ISSN No. 0048-3818

PHILIPPINE JOURNAL OF NURSING

PJN VOL. 86 NO. 1

OFFICIAL PUBLICATION OF PHILIPPINE NURSES ASSOCIATION, INC. JANUARY-JUNE 2016

Improving
Health Systems' Resilience and Research

RESEARCH ARTICLES

FEATURE ARTICLES

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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
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EDITORIAL

Improving Health Systems' Resilience and Research

The importance of well-functioning and responsive health systems for the delivery of quality health care to all people when they need it, where they need it, and at prices they can afford has long been a battle-cry among health professionals. Since the late 1970s when I was still a young community health nurse, this battle-cry continues to be my marching advocacy. Fineberg (2012, p. 1020) posits that "a sustainable health system has three key attributes: affordability for concerned individual such as patients, families, employers and the government; acceptability to key constituents like health professionals; and adaptability because health and health care needs are not static." Given these attributes, one can be quick to say therefore that primary health care approach to health development--- is what makes resilient health systems.

At present, health systems all over the world continue to report challenges to sustainability amid advances in health technology, the need for more responsive health human resources, access to health services, changing patterns in populations and diseases; greater expectations and demands from partners to name a few. Given the fact that nurses in all settings work with people to ensure their health and well-being, their safety, comfort, and dignity, the International Council of Nurses (2016, p. 20) asserts that "nurses are at the core of resilience" and that "nurses make a significant contribution in developing and maintaining resilience in health systems.".

Research and feature articles in this issue present situations that challenge the resilience of nurses, clients and organizations. The articles also offer recommendations to enhance resilience at various levels. These articles show the importance of the participation of nurses in research as consumers and producers. Paguio and Pajarillo's *Safety Culture and Attitudes of Nurses in the National University Hospital* describe the safety culture and attitudes of nurses of the National University Hospital. By improving dimensions in both "Safety Culture and Safety Attitude" nurses can have a positive impact on the care they provide to patients, thereby, potentially improving nurse-patient care outcomes and also positively impact hospital-sensitive outcomes "through hospital-wide programs." Such endeavour can improve nurses' and organizational resilience. On the other hand, Tursunova and Lobchuk's article *Immigrant Filipinos as Caregivers for Filipino Loved Ones with Chronic Illness in Canada* reveal how resilience can be enhanced among caregivers. The study "showed how health care providers need to provide more support for immigrant caregivers dealing with patients and with chronic illness, memory loss, and/or mental health issues---especially those caregivers and patients who live in impoverished neighborhoods. Furthermore, removing factors contributing to caregivers' strains such as employment arrangements, housing conditions, and the promotion of culturally appropriate health practices will enable immigrant caregivers and patients to enhance quality of care living in Canada." Meanwhile, Serafica and Lane's *The Meanings of Diabetes, Healthy Lifestyle and Barriers to Healthy Lifestyle Among Filipino Immigrants in the United States* explored the knowledge, perception, and beliefs of newly arrived Filipino immigrants regarding Type 2 Diabetes Mellitus (T2DM), healthy lifestyle, and perceived barriers to healthy lifestyle." The said study provides "anchors for future culturally appropriate intervention programs for recent Filipino immigrants and provide information for the design of health programs for the prevention of T2DM in the Philippines and United States."

Santos-Reyes' *Intimate Partner Violence from the Perspective of Caviteñas* contributes to both clients and nurses' resilience with the challenges derived from the study for nurses to address the "phenomenon through a holistic, integrated, multidisciplinary approach taking into account the many layers of the victim's persona - physically, psychologically, emotionally and even economically." In addition, Capellan's *Health Promotion Lifestyle Profile of Augustinian Recollect Sisters* also contributes to resilience of a religious group who dedicate their lives caring for others by determining their health promoting lifestyle and as a result, by having developed a program that will direct them to attain optimal health.

Two articles using systematic literature reviews indicate the importance of knowing and conducting this skill. Pagatpatan and Arevalo's *Systematic literature search strategies for the health sciences* "provides an introductory guide for researchers, as well as, clinicians on the step- by-step process of systematic literature search. It also provides information on the available open-access directories and databases as additional or alternative sources of evidence especially in low-resource institutions. This article can enhance individual and organizational resilience particularly on research needs. Lacalle's research, *Nurturing the Seeds of Evidence-Based Practice: Early Ambulation Among Cardiac Surgery Patients* searched, appraised, and synthesized the best evidence surrounding early ambulation among cardiac surgery patients. This evidence-based practice (EBP) review "ascertains that early ambulation could improve patient care outcomes, leading to the need to incorporate early ambulation in the local clinical guidelines for postoperative cardiac surgery patients." Such findings can enhance resilience of these clients and the nurses.

Featured in this issue are two young nurses, whose voices from the field resonates many nurses' concerns and experiences. Balakumaran's voice on Post-Colonial Scholarship claims that post-colonial research can assist nurses to explore and to challenge the manner in which nursing education is developed. Nurses can critically analyze and challenge the political and socio-economic influences dominating nursing education. A relevant education contributes to resilience. Santos, a novice nurse, echoes from the field her perspective on the Filipino nurses' resilience. Her voice resonates with voices of many other nurses in the country today: "As a novice nurse who has only recently practiced her profession, I began to understand better how the Philippine Health System will continue to be frail due to the shortage of experienced nurses in the country. A shortage that is highly ironical to boot because of the reported surplus of nurses in the country who are either jobless or underemployed. Yet a shortage, nevertheless, due to the continuing brain drain caused by the dim hope of having a nursing job that can actually support a family." Further, Santos asks: "How can one speak of nurses as agents of change and hope for health systems' resilience in this country when nurses are not treated fairly? I cannot imagine how health institutions locally and abroad can survive without nurses' vital participation. It is like taking the blood out of one's cardiovascular system. Nurses in this country are pumped incessantly to ensure that the health systems are supplied with enough manpower so that they operate smoothly and do not die and collapse. But, unfortunately, nurses' crucial role in this country's health systems continues to be undermined and worse, go unnoticed."

In conclusion, I quote Santos: "I think that building resilience is personal to most nurses…I do not want to lose all hope. I want to believe that at some point, nurses in this country will have the adequate support they deserve to make them stay and serve their own people."

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ERLINDA CASTRO-PALAGANAS, PhD, RN
Editor-in-Chief

[1] *https://www.twna.org.tw/frontend/un07_international/webPages.../IND_Kit_2016.pdf*

President's Message

Reaching transversely on dissimilar nursing speciality is a great influence on health systems' resilience. In nursing, resilience is determined by the profession's ability to withstand the impact on individual nurse career disturbance and ability to get back while continuously function to provide basic healthcare services in different work settings. And, the real meaning of resilience is portrayed as their capacity to bounce back from the disarray, stress, or change.

The American dictionary defined resilience as "the ability to recover quickly from illness, change, or misfortune." Health System Resilience is very universal nowadays especially with the Department of Health (DOH)'s A-C-H-I-E-V-E Health Agenda and the WHO-mandated Sustainable Development Goals (SDGs) 2016-2030 implementation for Universal Health Coverage in line with the "leave no one behind" approach. But, what is the construct of this among our nurses, and its significance to their practice and clientele? Is resilience inherent to quality process of healthcare services? Where does research lies in resiliency? Can it influence further learning focusing on research trends towards resilient methodology, and finally brings benefits and challenges for future breakthroughs?

Nurses are exposed to adversities in different situations and conditions in hospitals, clinics, schools, industries and communities of which adjustment are always expected for better outcome. Similarly, researchers may play a role on how these varied harsh conditions taken by nurses will be addressed. It can be an opportunity used for research for the betterment of patient services. Their optimistic adaptation ability shall be considered as demonstration of coping competence or success of performance of assigned tasks. In hurdling enormous challenges or achievement resulting from tough experiences brought about by distressful work environment, exploitation, low compensation, etc. must be given credit and consideration as health measure for safe care outcome. Meeting up high expectations, despite stressful incidents, is construed as the means to shield, or protect nurses from further risk, thus recognition of their role in the healthcare system with decent benefits is much deserved.

Hence, nurses' social competence, problem-solving skills, independence, sense of purpose for bright future with awareness on self attribute broaden their environment. This brings balance to the stress and ability to cope dynamically which is vital in life shifts: the nurses' hallmark of aptitude relative to peer relations, academic excellence, service commitment and purposive goals, and promising work accomplishment. But studies need to be done as substantial evidence to prove the accessibility of a resilient nurse who passionately works, serves, counsels and treats their patients well.

On behalf of the PNA, we express our gratitude and congratulations to the editorial team, authors, and peer reviewers for this 2016 1st PJN issue. It is our manifestation of the continued commitment to provide Filipino nurses with quality evidence-base printed reference material in their respective endeavour for specialization.

Kudos and God Bless!

BGEN PAULITA B CRUZ (Ret)
National President

REPRINTED ARTICLE

International Council of Nurses
INTERNATIONAL NURSES DAY 2016

Resilience: The Capacity to Recover from Difficulties

Introduction

Wherever you are in the world it is very likely you will find that health and meeting health needs is a significant focus of public debate and concern. Indeed, it feels like health is always in the news. This may stem from a number of reasons, some predictable and others less so. For example, in many parts of the world, there are increasing health challenges related to the ageing population; a rise in chronic diseases and other long term conditions; growing citizen expectations for more and better health services; and technological progress, which continue to put an expectation of growth in funding for health services. Health systems in countries around the world are being challenged to respond by considering new ways of working and new models of care for their citizens.

The unanticipated impact of the global financial crisis on health systems continues to have implications for public finances. Equally challenging has been the evidence of the vulnerability of global health systems. The 2014 Ebola disease outbreak in West Africa showed that global action to protect health is essential; infections are able to cross borders and travel to all corners of the globe just as people can. Natural disasters and conflict do not respect country boundaries either and require responses from across the world. This global connectedness can be a difficult concept to consider without becoming rapidly overwhelmed by its complexity. The uncertainty and sense of powerlessness it produces is all too understandable. Where do we start? How can we make a difference? It is easy to feel very small. Yet the impact of globalisation continues to grow and affect our daily lives. We are all intimately connected and, as one of the largest workforces in the world, nurses have to work together to understand and ensure that globalisation is a positive force for good.

> Definition of globalisation: a process of increasing global connections, interdependence and integration, especially in the economic arena, but also affecting cultural, social political, ecological and technological aspects of life." (Tuschudin and Davis 2008, p.4)

As documented in the Millennium Development Goals Report (UN 2015), the world saw substantive progress in achieving the Millennium Development Goals (WHO 2015a), saving millions of lives and improving conditions for many more. However, the report also acknowledges "uneven achievements", "shortfalls in many areas" and incomplete work. The disease specific approaches of the MDGs left many countries with fragmentation in care and weak service delivery systems. As a result, many of the countries that received development aid did not build health systems that can provide necessary essential services to all people in need.

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As previously mentioned, the Ebola virus disease outbreak in western Africa clearly showed that without a health system capable of responding rapidly and effectively, an epidemic can spread rapidly across borders and cause tremendous problems (WHO 2014)(When hit by the outbreak, the most affected countries had a fragile health system with insufficient numbers of health care workers (WHO 2015b). As a result, the response was not timely; existing health services were disrupted and many health care workers who cared for affected people died (WHO 2015c), further threatening the health of the populations (David et al. 2015) In fact, a May 2015 preliminary report by WHO (2015c) on health workers infected with Ebola, stated that of the 815 health care workers who had been infected by the Ebola virus since the onset of the epidemic, more than 50% were nurses and nurse aides. Two thirds of the health workers who were infected had died. This outbreak raised many questions: How can you rapidly respond to a lack of health care workers due to illness or even death? How can you rapidly skill up a nurse workforce to deliver care in very different settings? How do you rapidly get access to the right equipment? How do you communicate to the public in an effective way? There is a clear need for health systems that can respond to such shocks in a timely and effectively manner while continuing to provide necessary health services.

> "The resilience of a health system is its capacity to respond, adapt, and strengthen when exposed to a shock, such as a disease outbreak, natural disaster, or conflict."
>
> - Campbell et al (2014)

The complexity of this work includes pace of response needed, availability of resources in the right place at the right time and damaged infrastructure and a depleted health care workforce. Therefore, we need to be prepared before the next emergency comes, having in place emergency provisions, people that can be deployed with the right competencies and plans to divert resources.

In the busy life of most practising nurses, thinking about how we can support and strengthen the health system we work in is not a common activity. Yet the need to develop our thinking, planning and profile in this important area is all too evident. We are a vital force for the changes that the system needs.

Responding to new challenges

The nurse workforce has a long history of responding to the changing needs of society. We have developed our practice to tackle public health challenges and to ensure the provision of high quality care. Throughout the 20th century and into the 21st century, significant gains have been made in increasing life expectancy and reducing many of the risk factors associated with child and maternal mortality. Nurses have made significant contributions to improving child survival and their impact is well documented (Awoonor-Williams et al 2013). Major progress has been made in increasing access to clean water; improving sanitation; reducing malaria, tuberculosis, and polio; and decreasing the spread of HIV (Marmot et al 2012). Nurses have been at the forefront of many of these gains (ICN 2013) but we would all acknowledge that more can be done. On top of known health problems, we face emerging global threats such as antimicrobial resistance, new pandemics, emerging infections, natural disasters, global climate change, armed conflicts and migrants. What might this mean for us?

There is much evidence of nurses' responsiveness and the important role we play in contributing to population health which has been increasingly acknowledged by governments and recognised by the World Health Organization (WHO 2003, 2015d). Indeed, the nursing workforce is increasingly well educated and able to connect with citizens, communities, policy makers and each other. However, the need to adapt and change more quickly is evident and the challenges set out in the next 15 years will require a new generation of innovation and leadership. As nurses gain a higher profile in the development of local, national and international responses, we need to have confident well-informed leaders who understand their role in developing a workforce to meet new challenges.

Investing in the health workforce to strengthen health systems. The increase in demand on our health systems has been associated with an increased expectation of funding and it is now apparent that there is a strong link between the economic and the general health of a population. However, expecting and receiving a bigger share of public finances at times of economic crisis are two different things; the ability to constantly find more funding is a real challenge at all levels, from individuals to governments. In some cases, as governments seek short-term savings, we have seen real reductions in health expenditure (Karaniklos 2013) leading to both short- and long-term consequences. If not borne by governments, the cost of health care to individuals can lead to increased poverty. A WHO and World Bank Group report (2015) shows that 400 million people do not have access to essential health services and 6% of people in low- and middle-income countries are tipped or pushed further into extreme poverty because of personal health spending. However, as health has a value in itself, as well as being a precondition for economic progress, improvements in health and economic conditions are mutually reinforcing.

The Lancet Commission report "Global Health 2035: a world converging within a generation" (Jamison et al 2013) makes a strong economic case for greater prioritization of health by economic ministers, stating "The returns on investing in health are impressive. Reductions in mortality account for about 11% of recent economic growth in low and middle income countries as measured in their national income accounts." (Jamison et al. 2013, p.1898).

The report describes the possibility of a "grand convergence" in health, which is achievable within our lifetime. It presents a detailed analysis that shows that with enhanced investments to scale up health technologies and improve delivery systems it will be possible to reduce child and maternal mortality rates as well as mortality rates from infectious diseases to low levels universally. In most low-income and middle-income countries these rates would fall to those presently seen in the best-performing middle-income countries. As Jamison et al. (2013) write, "Achievement of convergence would prevent about 10 million deaths in 2035 across low-income and lower-middle-income countries…" (p.1898)

Additionally, the report notes that employment in the health sector can strengthen local economies. The health care workforce is significant and employs a lot of women. Well-educated nurses are, therefore, good for the economic health of a country.

New Goals: From MDGs to SDGs

There is now a global recognition that whatever the nature of the challenges, staying focused on ensuring healthy lives and promoting well-being for all at all ages is essential to sustainable development. The

need for strong and resilient health systems, able to respond to rapid change, is at the heart of the United Nations Sustainable Development Goals (SDGs).

The 17 SDGs (see Box 1) and 169 targets were adopted by Member States of the United Nations General Assembly in September 2015 (UNGA resolution 70/1). Building on the MDGs, the SDGs are relevant to all countries and cover the economic, environmental and social pillars of sustainable development with a strong focus on equity addressing the root causes of poverty. They are all interlinked underlining the fact that sustainable development in any country requires many parts of the system to work together.

The third goal, which is the most specific to health and well-being, has 13 targets (3.1-3.9) and enablers (3.a-3.d). (see Box 2)

It is expected that this will be associated with a range of activities and action plans throughout health systems. While most activities will be focused on Goal 3, many of the other goals will also require action from the nursing workforce and nurse policy makers have a lead role to play in this. One of the targets (3.8) is Universal Health Coverage (UHC), which has received much attention as a key enabler to sustainable development.

Universal Health Coverage (UHC)

The goal of UHC is to ensure that all people can use the promotive, preventive, curative, rehabilitative and palliative health services that are of sufficient quality, while at the same time ensuring that the use of these services does not cause financial hardship to the consumers (WHO 2013).

The recent report "Tracking universal health coverage: First global monitoring report" (WHO & World Bank Group 2015) shows that we are a long way from its achievement. The report, which is the first of its kind to measure health service coverage and financial protection to assess countries' progress towards UHC, looked at global access to essential health services in 2013 including family planning, antenatal care, skilled birth attendance, child immunization, antiretroviral therapy, tuberculosis treatment, and access to clean water and sanitation. As previously mentioned, the report found that at least 400 million people lacked access to at least one of these services, and that many people were being tipped or pushed further into extreme poverty because they had to pay for health services out of their own pockets.

WHO and the World Bank Group (2015) recommend that countries pursuing UHC should aim to achieve a minimum of 80% population coverage of essential health services and that everyone everywhere should be protected from catastrophic and impoverishing health payments.

Nurses play a central role in achieving UHC and there are numerous examples of nurses expanding access to essential health services (ICN 2011, 2015a). Some of ICN's initiatives to expand access include the ICN's Wellness Centres for Health Care Workers (see www.icn.ch/what-we-do/wellness-centres-forhealth-care-workers/) and the ICN TB/MDR TB project (www.icn.ch/tb-mdr-tb-project/welcome-to-theicn-tb-mdr-tb-project.html).

Box 1. *The 17 Sustainable Development Goals*

1. End poverty in all its forms everywhere
2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3. Ensure healthy lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5. Achieve gender equality and empower all women and girls
6. Ensure availability and sustainable management of water and sanitation for all
7. Ensure access to affordable, reliable, sustainable and modern energy for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
10. Reduce inequality within and among countries
11. Make cities and human settlements inclusive, safe, resilient and sustainable
12. Ensure sustainable consumption and production patterns
13. Take urgent action to combat climate change and its impacts (acknowledging that the United Nations Framework Convention on Climate Change is the primary international, intergovernmental forum for negotiating the global response to climate change)
14. Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development

"The world's most disadvantaged people are missing out on even the most basic services… A commitment to equity is at the heart of universal health coverage. Health policies and programmes should focus on providing quality health services for the poorest people, women and children, people living in rural areas and those from minority groups".

- **Dr Marie-Paule Kieny**, Assistant Director-General, Health Systems and Innovation, WHO (WHO & World Bank 2015)

New Expectations of the Workforce

Sustainable Development Goal 3, Ensuring healthy lives and promoting the well-being for all, at all ages, is essential to the achievement of the other SDGs. UHC means not only reaching everyone in need, but also delivering quality health care services that are people-centred. This requires a well-performing health system with a

Box 2. *The 13 health targets in Sustainable Development Goal 3 – Ensure healthy lives and promote well-being for all at all ages*

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births
3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1000 live births and under-5 mortality to at least as low as 25 per 1000 live births
3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, waterborne diseases and other communicable diseases
3.4 By 2030, reduce by one third premature mortality from noncommunicable diseases through prevention and treatment and promote mental health and well-being
3.5 Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents
3.7 By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes
3.8 Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all
3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination Enablers
3.a Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate
3.b Support the research and development of vaccines and medicines for the communicable and noncommunicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all
3.c Substantially increase health financing and the recruitment, development, training and retention of the health workforce in developing countries, especially in least-developed countries and small island developing States
3.d Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks

sufficient number of well-trained motivated health workers. It is projected that there will be a shortfall of 10.1 million skilled health professionals (nurses, midwives and physicians,) by 2030 (GHWA 2015). Many of those countries which struggled to achieve the MDGs face shortages and misdistribution of health workforce (ICN 2014). Scarcity of qualified health personnel, including nurses, is highlighted as one of the biggest obstacles to achieving health system effectiveness (Buchan and Aiken 2008). Workforce investment remains low and it is still the case that future projections demonstrate that low income countries will face a widening gap between the supply and the demand for health workers (Tangcharoensathien et al 2015). There is a growing expectation that rich and poor countries alike build national self-sufficiency to manage their in-country supply and demand for human resources for health through appropriate health human resources planning (ICN 2014).

In this regard, the WHO has developed the Global Strategy on Human Resources for Health (HRH): Workforce 2030 which is expected to be submitted to the World Health Assembly (WHA) in May 2016 for adoption.

ICN has long recognised the importance of better planning with regards to the nurse workforce (ICN 2014) and has supported the development of this strategy. Once adopted by the WHA, there will be an expectation of local action, and there is a value to National Nurse Associations (NNAs) in starting to work towards these objectives and targets now.

Why should nurses engage in health system strengthening?

We can all acknowledge that the world has never possessed such a wide range of interventions and technologies for curing disease and increasing life expectancy. Yet the gaps in health outcomes continue to widen (Crisp & Chen 2014). The positive impact of existing interventions is not matched by the power of health systems to deliver them to those in greatest need, in a comprehensive way and on an adequate scale.

The role of public health in building and strengthening health systems and increasing their resilience is clearly a priority for all nurses. Investing in health promotion and illness and disease prevention can have a positive impact by potentially relieving demands made on the health system by those in ill health as well as contributing economically to society through healthy and productive citizens.(Jamison et al 2013). As Tangcharoensathien et al (2015) state in their article on UHC and the SDGs. "Primary health care, which the majority of poor can access, acts as a major hub in translating UHC intentions into practice."

All of the policy recommendations detailed in the SDGs and the HRH proposal make clear that action on the social determinants of health should be a core part of health professionals' business, as it improves clinical outcomes, and saves money and time in the longer term. But, most persuasively, taking action to reduce health inequalities is a matter of social justice.'

What is social justice?

"Social justice means the fair distribution of resources and responsibilities among the members of a population with a focus on the relative position of one social group in relationship to others in society as well on the root causes of disparities and what can be done to eliminate them (CNA 2009)

When social justice is applied to health and health care, the term

"resources" means more than access to health services. It also includes access to others features such as housing, sanitation, transport, work and education. Collectively, these are referred to as the social determinants of health. Taking action for social justice means action to reduce differences and promote equal access. As most nurses on a daily basis see examples of inequity, it is evident that nurses have a significant role to play in contributing to strong systems in their daily practice. At the core of promoting health and well-being, a fundamental for all nurses is the notion of social justice (CNA 2009, Sheridan 2011 PJN 2013, ICN 2011).

Box 1. Global Strategy on Human Resources for Health: Workforce 2030 - Draft 1.0 submitted to the Executive Board (138th Session) (WHO 2015e)

Vision: Accelerate progress towards universal health coverage and the UN Sustainable Development Goals by ensuring universal access to health workers

Overall goal: To improve health and socioeconomic development outcomes by ensuring universal availability, accessibility, acceptability and quality of the health workforce through adequate investments and the implementation of effective policies at national, regional and global levels

Principles

- Promote the right to health
- Provide integrated, people-centred health services
- Foster empowered and engaged communities
- Uphold the personal, employment and professional rights of all health workers, including safe and decent working environments and freedom from all kinds of
- discrimination, coercion and violence
- Eliminate gender-based violence, discrimination and harassment
- Promote international collaboration and solidarity, in alignment with national priorities
- Ensure ethical recruitment practices in conformity with the provisions of the WHO Global Code of Practice on the International Recruitment of Health Personnel
- Mobilize and sustain political and financial commitment and foster inclusiveness and collaboration across sectors and constituencies
- Promote innovation and the use of evidence

Objectives

1. To optimize performance, quality and impact of the health workforce through evidence-informed policies on human resources for health, contributing to healthy lives and well-being, effective universal health coverage, resilience and health security at all levels.
2. To align investment in human resources for health with the current and future needs of the population taking account of labour market dynamics, to enable maximum improvements in health outcomes, employment creation and economic growth.
3. To build the capacity of institutions at sub-national, national and international levels for effective leadership and governance of actions on human resources for health.
4. To strengthen data on human resources for health, for monitoring of and ensuring accountability for the implementation of both national strategies and the Global Strategy.

> Every health professional has the potential to act as a powerful advocate for individuals, communities, the health workforce and the general population, since many of the factors that affect health lie outside the health sector, in early years' experience, education, working life, income and living and environmental conditions health professional may need to use their positions both as experts in health and as trusted respected professional to encourage or instigate change in other areas.
>
> **Institute of Health Equity (2013), p.5**

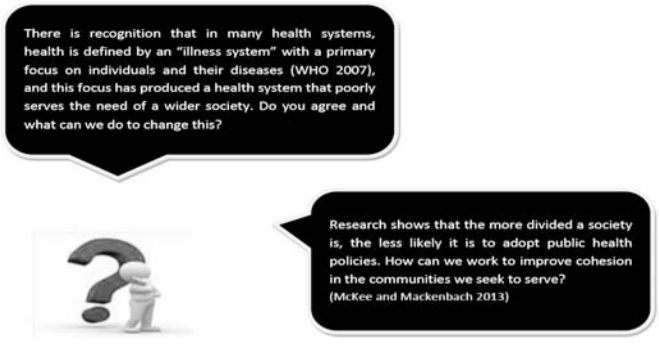
The ICN Code of Ethics for Nurses clearly states nurses' responsibility for initiating and supporting action to meet the health and social needs of the public, in particular those of vulnerable populations (ICN 2012a). The role of the nurse as an advocate for equity and social justice appears in the guidance of many National Nursing Associations and there are also examples of health professionals working together to have greater influence on policy makers to improve opportunities in this area (Allen et al 2013).

