = 0.038$, a significant negative correlation on the highest educational level (Post-Graduate Studies) and PCS score was determined. These variables statistically significantly predicted PCS $F (4, 116) = 12.134, p < .001$, and explained 54% of its variability ($R^2 = 0.543$).

Table 3. Bivariate Correlations Between KDQOL Domain Scores and Selected Independent Variables ($n = 121$)

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>PCS</th>
<th>MCS</th>
<th>KDCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.099</td>
<td>0.287</td>
<td>-0.266</td>
</tr>
<tr>
<td>Weight</td>
<td>0.036</td>
<td>0.924</td>
<td>-0.160</td>
</tr>
<tr>
<td>Treatment Adherence</td>
<td>0.386</td>
<td>0.000</td>
<td>-0.016</td>
</tr>
<tr>
<td>Social Support</td>
<td>0.170</td>
<td>0.062</td>
<td>0.424</td>
</tr>
<tr>
<td>Educational Level</td>
<td>-0.24</td>
<td>0.797</td>
<td>0.554</td>
</tr>
</tbody>
</table>

Five (5) variables were statistically significant with MCS (refer to Table 5). There was a positive correlation on social support (always), educational level (post graduate and college graduate), treatment adherence (rarely); and negative correlation on social support (rarely). For these significant variables, the ANOVA result is $F (14, 106) = 20.004, p < .001$. Specifically, these predictors explain 41% of the variability of MCS ($R^2 = 0.408$). As per Table 6, eight (8) variables for KDCS were statistically significant to the
Table 4. Results of Multiple Linear Regression for PCS and Predictor Variables (n = 121)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients B</th>
<th>Std.Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Adherence: Always</td>
<td>23.932</td>
<td>4.606</td>
<td>.963</td>
<td>5.196</td>
<td>.000</td>
</tr>
<tr>
<td>Treatment Adherence: Most of the time</td>
<td>17.382</td>
<td>4.438</td>
<td>.872</td>
<td>3.917</td>
<td>.000</td>
</tr>
<tr>
<td>Treatment Adherence: Sometimes</td>
<td>15.084</td>
<td>4.420</td>
<td>.625</td>
<td>3.412</td>
<td>.001</td>
</tr>
<tr>
<td>Educational Level: Post-Graduate</td>
<td>-10.285</td>
<td>4.889</td>
<td>-.186</td>
<td>-2.104</td>
<td>.038</td>
</tr>
</tbody>
</table>

Table 5. Results of Multiple Linear Regression for MCS and Predictor Variables (n = 121)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients B</th>
<th>Std.Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Adherence: Rarely</td>
<td>6.368</td>
<td>2.705</td>
<td>.321</td>
<td>2.354</td>
<td>.020</td>
</tr>
<tr>
<td>Social Support: Always</td>
<td>6.609</td>
<td>1.589</td>
<td>.397</td>
<td>4.159</td>
<td>.000</td>
</tr>
<tr>
<td>Social Support: Rarely</td>
<td>-9.068</td>
<td>2.327</td>
<td>-.290</td>
<td>-3.897</td>
<td>.000</td>
</tr>
<tr>
<td>Educational Level: Post-Graduate</td>
<td>11.777</td>
<td>3.103</td>
<td>.271</td>
<td>3.795</td>
<td>.000</td>
</tr>
<tr>
<td>Educational Level: College Graduate</td>
<td>5.516</td>
<td>1.590</td>
<td>.292</td>
<td>3.468</td>
<td>.001</td>
</tr>
</tbody>
</table>

Table 6. Results of Multiple Linear Regression for KDCS and Predictor Variables (n = 121)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Unstandardized Coefficients B</th>
<th>Std.Error</th>
<th>Standardized Coefficients Beta</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.133</td>
<td>.041</td>
<td>-.252</td>
<td>-3.200</td>
<td>.002</td>
</tr>
<tr>
<td>Treatment Adherence: Always</td>
<td>18.358</td>
<td>3.607</td>
<td>.881</td>
<td>5.089</td>
<td>.000</td>
</tr>
<tr>
<td>Treatment Adherence: Most of the time</td>
<td>12.435</td>
<td>3.476</td>
<td>.744</td>
<td>3.578</td>
<td>.001</td>
</tr>
<tr>
<td>Treatment Adherence: Sometimes</td>
<td>14.218</td>
<td>3.462</td>
<td>.702</td>
<td>4.107</td>
<td>.000</td>
</tr>
<tr>
<td>Treatment Adherence: Rarely</td>
<td>9.741</td>
<td>3.338</td>
<td>.460</td>
<td>2.918</td>
<td>.004</td>
</tr>
<tr>
<td>Social Support: Always</td>
<td>3.749</td>
<td>1.961</td>
<td>.211</td>
<td>1.912</td>
<td>.040</td>
</tr>
<tr>
<td>Educational Level: College Graduate</td>
<td>4.098</td>
<td>1.963</td>
<td>.202</td>
<td>2.088</td>
<td>.039</td>
</tr>
<tr>
<td>Educational Level: Elementary Grad.</td>
<td>7.925</td>
<td>2.224</td>
<td>.314</td>
<td>3.563</td>
<td>.001</td>
</tr>
</tbody>
</table>

There was significant positive correlation on treatment adherence (always, most of the time, sometimes, and rarely), social support (always) and educational level (post graduate and elementary graduate); and significant negative correlation on age.

Finally, Table 6 shows that KDCS was attempted to be predicted from age, educational level, weight, social support and treatment adherence. For this analysis, eight (8) variables were statistically significant to the prediction, p < .05 and F (8, 112) = 9.391, p < .001, $R^2 = 0.401$, wherein the variables explain 40% of the variability of KDCS. There was significant positive correlation on treatment adherence (always, most of the time, sometimes, and rarely), social support (always) and educational level (post graduate and elementary graduate); and significant negative correlation on age ($b = -0.133, p = 0.002$).

Discussion

Treatment adherence is essential for adequate and effective disease management because it can help decrease physical symptoms (Moattari et al, 2012). In contrast with previous
studies, it was discovered that rare treatment adherence can seemingly have a positive effect with MCS. Christensen & Ehlers (2002) suggest that it might be due to fact that the treatment-related lifestyle restrictions could affect patients’ personal illness beliefs, sense of control, leading to depression, and in turn adversely influence coping and adjustment. Maintenance hemodialysis therapy can result to loss of independence, interference of family and social life, and reliance on caregivers (Lin, Lee & Hicks, 2005).

Social support can help patients adjust to the challenges of this chronic illness. It is also recommended that the presence of social support in patients with kidney failure decreases incidence of depression (Sysmister & Friend, 2014). Furthermore, social support could also provide the means for better treatment adherence leading to better medical outcomes (Plantinga et al, 2010). In fact, the American Society of Nephrology (2010) reported that HD patients who have low degrees of social support coming from their family and friends tend to ignore doctors’ prescriptions and experience a poorer QOL.

A higher educational attainment is known to play an essential role in raising the awareness of chronic diseases and in a better coping ability with chronic disease (Ayoub et al, 2014). However, unlike with earlier researches, these patients are likely to achieve lower physical component of QOL. This may be attributed to the demanding and critical nature of highly-educated CKD patients (Bayoumi et al, 2013), not only to the satisfaction and quality of care received but also to their symptoms.

Conclusion

The apparent influence of age, educational level, social support and treatment adherence to these QOL scales possibly mean that they are its predictors among hemodialysis patients. Specifically, being adherent to the treatment regimen could improve physical QOL, while increasing levels of social support and high educational level could possibly enhance the mental QOL. On the other hand, progressive age might have a detrimental effect to KDCS as it is inversely related with physical and functional capacity, according to Malindretos (2012). However, unlike with other studies, weight was not seen as a significant predictor in this study.

Limitations

Since convenience sampling was utilized, only those present in the hemodialysis treatment sets were included in the study. Concerns on subjectivity and response set bias cannot be ruled out. Respondents may tend to either exaggerate or under-report the severity or frequency of symptoms in order to mask their problems. Whether the findings can be generalized to a broader range of settings and respondents remains to be determined.

Recommendations

The predictors used in this study might be tested into larger sample sizes to enhance generalizability. Additional predictor variables could be included such as: HD vascular access, spirituality, depression, dialysis efficiency or Kt/v, among others. Experimental or longitudinal studies can be performed to determine the effect of these variables. Validity and reliability testing of the translated instrument can also be done for peritoneal dialysis and kidney transplant patients.

Implications

For nurses, it is suggested that they fully understand the significance of these QOL predictors in their care approach. They should incorporate effective health teachings which are tailor fit for their patients’ educational level and understanding. Strategies to promote treatment adherence should also be planned and collaborated with the patient and his/her family. However, demanding compliance requirements can potentially make these patients lose their autonomy. Social support should also be encouraged, not only from the patients’ families and friends but also from their fellow nurses.

References


About the Author

Jerland Salazar Casilan, RN, MSN is a Research & Systems Manager at St. Luke’s Medical Center – Quezon City. He is also the Site Coordinator for the National Database of Nursing Quality Indicators (NDNQI®), an international benchmark system for nurse-sensitive measures. Prior to joining St. Luke’s, he served as the Chief Nursing Officer of Our Lady of Mt. Carmel Medical Center both in San Fernando and Clark, Pampanga. He obtained his BS in Nursing, with honors, from Angeles University Foundation in 2011. In 2014, he finished his MS in Nursing, major in Adult Health Nursing at Holy Angel University, wherein he graduated with high honors. His research interests include nursing quality, cardiorenal nursing, patient safety and nursing jurisprudence.

“NURSING ISN’T A JOB IT’S A PASSION

it’s part of who you are as a person. And you want the student to be sure that they have that passion, that intensity for what it is they’re coming into.”
Anjanette S. De Leon, RN, MAEd, MAN

Josephine M. De Leon, PhD, RN

Assessment of Health Care Needs of Older Persons with Type 2 Diabetes Mellitus

Abstract

The global prevalence of diabetes by 2030 estimated an increase in number of people with diabetes. People who are 64 years of age will be 82 million in developing countries and 48 million in developed countries. The study aimed to assess the health care needs of older persons’ physical, cognitive, functional and self-care abilities and determine relationship of these to their profiles. These assessments are the bases in designing modules for Diabetes Self-Management Education training module for Diabetes Educators. A descriptive correlational design was utilized to assess the health care needs of 100 young older persons. The Filipino Activities of Daily Living (Fil-ADL) and the Filipino Instrumental Activities of Daily living were utilized to assess the functional status of the older persons. The Montreal Cognitive Assessment (MOCA-P) and cognitive function exams were used to assess cognitive status while Mini-Nutritional Assessment (MNA) was used to assess nutritional status of the older persons. The Self-Care Inventory Revised (Sci-R) was used to assess self-care behaviors of older persons to diabetes management. Frequency and percentage were used to describe the health care needs of older persons, while mean and standard deviation were used in assessing knowledge and self-care abilities. Chi-square test for Association was utilized to determine relationship of the health care needs and the profile of the respondents. Study shows that most of the older persons are female, 66-70 years old, married and had primary education. The older persons’ knowledge in diabetes is satisfactory, had a normal nutritional status, was functional in daily living activities (ADL), was functional in their instrumental activities of daily living (IADL), was normal of their cognitive status, and sometimes perform self-care abilities to diabetes management. There is significant relationship between knowledge, civil status and history of diabetes. Nutrition and cognitive status had significant relationship to their civil status, education and history of diabetes. The functional status of the older persons has significant relationship with history of diabetes. It is necessary to include the culture-based health care needs of older persons and to consider demography such as education and history of diabetes in designing the training module for diabetes educators.

Keywords: Diabetes mellitus, diabetes self-management education (DSME), older persons, diabetes educators

1 Primary and Corresponding Author; asdeleon@ceu.edu.ph
Diabetes, as a major lifestyle disease, is increasing in prevalence globally. There is a rising trend of diabetes in Asia, and it contributes to 60% of the world’s diabetic population (Ramachandran, Chamukuttan, Samith Shetty & Nanditha, 2017). The World Journal of Diabetes (2012) highlighted the rising trend in prevalence of diabetes in Asia, its causative factors and the urgent need to implement national strategies for primary prevention of type 2 diabetes. The prevalence among adults aged 20-70 years is expected to rise from 285 million in 2010 to 438 million by the year 2030. Prevalence estimates of diabetes and impaired glucose tolerance (IGT) are high for all Asian countries and are expected to increase further in the next two decades (Ramachandran, et al. 2012). The Philippines ranked 15th in the world for diabetes prevalence. Recently, 2014 data from the Rural Health Unit of Bustos, Bulacan revealed that Diabetes Mellitus is 5th of the leading causes of mortality.

Diabetes Self-Management Education (DSME) for older persons is complicated by the high prevalence of medical comorbidities and declining functional status among this patient population (ADA, 2016). To adequately meet the DSME needs of older persons, DSME should be individualized, should involve multiple disciplines, should involve care partners when patients cannot assume full responsibility for their own self-care, and should carefully weigh the potential effects of diabetes treatments on quality of life. It is recommended in the study that more researches are needed on how diabetes affects older persons and on which educational approaches will work best for the older persons population.

The American Association of Diabetes Educators (AADE, 2015) defined the role of diabetes educators which is to help older persons with diabetes set appropriate goals, learn self-management skills and acquire knowledge about their disease. Diabetes educators assess and address age-related changes as well as other factors that may interfere with good diabetes self-management. In the Philippines, the Institute for Diabetes Federation (ISDF) trained endocrinologists that provide outpatient diabetes consultations to patients (Tan, 2015). In the other hand, the Association of Diabetes Nursing Educators of the Philippines (ADNEP) provide training for nurse educators. However, as of today, no guidelines were set to define the role of diabetes educators in the Philippines.

As a trained diabetes educator, the background of the researcher’s training will help her develop DSME module for diabetes educators who will teach older persons self-management of their condition as people with diabetes. At the time of the study, there is no existing module appropriate for older persons to be utilized by the diabetes educators in conducting DSME. Through this study, the needs of older persons will be identified so as to know the appropriate management of their diabetes condition. Health care needs assessment of the older persons with T2 DM is necessary to determine DSME needs. The results of the assessment will became the basis for development of a training module for Diabetes Health Educator.

Research Objectives

This study utilized Dorothea Orem’s self-care deficit as a guide in developing training module for nurses of older person with Type 2 DM. The deficit was identified by the researcher through assessment of the patients’ physical/functional, cognitive, nutrition and self-care abilities. The relationship of the older persons’ needs to their profile were also identified in the study to identify specific needs of the older persons that can be included in the development of DSME training module for diabetes educators for older persons with Type 2 DM.

Figure 1 presents the conceptual framework of the study. Needs assessment were conducted among older persons with Type 2 Diabetes Mellitus according to the Global Guidelines on Managing Older persons with Type 2 Diabetes (IDF, 2013). The key purpose of these assessment tests was to identify one or more healthcare needs that can be addressed by the researcher. The assessment included knowledge on diabetes, nutritional assessment, physical/functional abilities, cognitive assessment, self-care abilities.
and self-care abilities. The relationship of the older persons’ needs to their profile were also identified in the study to identify specific needs of the older persons that can be included in the development of DSME training module for Diabetes Educators for older persons with Type II DM.

Methodology

Research Design

This study used descriptive correlational research design to assess the health care needs of older persons in terms of the knowledge about diabetes, functional, nutrition, and self-care abilities and to determine the relationship of these to their profile. The outcome of the assessment was the basis of the development of training module for diabetes educators providing DSME.

Setting

This study was conducted at Bustos, Bulacan. Respondents were selected in the community setting in the 14 barangays of Bustos, Bulacan. This was chosen as the setting of the study because of the high incidence of DM among older persons and the researcher was affiliated in this municipality as diabetes educator.

Samples

Records review was conducted in the Rural Health Unit in the Municipality of Bustos, Bulacan to determine the total population of the study. All older persons with Type 2 Diabetes Mellitus included in the roster list were considered to be part of the study. Using purposive sampling technique selection of subjects were done based on the set inclusion and exclusion criteria. The respondents were older persons who belonged to the “young old” (60-75 years old) age group diagnosed with Type 2 Diabetes Mellitus. Secondary review of records was done to identify risk factors like history of diabetes in the family, lab results (FBS), obesity, lifestyle factors and positive signs of diabetes mellitus from the rural health unit/barangay health centers. Measurement of BMI, Waist-Hip ratio, and blood pressure were taken as baseline data.

Research Instruments

This study utilized standardized instruments like: (1) Knowledge test on DM, (2) Mini Nutritional Assessment (MNA), (3) Filipino Activities of Daily Living (Fil-ADL) and Filipino Instrumental Activities of Daily Living (Fil-IADL), (4) Montreal Cognitive Assessment-Philippines (MOCA-P), and (5) Self-Care Inventory-Revised (SCI-R). Permission to use the tool of ADL/IA DL, MOCA and SCI-R was approved by the authors. The cultural validations of the standards instruments to the Philippines setting was considered prior to the conduct of the study. Thus, the Filipino adaptations of the instruments was selected for the purposes of this study.

To assess the knowledge of the respondents, a thirty (30) item cognitive test was used covering diabetes awareness, nutrition, exercise, treatment, and survival skills. This was validated for content by three diabetes educators and tested for reliability using Test Re-test Reliability or Pearson Correlation Test. In interpreting the results of the written examinations for knowledge, the 50% cut-off from transmutation table of CEU, School of Nursing was used. Examination results were interpreted as excellent, very satisfactory, satisfactory, and poor.

To assess the needs of the older persons’ nutrition, the Mini Nutritional Assessment was adopted from Nestle Nutrition Institute with permission. The Mini Nutritional Assessment (MNA) tool was composed of 6 questions about food intake, weight loss, mobility, psychological stress, body mass index. The MNA is a validated nutrition screening and assessment tool that can identify older persons age 65 and above who are malnourished or at risk of malnutrition. The MNA was developed nearly 20 years ago and is the most well validated nutrition screening tool for older persons. Originally comprised of 18 questions, the current MNA now consists of 6 questions and streamlines the screening process. The current MNA retains the validity and accuracy of the original MNA in identifying older persons who are malnourished or at risk of malnutrition. MNA had a sensitivity of 96%, specificity of 98% and positive predictive value of 97% compared to clinical status. The MNA has a maximum of 14 points. A 12-14 points was interpreted that one has normal nutritional status, 8-11 points were interpreted at risk of malnutrition and 0-7 points were interpreted as malnourished.

In determining the physical and functional status of older persons, the Filipino- Instrumental Activities of Daily Living (Fil-IADL) for Filipino Older Persons (Fil-IADL) was adopted from the study of De Leon and colleagues (De Leon, Urgel, Cuveas & Dasalla, 2016). The Fil-IADL is a reliable tool to measure physical and functional status as a measurement of the client’s ability to perform activities of daily living independently. Clinicians typically use the tool to detect problems in performing activities of daily living and in planning accordingly. The index ranks adequacy of performance in the six functions of bathing, dressing, toileting, transferring, continence and feeding. Respondents scored yes or no for independence in six functions. A score of 6 indicates full function, 4 indicates moderate impairment, and 2 or less indicates severe functional impairment. The Fil-IADL has an internal consistency of .80 which indicates that the tool is sufficiently reliable to use. (De Leon, et.al. 2016).

To assess the psychological function of the older persons with Type 2 Diabetes Mellitus the MoCA-P was adopted from the study...
of Dominguez, Orquiza, Soriano, & Ampil (2013). The MoCA-P is a useful instrument employed by clinicians to detect cognitive impairment and diagnose probable Alzheimer’s Disease (AD) while in its early stages. The MoCA-P questions assess the domains of attention and concentration, executive functions, memory, language, visuospatial skills, conceptual thinking, calculations, and orientation. The MoCA-P yielded a high level of internal consistency (Cronbach’s α = 0.938). Inter-rater and intra-rater reliability were 0.887 (p = 0.05) and 0.969 (p = 0.05), respectively. The total possible score is 30 points with a score of 26 or more considered normal. To better adjust the MoCA-P for lower educated individuals, 2 points should be added to the total MoCA-P score for those with 4-9 years of education and 1 point for 10-12 years of education. The score range for Mild Cognitive Impairment (MCI) is 19-25.2 and for Alzheimer’s dementia is 11.4-21.

To assess the self-care abilities of older persons to DM management, a research-based instrument was used. The self-care tool (SCI-R) measures perceptions of adherence to recommended diabetes self-care behaviors of adults with Type 1 or Type 2 Diabetes. The tool consists of 14 items on a 5-point Likert scale that reflects how well they followed recommendations for self-care during the past 2 months (i.e., 1 = “never do it” to 5 = “always do this as recommended”) The 14 items include monitoring blood glucose, injecting insulin, regulating food, and exercising. The self-care test (SCI-R) internal consistency of the SCI-R was α = 0.87. Responsiveness analyses showed SCI-R scores improved with diabetes psycho education with a medium effect size of 0.62 and a Guyatt’s statistic of 0.85. To determine the extent of the Self-Care Behaviors of the older persons to DM management were described using ‘always’ (5.0) to ‘never’ (1.0). Self-care abilities were also ranked according to priority to determine priorities of the respondents in health teaching process.

Ethical Considerations

This study was subjected to ethical research protocols and procedures. The researcher submitted proposal for approval to the Centro Escolar University Institutional Review Board (CEU-IRB) before data gathering procedures started. Letter of approval was obtained from the Municipal Mayor and health officer. Prior to assessment, a consent letter was given to the subjects indicating the benefits and risk of their participation. A letter together with a copy of the proposed study was endorsed to the ethical board committee of the municipality for approval. Informed consent was secured before conducting data gathering.

### Data Gathering Procedure

After the selection of the respondents, training of the interviewers was conducted by the researcher to the ten nurses in Bustos, Bulacan in collecting data to the subjects of the study. Each nurse was given the guidelines on how to accomplish the tool. Discussion of each item in the tools, demonstration of measurement and scoring was detailed during the training.

Respondents were guided by the diabetes educators/nurses in answering the tools used in assessing the health care needs of older persons. The tool included answering the 30-item cognitive test to measure the knowledge of respondents about diabetes. One on one interviews were conducted to collect data on the functional abilities, cognitive, psychological, nutritional and self-care abilities of older persons. One on one interviews were conducted to collect data on the functional abilities, cognitive, psychological, nutrition and self-care abilities of older persons.

### Statistical Treatment of Data

In describing the assessment of health care needs of the older persons in terms of physical/functional, cognitive and nutritional status, Frequency and Percentage distribution was used. To describe the health care needs of older persons with Type 2 DM, Mean and Standard Deviation was utilized. The use of mean value described the need assessment of older persons and determined its relationship to the profile of the respondents. To show the relationship of health care needs assessment and the profile of the respondents, Chi-square test for Association was used. The Chi-square test for Association was utilized to determine relationship between the health care needs assessment and the profile of the respondents, which is considered a categorical data.

### Results

#### Demographic Profile of the Respondents

The demographic profile of the respondents was determined to identify the relationship of this profile in the responses of the older persons in the different health care needs. Table 1 presents the data on the older persons profile. As shown 50 percent of the 100 older persons belonged to the 66-70 years old while 26 percent belonged to the 60-65 age group and 24 percent belonged to the 71-75 years old. There are 75 female respondents and 25 male respondents from the total of 100 or 100%. This shows that the aging population comprises mostly of females. Data revealed that 84 percent of older persons are elementary graduate while 19 percent is high school graduate, 14 percent obtained college education and 3 percent with vocational course. Furthermore, the data shows that most of the older persons did not reach college education. Table 1 also shows that 55 percent of the older persons have 0-5 years history of diabetes, 27 percent had 6-10
years, 18 percent had 11-15 years, 2 (2 percent) had 26-30 years and 1 (1 percent) of the total population had 21-25 years and 31-35 years history of diabetes.

**Knowledge in DM Management**

The level of knowledge of the older persons in DM management is important to consider in designing the DSME training module. The aim of patient education for people with diabetes is to improve their knowledge, skills and confidence, enabling them to take increasing control of their own condition and integrate effective self-management into their daily lives. High-quality structured education can have a profound effect on health outcomes and can significantly improve quality of life. The level of awareness on the health care needs of the older persons according to knowledge in all DM management is satisfactory. Older persons have satisfactory knowledge in DM awareness, diet management, exercise management, drug management and survival skills. (See Figure 2).