Definition of Nursing

Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles. (ICN 2002)

As Tomblin-Murphy and Rose (2015) note in their summary of relevant literature concerning nursing leadership in strengthening primary health care to support the SDGs and Universal Health Coverage worldwide, nurses are educated with a holistic lens so that all facets of a person's health and well-being are considered when planning and delivering care. They note that there is an increasing focus on the determinants of health, but stress that the current models of health delivery still tend to focus primarily on the treatment of illness. They stress the importance of primary care in remote communities and/or in low-middle income countries where much of the care delivered at the local level depends upon the expertise of community health workers or nursing assistants. The role that nurses and nursing play in supporting their colleagues in communities through advocacy, mentorship, collaboration and recognising the important contribution of nursing assistants and community health workers in maintaining local services is key to future development (Dick et al. 2007).

Reflection



International Council of Nurses
INTERNATIONAL NURSES DAY 2016

Developing a Strong Health System

A deeper look into health systems Health systems encompass many subsystems, such as human resources, information systems, health finance, and health governance (Box 4.).

In 2007, the WHO identified strengthening health systems as a global strategic priority. They argued that this priority was "Everybody's Business" (WHO 2007).

Box 4: What is a health system?

A health system consists of all of the organizations, institutions, resources and people whose primary purpose is to improve health. This includes efforts to influence determinants of health as well as more direct health-improvement activities. The health system delivers preventive, promotive, curative and rehabilitative interventions through a combination of public health actions and the pyramid of health care facilities that deliver personal health care – by both State and non-State actors. The actions of the health system should be responsive and financially fair, while treating people respectably. A health system need staff, funds, information, supplies, transport, communications and overall guidance and direction to function.

WHO (2007)

They identified six key building blocks to achieving a strong system which are listed below:

1. Good health services are those which deliver effective, safe, quality personal and non-personal health interventions to those that need them, when and where needed, with minimum waste of resources.
2. A well-performing health workforce is one that works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given available resources and circumstances (i.e. there are sufficient staff, fairly distributed; they are competent, responsive and productive).
3. A well-functioning health information system is one that ensures the production, analysis, dissemination and use of reliable and timely information on health determinants, health system performance and health status.
4. A well-functioning health system ensures equitable access to essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness, and their scientifically sound and cost-effective use.
5. A good health financing system raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with having to pay for them. It provides incentives for providers and users to be efficient.
6. Leadership and governance involves ensuring strategic policy frameworks exist and are combined with effective oversight, coalition building, regulation, attention to system-design and accountability.

(WHO 2007, p.vi)

Well-functioning health systems are required in order to deliver quality health care to all people when they need it, where they need it, and at prices they can afford. Strengthening health systems, however, is challenging given their complexity. USAID (n.d.) captured this challenge in its description of health systems strengthening:

"A process that concentrates on ensuring that people and institutions, both public and private, undertake core functions of the health system (governance, financing, service delivery, health workforce, information, and medicines/vaccines/other technologies) in a mutually enhancing way, to improve health outcomes, protect citizens from catastrophic financial loss and impoverishment due to illness, and ensure consumer satisfaction, in an equitable, efficient and sustainable manner." All of the subsystems of a health system can be weakened by different types of constraints. For instance, health care may cost too much, causing people to delay seeking care or to forego it altogether. A country's health budget may not cover all of its population's health needs. As a result, a country's health outcomes may suffer.

In most heath systems, expenditure on workforce accounts for approximately 70% of recurrent spending (WHO 2006). However, it is important to remember that a strong health system cannot be achieved without a well-performing health workforce. In other words, the health of the population cannot be achieved without investing in the health workforce. There is growing evidence that, in addition to the economic benefit of keeping people healthy, investments in the health workforce can have positive impacts on socioeconomic development (GHWA 2015). We need to transform the traditional way of viewing the health workforce as a recurrent cost or expenditure to viewing investment in the health workforce as a strategy to achieve health for all and to grow economies by creating qualified jobs in the public sector.

A weak health system cannot be resilient. The next chapter will look at how we can improve resilience of health systems.

Thinking about where you work, do you see the WHO (2007) six building blocks in action? Where do they need strengthening? What can you do and who could help you?

A sustainable health system has three key attributes: affordability, for patients and families, employers and the government; acceptability to key constituents, including patients and health professionals; and adaptability, because health and health care needs are not static.

(Fineberg 2012, p.1020)

RESEARCH ARTICLE

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Safety Culture and Safety Attitudes of Nurses in the National University Hospital

Abstract

Purpose: Patient safety issues pose a great burden worldwide. However, there is still inadequate data on the burden of Patient Safety issues in the Philippines to specifically address institutional and national concerns through directed programs, policies, and interventions. This current study aims to describe the safety culture and attitudes of nurses of the National University Hospital in Manila, Philippines.

Design: This study used a non-experimental design that assessed the safety culture and safety attitudes of nurses from the general units of the National University Hospital (NUH) using two assessment tools: the Agency for Healthcare Research and Quality Hospital Survey on Patient Safety Culture (AHRQ-HSOPS) and the Safety Attitudes Questionnaire- Short Form (SAQ). Ethical approval was granted from both the university and the hospital ethics review boards.

Methods: Stratified random sampling was used to ensure representation of staff nurses and nurse administrators. A self-administered survey that included the two tools was translated to Filipino and administered to 200 nurses. Percent of positive responses were obtained to describe the safety culture and attitudes as prescribed by toolkits of AHRQ-HSOPS and SAQ.

Findings: The overall survey response rate yielded 86.77%. Nurses from the National University Hospital displayed both positive Safety Culture and Safety Attitudes based on AHRQ-HSOPS and SAQ. Dimensions that garnered the highest positive perceptions in Safety Culture were Organizational Learning and Teamwork while the lowest were Hospital Handoffs and Non-Punitive Response to Error. On the other hand, dimensions on Safety Awareness that received the highest positive perceptions were Teamwork and Safety Climate while the lowest was Stress Recognition. Perceptions of nurses also varied significantly across ranks in position titles and work settings.

Conclusions: There are identifiable dimensions that can be improved in both Safety Culture and Safety Attitude that can have a positive impact on nurses and potentially impact nurse-patient and hospital-sensitive outcomes through hospital-wide improvement programs.

Key words: *patient safety, safety culture, safety attitudes, nurses, work environment, job satisfaction, stress recognition, Philippines*

Introduction

There is limited literature on the state of Patient Safety in the Philippines. This present study describes the Safety Culture and Safety Attitudes of nurses in the National University Hospital in an attempt to provide insight on the dimensions that need attention to ensure safe healthcare in the country.

Since the release of the Institute of Medicine (IOM) report, To Err is Human (IOM, 1999), health care organizations started to focus more on patient safety and quality of care. The report highlighted the serious effects of health care errors caused by faulty systems, processes, and conditions resulting in health care professionals committing medication errors or being unable to prevent them from occurring. Healthcare-related errors result in complex problems and burdens to patients, families, and health care providers, organizations, and systems (WHO, 2008). Medication errors increase mortality and morbidity rates around the world and across economic classes. Due to inadequate information from developing countries, including the Philippines, regarding the incidence rate of their medical errors, it is difficult to ascertain actual medical errors and near misses in these countries to be able to make appropriate recommendations to address the problem.

This inability to ensure safe patient care in healthcare settings has been determined and measured based on the organization's safety culture. A safe culture refers to the attitudes, perceptions, competencies, values, and behavior that foster safe care and non-threatening discharge of roles and responsibilities of its healthcare professionals and employees. Successful implementation of safety culture requires awareness of how organizations believe other people perceive their level and quality of performance (Agency for Healthcare Research and Quality, 2014). This has been measured through various angles but some of the most widely measured are safety culture and safety attitudes.

'Safety culture' includes behavior by management and staff of health care organizations, procedures, and systems that define safe patient care and the perceptions by staff and nursing management about safe actions and approaches. On the other hand, 'safety attitude' reflects an aspect of 'safety culture' and incorporates dimensions used in describing the status of the culture of an organization (Wilson, 2007). The maturity of members of an organization when it comes to safety culture and attitude reflects in their ability to be informed and to be flexible in addressing safety issues (Robb and Seddon, 2010). Safety attitudes, although reflecting culture, can be measured separately because it is assumed that the healthcare personnel's safety attitudes is more temporal and individualistic in terms of perception. Hence, determining both aspects may provide a holistic view of both the individual healthcare worker and the whole institution.

Although there are limited published studies about safety culture in Philippine hospitals and in terms of the impact of healthcare-related harm in the country, several efforts to promote patient safety have been initiated since 2008. One such initiative is the National Policy on Patient Safety (Department of Health, 2011) that mandates Continuous Quality Improvement (CQI) patient safety programs in all healthcare facilities. These programs are supported by various organizations with the Department of Health (DOH) through Memorandum 2011-0160 designating a National Patient Safety Day. Healthcare organizations dedicate this event to safe patient care activities. Most initiatives are done at institutional levels during various local fora. However, these events were not documented which would have been useful for benchmarking.

Because of this limitation, this study aims to add to the sparse literature on the state of patient safety in the country from the perspective of nurses in one the largest government hospitals in the Philippines. This study aims to answer the following research questions: What are the perceptions of NUH nurses towards Safety Culture? What is the Safety Attitude of nurses working in the NUH? What is the relationship between Safety Attitude and Safety Culture among NUH nurses?

Methodology and Methods

Design

This study used a descriptive-exploratory and non-experimental design to describe the safety culture and safety attitudes of NUH nurses. The attitude and perceptions are presented using descriptive statistics related to the survey questions on patient safety attitude and safety culture. The said design was selected to adequately describe the dimensions of safety culture and safety attitudes without attempting to control or manipulate the clinical scenario at a particular point in time. No intervention was done to increase the level of awareness or change the practice towards patient safety. Rather, safety culture and safety attitudes were assessed while the institution is initiating efforts to increase patient safety through existing safety programs.

Correlation between the dimensions of safety culture is examined against the respondents' safety attitudes. This design is similar to prior single-institution studies (Pronovost & Sexton, 2005) and multi-institution or large scale studies (El-Jardali, Dimassi, Jamal et al., 2011; Huang, Clermont, Kong et al., 2010; Chen & Li, 2010; Kho, Carbone, Lucas et al., 2005) that analyzed safety culture and safety attitudes among health care personnel through a descriptive, non-experimental approach.

In addition, this study used a close-ended and self-administered survey to determine the safety culture and safety attitudes of the nurses.

Setting

A tertiary-level hospital with a total bed capacity of 1,500 was used in the study. It has 1,000 beds allotted for charity or indigent patients (Charity Wards) and seven (7) Pay Service Units. Staff to patient ratio in the general units are 1:5-15 depending on patient acuity.

Sampling

Stratified random sampling was used. The study sample consisted of staff nurses and nurse administrators from both the Charity Wards and Pay Service Units. The sample size was determined utilizing power analysis for correlation through Cohen's test. To achieve a sample power of 0.80 alpha (α) at a 0.05 level of significance with medium effect size of 0.50, a minimum total number of 64 staff and 64 nursing management staff was the computed ideal sample size (total n = 128).

The inclusion criteria was patterned after the recommendation of the AHRQ-HSOPS Toolkit to study a subset of staff from all hospital units which only includes those who were assigned in the practice areas and those who have been employed for at least six (6) months or more. The inclusion criteria ensure that the study participants are familiar with the hospital system to provide information relevant to the study.

A total of 200 survey forms were distributed to 100 nurse administrators and 100 staff nurses. Of the 200 survey forms, 25 were not returned, and among the 175 returned survey forms, 11 were rejected due to incomplete responses following the defined inclusion and exclusion criteria. Completed survey forms came from 24 patient care units of the NUH with a total response rate of 86.77%.

Tools

The self-administered survey used in this study was composed of two tools: the AHRQ-HSOPS and the SAQ. The Agency for Healthcare Research and Quality (AHRQ) Hospital Survey of Patient Safety (HSOPS) is one of the most widely used tools to measure safety culture (Agency for Healthcare Research and Quality, 2016). It is a five-point Likert scale that is comprised of 42 items measuring 12 composites of patient safety culture. On the other hand, the HSOPS includes components measured through hospital and unit-level dimensions and outcome variables. The percentage of positive responses for each item was calculated where negatively worded items were reversed as the percentage of positive responses were computed. Composite level scores were computed by summation of the items within the composite scales and divided by the number of items with non-missing values.

Meanwhile, the Safety Attitudes Questionnaire (SAQ) is a well-validated and a widely used instrument (Sexton, Helmreich, Neilands et al., 2006). This is a 32-item tool that assesses safety attitudes across six domains—perceptions of management, job satisfaction, working conditions, stress recognition, teamwork climate, and safety climate. Each item is measured on a 5-point Likert scale (Disagree Strongly to Agree Strongly) which is then converted to a 0–100 scale. Each factor score equals the mean score of its component survey items. A positive score is defined as $\geqslant$75 out of 100.

Data Gathering

After providing the potential respondents full disclosure regarding the study, research assistants handed the survey forms to them. Respondents were given one (1) week to complete the survey. Once completed, these were placed in the provided opaque envelope, sealed, and returned. The sealed envelope and the completed questionnaires had no markers or personal identifiers to maintain the confidentiality of the respondents. Completing and submitting the questionnaire is their implied consent to participate in the survey.

The following criteria were followed as recommended by the AHRQ Toolkit for possible exclusions. Responses were excluded if the respondent answered (1) less than one entire section of the survey, (2) fewer than half of the items throughout the entire survey (in different sections), or (3) each item was rated the same, e.g., all "4s" or all "5s").

Data Analysis

Descriptive statistics and *t*-test using Statistical Package for the Social Sciences (SPSS) version 10 was used to explore the differences in average positive response rate between nurse administrators and staff nurses. Spearman's rank correlation coefficient (ρ) was used to test the association between the Patient Safety Grade (High, Moderate, Low) as the reflection of safety culture and safety attitude dimensions.

Ethical Approval

Ethical approval to conduct the study was obtained from the University of the Philippines Manila - Ethics Review Board of UP Manila and the Expanded Hospital Research Office.

Findings

Demographics

There is an equal distribution of respondent for both staff positions being compared in this study with 51.8% (n=85) staff nurses (Nurse I and Nurse II) while 48.2% (n=79) are nurse

administrators/managers composed of 29.9% (n=49) junior head nurses, 15.2% (n=25) senior head nurses, and 3.0% (n=5) chief nurses.

Most respondents have considerable experience in the NUH, in their respective clinical units, and in their clinical specialization with 54.3% working in the hospital and their respective units for more than a year (29.9% for 1-5 years and 24.4% for those with 6-10 years experience). The same can be said of the nurses' length of service in their respective clinical areas or units. An overwhelming number (72%) of the nurses have been working in the same unit for 1-5 years (47%) and another 25% for 6-10 years. Those who have practiced in their current specialty for 1-5 years yielded 34.1%, while those in the same clinical specialty for 6-10 years were 25%, for a combined total of 59.1% of the total respondents working in the same clinical specialty.

This indicates that the nurses are familiar with the processes, systems, protocols, values, and the culture of the hospital, unit, and their respective clinical expertise. One can likewise surmise that the respondents have a considerable exposure to the NUH patient safety culture and its organization's attitude. Hence, the respondents are likely to provide reliable data on the patient safety status of the NUH.

On Perceptions of Safety Culture and Safety Attitudes

There is a general positive response to the dimensions of Safety Culture and Safety Attitude among the respondents (Table 1). Majority of the nurses gave NUH an Overall Patient Safety Grade of 'Very Good' (53%) and 'Acceptable' (34%), as well as, an Overall Safety Attitude Score of 70.86%. Both these results indicate that the nurses of NUH perceive that their individual units and their hospital promote patient safety.

With regards to the dimensions of AHRQ-HSOPS alone, the dimensions with the highest positive perceptions were Organizational Learning (90.41%), Teamwork within Units (87.63%), and Feedback and Communication about Error (78.98%), while the dimensions with the least positive perception or areas with greatest potential for improvement were Hospital Handoffs and Transitions (15.31%), Non-Punitive Response to Error (38.43%), and Communication Openness (44.90%). On the other hand, the nurses' Safety Attitude dimensions that had the highest positive perceptions were Teamwork Climate (86.78%), Safety Climate (85.56%), and Job Satisfaction (84.07%), while the lowest response is in Stress Recognition (44.10%).

On the Relationship between Safety Culture and Safety Attitudes of NUH Nurses

There is a significant and strong positive correlation (Table 2) between Safety Culture (using the Overall Patient Safety Grade) and the different dimensions of the nurses' Safety Attitudes in terms of the following dimensions: Teamwork Climate, Safety Climate, Job Satisfaction, Perceptions of Management, Working Conditions, Unit Management, and Hospital Management. However, there is a significant and strong negative correlation with Stress Recognition. These findings suggest that the Safety Attitudes of the nurses in the NUH promote a positive Safety Culture while poor Stress Recognition negatively affects Safety Culture.

Table 1. Percent of Positive Responses per Dimension on Safety Culture and Safety Attitudes

Dimensions	Percentage of Positive Responses n=164 (Staff Nurses=85, Nurse Administrators=79)
Safety Culture Dimensions (AHRQ HSOPSC)	
Organizational Learning—Continuous Improvement	90.41%
Teamwork Within Units	87.63%
Feedback and Communication About Error	78.98%
Overall Perceptions of Safety	60.62%
Hospital Management Support for Patient Safety	58.40%
Frequency of Events Reported	52.97%
Teamwork Across Hospital Units	47.92%
Staffing	46.94%
Supervisor/Manager Expectations & Actions Promoting Safety	45.71%

Table 2. Relationship between Safety Culture and Safety Attitudes among NUH Nurses

	Teamwork Climate	Safety Climate	Job Satisfaction	Stress Recognition	Perceptions of Management	Working Conditions	Unit Management	Hospital Management
Spearman's rho	0.41*	0.36*	0.42*	-0.36*	0.35*	0.34*	0.43*	0.39*
p-value	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
n	125	150	130	151	151	151	151	151
*Values significant at $\alpha = 0.01$								

Discussion

The findings reflect the presence of Safety Culture in the National University Hospital. However, one cannot determine the level of maturity of the organization. There is some awareness of the concepts of patient safety among the nurses as shown by strong scores in several dimensions of Safety Culture and Safety Attitudes. Strength is evident in the areas of Teamwork, Learning as an Organization, Job Satisfaction, and Positive Perception towards management. However, there remains issues on Managing Event Reporting, Low Rates of Events Reported, need for improvements in Nurse-Patient Ratio, inability to recognize the Impact of Job Stress to Incidence of Errors, Persistence of Individual Blaming, and arduous hierarchical processes when Communicating Errors.

On Error Reporting and Staffing

Nurses working at the NUH perceive Safety Culture in their organization positively. The greatest strengths are in the dimensions of Teamwork within Units, Organizational Learning-Continuous Improvement, and Feedback and Communication about Error. On the other hand, the greatest opportunities for improvement are in the dimensions of Non-Punitive Response to Error and Staffing. Based on the results, errors are made known for learning purposes, but the focus is still learning from the mistake of the individual and not the system. In this case, Just Culture promoting Patient Safety where trust, non-punitive, and a blame-free error-reporting atmosphere is not discernible (Sammer, Lykens, Singh et al., 2010).

More than 88% of the nurses had 0-2 events reported in the past 12 months with more events submitted by Pay Service Unit nurses (66.2%) as compared to nurses from Charity Wards (43.6%) where services are given with very little cost to indigent patients except for medical supplies.

There is likely underreporting of adverse events by nurses in Pay Service Units which is significantly more than Charity Ward nurses. Moreover, the increased number of reports from nurses in Pay Service units may be attributed to their perception that paying patients are litigious, while non-paying patients are just grateful for the free care they receive. It may also be possible that healthcare workers have reservations reporting errors for fear of reprisals, damage to the reputation of the organization, and the health professionals' loss of license (Listyowardojo, 2012).

In the dimension of Staffing, results reflect that nurses in the unit work longer hours than what is best for patient care as reflected by many patient-nurse ratio issues. This result is similar to the HSOPS Comparative Database Report (Sexton et al., 2006) where 'Staffing' is the third lowest positive response across 6,407 hospitals included in the database. The lack of adequate staff positions allocated by the government may be the greatest contributor to inadequate staffing. Furthermore, among the themes that came from the respondents' comments on patient safety issues in their respective units is with Nurse-Patient Ratio issue being the highest (44%), followed by Patient Acuity Imbalance (28%).

On Nurses' High Score on Job Satisfaction

Despite this great concern on staffing, both nursing management and staff nurses gave high Job Satisfaction scores for working in NUH. Job Satisfaction marks are also significantly higher among nurses working in Charity Wards where conditions are less than ideal and resources are sparse. Several nurses attributed this to their commitment to care for underserved populations despite budgetary and resource limitations. This is also supported by positive responses on Teamwork within Units and Teamwork Climate. The dimension on Working Conditions also contribute to positive Safety Attitudes and positive Teamwork, where nurses believe that good working conditions facilitate better

collaboration with other professionals that prevent communication breakdowns causing care delays and adverse events.

On Low Stress Recognition

When describing their work conditions, few nurses perceive that they are likely to commit errors during tense situations but acknowledge that fatigue impairs their performance during situations of high stress. Azimi et al., 2012 reported in their study that low Stress Recognition scores were also found among their respondents. They found that after a series of training programs, there was significant improvement in many safety culture dimensions except for Stress Recognition. They concluded that when stress becomes regular and consistent, it becomes readily unrecognized and integral to the working conditions making it unhealthy and unsafe.

Limitations

Although the study was able to capture a representation of the nurses in the general units of the hospital, it cannot be generalized to the critical care and emergency care areas, and other healthcare personnel. In addition, the safety culture and safety attitudes measured in the study cannot be used to reflect other Philippine hospitals as each institution will have different variables to reflect the culture of the institution.

Conclusions/Recommendations

The outcomes of this present research validate that nurses of the National University Hospital scored the institution positively in terms of Patient Safety Culture and Safety Attitude. There is more work that needs to be done to improve in the areas of Staffing, Non-Punitive Response to Error, and Stress Recognition. Safety Attitude significantly affects Patient Safety Culture where a strong Safety Attitude among healthcare personnel will enhance Safety Culture. Staff nurses and nursing management perceive Patient Safety Culture and Safety Attitude differently. In addition, nurses working in Charity Service areas have more positive perceptions about Patient Safety Culture in the NUH as compared to nurses assigned to Pay Service units.

The study recommends that the National University Hospital develop a hospital-wide Patient Safety program. This should be collaborative and in concert with nursing management and staff nurses, hospital administration, and all health and non-health professionals and workers. This program should include regular evaluative and inter-professional assessments in the form of continuous quality improvement measures. The study further recommends closer analysis of cultural and work environment factors surrounding Low Event Reporting and Low Stress Recognition that contribute to errors across the organization. Likewise, an institution-wide approach is required to identify a more decent and a more realistic nurse-patient ratio that promotes a safe work environment for both patients and providers. This research also emphasizes the importance on patient Safety Culture and Safety Attitude in the mindset of nurses and other healthcare staff in third world countries with the focus on quality and safe patient care continuing to be a global priority. The outcome of this study is an excellent addition to the limited literature in third world countries about this important healthcare issue. An established benchmark is valuable for use by other healthcare organizations where this study might be replicated, as well as, in other less developed and other developing countries worldwide.

Postscript to this Research

Results of this study were presented to the National University Hospital's administrative leaders and staff, resulting in the revision of its Patient Safety Manual. The NUH Division of Nursing Research and Development also conducted follow-up research studies on patient safety based on outcomes of this research. Several university-led studies are presently being conducted across healthcare providers in all units of the NUH to guide the next steps in promoting a safe culture. •

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Acknowledgements

The authors wish to acknowledge the contributions of Dr. Cora A. Añonuevo and Prof. Jocelyn G. Acop, and the Paz-Morales Grant for the completion of the research.

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> *"The oak fought the wind and was broken, the willow bent when it must and survived."*
>
> — **Robert Jordan, The Fires of Heaven**

RESEARCH ARTICLE

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MICHELLE LOBCHUK, RN, PhD

Immigrant Filipinos as Caregivers for Filipino Loved Ones with Chronic Illness in Canada

Abstract

Objective: The purpose of this study was to examine the type of care, factors influencing caregivers' strains, and caregiving outcomes of immigrant Filipino caregivers to senior patients with chronic and/or serious life-threatening conditions in Canada.

Design: This study employed a qualitative method with five female caregivers and five female and male patients who were Filipino immigrants in Winnipeg, Canada. Audio-recorded interviews were guided by a semi-structured open-ended interview script. Transcripts of audio-recorded interview data were analyzed using content analysis.

Findings: Findings of the study revealed that female caregivers' tasks included providing personal care, assisting with mobility and giving medications, as well as, performing care management tasks like arranging social services and transportation. Caregivers' economic, financial, physical, emotional and time strains were influenced by their employment arrangements, household status, income, social networks, the life cycle stage, housing, and neighborhood. Caregiving outcomes for employed female caregivers resulted often in economic and emotional distress and even poor health.

Conclusion: The study's results showed how health care providers need to provide more support for immigrant caregivers dealing with patients and with chronic illness, memory loss, and/or mental health issues --- especially those caregivers and patients who live in impoverished neighborhoods. Furthermore, removing factors contributing to caregivers' strains such as employment arrangements, housing conditions, and the promotion of culturally appropriate health practices will enable immigrant caregivers and patients to enhance quality of care living in Canada.

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RESEARCH ARTICLE

Introduction

In Canada, approximately 8.1 million adults (28% of population) provide care to a family member or a friend with chronic and/or serious life-threatening conditions, disability, or aging needs (Statistics Canada, 2013). Senior citizens are one of the fastest growing age groups. In 2011, people over 65 years of old comprised 5.0 million (total population 33,476,688): a number that is estimated to double in the next 25 years and reach 10.4 million by 2036. In addition, it is expected that in 2051, one in four Canadians will be over 65 years of old (Government of Canada, 2014). Manitoba has one of the highest rates of caregivers at 33% that is higher than the national average of 28% in 2012 (Statistics Canada, 2013). It is estimated that caregivers provide 80% of care to a patient with long-term conditions and contribute annually more than $25 billion of unpaid labour to the health care system (Canadian Caregiver Coalition, 2008). Many of these unpaid family caregivers are juggling work and caregiving responsibilities too. Hence, similar challenges of caregiving are likely being experienced in the growing immigrant community in Canadian society.[2]

Previous research found that for many immigrant family caregivers, the problems of adapting to a new health environment are linked to economic, cultural, and linguistic factors which contribute to social isolation (Kobayashi & Funk, 2010; Zanchetta & Poureslami, 2006). Immigrant female caregivers often experience difficulties in reconciling work demands and family caregiving influences leading to caregivers' role strains and depressive symptoms (Wang et al, 2011). They often experience deskilling, have low incomes, and are more likely to change from full-time to part-time positions to reduce their working hours, or worse, quit their jobs due to heavy obligations as caregivers to ill family members (Lai & Leonenko, 2007; Man, 2004; Stewart et al. 2006; Weerasinghe & Mithcell, 2007). Filipino immigrants in the United States, especially recent immigrants experience job-related stressors that are associated with poor health outcomes (De Castro, Gee, Takeuchi, 2008). Immigrant women often experience caregiving conflicts with work and family expectations resulting in their stress, burn-out, guilt, and frustration as they may feel overwhelmed by the amount of tasks to perform (Gulati et. al., 2012; Wang & Sanglang, 2005). Female caregivers also often report having chronic illness such as cancer, kidney, arthritis, headaches, and dementia. Moreover, as immigrant caregivers experience resettlement, they must frequently deal with isolation and loneliness, family conflict, economic dependence, and coping (Leung, 2000; Pratt, Pendakur, & Columbia, 2008). Immigrant communities tend to be unacquainted with the new health care system and experience challenges in accessing health-related information and navigating the Canadian healthcare services.

Filipino culture and family caregiving. Filial piety, cultural values of caregiving in families, and respect for the elderly are central values in Filipino families (McBride & Pareno, 1996). In Filipino culture, care meanings and experiences are shared and built into the social life of kinship structure and gender division of labour. For Filipino individuals, the shared culture prioritizes the following: 1) family as the main socio-economic unit of kinship structure; 2) reciprocal obligations among kin members and filial respect and responsibility for the care of one's own parents; 3) a sense of respect and gratitude towards parents and family; and, 4) avoidance of the disclosure of information that may bring shame to the families and put them at risk (Natividad, 2000; Pacquiao, 2011). Children reciprocate the care they receive from their parents and, in turn, take care of their elders. End-of-life health care decisions often require a social ethics of care. In other words, serious illness is usually discussed with family members before a shared decision is made to notify the patient about his or her terminal condition (Munoz, 2013). Filial obligations and gender aspects of caregiving in the Filipino culture that are linked to cultural norms, practices, and expectations require further investigation to understand family dynamics, caregiving strains, and outcomes.

As far as we know, there is currently none or limited information available on the caregiving experiences of Filipino caregivers to senior patients and factors influencing caregiving strains and outcomes as they settle into the new Canadian socio-economic, political, and health care environment. The purpose of this study is to address this gap by presenting accounts of immigrant Filipino family caregivers' experiences in providing care to patients with chronic and/or serious life-threatening conditions and show how their care was influenced by social and economic factors.

Methodology

The main focus of this qualitative study was to examine the type of care and factors influencing care and caregiving outcomes of immigrant Filipino caregivers who provide care to patients with chronic and/or serious life-threatening conditions. The field work was conducted between June and October 2013.

Guiding theories. This study was conceptualized by transcultural nursing, critical ethnography, and feminist research. Madeline Leininger, a nurse anthropologist, developed a theory of transcultural nursing that focused on human care in diverse cultural contexts. Leininger (1991, 1988, 1999) argued that with care being universal, individuals, nevertheless have diverse meanings, values, and norms that influence their decisions, patterns, and practices of care. Culturally congruent health care

requires a holistic understanding of individual, family, group, and institutional modes of care while considering the broader aspects of social structure, worldview, language, and the environmental context. Three modes are required to achieve culturally congruent care: 1) culture care preservation and/or maintenance that recognizes people's unique cultures to main cultural values related to care and health are conditions, 2) cultural care accommodation and/or negotiation helps people from diverse cultural backgrounds to negotiate care to attain the shared goals to achieve positive health outcomes, and 3) cultural care re-patterning and/or restructuring that enables patients to modify personal behavior while respecting their cultural values (Leininger, 1985, 2002). Through a critical ethnography lenses, researchers attempt to understand women's caregiving experiences, challenges that they experience and decisions they make with patients and health care providers (Leininger, 1990, 1997; Grewal, Bottorff, & Hilton, 2005). As guided by the feminist standpoint and intersectionality theories, researchers attempt to be open to hearing women's perspectives, knowledge and experiences of caregiving in their lives, choices, and constraints they have to overcome (Hooks, 2000). In this study, the feminist approach enabled the researchers to listen to female caregivers' distinctive experiences of knowing and living in the caregiver role as immigrant Filipino females.

Sample and recruitment. A purposeful sample of caregiver-patient dyads in this study included: patients over 55 years of age who were the first generation of Filipino immigrants in Manitoba. The lead author (ZT) recruited participants by not only distributing a written announcement about the study but also by displaying posters in Asian grocery stores, churches, and at the University Manitoba. ZT used a snowball recruitment technique and asked participants to identify eligible participants from the community and help ZT to connect with them. This method of sampling is useful in helping researchers to locate and find people who are difficult to reach (Macnee & McCabe, 2008). ZT immersed herself in the Filipino community by attending cultural events and Sunday service at the local church. ZT built positive relationships with community members and spent time socializing with them, sharing information about the study and hearing their perspectives on caregiving in the community. These informal encounters helped ZT to learn more about the Filipino community life and verify information obtained during the study. ZT provided caregivers with a brochure on caregiving that was published by the Government of Manitoba (Government of Manitoba, 2013). Each participant received a ten dollar grocery gift card for their participation in the study.

Data collection. The interviews were conducted mostly in participants' homes. A few interviews were held in hospitals and participants' workplaces. One interview was held in ZT's University office because of its convenient location for the participating caregiver. ZT and the research assistants administered written consents to participants that were followed by the demographic survey and audio-recorded interviews. Prior to the conduct of the study, written ethical approvals were initially obtained from the Research Ethics Board of the University of Manitoba and the University of Winnipeg.

ZT trained two research assistants (Ras), who were fluent in Tagalog, on how to conduct interviews and gain consent from participants in this study. The RAs, together with ZT, conducted six semi-structured interviews and four more during September to October 2013. Interviewers held separate interviews with female caregivers and with patients that were mainly organized at different times and sometimes at different locations. ZT also participated in the respective interviews and posed other questions. The audio-recorded interviews lasted about an hour. The participants had a choice to have the interview conducted in English or Tagalog. RAs conducted four interviews in Tagalog. Some interviews were also mixed with English based on participant preference or when the RAs did not speak Ilocano, one of the dialects in the Philippines. Since the RAs had limited experience in conducting interviews, ZT addressed RAs' concerns or questions during scheduled breaks in interviews and clarified whether or not they understood participants' responses. Moreover, ZT conducted four interviews with participants in English while Tagalog-speaking RAs translated and transcribed interviews in Tagalog. ZT also hired and trained a third RA, a non-Tagalog speaking individual, to transcribe the interviews done in English. Pseudonyms were used to protect the anonymity of the study's participants.

Data analysis

Data collection and data analysis were carried out. Content analysis was used to code and identify main themes that emerged from the transcribed interviews (Leininger, 1991; Graneheim, Hällgren, & Lundman, 2004). Two months after the interviews were completed, researchers communicated with the ten participants of the study to obtain their feedback, clarify any misunderstandings in the data, and to check on the accuracy of information captured in the transcripts. The interviewers' extended engagement with participants in their homes at scheduled visits helped to ensure the trustworthiness of information received during the interviews. The findings of the study were also presented at a community meeting and at academic events attended by Filipino community leaders, retirees, and private and public sector employees where ZT received feedback regarding this study's findings.

Findings

A sample of six caregiver-patient dyads was used. In one dyad, only the caregiver was interviewed because the patient left for the Philippines and had been in Canada for a visit. In another dyad, only the female patient was interviewed and her husband preferred not to be interviewed.

As shown in Table 1, all caregivers were female, around the age of 52 years, and Catholic, and had graduated from college or a university in the Philippines and/or in Canada. The caregivers identified themselves as either the wife, daughter, sister, or granddaughter to the patient The caregivers provided care to the patient between three months and 16 years.

The patients (n=5) were generally 70 years of age, Catholic, retired, had worked as a labourer, and had an annual income that was below $20,000. Three patients were widows who lived with their children, one patient was married and the other patient was single living on social assistance by herself. One male and four female patients were diagnosed with either stroke, tumor and stroke, diabetes and schizophrenia, kidney disease, or glaucoma and high blood pressure. One caregiver and two patients experienced memory loss. All patients received home care ranging from two to forty hours per week. A female patient on social assistance had received home care twice a week for a total of two hours. Patients with low or no income also seemed to have the lower home care hours provided to them.

Table 2 describes caregiving relationship characteristics. It is interesting to note that more caregivers than patients reported that caregivers often talked openly with the patient about his or her concerns and assisted the patient in dealing with issues arising from his or her illness.

Caregivers' tasks

Caregiving was shared among extended household members depending on their gender roles and identities. Female caregivers' care provision included such tasks as assistance with personal care (feeding, toileting, bathing, and dressing), mobility (walking, climbing stairs, transferring to the chair, the bed, and the toilet), and giving medications. Female caregivers cooked, cleaned the house, did laundry, changed beds, and changed patients' clothes. Female caregivers also took a lead role in care management tasks such as making appointments with doctors, case coordinators, social workers, and calling the emergency services. They also managed transportation, money, and made a schedule for the extended family members to bring food to the hospital. And they were assisted in care management by male and other extended household members.

Gender differences in care provision and care management tasks were significant. The findings of this study are consistent with previous studies on caregiving which document that women provided more “hands on” assistance than men including food preparation, household chores, shopping, laundry, and personal care (Pinquart & Sörensen, 2006; Luna, 1994). Some studies reported that male caregivers were more likely to arrange social services and transportation (Chang & White-Means, 1991). In contrast, this study revealed that female caregivers were more likely to arrange financial and social services than their extended kin male members. Women tended to take a lead role in negotiating care among extended household members.

Most caregivers in this study described that their tasks included health-promoting and healing practices in caring for their ill loved ones to provide spiritual, emotional and social support. For both caregivers and patients, prayer was a major health-promoting activity and also a matter of religious observance that helped to them to create a spiritually healthy place in the home and in the hospital. Praying together at dinner time, saying the rosary at home or in the hospital, and asking for communion if the patient could not attend chapel services or prayer time were all part of multiple responsibilities that caregivers assumed in their cultural and religious way of caring. In other words, prayer was integrated into the everyday caregiving routine of Filipino caregivers for members of their own families.

When carrying out multiple caregiving tasks while working, caregivers found time to address spiritual, physical and emotional well-being of patients and themselves. Religious rituals were one of the major activities that fostered bonding, support, and warmth between the caregivers and patients. Female caregivers also used religious rituals as a coping strategy to recover and address their own health issues, as well as, their feelings of anxiety and tension while working outside their home and caring for their respective patients. Belinda, a caregiver, shared how her husband used to read a Bible for four hours and she learnt a great deal from him. In this dyad, commitment and appreciation of each other's strengths were sources that fostered their strength-based relationship and communication. This dyad's strength-based communication was influenced by the caregiver's and patient's abilities to learn from each other, transfer knowledge, and engage in open dialogue, creativity, collaboration and commitment with and for each other.

For Filipino families in this study, the ritual structure in the family was a basic unit of social organization which empowered positive interactions amongst caregivers, patients, and extended family members. Some caregivers indicated flexibility and adjustments for prayer time such as going to the church not only on the weekends, but also during the week. Karen, a 21-year old caregiver shared this in her interview:

Table 1. Socio-economic characteristics of family caregivers and patients

Characteristics of family caregivers and patients	Family caregivers (n=5)	Patients (n=5)
Gender:		
Female	5	4
Male		1
Average age	52	70
Marital status:		
Married	2	3
Widowed	1	1
Single	1	1
Divorced	1	
Education:		
No education		1
Some/completed high school in the Philippines	1	2
College in the Philippines	1	1
University in the Philippines	1	1
University in Canada		
Currently an undergraduate student in Canada		
Relationship between family caregivers and patients:		
Wife	1	
Daughter	2	
Sister	1	
Granddaughter	1	
Religion:		
Catholic	5	4
No religious preference		1
Income:		
No income (social assistance)		1
Below $20,000	2	2
$20,00-$39,999	3	11
$40,000-$59,999		
Chronic illness:		
Diabetes		2
Schizophrenia and diabetes		1
Stroke		1
Kidney disease		1
Care provided by caregivers Duration	From 3 months to 16 years	
Current treatment		
Yes		4
No		1
Type of current treatment		
Dialysis		3
Insulin		2
Medications		5
Past treatment		
Dialysis		4
Surgery		2
Physiotherapy		1
Duration of home care	10 - 180 months	
Frequency of home care per week	2-5 days/week	

Table 2. Degree of perceived communication and assistance between family caregivers and patients

Characteristics of family caregivers and patients	Family caregiver	Patient
Degree of assistance:		
Always	4	2
Frequently	1	1
Sometimes		1
Never		1
Degree of accompanying patients to medical visits:		
Always	3	2
Frequently		
Sometimes		2
Never	2	1
Perceptions on the caregiving contact:		
Daily	4	2
Less than weekly	1	1
Weekly		2
Degree of communication about illness:		
Always	4	1
Frequently		1
Sometimes	1	2
Never		1
Degree of perceived knowing patients' concerns about the illness:		
Very well	3	2
Somewhat well	1	1
Have some knowledge	1	1
Not very well		1

Interviewer: Yes. Uh, and uh, could you please share if you use some cultural knowledge like foods, or remedies, or prayers, or rituals with your Grandpa?

Karen: Um. My cultural, uh, I guess we always went to church together.
I: Yes.

Karen: And we also prayed together. As a whole family, so not just me and him. But my whole family would pray with him. Um, I know we'll go, we'll go to church to church on a weekday even. It doesn't have to be a weekend. But that would be... I guess one thing that kept my family together, would be church. Um. [pause]. Daily food. Uh, Filipino food. He really likes his coffee and this type of bread.

Through religious observance and making modifications in ritual activities, the caregivers "kept families together" by extending healing practices from private places such as home to public, churches and hospitals. Clearly, they re-inscribed spatiality and temporality of their activities to create meaning through a new context in their lives. They stressed that the Filipino culture is based on the centrality of family and the collective well-being of all family members that are founded on religious observance and rituals. Love, respect, and care toward family members were integral parts of caregiving as captured in this study's sample of caregivers and patients.

In the interviews, some caregivers who described their experiences with severe caregiving strains preferred that patients live independently and be visited during the weekend. Patients who lived independently showed different ways of resilience in performing health promoting practices and religious observance to create healthy spaces in impoverished neighborhoods. Healthy spaces speak to individual's sense of agency through routine practices of food preparation and consumption, traditional healing and religious observance in forging healthy spaces within the specificities of migrant settlement (Dyck & Dossa, 2006). First, they prayed with non-family members of different religious backgrounds. For patients struggling with schizophrenia,

depression, and diabetes, they described that individuals who practiced other religions (e.g., Mormon, Jehovah's Witness) helped them to pray. Second, they watched religious programs on television to find spiritual help to deal with health conditions, cope with distress, and move on to a desired future. One of the patients declared that she attended TV Mass on Sundays and that she also attended prayer meetings in a tenant club in the Manitoba housing located in the North End.

Caregivers also described other tasks such as preparing meals especially since caregivers had a profound knowledge of the Filipino cuisine and pointed out that eating Filipino food was a key to the recovery and well-being of aging patients. Participants stressed that preparing Kare-Kare, Sinigang, Nilagang Baka, Menudo, Chopsuye, Pancit, Tinola, Chicken Adobo, Chicharon and other traditional Filipino dishes were part of their caregiving tasks. They believed that eating Filipino food is a pathway to their family members gaining strength and recovery. Like the South Asian and Afghani women in Ontario and women in Uzbekistan (Dyck & Dossa, 2007; Tursunova, Kamp, Azizova, Azizova, 2014), this study's caregivers acted as cultural brokers and d public spaces that were predominantly Eurocentric as demonstrated in dominant food consumption patterns (e.g., in hospital settings). Often Filipino caregivers say that they would meet with dieticians to consider accommodating Filipino diet or food preferences of patients. One senior patient participant, in particular, spoke about *lechon*, a roasted pig, as an important part of the Filipino diet. *Lechon* tends to be restricted to people with high blood pressure due to its high cholesterol content:

> Actually they are trying to restrict the….they want her on diet. They want her to eat the food that they have here because they are having hard time regulating the sugar and cholesterol. It's harder so I used to talk to the dietician and finally I said “Look Anna, I can't do that anymore because all the one you have on the list is a Canadian guideline—food guide. It's not going to work to my mom (sic). She will not eat potatoes or carrots. She will not eat that and I said “My mom is old, let's just give her what she wants.” Since rice is a staple food and an integral part of the Filipino dishes, the 83-year-old patient who likes eating lobster and fish revealed, “I don't think I would've lasted this long if I didn't eat rice. One for breakfast, one for lunch.”

Filipino patients did not like food in North America, especially food that was served to them in the hospital. These patients' caregivers would bring Filipino food to them daily.

Since the majority of Filipinos live in the Maples and West End districts predominantly populated by immigrants in Winnipeg, some Filipino caregivers had access to the Asian food stores with ethnic food. For some low-income caregivers, the issue of affordability was prevalent and often resulted in high calorie intake and less nutritious food choices. The issues of availability of stores and its accessibility was an issue to caregivers and patients living on fixed incomes especially in the North End. The high price of limited healthy food choices offered by convenience stores in the North End have been linked to the growing epidemic of diabetes among marginalized communities (Redekop & Crosier, 2013). Large grocery stores such as Food Fare, Extra Foods, Zellers had been driven out of business because there were 62 convenience stores with inflated prices and no large grocery stores located in the North End in Winnipeg. Convenience stores often do not offer healthy food. This type of situation forces people to buy cheap processed foods (Baxter, 2012). Oliver De Shutter (2012), the UN Special rapporteur on the Right to Food said that “In Manitoba alone $300 million went to treating diabetes. The costs will continue to increase and this will be one major reason why Canada cannot ignore adopting a national food policy” (p. 3). Thus, the lack of available healthy food and prevalence of processed foods are one of the major contributors toward increasing rates of diabetes in Manitoba that can reduce the well-being of caregivers and patients.

The caregivers in this study, moreover stressed, that they also modified Filipino food and reduced the patient's intake of salt and oil, preferred fully grained foods, offered lots of fruits and vegetables, and provided no genetically modified food to patients. Caregivers explained that they gained knowledge about a healthy diet through different sources, such as the Internet, doctors, television, and journals. Female caregivers stressed that cooking from scratch and sharing recipes and knowledge among household members were central in helping them maintain good health in the families they care for. Some caregiver tasks and caregiving roles extended as well into providing physical therapy and traditional remedies. In addition, they also knew reflexology and massaged ill family members and even offered traditional Filipino massage therapies. One young caregiver described that her grandparents who lived in the Philippines had shared traditional remedies with her such as White Flower. White flower is an ointment that is used for the temporary relief of minor aches and pains of muscles and joints due to backache, arthritis, or strains. Karen, a young caregiver described:

> Ok, well, uh... He brought this medicine actually from the Philippines, uh, I don't know what it is. But it's a green ointment, and you put it on your skin when you have a sore back or something. It actually, I guess, makes your... Makes you feel better the next day.

The study also showed that Filipino immigrant caregivers and patients who have been in Canada for a long time have often been acculturated to the health care system. Most caregivers in this study came mostly from urban areas in the Philippines and they did not know much about home remedies and traditional Filipino healing methods. Studies of health practices among Filipino Americans suggested that people who immigrated from rural areas in the Philippines often knew about home remedies, traditional healing techniques, and supernatural ailments. On the other hand, those individuals immigrating from the urban areas in the Philippines tended to rely more on Western medical interventions and over-the-counter medications (Montepio, 1986).

Factors contributing to caregivers' strains

Employment, household status, and age were critical factors in predicting caregiving workload and strains for immigrant caregivers. All Filipino caregivers in this study described how they balanced caregiving responsibilities. Retired caregivers described that they had relied on a diverse range of coping mechanisms such as rotating responsibilities among siblings and/or being protective of the amount of their personal commitment. Arlene, a seventy-year old caregiver, said:

> I would say 3/4 of the time I ignore my own needs and he has 3/4 of my time meeting his needs. But you see in the long run assessing your own situation for the long run, I need to take care of myself so I may be able to provide the care that he needs. So I'm at a point now where I said 'I have to be healthy so that I can provide help to him. And sometimes I go out of myself to make him comfortable and to make sure I meet his needs. So I would say 60 (laughter) for myself and 40 for him (laughter).

Retired caregivers seemed to balance their caregiving responsibilities successfully. In general, retired caregivers aimed to stay healthy to protect their personal, emotional, and physical well-being. They would spend leisure time with friends, go out for dinner, and watch Tagalog soap operas on television together. Some of them even volunteered at cultural events.

In contrast to retired caregivers, employed female caregivers experienced economic, financial, physical, emotional and time strains influenced by employment arrangements, household status, income, social networks, the life cycle stage, housing, and their neighborhood. Employed female caregivers also often experienced economic strain due their inability to generate income for their household. The caregiving strains mentioned were experienced by employed female caregivers' in specific ways. An example of such strains is that they had to juggle several jobs, accommodate their schedules or quit their jobs due to their caregiving responsibilities. One caregiver who was pregnant experienced multiple stressors and poor health outcomes. While working seven days a week as a health care aide and also taking care of her children and a relative with chronic illness, she, sadly, had to give birth to a child with several disabilities. For some employed caregivers, caregiving affected their personal health and resulted in sleep deprivation and memory loss. Consequently, poor health often reduced these caregivers' work productivity and increased absenteeism resulting in a loss of human capital in the organizations. Other caregivers struggled to find jobs and quite often experienced overt discrimination during recruitment and marginalization when seeking employment.

Caregiving experiences and outcomes

Five caregivers in the study adhered to filial responsibility and norms. They appreciated the availability of the health care services which helped them meet their family members' health care needs. In addition, caregivers had a strong sense of commitment and responsibility to their caregiver roles and tasks. They highlighted that the most meaningful experience as a result of their caregiving responsibilities was being able to bond with their loved ones by going for walks, eating together, observing improvements, and seeing their family members survive and thrive after surgery. Karin, a 21-year-old caregiver, took care of her grandfather, Ernesto, who came to visit Karin in Winnipeg for three months. Ernesto had glaucoma since he was 21 years old. Among the daily activities they engaged in were praying with the family, going to church, and going for walks to the park or shopping centres around Winnipeg. Karin's family took Ernesto to the provincial beach, parks, and resorts before he returned to the Philippines. For Karin, it was important for her to engage in as many joint activities with her grandfather as possible in order to give value to their remaining time together, not knowing how long they would see each other again if ever he would decide to return to his home country.

One of the most transformative experiences for caregivers was feeling acknowledged for the work they do and being recognized as “good daughters”. Maureen shared:

> I'm the only daughter, but I'm not my mom's pet. So I'm not really. But that's the time when my mom see maybe that I'm the one to never leave her (starting to get emotional) from the start to the end and I'm so lucky when my mom (didn't finish thought). Because she went out of the hospital May 13 and my birthday is May 15 and when she come home that's the first time my mom told me that “I am lucky to have you in my life, because without you I don't

know what's happening to me." That's the first time I heard that from my mom.

Almost all caregivers spoke of their caregiving roles and behaviors as being tied to their identity as a daughter, a spouse, or a granddaughter. Montgomery, Rowe and Kosloski (2007) asserted that caregivers not only change their activity patterns but also the way in which they perceive their role identity in relation to the patient. Caregivers in this study reported how they incorporated their new activities into everyday life and also became the main decision-makers. Some caregivers argued that their identities were defined by their increasing involvement and intensity of caregiving tasks. Others, especially employed caregivers who could not meet caregiving expectations and adapt to the new caregiving tasks, resented to some extent their new caregiving identities.

Emotional distress and radical changes in their physical, emotional, and mental health were outcomes described by the majority of female caregivers who were employed. Some caregivers experienced health issues such as insomnia, dizziness, "almost leukemia," low hemoglobin, and bleeding. They also experienced emotional distress such as anxiety, frustration, and stress. Moreover, employed caregivers described that they had limited opportunities to spend good quality time with their patients, family members, and friends. In the end, all caregivers in this study had experienced positive bonding with their loved ones whom they looked after and developed a personal appreciation for their roles. Still, it is alarming to note that caregiving appeared to cost the health and well-being of caregivers in this study that is widely mentioned in other studies (Spitzer, 2006; Heidenreich, Koo, & White, 2013).

Discussion

The major findings in this qualitative study offer insights into caregiving tasks consisting of personal care and care management tasks. The division of caregiver roles and tasks in this study sample seemed to be gender-based that is similar to other study findings with different populations or caregivers in general (Koehn, 2009; Scharlach et al., 2006). For instance, the study on gender differences in caregiving among Chinese Canadian caregivers revealed that contrary to public belief that sons and daughters-in-law are main caregivers in the Chinese culture, daughters played more of a significant role in family caregiving (Lai, Luk, & Andruske, 2007) as revealed in the current study.

This study's findings also offered a deep and comprehensive understanding of the intensity of involvement of female Filipino family members (daughters, wives, sisters, and granddaughters) in performing care tasks. These female caregivers were willing to provide care as driven by cultural and social values. Caregiving tasks included assistance with personal, medical, financial, and household care management. Female caregivers also engaged in health promotion to meet physical, emotional, and spiritual needs of their dependent family member.

Health promoting practices that were particularly important to Filipino caregivers included: observing healthy traditional food patterns, observing religious rituals, and engaging in prayer time with family members. These said practices were vital coping strategies in enhancing holistic health outcomes and quality of life in the Filipino culture. Barriers to accessible healthy food choices were significant for patients with low income and/or limited social networks. However, caregivers demonstrated their resourcefulness in being able to locate alternative sources of support and access to healthy food choices.

Caregivers' agency and deliberate strategic actions were shown through this study's caregivers. With their description on how they had integrated healing rituals into their everyday life activities, they were able to build healthy places in homes and hospitals for patients. Prayer was a central element of their identity, culture, and tradition as well--- that helped caregivers and patients to overcome difficulties in their lives. Moreover, Filipino caregivers with a Catholic background engaged in a range of negotiation activities to ensure that their patients could continue to participate in regular religious observance. The use of healing and health promoting practices is widely reported in other studies in Hindu, Chinese, and other immigrant communities (Mazumdar, 2009; Chiu, 2001). Whether there is a difference in caregiving and health promoting practices between non-Catholic versus Catholic caregivers, and when patients live on their own or with their caregiver deserves further inquiry.