**Nutrition**

The American Diabetes Association (ADA) (2016) has given focus on exercise and dietary modification in managing Type 2 DM. It is highly important for DM patients to monitor their blood glucose level, therefore it is only correct for them to watch out what they eat. In line with this, the ADA has recommended the best food options for Type 2 DM patients. Findings in figure 3 present the nutritional status of the older persons. About 79 percent of the older persons are with normal nutritional status, 15 percent is malnourished and 6 percent is at risk for malnutrition.
Functional Status

Diabetes appears to be a risk factor for the development of frailty, which is a pre-disability state and can lead to several key adverse outcomes such as hospitalization, increased risk of fall and premature mortality (IDF, 2013). Therefore, assessment of the functional status of the older persons is essential in the development of their care. Older persons are independent in terms of their activities of daily living such as bathing, dressing, toileting, transferring, continence and feeding. Older persons are also independent to instrumental activities of daily living, such as ability to use telephone, shopping, preparing food, housekeeping, laundry, transportation, and handling own medications as well as finances.

Cognitive Status

Older persons with cognitive impairment are incapable of self-care. The cognitive impairment may lead to significant memory problems, a degree of disorientation or a change of personality (IDF, 2013). The data in figure 4 shows that 46 percent of the older persons are with normal cognitive status while 29 percent have incidence of dementia/Alzheimer’s and 25 percent of them are with incidence of Mild Cognitive Impairment (MCI).

Self-Care Abilities

Diabetes self-care is complex with important recommendations for nutrition, physical activity, checking glucose levels, and taking medication. Older persons with diabetes have unique issues that have an impact on self-care. As people age, their health status, support systems, physical and mental abilities, and nutritional requirements change (Weinger, Beverly, & Smaldone, 2014). The level of assessment on the health care needs of older persons according to self-care abilities (Table 2) shows that the older persons sometimes do all the self-care abilities. Taking medications at the right time ranked first (mean= 4.23), which is verbally interpreted as usually, while wearing a medic alert identification ranked last (mean= 1.05), which is verbally interpreted as never.

![Cognitive Status of the Older Persons](image)

Table 2. Level of Health Care Needs of the Older Persons in Self-Care Abilities (N=100)

<table>
<thead>
<tr>
<th>Self-Care Abilities</th>
<th>Mean</th>
<th>SD</th>
<th>Rank</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Checks blood glucose with monitor</td>
<td>3.51</td>
<td>1.05</td>
<td>5th</td>
<td>Usually</td>
</tr>
<tr>
<td>2. Records blood glucose results</td>
<td>2.77</td>
<td>1.54</td>
<td>8th</td>
<td>Sometimes</td>
</tr>
<tr>
<td>3. Checks Ketones when glucose level is high (if Type 1 DM)</td>
<td>1.67</td>
<td>2.03</td>
<td>13th</td>
<td>Rarely</td>
</tr>
<tr>
<td>4. Takes the correct pills or insulin</td>
<td>4.22</td>
<td>1.01</td>
<td>2nd</td>
<td>Usually</td>
</tr>
<tr>
<td>5. Takes diabetes pills or insulin at the right time</td>
<td>4.23</td>
<td>0.94</td>
<td>1st</td>
<td>Usually</td>
</tr>
<tr>
<td>6. Eats the correct food portions</td>
<td>3.86</td>
<td>1.00</td>
<td>4th</td>
<td>Usually</td>
</tr>
<tr>
<td>7. Eats meals/snacks on time</td>
<td>3.90</td>
<td>0.92</td>
<td>3rd</td>
<td>Usually</td>
</tr>
<tr>
<td>8. Keeps food records</td>
<td>1.88</td>
<td>1.15</td>
<td>12th</td>
<td>Rarely</td>
</tr>
<tr>
<td>9. Reads food labels</td>
<td>2.04</td>
<td>1.20</td>
<td>10th</td>
<td>Rarely</td>
</tr>
<tr>
<td>10. Treats low blood glucose with just the recommended amount of carbohydrate</td>
<td>1.97</td>
<td>1.64</td>
<td>11th</td>
<td>Rarely</td>
</tr>
<tr>
<td>11. Carries quick acting sugar to treat low blood glucose</td>
<td>2.13</td>
<td>1.19</td>
<td>9th</td>
<td>Rarely</td>
</tr>
<tr>
<td>12. Comes in for clinic appointments</td>
<td>3.45</td>
<td>1.32</td>
<td>8th</td>
<td>Sometimes</td>
</tr>
<tr>
<td>13. Wears a medic alert identification</td>
<td>1.05</td>
<td>0.41</td>
<td>15th</td>
<td>Never</td>
</tr>
<tr>
<td>14. Exercises</td>
<td>3.00</td>
<td>1.06</td>
<td>7th</td>
<td>Sometimes</td>
</tr>
<tr>
<td>15. If on insulin, adjusts dosage based on glucose values, food, and exercise</td>
<td>1.35</td>
<td>2.04</td>
<td>14th</td>
<td>Never</td>
</tr>
</tbody>
</table>

Ave | 2.74 | 0.53 | | Sometimes |
**Table 3. Relationship of the Older Persons’ Knowledge to DM Management and their Profile (N=100)**

<table>
<thead>
<tr>
<th>Profile</th>
<th>Diet</th>
<th>DM Awareness</th>
<th>Exercise</th>
<th>Drug</th>
<th>Survival Skills</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>14.67</td>
<td>17.54</td>
<td>6.61</td>
<td>4.96</td>
<td>4.85</td>
<td>30.17</td>
</tr>
<tr>
<td>Sex</td>
<td>4.75</td>
<td>3.16</td>
<td>6.64</td>
<td>3.40</td>
<td>5.26</td>
<td>10.06</td>
</tr>
<tr>
<td>Civil Status</td>
<td>9.60</td>
<td>52.85*</td>
<td>8.28</td>
<td>4.64</td>
<td>10.09</td>
<td>39.84*</td>
</tr>
<tr>
<td>Education</td>
<td>17.00</td>
<td>8.97</td>
<td>23.98</td>
<td>12.52</td>
<td>12.22</td>
<td>50.71</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>110.22</td>
<td>48.87*</td>
<td>42.36*</td>
<td>16.37</td>
<td>36.01*</td>
<td>143.26*</td>
</tr>
</tbody>
</table>

*significant @ <0.05

**Relationship of the Health Care Needs of Older Persons with Type 2 DM and their Profile**

Many factors affect the aging process. These factors are age, sex, civil status, education and history of diabetes and it is important to note these in considering the management of diabetes in older persons.

Knowledge on diabetes management is crucial to the older persons with Type 2 DM. Factors that affect knowledge to DM management are important to determine in order to acquire basis for diabetes nursing care. The relationship of the older persons’ knowledge to DM management is significant in their civil status (<0.05) and history of diabetes (<0.05) but not significant in age, sex, and education (Table 3). The data shows that knowledge of the older persons on DM management is dependent on their civil status and history of diabetes. Majority of the older persons are married and with less than 5 years history of diabetes. Knowledge of the older persons on DM management is rated as satisfactory.

Table 4 presents that older persons’ nutrition status are significantly related to civil status (<0.05), education (<0.05) and history of diabetes (<0.05) but not related to age and sex. Findings above show that the nutrition status of the older persons is dependent on their civil status, education and history of diabetes. Relationship of the older persons’ ADL status and their profile (Table 5) shows significant relationship to history of diabetes (p=<0.05). The ADL status is dependent of the older persons’ history of diabetes. Older persons’ IADL status and their profile (Table 6) also shows significant relationship to history of diabetes.

The cognitive status of the older persons (Table 7) is related to civil status (<0.05), education (<0.05) and history of diabetes (<0.05) but not related to age and sex. The older persons’ cognitive status is dependent on their civil status, education and history of diabetes.

**Table 4. Relationship of the Older Persons’ Nutrition and their Profile (N=100)**

<table>
<thead>
<tr>
<th>Profile</th>
<th>Pearson Chi Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>48.16</td>
<td>0.76 &gt;0.05</td>
</tr>
<tr>
<td>Sex</td>
<td>19.73</td>
<td>0.10 &gt;0.05</td>
</tr>
<tr>
<td>Civil Status</td>
<td>44.14</td>
<td>0.01 &lt;0.05*</td>
</tr>
<tr>
<td>Education</td>
<td>60.28</td>
<td>0.00 &lt;0.05*</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>94.52</td>
<td>0.00 &lt;0.05*</td>
</tr>
</tbody>
</table>

*significant @ <0.05

**Table 5. Relationship of the Older Persons’ ADL Status and their Profile (N=100)**

<table>
<thead>
<tr>
<th>Profile</th>
<th>BA</th>
<th>DR</th>
<th>TO</th>
<th>TR</th>
<th>CO</th>
<th>FE</th>
<th>Total ADL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.09</td>
<td>1.09</td>
<td>1.09</td>
<td>2.26</td>
<td>5.20</td>
<td>3.20</td>
<td>13.27</td>
</tr>
<tr>
<td>Sex</td>
<td>1.03</td>
<td>1.03</td>
<td>1.03</td>
<td>1.39</td>
<td>1.33</td>
<td>0.34</td>
<td>2.34</td>
</tr>
<tr>
<td>Civil Status</td>
<td>0.13</td>
<td>0.13</td>
<td>0.13</td>
<td>0.17</td>
<td>1.97</td>
<td>0.42</td>
<td>3.50</td>
</tr>
<tr>
<td>Education</td>
<td>0.86</td>
<td>0.86</td>
<td>0.86</td>
<td>0.86</td>
<td>1.38</td>
<td>0.57</td>
<td>3.58</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>20.07*</td>
<td>20.07*</td>
<td>20.07*</td>
<td>19.04*</td>
<td>6.02</td>
<td>0.83</td>
<td>59.66*</td>
</tr>
</tbody>
</table>

BA= Bathing; DR= Dressing; TO= Toileting; TR=Transferring; CO=Continence; FE=feeding *significant at <0.05
The older persons' self-care abilities (Table 8) are related to education and history of diabetes but not related to age, sex and civil status. The older persons' self-care abilities are dependent of education and history of diabetes.

**Discussions**

Majority of the older persons belonged to the young old group. According to the National Diabetes Education Program (American Academy of Family Physician Foundation, 2013), adult diabetes prevalence doubles with every 15 years of age until age 65. Prevalence in older adults has doubled in the past 15 years. Incidence and prevalence are increasing most rapidly in absolute terms among older adults. The increasing incidence and detection, decreasing mortality, and aging of the baby boomers are expected to cause large increases in diabetes prevalence over the next 20 years. The findings show that majority of the older persons were married. The Philippines 2010 census revealed that three in five older persons were married. Of the household population 60 years old and over, 60.38 percent was married, and 30.02 percent was widowed. A relatively small proportion was reported single (5.03 percent). Another 1.17 percent was divorced/separated and 2.76 percent was with other marital arrangements. Furthermore, the data showed that older adults are not well educated. The Philippine Census Report (Philippine Statistics Authority, 2010), reported that five percent of the older persons are academic degree holders. Three in five older persons reached at most elementary and 15.69 percent reached at most high school. About 4.85 percent was college undergraduates and only five percent was able to finish a degree. Those who had not completed any grade made up of 10.15 percent, of which more than half (59.48 percent) was female. The population came from the rural areas where most of the older persons have not finished secondary education.

Older persons have satisfactory knowledge in DM awareness, diet management, exercise management, drug management and survival skills. Asif (2014) stated that effective lifestyle modifications including counseling on weight loss, adoption of a healthy dietary pattern, together with physical activity are the cornerstone in the prevention of type-2 diabetes. Therefore, emphasis must be given to promoting a healthier lifestyle and finding solutions in order to increase adherence and compliance to the lifestyle modifications, especially for high-risk individuals.

### Table 6. Relationship of the Older Persons’ IADL status and their Profile (N=100)

<table>
<thead>
<tr>
<th>Profile</th>
<th>ATT</th>
<th>SHOP</th>
<th>FP</th>
<th>HK</th>
<th>LA</th>
<th>MT</th>
<th>MEDS</th>
<th>FIN</th>
<th>Total IADL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>6.21*</td>
<td>18.73*</td>
<td>12.10*</td>
<td>1.70</td>
<td>0.48</td>
<td>24.48*</td>
<td>9.11*</td>
<td>6.12*</td>
<td>35.60*</td>
</tr>
<tr>
<td>Sex</td>
<td>0.98</td>
<td>0.26</td>
<td>0.00</td>
<td>0.00</td>
<td>2.02</td>
<td>1.94</td>
<td>1.33</td>
<td>1.39</td>
<td>5.90</td>
</tr>
<tr>
<td>Civil Status</td>
<td>6.65*</td>
<td>2.65</td>
<td>4.60</td>
<td>6.96*</td>
<td>8.55*</td>
<td>0.51</td>
<td>0.46</td>
<td>0.17</td>
<td>14.47</td>
</tr>
<tr>
<td>Education</td>
<td>6.09</td>
<td>3.89</td>
<td>6.32</td>
<td>2.94</td>
<td>3.81</td>
<td>4.72</td>
<td>4.29</td>
<td>0.87</td>
<td>24.25</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>5.28</td>
<td>10.96*</td>
<td>16.70*</td>
<td>1.23</td>
<td>3.11</td>
<td>12.43*</td>
<td>19.75*</td>
<td>11.89*</td>
<td>62.18*</td>
</tr>
</tbody>
</table>

*Significant at <0.05

ATT=Ability to use telephone; SHOP= Shopping; FP= Food Preparation; HK=Housekeeping; LA= Laundry; MT= Mode of Transportation; MEDS= Responsibility for own meds; FIN=Ability to handle Finances

### Table 7. Relationship of the Older Persons’ Cognitive Status and their Profile (N=100)

<table>
<thead>
<tr>
<th>Profile</th>
<th>Pearson Chi Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>48.16</td>
<td>0.12 &gt;0.05</td>
</tr>
<tr>
<td>Sex</td>
<td>1.76</td>
<td>0.62 &gt;0.05</td>
</tr>
<tr>
<td>Civil Status</td>
<td>25.02</td>
<td>0.01 &lt;0.05*</td>
</tr>
<tr>
<td>Education</td>
<td>60.28</td>
<td>0.00 &lt;0.05*</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>94.52</td>
<td>0.00 &lt;0.05*</td>
</tr>
</tbody>
</table>

*significant @ <0.05

### Table 8. Relationship of the Older Persons Self-Care Abilities and their Profile (N=100)

<table>
<thead>
<tr>
<th>Profile</th>
<th>Pearson Chi Square</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>55.89</td>
<td>0.82 &lt;0.05</td>
</tr>
<tr>
<td>Sex</td>
<td>23.39</td>
<td>0.89 &lt;0.05</td>
</tr>
<tr>
<td>Civil Status</td>
<td>5.12</td>
<td>0.53 &lt;0.05</td>
</tr>
<tr>
<td>Education</td>
<td>0.26</td>
<td>0.00 &gt;0.05</td>
</tr>
<tr>
<td>History of Diabetes</td>
<td>165.83</td>
<td>0.47 &gt;0.05</td>
</tr>
</tbody>
</table>

*significant @ <0.05
Data shows that the older persons are with normal nutritional status. International Diabetes Federation (IDF) guidelines for older people with diabetes (2013) recommends that older people should have a nutritional and biochemical assessment on diagnosis, on admission at an aged care home, and as part of the annual review.

Older persons are functionally healthy and are able to perform activities of daily living. Older persons with Type 2 Diabetes are categorized according to three main categories to allow recommendations to be specific and suitable for the broad range of individual seen in clinical practice and as basis for clinical decision making (IDF, 2013). Older persons with normal functional status are categorized under Category 1: Functionally Independent. This category is characterized by people who are living independently, have no important impairments of activities of daily living (ADL) and are receiving none or minimal caregiver support (IDF, 2013).

Results show that the older persons are with normal cognitive status while there is incidence of dementia/Alzheimer's and Mild Cognitive Impairment (MCI). Aging is associated with changes in psychological factors. Learning declines and the risk of dementia increases as people age. Kirkman et.al. (2012) suggested that older persons who are functional, cognitively intact, and have significant life expectancy should receive diabetes care using goals developed for younger adults.

The level of assessment on the health care needs of older persons according to self-care abilities shows that the older persons sometimes do all the self-care abilities. Older persons in the Philippines do not usually wear medic alert identification even if they have diabetes. But based on the results, older persons have self-care abilities in drug, diet and exercise management but need further education on survival skills like blood glucose monitoring, checking ketones, treating low blood glucose and adjusting insulin treatment. The needs of patients with diabetes are not only limited to adequate glycemic control but also correspond with preventing complications, disability limitation and rehabilitation (Shrivastava, Shrivastava, & Ramasamy, 2013). There are seven essential self-care behaviors in people with diabetes and these behaviors predict good outcomes. These are healthy eating, being physically active, monitoring of blood sugar, compliance with medications, having good problem-solving skills, showing healthy coping skills and risk-reduction behaviors. All these seven behaviors have been found to be positively correlated with good glycemic control, reduction of complications and improvement of quality of life.

Patients with family history of diabetes have satisfactory score in diabetes management. This finding is supported by the results of the study of Hewitt, Smith, Chaturvedi, Bulpitt, and Fletcher (2011) and Hu, Gruber, Liu, Zhao, and Garcia. (2013) where diabetes knowledge of older persons with history of diabetes was examined and showed satisfactory scores. The study shows no significant relationship between education and knowledge in diabetes management. However, in the study of Omar and Lai San (2014) results revealed that subjects with higher educational level achieved higher knowledge scores in diabetes management. The success in Type 2 Diabetes Mellitus management requires patients' participation and they must be ensured to receive adequate education related to their disease.

Nutrition is an integral part of diabetes care for all ages, but there are additional considerations for older adults with diabetes. Though energy needs decline with age, macronutrient needs are similar throughout adulthood. Meeting micronutrient needs with lower caloric intake is challenging; therefore older adults with diabetes are at higher risk for deficiencies. Older adults may be at risk for under nutrition due to anorexia, altered taste and smell, swallowing difficulties, oral/dental issues, and functional impairments leading to difficulties in preparing or consuming food. Overly restrictive eating patterns, either self-imposed or provider-directed, may contribute additional risk for older adults with diabetes. The Mini-Nutritional Assessment, specifically designed for older adults, is simple to perform and may help determine whether referral to a registered dietitian for medical nutrition therapy (MNT) is needed (Kirkman et al, 2012).

Diabetes has significant association between ADL and IADL function of older persons as shown in the meta-analysis study conducted by Wong et al (2013). Persons with diabetes may have problems in mobility as the disease progresses; thus, monitoring and assessment of these are important. Further, screening for diabetes complications should be individualized in older persons, but particular attention should be paid to complications that would lead to functional impairment (Kirkman et al. 2012).

The results of the study show that age does not affect cognitive status of the older persons. However in the study of Hewitt, et. al. (2010), results suggest that in older persons with diabetes, individual understanding of the management of diabetes is likely to be complicated by poor cognition.

Alzheimer's-type and multi-infarct dementia are approximately twice as likely to occur in those with diabetes compared with age-matched non-diabetic control subjects. High rates of unidentified cognitive deficits in older persons suggest that it is important to periodically screen for cognitive dysfunction (Kirkman et. al. 2012).

The older persons' self-care abilities are related to education and history of diabetes but not related to age, sex and civil status. The older persons’ self-care abilities are dependent of education and history of diabetes. Long Type 2 DM diabetes history and education revealed positive predictor in Type 2 DM patients’ self-care contributing factors (Abraham, 2011). To improve patients’ DM self-care, demography such as education should be considered.

Conclusions and Implications to practice

There is a need to improve the self-management behavior of older persons, specifically on knowledge to DM management, nutrition, functional status, cognitive status and self-care abilities. It is necessary to consider the demography, such as education and
history of diabetes in designing health education to older persons with diabetes mellitus.

The health care needs of older persons in the management of diabetes, which include provision of knowledge to DM management, assessment of nutritional needs, assessment of functional and cognitive status, and self-care abilities is necessary to include in the training module for diabetes educator. In the future studies, an assessment of older persons in general population must be considered for future studies both in rural and urban areas and an assessment to detect complications among older persons like neuropathy are recommended.

References


About the Authors

Anjanette S. De Leon, RN, MAEd, MAN is an Assistant Professor at Centro Escolar University and currently the community coordinator of the School of Nursing. She earned her Master of Arts in Education at De La Salle, Manila and Master of Arts in Nursing at Centro Escolar University, Manila. At present, she is an active member of the Board of Directors of the Association of Diabetes Nurse Educators of the Philippines. Currently she is a lecturer and a facilitator of Diabetes Education Training at ISDFI Bldg., Marikina for Registered Nurses, Dietitians and Allied Health Care Professionals.

Josephine M. De Leon, PhD, RN is an Associate professor of the CEU School of Nursing and Graduate School. She is currently a member, House of Delegates Philippine Nurses Association of Zone 1 Manila Chapter. She is the adviser of the Philippine Nursing Research Society (PNRS) CEU Cell students’ organization. She earned her PhD degree major in Curriculum and Supervision at CEU Manila. She had completed and published research projects in local and international peer reviewed journal. Among her research interest includes, nursing education, diabetes mellitus, older persons and “Bundle of Care” interventions.
Wading through Misery, Hope and Beauty in Caring for Cancer Patients: Experiences of Oncology Nurses

Abstract

Nurses are often engaged in providing care for patients who are diagnosed with terminal illness and are faced with the process of dying. Working with these patients and families can be emotionally demanding and challenging. Nurses ought to meet the challenge of developing and rendering effective interventions for cancer patients, focusing predominantly on health promotion, end-of-life care, and above all, the four domains of health-related quality of life: physical, psychological, emotional and spiritual functioning. Health-related Quality of Life (HRQoL) interventions can empower patients to practice health behaviors and facilitate them to be self-directed in their care; thereby contributing substantially to their quality of life.

This study aimed to describe and understand the ‘lived’ experiences of oncology nurses in providing health-related quality of life interventions among cancer patients. The study was conducted using descriptive phenomenological method and data was generated through one-on-one audio-recorded interview with ten oncology nurses Colaizzi’s (1978) procedural interpretation of the phenomenological method of inquiry was used for data coding and identifying themes. Methods to ensure trustworthiness of the findings were implemented.

Three themes with 14 sub-themes were identified. Results of the study showed that health-related quality of life interventions were essential in nursing care among cancer patients. It was suggested that the manner in which cancer patients’ quality of life improves through HRQoL interventions should be further studied. In addition, it may be of value for nursing leaders to provide specified training programs for oncology nurses working on issues relevant to the HRQoL intervention skills.

Keywords: Oncology Nurses, Cancer Patients, Health-related Quality of Life, Health-related Quality of Life Interventions

Introduction

Health-related Quality of Life (HRQoL) is the individuals’ happiness or satisfaction in relation to their physical, psychological, emotional and spiritual functioning. These are concerned primarily with factors that fall...
under the purview of healthcare providers and healthcare systems. The notion of HRQoL and its determinants were developed to encompass those facets of over-all quality of life that can be clearly shown to affect health, either physical or mental. The HRQoL of people suffering from cancer was a significant concern to the healthcare system and healthcare professionals, particularly nurses who were providing direct care to these patients.

American Cancer Society (2015) disclosed that cancer amounts to a massive burden on society, both in more and less economically developed countries. The incidence of cancer is increasing because of the growth and aging of the population, as well as an increasing prevalence of established risk factors, such as smoking, overweight, physical inactivity, and changing reproductive patterns associated with urbanization and economic development. According to Ferlay et al. (2013), GLOBOCAN estimates, about 14.1 million new cancer cases and 8.2 million deaths occurred in 2012 worldwide. Over the years, the burden has shifted to less developed countries, which currently account for 57% of cases and 65% of cancer deaths worldwide.

It should be the goal of every oncology nurses to aid patients to manage the issues associated to their cancer experience. To achieve this requires building a rapport with the patient and therapeutic use of self. By becoming part of the patient's universe, the nurse shares the burden of agony thru empathy, caring, and compassion (King and Jordan-Welch, 2003). Nurse's conscious and unconscious feelings are part of the relationship and enter into exchanges with patients (Lancely, 2001). Ultimately, nurses' ability to communicate will influence the success of providing HRQoL interventions thru therapeutic communication.