Factors influencing care in many ethnic communities are related to a low socio-economic status that is also a predictor of poor health. However, many ethnic communities have strong kin networks of support in old age (Chappell & Funk, 2011). In this study, a sub-group of female caregivers appeared to experience distress due to their poor social networks. Filipino caregivers with poor informal social networks (e.g., family or friends) also inevitably lacked support from their community's social services. As described by Chow, Wong, and Poon (2007), structural factors such as family size, employment, housing, and stage of life cycle can reduce the ability of caregivers to secure filial piety as a support mechanism to reduce their caregiver distress.

Furthermore, many caregivers were challenged in balancing caregiving obligations with employment demands. The effects of work demands, employment status, and work

inflexibility can pose challenges to meet work demands and reconcile work and family caregiving that is well documented (Wang et al, 2011). Other studies drew attention to the effects of caregiving on employment and economic costs associated when caregiving demands were high (Lai, 2007). Caregivers' age, income employment, caring for an additional patient, types and intensity of care, and patients' financial security were key predictors of economic costs. Main predictors for male caregivers were age, caring for an additional patient, and their financial situation. Meanwhile, for female caregivers, financial situation and higher levels of caregiving tasks as compared to male caregiving were the main predictors of economic costs (Lai, 2007). The gendered nature of immigrant caregiver strains and predictors of economic costs requires attention by caregivers and health care providers to reduce caregiving stressors. Policy makers should take into account barriers that immigrant caregivers face in securing social support for themselves and not make assumptions about filial piety or duties that they believe exist in ethnic minority groups like the Filipino population (Lai, 2010).

Finally, this study demonstrated that caregivers' abilities to avert negative outcomes were important in balancing caregiving tasks and taking care of their emotional, mental, spiritual, and economic well-being. These findings suggest that it is crucial for caregivers to learn how to negotiate caregiver roles and set boundaries for themselves to stay healthy. Also, caregivers' abilities to share or distribute caregiving tasks' turns among extended family members were acknowledged by Filipino caregivers. More investigation is required to uncover the dynamics of caregiving in complex immigrant family units as impacted by filial obligations, socio-cultural and economic factors, and the gender dimensions of caregiving.

This qualitative study has several major limitations. Also, findings of this study cannot be generalized to all immigrant family caregivers living in urban and rural places in Canada. It was impossible to recruit male caregivers as well since they refused to participate in the study and share their experiences. Although the current sample was comprised of caregivers with a specific range for their socio-economic status, it was difficult to recruit caregivers who held several jobs or had a low-income. It must be noted too that community members who assisted in the study's recruitment of participants affirmed challenges in being able to recruit female caregivers who are distressed due to their dual work and caregiving obligations. Hence, future studies should examine the experiences of both immigrant female and male caregivers to better comprehend gender differences in caregiving experiences, its dynamics, and the economic strains in meeting both caregiving and employment role expectations.

Conclusion

Major findings in this qualitative study offer insights as to the linkage among caregiver tasks, influencing factors, and outcomes of the caregiver role in the Filipino culture. Employed immigrant female caregivers especially experienced multiple economic, emotional, and time strains. For instance, they had to deal with physical demands placed on them and on their own health outcomes which often reduce their economic productivity. Health care providers and policy makers should, therefore, provide special attention to the needs of employed immigrant caregivers through home care, especially those with low or no income.

Filial obligations and expectations in the Filipino culture for females to assume caregiving tasks were consistently expressed by caregiver participants. These caregivers' main concerns were for the physical, psychological, and spiritual well-being of senior patients and themselves. In this study of caregiving in the Filipino culture, there were gender-related role expectations for female family members to manage the majority of caregiving tasks. Health care providers and policy makers, thus, should be aware of and focus their attention on the intersectionalities of caregiving and caregivers' financial adequacy, poverty, and gendered nature of caregiving in the perplexing context of resettlement in Canada. Policy and clinician decision-makers who are informed about immigrant caregiver issues can better address the intensity of caregiver strains and familial obligations when designing effective systems and individual level interventions to support immigrant family caregivers.•

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Acknowledgments

The research was conducted with the support of the members of the Philippine Heritage Council of Manitoba Inc., headed by Perla Javate. The authors wish to acknowledge the work of Research Assistants, Karlo Aguilar, Yvanne Dandan, and Chantal Shivanna Ramraj. The Special acknowledgements goes to the University of Winnipeg for the financial support of the research project. The authors wish to acknowledge the support of her Research Manitoba Chair in Caregiver Communication.

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RESEARCH ARTICLE

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The Meanings of Diabetes, Healthy Lifestyle and Barriers to Healthy Lifestyle Among Filipino Immigrants in the United States

Abstract

The purpose of this study was to explore the knowledge, perception, and beliefs of newly arrived Filipino immigrants regarding Type 2 Diabetes Mellitus (T2DM), healthy lifestyle, and perceived barriers to healthy lifestyle.

This is a qualitative study. A sample (n=40) of newly-arrived (less than six years in United States) first generation Filipino immigrants, not diagnosed with T2DM, living in southeastern part of United States were the focus of the study. Face to face interviews were conducted using an interview guide. No further interviews were conducted after data were saturated. The data sources were field notes and audio-recorded interviews, which were transcribed verbatim by the researcher. This study complied with the protocol for human subjects' protection as obtained from the institutional review board. Prior to analyses of the transcripts, each transcript was read at least twice and compared to the recordings to ensure accuracy and completeness. To ensure trustworthiness, selected transcripts were reviewed and coded by two experience qualitative researchers to ensure inter-coder reliability.

A significant number of the participants had little knowledge and few beliefs about T2DM. The perceptions of T2DM were varied, but several beliefs were widely held: (a) T2DM is a "sugar disease" that is based on sweet food intake, (b) participants were aiming to achieved healthy lifestyles through diet, exercise and prayers and (c) T2DM can result from several factors, including barriers to healthy lifestyle that includes stress, possible discrimination, and not enough information to navigate health resources. Although immigration brings opportunities, there are also numerous risks. Some of the diabetes beliefs that this study delineates provide anchors for future culturally appropriate intervention programs for recent Filipino immigrants. One of the major findings in this study was the low diabetes literacy among the participants. Immigrants with low diabetes literacy may have lower awareness of the disease condition, which may have a negative impact on their disease prevention behaviors. Migratory background is also an important factor influencing beliefs about disease prevention. These results provide information for the design of health programs for the prevention of T2DM in the Philippines and United States.

Key words: *acculturation, Filipinos, healthy lifestyle, type 2 diabetes*

RESEARCH ARTICLE

Introduction

Ethnicity and minority status affect the perception of illness and may require special consideration in the development of appropriate tools for health promotion and disease prevention (Kokanovic & Manderson, 2007). Type 2 diabetes mellitus (T2DM) is a chronic degenerative illness that has the greatest negative effects on economically productive adults (Gallegos, Ovalle-Berúmen, & Gomez-Meza, 2006). It is estimated that approximately 24.4 million people in the United States are suffering from diabetes, and 90% of these patients are afflicted with T2DM (Guariguata et al., 2014). Diabetes management requires resources for home glucose monitoring, regular medical care, oral medications, a modified diet, exercise and physical activity, and in more advanced cases, insulin administration (Arcury, Skelly, Gesler, & Dougherty, 2004; Peyrot et al., 2005). There has been considerable effort to explain the diabetes beliefs and practices of other minority groups (Arcury et al., 2004; Hjelm & Nambozi, 2008; Jayne & Rankin, 2001; Kokanovic & Manderson, 2007; Povlsen & Ringsberg, 2009). However with the exception of Arcury et al. (2004), most of these works have been based largely on research with individuals who are already diagnosed with diabetes. Healthy People 2020 proposed to reduce the disease and economic burden of diabetes mellitus (DM) and improve the quality of life for all persons who have, or are at risk for, DM (U.S. Department of Health and Human Service (USDHHS), 2010). There is a need to highlight improved diabetes management with efforts aimed at primary prevention among those at risk for developing T2DM.

The United States Census Bureau determined that in 2010, Filipino Americans (FAs) numbered 2,555,923, and it was estimated that FAs are the third largest Asian ethnic group in the United States (Angosta, Serafica, & Moonie, 2015; Serafica, Lane, & Ceria-Ulep, 2013). In the literature, no study was found to identify the barriers to practicing a healthy lifestyle among Filipino immigrants. Furthermore, data are limited regarding the determinants of T2DM among Filipino immigrants. The few available studies suggest that Filipinos are among the highest-risk groups for developing diabetes (Araneta & Barret- Connor, 2005; Cuasay, Lee, Orlander, Steffen Batey, & Hanis, 2001; Finucane & McMullen, 2008; Jordan & Jordan, 2010; Ryan et al., 2000).

Background

Diabetes has been explored in the past in other immigrant groups (Aloozer, 2000; Kokanovic & Manderson, 2007; McEwen, Baird, Pasvogel, & Gallegos, 2007). These studies concluded that immigrants are viewed as vulnerable groups with different needs and with fewer chances of achieving good metabolic control. Furthermore, these previous studies were based on immigrant populations of different ethnicities who were already diagnosed with diabetes. Immigrant health studies conducted in the past draw little attention to the fundamental variations in the conceptual meaning of a healthy lifestyle among disadvantaged subgroups (Miller, Miller, Zapata, & Yin, 2008; Schweitzer, Melville, Steel, & Lacherez, 2006). Most studies conducted in the U.S. and overseas have focused almost exclusively on health status and the linguistic and cultural barriers to health care accessibility (Bean, Cundy, & Petrie, 2007; Lee, Demissie, Lu, & Rhoads, 2007; Pasco, Morse, & Olson, 2004; Weerasinghe & Mitchell, 2007). Very little research has been directed towards the examination of the immigration experience as it relates to health beliefs and disease prevention in Filipino immigrants (Angosta et al., 2015; Dela Cruz & Galang, 2008; Serafica et al., 2013).

It is important to understand how the beliefs of Filipino immigrants without diabetes view disease prevention and its association with the larger acculturation and societal context. Little is known about how Filipino immigrants define diabetes as a chronic illness, their cultural description of a healthy lifestyle, and their perception of barriers to achieve a healthy lifestyle. Health education directed at health promotion and disease prevention initiatives requires a thorough understanding because it caters to the needs of Filipino newcomers. Poor access to services affects the health and well-being of individuals (Lai & Chau, 2007). In addition, limited funding because of the unequal distribution of their financial resources affects how immigrants practice healthcare (Donnelly & McKellin, 2007).

Purpose of the Study

The purpose of this qualitative study was to describe how first-generation non-diabetic Filipino immigrants describe their knowledge and beliefs about diabetes, a healthy lifestyle, and perceived barriers to a healthy lifestyle.

Research Questions

The questions that guided this inquiry are as follows: (a) How do Filipino immigrants define diabetes? (b) How do Filipino immigrants define a healthy lifestyle? (c) What are the perceived barriers that prevent this population from practicing a healthy lifestyle?

Significance of the Study

Recent first-generation Filipino immigrants have faced more barriers in obtaining health services with welfare reform at the

federal level (Kaushal, 2005). T2DM is an emerging health problem for Filipino immigrants with serious complications if inadequately treated (Araneta & Barrett-Connor, 2005). Because the rate of diabetes is disproportionately higher among non-White ethnic groups and among those who are economically disadvantaged, diabetes is often associated with marginalized minorities and people of lower socioeconomic status. These findings will aid healthcare professionals and policy makers in becoming more effective in promoting immigrant health through culturally holistic and appropriate interventions.

Methodology

Research Design

This study used a qualitative content analysis research design to find meanings of diabetes, healthy lifestyle, and barriers to healthy lifestyle among Filipino immigrants.

Sample and Setting

The study was conducted in a southeastern suburban city in the U.S., where a 2010 census showed an 80% increase in the Filipino population living in this particular state. The setting for the data collection was chosen by the participants to be either in their home or at a suitable public location. The inclusion criteria for this study were as follows: (a) a first-generation immigrant from the Philippines and (b) must understand and speak English. The exclusion criteria were as follows: (a) a previous diagnosis of diabetes or the consumption of medication for diabetes, (b) or having lived in the United States for more than ten years. Initially, there were 42 potential participants who volunteered for this study. Because of sickness in the family, two participants withdrew.

Forty Filipino (n=40) immigrants participated in this study. They were recruited through a referral from a parish nurse and through word of mouth (snowball technique) in the Christian church within the community. This church was selected because of its high percentage of Asian church-goers, particularly the Filipino population.

Data Collection Procedure

The designed study used qualitative research methods conducted in three sequential phases: (1) focus groups, (2) individual face to face interviews, and (3) the development of a dietary acculturation food questionnaire. The study only reports on the results from the focus groups and individual face to face interviews related to the result of immigration status and acculturation on the perceptions of the meanings of diabetes and barriers to healthy lifestyles among newly arrived Filipino immigrants.

The participants in the focus groups and individual face to face interviews were sent letters and follow-up phone calls. A focus group guide was developed to identify: (a) the Filipino immigrants' perception and definition of diabetes and (b) the Filipino immigrants' perception of a healthy lifestyle and barriers to a healthy lifestyle in the U.S. The topic guide also probed the participants to compare their way of life before they left the Philippines to the U.S. and the changes that they may have experienced since arriving related to health, stress and lifestyle behaviors.

Data Plan, Management and Analyses

Three focus groups consisting of nine participants in each group (N=27) and 13 in-depth interviews were conducted over a 6-month period (January 2014-June 2014). The focus group sessions and the individual interviews were 80-120 minutes in length, digitally recorded, and conducted by a native speaker of Filipino origin with training and experience conducting focus groups and interviews. In addition, the principal investigator (PI) was present at all focus group sessions to take notes. The focus groups were conducted inside the church's activity hall after church meetings and services, and the individual interviews were conducted at the participants' homes. An analysis of the focus group data revealed key themes related to the meanings of diabetes and barriers to healthy lifestyles, in addition to acculturation in the U.S. The interview guide for the individual interviews was subsequently developed, following the format for the focus groups but with the inclusion of new questions to obtain more in-depth information on these themes.

Research using qualitative content analysis focuses on the characteristics of language as communication with particular attention to the content or contextual meaning of the text (Hsieh & Shannon, 2005). In addition, qualitative content analysis goes beyond merely counting words to examine language intensely for the purpose of classifying large amounts of text (Hsieh & Shannon, 2005; Weber & Wyne, 2006).

The transcripts from the focus groups discussions were also reviewed by a qualitative research expert to develop a codebook. Two coders trained in qualitative methods independently read and manually analyzed the focus group transcripts using content analysis to identify similar phrases and common themes. Inconsistencies in the coding were discussed and resolved. The same protocol was followed for the analysis of the in-depth interviews, and new themes were added to the codebook.

Prior to the analyses of the transcript, each transcript was read at least twice and compared to the recordings to ensure accuracy and completeness. To ensure trustworthiness,

selected transcripts were reviewed and coded by the two coders to ensure intercoder reliability. Once the themes and categories were clearly defined, a typology was created to serve as the basis of the conceptual framework that described the health promotion model for the Filipino immigrants.

We also based our analyses on reading and rereading all the transcripts and experiences and processes observed during the study to identify themes, sub-themes, and meanings among the participants and to select those that were particularly insightful on specific topics. The steps used in this data analysis were as follows: (a) reading and rereading all the completed transcribed interviews and (b) creating a theme analysis by the inductive generation of themes and categories. The major thematic findings were also validated by a group of participants who were contacted by phone or through face-to-face meetings. The qualitative data are presented in this article using direct quotes from the participants to illustrate the findings.

Protection of Human Subjects

The study protocols and consenting procedures were approved by the affiliated university institutional review board prior to this study. Participation was voluntary, and all data were treated anonymously. The participants were informed that they were free to withdraw from the study at any time. Informed consent was obtained from each participant prior to the interviews.

Ethical Considerations

The risks of the loss of privacy were addressed by the following: the informed consents and confidentiality agreements were kept in a locked file in the PI's home office, which was accessible only by the PI. Codes were assigned for each individual who participated in the interviews, and a record of observations was kept separately from the informed consents.

Result

Most of the participants had completed their education (14 years) in the Philippines. Many of the Filipinos were newly arrived in the United States, and they had been in the United States for an average of less than seven years. The participants were family members who were sponsored through spouses or siblings who were naturalized United States citizens. All the participants had obtained permanent resident status or a green card in the United States that allowed them to legally live and work in America. The demographics are described in Table 1.

Significant statements were coded into three themes: defining diabetes, aiming for a healthy lifestyle, and sensing the barriers to a healthy lifestyle. Under each theme, sub-themes were created to describe the experiences, attitudes, and beliefs that the participants discussed. The thematic findings provided evidence of experiences in the context of acculturation to a new

***Table 1**. Demographic Characteristics of Participants (N=40)*

Category	Number
Average years in the United States	6
Median age in years	39.5
Housing	
Own home	2
Rent home	38
Employment	
Full-time	10
Part-time	20
Holds 2 or more jobs	10
Marital Status	
Married	18
Single	22
Gender	
Male	16
Female	24

***Table 2**. Overview of themes and subthemes formulated from the analysis*

Themes	Subthemes
Defining Diabetes	Naming the Condition
	Understanding the Cause
	Recognizing the Symptoms
	Believing the Seriousness and Treatment of the Disease
Aiming for Healthy Lifestyle	Watching One's Diet
	Recognizing the Importance of Exercise
	Praying for Health
Sensing the Barriers to a Healthy Lifestyle	Putting the Pedal to the Metal
	Trying to Nourish Two Worlds
	Experiencing Structural Discrimination
	Feeling Powerless to Resources

country. The results from the data analysis answered the research questions concerning the meanings of diabetes and the meanings and perceived barriers to healthy lifestyles of newly arrived Filipino immigrants in the United States. Each theme is supported by direct quotes (or italicized) from the participants. The themes and sub-themes are described in Table 2.

Theme 1: Defining Diabetes

Diabetes was a familiar term among the participants, and there was variability in the participants' diabetes knowledge.

Naming the Condition: "Diabetes" or "sugars" were the common terms that the participants applied to this illness. Four participants also referred to the illness as "sugar disease". Another participant referred to it as "too much sweetness". They did not discuss other terms that were used in their country or refer to names for the illness that were used in their country of origin. However, one of the participants referred to it as "sugar in the blood is not manageable".

Understanding the Cause: The understandings of diabetes causation among the participants were diverse. There was a common model of what causes diabetes (eating too much sugar), and most of the participants agreed that they were unsure of the medical cause of diabetes. However, one of the participants mentioned the risks for diabetes. One participant believed that diet and exercise are important in preventing diabetes. Another participant shared her thoughts that everyone might have diabetes: "…… we have sugar in our bodies, maybe it's not developed but if you eat a lot of sweets… it will trigger this sugar effect".

Eating too much sugar or sweets was considered a major cause of diabetes. "If you eat all these sweets and you don't drink enough water to flush it out, you can get diabetes… if you drink too much soft drink (sodas), you will get it too". Some of the participants also discussed eating too much sugar when discussing those they knew who had diabetes, with a general understanding that those with diabetes must limit their intake of sweets. This clouds the understanding of whether eating too many sweets is a cause of diabetes.

The participants were uncertain about the role of weight and overweight in diabetes. They perceived overweight, or being "fatter", as unhealthy. One participant stated that "she's fatter than me, maybe if I become like her, I will get diabetes too".

Recognizing the Symptoms: Although the participants knew only a few symptoms of diabetes, the most commonly stated and feared symptoms were dizziness, fatigue, and constant thirst. "My sister….. she faints a lot, and she is always dizzy and tired", whereas another participant stated that "I know you get really dizzy if you have it". The notion of harm to the body and deterioration of health as a result of getting diabetes was also perceived as a generalized symptom of the disease. "It's like having a slow death sickness; you become so weak and helpless".

Believing the Seriousness and Treatment of the Disease: There was consensus among the participants that diabetes is a serious illness. The seriousness of the disease was influenced by individual behavior. It is a disease that can be fatal if not taken seriously at the time of diagnosis. They believed that diabetes can get worse for those who do not follow the doctors' recommendations and advice. One participant declared that "If you don't take care of yourself and if you don't follow the doctors, then it will get worse… it will damage your organs". Another participant mentioned that "someone that I know lost his foot over diabetes".

Theme 2: Aiming for a Healthy Lifestyle

The participants indicated that a healthy lifestyle means adjusting their daily routines to include decreasing unwanted or unfavorable habits. It also means feeling good and being clean. These consist of making a commitment to a healthy diet and exercise. Most of the participants believed that a chronic illness such as diabetes can be prevented.

Watching one's Diet: Only general diet modifications were mentioned, such as eating a good diet, reducing sugar and sweets, and eating lots of vegetables. One participant suggested changing the diet if someone is diagnosed with diabetes. Another participant mentioned reducing food portion intakes to promote a healthy diet "…eating the right food… and reducing your food portions, and saying no to super-size meals". Another participant elaborated on the size portions of the food in the U.S. compared to the typical Filipino food portion: "food servings here are much bigger than the Philippines….. more of mega-size meals".

Furthermore, one of the participants stated:

> "I was 130 lbs., before, now I'm 150 lbs. Too much food in America and too much servings, I mean size portions are bigger. You see we have smaller frame than Whites and Blacks, and yet we like to eat the same portion size like them. Maybe this is the reason why we are becoming bigger and fatter here in America…….I hope I don't get diabetes".

Although most of the participants who were interviewed reported their beliefs in managing diabetes through meal portions, they also acknowledged the importance of Filipino

customs and traditions in relation to the consumption of food. One of the customs in Filipino tradition is to finish the food that you are served. Not finishing the food on the plate is considered an insult to the host or whoever is providing or paying for the family meals. This issue can create a conflict of beliefs as one participant shared, "You see in the Philippines, you're not supposed to waste any food, so here we have to finish all the food and we will not let it go to waste."

Another participant noted:

> "I feel so bad… we don't want to throw leftovers. I guess it's more of a tradition. You are supposed to clean your plate every meal, even if you don't like the food, you have to finish it. …. Yes, when I was growing up, my grandmother would get angry if I did not finish my meal. She would you make you feel so guilty. Here in America, the servings are almost double of what Filipinos like me are used to."

Recognizing the Importance of Exercise. The importance of exercise was mentioned several times during the interviews. One of the participants concluded that "I used to be active when I was younger back in the Philippines". Furthermore, the significance of being active was manifested in one in-depth interview. "Lots of exercise is important, like playing outside with the boys... walking, running, shoot some hoops". They also recognized the challenges that they face because of limited resources in their community. One of them suggested, "Maybe if have a place where we can play sports with our kids during winter month, no not the YMCA because it's expensive… I don't want to walk around outside when it's too cold."

In addition, some of the participants showed interest in making commitments to perform more physical activity, but the unavailability of resources hindered this initiative. According to one of the participants, "Every New Year, we would make a resolution that we will walk around the block for at least 30 minutes a day, we tried it once, then we stopped … did not do it again… it gets really cold here in winter and it is hot and humid in the summer… there's no way (sigh)."

Praying for Health. Praying to God and going to church were considered to be important to most of the participants, as was believing that God provides good health and a good life. The participants believed that "the family that prays together stays together". Another participant said "If you are religious, God will also take care of you. I always pray that the Lord will give us a good life that no one in the family will get sick. We go to church almost every Sunday and Wednesday too, we pray to God for good health, good life, good job, and the children especially, they need prayers." One participant in the focus groups mentioned that "God will heal you if you get diabetes… as long as you go to church your health will be okay…. other people in church will pray for you too… we pray for each other".

Theme 3: Sensing the Barriers to a Healthy Lifestyle

According to the participants, the barriers to lifestyle change included time constraints, economic distress, structural discrimination, and problems navigating resources in their community.

Putting the Pedal to the Metal. One participant revealed her desire to exercise more and to choose and prepare healthier foods for her family; however, a hectic schedule and lifestyle was preventing her from participating in healthier lifestyle patterns. Some of the participants tended to blame their busy American life in exchange for being healthy. A participant declared "Where I work, people eat lots of junk food. I have to bring my own meal from home each time, but sometimes I don't have the time to prepare my meal, so I eat whatever they eat….. I order delivered food with them and I feel like we're not getting enough time to take care of our body anymore. We eat what is convenient."

Trying to Nourish two Worlds. The majority of the participants shared their experience concerning financial constraints and reported that financial problems were an issue. It was crucial for the participants to have enough money to cover their basic necessities such as food, rent, school savings, and remittances of money or goods to send to relatives in the Philippines. The monthly remittances of the participants' income could indicate how they practice healthy lifestyles. The participants mentioned "Yes, to come here, we borrowed money for airfares and expenses, so we had to pay it back on top of the regular monies we are sending monthly to our relatives in the Philippines." Furthermore, the participants in this study demonstrated a strong sense of family obligation that often supersedes the needs of individual family members. The prioritization of sending a huge portion of a family's income to support other relatives outside of the U.S. can possibly cause a salient barrier to resources that could be utilized to gain access to a healthy lifestyle such as a better dietary selection and participation in physical activities. Another participant stated "I'm not so sure if you can understand that we are kind of supporting two families, one from here and the other one back home in the Philippines… sending money to our parents and siblings… it's hard to do…. but we have to send money, it's like a family obligation you know." Previous studies performed on Filipino immigrants revealed that the loss of economic resources or financial problems is considered one of the most serious stressors among first-generation immigrants.

Experiencing Structural Discrimination. Some participants elucidated that discounting their education and work credentials earned in their home countries is one example of structural discrimination. Several of the participants expressed their perception that living in America is indeed the land of opportunity; however, one must work hard for it. The participants appeared to accept the changes in their new life in the U.S. As a result of this

change, they sacrificed their professional careers and skills. The U.S. state professional certifications boards often have different requirements for professionals who are educated outside of the U.S. One participant explained "I had a business degree from the Philippines but it's not good here. My husband was an engineer but also not good here. It's good in papers when we were applying for immigration but those degrees are not equivalent of what they are looking here. Here, we are nothing… unless we go back to school and retake all the certifications (sigh)."

Feeling Powerless to Attain Resources. Another significant finding throughout these interviews was that all the participants shared their frustrations in navigating the resources available for them that they believed would assist them in leading healthy lifestyles. Thus, the participants believed that education is important for them to learn more about being healthy and to understand more about preventing chronic diseases such as diabetes. One of the participants shared his discouragement as a newcomer to America.