Since nurses are the most essential part of the caring process and several discussions on the role of physical, emotional, psychological and spiritual care in the prognosis of cancer patients crop up without any tangible studies conducted, a question was posed for oncology nurses: What is it like to render HRQoL interventions to Cancer patients? To deal with this inquiry, we conducted a qualitative study to elucidate and clarify the depth of oncology nurses’ experiences in providing HRQoL interventions among cancer patients.

**Methodology**

This study made use of descriptive phenomenological design to accurately describe the 'lived' experiences of oncology nurses in providing health-related quality of life interventions among cancer patients. According to Speziale and Carpenter (2007), the goal of descriptive phenomenological research is to describe a particular phenomenon or the appearance of things, as lived experiences.

Colaizzi’s (1978) method of data analysis was used to provide assistance in extracting, organizing, and analyzing the narrative dataset. Applying Colaizzi’s strategy in descriptive phenomenology was to elicit an exhaustive description about the phenomenon regarding oncology nurses’ experiences in taking care of cancer patients. To begin with, we transcribe, read, re-read, and analyze a description of each informant participating in the study to acquire full understanding of the data. Then we extracted statements with importance to the research question, such as descriptions of how an oncology nurse feels about in providing health-related quality of life interventions among cancer patients. To reflect the research data precisely, the important statements was made through quotations from the informants. To analyze the important statements, we commenced to articulate what the statements denote and generate themes from the meanings. Then we clustered related themes together and organized them into sub-themes. In this study, we obtained three themes and 14 sub-themes. Lastly, we incorporated the results into a complete description of the topic and consulted to each informant to validate the results.

Credibility and conformability was established through member checking. The report of the analyses was given to the informants in order to get guarantee that we described their real world in themes and extracted sub-themes.

**Participants of the Study**

Nurse informants were recruited using purposive sampling based on the following criteria: (1) currently employed as oncology nurse; (2) at least twenty-five (25) years of age; (3) with at least three (3) year experience as oncology nurse; (4) male or female Filipino nurses; (5) working in a government hospital in Pasig City; and (6) willing to share their experiences. Eight female and two male nurses participated in the study and completed a demographic form prior to the interviews. The ages of the informants ranged from 28 to 57 and their minimum time of clinical experience as oncology nurse was 10 years and the minimum was 3 years.

**Data Collection and Data Analysis**

Data were gathered through in-depth interviews with each informant from February to May 2015. The interviews were conducted face-to-face at a pre-arranged dates and time and lasted approximately 30-60 minutes. The interviews were continued until no new theme emerged. Data saturation was obtained after all the interviews. They were tape-recorded and transcribed verbatim. The researcher approached the informants with a very broad question that contemplated on the description of the lived experiences in providing HRQoL interventions. The main question asked was “Can you tell me what is it like to be an oncology nurse providing health-related quality of life interventions among cancer patients?” At first the informants were requested to share their stories but in the
subsequent questions, the researchers asked probing questions that were in direct response to the informants’ descriptions to arrive at a deeper level of understanding, to reflect and to validate. It was through this intersubjective interview that the informants and the researchers built up the essential description of the lived experiences in providing HRQoL interventions among cancer patients.

**Ethical Considerations**

This study was subjected to the ethical review of the University Research Center - Ethics Board Committee of Far Eastern University – Institute of Nursing. Hospital and informed consent from each informant was sought prior to the interviews. This study has been guided by the following ethical principles: (1) autonomy, right to know and to withdraw were respected by providing the informants with all information pertinent to the study and by making them understand that their participation was completely voluntary and had the right to withdraw any time; (2) nonmaleficence was observed by discussing to them the risks of discomforts; and (3) privacy and confidentiality were guaranteed by storing all data in a secured place and all information acquired from the informants was treated non-identifiable and confidential manner.

**Findings**

The lived experiences of oncology nurses in providing HRQoL interventions among cancer patients was formulated in three themes and 14 sub-themes. The first theme is “Drowning the demons of misery”, which includes five sub-themes: (1) Downcasted from trying to be stronger than they feel, (2) This is not how my story will end, (3) The thing about pain, you'll never know how much it hurts (4) No one is rich enough to buy back his health, and (5) Acceptance is the road to all change. The second theme is “When there's life, there's hope”, which includes five sub-themes: (1) Building bridges beyond walls, (2) From the heart through the hands, (3) Worry ends when faith in God begins, (4) Seeing life sideways, and (5) We rise by lifting others. The third theme is “Finding beauty in the ugliest days” which includes four sub-themes: (1) The more you care the more you have to lose, (2) Anticipate the difficult by managing the easy, (3) When the pressure is too much to handle, and (4) Finding the calm in the chaos.

**Drowning the Demons of Misery**

All the informants were fretful to the reality that they need to consider and connect in patients’ feelings of existential misery to avoid it from being linked with helplessness and hopelessness.

All the informants were fretful to the reality that they need to consider and connect in patients’ feelings of existential misery to avoid it from being linked with helplessness and hopelessness.

**Downcasted from trying to be stronger than they feel**

Several informants perceived that emotional care of the terminally ill cancer patients is important to address their needs. Some of them acknowledged the fact that at least a quarter of patients with advanced cancer have a symptom of depression. For instance, N8F said very graphically: “Their emotions weren't stable. They try to be okay but sometimes they remember something and there's a shift. They get sad and then they cry.”

One informant described depression in cancer patients as highly ubiquitous and can significantly affect their probability of survival. According to N1F: “Depressed patients are really those that go through chemo. You'll notice differences whenever they come back and the prognosis is bleak.”

Another informant (N1F) added that knowledge about depression, the recognition of symptoms like ‘appropriate sadness’ due to the patient’s trying to conquer fear of death and initiation of treatment is essential for optimum cancer care: “Listen to the depressed. They speak whatever it is on their minds. But even when you don't hear it, you can see in their actual appearance how depressed they are. So that's what you really need to be able to see, since the cancer could worsen because of it.”

**This is not how my story will end**

Many times during their treatment and recovery, N2F noted that people with cancer were worried and fearful on how their different life situations will end. Fear of treatment, doctors’ visits, and tests caused trepidation – the feeling that something bad is going to happen: “They were scared that when they stop doing chemo, their illness will worsen or, that they will die.”

Similarly, N5F added that cancer patients are afraid of uncontrolled pain, thinking of what happens after death, including what might happen to their loved ones: “Whenever they see their children visiting, they end up crying. They don't speak about the pain they feel, but I interpret it as these people not yet wanting to leave their kids unstable.”

**The thing about pain, you'll never know how much it hurts**

One of the focal point of nursing care among cancer patients is pain. One informant said that pain is permanent or frequent for patients with advanced cancer and most of them who die as a result of cancer suffer from pain in the final phase of life. Here is N6F: “Stage 3 or 4 patients can be demanding as they are in extreme pain. You can't really tell what it is, and even if you have a high threshold of pain, it’s different with then. Tramadol isn't enough; only morphine will relieve their pain.”
Informants disclosed that nurse’s role in terms of pain management was of great importance. N3F stated that nurses should make an assessment of patients’ problems and needs, to suggest and conduct health teaching regarding pain and some reliefs, initiate and perform interventions for relief of pain and other symptoms while preventing negative side-effects of medication.

No one is rich enough to buy back one’s health

Life changes with cancer. Informants spoke about loss of income as one of the greatest financial implications for people diagnosed with cancer. N2F stated: “One of their main concerns is finance, as treatment is expensive.” N8F added: “Even those who are well off, their resources will really be drained as the medications used are really expensive.” Another said, N1F: “Cancer really calls for a lot of money, as it’s a lifetime of treatment. Even when you wish to become better, it comes back, and even spreads.”

Some informants were able to communicate that those in employment at the time of diagnosis experience loss of income. Some have to use savings and some borrow money from financial institutions, friends, family, or employers. Monetary repercussions were expressed by N3F: “Some will tell you they really have no money anymore, their house is pledged, they’ve borrowed so much money already.”

As consequence, patients want to seek financial help soon after being diagnosed with cancer because bills and debt quickly. Oncology social workers, case managers, doctors, and nurses can help or provide referrals to support services and financial resources. For instance, N8F revealed: “When someone opens up about financial problems, we refer them to a social worker, such as PCSO to help them. There are also government agencies. We give them options; we help them by referring them to agencies that can help.”

Acceptance is the road to all change

Patients have varied ways of coping with a cancer diagnosis. One informant, N6F stated: “No matter how you try to make them happy, especially if they are in the denial stage, it really won’t do anything. Other patients are easier in accepting, depending on their own coping mechanism.” Another informant described her experience that the response of cancer patients to a poor prognosis is ranging from shock and denial through anger, depression and finally acceptance.

Most people can handle the news that they have cancer, but each person needs time to adjust and figure out what the diagnosis means to them while some coping strategies may also influence the prognosis.

Several informants asserted that patients, whose strategies focus on accepting the condition, or on seeking solutions to problems, show a better subsequent adjustment. N8F adds that: “When they’ve accepted that this is now their quality of life, their days are prolonged. But of course if they’re on stage 4, it’s really terminal already. But they still enjoy life better when they’ve accepted their condition.”

When there’s life, there’s hope

All informants were vastly encouraged in caring for cancer patients holistically, with emphasis on the physical, psychological, emotional, and spiritual aspects of care.

Building bridges beyond walls

Most informants described how trying to see things from a patient’s viewpoint and empathizing with their emotions make them feel important. For instance, N3F stated: “Don’t hesitate striking a conversation with the patient, even when they get irritable sometimes, they’re always in pain. But once you show concern and compassion, you make them feel important even if it’s just for five minutes.”

Learning to reflect the patient’s feelings in a deeper meaning makes them feel heard and understood. Nurses don’t analyze, interpret, judge, or give advice. One informant expressed his understanding that whenever patients feel they are being heard, they are less anxious, complain less about their nurses, and are more likely to comply with their treatment plan by saying.

The actions and practical competence that the nurse demonstrated based on the standard of care allows the patient to trust them. As one informant said, N8F: “Once the patient opens up or a relative, it makes you happy because you showed them you’re ready to listen.”

From the heart through the hands

Patients receive messages each time they are “touched”. As N4F stated that cancer patients can sense and feel the uneasiness, nervousness, tension, anxiety and also carelessness being conveyed, through the interpretation of the body language of nurses and closed ones but also in the way they are touched while being cared for.

While the words accompanying the manual interventions may be chosen to disguise any complexity or frustration on the part of the nurses, the sensory input through the hands often converse another truth, which commonly increases the patients’ feeling of dependency. N8F states: “It’s important for the patient you stroked them while saying things like, “ma’am, it will be okay,” by doing that you make them feel that you’re there for them.”
Touch may be the finest way to convey empathy, understanding or reassurance, and will often outweigh words. Touch makes a significant difference for patients whose pain is difficult to control as stated by N3F: “The pain might be unbearable, but with a simple touch, it’s like they feel relief, they feel calmer.”

Worry ends when faith in God begins

Many informants described how people’s exposure to stressful events and incurable diseases like cancer made them turn to religion and spirituality. For instance, one informant, N10M stated: “So far, I haven’t had experience yet where they blame God. In fact, most of them become closer to God. And when they get closer to him, they accept their condition.”

And yet, despite professing a belief that spiritual care is an important component of health care because people tend to hold on to God as their last and final resort, nurses do not routinely and consistently provide spiritual care to their patients. N2F says, “The spiritual aspect of care, though important, is not really our priority. Sometimes it is, sometimes not, as nurses don’t have that much time, and also, because they all have different beliefs so there’s no single approach.”

Seeing life sideways

Humor helps ease the pain. It shows the human side of the health care team and generally helps everyone cope. One of the informants stated that when humor is used sensitively, respecting the gravity of the situation, it can build the connection among the caregiver, patient, and family: “Whenever I provide care, no matter how difficult it is, I just joke with them. Sometimes there are young lads doing chemo and though I know they are very young, I joke, “Tay, you’re still young?” “Yeah,” “Me too.” It’s really all you can do for them to ease their difficulty” (N4F).

Another informant added: “You should always be smiling. As their nurse, when they see you smiling, it brings them positive vibes.”

Being a patient advocate, nurses’ uses therapeutic interventions such as storytelling that provide patients and their families a venue to express feelings and describe experiences when faced with devastating situations such as a diagnosis of cancer. For instance, N1F noted: “You share with them the experiences you’ve had caring for others, but you don’t compare them. You just share those that will motivate and inspire them.”

We rise by lifting others

Nurses are faced with the difficult challenge of being positive and supporting patients in trying to be optimistic. As stated by one of the informants: “The role of nurses is important in keeping the patients optimistic. When a person becomes ill, it’s not just their organs. Nurses can change their minds, for example, nurses can explain to them and then make them feel that they are understood, no matter how horrible they feel, they won’t have to feel alone” (N1F).

Informants spoke on the significance of allowing patients to express their negative feelings about their illness and treatment when they feel they need to, in order to reinforce positive disposition. On the other hand, nurses also encourage the patient to regain control of their lives, experience hope and reconciliation through the development of their potential even in difficult times. N5F noted: “When you give medication to depressed patients and they say, “Later” you say “You need to take it now.” You watch them and encourage them to take it on time.”

Finding Beauty in the Ugliest Days

Informants’ repeated exposure to trauma can be a regular stressor for them as they witness their patients’ physical, psychological, emotional, and spiritual suffering everyday.

The more you care the more you have to lose

Nurses who have developed strong interpersonal relationships with patients often share the suffering experienced by the relatives of a cancer patient, and may experience a similar sense of bereavement when the patient dies. For instance, N1F stated: “When you see chemo’s side effects, you really feel for the patient. You develop a bond with them; they don’t just do chemo once, it happens twice, thrice, even more. As a nurse, you know you have emotions, and you feel for them, but there’s nothing you can do but serve them.”

One informant noted that nurses tend to get to know the cancer patients, their families, even their friends because they keep on returning in the institution for their treatment sessions. And because they get to know them so well, in such an intense and intimate setting, they end up caring about them. N6F added, “I had a patient I took care for a long time and when he died, I was devastated. I got to know their family, and they were all so kind and so close. So I felt like I was part of the family, so when the death came, I was also devastated.”

Many informants described what it means to be an oncology nurse, a no-win situation where compassion routinely gets hijacked by grief. When a cancer patient died in the hospital, the person caring for them in their last days, hours, and
minutes is the nurse because they are the ones who are always there. N8F added: “One of my patients who died, I was called to his bedside and I was holding his hand for a few minutes with his family. But I left because I knew I was going to cry. I didn’t want her family to cry and for them to see me crying, too, as I was the caregiver, so I thought they shouldn’t see me cry.”

Finding the calm in the chaos

Nurses were asked to be doing more and more with less and less. Keeping a cool head on their shoulders and having compassion is clearly something that helps. For instance, one informant stated that sometimes it can be very difficult for the nurses to maintain a calm demeanor when things get out of hand. This is particularly true when patients are displaying challenging behavior because patient care is central to the job of a nurse.

Most informants accepted the importance of patience in their situation. Whether it’s a lack of sleep, a doctor being short-tempered or a very demanding patient, nurses can diminish their stress level by refining their capacity to be patient. For instance, an informant revealed: “In my experience as an oncology nurse, patience is really an important part in my role in dealing with people and colleagues. Especially those who are just newly diagnosed, they are more snobbish, so you don’t show the same bad attitude to them. You just try to understand them better, as they are really going through something difficult. Even doctors or colleagues who are in a foul mood, you try to be patient around them, because you know you are all tired and others are on a 24 hour duty.” (N8F)

Discussion

The analysis revealed that the nurses interviewed in this study developed a string of responses as they were providing HRQoL interventions among cancer patients. They accentuated various and comprehensive challenges in order to provide HRQoL interventions in their daily professional caregiving task. These experiences helped the nurses to reflect on the magnitude of HRQoL interventions and also their behaviors towards cancer care, regardless of their self-limitation and naivety in HRQoL interventions for cancer patients.

The current study formed numerous results that highlighted the experiences of cancer patients. Firstly, depression and anxiety are common among people diagnosed with cancer. Stress is often a trigger for depression and anxiety, and cancer is one of the most stressful events that a person may experience. These conditions may interfere with cancer treatment. The patients with untreated depression or anxiety may be less likely to take his cancer treatment medication and continue good health habits because of fatigue or lack of motivation. They may also withdraw from family or other social support systems, which means they will not ask for the needed emotional and financial support to cope with cancer. This in turn may result in increasing stress and feelings of despair (American Society of Clinical Oncology, 2012).
Besides, cancer patients have concerns about an uncertain future, horrendous pain, the potential for treatment failure, the cancer spreading, the possibility of death, financial insufficiency, and whether they can admit to themselves that they are critically ill or not. Cancer patients suffer extensive misery from diagnosis to treatment and beyond. Since cancer affects not only the physical but also the psychological, emotional and spiritual status of the patient (Markides, 2011) in countless ways, there is no single trail taken by all cancer patients. The misery is shared between the patient and healthcare professionals, and nurses can provide both care and support to patients throughout their desolation (Legg, 2011). Thus, oncology nurses who are comfortable with listening and discussing existentially related concerns may be in a better position to promote the patient’s physical, psychological, emotional and spiritual adaptation. With a nurse’s help, if a patient can resolve the miseries that impact quality of life during treatment, it may greatly improve their outlook. It is difficult for patients to focus on learning about anticancer treatment if they are overwhelmed with anxiety and distressing thoughts (Vondrasek and Cody, 2012).

In the present study, oncology nurses empower the patients to establish hope and reconciliation thru rapport and communication, touch intervention, enhancing faith, inserting humor during interactions, and helping the patients develop a positive outlook in life despite their condition. Open communication is the cornerstone of rapport between nurse and patient. The patient wants to know what is going on and will appreciate it when the nurse keeps them informed (Barkley, 2016). This help relieve patients’ stress and then they can begin focusing on cultivating a healthy and positive nurse/patient relationship that will lead to increased chances of a speedier recovery (Bowen, 2012). Nursing touch is powerful and can be an excellent way to bring the patients’ stress level down a notch or two. Based on a research, an affirmation can be made regarding the use of therapeutic touch as a non-invasive intervention for improving the health status in patients with cancer (Tabatabaee, Tafreshi, Rassoul, Aledavood, AlaviMajd, and Farahmand, 2016). It can relieve their pain, anxiety and stress, and improve their quality of life (Ness, 2012).

Nurses in the present study talked about humor as one of the efficient approach to establish hope among cancer patients. It has been suggested that the use of humor permits patients to psychologically distance themselves from their own death, while still allowing an acknowledgment of their terminal condition, thus helping to limit their psychological level of awareness of their condition and being an acceptable way to deny reality (Joshua, Cotroneo, and Clarke, 2005). Likewise, oncology nurses in this study aid patients in developing optimism that could help them achieve a good prognosis. According to International Association for the Study of Lung Cancer (2010), researchers focused on lung cancer patients and discovered that those who exhibited an optimistic disposition experienced more favorable outcomes than those with a pessimistic disposition. Larsson, Hedelin and Athlin (2007) reported that the encouragement and support given by the nurses motivated the patients to go on. The oncology nurses assist the patients to regain some balance in their daily lives by creating a new life as a final phase in the process of cancer survivorship. Nurses encourage patients because they believe that patients can use their strengths even in difficult times (Sherman, D., Rosedale, M., and Haber, J., 2012).

Failure to give attention on the spiritual aspect of HRQoL interventions to cancer patients is evident in this study. Cancer patients draw strength from their faith when faced with the illness that has overwhelmed them physically and emotionally. Hope is particularly important for those suffering with cancer. Researchers have found a strong link between religious beliefs and hope. Hope enables people to actively cope with difficult and uncontrollable life situations. Patients with a strong sense of hope report a high quality of life, and hopefulness is linked to better adjustment by radiation therapy patients being treated for cancer. Robust hope can give a patient strength and courage to face the stress of illness and treatment, while hopelessness brings passivity and resignation (Weaver, 2001).

Oncology nurses have been personally affected by their attachment in caring for cancer patients. They reported emotional grief when having a dying cancer patient during their shifts and experiencing the divergence between professional duty of providing quality care and personal inadequacy, which prohibited them from achieving this. Due to the length and intensity of their interactions, oncology nurses can be at risk of becoming overly involved with patients and their families; this ‘unhealthy’ empathy leads to the blurring of professional boundaries and constitutes a major stressor in hospice nursing (Abendroth and Flannery, 2006). Oncology nurses face the challenge of working intensively with seriously-ill patients and their families at highly emotional and stressful times in their lives (Meier and Beresford, 2006; Rokach, 2005). Constant exposure to grief and to the experience of multiple deaths may lead to ‘grief overload’ (Vachon, 1998). Healthcare professionals who have developed strong interpersonal relationships with patients often share the suffering experienced by the relatives of a dying patient, and may experience a similar sense of bereavement when the patient dies (Wakefield, 2000).

In addition, certain nurses in the study experience exhaustion for having to deal with difficult patients together with their excessive work load. However, they manage to remain unruffled regardless of the extreme demands on them. Becoming a nurse is still very rewarding, because it’s such an important job. Yet in a high-stakes environment like a hospital, sometimes it can be difficult to maintain a calm demeanor when things get out of hand. This is
particularly true when a patient is displaying challenging behavior or when the heavy workload is too much to handle (Western Governors University, 2013). Nurses must have a huge internal storage house of patience in order to keep their tolerance (Heacock, 2012).

Conclusion

Health-related quality of life interventions was verified to be an essential element of nursing care among cancer patients. Oncology nurses should consistently provide therapeutic interventions for physical, emotional, psychological and spiritual aspects that promote the improvement of health conditions of patients with cancer and their QoL (Freire, Sawada, de Franca, da Costa and Oliveira, 2014). The findings of the present study provide insights into recognizing the full significance of HRQoL interventions among cancer patients wherein oncology nurses encountered serious challenges when delivering HRQoL interventions because of attachment, difficult patients, work overload and temper. Oncology nurses can take an active role in enhancing the consistency of providing HRQoL interventions to patients with diverse health conditions. How the cancer patients' quality of life improves through HRQoL interventions should be further studied. In addition, it may be of value for nursing leaders to provide specified training programs for oncology nurses working on issues relevant to the HRQoL intervention skills.

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**About the Authors**

**Jocelyn Perlas Lauro, MAEd MAN, RN** received her undergraduate degree in nursing from University of Perpetual Help – Delta, her graduate degree in nursing from University of Asia and the Pacific, and obtained her 21 education units from the Rizal Technological University in Mandaluyong. She is an RFT - Associate Professor I of the Institute of Nursing, Far Eastern University – Manila. She considers herself as an advanced beginning researcher despite being a part of the successful feasibility study on satellite clinics. While her areas of expertise are in intravenous therapy, electrocardiogram, ethics and jurisprudence, nursing leadership and management, emergency disaster nursing, and bioethics, her research interests converge into geriatric nursing and hospice care, student nurses competencies in the clinical area, clinical trials of herbal plants, and educational development. Correspondence e-mail: jlauro@feu.edu.ph

**Veronica M. Dancil, MSN, RN** is an Associate Professor of the Far Eastern University, Institute of Nursing. She is a full time faculty handling subjects in the BSN program and also clinical follow up in the following agencies Manila Health Department, National Center of Mental Health, FEU-NRMF Medical Center and Dr. Jose Reyes Memorial Medical Center. She earned her Master’s degree at St Paul University and is currently taking her PhD in Nursing Education at St. Paul University Manila. Correspondence e-mail: vdancil@feu.edu.ph

**Mercedes Arguel-Belza, EdD, MAN, RN** is a former Associate Professor at the Far Eastern University (FEU), Manila. She earned her Bachelor of Science in Nursing (BSN) at Philippine Women’s University (PWU) in 1975, Master of Arts in Nursing (MAN) at Arellano University, Manila in 2000 and Doctor of Education (EdD) at FEU in 2011. She retired from being an active educator in May 2015 and now ventures the world of entrepreneurship. With a grateful heart, she is thankful to her family, colleagues, friends and mentors throughout her journey in the academe.

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**“Ethics is knowing the difference between what you have a right to do and WHAT IS RIGHT TO DO”**

- Potter Stewart
Dyspnea Among Patients with Advanced Lung Cancer: A Concept Analysis

Abstract

Dyspnea is a subjective, multidimensional experience of breathing discomfort, influenced by physiological, psychological, social, and environmental factors, which includes secondary psychological and behavioral responses and cannot be defined only by physical objective abnormalities. It has been found to create barriers in daily life among patients with advanced lung cancer which interferes with physical activities such as walking, work, and psychological activities such as disposition, taking pleasure in life, relationship with others, and sleep. This paper aims to identify current theoretical and operational definitions of dyspnea and to identify and describe defining attributes of dyspnea. The method of inquiry was guided by Walker and Avant’s (2011) approach to concept analysis. From this analysis, a conceptual model of dyspnea experience within the core of patients with advanced lung cancer may include attributes of dyspnea occurrence and distress as not only the physiological, psychological, and environmental, but also the situational existential meaning or perception of individual suffering from dyspnea. Dyspnea is a symptom that is usually under-diagnosed and inadequately managed due to lack of recognition or availability of interventions. The impact of dyspnea management on the quality of life in advanced lung cancer patients requires more recognition and better quality of care. Despite the frequency and complexity of this symptom, little research has been conducted to specifically identify effective treatment in patients with advanced lung cancer. Further investigations are needed in this area to assert the total dyspnea experience that could be influential in regards to the impact of dyspnea management on the quality of life in patients with advanced lung cancer.

Introduction

Dyspnea is a common and distressing symptom in patients with lung cancer (Smith et al., 2001). It has been acknowledged that dyspnea experiences consist of several components such as intensity, frequency, duration, affective impact, and threat that is posed by this symptom (Dodd et al., 2001). The multidimensional nature of dyspnea, including physiologic, psychological,
environmental, and social factors contribute to the difficulties in obtaining adequate symptom control. Hence, dyspnea symptom control is less frequently obtained than is controlled of other symptoms experienced by patients with lung cancer (Williams, 2006). Furthermore, dyspnea has been found to create barriers in daily life among patients with advanced lung cancer. It interferes with physical activities such as walking, work, and psychological activities such as disposition, taking pleasure in life, relationship with others, and sleep (Tanaka, Akechi, Okuyama, Nishiwaki, & Uchitomi, 2002).

In patients with lung cancer, living with an incurable disease means having to face the idea of dying (Kahana, 2000). Dyspnea is one of the most commonly reported symptoms in advanced lung cancer. Its occurrence is about 21% to 79% and it is reported to be from moderate to severe in 10% to 63% of patients; the frequency and severity of dyspnea increase with the progression of the disease or when death is approaching (Ripamonti, 1999). This symptom burden can create a very distressing and debilitating agony that can severely limit a person’s ability to engage in the activities of daily living required to maintain well-being, health, and independence, such as hygiene, hydration, and nutrition (Roper, Logan, & Tierney, 1990). The feelings of loneliness and concern for those having near death experience also leave a psychological impact on patients with lung cancer. Therefore, intensifying emotional reactions to dyspnea creates an unpleasant or troublesome feeling and causes stress, worry and anxiety (Heno, Bergman, Gustafsson, Gaston-Johansson, & Danielson, 2007). To the lung cancer population, dyspnea is a constant reminder of how serious the consequences are of being stricken by a life threatening disease.

**Aim of Analysis**

The aim of this concept analysis paper is to provide a clear operational definition of the word dyspnea utilizing the framework outlined by Walker and Avant (2011). In addition, it is my goal to gain a deeper understanding of dyspnea as a symptom while I investigate the impact of dyspnea management and its effect on quality of life in patients with advanced lung cancer. The question that I seek to answer is whether dyspnea management can be essential to a more suitable and effective promotion of QOL in patients with advanced lung cancer. Henoch, Bergman, & Danielson (2008) indicated in their study that there is a need to gain better understanding of how the dyspnea experience and its congruence with the patient’s own management strategy through their own experience can impact dyspnea symptoms.

**Concept Uses**

The term dyspnea has been defined by Sarkar S., & Amelung PJ (2006) as shortness of breath, difficulty or labored respiration deriving from the Latin dyspnea, from Greek dyspnoia, as in dyspnoos, which literally means disordered breathing.

Steadman’s Medical Dictionary for the Health and Professions and Nursing (2012), defined dyspnea as shortness of breath, a subjective difficulty or distress in breathing, usually associated with disease of the heart or lungs; sometimes occurring during intense physical exertion or at high altitude. Current literature defines dyspnea as a subjective, multidimensional experience of breathing discomfort, influenced by physiological, psychological, social, and environmental factors, which includes secondary psychological and behavioral responses and cannot be defined only by physical objective abnormalities (Mularski et al., 2010). Moreover, the American Thoracic Society (2012) states that dyspnea is a subjective experience of breathing discomfort that consist of qualitative distinct sensations that vary in intensity, with physical, psychological, social, and spiritual existential contributors. Therefore, there is no objective method for measuring this phenomenon, much like pain; it is captured by patients’ report (Thomas, 2009).

The dyspnea experience in the lung cancer population compels patients to take steps to manage the symptom (Heno, et al., 2008). In a qualitative study conducted from breathlessness clinics, it was shown that dyspnea descriptions included both physical and emotional sensations, such as the feeling of not getting enough breath, panic, or impending death (ODriscoll, Corner, & Bailey, 1999). Brown et al. (1986) used quantitative and qualitative methods to obtain patients description of the dyspnea sensation from patients with lung cancer. Outcomes showed that shortness of breath, inability to take a deep breath, and shallow breathing were the most frequently described discomfort (Kathiresan, Clement, & Sankaranarayanan, 2010). In addition, the affective component of dyspnea also includes the “unpleasantness” or distress associated with the symptom, as well as emotions such as anxiety, anger, and depression that amplify the intensity of dyspnea, and can lead to panic and overwhelming feelings of lack of control (ODonnell et al., 2007, Mahler, 2006). Therefore, dyspnea not only produces physical symptoms but also, has the potential to contribute to psychological distress and social QOL, most especially if the person needs to limit going outside or engaging in sexual activity because of the symptom. Lastly, the meaning of dyspnea is important for understanding the impact of the symptom on the person’s spiritual QOL, such as joining with other individuals, which is necessary for human soul inner fulfillment (Brennan & Mazanec, 2011).

**Defining Attributes**

Existing theory and studies of dyspnea as a symptom in the lung cancer population defined key attributes of dyspnea as frequency, intensity, and duration. The quantification of dyspnea can be an important judgment in the severity and prognosis in lung cancer patients. It can also lead to a limiting symptom that may be responsible for the economic and social disabilities (Bass, 1990). Brown et al., (1986) found that the descriptions
most frequently used by patients with lung cancer were difficulty of breathing, shortness of breath, air hunger, shallow respiration, and suffocation. In addition, 97% of patients describe the chest as the location of their sensation, as well as an emotional feeling that were accompanied by the sensation of anger, anxiety, and fear (Brown et al., 1986). According to Rhodes and McDaniel (1999), the meaning that people assign to physical sensation of dyspnea may have profound implications for their physical and psychological health, which leads to a decrease in their quality of life. Roberts, Thorne, and Pearson (1993) found that although dyspnea seems to be a significant symptom in patients with advanced lung cancer, it often remains unmanaged by healthcare professionals.

Dyspnea is considered a distressing symptom that can be attributed by ascribing a positive and negative perspective on the symptom experience. How patients perceive the impact of dyspnea on their daily lives can lead to situational meaning that maybe triggered by inability to perform activities of daily living as a result of dyspneic episodes (Armstrong, 2003). Existential meaning may incorporate the patient's sense of vulnerability and mortality, reminding them of their cancer diagnosis. Therefore, the concept of dyspnea experience within the core of patients with advanced lung cancer may include attributes of dyspnea occurrence and distress as not only the physiological, psychological, and environmental, but also the situational existential meaning or perception of individual suffering from dyspnea.

**Model Case**

M. R., 62-year-old man compared dyspnea to “suffocating or feeling like a fish out of water. Imagine feeling that way all the time, struggling to get relief, and not being able to get relief and not being able to get that deep breath of fresh air.” In severe cases he described an “intense fear of waking up with air hunger, discomfort in the chest, a feeling of impending death, and a fear of dying during the next episode” of dyspnea.

M.L. a 79-year-old woman presented into the emergency room with complaints of dyspnea and cough. On system review, a weight loss of 40 pounds in the past month was noted. CT scan revealed an upper lobe mass with progressive lymphatic spread of lung cancer. As her disease continued to progress her anxiety increased and dyspnea continued to worsen. She described feeling “short of breath, a smothering feeling, tightness in my chest, an inability to get enough air, and feeling of suffocation.” She stated that when dyspnea occurs “I stop what I’m doing and increase my breathing to attempt to reduce the symptom.”

Both patients have the same diagnosis and closely experienced symptom of distress in relationship to dyspnea episode. They are also influenced by their demographic, disease, and other individual factors leading to difference in the meaning of the dyspnea to the person. M.L. found a way to manage her dyspnea to reduce the intensity of her symptom and was influenced not only by the occurrence and characteristics, but also of the meaning of the symptoms compared to M.R.’s fear of helplessness during a dyspnea attack. The consequences of dyspnea are influenced not only by the occurrence of distress characteristics but also the meaning of dyspnea to the person. This is evident in the difference in the perceived meaning and impact on life events between the first and second cases (Armstrong, 2003).

**Additional Cases**

**Borderline cases** are those examples or instances that contain most of the defining attributes of the concept being examined but not all of them (Walker & Avant, 2011). The following is an example.

74-year-old male diagnosed with stage IV lung cancer suffering from progressively worsening dyspnea with chest tightness and suffocation for the last two weeks. This describes intensity and frequency, but does not describe the meaning of distress or the meaning of dyspnea perceived (Armstrong, 2003).

**Related Cases** are instances of concepts that are related to the concept being studied but do not contain all defining attributes (Walker & Avant, 2011). For example, Michelle was crying in the bathroom this morning. She felt that her dyspnea is interfering with here activities of daily living. She verbalized being depressed and resentful about being diagnosed with advanced lung cancer. This is an example of symptom distress. It describes the emotional response but failed to include what it means to experience dyspnea.

**Contrary Cases** are those examples that clearly are not related to the concept (Walker & Avant, 2011). An example would be: Michael was at the park with his friend and a beautiful woman walked by and he told his friend “She took my breath away.” This example includes none of the characteristic evident in the concept of dyspnea experience.

**Antecedents**

The pathophysiology of dyspnea is not understood (Tanaka, Akechi, Okuyama, Nishiwaki, & Uchitomi, 2002). Dyspnea usually occurs in patients with primary or secondary tumors (Pan, 2003). Walker & Avant (2011) identify antecedents as events or incidents that must occur prior to the occurrence of the concept. For the purpose of this concept analysis paper, antecedents for dyspnea in relationship with the advanced lung cancer population can be classified by the demographic characteristic (age, gender, culture, education and socioeconomic status), disease characteristic (stage of lung cancer, type and availability of treatment, and comorbidities), and individual characteristic (health knowledge, values, past experience, and sense of coherence) (Armstrong, 2003).
Consequences

The multidimensional nature of dyspnea includes physiological, psychological, sociological, and spiritual beliefs. Dyspnea has been associated with physical, emotional, spiritual, and cognitive changes. This includes poor coordination, anorexia, memory loss, sweating, smothering, fatigue, depression, anxiety, panic, loss of faith, and decreased mastery (Brown et al., 1986, Bernhard & Ganz, 1991). In a study by Tanaka et al. (2002) on an outpatient diagnosed with lung cancer, dyspnea was significantly correlated with psychological distress and presence of organic causes, cough, and pain (Tanaka et al., 2002). Another study done by the same group observed that dyspnea also interfered with activities of daily living (Tanaka et al., 2002). A recently published study with 954 patients reported that the presence of dyspnea could negatively impact the quality of life of patients with advanced lung cancer (Gupta, Lis, & Grutsch, 2007). Therefore, the consequences for the purpose of dyspnea as a symptom expression includes lower functional status, less effective role functioning, decrease QOL, psychological impairment, and lower physical performance.

There is a need for high quality care to support patients and reduce the devastating symptom of dyspnea. The QOL table (see below) is an essential component of this concept analysis paper in addressing the consequences that deals with one’s physical well-being, social well-being, and spiritual well-being. The table presented below will enhance patients’ adjustment to the illness, quality of life, functional status, emotional well-being, spiritual faith, disease progression, and ultimately adjustment to the disease progression.

Empirical Referents

The frequency and severity of dyspnea depends on the stage of the disease, increasing when death is imminent (Mercadante, Casuccio, & Fulfar, 2000). Dyspnea is a dominant and incapacitating symptom in 80% of patients with advanced lung cancer, and it was described as an independent predictor to live (Tataryn & Chochinov, 2002, Chochinov, Tataryn, Clinch, & Dudgeon, 1999). Considering the complex multidimensional nature of dyspnea, minimal nursing research has investigated dyspnea in patients with lung cancer. In addition, 97% of patients describe the chest as the location of their uncomfortable sensation that leads to feelings of suffocation, air hunger, shallow respiration, as well as emotional distress accompanied by anger, fear, and anxiety (Brown et al., 1986). For patients approaching the end of life with advanced lung cancer disease, early and clear discussions of advanced care planning should include patients’ preference about interventions with increasing burdens and decreasing benefits that will help direct the goals or the care and management of dyspneic symptoms. Palliation of symptoms with emotional support, education, and respiratory and physical therapy may enhance QOL (Williams, 2006).

Anticipated Uses

Dyspnea in patients with lung cancer is often an under-recognized symptom. Investigation must continue in this area of symptom management so that patients experiencing dyspnea can be promptly and appropriately managed with the use of evidence-based practice guidelines (Gaguski, 2010). It is my goal that by writing this concept analysis paper, current research

<table>
<thead>
<tr>
<th>Physical Well-Being</th>
<th>Psychological Well-Being</th>
<th>Social Well-Being</th>
<th>Spiritual Well-Being</th>
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<tr>
<td>Disease-specific Effects on Physical Well-Being</td>
<td>Disease-specific Effects on Psychological Well-Being</td>
<td>Social adjustment to Dyspnea</td>
<td>Quality of Spiritual Well-Being</td>
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<tr>
<td>• Suffocation</td>
<td>• Depression</td>
<td>• Social activities</td>
<td>• Spiritual activities</td>
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<td>• Air Hunger</td>
<td>• Anxiety</td>
<td>• Personal relationships</td>
<td>• Religious activities</td>
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<td>• Breathlessness</td>
<td>• Uncertainty</td>
<td>• Isolation</td>
<td>• Sense of inner peace</td>
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<td>• General Quality of Physical Well-Being</td>
<td>• Fear of Recurrence</td>
<td>• Travel challenges</td>
<td>• Positive changes</td>
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<td>• Fatigue</td>
<td>• Difficulty expressing emotion</td>
<td>• Recreational activities</td>
<td>• Hopeful</td>
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<td>• Weakness</td>
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<td>• Intimacy</td>
<td>• Reason to be alive</td>
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<td>• Aches/Pains</td>
<td>• General quality of Psychological Well-Being</td>
<td>• Adjustment difficulty</td>
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<td>• Weight loss</td>
<td>• Enjoyment</td>
<td>• Family distress</td>
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<td>• Sleep Disturbances</td>
<td>• Support</td>
<td>• Financial burden</td>
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<td>• Overall Physical</td>
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<td>• Well-Being</td>
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Table 1. Components of Quality of Life

Adapted from Grant et al., 2004
studies can apply my learnings and raise awareness of dyspnea symptom. In doing so, predictors of dyspnea can be further studied and explored into education, theory, research, and practice. The multidimensional factors that influence patient’s subjective experience of dyspnea with advanced lung cancer can be an essential component to compel patients to take steps to manage the debilitating symptom of dyspnea.

Summary

Dyspnea is a symptom that is usually under-diagnosed and inadequately managed due to lack of recognition or availability of interventions. Despite the frequency and complexity of this symptom, little research has been conducted to specifically identify effective treatment in patients with advanced lung cancer. The impact of dyspnea management on the quality of life in advanced lung cancer patients requires more recognition and better quality of care. Dyspneic patients are unable to perform activities of daily living because of fatigue, discomfort, and anxiety associated with the inability to breathe normally (Bruera & Ripamonti, 1998; Wickham, 2002; Dudgeon, 2013). At present, the most commonly used intervention for dyspnea is supplemental oxygen and medications such as opioids, oxygen, bronchodilators, steroids, and diuretics (Luce & Luce, 2001). Research has shown that one of the most important intervention that can be utilized with dyspneic patients with advanced lung cancer is education regarding more effective breathing exercises, such as diaphragmatic breathing, alteration of breathing, bio-behavioral nursing interventions and pursed-lip breathing (Pan et al., 2000). A study by Reddy et al., (2009) indicated that due to the multidimensional construct that are commonly occurring with other clusters of symptoms associated with dyspnea, treatments of this symptom requires a multimodality approach that involves opioids, fatigue management, relaxation techniques, and psychosomatic interventions that could lead to better outcome (Reddy, Parsons, Elsayem, Palmer, & Bruera, 2009).

Conclusions

Patients with advanced lung cancer experience dyspnea in ways that changes lives with restriction, loss of autonomy, and with subsequent dependence on others by threatening the joy in their existence (Henoch et al., 2008). There is no doubt that dyspnea limits patients’ activities and produces social isolation (Tanaka, Akechi, Okuyama, Nishiwaki, & Uchitomi, 2002). As a nurse scientist, providing patients with the opportunity to express the meaning of dyspnea as a symptom can be accomplished by continued research study. Further investigations are needed in this area to assert the total dyspnea experience that could be influential in regards to the impact of dyspnea management on the quality of life in patients with advanced lung cancer. It is my hope and desire to develop intervention strategies for patients with advanced lung cancer. Ultimately, understanding the concept of dyspnea experience in my chosen population will lend itself to standard assessment guideline techniques and interventions that are designed to affect symptom occurrence and dyspnea suffering. By doing so, I can take the lead in implementing research interventions that will introduce vast knowledge to future nursing scholars in finding strong significant correlation on the impact of dyspnea management in relationship to QOL.

References


**About the Author**

Barbara A. Roces PhD, MSN, NP, RN received her Bachelor of Science in Nursing from University of Southern California at Los Angeles and her Master of Science in Nursing from University of California Los Angeles with specialization as an Oncology Nurse Practitioner. She obtained her PhD in Nursing from the University of San Diego in California. She is an Associate Professor of Nursing at West Coast University in Los Angeles, California. Additionally, she works as a Hospice/Palliative Nurse Practitioner. Her dedication to research is exceptional as evident by multiple presentations of her research study “Patients with Advanced Lung Cancer: Quality of Life and Perception of Dyspnea.” Her research interest includes promotion of Quality of Life in Palliative/Hospice patients, as well as looking at the psychophysiological aspect of dying patients with advanced cancer diagnosis.
Effect of Psychoeducation on Self-esteem and Self-efficacy among College Students

Abstract

Authors suggest efforts are needed to further explore the usefulness and utilization of psychoeducation at the community and professional levels as applied to various settings and populations. In addition, if developed and implemented carefully, psychoeducational interventions have promising application on other life challenges across levels of the public health, social, and educational systems. This quasi-experimental three group pre-test post-test study aims to investigate the effect of psychoeducation on the self-esteem and self-efficacy of college students. A total of 105 college students (35 subjects per group) who were enrolled at Saint Louis University, Baguio City, Philippines were included as sample. Sampling technique was purposive. The Rosenberg's Self-esteem Scale and Schwarzer's General Self-efficacy Scale were used as data gathering tools. A self-made psychoeducational module that was validated by experts in mental health and psychiatric nursing was utilized as intervention. SPSS version 20 was used for the statistical analysis. The results on the post-test scores of both treatment arms (informational and comprehensive model) were significantly higher compared to control group after eight sessions of psychoeducation. The researchers therefore conclude that both psychoeducation models (informational and comprehensive) showed evidence of effectiveness in increasing the self-esteem and self-efficacy levels of college students.

Keywords: Psychoeducation, self-esteem, self-efficacy, comprehensive model, informational model

Introduction

"There is no health without mental health (World Health Organization, 2005).” This statement depicts the growing emphasis on the importance of not only having a healthy body, but also a healthy mind. It is therefore essential to enhance not only the physical health of a person but the mental health as well.

"Mental health is state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community (World Health Organization, 2001).” Several components comprise mental health. Among these components are self-esteem and self-efficacy (Maddux, 2014).

1 Primary and Corresponding author; Faculty of Saint Louis University, School of Nursing; yaj_golva17@yahoo.com
2 Faculty of Saint Louis University, School of Nursing
3 BSN students at SLU-School of nursing (BSN III-D1 Batch 2017)
Self-esteem is how people think and feel about themselves (Sasat et al., 2002). Self-efficacy refers to a person's belief that he or she is able to effectively perform the tasks needed to attain a valued goal (Bandura, 1997). Once a person's self-esteem is in place, it kindles further success. Likewise, a person with finely honed self-efficacy will have a more goal oriented behavior with positive outcomes, and a more stable self-regulation (Zimmerman & Timothy, 2006). The need to possess a high level of self-esteem and self-efficacy is crucial to succeed in most dimensions of life. In reality though, the number of mental health problems globally among the general population including the college students continue to increase in terms of severity and frequency (Higginbotham, 2013).

In the local setting, Saint Louis University, Baguio City, Philippines reported that there was an increase in the number of college students who sought counseling service at the Guidance Center due to mental health problems and psychological issues. From the 663 undergraduate students who sought counseling service in the academic year 2012-2013, the figure almost doubled in the academic year 2014-2015 (663 versus 1063). Latest statistical data shows that in the academic year 2015-2016, there were 1, 235 college students who sought counseling. The report contained various concerns like family, personal affairs, academics, relationship, future, and other concerns. In addition, the report from the guidance center also shows that under personal concerns, issues like low self-esteem and low motivation are included as reasons for seeking professional help at the Guidance Center (Saint Louis University Guidance Center, 2016).

To improve self-esteem and self-efficacy, several interventions have been identified to be effective like cognitive behavioral therapy, counseling, physical activity intervention, and group therapy.

Lukens and McFarlane (2004) discuss that one of the most effective evidence-based practices that have emerged in both clinical trials and community settings is psychoeducation. The flexibility of the psychoeducation, which incorporates both illness-specific information and tools for managing related circumstances has a broad potential for many forms of illnesses and varied life challenges. Patient education or psychoeducation is an important independent function of the nursing profession (Spellbrin, 1991) and historically been in the domain of nursing (Sanford, 2000). Although most psychoeducation programs are implemented in hospital and community based settings, Cartwright (2007) proposes that the school system is another potential venue for developing psychoeducation interventions.

To address the increasing number of mental problems and growing need for mental health services among college students, Higginbotham (2013) explored the utilization of psychoeducation to improve college students' mental health. He combined proven psychoeducational approaches into a semester class under the umbrella of effective stress management. The class integrates physiological and psychological understandings of stress and stress management with evidence-based skills including relaxation techniques, problem-solving, mindfulness, cognitive restructuring, and assertiveness. The course also included a set of skills consistent with the positive psychology literature on the development of resilience. An instructors guide, course slides, course syllabus, and recommendations for readings, homework, and practices are provided. The current study focuses on psychoeducation to improve self-esteem and self-efficacy. It will also explore what model of psychoeducation will be effective for college students.

Psychoeducation is a systematic, didactic, psychotherapeutic intervention designed to inform clients and their relatives about mental disorder and psychosocial problems and to promote coping (Bhattacharjee et al., 2011). Types of psychoeducation include the information and comprehensive model. Information model provides clients and families the knowledge about psychiatric illness and psychosocial problem and its management (Bhattacharjee et al, 2011). Comprehensive model, also called combination approach consists of information, skill training and supportive approach through individual sessions (Bhattacharjee et al, 2011).

To date, psychoeducation addressing schizophrenia and cancer can be considered evidence based (Ozkan, Erdem, Ozsoy & Zararzis, 2013; Xia, Merinder & Belgamwar, 2011), and some authors (Lukens & McFarlane, 2004; Dixon et al., 2001) suggest a need for more extensive studies of psychoeducation in order to establish its usefulness in the management of psychosocial problems.