> He explained, "I feel like America just want us to work and pay taxes, so that they can take care of us if we get sick. But, we don't want to get sick." Another participant expressed her thoughts. "Maybe a Filipino doctor or nurse should give us more education or write something in our church's newsletter. Doctors are role models…. They should explain the benefits of what you are doing to your health… I think this education is more important than anything else… We also need lessons on how to cook our food healthier ... maybe make the Filipino dishes diabetic friendly (giggles)."

The importance of providing information to newly arrived immigrants demands much attention. One experience in particular stood out during the interviews: "It took us five months to figure out how to find a doctor when one of the boys got sick, we were lucky that we have health insurance from work, but no one told me how to explore the health care system here in America…. it is different here than the Philippines …. some don't take new patients, but why?

Additional statements from the participants:

> "I feel like I need education on food preparation, servings, how to be fit and to have access out there."

> "If they post anything like health screenings, it feels like it's only for Spanish speaking people, not for us because it's all written in Spanish. I could be wrong, but I think we can all benefit from it as well especially for diabetes prevention".

Discussion

The purpose of this qualitative study was to describe how first-generation non-diabetic Filipino immigrants delineate their knowledge and beliefs about diabetes, a healthy lifestyle, and perceived barriers to a healthy lifestyle. The first theme focuses on the participants' meanings and definitions of diabetes as a disease. There is a significant lack of diabetes knowledge by the participants in this study that emerged throughout these interviews. The participants indicated that diet is important in causing diabetes and illness in general is related to a poor diet. Complicating the participants' understanding of the role of diet in causing diabetes was their knowledge that people with diabetes consume a large amount of sugar or sweetness in their diets. In this study, Filipino immigrants who did not have diabetes during the study illustrated a number of knowledge deficits regarding the etiology and pathophysiology of diabetes. In a study conducted on Chinese immigrants, the participants with diabetes blamed themselves for their illness and cited their eating patterns as the cause of their illness (Jayne & Rankin, 2001). These results were similar to an earlier study that included the significance of diet, the consumption of sweets, and overall deficiency in diabetes knowledge. Although the Filipino participants recognized the seriousness of the disease, lack of disease awareness is clearly a serious problem among recent Filipino immigrants in this study group.

The second main theme was the participants' own take on a healthy lifestyle. Although the participants in the study acknowledged that healthy eating and regular exercise are partially important in the prevention of diabetes, they were also aware of other cultural factors and barriers that prevent them from pursuing a healthy lifestyle. Filipinos do not waste food, and they do not believe in throwing away leftover food, resulting in the consumption of all the food on their plates, leading to the consumption of larger portion sizes (Farrales & Chapman, 1999). They also acknowledged the difference in serving sizes in the U.S. compared to the Philippines. None of the participants discussed or mentioned the importance of rice in their diet. Research has indicated that Filipino meals contain a fair amount of rice as their main source of carbohydrates. Rice is considered a staple food in the Philippines (Chong, 2003; Serafica et al., 2013). Although several participants felt that they needed to engage in regular exercise, they also presented barriers to exercise such as accessibility, time constraints, and costs. Similar barriers to physical activity and exercise have been presented in previous studies on immigrant populations (Wilbur, Chandler, Dancy, & Lee, 2003; Yang et al., 2007; Yu & Berryman, 1996). Prayer and religious ceremonies, such as going to church and praying for one another, are important activities for Filipinos to achieve overall health and to avoid diabetes. Prayer is the most common religious practice among Filipinos, followed by prayers by others and spiritual support from the church to which they belong (Lagman, Yoo, Levine, Donnell, & Lim, 2014). In addition, the church is a place to meet other Filipinos to establish a sense of community and security (Abe-Kim, Gong, & Takeuchi, 2004; Leake, Bermudo, Jacob,

Jacob, & Inouye, 2012). Furthermore, church events not only reinforce spiritual faith but also provide Filipino immigrants a place of refuge where life goes on as in the old country. These factors may also explain why Filipino attendance at religious services was associated with decreased psychological distress. In this population with high levels of religious participation, the church may serve to strengthen kinship bonds among the Filipino families and provide them with a sense of protection from higher beings (Jarvis, Kirmayer, Weinfeld, & Lasry, 2005).

The last theme generated was the identification of barriers to a healthy lifestyle. One of the most serious problems reported by the Filipino immigrants in this study was the occupational adjustments brought on by structural discrimination. This result supports work from a previous study (De Castro, Gee, & Takeuchi, 2008) showing that after coming to the U.S., some Filipino immigrants were displaced from their original professions. Some Filipino professionals were not qualified to work as professionals in the U.S., thus decreasing their chances for better paying jobs. Furthermore, as discussed in the literature, the participants identified this as a displacement of status and authority that they once held in the Philippines. Economic distress exacerbated by financial constraints was also identified by the participants as another stressor. The remittances of money and material goods sent to the Philippines are considered more of an obligation and responsibility for these immigrants. The Philippines is now the world's third largest recipient of remittances, and 10% of the household income in the country is now derived from remittances.

It was also highlighted in a study that most Filipino immigrants typically sent remittance to relatives in the Philippines in the form of money and material goods (McKay, 2007). In addition, they spoke of being dual bread winners to both their families in America and in the Philippines. In addition, despite variations in household strategies and in migration patterns, most researchers agreed that Filipino immigrant members of the household unit act collectively to maximize their earnings to help support family members living with them and relatives in their country of origin (Semyonov & Gorodzeisky, 2005). A study conducted on Filipino immigrants demonstrated that the loss of economic resources or financial problems is considered one of the most serious stressors among the cohorts of this group (De Castro et al., 2008).

Most Philippine-born Filipinos experienced adjustment to American life in the form of language difficulties because they struggled to speak and think in English (Tuason, Taylor, Rollings, Harris, & Martin, 2007). Language and communication difficulties also come from unfamiliar accents, usage of slang, idioms, and jargons (Xu, 2007). Furthermore, no matter how well the professional immigrants thought that they were prepared linguistically, they still found themselves not proficient enough to meet the language and communication needs in a foreign country. Furthermore, most immigrants changed their occupational situations after moving to the U.S., and some moved to non-skilled worker positions.

The study also identified other different barriers to a healthy lifestyle. The participants were concerned about their lack of time. The participants reported that job pressures competed with family responsibilities to create a long and tiring day. They were also concerned about the time required to prepare homemade Filipino meals. In addition, the participants who had children described how they depended on low-nutrition, high-calorie fast foods to feed their families because of time constraints, and this created a major obstacle to lifestyle change. Time constraints curtailed opportunities for families to engage in the overall maintenance of health, which is well documented in the literature (Nguyen, Barg, Armstrong, Holmes, & Hornik, 2008; Scott, Lee, Lee, & Kim, 2006; Tcha & Lobo, 2003). The lack of personal time and increased social isolation because of competing demands from work and busier lives in the U.S. appeared to have a strong influence on diet and left less time for families to participate in physical activity.

The lack of awareness and assistance in navigating health care resources is one of the most striking results of this study. Generally, the participants believed that they were uninformed about resources within the system. They could recall few screenings for diabetes; thus, their perception was that diabetes does not have high recognition as a severe health threat. To improve access to health services among immigrants, one study recommended targeting outreach programs to inform immigrant families, particularly low-income families, of the health resources that are available to them in their community (Stella, Huang, Schwalberg, & Kogan, 2005). In addition, several participants indicated feelings of alienation when it comes to health screening and education on diabetes. The participants also expressed feeling a lack of social support in the U.S., and previous studies have shown an association between social support, dietary quality, and physical activity (Angosta et al., 2015; Hill, Wyatt, Reed, & Peters, 2003; Sussner, Lindsay, Greaney, & Peterson, 2008).

Limitations

The overall comprehensiveness of our findings is limited. The participants were recruited from only one suburban city and was limited to church settings, therefore the findings cannot be generalized to other Filipino immigrant groups. Furthermore, because of limited resources, non-English speaking participants were excluded in the study.

Recommendations

The development of culturally-appropriate diabetes education programs that emphasize prevention among newly arrived immigrants to the U.S. is warranted to facilitate improvement in their overall diabetes literacy. Future research that prioritizes other pertinent societal determinants of health such as acculturative stress, structural discrimination, economic distress, and time constraints should be further investigated in relation to primary disease prevention. This can be achieved in the Philippines (pre-migration) and in U.S. (post-migration). Additionally, further research is also required regarding the relationship between social support and access to health providers. By addressing the knowledge factors, preventative measures, and health resources, this population can be assisted in their acculturation to the U.S. In addition, it is also imperative that additional research be performed to understand the interpretations made by researchers of the immigrants' perceptions of diabetes, a healthy lifestyle, and barriers to a healthy lifestyle to design culturally congruent and appropriate interventions to promote wellness and disease prevention strategies.

Conclusion

This study provides basic information regarding newly arrived Filipino immigrants in the U.S. on their understanding of diabetes, a healthy lifestyle, and barriers to a healthy lifestyle. The findings from this study are relevant in the broader context of health practice, education, and research focused on understanding and intervening on the dramatic rise of diabetic patients among immigrant populations. Immigration and acculturation are also a question of the process involving cultural transition, assimilation, and adaptation. It is necessary to conduct research that helps identify beliefs, perceptions, and practices related to the development of diabetes so that more culturally appropriate health interventions can ultimately be designed. •

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RESEARCH ARTICLE

ALELY SANTOS-REYES, RN, MAN, PhD

Intimate Partner Violence from the Perspective of Caviteñas: Its Implications to the Nursing Profession

Abstract

This study used a grounded theory approach to primarily understand the processes Caviteña participants go through in order to arrive at a decision about how to optimize intimate relationships in the presence of abuse and also on how to generate a conceptual framework out of the interconnections of the concepts identified. Eleven participants were interviewed. Five core categories emerged namely: intimate partner violence (IPV), gender differences, processes, consequences and interventions. IPV from the perspective of Caviteñas can be constructed as an inner experience that affects many dimensions of a woman as a person. It causes pain that goes beyond what is physical and deeply penetrates an affected person's inner emotional core. It is a product of interplay among a multitude of factors and is a culprit of many physical and psychological health problems. It affects not just the woman and the perpetrator but also the children, the rest of the family's members, and the community as well. The conceptual framework challenges nurses to address the phenomenon through a holistic, integrated, multidisciplinary approach by taking into account the many layers of the victim's persona - physically, psychologically, emotionally and even economically.

Key words*: intimate partner violence, grounded theory, concepts, Caviteña*

Introduction

More than one in every 3 women has been abused during their lifetime (Black et al., 2010). In the Philippines, there were 15,104 cases of violence against women in 2010---- the highest reported cases since 1997 (PNP as cited in APC, 2013). Intimate Partner Violence (IVP) creates considerable amount of health problems both physical and psychological that requires medical attention. There has been dearth of researches on IPV especially on the grounds of a culture where fortitude, respect for human right, and preservation of family is central. These realities make the study interestingly new and unique. How can IPV happen in families where integrity, respect, and freedom are foremost? This is addressed by the central research question: What are the processes (cognitive, affective, and behavioral) that Cavitenas have undergone in dealing with intimate partner violence? ("*Anu-ano ang mga proseso*

na pinagdadaanan mo sa pagpapasya mong pagtiisan o tapusin ang karahasan laban sa karelasyon na iyong nararanasan?"). Through these processes, the study proceeded in answering the question: What postulates can be formulated as far as intimate partner violence is concerned?

Methodology:

Research Design

This study utilized a descriptive design through a qualitative approach by means of the grounded theory strategy.

Participants

As a result of the purposive and theoretical sampling processes, 11 participants were interviewed. They were described as Caviteñas: 1) who were within the reproductive ages of 15-49 years old; 2) who were born and raised residents in the municipalities of Cavite (where the cultural values are still preserved and nurtured due to low intermigration characteristics) particularly the first district (Kawit, Rosario, and Cavite City) and the seventh district (Alfonso, Gen. Aguinaldo or Bailen, and Indang); 3) who had suffered physical abuse in intimate relationships at least once; and 4) who were willing to signify their intention to be participants in the study by signing an informed consent.

Data Collection

Data were collected from unstructured/informal interviews and observation lasting from 40-60 minutes in designated private offices within the community (eg. barangay hall, MSWD/CSWD office, PNP office) or in the participants' own homes. To maintain a non-threatening environment that facilitates disclosure of IPV experiences, indigenous techniques were incorporated like integration using informal conversation which are popularly labeled in Cavite as "*pakikipagkuwentuhan", "pakikipaghuntahan"* or "*pakikipanaligan*." Significant observable behaviors, as well as, impressions, descriptions of the setting, circumstances, and intriguing events in relation to the field and the interviewee as suggested by Flick (2009) were noted.

To ensure confidentiality, code names were assigned to the recorded files, notes, and transcripts. The technical review panel ascertained that the conduct of the study was ethically sound.

The interview process was subdivided into three phases: introduction, exploration, and conclusion. At the beginning of the *introduction phase,* informed consent was discussed in detail giving special attention to confidentiality, potential emotional consequences of participating in the interviews, and the right to withdraw from the study any time. After the participants had agreed to participate, they were provided an orientation to make them feel at ease, to build rapport, and to establish context through brief description/scenario of IPV in the Philippines. During the exploration phase, the researcher ascertained that the participants had adequate space to convey the way they would conceptualize their experiences. Next was the interview process. Although the interview process was organized in phases, the researcher posed open-ended questions and varied the order in accordance with the flow and concepts that would surface during the interview--- thereby making them feel free to answer in an unstructured fashion. Therapeutic techniques of communication like reflecting, restating, focusing, verbalizing the implied, encouraging description of perception, attempting to translate into feelings, seeking consensual validation, seeking clarification and the like were used to obtain more in-depth information. The researcher did constant checking to see whether a break would be necessary. Finally, at the conclusion phase, the researcher asked the participants if there was anything else they would like to add, how the interview process was, and whether they had any feedback. Summarizing or reviewing the transcripts was done to ascertain participants that their stories were actively listened to and that confidentiality was maintained.

Data Analysis

The data analysis involved a three-phase process of open, axial, and selective coding. Open coding is a process of naming and categorizing of phenomenon through close examination of data. Here, data are broken down into discrete parts and compared for similarities and differences through line-by-line, paragraph-by-paragraph or document-by-document review (Strauss and Corbin, 1990). As suggested by Strauss and Corbin (1990), the researcher named each category based on personal and professional reading, technical literature, and in-vivo codes or actual words of the participants. Through axial coding, data are put back together in new ways by making connections between a category and its subcategories (Strauss and Corbin, 1990). At this juncture, categories were grouped together and relationships related to the Caviteña women's viewpoint on Intimate Partner Violence were consequently constructed. Selective coding, according to Strauss and Corbin (1990) is the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development. It allows a framework to emerge and recreate data into a conceptual framework.

As the theoretical codes saturate, the researcher began the process of sorting memos. Sorting enables the researcher to develop hypotheses about the concepts and helps to ensure

parsimony of the substantive theory. When theoretical saturation is reached or the main concern of the participants is clear, the researcher can proceed to writing up the research finding (Glaser, cited in Streubert and Carpenters, 2011).

Findings

From the vantage point of the Caviteña participants, intimate partner violence is an experience that causes pain not just externally but internally – affecting the woman's inner core of being. In any form of IPV, there is always an accompanying *pain* that emanates from the emotional core or core of being. And this discovery subsequently affects the abused woman's sense of self by typically weakening her self-concept and self-esteem. Any form of IPV boils down to *disrespect* of the woman wherein she is viewed as a powerless and a subordinate being. All forms of abuse lead to social *isolation* which is either imposed by self or the partner in an effort to conceal the abuse and demonstrate control and supremacy of the male partner. IPV comes out of *fear*, more than love, because the woman fears of losing the person she considers special and she fears of losing in the relationship she considers sacred and lifelong. IPV develops *anger* that either protects the victims from further pain or reinforces more loneliness if handled ineffectively through silent submission, ineffective fighting, vengeful blaming and emotional distancing. IPV occurs with *dependence* either emotionally or financially of a female partner over her partner. They, likewise, hold on to the relationship out of loyalty or indebtedness.

In the process of dealing with IPV, the Caviteña participants demonstrate remarkable courage and ability to transcend their difficult situations; and eventually, they seek for ways in improving their well being, as well as, that of their children's. They become resilient to the abuse in an effort to hold on to the relationship and such recourse is borne out of their strong cultural belief on marriage and family.

IPV, therefore, is a process in itself. The flow of events begins from abused women's victimization to re-victimization, then to an eventual action that intends to save the marriage or the family. Learning to deal with the abuse may be a means to start new beginnings with the hope that their over-all life situation will change for the better. There is a significant note made on Caviteña participants' openness to forgiveness and healing while it can also be noted that there is also legal consciousness and intervention though many show ambivalence to pursue legal actions.

The following conceptual framework that emerged in this present research may make important contributions to the extant technical literature. They are discussed based on the five core categories that were developed from the coding process. The five (5) core categories discussed here are: 1) intimate partner violence, 2) gender differences, 3) processes, 4) consequences and 5) interventions.

Hence, the findings point to the following concepts for each core category. These concepts are, thus, put together here to form part of a single paradigm as shown in Figure 1 in the succeeding pages.

Core Category 1: Intimate Partner Violence. Intimate Partner Violence (IPV) from the perspective of Caviteña participants is not a distinct entity separate from the woman's intrapsychic, interpersonal, and socio-cultural system. It can seriously affect all aspects of the woman's personhood such as her physical, psychological, emotional, sexual and economic condition. The most profound pain is that which penetrates the inner emotional core debilitating the woman. In this research, extramarital affairs by the husbands evolved as the overriding reason for the occurrence of emotional abuse with lifelong consequence. As verbalized by an abused woman from Cavite City, *"Ang pinakamatagal maglast ay yung pambababae."* (Womanizing is the most lasting.). As articulated by another participant, "*Pag binugbog ka, masakit yung sa dibdib mo… ang sakit sa dibdib."* (When you are beaten physically, you are hurt emotionally as well.). The pain can also destabilize marriage and family relationships.

> *"Noong time na sinasaktan niya ako, nawawalan ako ng pagmamahal sa kanya."* (During that time when he was hurting me, I was already losing my love toward him.)
>
> *"Kasi gusto ko privacy lang naming mag-asawa. Ngayon, iba na… una pa lang humingi na ng tulong huwag ng paabutin sa ganito baka patayin na kagaya ng sa akin papatayin na ako ng asawa, 'yun ang ano hanggat maaga magreklamo na."* (I want to maintain the privacy between us, husband and wife. Now, it's already different. At the start, seek for help, don't let it happen like this that my husband would like to kill me. As early as possible, file a complaint.)

However, such personal woe is maintained by a culture of silence in consideration of familial welfare.

> *"Pag sumagot ka, ay talagang titirahin ka. Kahit mga anak ko natatamaan. Tumahimik lang ako….hindi na…hindi…. Kasi mahirap din eh… kasi pag nag-alsa boses mo ay malalaman ng kapitbahay kaya iwas lang."* (If you answer, he would hit you. Even my children are involved. I just keep silent. If I speak loud, our neighbor would know.)
>
> *"Di ko nirereklamo sa barangay kasi problemang mag-asawa eh. Problemang mag-asawa kahit pa masaktan ako, kahit magkabasag basag ang mukha ko--- problema nating dalawa 'yan. Tayo aayos."* (I don't report to the barangay because it is a problem between couples. I may be hurt up to the point of damaging my face but since it is our problem, we will be the ones to solve this.)

Core Category 2. Gender Differences. IPV is seen as a result of gender role differences which are largely influenced by culture and socio-economic status of women. Being an abused Caviteña is a reflection of both the indigenous and modern Filipino.

Core Category 3. Processes of IPV. IPV affects the woman's sense of self. It diminishes the victim's self-worth making her think that she is not valued by her partner. Her dignity (dangal) is given paramount importance in Filipino culture. This loss of dignity causes extreme shame (hiya) as the woman deliberately hides her situation from others.

"Nakakahiya po, ayoko po malaman ng ibang tao na ganun s'ya." (It's shameful. I don't want others know that he's like that.)

"*Kung wala lang akong anak na binibigyan ng kahihiyan o ano kung may mag-iinterview sa' kin, spread ko talaga sa buong mundo na talagang masakit ang nangyari sa buhay ko, pero komo nahiya din naman ako sa mga anak ko dahil lahat sila mababait at saka ang tatay nila minahal nila."* (If only I don't have children who might also feel ashamed, I would really tell the whole world that it's really painful what has happened to me. I really feel ashamed for my children because they are kind; besides, they also love their father.)

"Pinahiya n'ya ko sa pamilya ko." (He shamed me in front of my family.)

"Gusto ko mag-isip, pumunta sa magulang ko, pero ako naman ho nahihiya sa sasabihin ng tao." (I want to think, go to my parents, but I am ashamed of what people will say.)

She is brave and resilient; yet, her bravery and resilience are softened in favor of her family. She should have left and committed suicide but all these simply remain in her mind for she values her children's future more than anything else.

"Simula po nung nasaktan n'ya ako ng matindi, inano ko sa kanya na wala na kumbaga nagtitiis na lang ako gawa ng sa anak namin, ayoko na maging kagaya sa 'kin na broken family, ayoko… gusto ko buo kami kahit na nasasaktan niya ako basta kasama ko mga anak ko, okay lang sa 'kin." (When he started hurting me, I just sacrificed because of our children. I don't want my children to become like me with a broken family. I like that we are a complete family although he hurts me. I am willing to suffer for as long as my children are with me.)

"Kung gugustuhin ko ho sa nanay ko sa magulang ko kaya kong pumunta, iniisip ko lang kasi ang anak ko na nag-aaral pa. Nag-aaral pa anak ko…mapapatigil, gusto ko lahat ng anak ko kuhanin ko." (If I would like, I can go to my parents. But I think of my children. They are still studying. They might stop schooling. I want to make sure that I get all my children.)

"Laging mga hadlang sa akin mga anak ko ho. Isang beses n'ya hong natiyempuhan na itatakas ko na ho iyan eh, narinig ko anak ko nagsabing, "Mama, iiwan natin si Papa?" (I could not leave because of my children. One time he found out that we were leaving because he heard my child saying "Mama are we leaving Papa?")

"Kung gugustuhin ko naman nung nakaraang sang taon eh nakulong na ho iyan. Kasi nakikita ko kasi pag broken family, naisip ko mga bata eh.. wala ng hong ano…wala ng pupuntahan mapapariwa lang." (If I would like, it should have been last year that he was already put into prison. But I think of my children who are still young. If they have a broken family, their life would not have direction.)

"Saka ho 'yun iniisip ko mga bata…masisira ho ang pag-aaral, 'yung panganay ko. Pag ginawa ko na ho iyon." (I think of my children. Their studies will be affected, especially my eldest if I do that.)

"Iniisip ko maghihiwalay tayo paano ko mabubuhay ang dalawang bata?" (I think that if we separate, how could I support the two children?)

"Ayoko naman makipaghiwalay, eh ang mga anak ko mgabata pa kasi." (I don't want to separate, my children are still young.)

She acknowledges that it is her responsibility to maintain harmony in the family; thus, she endures the cruelty of her husband

"Sabi nga sa isang pamilya, babae ang nagdadala." (It's the woman who propels the family.)

"Nag-asawa ka eh di magtiis ka." (Because you married, you sacrifice.)

"Ako ang gumagawa ng paraan para ho maging maayos ang pagsasama namin." (I do means to change our lives for the better.)

However, violence also reaches an end. The woman's endurance also reaches an exhaustion point where she has to protect herself by fighting back through assertive behaviors and legal means. One woman from Cavite City has learned to confront the situation (emotional abuse due to infidelity) with enough courage and contention.

"Noong una hindi ako nalaban kasi tahimik lang talaga ako pero dumating sa punto na halos mablack-eyean na ako, ay dun ko talaga naano na lumaban na ako." (Before I never fought back because I am naturally silent. But it reached a point that I almost got black eye and knew that I ought to fight back.)

One woman from Kawit, Cavite sought help from the barangay justice system.

"Hihingi ako ng tulong, kung pwedeng bigyan ko s'ya ng leksyon bibigyan ko s'ya. Minsan, pero nagpablotter na po ako minsan kasi pangalawa na po 'yun kase baka mamaya ulitin n'ya sa akin."(I will ask help. If possible, I want to give him a lesson. One time, I had him blottered. It was the second time and he might do it again.)

Still another abused victim from Indang, Cavite asked help from the police and had her husband incarcerated.

"Ang aking pong naging problema kaya po ako naririto (PNP) upang mahinga ko ang sama ng loob sa aking asawa, ako po ay lagi niyang sinasaktan."(I am here at PNP to express my ill feelings to my husband. He always hurts me.)

Core Category 4. Consequences of IPV. IPV is a pressing health issue leading to multiple physical and psychological consequences both for the woman and her children. It can be an important turning point for the woman to understand the experiences and the processes she has tracked to learn to deal with the abuse, to recognize the need to ask for professional help and to undergo healing. The following citations support the varied physical and psychological ramifications resulting from IPV:

"Naranasan ko ho na mabinat….mahirap. Mahina na ako sa lamig ho. Dati naliligo ako ng buhay na tubig. Ngayon eh kailangan ko pa magpakulo ng tubig na maiinit. May mga time na ako'y pagod na pagod, ang ulo ko ay parang hinahangin."(I experienced relapse. It's hard. I could not take cold water anymore. Before, I could take bath using fresh water. Now I have to heat the water. There were times I felt so tired, my head seems to be floating with air.)

"Para akong nagkaroon ng kuwan sa puso." (I happened to have what…it seemed I had a heart problem.)

"Alam ko namang marami siyang babae. Nagkasakit ako ng tulo. Nagkasakit ako ng kuto." (I know that there are many women. I got gonorrhea. I got sick of pubic lice.)

"Nagpalaglag ako ng 2 beses." (I had abortion twice.)

The following excerpts from in-depth interviews validate the Caviteña participants' contemplation for suicide:

"Umabot sa punto na gusto ko ng magpakamatay."
(It even came to the point that I wanted to die.)

"Ang gusto ko isaksak lang ng gunting ang sarili ko pero kinontrol ko na rin.. hindi ko isinaksak, naggupit ako ng buhok." (I wanted to stab myself by scissors but I controlled it. I just cut my hair instead.)

"Dalawang beses ho akong nag-isip magpakamatay. May hawak ho akong tali itatali ko ho sa aming … pangalawa, yung kutsilyo ho inano ko sa aking leeg." (I attempted to kill myself twice. I had a rope that I tied in our….Second, I placed the knife in my neck.)