The increase in the number of students having low self-esteem and low self-efficacy and its negative effects cannot be ignored. Today, there is also growing emphasis on the utilization of cost-effective intervention like psychoeducation on improving mental health. There is also a need to try and test creative strategy like psychoeducation. In addition, the interest of the researchers in mental health and adolescent psychiatry, the advocacy to promote mental health among adolescents gave the researchers the impetus to conduct the study.

The aim of this study is to investigate the effect of 8 session psychoeducation on the self-esteem and self-efficacy levels of college students. The researchers aim to answer the following research questions: 1.) Is there a significant effect on the college student's self-esteem level and self-efficacy level after the introduction of psychoeducational intervention? 2.) Is there a significant difference on the self-esteem level and self-efficacy level between groups-Control Group, Informational Group and Comprehensive Group?
Ausubel's Assimilation Theory, Albert Ellis' Cognitive Behavioral Theory and concepts from Albert Bandura's Social Cognitive Theory were used as the conceptual framework of this study.

Learning occurs through development of new cognitive structures that will hold newly acquired information. Cognitive structure is defined as the 'individual's organization, stability, and clarity of knowledge in a particular subject matter field at any given time'. When there is new knowledge, it is linked to an existing general concept. In this study, psychoeducation was facilitated by researchers in order to enhance the cognitive structure of the subjects. The psychoeducation focused on topics about self-esteem and self-efficacy to generate or impart new knowledge and skills to the participants. Since the participants have experiences of low self-esteem and low self-efficacy levels, they will be able to relate it with the new knowledge they have acquired. This new knowledge was anchored in their cognitive structure, applied and resulted to improved self-esteem and self-efficacy levels.

Albert Ellis developed an ABC format to teach people how their beliefs cause their emotional and behavioral responses: 'A' stands for activating event or adversity. 'B' refers to one's irrational belief about 'A'. That belief then leads to 'C,' the emotional and behavioral consequences. Ellis believes that it is not the activating event (A) that causes negative emotional and behavioral consequences (C), but rather that a person interpret these events unrealistically and therefore has irrational belief system (B) that helps cause the consequences ©.

In the study, the students developed irrational beliefs or negative thoughts about themselves. Through psychoeducation, the researchers taught the students about information and skills to improve self-esteem and self-efficacy. Thus, with the aid of psychoeducation, the participants were able to change their personally identified irrational beliefs about themselves into positive beliefs, leading to improvement in their self-esteem and self-efficacy.

This study is also grounded on Albert Bandura's Social Cognitive Theory. In this theory, he describes that an important aspect of the self is self-efficacy. Self-efficacy refers to the feelings of adequacy, efficiency, and competence in coping with life. Meeting and maintaining the performance standards enhances an individual's self-efficacy, while failure to meet and maintain those standards reduces the self-efficacy. Bandura also describes self-efficacy in terms of the perception of the degree of control over one's life:

"People strive to exercise control over events that affect their lives. By exerting influence in spheres over which they command some control, they are better able to realize desired futures and to forestall undesired ones. The striving for control over life circumstances permeates almost anything people do because it can secure them innumerable personal and social benefits. The ability to affect outcomes makes them predictable. Predictability fosters adoptive preparedness. Inability to exert influence over things that adversely affect one's life breeds apprehension, apathy, or despair" (Bandura, 1997)

In this study, the students appraised their own capability to accomplish and now know that they can make a difference. The cognitive structure of an individual is programmable, which can be programmed in such a way that individual will perceive the task to be accomplished will be achievable. The researchers applied psychoeducation by teaching the participants concepts and skill on improving self-efficacy. Therefore, the researchers utilized psychoeducation to increase the students' self-efficacy and resulting to the students to be more convinced that they can accomplish an activity.

The study will promote a cost-effective psychotherapeutic intervention that would help students or clients improve their self-esteem and self-efficacy. Psychoeducation can be used as stand-alone or adjunct intervention to improve self-esteem and self-efficacy. The study will also provide an opportunity for the participants to verbalize their thoughts and feelings with regards to their selves. Furthermore, the participants will be able to learn and apply psychoeducation to improve their self-esteem and self-efficacy. The researchers will also benefit since this study will provide an opportunity to enhance their skills in delivering psychotherapeutic interventions specifically psychoeducation. Since proven effective, the researchers could also utilize psychoeducation to improve their self-esteem and self-efficacy. The school administrators will also be updated about this cost-effective intervention and this study can be a basis for developing mental health programs and activities for students specifically targeting mental health promotion. Part of this study is the creation of module on developing self-esteem and self-efficacy. The module can also be used by faculty members who are teaching psychiatric nursing and supervising students in psychosocial counseling. The findings of the study can also contribute to the existing body of knowledge on psychoeducational intervention and be a springboard for other research related to psychoeducation.

**Methodology**

The study utilized a quasi-experimental design. The researchers believed that this is the most fitting design for the study since the researchers are interested in the effects of psychoeducation on the self-esteem and self-efficacy of college students. The study consisted of a control group and two treatment groups. The control did not receive psychoeducational intervention. Randomization of subject was not done. Baseline self-esteem and self-efficacy scores were initially measured using standardize tools and post-test was done after a month or eight sessions of
psychoeducation. The study was approved by SLU Research Ethics Committee with protocol number: SLU-REC.2016-006.

A total of 105 college students (35 subjects per group) who were enrolled 2nd semester of the academic year 2015-2016 at the different undergraduate schools of Saint Louis University were the subjects of this study. The sample size was computed using the Yamane’s formula and sampling technique was purposive-homogenous sampling. The following study criteria were also met by the participants: ages between 15-19, willing and committed to participate in the study or psychoeducation intervention, able to understand and communicate in English and have baseline self-esteem score of 18 and below. Students from the school of medicine, law and graduate programs, married, pregnant or have small child or children, students with major psychological disorders or have other mitigating medical conditions which will impede them from participating in the psychoeducation were excluded in the study. The researchers utilized vacant rooms and the psychosocial counseling room located at the Nursing faculty room at Diego Silang Building for the psychoeducational intervention.

For students who are 18-19 years old, the researchers took their consent or let the student sign the consent form after explaining it. A copy of the consent form was also given to the subjects. For participants 18 years old and below (15-17), the researchers let the students signed the assent form and let the parents signed the informed consent form for parents.

Self-esteem of college students (pre-test and post-test) were measured using the Rosenberg’s self-esteem scale while self-efficacy levels were measured using the Generalized Self Efficacy Scale (GSES). Rosenberg’s self-esteem scale is a 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self. All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. On the other hand, Generalized Self Efficacy Scale (GSES) is also ten-item scale that assesses the effectiveness of an individual’s belief in his or her own ability to respond to novel or difficult situation and to deal with any associated obstacle. Both tools are valid with Cronbach’s alpha coefficients ranging from 0.72 to 0.87 and 0.76 to 0.90 respectively.

Self-made psychoeducation module on enhancing self-esteem and self-efficacy were given to the subjects of the study. The module was subjected to face and content validity of experts in mental health and psychiatric nursing and research prior to use of these materials. The comments and suggestions of the experts were used to improve the module.

The module on enhancing self-esteem and self-efficacy is a 41 page soft bound module printed in a standard size paper. The preliminary pages contain the description, objectives, primary and secondary uses of the module. It is also divided into sections (psycho-information and psycho-skills). Topics in the module include definition and development of self-esteem and self-efficacy. Discussion on how to measure self-esteem and self-efficacy was also included. In addition, the effects of low self-esteem, effects of having a well define self-efficacy, and ways or tips on how to improve self-esteem and self-efficacy were also included in the module. For the psycho-skills part of the module, the researchers included some evidence-based interventions and activities to enhance self-esteem and self-efficacy. These activities include cognitive re-structuring, positive self-talk, and self-reflection or self-analysis. Worksheets and assignments were also provided.

In this study, there was a control group and two treatment groups. The control group did not receive any intervention. Pre-test measure of self-esteem and self-efficacy of subjects was done at the start of the study and was re-assessed after one month. Informational model group (Treatment A) and Comprehensive model group (Treatment B) underwent eight sessions of psychoeducation on self-esteem and self-efficacy. Specifically, the Informational Group (Treatment A) were given a module on psychoeducation for them to read during their free time for a period of one month. The Comprehensive group (Treatment B) was closely supervised by the researchers and underwent a comprehensive approach of psychoeducation-combination of information dissemination, skills training, and supportive approach. Activities in the psychoeducation for both groups were structured using a psychoeducational plan.

All throughout the study the researchers maintained the anonymity, autonomy and confidentiality of data. If in any event a subject from the control group and the informational group is interested to undergo the comprehensive psychoeducation intervention, the subjects were instructed that their request will be granted after the study.

Moreover, the student researchers underwent a series of orientations and skills training on psychoeducation and psychosocial processing facilitated by their research promoters to ensure equivalence. All members of the research team including the research promoters had a series of dry run of the experimental protocols to ensure uniformity of procedures in administering the psychoeducational intervention and administration of questionnaire. The researchers also developed a facilitator’s manual for the psychoeducational module to ensure uniformity of using the module in the comprehensive group. Furthermore, the same research members followed up the same subjects throughout the study.

Statistical results were computed using SPSS version 20. Mean scores and p-value was used to present the results. Parametric statistics like T-test (paired two sample for means) was used to
determine the significant effect of psychoeducation on the self-esteem and self-efficacy of college students in the control and treatment groups. Independent T- test was used to determine the significant effect of psychoeducation on the self-esteem and self-efficacy of college students in the control and treatment groups.

Results and Discussion

Effect of psychoeducation in increasing the self-esteem of college students: Table 1 shows the summary of the paired t-test that evaluates the significant effect of psychoeducation in increasing the self-esteem of college students. The analysis of pretest and post-test mean scores of both treatment groups, comprehensive and informational group showed that the self-esteem mean values (15.26 vs 22.94; 15.49 vs 21.11) of college students increased after the introduction of psychoeducation.

The comprehensive group received one-on-one or peer-to-peer interactions, the students were able to observe and learn from other people in a controlled therapeutic environment (Snyder, 2008). Almost all (34 out of 35) participants have an increase self-esteem after the psychoeducation. It was proven that psychoeducation when done with a counselor or peer teacher (such as in the comprehensive model group) was effective in increasing the self-esteem of students. This finding was supported by the study of Menezes, Burgess, Clarke, and Mellis (2016) which elucidate that peer learning program have been effective in gaining practical skills and valuable learning. Moreover, active learning was more preferred because it caused them to gain clarity on the topic, arousing intellectual curiosity, promoting student interaction and yielding a more effective learning, subsequently increasing their self-esteem.

Feedback was also assessed at the last session of the study and participants verbalized that they are satisfied with the intervention. The students further stated that the study helped them change their negative self-perceptions. This claim may have a relation with the theory of Albert Ellis. The participants were allowed to vent their concerns about themselves and was processed through the application of the concepts and different exercises or activities found on the module, allowing them to change their negative perception about their selves. Therefore, psychoeducation with a counselor or a peer teacher allowed the participants to have an insight on what causes them to have low self-esteem and explore ways or strategies to increase their self-esteem.

Informational model is done by imparting information to increase the awareness of the persons involved about a specific condition (Bhattacharjee, et.al. 2011). Thirty two out of thirty five students have an increase of self-esteem after introduction of psychoeducation. The psychoeducation focused on topics about self-esteem to generate or impart new knowledge and skills to the respondents thru reading. Since the respondents have experiences of low self-esteem, they were able to relate it with the new knowledge they have acquired. This new knowledge was anchored in their cognitive structure, applied and resulted to improved self-esteem levels.

Table 1. Effect of psychoeducation in improving the self-esteem and self-efficacy of the subjects (n=105)

<table>
<thead>
<tr>
<th>Group</th>
<th>Self-esteem Level</th>
<th>Self-efficacy Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
<td>Post-test</td>
</tr>
<tr>
<td>Control Group (n=35)</td>
<td>14.89</td>
<td>15.37</td>
</tr>
<tr>
<td>Informational Group (n=35)</td>
<td>15.49</td>
<td>21.11</td>
</tr>
<tr>
<td>Comprehensive Group (n=35)</td>
<td>15.26</td>
<td>22.97</td>
</tr>
</tbody>
</table>

The results also show that psychoeducation, whether comprehensive or informational model, have significant effect on improving self-efficacy. The analysis of pretest and post-test mean scores of both comprehensive and informational group showed that the self-efficacy scores (26.20 vs 32.40; 28.14 vs 31.83) of the college students increased after introduction of psychoeducation intervention. The results showed that the comprehensive group had a higher increase compared to the informational group although the both of them were statistically the same. Majority of the participants (31 out of 35) in the comprehensive model group had an increase in self-efficacy level. This result show that with the regular interaction between the therapist and the client can lead to a definite increase in the self-efficacy of an individual. Generally, students with increase in self-esteem scores had also increase self-efficacy scores.
The studies conducted by McCoach, (2007) and Shorey, Chan, Seng, & Hong-Gu, (2015), in summary, elucidate that psychoeducation given in the form of mentoring, teaching and supervised learning would most likely cause the client to have an increase in self-efficacy. Maddux and Kleinman (2014) posit that self-esteem greatly influence the self-efficacy because how you feel about yourself overall greatly influence your confidence in your ability to perform well in activities. As for the informational group, 28 out of 35 participants have an increased self-efficacy. The studies of Shimazu, Kawakami, Irimajiri, Sakamoto, Amano, (2005) and Santos, Lawanto, Becker, Fang, & Reeve (2014) state that having the client receive a module or self-help treatment could also lead in the increase of self-efficacy or change of behavior.

**Effect of psychoeducation in improving the self-esteem and self-efficacy.** Table 2 consists of the summary of the independent-samples t-test to determine the significant differences of two groups at a time using the post-test scores. Statistically, informational model and comprehensive model of psychoeducation are the same in terms of increasing the self-esteem and self-efficacy levels. The result shows that both models of psychoeducation are effective improving self-esteem and self-efficacy of college students.

<table>
<thead>
<tr>
<th>Groups Compared</th>
<th>Self-esteem</th>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group &amp; Treatment A</td>
<td>&lt;0.0001</td>
<td>0.006</td>
</tr>
<tr>
<td>Control Group &amp; Treatment B</td>
<td>&lt;0.0001</td>
<td>0.001</td>
</tr>
<tr>
<td>Treatment A&amp; Treatment B</td>
<td>0.057</td>
<td>0.435</td>
</tr>
</tbody>
</table>

Treatment A received the informational model, which had received the module and are considered self-learners. Informational modules provide an effective environment for learning (Dhamija & Kanchan, 2014). This allows the student to learn on their own. By learning, they change their cognitive structure, and replace their old knowledge with the new one (Ausubel, 2000). If self-esteem is enhanced, an increase in self-efficacy subsequently follows (Maddux, 2014). Comprehensive model is effective as well. In the research, the treatment B group had an interactive approach with the researcher and gained higher scores on the post test results. Moreover, active learning was more preferred by students because it caused them to gain clarity on the topic, arousing intellectual curiosity, and promoting student interaction and yielding effective learning.

Additionally, the results revealed that the intervention, whether informational or comprehensive, is effective in increasing the self-efficacy of college students. The study of Shimazu, Kawakami, Irimajiri, Sakamoto, Amano, (2005) revealed that the intervention they used, which was psychoeducation, increased the self-efficacy of their participants, especially in willingness to exert effort in completing the behaviors and persistence in the face of adversity. The result suggested that the intervention was indeed effective, and most importantly, these increases can be achieved during a short period of time with minor changes in instructional style.

This study implies that with the help of psychoeducation whether with module alone or done the help of a counselor or a peer teacher, self-esteem and self-efficacy of individuals can increase. Psychological problems that lead to low self-esteem and self-efficacy can now be addressed with the use of this psychotherapeutic intervention. This kind of self-help treatment can and will also educate any reader on ways to cope with the stressors of life. Psychotherapeutic interventions like these will help not only individuals who are experiencing psychological problems but can also be used by individuals to maintain or increase their self-confidence. This research can also be a basis of mental health programs in the schools and the psychoeducational module can also be used by faculty members and counselors

**Limitations**

In summary, psychoeducation is an effective intervention in improving the self-esteem and self-efficacy of college students. Several uncontrollable factors may contribute to the outcome of this study. Example, the time and place in which the psychoeducation was administered in this study was not controlled especially in the informational model since the study was performed with its intent being self-directed. The only control we had as a research team was the reminders via call or private message in phone or Facebook to read the module. There is a lack of control to other stimuli such as varied defense mechanisms, characteristics of the subjects, and life situation, daily stress of the participants which may have had an effect on the results. The module used in this study was only validated by two experts. Qualitative comments on how to improve the module were carried out however the content validity index was not measured using a tool. The sample size is small for the findings to be generalized since sample size was computed at 10% margin of error. Another limitation is the sampling technique which is purposive. The findings might not be generalizable among college students. Despite these limitations it can be argued that this initial study showed promising results.
Conclusion and Recommendations

The researchers therefore conclude that psycho-education showed evidence of effectiveness in improving self-esteem and self-efficacy levels of college students. Both the psychoeducation models have been found to be effective in increasing the self-esteem and self-efficacy levels but psychoeducation in form of comprehensive model, yielded higher results in the self-esteem and self-efficacy scores than the informational model. Psychoeducation works well when information is combined with skills training and supportive approach from a peer or a counselor. It is also effective when it promotes students interaction.

Basing now on the results, the researchers would like to recommend the following: the university, especially the guidance center to utilize the comprehensive model of psychoeducation as a lone or adjunct intervention to address low self-esteem and self-efficacy or other mental health concerns in the university; that the guidance center to administer scales like Rosenberg and Generalized Self-Efficacy Scale during the entrance exams to identify students who are at risk of developing mental health problems; further studies on psychoeducation and adding time as one of the variables; testing on the effectiveness of psychoeducation on other groups of population such as high school students, staff nurses, and faculty who experiences burn out at school and work; to test effectiveness of psychoeducation on other psychosocial problems like anxiety; the School of Nursing faculty to apply psychoeducation as part of teaching-learning activity during psychosocial counseling; to conduct a true experimental study on psychoeducation; to conduct a systematic review or meta-analysis on psychoeducation; and to utilize a Delphi method in developing a psychoeducation module on enhancing self-esteem and self—efficacy of college students.

References


About the Authors

Jay Ablog, RN, MN, is a faculty and a research promoter at Saint Louis University-School of Nursing, Baguio City. He hold a master’s degree in nursing specializing in Mental Health and Psychiatric Nursing. He is also PhD candidate currently writing his dissertation. His research interest include mental health promotion activities or psychotherapeutic interventions, adolescent psychiatry, depression and suicide.

Elmer Ivan M. Calaustro Jr., RN, MN, is a faculty and a research promoter at Saint Louis University-School of Nursing, Baguio City. He hold a master’s degree in nursing specializing in Mental Health and Psychiatric Nursing. His research interest include mental health and psychiatric nursing.

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“When I think about all the patients and their loved ones that I have worked with over the years, I know most of them don’t remember me nor I them.

BUT I DO KNOW THAT I GAVE A LITTLE PIECE OF MYSELF TO EACH OF THEM and they to me and those threads make up the beautiful tapestry in my mind that is my career in nursing.”

- Donna Wilk Cardillo
Relationship Between Level of Readiness for Self-directed Learning and Learning Styles of CEU Nursing Students

Abstract

This study aimed to assess the level of readiness of student nurses for self-directed learning and their learning styles. It also determined the relationship between the two factors and the relationship of each factor to the respondents' demographic profile. This descriptive- correlational study utilized the Autonomous Learner Index of Abu-Moghli, Khalaf, Halabi & Wardam (2005) to assess the students' level of readiness in self-directed learning, and the Learning Style Inventory of Kolb & Kolb (2005) to assess their learning style type. No sampling technique was used because total population was included covering all 103 regular nursing students of Centro Escolar University for First semester of academic year 2016-2017. The study underwent Ethics Review Board Approval before it was implemented. Results of the study revealed that most of the nursing students were independent learners (52%). There were no dependent learners but since there were several respondents who were uncertain (48%), it is the role of nurse educators to develop their independence in learning. Moreover, all the four types of learning styles namely: Accommodative, Convergent, Assimilative and Divergent; were present showing the variation in learning styles of nursing students. But it was found out that they mostly prefer the Convergent learning style, especially the junior and senior students. The study concluded that there was no relationship between the variables: demographic profile, self-directed learning readiness and learning style. However, the scores of convergent learning style were higher than that of divergent and accommodative in their self-directed learning readiness.

Keywords: Self-directed Learning, Learning Styles, Nursing Education, Active Learning, Readiness for Self-directed Learning

Introduction

Nurse educators today are dedicated in preparing Millennial nursing students care for patients in an increasingly complex healthcare environment by investigating creative and effective strategies that would focus on active learning. (Nicholson, 2010) In a study by Ni (2013), it was concluded that self-directed learning strategy has been found to be effective for supplying the need in active learning. Thus, Self-directed Learning Readiness (SDLR) is an important factor in
enhancing academic performance and perceptions of the learning environment of students. Aside from readiness for self-directed learning, considering learning preferences or styles is also essential in helping students understand their learning needs. It rationalizes their own choice of teaching strategies suitable for themselves. (Alkhasawneh, 2013) Learning styles are patterned and preferred ways of resolving conflict because of particular past life experiences and the demands of our present environment (Kolb & Kolb, 2011). According to Iurea, Neacsub, Saftac, & Suditu (2011), when the teaching style is congruent to the learning style of the student, the satisfaction rate is higher that would lead to the development of students’ professional competence.

With the known benefits of assessing both self-directed learning readiness and learning styles of students, foreign researchers have been made to identify the relationship between the two variables. It has been concluded in these studies that there is a weak or no relationship at all between the two variables but researchers recommended considering it in other socio-economic or racial groups as well. (El-GIANY, 2013; SAFAVI, SHOOSHSTARI zadeh, MAHMOODI, YARMOHAMMADIAN, 2010; CANIPE, 2001). Local studies also concluded the importance of the two variables in academic performance of students (VELASCO, AGENA, ORENCE, GONZALES, BELDIA & LAGUADOR, 2015; DE GUZMAN & IGNACIO, 2007) and its relationship with demographic profile of students (CHOI, YU & LOQUIAS, 2014; DELLOSA & LARAYA, 2011) but there is a lack of local researches to determine the relationship between the two variables.

**Methodology**

The study utilized the descriptive-correlation survey design. It was used to describe the relationship between the readiness for self-directed learning and learning styles of nursing students in relation to their demographic profiles. It was conducted in the School of Nursing of Centro Escolar University at Mendiola, Manila and respondents were nursing students enrolled in the regular sections of professional subjects for First-semester of academic year 2016-2017. The study used standardized instruments for each assessment. The first is the Autonomous Learner Index (ALI) by Abu-Moghli et al., (2005) which was designed to evaluate both independent and dependent learning behaviors; and second is Learning Style Inventory (LSI 3.1) by Kolb & Kolb (2005) which is a practical self-assessment instrument that can help students determine their learning styles. The Autonomous Learner Index questionnaire was developed and validated for content validity by a panel of nurse educators in Jordan and Abu-Moghli et al. (2005) stated that the instrument was reliable (α = 0.89) in measuring independence in learning of baccalaureate nursing students. It is the only published instrument that evaluates the learner independence of baccalaureate nursing students. While for the LSI, it showed high scores on its internal consistency using Cronbach’s alpha on seven different studies with an average of α = 0.7. (Kolb & Kolb, 2005). The data gathering process in this study was done in the following phases:

**Preparatory Phase.** This phase ensured the preparation of 103 questionnaires needed and request for the survey to be done among the enrolled students. After approval, schedule was set for each year level to answer the survey by seeking the advice of the Assistant to the Dean for Instruction because the survey shall take at least 15-30 minutes of the respondents’ time after their class.

**Survey Implementation Phase.** The study was subjected first for institutional review board approval. Informed consent was obtained from the respondents. Privacy was reassured as names were not required on the survey form but instead each student was given a code written on their questionnaire. They were informed that they will be given the choice to withdraw from the study anytime and data obtained will be kept confidential. On the implementation of the survey, an orientation was given to the respondents taking 5-10 minutes including the distribution of questionnaires.

**Data Processing and Analysis Phase.** After gathering all the data, it was computed to identify the students’ readiness in self-directed learning according to the results of ALI. Results of the Learning Style Inventory were computed by transcribing them in the Learning Style Profile. By analyzing the data gathered, relationship of demographic profile, readiness in self-directed learning and learning styles were identified as shown in the Conceptual Framework in Figure 1.

**Figure 1.** Conceptual Framework of Relationship of Readiness for Self-Directed Learning and Learning Styles
Results

With the assessment of self-directed learning readiness using ALI by Abu-Moghli et al. (2005), fifty-two percent (52%) of the respondents were independent learners. This shows that more than half of the respondents are ready for self-directed learning. While in the assessment of learning style preference, the most preferred learning style of the respondents was Convergent having thirty-six percent (36%) which generally relies on the learning abilities of abstract conceptualization and active experimentation. Strengths of this type of learners are decision-making and problem solving which are attributes of Millennial learners. (McGlynn, 2005) Thus, the findings support that our respondents are within the Millennial generation. Twenty-six percent (26%) of the respondents were Accommodative whom are focused on concrete experience and active experimentation. Compared to the other styles, their strength depends on doing things, in carrying out plans and tasks and getting involved in new experiences. Assimilative who were twenty-three percent (23%) of the population are focused on abstract conceptualization and reflective observation. This learning style is focused less on socio-emotional interactions and more on ideas and abstract concepts. Least of the respondents preferred Divergent having only fourteen percent (14%) whose modes are concrete experience and reflective observation. Their strength depends on imaginative ability to view concrete situations from many perspectives and to organize many relationships into a meaningful unified whole.

Since sex is a nominal level of measurement, the Cramer coefficient was used to test correlation between sex and Self-Directed Learning Readiness. Table 1 yielded a value of 0.017 which is very close to 0, and the p-value 1.00 indicates no correlation at all, implying that sex does not at all affect Self-Directed Learning Readiness. The coefficient 0.049 shows that there is a weak but negative correlation between Self-Directed Learning Readiness and Year Level. The p-value 0.616 is also quite high compared to 0.05. Therefore at 0.05 level of significance, they have no sufficient evidence to conclude that there is correlation between Self-Directed Learning Readiness and Year Level. The Cramer coefficient of Sex and Learning Style was used to see whether there is correlation between the two variables at 0.05 level of significance.

However, as shown in Table 2, the coefficient yielded by the test was 0.126, indicating a weak correlation between the two, and the p-value 0.708 was so much higher than 0.05. Therefore, at 0.05 level of significance, there was no sufficient evidence to conclude that there is correlation between Sex and Learning Style. Hence, there is no specific gender that is more likely to adapt a certain learning style. Similarly, using Cramer coefficient again but this time testing correlation between year level and Learning Style, the coefficient 0.232 is higher than that of the previous pair, the p-value 0.113 is still higher than 0.05. Hence, at 0.05 level of significance, no sufficient evidence was present to conclude that there is correlation between year level and Learning Style.

Using ANOVA, results revealed that there is at least one pair of Self-Directed Learning Readiness classified to Learning Style which is significantly different. It also implies that each learner having the same learning style does not mean that they have the same level of self-directed learning readiness. To further identify the significant pairs, follow-up independent samples t-test were conducted to all possible combinations of pairs of Learning Styles. The pairs Convergent-Divergent and Convergent-Accommodative resulted to the p-values 0.044 and 0.003, respectively, which were both less than 0.05. This implies that between the learning styles on each pair, there was a significant difference on their self-directed learning readiness raw scores.
The Cramer coefficient of Learning Style and Self-Directed Learning Readiness was tested to see whether there is correlation between the two variables at 0.05 level of significance in Table 3. The p-value is 0.07 is greater than 0.05, therefore, at 0.05 level of significance, no sufficient evidence is shown to say that Learning Style and readiness in self-directed learning is significantly correlated.

<table>
<thead>
<tr>
<th>Nominal by Ordinal</th>
<th>Value</th>
<th>Correlation</th>
<th>Significance</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cramer's V</td>
<td>0.271</td>
<td>Weak</td>
<td>0.07</td>
<td>NS</td>
</tr>
</tbody>
</table>

Table 3. Cramer Coefficient of the Respondents’ Learning Style and Self-Directed Learning Readiness

Discussion

Most of the CEU nursing students perceived themselves as independent learners which supports the findings of Abu-moghli et al. (2005); Kocaman, Dicle & Ugur (2009); and Klunklin, Viseskul, Sripusanapan, & Turale (2010) that most of nursing students are ready for self-directed learning. But nurse educators still need to focus on the almost half percentage of students who are not yet ready for it. According to a study by Smedley (2007), some students may never become independent or self-directed type of learners. Thus, educators need to help these learners by giving clear directions and encouragement to achieve the optimal learning outcomes.

The study also found out that the most preferred learning style of nursing students was Convergent. This revealed the same conclusion with studies in different countries conducted in Iran by Ahadi, Abedsaiidi, Arshadi & Ghorbani (2010), in Sri Lanka by Sugathapala, Siriwardhana & Tennakoon (2009), and in Australia by Zoghi, Brown, Williams, Roller, Jaberzadeh, Palermo, McKenna, Wright, Baird, Schneider-Kolsky, Hewitt & Holt (2010). The strengths of this type of learner are decision-making and problem solving. (Kolb & Kolb, 2011) McGlynn (2005) stated that Millennials want themselves to be engaged with cooperative learning exercises empowering them to be decision makers and making them analyze their own learning strategies. Considering that most of the respondents were Convergent type of learners and as previously mentioned, these findings support that they are within the Millennial generation.

Moreover, results revealed that two significant pairs of learning style had significant difference on their self-directed learning readiness raw scores namely, Convergent-Divergent and Convergent-Accommodative. Raw scores in self-directed learning readiness may have been affected in the first pair because convergent and divergent are opposite learning style preferences (Kolb & Kolb, 2005) as shown in Figure 2. Convergent type is more of a self-directed learner because of their ability to find practical applications for ideas, concepts and theories, while the divergent are less self-directed because they enjoy brainstorming and small group discussions. (Kolb & Kolb, 2005) Almost having the same reason with the first pair, the second significant pair is the Convergent-Accommodative because Accommodatives, like the Divergents, are focused on socio-emotional interactions. (Kolb & Kolb, 2005) This means that they are also less self-directed in learning that’s why Convergents had higher mean scores in self-directed learning than the Accommodatives. Relative study of Manoehr (2006) showed that Assimilative and Convergent learners performed better in e-learning method while Divergents and Accommodative learners had better results in the traditional teaching method. This means that Convergent learners have higher level of self-directed learning readiness than Accommodative and Divergent learners as shown in the results of this study.

Figure 2. Learning Styles Grid
Conclusion

Although the results conclude no correlation between the two variables namely; readiness for self-directed learning and learning styles, the study shows that CEU students having the Convergent type of learning style are more independent type of learners than the ones who are Accommodative and Divergent.

Recommendation

With the high level of readiness in self-directed learning and the dominance of a single type of learning style, which is Convergent, the researcher recommends that these findings should be considered in adapting and adjusting teaching methods. El-Gilany & Abusaad (2013) stated that students with high level in self-directed learning readiness and dominant in the Convergent learning style will be able to use these variables positively in their education and even in their post-graduate nursing education. It is then the nurse educator’s responsibility to identify the personal needs in learning and use different teaching strategies to facilitate learning. (Brown & Libberton, 2007)

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About the Authors

Vincent Raphael Manarang MAN, RN, finished his Bachelor of Science in Nursing in 2009 and Master of Arts in Nursing Administration. in 2017 at Centro Escolar University Manila. He is a faculty member at the same university teaching subjects such as General Anatomy, Physiology, Histology and Pathology. As a researcher, he won his first achievement in the field of research at the 9th National Nursing Research Conference when he landed the First Place for Podium Presentation in the Professional Category. His research interests are focused on Nursing Education.

Pearl Ed G. Cuevas, MAN, PhD, RN, FGNLA, is an Associate Professor at Centro Escolar University Manila, School of Nursing and the Graduate School. She is a fellow of the Gerontology Nursing Leadership Academy, Sigma Theta Tau Honor Society of Nursing. Her research interests include theory testing and mix methods research. She is the National Secretary of the PNA House of Delegates 2017. She is also a board representative of NCR for the Philippine Nursing Research Society.
Development of Framework for Clinical Nursing Research Fellowship in the Philippines

Abstract

Fellowship programs serve as alternative means to bridge the gap between undergraduate education and nursing practice. The purpose of the study was to develop a framework for a Clinical Nursing Research (CNR) Fellowship Program in the Philippines. A sequential non-dominant mixed method design was used. It comprised the following: identifying the competencies needed by clinical nurses in research and EBP; the training needs of clinical nurses in research and EBP; the core competencies, functional competencies and tasks of CNR fellows; and describing potential fellows’ reactions and preferred ways of learning. Categorical analyses were done to analyze qualitative data. Descriptive statistics was used to analyze training needs and consensus agreement of experts. There were nine core competencies and 70 tasks of a CNR fellow that were distributed to the Beginner, Intermediate and Advanced Levels. Potential fellows prefer learning that is active, reflective, sequential, cooperative, guided by experts, personalized and involves use of technology. After learning the basics, they would need to learn more intensively on competencies that would help them become more capable of contributing to clinical practice.

The CNR Fellowship Program framework seemed to contain contextually-relevant core competencies in clinical nursing research that are needed to augment basic nursing research education and to benefit clinical nursing practice.

Keywords: Evidence-Based Practice, Training Needs, Sequential Mixed-Method, CNR Fellow, Clinical Nursing Research Fellowship Program

Introduction

The use of research and evidence-based practice (EBP) has become necessary in making effective decisions in healthcare. Pajarillo (2014) cited some of the main factors that push an evidence-based practice in nursing that include (1) the emphasis on the role of nurses in healthcare, (2) the aim by healthcare organizations to achieve recognitions and accreditations by local or international organizations, (3) the need to improve the quality of care, (4) the need to improve patient outcomes, and (5) the need to improve patient safety. The use of evidence-based practice is critical in nursing to improve patient outcomes and to ensure that nursing care is delivered in a safe and effective manner. However, nurses may lack the knowledge and skills needed to effectively use evidence-based practice in their daily practice.

1 Faculty, Graduate School, School of Nursing and Allied Medical Sciences, Holy Angel University, Sto. Rosario Street, Angeles City; +63922 3988699, jcura@haau.edu.ph; jonathandcura@gmail.com
international organizations (e.g. Magnet), (3) requirements to be complied to third party payers of healthcare for payment and non-reimbursement of services, and (4) the national push to improve standards of care in nursing. In the Philippines, research is a significant component of the curriculum of the BS Nursing Program. Nursing students are expected to demonstrate competence in this area (Commission on Higher Education, 2008; 2009).

However, after graduation, nurses become more occupied with clinical practice and research is not a priority (Leão, Farah, Reis, de Barros & Mizio, 2013). It is often difficult for nurses to get away from the bedside or to get them scheduled for research trainings (Brim & Schoonover, 2009; Swensonbritt & Reineck, 2009). Only few are enrolled in a master's degree program, where they could learn advanced knowledge and skills in research (Mahoney, 2009). Most healthcare providers still rely on their undergraduate education like lectures and textbooks, internet search, personal observations and ‘expert’ opinion for information regarding practice (Dizon et al., 2014; Gorgon et al., 2012; Hutchinson & Johnston, 2006; Pravikoff, Tanner & Pierce, 2005; Swensonbritt & Reineck, 2009).

Specialized and sustainable training programs in clinical nursing research may be provided to align with the needed skills to fulfil or augment the expanding role of nurses (Galassi et al., 2014; Sawatzky-Dickson & Clarke, 2008). Fellowship programs serve as alternative means to bridge the gap between undergraduate education and nursing practice, and augment basic training programs (Scribner-Howard, Kenney & Health-Richland, 2011; Short, McDonald, Turner & Martis, 2010). While very few published studies have looked into the development of a contextually-based research and EBP training program among allied health providers in the Philippines, there was no published research found that aimed to develop such program for nurses locally.

It is important to conscientiously determine the scope and structure so that the program would be able to meet the needs of the current nursing workforce in practice (Graling & Rusynko, 2001; Zori, Nina, Gallo & Friedman, 2013). The development of framework may be done based on methods that would pragmatically answer the main research questions related to program components, such as learners’ competencies.

Hospitals with nursing education or training and research departments may use the program when opening specialized continuing education in nursing research.

The study aimed to develop a framework for the Clinical Nursing Research (CNR) Fellowship Program in the Philippines.

Methodology

The study was conducted from September 2015 to October 2016. The scientific and ethics approval for the study was granted by the Holy Angel University Research Council. No funding was received for this study. This study employed a sequential non-dominant mixed-method design.

Identifying the competencies needed by clinical nurses in research and EBP. The study started with a review of the needed competencies of clinical nurses in research and EBP based on existing documents, literature review and online sources of fellowship programs in nursing research. The beginning nurse's role on research based on the 2012 National Nursing Core Competency Standards, and the learning outcomes related to research in the Bachelor of Science in Nursing curriculum based on Commission on Higher Education (CHED) Memorandum Order No. 14 (CHED, 2009) were retrieved online. A sample of learning outcomes related to research were requested from the graduate schools of Nursing that were in the official list of CHED. From the list of accredited providers of Continuing Professional Development (CPD) of the Philippine Professional Regulation Commission, the official organizational websites of accredited providers were searched for program descriptions and learning outcomes (Figure 1).

Literature review was done by searching articles in Google, Google Scholar and ProQuest using the keywords, “nurses research knowledge, skills, attitude, research utilization”, “hospital nurses evidence-based practice competency”, and “nurses belief in research application”. The articles were further evaluated based on the following criteria: (1) published from year 2010 to 2015, (2) empirical studies, theses and dissertations, conference proceedings on research abstracts, (3) professional lectures, theoretical and conceptual paper/articles in Nursing, position papers in Nursing Research, (4) written in English, (5) referring to clinical nurses/nurses in the hospital and (5) referring to knowledge, skills, attitude of clinical nurses in research.

Information about the existing fellowship programs in Nursing was also gathered. Search from Google and Google Scholar was done using the keywords, “nurse research fellowship program”, “nurse fellowship program design”, “nurse fellowship program model”, and “nurse fellowship program structure”. The program descriptions were evaluated based on the following criteria: (1) published from year 2000 to 2015, (2) website updated from at least year 2010, (3) fellowship program in Research or EBP for nurses, (4) systematic reviews, meta-analyses, scoping reviews, narrative reviews, descriptive studies, program structures, concept papers/articles, program information, program websites, brochures or editorial reviews, and (5) written in English. These were further screened based on the criteria: (1) that they should include at least one of the following in the description/abstract: (a) fellowship program in nursing or allied health, (b) clinical fellowship program, (c) research fellowship program; (2) there should be a description/content of the fellowship program, and specific area of specialty of the fellowship program. Exclusion criteria were: (a) residency program in nursing, (b) post-doctoral training, (c) post-graduate training/general training program, (d) transition training of newly
Identifying training needs in research and EBP. The investigator used the results of the previous stage to create items for a Training Needs Analysis (TNA) survey questionnaire on staff nurses' training needs in research and EBP. The researcher-made questionnaire consisted of 29 7-point Likert scaled items that evaluate (a) how important each research-related activity is to the successful performance of their job as a nurse, and (b) how well they consider themselves currently able to perform each activity. The respondents were conveniently selected in two private tertiary medical centers in the National Capital Region and Pampanga. Follow-up was done after one week of distribution. Return of completed and stapled survey questionnaire implied the consent of the respondents for the study. The respondents' ratings on the level of importance and current performance of each activity were...
Identifying core competencies of CNR fellows. The experts' opinions and consensus on the proposed core competencies were gathered through a Normative Delphi Survey. Through snowball sampling, members of an expert panel were sought and invited through e-mail. Criteria for panel membership included: (1) clinical researcher, and (2) with leadership role in a reputable organization's clinical research program. The Delphi technique via funnel decision making approach was done based on the model of Falzarano and Pinto Zipp (2013). It consisted of (1) the development of the Delphi survey tool derived from the result of the TNA in research and EBP, (2) invitation of expert panel members based on panel criteria, (3) sending of survey to gather panel members' ratings and responses, and (4) retrieving responses, analyzing, revising and sending of results to panel members until consensus is met.

Identifying tasks of CNR fellows for the successful performance of core competencies. The CNR fellows' core competencies that were developed in the previous phase were forwarded to this phase. Through snowball sampling, members of an expert panel were sought and invited through e-mail. Criteria for panel membership included: (1) nurse with leadership role in a healthcare organization, and (2) significant experience and contribution to nursing leadership and management, training, and/or clinical nursing practice. Those who agreed to participate were initially asked to identify the important tasks that the CNR fellows must perform in each core competency that would benefit clinical practice. Subsequently, the Delphi Technique Funnel Decision-Making Model of Falzarano and Pinto Zipp (2013) was used to achieve consensus on the proposed tasks.

Identifying the functional competencies and aligning the tasks needed to be performed by CNR Fellows in each training level. Functional competencies in each training level were developed. Benner's (1982) framework was used in stating functional competencies in the Beginner, Intermediate and Advanced Levels. The tasks identified from the previous phase were arranged in a matrix display according to a specific training level (beginner, intermediate or advanced). Benner's Level I (Novice) was used as basis for grouping competencies in the Beginner Level of the CNR Fellowship; Benner's Level II (Advanced Beginner) was used as basis for grouping competencies in the Intermediate Level; Benner's Level III (Competent) was used as basis for grouping competencies in the Advanced Level.

Describing Potential Nurse Fellows' Reactions to the Program and their Preferred Ways of Learning each CNR Competency. Potential nurse fellows were invited and scheduled for focus group discussions (FGD). They were identified by posting an online survey poll in a Facebook group of staff nurses who conduct research, and conducting survey among nurse trainees in a tertiary medical center in Quezon City. They were given invitation letters for research participation that contained the purpose of the study, reasons for eligibility, voluntariness of participation, research procedure and their consent for research participation, and were distributed personally to all potential participants. After one week, those who provided signed consent forms were scheduled for FGDs based on their schedule of availability. For every FGD, the minimum number of participants was set to three (Carlsen & Glenton, 2011), while the maximum was 10. Recruitment of participants was continued until data saturation was attained. Separate FGDs were scheduled for staff nurses and nurse trainees. All FGDs were conducted in a small conference room within a hospital setting. Discussions were voice-recorded. A coding system was used to maintain anonymity of participants' identity. Main questions included: “Do you think you could have learned research and evidence-based practice even better?”, “What competencies do you think you need to: (1) learn first, and (2) learn intensively?”, and “How do you prefer to learn competencies in research and evidence-based practice?”

Data Analysis. Categorical analysis was done in analyzing qualitative data. This included the analysis of the needed competencies of clinical nurses in research and EBP based from existing documents, literature and online sources, as well as the potential nurse fellows' reactions to the program and their preferred way of learning the competencies.

In the TNA, data were analyzed through IBM SPSS Statistics version 20. Reliability of the survey items (importance scale and practice scale) was tested through Cronbach's alpha. Descriptive statistics (mean, SD) was used to describe the respondents' overall perceived importance of the identified competencies to their job as a nurse (importance score) and their self-evaluation on how well they currently perform them (performance score). The difference between an item's performance score and importance score represented the respondents' training need for that item. The larger the mean difference in scores, the greater the training need was. When the items were rank-ordered according to their mean differences in scores, the items that are equal to or above the mid-value were considered as training priorities for research and EBP.

The evaluations of items in the Normative Delphi were based on the following criteria: (1) importance of the proposed competency in the training of CNR fellows, (2) clarity of meaning of each competency, and (3) appropriateness of words and of the statement as a proposed competency in the CNR fellowship program. The results were returned to the panel members after every round to give them opportunity to revise/modify their opinions based on the group's responses. Those with outlying values for particular items were asked via e-mail to explain their responses. Percent agreement was used as definition of consensus (Diamond et al., 2014). A 75% agreement from the panel was used as basis for the items to be retained as competencies to be developed/acquired in the program, while
75% disagreement from the panel was used as basis for removing them from the program (similar to Austin et al., 2013; Diamond et al., 2014; Pearl, 2016; Rahaghi et al., 2016).

The evaluation of proposed tasks was based on the following criteria: (1) importance of the task in benefiting clinical practice, and (2) appropriateness of the statement as a task under each competency. The process and scoring system for consensus building was similar to the Normative Delphi survey.

Qualitative development and evaluation of the functional competencies and tasks in each training level were done through matrix analysis. Through audit trails, an independent (external) evaluator was asked to evaluate the fit of statements for each level.

For every question in the FGDs, the responses of the participants were grouped into categories. The data were analyzed according to the question that the investigator (as FGD facilitator) asked during the sessions. A research assistant was hired to help the investigator in documenting key observations on the participants. These notes were also used during analysis.

Results

Competencies needed by clinical nurses in research and EBP. There were 29 specific competencies that were found to be needed by clinical nurses when conducting research and evidence-based practice. They were grouped into 11 main categories: (1) identifying researchable clinical problem; (2) reviewing the literature and appraising of evidence; (3) use of models; (4) planning for methodology; (5) research management; (6) finding interventions; (7) adherence to ethical and scientific technical guidelines; (8) financial planning; (9) expert guidance; (10) measurement and evaluation; and (11) knowledge transfer and utilization. The 29 competencies served as items that were used for the Training Needs Analysis.

Training needs of clinical nurses in research and EBP. Out of 446 respondents who answered the survey, majority came from hospital 1 (82.5%) and were from the general nursing care units (50%). Majority were female (n=290, 65%). The mean age of the respondents was 25 years old (SD=6.6) (Table 1).

Some of the competencies that showed largest score gaps in the TNA and would need to be prioritized for training included investigating new ways to improve practice by reviewing research reports, practice data and practice guidelines (M= 1.45); planning and conducting research according to ethical guidelines (M=1.43); testing recommendations for practice through small scale pilot implementation (M= 1.38); gathering clinical data using various methods (M= 1.36); and drafting a conceptualized research project (M= 1.35). These items with largest score gaps served as initial competency statements for expert evaluation in the next phase. The high value of Cronbach’s alpha (0.983 for importance scale; 0.989 for practice scale) suggested redundancies. Some of the items were merged since they pertained to similar activities that can be grouped. There were 13 proposed competencies that were forwarded to the expert evaluation.

Table 1. Respondents’ Demographic Profile (n= 446)

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Hospital</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-22</td>
<td>67</td>
<td>15.02</td>
<td>Hospital 1</td>
<td>368</td>
<td>82.5</td>
</tr>
<tr>
<td>23-25</td>
<td>185</td>
<td>41.48</td>
<td>Hospital 2</td>
<td>78</td>
<td>17.5</td>
</tr>
<tr>
<td>26-28</td>
<td>107</td>
<td>23.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29-31</td>
<td>41</td>
<td>9.19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32-34</td>
<td>13</td>
<td>2.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-37</td>
<td>3</td>
<td>0.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38-40</td>
<td>2</td>
<td>0.45</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&gt;40</td>
<td>7</td>
<td>1.57</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No response</td>
<td>21</td>
<td>4.71</td>
<td></td>
<td></td>
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<table>
<thead>
<tr>
<th>Years of Experience</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;1 year</td>
<td>180</td>
<td>40.36</td>
</tr>
<tr>
<td>1-2 years</td>
<td>125</td>
<td>28.03</td>
</tr>
<tr>
<td>3-4 years</td>
<td>89</td>
<td>19.96</td>
</tr>
<tr>
<td>5-6 years</td>
<td>17</td>
<td>3.81</td>
</tr>
<tr>
<td>7-8 years</td>
<td>19</td>
<td>4.26</td>
</tr>
<tr>
<td>9-10 years</td>
<td>10</td>
<td>2.24</td>
</tr>
<tr>
<td>&gt;10 years</td>
<td>5</td>
<td>1.12</td>
</tr>
<tr>
<td>No response</td>
<td>1</td>
<td>0.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area of Assignment</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Nursing Unit</td>
<td>223</td>
<td>50.00</td>
</tr>
<tr>
<td>Specialized Nursing Unit</td>
<td>212</td>
<td>47.53</td>
</tr>
<tr>
<td>No response</td>
<td>11</td>
<td>2.47</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Educational background</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSN Graduate</td>
<td>394</td>
<td>88.34</td>
</tr>
<tr>
<td>With Master’s units</td>
<td>27</td>
<td>6.05</td>
</tr>
<tr>
<td>With Master’s degree</td>
<td>5</td>
<td>1.12</td>
</tr>
<tr>
<td>With PhD units</td>
<td>1</td>
<td>0.22</td>
</tr>
<tr>
<td>No response</td>
<td>19</td>
<td>4.26</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>290</td>
<td>65.02</td>
</tr>
<tr>
<td>Male</td>
<td>149</td>
<td>33.41</td>
</tr>
<tr>
<td>No response</td>
<td>7</td>
<td>1.57</td>
</tr>
</tbody>
</table>
CNR fellow’s core competencies. Seven research experts participated in the Delphi Survey. Majority of the panel members were registered nurses; there were two medical doctors. Consensus was met after three rounds, with two to three weeks to complete each round. The nine core competencies of a CNR fellow include: 1) develops researchable clinical questions based on identified gaps in knowledge and clinical practice; 2) critically appraises gathered research evidence from the literature; 3) ensures a study protocol’s adherence to scientific, technical and ethical considerations; 4) identifies and applies for possible funding sources for research study; 5) initiates and applies innovative strategies and evidence-based practice models that build and promote research capacity; 6) develops and implements a research study with a concerned interdisciplinary team; 7) gathers and analyzes data to continuously improve clinical practice and healthcare outcomes; 8) disseminates research findings to diverse audiences using multiple modalities; and 9) creates opportunities for the practice of research to impact nursing practice.