"Sa dami na paulit-ulit na pananakit, eh kung ako ay mamamatay eh wala ka ng sasaktan." (Because of repeated hurting, if I will kill myself you would have no one to hurt.)

"Baka kako pag nasaktan ko sarili ko maiiba siya."(I think that if I hurt myself, he would change.)

Core Category 5. Interventions. Addressing IPV is multifaceted. The woman, as an independent decision- maker from her inner determination, can make use of her own interventions. However, she cannot do it alone, independent from her family and her community (neighborhood, church, legal system).

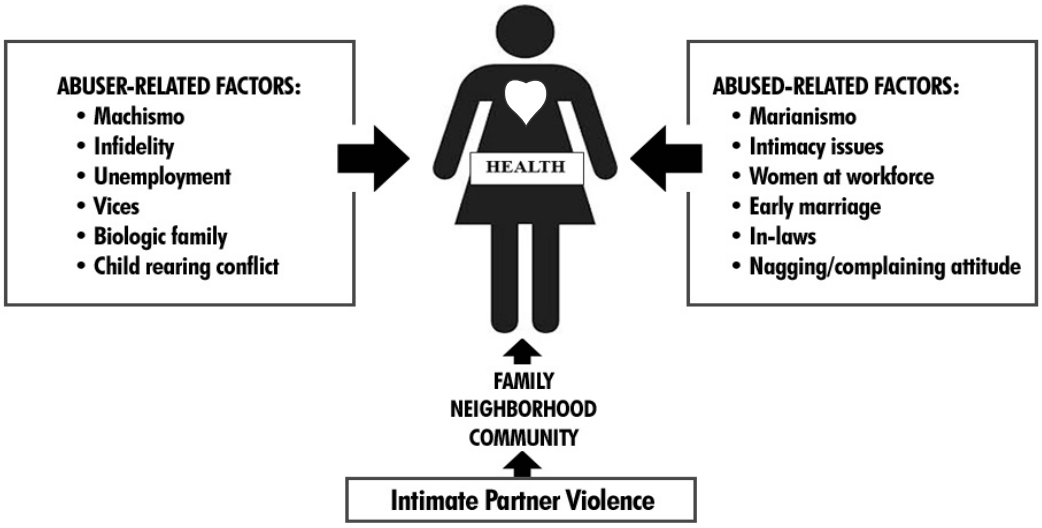
"I need companion lang with my friends. Kailangan ko lang i-enjoy, i-relax ang sarili ko, ang isip ko. Kasi mahirap eh pag ang depression ang pumasok sa 'kin maloloka ako." (I need companionship from my friends. I need them to enjoy and to relax myself. It's difficult if depression comes in. I might go insane.)

"Sa haba haba ng panahon ng aking pagtitiis sa kanya naghihintay pa ako ng pagbabago n'ya…hindi naman s'ya nagbabago lalo pang nairal habang natanda. Kaya napalapit ako dito (PNP) ay hindi ko na ho kaya." (Through long years of sacrifice, I wait for him to change but he does not. The more he becomes evil as he grows older. That's why I am here at PNP. I could no longer take it.)

The theoretical schema of IPV in Figure 1 shows the different dimensions of IPV as represented by the 5 core categories generated by the study. These 5 core categories are summarized in the foregoing pages. The schema signifies that those abuser-related and abused-related factors of intimate partner violence affect the different dimensions of the woman's personhood. The depth of penetration most significantly targets the emotional core. As a person who repeatedly suffers the pain and trauma of IPV along with other devastating reactions, it is undeniable that her roles as a wife, a mother, a daughter, and a friend altogether become affected. These impede the health and well-being of the woman making her vulnerable to a myriad of health problems. The woman's social connection with her family, her neighborhood, and her community at large is very crucial. The culture of silence has permeated the victim and the society that has prevented others, including her own self, to intervene.

How can the pain that emanates from the inner core of a person be dealt with? How can that culture of silence be stopped? The answer lies in the inner determination of the abused woman to emerge as a survivor, to undergo healing and to restore relationships with or without abuse. There is nothing wrong with culture especially fortitude, permanence of marriage, family unity, dignity, shame, among others but it is truly wrong if the husband uses violence to maintain position within marriage and if the family and that the community concerned seem to be powerless to take part in the intervention process.

Figure 1. *Over-all Theory Generated*



Therefore, the over-all theory constructed in this study is that *Intimate Partner Violence from the perspective of Caviteñas is an inner experience that affects many dimensions of a woman as a person. The pain is beyond physical but that which deeply penetrates the inner core. The deep-seated emotional pain debilitates the woman up to the point of surrendering herself and contemplating for suicide. But her strong sense of family's well-being particularly that of her children empowers her by making her bring out the fortitude that is inherent of her as a Caviteña. This empowerment may eventually bring the woman to a trajectory of healing process with the support of her family, her neighborhood, and the rest of her community's members.*

Discussion of Findings

The Caviteña participants in this study saw that among the different forms of intimate partner violence, emotional violence is the most prevalent and most damaging to the core of being. As explained by Martin (1987), emotional abuse is more damaging because it tends to be self-fulfilling and self-perpetuating in making the woman believe and consequently behave that emotional violence is normal.

Caviteña participants perceived that couples have different approaches on child rearing which commonly cause marital discord leading to violence. Conflicts over child-rearing occur relative to the enormity of the housework load and child rearing task of the women which is 2-3x that of men (Kolander et al., 2011). Many describe an abusive partner as controlling, domineering, charming, and with a different view of abuse in relationships. The controlling and domineering characteristic of the perpetrator (as shared by the participants in this study) is consistent with the patriarchal ideology--- that is about the domination of male and the subordination of the female in the society that exists in many cultures (Denmark and Paludi, 2008). The motivation of male perpetrators for IPV is to use this as a tool to exert control over women (Johnson and Ferraro as cited in Weiten et al., 2009), thereby generating gender inequality and unequal balance of power (Watts and Zimmerman as cited in Davidson et al., 2011). The charming personality of the abuser makes the woman love him more and this, together with her strong cultural view of the permanence of marriage, is her frequent reason for deciding to stay in the abusive relationship. Considering the cultural characteristics of Caviteñas, participants described themselves as hardworking, loyal and loving, and submissive yet brave and principled if the situation calls for it. The following adage, "Ang tapayan kapag napuno ay umaapaw." (A jar when filled shall overflow.) supports that Caviteñas may be tolerant of abuse at a certain point but when their bravery is tested they can also fight and become destructive. Caviteñas as Filipinos express emotions in a step-wise fashion. There has to be accumulation of injustice before an overt action is taken as elucidated by Enriquez (2002). In the process of dealing with intimate partner violence, the Caviteñas demonstrate remarkable courage, resilience, and the ability to transcend their difficult situation. They have the inclination to change their situation if they have reached a point of exhaustion in being abused. Being tired of enduring the long suffering, they learn to consider their own safety, as well as, their children's and would consider fighting back.

As consequences of intimate partner violence, the abused Caviteña participants suffered from a multitude of physical and psychological problems including depression, extreme trauma, overwhelming fear and anxiety, suicide, heart ailment, cold intolerance, sexually transmitted disease (specifically gonorrhea) and infestation of body lice particularly pubic lice. According to Girdler et al. as cited in Zapien (2010), psychological difficulties such as anxiety, depression and thoughts of suicide have been associated with intimate partner violence. In addition, the Family Violence Prevention Fund (PVPF) as cited in Zapien (2010) reported that 70% of women who have experienced violence in

intimate relationship have increased likelihood for heart disease. Santos (2002) reported that the wives of abusive men have greater risk of acquiring STD, most commonly HIV. Intimate violence has its contribution also to risk unintended pregnancy (Steinberg et al. as cited in Denmark and Paludi, 2008) and this can be a source of potential conflict between spouses especially if the pregnancy is wanted by the woman but unwanted by the intimate partner. This may be the explanation why one of the participants in the study resorted to intentional abortion. This is further supported by WHO (2006) stating that abused women are inclined to have more pregnancies and abortions.

Finally, IPV affects not just the woman and the perpetrator but the children, the rest of the family, and the community as well. The roles of the biologic family and the in-laws are greatly indispensable. The barangay officials, the police, the counselors, etc. have important part in the survival strategies of abused women. In preventing IPV from happening, the following themes emerged as imperative measures: open communication; fortitude; appropriate mate selection process before marrying; marrying at the right time; spiritual strength; privacy of marital conflict; analyzing the situation well before deciding to do an action; early identification and intervention of abuse; flexible (not rigid) view on marriage; maintaining respect in the family; forgiveness; reciprocal relationship; and submission to husband. All these can be handled by counseling (both for women alone and couples) and psychoeducation programs focusing on mate selection and preparations for marriage and family life. Although, the preceding concepts of preventing intimate partner violence were derived from the perspective of the participants, it can be assumed that these were the actual strategies that they pursued and are capable of doing in the future. The views on open communication, analyzing the situation, and reciprocal relationship can be important elements of conflict management and negotiation skills in marital distress. Levenson and Gottman as cited in Kolander et al. (2011) found that couples who are able to negotiate and compromise and who have the same fighting style have more successful resolution of conflicts, whereas couples who leave the argument unresolved may erode the covenant that binds them together.

Caviteña participants are hopeful that their abusive situation will change. It was noted that participants are open to forgiveness and healing while also maintaining legal consciousness and intervention. According to Gordon et al. as cited in Haggblom (2008), a woman's decision about whether to stay or leave may be influenced by feelings of forgiveness. If a woman believes that her partner is genuinely taking steps to modify behavior and learn positive ways of coping, she may be more likely to forgive him and, therefore, more likely to stay or return. Notably, the participants did not seek professional help from any health care facility in the effort to conceal injuries and the problem at large. For Martin (1987), reluctance of the abused women to use medical care is due to fear that the abuse will become public and of the financial implications of medical care which can precipitate further violence. In addition, Wong et al. (2011) justified that if the health consequence of IPV is associated with depression, the health seeking behaviors of Asian women are found to be lower than other culture because of the stigma attached to depression as a mental illness. This is in contrast with the report that there were approximately 30% abused women who received health care from their injuries (Tdajen and Thoennes as cited in Baker and Sommers, 2008). As stated, other than making the abuse private, the severity of the injury and cost of medical care could then be reasons for the reluctance of the Caviteña participants to seek medical management for their injury.

In the end, it can be assumed that what keeps Caviteña participants from remaining in abusive relationships are their notable strength in themselves and their sense of responsibility in assuming their roles in the family. Amidst dehumanizing experience in the hands of their intimate partners, Caviteña participants are able to maintain their characterization as courageous and resilient individuals. They are capable of positive coping and transcendence above their difficult situation. As they rise above their difficulties, they are able to externalize and discern about what to do to improve their situation. The abusive experience itself makes them better persons as a result of these said experiences. Caviteña participants, moreover, demonstrate humility and openness for healing and forgiveness. As a means of positive coping, Caviteña participants engage themselves in worthwhile activities just to be productive and to augment the family's means of livelihood. In addition, they get strength from their faith in the Almighty. If their tolerance is already strained, they seek refuge from the local authority or file legal charges against the batterer. Paraphrasing what Khalil Gibran once said, "*Out of suffering have emerged the strongest souls, the most massive characters are seared with scars."* In this study, it can be noted that participants who have stayed long in marriage and, at the same time, have coped with IPV for many years have somehow reached such point. Jung as cited in Flannagan and Flannagan (2004) pointed out that no matter how advanced one's age is, there is a drive toward growth and transcendence. These participants may be scarred with profound wounds, but they have the capacity to emerge as survivors and transcend to that region where they encounter their potentialities, capabilities and abilities (Gripaldo, 2005) as Caviteñas and as Filipinos. Whatever their state is, whether they are married, separated or widowed, they are finding more satisfaction as they make changes to take care of themselves and be empowered. As how Yalom as cited in Flannagan and Flannagan (2004) puts it, *"Life is a struggle. Life is filled with sufferings, yet, it must be lived."*

Conclusions

The following postulates emerged after carefully analyzing the findings of the study:

1. Emotional violence is most damaging to the core being of a Caviteña who experiences IPV.
2. The following are the identified cultural characteristics of

Caviteñas that are relevant to IPV: strong belief on lifetime marriage, shame-based perspective, culture of silence, sense of family unity, fortitude, and the capacity to subsume one's needs over the needs of the family.

3. IPV has intergenerational pattern that allows tolerance of abuse at a certain point in a woman's life.
4. IPV occurs with either emotional or financial dependency by the abused Caviteñas on their partners which makes them hold on the relationship out of a need for nurturance, loyalty or indebtedness.
5. Abused Caviteñas feel disrespect over their sense of being whenever they are treated as powerless individuals.
6. Victims of intimate partner violence isolate themselves from deeper social connections causing them to set aside their needs for social relationships.
7. IPV comes out of fear of losing the person the woman considers as special and of losing herself in the relationship she considers sacred and lifelong.
8. Leaving the relationship is usually considered as the last option contingent on the empowerment and readiness of the victim. Many Caviteñas need to experience a crisis point in their situation before they are made to realize that it is not worthy remaining in the relationship anymore. Deciding to stay, leave, or go back to the relationship is predominantly due to the couple's children's welfare.
9. Caviteñas are hopeful that their abusive situation will change. There is openness for forgiveness, healing, and legal interventions.
10. IPV affects not just the woman and the perpetrator but the children, the rest of the family, and the community as well. The roles of biologic family and the in-laws are greatly indispensable.

Implications to Nursing Profession

According to WHO (2006), 90% of the wounds of women admitted to the hospital were due to physical abuse by their husbands. However, the abused women from Cavite are reluctant to ask for medical and psychological care for their injuries due to the fear that the abuse will be made public. Thereby, it is recommended that screening for women abuse be part of the routine history in taking physical assessment by nurses in all health settings especially in the community. In addition, the building of the nurse-client relationship during health assessment must be characterized by trust, non-judgmental, and reinforcing environment and skills using open-ended communication to facilitate disclosure of abuse stories and examination of physical injuries related to abuse which may be concealed by the victims.

As suggested by Jansen (2010), the health-seeking behaviors of the participants may have improved if there are more services, better quality of care, enhanced communication skills of the interviewer, and destigmatization of intimate partner violence in the society. Nurses are in the best position to achieve these by making services more accessible and available through public health education about abuse and its health consequences. Nurses are also expected to be skillful not just in facilitating disclosure of abuse, but in communicating possible health consequences and legal interventions on women abuse.

Since the victims of intimate partner violence are susceptible to developing physical and emotional pain which is a representation only of other manifested health problems, nurses and other members of the health care team should appreciate and address complaints of pain as not a single condition but a complex picture of sufferings which takes into account many layers of the victim's persona. There is a need for a holistic, integrated, multi-disciplinary approach in pain management of victims of intimate partner violence.

In collaboration with counselors and psychologists, management of symptoms which can potentially lead to PTSD may be emphasized in the nursing context. It is also recommended that in the course of designing programs for abused Caviteñas, the following may be given focus: self-awareness, self-esteem enhancement, empowering women, development of abuse screening tools, preparation for marriage in the form of pre marital counseling, anger management, communication skills development, PTSD management, psychotherapies and other relevant interventions.

Both the Department of Social Welfare and Development, as well as, the Philippine National Police have clear existing programs on Violence against Women and Children (VAWC). As observed and experienced by the researcher, these two are harmoniously in collaboration with each other when it comes to handling cases of abused women in Cavite. However, both have certain limitations in their capacity to manage abuse victims due to inadequate resources and probably restriction in their scope of functions. Nurses can be tapped in addressing these limitations by giving trainings on how to communicate with these women and on how to provide them a safe environment.

The study unveiled that the sense of self including the emotional core and the sense of "I" of Caviteñas has been shattered as a result of violence making them feel lonely, powerless, and suicidal. In this consideration, they must be assisted by nurses towards self-awareness, self-understanding, and eventual self-acceptance through psychotherapeutic interventions such as play therapy, art therapy and other relevant activities.

However, a more important strategy prior to this is that nurses must first undergo the same emotional preparation against possible vicarious traumatization from victim's stories of abuse. The impact of abuse stories to nurses especially after history-taking and communication sessions with patients must not be underestimated but rather be dealt with properly through psychologically-guided processing activities.•

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Acknowledgments

This research article was a major part of the author's dissertation for PhD in Counseling Psychology with Concentration in Community Counseling at De La Salle University – Dasmariñas, Philippines. The author is indebted to the following organizations and persons: De La Salle Health Sciences Institute for the educational scholarship; CHED as represented by D. Patricia B. Licuanan (chairperson) and Dr. Jean C. Tayag (director IV, Office of Policy, Planning, Research & Information) for the research funding; Dr. Ann Margaret T. Martin, Dr. Alexa P. Abrenica, Dr. Cecilia B. Banaag, Dr. Manuel G. Camarse, Dr. Paulito V. Hilario, Dr. Josefina G. Madrid, Prof. Teresita Unabia, Prof. Joselita M. Bongcaron and Dr. Lucio A. Hernandez for providing the technical expertise in grounded theory; and most importantly, the participants – the emotionally tough and resilient Caviteñas whose stories behind abuse contributed greatly to the phenomenon of Intimate Partner Violence.

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RESEARCH ARTICLE

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Systematic Literature Search Strategies for the Health Sciences

Abstract

Systematic search of literature is an important skill for researchers to help achieve a comprehensive understanding of the topic of interest. Likewise, clinicians need this skill for them to be updated on the recent evidence in providing relevant health care interventions to their patients. However, many health professionals and health science students rely on the use of limited search engines and few databases without systematically performing search and retrieval of relevant studies. This practice commonly yields inadequate references for a research project or clinical decision-making resulting to an incomplete understanding of the topic at hand. This paper aims to provide an introductory guide for researchers as well as clinicians on the step-by-step process of systematic literature search. It also provides information on the available open-access directories and databases as additional or alternative sources of evidence especially in low-resource institutions. However, careful guidelines must be considered in using open-access sources to maintain the quality of research projects and clinical decisions.

Key words: *Systematic literature search, databases, health sciences, open-access sources*

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The development of the internet resulted to an information revolution with rapid practical storage and distribution of available data worldwide (Falagas, Pitsouni, Malietzis, & Pappas, 2008). Voluminous scientific information is readily available online. For every topic of interest in health care, one can easily find related literature. Everyday, more articles are being added to the several millions of published materials in medicine, nursing, pharmacy and other allied health sciences.

Although internet use is continuously increasing worldwide, many academic and research institutions still do not have adequate access to bibliographic databases especially in low- and middle-income countries (LMIC). But with the increasing movement for open-access publishing, alternative and additional sources of scientific information are available. Whether researchers and clinicians rely on subscription-based or open-access sources, the tremendous volume of scientific materials available online makes the identification of the most relevant information difficult.

Effective searching of the literature is considered a core skill for the practice of evidence-based medicine (Doig & Simpson, 2003). For instance, in planning a health education program on dengue or Zika virus, effective literature search can provide recent evidence on the scientific information that can help health sciences students and professionals in the preparation and delivery of educational activities about dengue vaccination or Zika virus complications and management. Similarly, researchers perform literature search to develop and refine their research questions by identifying gaps in the literature. Others use the literature to conduct research synthesis such as systematic review, scoping review, meta-ethnography and realist synthesis to inform health policy and practice.

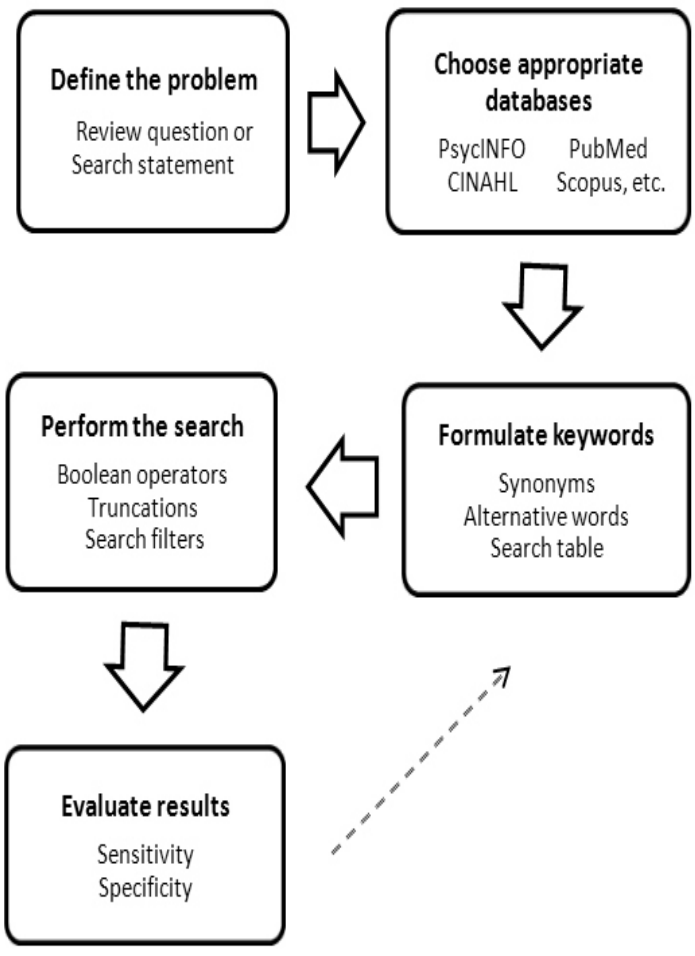
Conducting literature review is always necessary to gain a thorough understanding of the research topic. Many research questions may have been answered and relevant studies may already been available. Clinicians also need to be updated on the current scientific information to help them provide adequate health care to their clients.

This paper aims to provide introductory information on the systematic search of the medical and allied health literature to help inform research projects as well as clinical practice. This paper specifically intends to present a general step-by-step guide in literature searching and provide some information on the additional or alternative sources of articles– the use of open access publications. Researchers interested in literature search in specific databases should refer to other articles (e.g. Doig & Simpson, 2003; Ebbert, Dupras, & Erwin, 2003; Schrimsher & Kendrach, 2006). This paper does not cover selection and appraisal of literature.

A step-by-step literature search

This section presents our experiences in the systematic literature search and substantiated it with the available related literature (e.g. Bartels, 2013; McGrath, Brown, & Samra, 2012; Timmins & McCabe, 2005). The following steps are suggested in conducting systematic search of the literature for research projects and clinical decision-making. Figure 1 below shows the steps in the systematic search of literature.

Figure 1: Diagram of the systematic literature search



Specify what you need to search. A more specific review question or search statement will generate the most relevant literature. For instance, rather than asking, 'what are the interventions for diabetes?', narrow it down to, 'what are the most effective preventive interventions for type II diabetes?'. This will allow the searcher to retrieve studies on strategies specific to preventive approaches rather than studies that include a range of promotive, preventive and curative interventions. Adding the word 'effective' would also allow the searcher to generate studies

on interventions that produced only good outcomes rather than including interventions that are both effective and ineffective. However, in some instances a relatively broader review question (or search statement) is necessary when the purpose is to look for breadth of evidence on a research topic and/or when the topic is relatively new and fewer articles are available.

The extent of literature search always depends on the purpose. If one would like to review the literature to help decide on the effectiveness of dengue vaccine, you may search on the most recent studies or a meta-analysis on the effectiveness of dengue vaccination. Sometimes identifying the most cited article would help for similar purpose. Identifying seminal studies related to the topic may also be necessary in providing historical or contextual background information.

On the other hand, if the purpose is to perform research synthesis, searching the literature may require a more comprehensive number of studies to be included in the synthesis. A number of databases maybe identified to provide substantial information on this purpose. For literature reviews such as scoping reviews and systematic reviews, Stern, Jordan, and McArthur (2014) suggest that review questions can be formulated using PICO (Population, Intervention, Comparison and Outcome) for quantitive reviews, and PICo (Population, phenomenon of Interest and Context) for qualitative reviews.

Step 2: Choose the appropriate database

Bibliographic databases are organized digital collection of references to published literature such as journals, articles, books, conference reports, graphics and multimedia that can be searched through the internet.

There are several hundreds of databases available but it is difficult to select the most appropriate for specific search topic. The selection of databases depends on the areas of interest in the health sciences. For behavioural sciences, PsycINFO might be an important database to start with. For nursing and allied health, CINAHL is one of the most popular databases. Scopus is one of the largest abstract and citation databases with peer-reviewed literature that could provide adequate number of studies with a wide range of topics in the health sciences. For studies in biomedicine, medicine and pharmacy, PubMed and Embase are good sources of relevant articles (Wilkins, Gillies, & Davies, 2005).

Lawrence and Laflamme (2008), however, warn that using only one or two databases may not enable the searcher to access adequate essential information related to the review question. Other authors suggest to conduct exhaustive search of the study topic to achieve breadth and depth. Identification of all possible literature databases is usually necessary to determine the most influential and relevant information. Researchers can also avoid repetitions in addressing previously answered research questions.

The extent of search will always depend on the purpose of the searcher, e.g. scoping review over systematic reviews, where the latter always necessitate retrieving practically all related articles unlike with the scoping review where it may only require the most relevant studies to be included.

Step 3: Formulate the keyword search strategy

Keywords are significant words or phrases identified by the authors of a particular publication that represent the gist of the paper. The keyword is the main tool in retrieving relevant studies. The selection of the appropriate keywords should be targeted. Using less appropriate keywords will yield volumes of unrelated publications, thus causing problems in the selection and appraisal of studies and may lead to frustration on the side of the searcher.

In using keyword search strategy, we can formulate keywords based on the research question or search statement developed in step 1. Identifying synonyms or alternative words of these keywords may also be helpful. For instance, the keyword 'obesity' is synonymous with overweight; the keywords 'public participation' is synonymous with 'public involvement' or 'consumer participation'. On the other hand, the alternative phrases for “health planning” are “priority setting” or “public consultation”. To identify alternative words, it is important that a searcher has done background readings about the topic. The searcher should take time to scan articles, especially the seminal papers on the specific topic, if available. We should also take note that many databases have limits to the number of keywords to be used for searching that may affect the extent of the yielded results. For instance, Scopus limits up to 30 words, Web of Science up to 15 words, while PubMed has no limit (Falagas et al., 2008).

Bartels (2013) suggests that instead of rushing into a search by typing the words that come to mind, it is worthwhile to create a search table. The example below is a search table for a search strategy on the research question, “what strategies are effective in reducing teen-age pregnancy?” The most important terms in this review question are: “strategy”, “effective”, “reduce” and “teen-age pregnancy”. To be able to

capture relevant studies, identify synonyms or alternative words for each term as shown in Table 1.

Table 1: *Sample search table*

Strategy	Effective	Reduce	Teen-age pregnancy
Intervention	Successful	Minimize	Adolescent Pregnancy
Program	Outcome	Decrease	Early-age pregnancy
Activity	Result	Lessen	

Moreover, the PubMed database stores both Medline and non-Medline databases for medical literature, and uses a more sophisticated controlled vocabulary called MeSH terms (Medical Subject Headings). These terms are identified and classified by highly skilled information technicians or indexer that would allow the searcher to cull for citation in an increasingly refined topic (McKeever, Nguyen, Peterson, Gomez-Perez, & Braunschweig, 2015).

Step 4. Perform the search

Performing the actual literature search may vary from one database to the other. Though there are commonalities in the search strategies across databases, it is essential to be familiar with the specific search functionalities for each database. The following are among the general strategies that may guide searchers to retrieve relevant citations.

Working with Boolean operators and truncation

In performing the search, there are two important strategies in limiting or broadening the search. The first is the use of Boolean operators. These operators are simple words used as conjunction to include or exclude keywords that would allow a more focused and productive search. The words OR, AND, and NOT are common Boolean operators. They must be written in all caps.

The use of the operator OR broadens the search, as it will allow retrieval of publications that contains either of the keywords used. Using the keywords 'health policy' OR 'health planning', will generate all articles containing either of these phrases. However, if we use 'health policy' AND 'health planning', the searcher puts limit to the search as it will only generate articles that contain both of these two phrases. Using NOT will tell the search engine to exclude articles that contain the keywords identified.

The second strategy is the use of truncation. It allows the search to capture both British and American spelling. If the searcher types the word 'edema', it will not capture studies with the British spelling of 'oedema'. Similarly, using the word 'organization' will not capture the word spelled as 'organisation'. By using an asterisk (*), e.g. *dema, organi*ation, the searcher allows the search engine to generate studies that contain words with various spellings. Moreover, if the search intends to cull all terms with the prefix of a particular word such as the word 'nurse', truncation can be used at the end, like nurs*. It will capture plurals or alternate suffixes such as nurses, nursing and nursery.

Using quotation marks or parenthesis

To cull studies with specific phrases such as 'health care practices', the use of quotation marks will limit the search only for articles that contains these words in particular order. It will not include 'health', 'care' and 'practices' that are written separately. Other databases use parenthesis instead of quotation marks.

Using search filters

The use of search filters also makes the search more specific. The choice of search filters always depends on the purpose of the search. Below are some examples of search filters.

Publication dates. If the purpose of the search is to understand the social determinants of health in relation to the prevalence of tuberculosis, the searcher may indicate the year “2007 to present” in the search filter box. Using search filter to limit publications dates should always be justified. For this example, this is the period where many articles on the social determinants of health begun to be published after the report of the WHO's Commission on the Social Determinants of Health.

Publication types. If the intent of the search is to identify the best neurological assessment tool in the clinical assessment of adults and children, searchers may opt to include research articles that are primary studies from peer-reviewed journals only and exclude papers that are book reviews, commentary and conference papers. If the aim of the search is to draw historical evolution of primary health care in LMIC, the search may include a range of publication types such as research articles, editorials, conference papers and book chapters, in order to capture broad contextual and historical information.

Subject area. If the area of interest is on pharmaceutical intervention for psychiatric disorder, search terms may include subject areas such as psychiatry, pharmacology, neuroscience, and biomedicine but may exclude subjects on social science or population health.

Language. If the search aims to include two languages in searching for certain research projects and if there are available resources for the translation of the citation to be generated, the searcher should include only the identified languages rather than deselecting other languages. It might be more practical to select the two languages as search filters rather deselecting the others because there are so many languages included in every database. For instance, PubMed database includes 57 languages, Scopus uses 31 languages and Web of Science has 45 languages (Falagas et al., 2008).

Three-step search strategy

For all types of reviews, The Joanna Briggs Institute (2015) suggests to perform a three-step search strategy. The first step is an initial search in at least two databases to identify the commonly used keywords for the topic of interest. The second step is to use all the identified keywords (using the search table) in the entire database search. The third step involves manually checking the reference list of the selected articles or contacting authors for relevant articles.

Manual searching

The inability to yield some studies could be associated with the quality of search strategies. There are two possible ways to address this limitation. First, a study by Horsley, Dingwall, and Sampson (2011), found that checking the references cited by the articles generated from the keyword search was found to supplement the number of search output. However, the time and resources allotted in manually searching for additional studies was not clearly accounted in this study. The second approach is to contact authors and/or experts in the field or organizations who could suggest relevant articles to the search topic or question (Hopewell, Clarke, Lefebvre, & Scherer, 2007). Although these strategies maybe time consuming, results may not be available soon, and may require additional resources in performing the search, it can still help minimize the risk of selection bias of literature.

Step 5: Evaluate the result and revise search strategy, if needed

There are several ways to evaluate the result of the search. After performing the first step of searching from at least two databases, the results of this initial search can provide a sense of the quality of the search strategy. A good search yields relevant articles that answer the review question or search statement. Reading the title and abstract of the generated result could provide an idea if the searcher culled the most relevant articles. If many unrelated articles were yielded, it is better to check the search terms and determine which of these terms might have contributed to the broad search result. Checking the reference list of the relevant articles could also help determine if the searcher generated all relevant articles. If the reference lists show a number of relevant articles not included in the search output, revision of the search strategy is necessary and a manual search is highly recommended (McGrath et al., 2012). Evaluating the use of search filters may also be necessary.

The important factors to consider in evaluating the search outcome are sensitivity and specificity (Cleary, Hunt, and Horsfall (2009). Sensitivity refers to the retrieval of all relevant articles. If sensitivity has low precision, it may result to the searcher sorting through huge number of the irrelevant studies. On the other hand, specificity is the retrieval of fewer articles of high quality and minimal number of inappropriate articles. The downside of specificity is the possibility of omitting some relevant articles. Walters, Wilczynski, and Haynes (2006) suggest to trade-off high specificity and high sensitivity depending on the searcher's needs.

Documenting the search strategy

Documenting the search strategy would provide evidence on the quality and possible limitations of the search. A well-documented search process will show how the findings of the research were achieved. This adds credibility to the research process especially if the project is a systematic review of a particular intervention. In documenting search strategies, Kable, Pich, and Maslin-Prothero (2012) describe 12 points to consider. Although these steps extend beyond systematic search per se, these points will be helpful in documenting the entire literature review process. The points to consider in documenting include: (1) provide a purpose statement to describe the question addressed in the literature search, (2) document databases or search engines used and specify if other sources were also accessed, (3) specify the search filters applied and justify its use, (4) list the inclusion and exclusion criteria, (5) list the search terms used and identify the concepts of interest, (6) document the search results for each search engine/database including numbers of articles retrieved, (7) assessed the retrieved articles for relevance, (8) document a summary table of included article, (9) provide statement of included articles, (10) conduct quality appraisal of retrieved articles, (11) critical review of literature and, (12) check reference list for accuracy.

Cleary et al. (2009) further suggest documenting the process of the search through a flow diagram showing the steps from the beginning of the search up to the inclusion of articles for review. This provides a clearer visual view of the steps undertaken in the search process.

Finding additional and alternative sources: open-access directories and databases

One of the common barriers of access to published documents is the lack of subscription to databases. Individuals or institutions who have limited resources may opt to subscribe to 3-5 databases out of the several hundreds of databases. The increasing movement of publishers for 'open-access' addresses this problem of accessibility. The Budapest Open Access Initiative (BOAI, 2002), defines open access as;

> … the free availability of scientific publications on the public internet, permitting any users to read, download, copy, distribute, print, search, or link to the full texts of these articles, crawl them for indexing, pass them as data to software, or use them for any other lawful purpose, without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself...

This section provides some descriptions of open access sources to support health science research and clinical decision-making.

Google scholar is considered as the most common and readily accessible search engine that stores and manages millions of articles. It covers a great range of topical areas and appears to be strongest in the sciences, particularly medicine, and secondarily in the social sciences (Vine, 2006).Though it provides quick access and initial information, Google Scholar is not ready as a professional searching tool for tasks where structured retrieval methodology is necessary (Boeker, Vach, & Motschall, 2013). It lacks sufficient and advanced search features, lacks transparency of the database content, and has uneven coverage of the database (Vine, 2006).

There are various open-access directories and databases. Some of these include the Directory of Open Access Journals (DOAJ), Open Access Theses and Dissertations (OATD), WHO Library and Information networks for knowledge database (WHOLIS) and the Institutional Repository for Information Sharing (IRIS), and PubMed.

DOAJ

The Directory of Open Access Journals aims for the visibility and ease of use of all high quality, peer-reviewed open access journals, periodicals and articles' metadata. Researchers and clinicians can search for open access articles at the DOAJ's website (http://doaj.org) through the quick search box or start with the advance search. There are about 8,829 indexed journals in this directory and includes around 1.98 million articles. However, DOAJ remains an incomplete source for biomedical research papers in general and perhaps other areas of the health sciences. Liljekvist, Andresen, Pommergaard, and Rosenberg (2015) found that DOAJ list about 86.7% of all open access journals in biomedicine. However, the number of journals indexed in the DOAJ may change as current journals may become inactive overtime and new members could be included.

OATD

Thesis and dissertations are increasingly available freely online. Authors choose to publish online to gain wider audience. OATD is a collection of over 2.4 million electronic theses and dissertations (ETDs) that are accessible online. Full text of all papers live on the original hosting site, usually the repository of the university that granted the degree. However, these are not always full-text and access to full-text is limited and bounded by the policies of the universities owning the repository. Some websites could be useful for accessing thesis and dissertations are: https://oatd.org, pqdtopen.proquest.com and http://www.openthesis.org .

WHOLIS and IRIS

The World Health Organization maintains databases that are openly available in various areas of public health such as disease surveillance, health systems, environmental health, primary healthcare, patient safety, among others. These databases include full text of WHO publications such as the Bulletin of the World Health Organization from 1997 to the present and Weekly Epidemiological Record from 1996 to the present. However, documents in these databases are only limited to WHO publications. These databases can be accessed from: http://www.who.int/ library/databases/en/index.html and who.int/iris/

PubMed

PubMed (www.PubMed.com) is a biomedical and life sciences database with more than 5600 journals and greater than

22 million total citations (Lindsey & Olin, 2013). When PubMed searching is compared with the other databases, PubMed tends to generate more specific citations for the intended topic because it uses MeSH searching and hierarchy. Many of the journals indexed in PubMed are available free of charge. This database is also considered to provide the most up-to-date clinical information for practice and research as it is updated daily.

Other possible sources of open-access articles

Thelwall and Kousha (2015) suggest two academic social networking sites (ASNS) that are potential sources of relevant articles. ResearchGate.net and Academia.edu are used by academics to disseminate their work by listing or uploading their work that may provide additional access points for literature searchers. Other reference sharing sites with social networking functionality are also possible source of researches such as Mendeley.com, BibSonomy.org, Zotero.org, and CiteULike.org.

The question of quality of open-access publications

There is a debate that open-access journals publish low quality articles. The perception is that, if open access journals require fees from the authors rather than the subscribers, there is a possibility that these journals accept low quality papers for more collection of fees (Leopold, 2014) to sustain its operation. However, Björk and Solomon (2012) found that the share of gold open access publishing (assigns the cost of publishing to the author) for the overall volume of peer-reviewed journals publishing is rapidly increasing and argue that there is no reason not to choose to published in the OA journals. But researchers need to be vigilant of the increasing number of questionable or 'predatory' open-access journals (Shen & Björk, 2015). There is a need to check carefully the quality standards of the OA journals being considered aside from appraising the quality of the articles retrieved. Jeffrey Beall (2015), a well-known critique of predatory open-access publishing, defines a list of criteria in identifying predatory publishers and journals, and provides a list that are regularly updated at his blog, scholaryoa.com.

Conclusion

Systematic search of literature for the purpose of research or clinical decision-making requires time. The relevance of the generated articles depends on the quality of the planning process for the actual performance of the search. Systematic literature search, with the properly developed search strategies, allows the searchers to retrieve the appropriate materials and answer the research question or search statement. The problems on accessibility of researchers and clinicians in low and middle-income countries to journal subscriptions could be addressed partially by maximizing the rapidly increasing number of open-access publications that may provide additional or alternative sources of scientific information. Searchers, however, need to evaluate these open-access sources and identify its potential limitations. •

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"It is GOOD to cherish your yesterdays; It is BETTER to dream your tomorrows; but it is BEST to live your today's! Remember to hold fast to your dreams, for if your dreams die, then your life is like a bird with broken wings that cannot fly."

- Donald Pillai

RESEARCH ARTICLE

RAINIER C. MORENO-LACALLE, RN, MSN

Nurturing the Seeds of Evidence-Based Practice: Early Ambulation Among Cardiac Surgery Patients

Abstract

Background: Cardiovascular disorders continue to be the most prevalent cause of morbidity and mortality in the Philippines and worldwide. Surgical treatments used to manage cardiovascular disorders (unfortunately) have multiple complications. As part of the health care team, nurses need to develop interventions that are safe, scientifically grounded, and cost-effective in order to counteract these complications. One of the nursing interventions that can be implemented is early ambulation.

Aim: To search, appraise, and synthesize the best evidence surrounding early ambulation among cardiac surgery patients.

Methods: This study employed an evidence-based review method suggested by Melnyk and Fineout-Overholt (2005). Systematic literature search was done to the following databases: Cochrane, Cumulative Index of Nursing and Allied Health Literature (CINAHL), Joana Briggs Institute (JBI), MEDLINE, National Guideline Clearinghouse (NGC), and Nursing/Academic edition. Post-operative patients who have undergone coronary artery bypass surgery (CABG), percutaneous coronary intervention (PCI), and transfemoral cardiac catheterization (TCC) are included in this study. The final review also included six articles.

Results and Discussion: Findings show that early ambulation among patients who underwent coronary artery bypass surgery (CABG), percutaneous coronary intervention (PCI), and transfemoral cardiac catheterization (TCC) improves patient care outcomes (i.e., reduce complications such back pain, puncture bleeding, and urinary discomfort, improves general well-being, and decrease health care costs). Parameters for early ambulation (ranges from 3 hours to 24 hours) and late ambulation (ranges from 12 hours to 48 hours) are used in the study reviewed. The non-randomized comparative study found that the complication rate in the early ambulation group is not increased compared to the late ambulation group (test for non-inferiority p= 0.002). Randomized controlled trial found out that early ambulation among cardiac surgery patients could reduce back pain (OR=0.19, 95% CI: 0.08-0.45, p<0.001), decrease urinary discomfort (OR=0.35, 95% CI:0.14-0.90, p=0.03) for very or unbearable urinary discomfort, and general-well being (p=0.0005 for vitality scale and p=0.014 for the total general well-being). Furthermore, early ambulation group reported decrease in hospitalization costs (less charge of $105 or Php 5,040).

Conclusion and Recommendations: This evidence-based practice (EBP) review ascertains that early ambulation among postoperative coronary artery bypass surgery (CABG), percutaneous coronary intervention (PCI), and transfemoral cardiac catheterization (TCC) patients could improve patient care outcomes such as reduction of complication rate, improvement of general well-being, and decrease of healthcare costs. This study, therefore, recommends the use of early ambulation among CABG, PCI, and TCC postoperative patients to complete the last two phases of evidence-based practice.

Key words: *early ambulation; late ambulation; early mobilization; late mobilization; cardiac disorders; surgery; evidence-based practice*

Introduction

The overarching impact of cardiovascular diseases (e.g. coronary heart disease, angina, heart failure, peripheral disease, etc.) in the Philippines and in other parts of the world remains to be a primary threat. World Health Organization [WHO] (2014a) reported that approximately 7.4 million die of heart-related diseases representing 31% of total deaths. Regardless, however, of whether the country is underdeveloped, developing, or developed, the burden of effect is tangible. For instance, in every 1000 deaths, 37 die due to cardiovascular diseases in the high income countries, 46 for upper middle income countries, and 43 for lower middle income countries (WHO, 2014). In the Philippines, cardiac-related diseases tolls 33% of the total mortality (WHO, 2014b). Philippine Statistics Authority (2012) predicted that five in every ten Filipinos would die due to cardiac-related diseases translated to 19 deaths per hour, lower than the United States of America (USA) which accounts one for every four deaths (Center for Disease Control and Prevention, 2015). Aside from the lives lost due to cardiovascular diseases, it impacts the economy due to subsequent rise in health care costs and loss of productivity. For example, USA reported $1 billion loss daily because of the cardiac-related diseases (Greenwell, 2015). This means that aside from global mortality due to cardiac disorders, it has economic toll too.

In response to this alarming global occurence, several surgical interventions have been utilized to treat cardiovascular diseases (Brunicardi, Andersen, Billiar, Dunn, Hunter, *et al.,* 2015). Some of these surgical interventions are Percutaneous Coronary Interventions (PIC), Coronary Artery Bypass Grafting (CABG), and TMR or Transmyocardial Laser Revascularization (Daniels & Nicoll, 2012). Although the prognosis is high, the complications may pose some threat such as pneumonia, thromboembolism, and other forms of hemodynamic instability (Daniels & Nicoll, 2012). These complications call for health workers to develop interventions that minimize the impact. Fast-track cardiac surgery may counteract these probable consequences. Probst, Cech, Haentschel, Scholz, and Ender (2014 p. 1) called fast-track cardiac surgery as the "global standard of care" because it combines medical and nursing interventions to hasten patient recovery. One of the fast-track cardiac surgery vital components is the institution of early ambulation.

DeLaune and Ladner (2011) defined ambulation as the ability to perform daily and routinary movements that facilitates the execution of activities of daily living. Aside from being used as measurement indicator of overall health status, early ambulation strengthens muscle tone, boosts vitality, and is often associated with positive psychological benefits (DeLaune & Ladner, 2011). Therefore, it stands to reason that early ambulation may provide added benefits to patients who have had cardiovascular surgeries. Despite the anticipated benefits, early ambulation is often omitted during nursing care (Kalisch, 2006). The seemingly steady prevalence, pervasive threat, intractable mortality, insurmountable pressure to nurses, and wide health disparities prompted the researcher to answer the Patient, Intervention, Comparator, and Outcome (PICO) question. The purpose of this is study is to search, appraise, and synthesize studies related to early and late ambulation in improving patient outcomes among cardiac surgery patients.

1.1 PICO question

Is early ambulation effective in improving patient care outcomes (i.e., postoperative complications, general well-being, & cost effectiveness) than late ambulation among postoperative cardiac patients?

Methods

2.1 Search Methods

This study is an evidence-based review that utilized the five critical steps in evidence-based practice suggested by Melnyk and Fineout-Overholt (2005). Only the first three steps were employed in this paper. An attempt to disclose the information before actual implementation of the review is aimed. The reason is that the author wishes for a rigorous scientific scrutiny to ensure the utmost patient safety that is, prior to the completion of the five evidence-based practice phases. The three steps are: (1) asking the burning clinical question through PICO format, (2) collecting the most relevant and best evidence to answer the

clinical question, and (3) critical appraising the evidence that has been collected (Melnyk & Fineout-Overholt, 2005, p. 8). The last two steps namely (4) integration of evidence with clinical expertise, assessment of patient values, and checking of available resources and (5) evaluating the change will be reported after the publication and implementation of this evidence-based review.

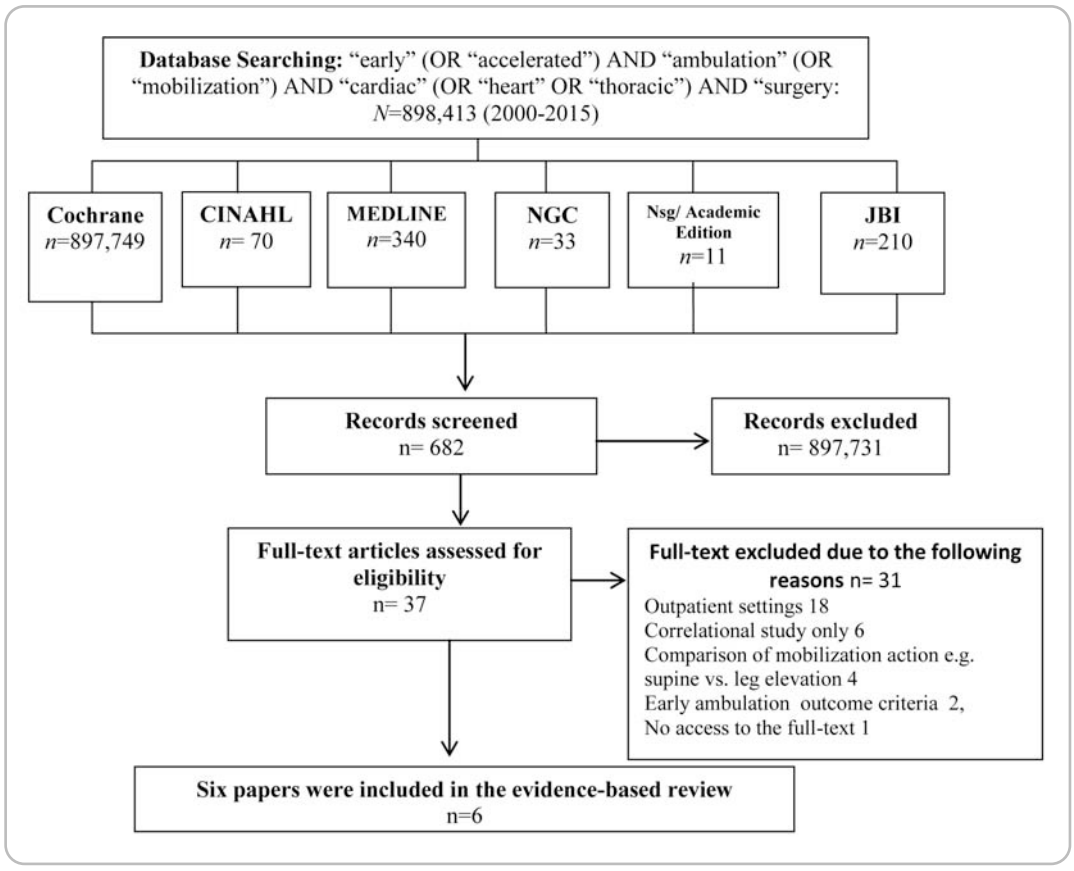
After the selection of the PICO question (that served as the guide of the research aim), searching of the best evidence was instituted. The following electronic databases were searched: Cochrane Library, Cumulative Index of Nursing and Allied Health Literature (CINAHL), The Joanna Briggs Institute (JBI), MEDLINE, The National Guidelines Clearinghouse (NGC), and Health source: Nursing/ Academic Edition were searched as seen in Figure 1. Originally, the search terms "early", "ambulation", "cardiac" and "surgery" were used. However, each database was searched based on their operational features. On the Cochrane Library, MEDLINE, and The Joanna Briggs Institute, medical subject subheadings (MeSH) terms were used such as "accelerated", "mobilization", "heart", and "thoracic". MEDLINE features truncation (e.g. mobil$) and wildcards plus country-specific spelling were also put into consideration. The systematic search yielded 898,413 article hits using the time frame 2000-2015 as shown in Figure 1. This phase took six months to complete solely by the researcher.

The searching phase of the evidence-based review was divided into three processes: assessment of the title relevance, abstract weeding, and the reading of the entire article. At first, title hits were read, color coded, and classified based on relevance. Pink highlight means not relevant, green corresponds to somehow relevant, and orange represents that the article meets the inclusion criteria. Only green and orange were included to be part of the abstract weeding phase. After categorization, the articles were downsized to six hundred eighty-two (n=682). Abstracts were read. Modified criteria for optimal grading by Guyatt, Gutterman, Baumann, Harris, Hylek, Philipps, *et al.* (2006) were also used. The said criteria were used, each given with weight of one point: simplicity, transparency, quality of evidence, sufficiency, explicitness, consistency, and clarity on the different approaches for different outcomes. Only those garnering 6 points and above were included in the next phase of the study. This phase cuts the included study to forty-three (n=43) articles.

Each of the forty-three articles was read in its entirety to clearly grasp the article. The following shows exclusion criteria: the treatment was done in the outpatient settings (n=18), correlational study (n=6), comparison of mobilization action, e.g. supine vs. leg elevation (n=4), early ambulation serves as the outcome criteria (n=2), and no access to the full-text (n=1). Finally, six articles were included in this evidence-based review as shown in Figure 1.

The appraisal and synthesis includes quality assessment. Code sheets were utilized with nine columns as follows: 1. Study citation, country, and funding source; 2. Purpose, question/ variables; 3. Design/ setting; 4. Subjects/ samples; 5. Findings; 6. Methods; 7. Data analysis/ results; 8. Implications for practice and

Figure 1: Flowchart of literature process and results



limitations; and 9. Decision for use as shown in Table 1. This is adapted from Schultz (2016) Evaluation of Quantitative Research Article tool.

2.2 Type of Studies.

Clinical guidelines (Brazilian Congress of Cardiology, 2007), systematic review and meta-analysis (Mohammady, Heidari, Sari, Zolfaghari, & Janani, 2014), randomized single-blinded controlled trial (Yu, Choi, Wong, Sit & Ip, 2012), open-observational (Kirkerby-Gastra, Sellevold, Stenseth, & Skogvoll, 2005), retrospective-observational studies (Kobrossi, Tamim, & Dakik, 2014), and non-randomized comparative study (Schiks, Schoonhoven, Aengevaeren, Nogarede-Hoekstra, Van Achterberg, *et al.,* 2008) were included in this study.

2.3 Type of Participants.

Postoperative patients who have undergone coronary artery bypass surgery (CABG), percutaneous coronary intervention (PCI), and transfemoral cardiac catheterization (TCA) were included in this evidence-based review.

2.4 Type of Interventions.

Early ambulation (ranging from 3 hours to 24 hours) and late ambulation (ranging from 12 hours to 48 hours) were used as an intervention in the selected studies.

2.5 Type of Outcome Measures

Effects of early ambulation to postoperative cardiac patients on general well-being, satisfaction level, mixed venous saturation, and complications such as venous thromboemolism, bleeding, hematoma, pseudoaneurysm formation, back pain, urinary comfort, and vasovagal collapse emerged as the patient outcomes.