Tasks of CNR fellows for the successful performance of core competencies that would benefit clinical practice. A panel of experts comprised of 6 healthcare and nursing leaders and experts in clinical practice identified and evaluated task statements that need to be performed by CNR fellows. After 4 Delphi rounds, 80 initial task statements were reduced to 70. Most of the task statements were related to competencies in gathering and analyzing data, critical appraisal of evidence from literature, and disseminating evidence to diverse audiences.

Functional competencies and tasks needed to be performed in each training level. Table 2 shows a sample of the alignment of developed functional competencies in each level, along with the distribution of tasks that would be done by the fellow to achieve each competency.

Potential nurse fellows’ reactions and preferred ways of learning each competency. There were four FGDs conducted among 20 participants. Three of these were conducted among nurse trainees, while one focus group was comprised of staff nurses, who were currently actively involved in research-related activities provided by a research department of a tertiary medical center.

Table 2. Sample Tasks and Functional Competencies in Each Level of Training

<table>
<thead>
<tr>
<th>Core Competency</th>
<th>Level of Training</th>
<th>Functional Competencies</th>
<th>Tasks of CNR Fellows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develops researchable clinical questions based on identified gaps in knowledge and questions in clinical practice.</td>
<td>Beginner</td>
<td>Articulates and distinguishes components of a researchable question. Identifies sources of questions from the gaps in clinical practice.</td>
<td>Investigate for sources of problems. Perform classroom exercises and didactics in developing sample clinical questions/PICO based on experience.</td>
</tr>
<tr>
<td></td>
<td>Intermediate</td>
<td>Constructs clinical questions based on identified gaps. Revises clinical questions based on appropriateness and researchability.</td>
<td>Formulate researchable questions based on current clinical practices that can be potential cause of problems/issues. Discuss with bedside nurses regarding the identified gaps in knowledge and questions in clinical practice. Communicate knowledge gaps with nurse managers. Meet regularly with mentors to clarify and define clinical questions and to seek guidance. Determine evidence-based practices through review of articles, current trends and issues in nursing practice that are applicable in the Philippine Health Care Setting.</td>
</tr>
<tr>
<td></td>
<td>Advanced</td>
<td>Decides on priority areas for clinical research.</td>
<td></td>
</tr>
</tbody>
</table>
Tworen main categories were found on participants' suggestions on how they could understand research better: (1) reviewing fundamentals of research, and (2) understanding of the research process. Fundamentals of research can be taught through lectures. Suggestions on understanding the research process included having field observations in clinical research, conducting empirical investigation, and actual data collection with prolonged immersion. Having someone who would serve as a mentor or a guide while conducting research may help in making them become more engaged and informed about the rationale behind each step in the research process. The participants verbalized their main expectations in the program, specifically, (1) enrichment of the basic research process, (2) clinical immersion, and (3) generation of output. Among the core competencies, most participants believed that 'developing researchable clinical questions' need to be learned first, while 'critically appraising research evidence from literature' may need to be more intensified. This is the part of the research process that most of the participants thought they have difficulty of doing. One participant declared, “Based on my experience, nahihirapan po talaga ako sa literature kasi sobrang parang (time-) consuming din siya. (paused, thinking) kasi ang literature hahanap ka ng ibang ideas sa ibang resources. Yung mga makukuha mo na idea from that ay ia-align mo dun sa kung ano mang study ang ginagawa mo. And yun nga po yung mga different resources na may different point of views. Paghahaluin mo pa yung mga yun until makabuo ka (Participant 1, FGD 2, 8/18/16)."

There were seven main categories of preferred ways of learning: (1) active performance, (2) reflective, (3) sequential, (4) cooperative, (6) guided, (7) personalized, and (8) the use of technology. Guided learning refers to activities that promote prescribed, disciplined training/mentorship that is given by an authority figure, who provides feedback regarding the fellow's learning progress. Under the mentorship of a research expert, they could learn specific skills in developing researchable clinical questions, technical writing, data presentation and data analysis. Lectures can be complemented by other methods such as using media and audio-visual tools, case examples, and expert consultations. Activities that promote teamwork and discussions are perceived to intensify learning during actual data collection and analysis.

Figure 2 shows the framework for the CNR Fellowship. The arrows show the specific tasks in each functional competency for each learning phase. The broken lines show interrelationship of the tasks among other tasks either within the same functional competency, same phase or different phase. Some tasks need to be successfully done from one to another phase in order to move on to the next phase of learning.

Discussion

The fellowship program can be divided into three main levels. The gradual development of core competencies is integrated in all levels of training. Teaching strategies should be aligned with the definitions of the training levels, the tasks and the preferred learning activities. After learning the basics, they need to learn more intensively on competencies that would help them become more capable of contributing to clinical practice through research. In the beginner level, the fellows will be trained to understand the basic concepts of clinical research, and to familiarize themselves with the organizational context (e.g. clinical setting as the learning environment) where they can practice. Mastery of the research process will be necessary to appreciate evidence-based practice, while familiarization of the context will be needed to identify resources needed in the practice phase. In-class strategies include writing sessions, presenting a sample research paper, and case examples for identifying researchable questions and roles of different disciplines in research protocols. Guide questions, which are given for in-class activities or assignments, could help them understand the concepts through personal discovery and group work. In the intermediate level, they will conduct actual clinical research with the guidance of a mentor and support of a group/team. They would work with assigned nursing units in the development and implementation of research projects, in accordance with institutional research policy. Strategies for advanced level fellows include letting them attend regular meetings of nursing units and the Nursing Service to identify actual problems that need evidence-based decisions or interventions. In the advanced level, they will monitor the outcomes of their EBP projects, and disseminate the results through publication or presentation to research fora. They will be asked for their recommendations when updating procedures, and implementing organizational strategies to improve clinical practice. They can also guide staff nurses in utilizing reviewed literature and research findings for patient care.

The competencies, “develops and implements a research study with a concerned interdisciplinary team” and “creates opportunities for the practice of research to impact nursing practice” are considered contributions of this research. The focus of the program will be on the identification of best current evidence and testing which ones would work effectively in bedside care and in nursing management. The program’s intention is to impart competencies that can be used to utilize research in practice and influence others in attaining evidence-based practice.
The program may serve as a training ground for future staff who may be hired to support the current nursing workforce. It may be initially opened externally to non-staff nurses who are available for a full-time fellowship program. Positions such as nurse researcher or nurse scientist may be created so that the responsibilities and tasks will be commensurate with competencies that are developed in the program.

Future studies may be conducted to test implementation of the framework in a supportive environment where adequate resources/logistics or clinical research are available. The CNR Fellowship framework may be implemented in partnership with an accredited professional organization or interest group (e.g., Philippine Nursing Research Society, Inc.). Partnerships with graduate schools of nursing or research department of the hospital may be necessary to identify experts who would serve as research mentors.

Limitations

During the review of program outcomes/objectives among CPD providers in nursing, some program outcomes/objectives were not available electronically and some websites were not updated. There was limited availability and accessibility of information through internet search on research-related program outcomes/objectives of CPD Providers in Nursing and graduate schools of Nursing. There was minimal response rate among higher educational institutions when requested for copy of program descriptions/outcomes via business reply.
Conclusion

The CNR Fellowship Program framework contains contextually-relevant core competencies in clinical nursing research that are needed to augment basic nursing research education and to benefit clinical nursing practice.

References


About the Author

Jonathan D. Cura, RN, PhD, obtained his Doctor of Philosophy in Nursing Education from Holy Angel University, Angeles City. He is a graduate of BS Nursing at Holy Angel University (HAU) and MS Nursing at UERMMMCI. He also had units in MS Genetic Counseling at the University of the Philippines- Manila. He is a Nursing Research Manager and OIC-Department Manager of Nursing Research, Systems Management and Accreditation (NRSMA) Department at St. Luke’s Medical Center- Quezon City. He is a faculty member in the graduate schools of HAU and UERMMMCI. He is a member of the Philippine Nurses Association, Inc. and Philippine Nursing Research Society, Inc.

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Staff Nurses’ Competency and Patients’ Satisfaction in an Accredited Maternity Hospital: Basis for Enhancement Program

Abstract

This paper centers on the staff nurses’ level of competency and patients’ level of satisfaction. Descriptive comparative design was utilized covering 32 staff nurses and 37 maternity patients from an accredited government maternity hospital. Purposive sampling was used to select the respondents. The questionnaires that were employed came from the Department of Health’s Philippine Nurse Certification Program Self Assessment Tool for Level 3 Certification in Maternal and Child Nursing. The profile of staff nurses includes gender, length of experience, and educational attainment. On the other hand, gravidity, parity, and age are the patients’ profile. Informed consent was given to all respondents. Statistical tools that were used included: frequency and percentage, mean, standard deviation, independent sample t-Test, one way analysis of variance, and Pearson’s correlation. The result concluded that there was no significant difference in the staff nurses’ level of competency and patients’ level of satisfaction when their profiles were considered. Moreover, it can be elucidated that there was no significant relationship between the level of competency and level of satisfaction. It can be interpreted that staff nurses are highly competent and patients are highly satisfied in terms of Client Care, Management and Leadership, and Research. However, there were statements with moderately competent results namely assess degree of laceration and actively participates in the collection of data research process to improve Maternal and Child Nursing practice in work setting with a mean of 2.50 and 2.28 respectively. The researcher suggests enhancement program in the form of the following trainings: internal external suturing in coordination with Association of Nursing Service Administrators of the Philippines and Research Process in coordination with Philippine Nursing Research Society.

Keywords: Competency, Level of Satisfaction, Staff Nurse

Introduction

Nowadays, maternity patients are searching for health care workers like staff nurses with the highest degree of competency. According to Manchester (2008), ensuring the professional competency of an entire clinical staff is
essential to the successful delivery of evidence-based, safe, effective, respectful, and appropriate care. These efforts have the potential to improve quality outcome measures and enhance patient satisfaction. Therefore, patients seek for the highest possible maternity care in order to guarantee their well being and the health of their newborns.

In September 2013 issue of Official Gazette, the Department of Health Philippines launched its certification program for nurses in eleven specialty areas and one of them is maternal and child nursing. According to the Department of Health, it is a key strategy in order to enhance the competencies of the country’s nurses who play crucial roles in the attainment of universal health care. The program is a system to certify nurses based on a set of standard competencies in both basic and specialty areas. However, patient satisfaction plays an important indicator of the competency of nurses.

The relationship between nurses and patients has been shown to be one of the most important aspects of nursing that influence patient satisfaction. The staff nurses’ competency and satisfaction of the patients are related to each other. Measuring if there is a relationship between them is beneficial to enhance ideas that can affect the nursing education, nursing practice, and nursing research.

Methodology

The research design was quantitative specifically descriptive comparative. There were two or more variables compared which are the staff nurses’ level of competency and patients’ level of satisfaction on staff nurses’ performance to their respective profile variables. Staff nurses and patients were chosen as the samples through purposive sampling in order to represent the competency and satisfaction respectively in the accredited maternity hospital. The respondents were selected based on their availability and most importantly, the set criteria.

Purposively sampling was used because of the set criteria. The staff nurse respondents must have at least six (6) months of continuous experience in the Obstetrics and Gynecology Ward that is directly involved in giving such maternity services, and have experience in normal spontaneous deliveries. In addition, they work on shifting of assigned maternity patients, and some were occupied in fulfilling their nursing roles. Moreover, profile of the staff nurse respondents are the following: gender, length of experience, and educational attainment. On the other note, it is difficult to find maternity patient respondents because of the following: case of normal spontaneous delivery, non-communicable, and a non-high risk delivery. The maternity patient respondents must have at least four prenatal check-up (regardless of trimester), undergone labor, and give birth in the accredited maternity hospital. Prenatal check-up is a tough criterion since the hospital is a referral facility for maternity cases wherein most of their patients came from other health care institutions. Thus, purposive sampling was employed. Furthermore, profiles of the maternity patient respondents are the following: gravidity, parity, and age. And lastly, informed consent was explained and given to all respondents.

The research setting is a government accredited maternity hospital which focuses on obstetrics, gynecology, and child care. It is a research and training hospital where the questionnaires were already tested. The researcher provided letter of intent. In addition, the researcher was scheduled by the nurses for the hospital duty in order to get the data needed.

The data gathered made use of validated adapted questionnaires from the Department of Health Nurse Certification Program specifically on Maternal and Child Nursing. The questions were grouped into three namely: Client Care, Management, Leadership, and Research. These were clustered into three domains of the core competencies conceptual framework based on the Professional Regulation Commission – Board of Nursing Resolution June 2012. A Filipino version of the questionnaire was used by maternity patient respondents. The researcher interviewed and welcomed any clarifications from them like the staff nurse respondents’ research competency. Hence, maternity patient respondents were not only aware of the facility and its services, but also of the content of the questionnaire.

Interval type of data was derived from the respondents. The actual responses were recorded in the Statistical Package for Social Sciences version 19. Coding system was used by the researcher. After the data was encoded, statement of the problem was utilized to examine the data. It was analyzed using following statistical treatments of data: frequency and percentage, mean, and standard deviation. In addition, independent sample t-Test was used to compare the staff nurse respondents’ level of competency when dealing with their gender. On the other hand, one way analysis of variance (ANOVA) was employed to compare the staff nurse respondents’ level of competency when concerning with their profile such as length of experience and educational attainment. Another way by which ANOVA was also utilized by comparing the maternity patient respondents’ level of satisfaction when dealing with their profiles such as gravidity, parity, and age. And lastly, Pearson’s correlation was employed to infer the relationship between the staff nurse respondents’ level of competency and maternity patient respondents’ level of satisfaction. Furthermore, the null hypothesis is accepted if the significant value was greater or equal to 0.05 level of significant. If not it would be rejected.
Results

Profile of the staff nurse respondents in an accredited maternity hospital in terms of gender, length of experience, and educational attainment

Out of the 32 staff nurses, 13 are males and 19 are females. In terms of length of experience, 10 of the staff nurses have rendered service for more than 4 years. 22 of the staff nurses have an educational attainment of Bachelor’s degree.

Profile of the patient respondents in an accredited maternity hospital in terms of gravidity, parity, and age

Twenty-five of the maternity patients have 1–3 gravidity and parity. Meanwhile, most of the maternity patients area aged at around 18 to 30 years old.

Self-assessed level of competency of the staff nurse respondents in terms of client care, management and leadership, and research

Most of the statements have an interpretation of highly competent. The mean of Client Care which is 2.81 has the highest mean among the three level of competencies. Meanwhile, Management and Leadership got the second highest mean of 2.65. And lastly, Research had the lowest mean of 2.56. The three levels have an adjectival description of always and interpretation of highly competent. Notable statements with an interpretation of moderately competent came from statements number 7 and 23. Statement number 7 which pertains to the assessment of the degree of laceration got a mean of 2.50. Statement number 23 which tackles actively participates in the collection of data research process to improve Maternal and Child Nursing practice in work setting received the lowest mean of 2.28. Overall, the staff nurses' level of competency had a composite mean of 2.67 with an adjectival description of always and interpretation of highly competent.

<table>
<thead>
<tr>
<th>Statements</th>
<th>Mean</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Secure complete and accurate health status of a pregnant woman.</td>
<td>2.88</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>2. Identify standard diagnostic procedure.</td>
<td>2.88</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>3. Identify the nursing care needed for a pregnant woman.</td>
<td>3.00</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>4. Administer safe medication to pregnant woman independently.</td>
<td>2.97</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>5. Monitor both mother and fetus during labor.</td>
<td>2.78</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>6. Assist independently in handling normal delivery.</td>
<td>2.75</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>7. Assess degree of laceration.</td>
<td>2.50</td>
<td>Moderately Competent</td>
</tr>
<tr>
<td>8. Provide routine newborn care and identify newborn problems at birth.</td>
<td>2.91</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>9. Sustaining lactation with the mother.</td>
<td>2.91</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>10. Monitor mother’s condition during postpartum period.</td>
<td>2.97</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>11. Evaluate the effectness of nursing care utilized.</td>
<td>2.78</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>12. Discuss and present health teachings to a client according to her needs.</td>
<td>2.81</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>13. Provide correct information to client and their family.</td>
<td>2.97</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>14. Recognizes lapses on patient's rights.</td>
<td>2.56</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>15. Maintains integrity, confidentiality, accuracy and records of nursing care.</td>
<td>2.94</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>16. Knowledge of the nursing standards and policies relevant to the clinical setting.</td>
<td>2.72</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>17. Assess activities that will result in continuing professional and personal development.</td>
<td>2.53</td>
<td>Highly Competent</td>
</tr>
<tr>
<td>18. Demonstrate professionalism toward standards of care and established values governing the ethics of nurses.</td>
<td>2.81</td>
<td>Highly Competent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Management and Leadership</th>
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<tbody>
<tr>
<td>19. Identifies appropriate findings with Health Team.</td>
</tr>
<tr>
<td>20. Uses appropriate and reasonable resources in the work setting for patient safety and quality delivery of health care.</td>
</tr>
<tr>
<td>21. Demonstrate leadership skills in the development activities concerning MCN practice.</td>
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<tr>
<th>Research</th>
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<tr>
<td>22. Recognizes the needs for improvement on the standards of patient’s care.</td>
</tr>
<tr>
<td>23. Actively participates in the collection of data research process to improve Maternal and Child Nursing practice in work setting.</td>
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<table>
<thead>
<tr>
<th>Composite Mean</th>
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<tbody>
<tr>
<td>2.67</td>
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Legend: 2.51 – 3.00 Always / Highly Competent | 1.51 – 2.50 Sometimes / Moderately Competent | 1.00 – 1.50 Rarely / Not Competent
Level of satisfaction of patient respondents on staff nurses’ performance in terms of client care, management, and leadership, and research

In terms of the level of satisfaction, the mean of Management and Leadership received the highest mean of 2.77. Next is Client Care which received the mean of 2.74. And lastly is Research, which has the lowest mean of 2.72. The three levels have the same adjectival description of always and interpretation of highly satisfied. Overall, the patients’ level of satisfaction has a mean of 2.74 with an adjectival description of always and interpretation of highly satisfied. In sum, the patients have same level of satisfaction on staff nurses’ performance which is highly satisfied.

Is there a significant difference in the self-assessed level of competency of staff nurse respondents when their profile variables are considered as test factors?

Gender has an overall t-value of 0.00 and sig value of 0.95. On the other hand, length of experience has an overall F-value of 0.18 and sig value of 0.95. And lastly, educational attainment has an overall F-value of 0.30 and sig value of 0.74. There is no significant difference in the self-assessed level of competency of the staff nurses when gender, length of experience, and educational attainment are considered.

Difference in the level of satisfaction of patient respondents on staff nurses’ performance when their profile variables are considered as test factors

Both gravidity and parity has an overall F-value of 0.64 and sig value of 0.53. And lastly, Age has the overall F-value of 0.58 and sig value of 0.57. The interpretation after the sig value is entirely insignificant. There is no significant difference in the patients’ level of satisfaction on staff nurses’ performance when gravidity, parity, and age are considered.

Relationship between the staff nurses’ level of competency and level of satisfaction of patient respondents on staff nurses’ performance in an accredited maternity hospital

The overall computed r of Client Care, Management, and Leadership, and Research is 0.02 with sig value of 0.92 and this results into the interpretation of not significant. Thus, there is no significant relationship between the staff nurses’ level of competency and patients’ level of satisfaction on staff nurses’ performance.

Proposed activities for the enhancement program

The staff nurses should undergo trainings on the assessment of the degree of laceration and collection of data research process to enhance their knowledge, skills, attitudes, and attributes. The trainings are the following: suturing techniques in coordination with Association of Nursing Service Administrators of the Philippines and collection of data research process in partnership with Philippine Nursing Research Society. The focus of the enhancement program is not only to enhance their competency, but more on the improvement of maternal and child nursing practice. Thus, it anchors the role of nurses in the attainment of millennium development goals regarding maternal health and infant mortality reduction.

Discussion

Majority of the staff nurses are young, finished their Bachelor’s degree in Nursing (BSN), and more than 4 years of hospital experience. The findings about staff nurses affirm the research of Agunod, (2008) in which most staff nurses are on adulthood, female, and Bachelor of Science in Nursing (BSN) graduates. It also verifies the research of De Vera et al, (2014) were majority are young and finished BSN. Meanwhile, most of the patients are young and fertile. It denotes the study of Kapzawn (2006) in which majority of the mothers belonged to the age group of 21 – 30 years. And the study of Soux (2005) that most of the mothers were aged at an average of 26, with a range of 16 – 47 years and with previous childbirth. It can be concluded that most of the patients get pregnant at a young age and already had multiple deliveries.

Staff nurses have the knowledge, skills, and attitude in order to deliver the best possible care towards their patients. They are highly competent. This is supported by the research of Lundeen (2010) in which nurses use their knowledge, experience, and instincts as bridging tools to guide the patient’s journey from the unknown to known via teaching, informing, creating, and collaborating. Furthermore, there are statements that produce moderately competent data. Statement number 7 may indicate that staff nurses are not inclined in assessing the degree of laceration. Since this nursing assessment is more common in labor and delivery area rather than the setting which is the ward. According to Reiss (2005) the presence of the nursing behaviours was most correlated to patients who rated high for their quality of care. The staff nurses, however, know that they may not always practice this kind of nursing behaviour to their patients. On the other hand, statement number 23 may elaborate that staff nurses have modest knowledge, skills, and attitude about research. The accredited maternity hospital must drive its staff nurses in terms of research utilization in maternal and child nursing.

Patients are highly satisfied from the care rendered by the staff nurses from admission up to discharge in the ward. In the study of Moosavisadat et al, (2011) in general, the level of women’s satisfaction with delivery care in the teaching and non-teaching hospitals was acceptable in both hospitals. Satisfaction involves manner of service providers, waiting time for receiving services, observance of privacy and covering during examination, and
hygienic conditions of the ward. The patients have same level of satisfaction on staff nurses’ performance.

The staff nurses’ levels of competency as assessed by them are not significant in terms of gender, length of experience, and educational attainment. This confirms the research of Liva et al. (2012) that there were no significant relationships between the years of experience and nurses’ attitudes toward the importance of vaginal birth. Staff nurses have the same level of competency in terms of Client Care, Leadership and Management and Research. It could also mean that the staff nurses are competent based on their delivery of high quality outcomes through the satisfaction of the patients. According to Thomas (2014) having a competent workforce to provide effective care is crucial to achieve high quality outcomes. On the other hand, patients' level of satisfaction on staff nurses’ performance are not significant in terms of gravidity, parity, and age. This may affirm the research of Wagner, (2009) in which new mothers may express satisfaction in all areas of nursing care throughout hospitalization. In addition, patients are already satisfied in their service. According to Easton (2013) women choosing to deliver at a hospital are satisfied with the care they are receiving.

It can be gleaned that there is a negligible relationship between the self-assessed level of competency of staff nurses and patients' level of satisfaction on staff nurses’ performance. The result negates the study of Ten Haaf (2007) about competencies of nurses correlating with patient satisfaction. However, it may affirm the results that whether the staff nurses are moderately competent or highly competent they will still have highly satisfied patients.

Conclusions and Recommendations

It can be elucidated that there is no significant relationship between the staff nurses’ level of competency and patients' level of satisfaction. However, an enhancement program is recommended for the moderately competent areas recognized by staff nurses. This will be in the form of trainings to enhance their competency such as internal and external suturing in coordination with Association of Nursing Service Administrators of the Philippines and Research Process in coordination with Philippine Nursing Research Society.

It is highly suggested that the questionnaire should be applied to other hospitals with focus on maternal and child nursing. There must be a rigorous sampling technique and additional samples from nurses on other areas like emergency and operating room to generate better outcomes. And finally, that the criteria for maternity patients may be relaxed or explore other variables like ethnicity and social class.

References


About the Author

Maurice Lee B. Santos, DNM, RN received his Bachelor of Science in Nursing at Manila Doctors College and obtained his Master of Arts in Nursing, major in Nursing Service / Education and Doctor in Nursing Management at Trinity University of Asia. He is a Pediatric Nurse at National Children’s Hospital, Philippines. He is also a Phlebotomist. His research interests include: tuberculosis, patient satisfaction, and nursing competency.
Reflections on Nursing Research, Paradigms and Perspective

On paradigms and perspectives in the conduct of nursing research

I never thought of myself other than being a positivist. Throughout my growing years, acquisition of knowledge was based on acceptance of what is seen and taught. I have accepted that facts are facts because they have undergone study and scrutiny and published, therefore, are believable and usable. My learning methodologies were listening, memorizing, storing and remembering concepts that have been transmitted through the years. This was the way to do it, therefore, this is the way I should learn it.

Yet, I have a problem with understanding. Somehow, my intellect just would not accept that I memorize, store, and remember. I have to understand and if I don’t understand an idea, it becomes a difficult concept, one that I would rather not learn at all. This became all the more obvious when I went through Quantitative Research. I simply do not understand the concepts underlying the process of Quantitative Research. It seems easy enough in theory, but once the paper has to be started, somehow, I get nowhere.

It was during the Qualitative Research class that I came across the constructivist paradigm. Reality is relative. It is a philosophy of learning founded on the premise that by reflecting on our experiences, we construct our own understanding of the world we live in (Brooks, 2005). It enlightened me to think that there is such a point of view where we can create our own learning. I do not have to look at reality as it is presented by someone else. I can be free to explore and learn facts based on how I experienced them. I don’t have to be “boxed-in”.

This discovery is in sync with my personal characteristics as well. I am, after all, a contextual person. For every encounter I have had with people, I automatically relate the situation where they are in at the moment. It is an advantage, for it allows me to see things through the eyes of another person. As a nurse, it makes me more sensitive to the needs of the patients as I assess each situation through their perspective. A disadvantage, on the other hand, is when I have problems dealing with the core of policies. For instance, I tend to understand excuses made by students for tardiness or

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1 Graduated BSN from Silliman University and MSN at UERMMC. Worked at Makati Medical Center College and had the honor to be its Dean from 2014-2016. Currently preparing for another adventure in borders beyond the Philippines. Loves to read and write. Research interests include: life experiences of certain demographics, like OFW parents, ICU nurses, among others; and teaching-learning practices that would work best for certain group of learners.
The Colors of Paradigms and Perspectives: Recognizing Complexities, Contentions, and Transitions

The fact that truth exists without question, but where and how to find it remains a challenge. In the course of history, people have been in a continuous quest to discover reality and meaning in existence, which is based on how the world actually is. In the realm of nursing, our scientific exploration has sparked evolution of paradigms and perspectives leading to processes of emerging complexities, contentions, and transitions throughout the previous decades. This paper aims to present my reflection on the development of paradigms and perspectives as a result of this unending academic expedition.

In my seven years of work in the academe, I have always been passionate about human development, whose ultimate aim is to promote competency development that is appropriate and responds to the needs of the society. Working as an instructor in a university also opened up doors of opportunities and great challenges that allowed me to see beyond the world of nursing. Performing university functions together with those working in other disciplines and professionals in various areas of expertise provided rays of enlightenment in terms of commonalities and differences in knowledge. I view this as an opportunity for nursing to flourish given its current status as it seeks more independence in terms of establishing a strong and distinct theoretical foundation. Challenges among nurse scholars has been present for the past decades, but the recognition of these challenges can be the key to future developments that will enable continuous growth of knowledge base amidst the challenges.

Nursing during the early times relied primarily on the fields of medicine and natural sciences. In the succeeding decades, most nurse scholars and nurse scientists have leaned on the positivist paradigm or the natural science model in their attempts to provide credible and acceptable contributions to this enlarging knowledge base. Positivism contends that the process of seeking new information is through the scientific method, and believes in one truth that can be searched best using an objective way (Holloway & Galvin, 2017; Denzin & Lincoln, 2013). The use of positivism in contributing to nursing science continues and is still evident until today. In

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1 Graduated BSN from Lorna Colleges and his MAN from the Union Christian College. He is currently a Faculty member of the Don Mariano Marcos Memorial State University, Institute of Community Health and Allied Medical Sciences; President, Philippine Nursing Research Society, Inc.; and a PhD student at the Saint Louis University School of Nursing.
many scientific gatherings, such as conferences, we often see nurse scholars whose research undertakings follow a positivist's paradigm. This can be especially true for many multidisciplinary colloquia where the natural sciences usually dominate the research stage. It appears that the natural sciences still have a strong influence in research undertakings among nurses. Looking at the current nursing curriculum, much of the theoretical foundations being inculcated, particularly among bachelor's degree students, come from those offered by the natural sciences. The knowledge provided by these disciplines are beneficial and indispensable. However, careful understanding of the relationship of knowledge offered by these disciplines and nursing should be considered. This yields better directions in terms of augmenting the science and art of nursing (Whittemore, 1999).

On the other hand, several scholars presented arguments that question the propriety and adequacy of positivism to nursing. It has been criticized in its attempt to provide an objective explanation of a social world – a world made up of subjective interpretations and context (Holloway & Galvin, 2017; Munhall, 2012). This makes human science an area of concern. Cody & Mitchell (2002) presented the lack of growth in terms of knowledge in the human sciences that “imperils nursing as a practice of being with, witnessing, and co-creating quality of life, lived by nurses” (p. 4). I see this as an important issue that necessitates continued attention among scholars. In the practice of our profession, interactions happen between us and our clientele, where we both address issues of health which are values based on the context of our clientele. This proves that our practice is basically grounded on human science that requires appreciation, recognition and utilization of relativistic ontology to capture the indispensable truths (Giorgi, 2005; Silva & Rothhart, 1984). It creates relevant nursing frameworks that are multi-dimensional and flexible to human needs that are context-bound and never static.

The overwhelming complexities in the search for truth and knowledge, particularly in nursing, precipitated continuous changes and evolution of ontological, epistemological, methodological, and axial perspectives. With the advent of criticisms against positivism, several other paradigms emerged, such as postpositivism, critical theory, constructivism, and participatory (Denzin & Lincoln, 2013). These paradigms show their flexibilities. Moreover, they provide context-dependent approaches to research undertakings; thus, enhancing validity of results and acceptance to the scientific arena. Most of the transitions and emergence of these paradigms are results of a socio-political stance, considered to have come into existence because of appreciating the nature of human sciences.

Perhaps the latest contention was whether methods from the positivist paradigm, which concern quantitative types, and interpretivism, which is mostly qualitative, can be combined in one scientific undertaking known as mixed methods. The focus of paradigms at the time was just to determine how one’s strengths complements the other’s weaknesses. As these paradigms become more and more mature, flexible, and modern, I see this to be no longer a question of which paradigm is more acceptable, but which of the paradigms would best fit the philosophical questions that need answering.

Asking questions has always been part of our lives. It is human nature that finds meaning in existence throughout existence. The great evolution of paradigms and perspectives exists throughout time. Nursing as both science and art is a world full of complexities that involve a network of relationships between disciplines of humanities and natural sciences. Its quest for having an exhaustive, all-inclusive, and distinct knowledge base brought contentions between several intellects. These academic exchanges of arguments and positions have facilitated dramatic ontological and epistemological transitions that shaped today’s nursing paradigms.

The trajectory of finding truth (or several truths) persists and may continue to persist through time. The very nature of knowledge generation and research must not focus on discovering the truth, but with how the findings become the key to current problems and their acceptability in addressing issues. Conceivably, this is how the intricate system of truth really is. That the complexities of human existence in addition to elaborate factors of time, context, and each person’s distinctive nature, bring multiple dimensions of paradigms. Every dimension exhibits a distinguishing color, and that together, they make up the colors of nursing paradigms – vibrant magnum opus that symbolize truth, meaning, reality, and existence.

References


A Nursing Perspective on Climate Change and Planetary Health

Introduction

In the next thirty years, the World Health Organization (2016) estimates 250,000 deaths per year attributable to climate change. Epidemiologic studies suggest the climate change increases the risk for cardiovascular and respiratory disease, injuries, vector-borne diseases, malnutrition and mental health problems (Song et al., 2017; WHO, 2015). These links between environment and health have long been explored. Florence Nightingale, the matriarch of modern nursing, believed in the importance of clean air and water to sustain basic health needs. Though the current understanding of climate change and health calls for a multi-sectoral approach, nursing science offers a significant role in the discourse and areas of action.

Human Activity, Climate Change, and Planetary Health

Scientists claim that human activity has contributed to climate change (Whitmee et al., 2015). Population growth meant an increasing demand for food, energy, and water. Our consumption patterns in terms of resulting goods and services released significant amounts of carbon dioxide and other greenhouse gases into the atmosphere causing global warming. This led to the melting of sea ice, deterioration of air quality, sea level rise, and extreme weather events, which impact health. The profound environmental changes have influenced scientists to name this geological period as the Anthropocene (Whitmee, et al., 2015; WHO, 2015). These developments have elevated the discourse beyond global health and into an emerging concept known as planetary health. The Rockefeller Foundation-Lancet Planetary Health Commission defines planetary health as “the health of human civilizations and the natural ecosystems where it depends”. It takes into account the wider perspective of existing global health issues (e.g. population growth, non communicable diseases, infectious diseases, social determinants of health) vis-à-vis the planet’s ecosystems and life-supporting mechanisms.

Nurses’ Role in Climate Smart Health Systems and Building Community Resilience

Nurses play a role in addressing planetary health issues. The health sector is also a contributor to greenhouse gas emission from the energy needed to run health facilities, transport patients, equipment and pharmaceutical products, hospital waste,
health care procedures, among many others (Eckelman & Sherman, 2016). Climate-smart health systems are characterized by engaging in environment-friendly operations and having the capacity to withstand extreme weather events and disasters (World Bank, 2017). Nurses are significant contributors to the human resources for health needed for climate-smart health systems, especially during extreme weather events and in disaster risk management in general. There is a potential for advocating for healthy built environments, efficient use of supplies and resources, waste minimization and water and energy conservation in health facilities (Adlong & Dietsch, 2015; Goodman, 2013).

Nurses also help in building resilient communities. Alcayna et al. (2016) recommends looking at resilience at a community and systems level as it relates to hazards and vulnerability-risk assessment, early warning systems and evacuation, risk transfer mechanisms, capacity building for disaster preparedness, response and relief operations, rehabilitation, recovery and reconstruction. There is the potential to build community competence in terms of increasing public awareness on consumption patterns and its contribution to greenhouse gas emissions, communicating risk, health impacts and potential courses of action.

**Planetary Health: An Opportunity for Collaboration**

Understanding the macro-level forces (e.g., economics, politics, trade and environment protection agreements), planetary health is an excellent platform for collaboration among the different sectors within and across countries. The climate science and the health science societies must work closely to develop key messages on planetary health issues that influence behavior change in the general public. Research collaboration is needed to examine vulnerability, resilience, and effective health adaptation strategies (Hosking & Lendrum, 2012). More importantly, it is essential to recognize that humanity has only one planet and it has finite resources. Nurses offer the huge potential to take the lead in pushing forward policies for a more sustainable future.

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absence. I have a tendency to accept reasons given by fellow clinical instructors on non-submission of grades because I understand the current dilemma they may be going through.

So, what’s next? Definitely, I will be more assertive in my creativeness. I should learn not to fear “out-of-the-box” thinking. Most of the time, I do not explore new ways of thinking and doing out of fear of rejection. For starters, I have to improve on my teaching strategies with the realization that some of my students may be constructivists as well.

Surely, I will have a long way to go before I can really put to practice my newly discovered paradigm. Yet having made this discovery has started me already on that journey towards constructivism.

Surely, I will have a long way to go before I can really put to practice my newly discovered paradigm. Yet having made this discovery has started me already on that journey towards constructivism.

**References**


Since its incorporation in 1922, the Philippine Nurses Association (PNA) has been an “outlet” for all Filipino nurses in addressing diverse concerns from their work places to the pressing matters affecting their rights as Filipino citizens. In 1951, PNA sponsored HB 1097 to standardize nurses’ salary and to instate automatic increase for those serving in the government. It was during the same year when the late Anastacia Giron Tupas, the founder of PNA was given the Presidential Medal of Merit due to her key role in lobbying for the standardization of nursing education. In 1953, PNA sponsored RA 877 to provide a Board of Examiners for nurses and other provisions relative to nursing practice. It was in this same year that the internationally recognized Philippine Journal of Nursing (PJN) was created by PNA. In 2000, PNA held PDOS trainings in partnership with POEA to adequately prepare nurses for work overseas. And in 2005, PNA signed a MOA with other Filipino organizations abroad that resulted into the establishment of NCLEX testing centers in the country.

PNA in Recent Years

In 2015, PNA held the 1st Philippine Nursing Leadership Institute seminar to further hone the leadership skills of its nurse-members from different areas of specialization. And through its local and foreign chapters, PNA implemented various programs and projects that are aligned with the PNA Roadmap 2030. This said roadmap is patterned after the Philippine Nursing Roadmap, a product of a countrywide coalition with other nursing groups and the PR-Board of Nursing (PR-BON) to facilitate the ASEAN integration of Filipino nurses.

It has also provided mutual aid benefits to its members, yearly scholarships for those who would like to pursue further studies, free legal assistance to all nurses, medical and burial benefits, sponsorships and fund-raising activities for countless causes, the largest of which was in 2013 during typhoon Yolanda where more than P2M in cash was given in an onsite visit to affected nurses. To date, an ongoing donation drive is being done for nurses in Marawi and onsite visit is currently being planned once the said city is made accessible to the public.
History repeats itself, as PNA spearheaded, in partnership with the PR-Board of Nursing the lobbying of the Revised Comprehensive Nursing Law in 2016 that almost lapsed into law but was sadly vetoed. It can be recalled that PNA was in the forefront of having played a crucial role in the passage of RA 9173, the Philippine Nursing Act of 2002.

At present, PNA takes the lead in the establishment of a clinic, known as the PNA-led clinic, to not only cater to the needs of the immediate community surrounding it, but more importantly, to provide a means for nurses to get free consultation. The said clinic had its soft opening last August 24, 2017, during the birthday of its founder, AGT. PNA is currently in the process of finalizing a MOA with the Department of Health for the Philhealth accreditation of this clinic and to assist PNA with its much needed medical supplies and manpower.

In addition, PNA is also in the final stages of finalizing a MOA with DOLE and POEA to take an active part in the policy-making and full monitoring of Filipino nurses' welfare in the workplace (especially in the private sector) and to once again aid them in preparing for work overseas. Moreover, the MOA intends to facilitate nurses' concerns when they are already abroad to make them feel secure, despite the distance from their country and their loved ones.

Finally, PNA has been relentless in the expression of its position in various crucial matters affecting nurses' welfare. The more recent example of this is about an incident in one of Cebu's bars. PNA had released its official stand through its website and afterwards, had mobilized its Cebu Chapter President to vocalize the organization's disgust to the managers of the said bar where nurses were used as a theme of a morally degrading nature.

**PNA's Centennial Celebration**

As PNA moves forward in anticipation of its 100th year celebration, it must not be forgotten that it is also the pioneer in having the first website among professional organizations in the country. And had made its distinctive mark as the Accredited Professional Organization (APO) for nurses, after three Most Outstanding APO wins in 2003, 2013, and 2015.

To-date, PNA is also keen on developing a new membership system as it envisions online ID printing and an accessible payment gateway system for its members. Furthermore, it will make a pilot offering of online CPD seminars, in partnership with the International Council of Nurses and of local online CPD providers, to further improve its grant of low cost CPD seminars to members locally and abroad. These seminars have received international accreditation and will be applied for local equivalence at the PRC to further assist members in foreign chapters to update their PRC IDs.

**The APO for Filipino Nurses**

An APO's basic mandate is to serve the welfare of Filipino nurses and to ensure their professional development.

To serve such mandate as the only accredited professional organization for nurses means that “it is the national organization for nurses.”

This mandate gave life to PNA years ago. It is also why PNA continues to stand firm today because PNA represents all Filipino nurses in this country regardless of their specialization, their professional rank, etc. In other words, regardless of their overall circumstances.

In brief, PNA has been a mother organization to all Filipino nurses.

*It is what makes it the APO.*

*It is why it is the APO.*
The Philippine Journal of Nursing, a peer-reviewed international journal, is the official publication of the Philippine Nurses Association published biannually. It considers original articles written for Filipino nurses at all levels of the health care organization and in various settings. The Philippine Journal of Nursing will serve as:

1. Venue for the publication of scientific and research papers in the areas of Nursing practice and Nursing education;
2. Source of updates on policies and standards relevant to Nursing practice and Nursing education, and
3. Medium for collegial interactions among nurses to promote professional growth.

The Philippine Journal of Nursing invites original research and scientific papers, full text or abstract, written by registered nurses on different areas of nursing practice, including but not limited to clinical, community, administration, and education. If you are interested in submitting a manuscript for possible publication, please review the submission requirements below.

Manuscript Preparation and Submission

1. Manuscripts are voluntary contributions submitted for exclusive review for publication in the PJN. Manuscripts containing original materials are accepted for consideration if either the article or any part of its essential substance, tables, or figures have never been or will be published or submitted elsewhere before appearing in PJN.
2. Authors submit 3 manuscripts for consideration by the PJN with the understanding that their work may be submitted to a plagiarism detection software at the discretion of the Editorial Board to ensure originality of the work submitted.
3. PJN adheres to the International Committee of Medical Journal Editors (ICMJE) (2019) Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals. Authors are advised to read and understand this document which can be downloaded free from ICMJE’s website: http://icmje.org/icmje-recommendations.pdf
4. Scholarly works submitted by two or more authors require submission of a signed “Declaration of Authorship and Contribution” by each of the authors listed on the manuscript. The forms can be downloaded from the PJN website: www.pna-pjn.com and must be submitted along with the manuscript.
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The form must be submitted along with the manuscript. One form is required from each author identified on the manuscript.
6. For additional information about manuscripts and queries about submitting manuscripts, please contact the editor: E-mail: philippinenursesassociation@yahoo.com.ph.

The information below indicates the required presentation of manuscripts.

Format and Style

1. The PJN follows the Publication Manual of the American Psychological Association (APA) 6th edition with respect to manuscript preparation. Authors are encouraged to refer to the manual, whenever possible. Alternatively, the following internet resource may be used:

2. Please submit two copies of the manuscript, which should not be more than ten pages, including abstract, text, references, tables, and figures. The author is responsible for compliance with APA format and for the accuracy of all information, including citations and verification of all references cited in the text. Spacing may be in either American or British English; submission must be typed, double-spaced on letter-size (8.5” x 11”) paper with at least 1” margin on both sides. Include a cover letter listing the author’s contact number, address, title, institutional affiliation, position, and other relevant credentials. All articles should be addressed to the PNA Office at 1663 Benitez St., Manila, Philippines or sent through e-mail: philippinenursesassociation@yahoo.com.ph.
3. Manuscripts should be 12 font, double-spaced with standard margins (about 1 inch). Fancy typefaces, italics, underlining and bolding should not be used except as prescribed in the APA 6th edition guidelines.

Content

The context of a typical manuscript includes:

Title page
Title
Should indicate the focus of the article in as few words as possible. It should not contain a colon or other complex structure. Manuscript titles should not exceed 15 words.

Author’s information
Indicate for each author:
(a) Name and degrees
(b) Title or position, institution and location; to whom correspondence should be sent, with full address, phone and fax numbers, and e-mail address: provide e-mail address for all coauthors.

Acknowledgements
Briefly state name of funders, grant number and name of mentors/people with significant contribution.

Disclosure of Conflict of Interest

Abstract
A structured abstract with headings should be included as part of the manuscript. The abstract contains: (a) purpose of the article, without detailed background; (b) design, including type of study, sample, setting, ethics review board approval, dates of data collection, if applicable; (c) methods, such as interventions, measures, type of analysis; (d) findings; and (e) conclusions.

For manuscripts focused on review or theoretical analysis, a structured abstract is still required but the organizing construct may be stated instead of a design.

Key words
A few words that are recommended for use in indexing should be listed at the end of the Abstract.

Text
Successful articles have clear, succinct and logical organization and flow of content. PJN has adapted the following sections from ICMJE (2016):

Introduction
References
Methodology
Tables
Results
Illustrations (Figures)
Discussion
Units of Measurement
Conclusions and Recommendations
Units of Measurement

Abbreviations and Symbols

For further details, authors are referred to the International Committee of Medical Journal Editors (ICMJE) (2016). Recommendations for the Conduct, Reporting, Editing, and Publication of Scholarly Work in Medical Journals which can be downloaded free from ICMJE’s website: http://icmje.org/icmje-recommendations.pdf.

Systematic Reviews

Authors considering to submit a systematic review must adhere to the PRISMA Statement. Such submissions must be accompanied by a PRISMA 2009 Checklist. Further information about the PRISMA Statement and the PRISMA 2009 Checklist can be obtained from the following link: PRISMA. (n.d.) The PRISMA checklist. Retrieved from http://prismastatement.org/PRISMAStatement/Checklist.aspx

References

Authors must adhere to APA 6th Edition Form and Style; list of references should include only those references that are important and cited in the text. References should be the most current on the topic.

Tables and figures/photos
1. Each table and figure should be presented on a separate page and uploaded separately. Placement of each table or figure should be noted in the text. The PJN does not use addenda, appendices and colors.
2. Photo of the author as well as photos that highlight article content are also welcome Black and white photos are preferred. Drawings and graphics should be clear. Art work, photographs, and other materials submitted with the manuscript are accepted with the understanding that the author’s has/have copyrights over these materials, and this must be explicitly indicated in the cover letter when the author’s submit their manuscript for consideration in the PJN.

Time for Review, Decision and Production

1. The average time from manuscript submission to the author’s receipt of the editor’s decision about publication is approximately three months. During that time, each manuscript undergoes rigorous double-blind peer review. During this period, peer reviewers may request additional information including but not limited to electronic copies of raw data for the purpose of verifying and gaining a better understanding of the manuscript. Such requests will be within the limits allowed by standard ethical guidelines.
2. The editor’s pending decision is:
   a. accept, with editing to follow immediately;
   b. accept, pending satisfactory revisions by the author;
   c. not accepted, but the author is encouraged to make specified major revisions and return the manuscript to the editor for further consideration;
   d. rejected.
3. The editor also is encouraged to ensure that all the author(s) continue the work and to revise and resubmit the manuscript as part of the mentoring process. The time required for revisions can vary.
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5. Publication is scheduled at the discretion of the Editor who reserves the right to postpone and cancel publications for reasons of space and other factors.
6. All accepted manuscripts are subject to editing.
7. Authors will receive a complimentary copy of the issue in which their respective articles appear.

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We pledge our lives to aid the sick
To help and serve all those in need
To build a better nation that is healthy and great

We’ll bring relief to every place
In towns and upland terraces
In plains and hills and mountains
We shall tend all those in pain

Beneath the sun and stormy weather
We shall travel on
To heed the call that we must be there
With our tender care

We pray the Lord to guide our way
To carry on our work each day
And grant us grace to serve the sick
And love to help the weak