2.6 Quality Appraisal

The American Heart Association level of evidence was used to appraise (Gibbons, Smith, & Antman, 2003). Since the evidence-based review included studies with different methodology, various quality assessment tools were utilized for: observational cohort and cross sectional studies, randomized controlled trial, and systematic review/ meta-analysis wherein such review used National Heart, Lung, and Blood Institute Quality Assessment Tool (National Institute of Health, 2014), and for the clinical guidelines the review used AGREE collaboration tool (Canadian Institutes of Health Research, 2013).

Results

3.1 Description of Studies

The evidence-based review involved five thousand fifty-one (N=5051) participants, with study size ranging between 31-4091 patients. Two studies are conducted in European countries (Kirkeby-Garstra *et al*., 2005; Schiks *et al*., 2008), three from Asia (Mohammady *et al*., 2014; Kobrossi *et al*., 2014; *Yu et al*., 2012), and one from the Latin America (Brazilian Congress of Cardiology, 2007).

The study included Class Ib and Class IIa evidences only. Class Ib level of evidence refers to benefits outweighing the risks and one study from single randomized trial or non-randomized trial while Class IIa represents that the benefit outweighs the risk but additional studies with focused studies are recommended (Gibbons, Smith, & Antman, 2003). As to the quality of evidence, all studies included are 'good' with an average rating of 85% ranging from 71% to 93%. The bases of these ratings involves the summing of the total yeses (i.e., meeting the prescribed standards by the adopted tool) divided by the total number of items.

3.2 Risk of bias in included studies

This section aims to provide a candid view of the studies included in this review. The study may be vulnerable to the following biases: publication, contamination, non-randomization, and outcome reporting. Publication bias is the non-inclusion of the unpublished studies (Melnyk & Fineout-Overholt, 2005). Evidence-based reviews that included published studies might be more favorable to the effect of the intervention due to non-reporting of unpublished studies (Melnyk & Fineout-Overholt, 2005). At the same time, the percentage of the studies had moderate to high quality (72 to 93%), which could have contaminated the outcome of the study. This process may lead to over- and underestimation of early ambulation effectiveness. Cochrane Collaboration (2011) postulated that researchers knowing the subjects may affect the outcome of the study because of non-randomization. Three studies (Kobrossi *et al.,* 2014; Schiks *et al.,* 2008; Kirkeby-Garsta *et al.,* 2005) might have methodological weakness since they are not blinded to the subjects during the conduct of the study. Finally, Cochrane (2011) defined this as “selective reporting” of the outcomes which might lead to distorted results (i.e., outcome reporting bias). Moreover, Brazilian Congress of Cardiology (2007) clinical guidelines and Mohammady *et al.* (2014) meta-analysis might have contributed to this result since the outcomes report is deemed selective. The clinical guideline is a ready-made output while the meta-analysis reported on the complications of early ambulation only.

RESEARCH ARTICLE

Table 1: Quality appraisal of selected studies

Study Citation, include country & funding source	Purpose Question/ Variables	Design Setting	Subjects/ Sample	Findings	Methods	Data Analysis Results	Implications for Practice and Limitations	Decision for Use(evidence table used)
Brazilian Congress of Cardiology (2007) *I Guidelines for Perioperative Evaluation.* Brazil, Gualandro D.M. Pinho, C., & Caramelli B. Brazil **Funding Source:** Brazilian Congress of Cardiology (Brazilian Society of Cardiology)	To provide a comprehensive evidence-based guidelines for patients undergoing cardiac surgeries. **Independent:** Early Ambulation **Dependent:** None noted	Evidence-based review **Setting:** Not noted	**Power analysis:** Not noted **Attrition:** Not noted	Recommendations for the perioperative prophylaxis of venous thromboembolism Low risk: early mobilization (Class I, level of evidence C)	The participants of these guidelines were chosen among health sciences specialists with hands on and academic experience, thus being characterized as clinical researchers. The basics of perioperative evaluation and the current recommendations were established in order to decrease perioperative complications. The adopted methodology and evidence levels were the same as those used in earlier documents by the Brazilian Society of Cardiology **Instrument:** Not-noted **Psychometrics:** Not noted	**Statistics:** Not-noted **Important Statistical findings:** Not noted	The guidelines stipulate that early mobilization could prevent complications such as thromboembolism and is characterized as low risk.	**Level of Evidence:** Class I Level of Evidence A **Quality:** Good. (Agree Collaboration for Clinical Guidelines (86%)) **Potential Harm is implemented:** No **Feasibility of implementation:** Yes **Decision:** Keep for use
Kirkeby-Garstad, I., Sellevold, O. F. M., Stenseth, R., & Skogvoll, E. (2005). Mixed venous oxygen desaturation during early mobilization after coronary artery bypass surgery. *Acta anaesthesiologica scandinavica*, *49*(6), 827-834. Norway **Funding Source:** None Noted	The aim of the study was to investigate whether patients with coronary artery bypass grafting (CABG) exhibit decrease in mixed venous saturation during postoperative mobilization. **Independent:** Early Mobilization **Dependent:** Mixed venous oxygen saturation (SvO2)using ejection fraction (EF).	Open Observational Study **Setting:** Not noted	Three women and 28 men, mean age 62.4 ± 9.5 years. **Power analysis:** Not noted **Attrition:** Not noted	Patients with CABG exhibit a marked desaturation during early postoperative mobilization.	The Regional Board of Ethics in Medical Research approved the study protocol. A standardized 15-20 minutes mobilization sequence was performed on the morning of postoperative days 1 and 2. Sequential Steps: T1: resting in bed T2: sitting on bed with feet on the floor for 3 minutes T3: exercise, the patient stood up and 'walked on the spot' T4: sitting in the weighing chair for 3 min T5: exercise, the patient stood up and 'walked on the spot' T6: 10 minutes after returning to bed Subsequently monitoring the oxygen saturation. **Instrument:** ABL300 blood gas analyzer The Explorer TM Vigilance TM *(Mean of three consecutive measurements)* **Psychometrics:** Signal Quality Index	**Statistics:** Mean and Standard deviation ANOVA Paired t-tests with bonferroni correction **Important Statistical findings:** The mixed venous oxygen saturation (SvO2) values completely returned to baseline within 10 minutes after the patient returned to bed. SvO2 values higher on day 2 at time points T3 and T5 (P=0.024 and P=0.032) A significant reduction in CI from rest to exercise was found on both days (P=.008 day 1; P=0.036 day 2)	During early mobilization close monitoring of oxygen saturation is necessary. The study did not employ randomized controlled trial.	**Level of Evidence:** Class IIa, Level B **Quality:** Good (Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies by the National Heart, Lung and Blood Institute 12/14 yeses) **Potential Harm is implemented:** Yes **Feasibility of implementation:** Yes **Decision:** Keep for use

Study Citation, include country & funding source	Purpose Question/ Variables	Design Setting	Subjects/ Sample	Findings	Methods	Data Analysis Results	Implications for Practice and Limitations	Decision for Use(evidence table used)
Kobrossi, S., Tamim, H., & Dakik, H. (2014) Vascular complications of early (3h) vs standard (6h) ambulation post-cardiac catheterization or percutaneous coronary intervention from the femoral artery. *International Journal of Cardiology. 176,* 1067-1069 doi.org/10.1016/j.ijcard.2014.07.137 Lebanon **Funding Source:** None declared	The study aimed to determine whether early (3 hours) ambulation post cardiac catheterization or percutaneous coronary intervention from the femoral artery. **Independent:** Ambulation **Dependent:** Vascular complications (bleeding, hematoma, pseudoaneurysm formation)	Retrospective observational study **Setting:** Not noted	All patients undergoing cardiac catheterization (CC) with percutaneous coronary intervention (PCI) from the femoral artery by one operator in the past two years. 262 patients 172 were ambulated after 3 hours 115 ambulated after 6 hours **Power analysis:** Not noted **Attrition:** Not noted	Both ear (3 hours) and standard (6 hours) ambulation after CC/PCI from the femoral artery has a similar and low rate of vascular complications.	The medical charts of the patients were reviewed retrospectively to obtain the clinical characteristics of the patients and the angiographic findings. For patients undergoing CC only, the vascular sheath was removed immediately after the procedure and the femoral artery was compressed manually for 15 min to establish homeostasis. For patients who had concomitant PCI, the vascular sheaths were removed by the cardiology fellows. **Instrument:** Arterial duplex scan **Psychometrics:** Not noted	**Statistics:** Mean Standard deviation Students t-test Chi square test **Important Statistical findings:** The 6h ambulation had a higher rate of peripheral vascular disease (2.6% vs. 0%, p=0.05). There were more significant CAD in 6h compared to the 3h (75%-60%, p=.01). The overall vascular complication rate in the whole study population was 2.7% and it was similar (2.7% vs 2.5%, p=.97).	The findings are important since it proves that as a whole it does not matter whether you start early or late in the ambulation along vascular complications. One operator bias was noted too.	**Level of Evidence:** Class I Level of Evidence B **Quality:** Good. (with 12/14 yeses on the NHBL Quality tool) **Potential Harm is implemented:** No **Feasibility of implementation:** Yes **Decision:** Keep for use
Mohammady, M., Heidari, K., Sari, A. A., Zolfaghari, M., & Janani, L. (2014). Early ambulation after diagnostic transfemoral catheterisation: a systematic review and meta-analysis. *International journal of nursing studies*, *51*(1), 39-50. Iran **Funding Source:** None declared	To assess the effects of the duration of bed rest after transfemoral catheterization on the prevention of vascular complications and general discomfort, pain, urinary discomfort, and patient satisfaction. **Independent:** Ambulation **Dependent:** Vascular complications (bleeding, hematoma, pseudoaneurysm formation) Back pain and urinary comfort	Systematic review and meta-analysis **Setting:** Not noted	They identified studies from the following databases: MEDLINE, SCOPUS, Proquest dissertations, OPEN SIGLE, Persian medical databases, and CINAHL. This study includes 20 RCT involving total participants of 4091. **Power analysis:** Not noted **Attrition:** The studies included a range of attrition rate from 13%-26%.	There were no statistical differences between categories in the incidence of bleeding, hematoma, bruising, pseudoaneurysms, thrombus, or areteriovenous fistula. Patients had significantly less back pain after 2-4 hours bed rest compared to 6 hours. Urinary discomfort reported less when bed rest lasted 4 hours compared to 12-24 hours. Reduced bed rest time may significantly decrease the costs of hospital care.	Eight databases were included. Using the QUOROM statement flow diagram, 20 studies met the inclusion criteria. **Instrument:** Not applicable **Psychometrics:** Not applicable	**Statistics:** Dichotomous outcomes odds ratio Mantel-Hanzel fixed-effect model Sensitivity analysis **Important Statistical findings: Hematoma** Comparing 4 to 6 hours chi2= 0.19, df= 1 (P=0.66), F=0% Overall effect Z=0.14 (P=0.89) **Bleeding** Comparing 4 to 6 hours versus 12-24 hours $Chi^2 = 0.21$, df=1 (P=0.65), P=0% Overall effect Z-=0.61 (P=0.54)	The study is useful since it included RCT study only. It balances the pros and cons of early ambulation. **Limitation:** The study is susceptible to: • Sequence geration • Allocation concealment • Incomplete outcome data • Selective reporting	**Level of Evidence:** Class I Level of Evidence A **Quality:** Good. 7/8 National Heart, Lung, and Blood Institute Tool for Meta-analysis **Potential Harm is implemented:** Yes **Feasibility of implementation:** Yes **Decision:** Keep for use

RESEARCH ARTICLE

Study Citation, include country & funding source	Purpose Question/ Variables	Design Setting	Subjects/ Sample	Findings	Methods	Data Analysis Results	Implications for Practice and Limitations	Decision for Use(evidence table used)
Schiks, I., Schoohoven, L., Aengevaeren, W., Nogareded-Hoekstra, C., van Achterberg, T., & Verheught, F. (2008) Ambulation after femoral sheath removal in percutaneous coronary intervention: a prospective comparison of early vs. late ambulation. *Journal of Clinical Nursing*, 18, 1862-1970 The Netherlands **Funding Source:** None declared	To investigate if ambulation four hours after sheath removal can replace ambulation 10 hours or more after sheath removal with regard to puncture site complications after percutaneous coronary interventions (PCI) and to examine patient comfort in both groups. **Independent:** Ambulation **Dependent:** Puncture site complications: hematoma, bleeding, false aneurysm, and arteriovenous fistula. Secondary end points were occurrence of vasovagal collapse after mobilization, back pain & problems with voiding. Patient's well-being	A non-randomized comparative study. **Setting:** Radboud University Nijmegen Medical Center	The patients included in this study were admitted at a hospital for PCI. 531 patients completed the protocol. Patients who underwent an elective PCI procedure and/or fractional flow reserve (FFR) measurement by femoral approach. All patient had a six French sheath. **Power analysis:** Not noted **Attrition:** The studies included a range of attrition rate from 13%-26%.	The study shows that early ambulation four hours after femoral sheath removal is feasible and safe in patients after uncomplicated PCI. The incidence of puncture site complications did not increase and patient comfort was similar.	Percutaneous coronary intervention was performed by femoral approach. Registered nurses of the ward removed the sheath and homeostasis was achieved by manual compression. After bed rest with a compression bandage for four hours, the patients in early ambulation group were ambulated. The patients in the control group stayed in bed till the next morning. Primary study endpoint was the comparison of puncture site complications: hematoma, bleeding, false aneurysm, and arteriovenous fistula. Secondary end points were occurrence of vasovagal collapse after mobilization, back pain and problems with voiding. Ambulation: 1. Patient sat on a chair for 10 minutes. 2. Patient walked on the ward with a nurse. **Instrument:** Activated clotting time (ACT) **Psychometrics:** Not applicable	**Statistics:** t-tests Chi-square tests Mann-Whitney U tests **Important Statistical findings:** Puncture site complications occurred in nine patients (2.7%) in the early ambulation group and six patients (3.0%) in the control group. The complication rate in the early ambulation group is not increased compared to the control group (test for non-inferiority p=.0002).	The study proved the nurses may ambulate post-PCI patients because there is no statistical significance on complications. **Limitation:** • No randomization • No blinding • The information about puncture site complications would be more complete if there were data about puncture site complications after discharge from the hospital. • Patient groups differed on several risk factors. • There was a change in heparin protocol 10 weeks into the study. • Patients with ACT values below 275 second were included. • Single center evaluation.	**Level of Evidence:** Class I Level of Evidence B **Quality:** Good. (13/14 yeses on the Quality assessment tool by NHLBI) **Potential Harm is implemented:** Yes **Feasibility of implementation:** Yes **Decision:** Keep for use
Yu, M., Choi, K. C., Wong, E. M. L., Sit, J. W. H., Ip, W. Y., Belgi, A., ... & Korkmaz, A. A. (2012). Effect of early ambulation after transfemoral cardiac catheterization in Hong Kong: a single-blinded randomized controlled trial. *Anadolu kardiyoloji dergisi: AKD= the Anatolian journal of cardiology*, *12*(3), 222-230. Hong Kong **Funding Source:** None declared	The purpose of the study was to investigate the effect of early ambulation after cardiac catheterization (CC) on patients' back pain, puncture site vein, vascular complications, urinary discomfort, general well-being and satisfaction level. **Independent:** Ambulation **Dependent:** Patients' back pain, puncture site vein, vascular complications, urinary discomfort, general well-being and satisfaction level.	Randomized single-blinded controlled trial. **Setting:** One regional hospital in Hong Kong.	Overall, 137 participants were randomly assigned to experimental (63 participants) or control (74 participants) group according to a computer generated random list. **Power analysis:** Not noted **Attrition:** The studies included a range of attrition rate from 13%-26%.	He major finding of the study was that 4 hours ambulation after CC could reduce back pain, urinary discomfort and increase general well-being of the patients. However, effect of early ambulation on puncture site pain, puncture site bleeding, and the satisfaction level were not significantly different between the two groups Only one patient in the control group experienced puncture site bleeding after CC.	Early ambulation is defined as 4 hours and late ambulation is 12 to 24 hours. After passing the inclusion criteria and was divided randomly between experimental and control group. Patients in the experimental group were asked to ambulate according to the schedule: -standing at the bedside for 1 minute -walking n the room for 2 minutes each hour for 3 consecutive hours -and the dependent variables are assessed **Instrument:** Questionnaire **Psychometrics:** Bleeding and hematoma assessment tool Pain assessment tool Urinary discomfort tool General well-being tool Patient satisfaction tool	**Statistics:** Independent t-tests Mann-Whitney U test Pearson Chi-square test **Important Statistical findings:** General estimation equation models revealed that the experimental group has significantly larger increase in the vitality subscale (p=0.0005) and the total general well-being (p=.0014) scores after CC. The experimental group experienced milder back pain than the control group, especially after 8 hours (p=0.001) and in the next morning (p=.002). General multiple logistic regression showed that the experimental group was also less likely experiencing much difficulty or unable to urinate at all than the controls after adjusting for the potential confounding variables (OR=0.22, 95% CI (0.06-0.74), p=0.015).	This study proves the efficacy and efficiency of early ambulation in improving patient care outcomes. . **Limitation:** • Sample size is small. • Selection bias	**Level of Evidence:** Class I Level of Evidence B **Quality:** Good. (10/14 yeses on the Quality assessment tool by NHLBI) **Potential Harm is implemented:** Yes **Feasibility of implementation:** Yes **Decision:** Keep for use

3.3 Interventions

Generally, early ambulation time ranges from 3 hours to 24 hours after patient has been stabilized while the late ambulation ranges from 12 hours to 24 hours. For example, among 260 percutaneous coronary interventions (PCI) and cardiac catheterization (CC) postoperative patients, 172 patients were ambulated after 3 hours and 115 patients after 6 hours (Kobrossi *et al.*, 2014). Yu *et al*. (2012) utilized a longer early ambulation time (4 hours) among 137 patients dividing 63 in the experimental group and 74 in the control group after cardiac catheterization. Schiks *et al.* (2008) attempted to stabilize the patient first (after removal of the sheath) and were [early] ambulated 4 hours after. Mohammady *et al*. (2014) involving 20 randomized controlled trial (RCTs) equates bed rest and late ambulation. Whereas four compared 2 hours bed rest vs. 4 hours (h) bed rest, eleven compared 1.5-4h bed rest vs. 6h bedrest, and finally, five compared 4-6h bed rest vs. 12-24h bed rest. With major operative cases like coronary artery bypass grafting (CABG), more conservative early ambulation was done for Day 1 postoperative (Kirkey-Garstad *et al.,*2005). Lastly, Brazilian Congress of Cardiology (2007) made no pronouncement on the time of early ambulation in their protocol.

3.4 Effects of Interventions

As to the postoperative cardiac patient outcomes, three studies (Mohammady *et al*., 2014; Kobrossi *et al*., 2014; Schiks *et al*., 2008) determined vascular complications after early ambulation namely: hematoma, bleeding, false aneurysm, and arteriovenous fistula. Secondary end points were considered too, such as patient comfort, expedited release from the hospital (Kobrossi *et al*., 2014), vasovagal collapse, back pain, urinary problems (Mohammady *et al*., 2014; Yu *et al*., 2012; Schicks *et al*., 2008), mixed venous oxygen saturation using ejection fraction (Kirkeby-Garstra *et al*., 2005), and lastly, general well-being and satisfaction level (Yu *et al*., 2012) which are deemed favorable to early ambulation.

Phillips (2008) pointed out possible complications of cardiac surgeries namely stroke, hypotension, excessive bleeding, and myocardial infarctions and cardiac rhythm aberrations. This is more pronounced in cases of coronary artery bypass surgery (CABG). Kirkeby-Garstad *et al* (2005) provided information regarding one of their subjects who developed ventricular tachycardia and excessive bleeding post-CABG. He was reoperated at Day 1 and resumed the study on Day 2, on and off ventricular tachycardia and cardioversion happened, and demised at Day 17. Oddly, only 1 out of 31 subjects on the study developed the complications (Kirkeby-Garstad *et al* 2005). The same is true with Yu *et al.* (2012) who discovered that only one of 137 developed puncture site bleeding.

Early ambulation has no significant difference when it comes to vascular complications to that of late ambulation. No significant difference was found to early and late ambulation on puncture site/ vascular complications (Mohammady *et al*., 2014; Yu *et al*., 2012; Schiks *et al*., 2008). In addition, Yu *et al*. (2012) found out that the complications including hematoma, bleeding, false aneurysm, and arteriovenous fistula in not increased after early ambulation (test for non-inferiority p= 0.002). Scientific literatures with the highest level of evidence like randomized controlled trial (Yu *et al.,* 2012) also found out that it could reduce back pain (OR=0.19, 95% CI: 0.08-0.45, p<0.001), urinary discomfort (OR=0.35, 95% CI:0.14-0.90, p=0.03) for very or unbearable urinary discomfort, and general well-being (p=.0005 for vitality scale and p=0.014 for the total general well-being). Systematic reviews/ Meta-analysis (Mohammady *et al.,* 2014) support early ambulation too. As for the early ambulation group, they reported less back pain, urinary discomfort (standard mean difference 0.27; 95% CI: -2.37, -0.59), and decreased costs during hospitalization (early ambulatory patients have less hospital charges of $105 dollars roughly around PhP 5,040 at the time of the writing). Finally, the group of experts developed the Brazil Perioperative guidelines (Brazilian Congress of Cardiology, 2007) and recommended early ambulation (Class I, level of evidence C), that is classified as low risk. How they arrived in this conclusion is not clearly stipulated in the guideline. However, they added that early ambulation decreases incidence of venous thromboembolism.

Discussion

Findings from the evidence-based review show that early ambulation among cardiac surgery patients (i.e., CABG, PCI, & TCC) improves patient care outcomes such as reduction of complication rate, increase in general well-being, and lessens health care costs. From an economic standpoint, prolonged immobilization might pose decrease in productivity because of inability to resume work. This is an indirect effect due to prolonged hospitalization. It must be noted that instead of working and earning money for the family, patients would stay inside the hospital and inevitably increase financial burden because of health care costs. At the same time, being admitted

in the hospital compounds their expenditures often called the direct effect. They may need to buy more food, rent a house, double travel expenses, buy medications, and pay professional fees while their relatives are hospitalized. When hospitalization is fast-track, these could halt. Therefore, potential economic benefits of early ambulation are projected.

As Daniels and Nicoll (2012) enumerated the complications associated with cardiac surgeries, this study alludes that early ambulation might not be the cause. Early ambulation counteracts the complications which could be attributed to the improvement of blood flow to the peripheries. To wit, blood caries oxygen, glucose, and other essential nutrients which is important to the cellular functioning of the body. If the patient would stay in bed for a long period of time, this causes sluggish blood flow, potentially depriving essential nutrients to those of other vital organs such as the brain which may cause the patient not to think clearly, decrease wound healing time, and slows the recovery process. Rion and Kautz (2016 p. 159) called early ambulation as "the walk to save" because it averts multiple complications such as atelectasis, pneumonia, and hemodynamic instability. Similarly, early ambulation promotes muscle mass strengthening and ventricular remodeling due to promotion of muscular contraction and relaxation.

From a psychological standpoint, early ambulation promotes the functioning of the cognitive faculty since it opens the patient to interpersonal relationship with other people. For instance, when a postoperative cardiac patient would use the hallway to walk, the patient would be exposed to other patients, bystanders, and health workers. Mingling may cause the person to develop more appropriate coping mechanism, divert attention, delays negative emotions, and improves overall relationship with other people bringing positive emotions. This is often associated with faster recovery (Ostir, Berges, Ottenbacher, Clow, & Ottenbacher, 2008). These multiple feedback loops starts with the patient- early ambulation. Freedom from financial constraints, promotion of blood flow, and involvement to social life, ultimately, improves patient outcomes. The findings concur with Kalisch, Lee, and Dabney (2013) saying that inpatient mobilization improves outcomes in four levels: physical (it decreases complications such as pain, deep vein thrombosis, & fatigue), psychological (it averts anxiety, depression, & distress), social (since it promotes quality of life and independence) and organizational (because early ambulation reduces length of hospital stay, mortality risk, and costs.

4.1 Strengths and Limitations

The study covers a multitude of databases to reduce publication bias. Attempts were done to access all relevant article hits. If full-text is not available in the database, authors were written to request a copy of their article. The researcher sought help from the expert librarian to cull all the necessary articles. Overall, the result of the evidence-based review is grounded on strong science, systematic searching, and the lack of homogeneity among studies.

The possible methodological limitation of the paper includes the dearth of highest level of evidence concerning early ambulation in cardiac surgeries. Some studies may be suffering from methodological flaws, concealment, and low generalizability. Although biases were avoided, still, significant grey literatures may have been overlooked.

4.2 Conclusions

This evidence-based practice (EBP) paper ascertains that early ambulation improves patient outcomes (i.e., reduction of complication rate, improves general well-being, and lessens health costs) among postoperative coronary artery bypass surgery (CABG), percutaneous coronary intervention (PCI), and transfemoral cardiac catheterization (TCC) patients. Postoperative cardiac surgery (PCI & TCC) patients can be ambulated from 3 hours to Day 1 while major cardiac surgery like CABG can be ambulated 24 hours to Day 2. This review highlights that health workers have the capacity to create scientific and cost-effective interventions. Finally, the study recommends the use of early ambulation among CABG, PCI, and TCC postoperative patients to complete the last two phases of evidence-based practice.

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Acknowledgements

I wish to acknowledge the assistance of Dr. Mary Grace Lacanaria, Dr. Alyze Schultz, Ms. Carmen Bolinto, and Ms. Rufina Abul for the support towards the fruition of this manuscript.

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RESEARCH ARTICLE

SR. MERRIAM C. CAPELLAN, A.R.

Health Promotion Lifestyle Profile of Augustinian Recollect Sisters: Basis for a Health Program

Abstract

Studies on health promotion lifestyle of religious communities have relatively received little attention. This study aimed to determine the health promoting lifestyle of the Augustinian Recollect Sisters and to develop a program that will direct them to attain optimal health.

Health Promotion Lifestyle Profile II was used to determine the health promotion lifestyle profile of 88 Augustinian Recollect Sisters. Descriptive statistics featured the profile of the respondents and Pearson r determined the significant relationship between the respondents' demographic profiles and their level/degree of engagement in health promotion lifestyle. Findings revealed no significant relationship between the respondents' demographic profile and their level of health promotion lifestyle.

Key words*: Health Promotion, Augustinian Recollect Sisters, Education Apostolate, Health Promotion Lifestyle, Health Promotion Program*

Introduction

Health promotion is the process of enabling people to increase control over and to improve their health (WHO, 2009). Health promotion prevents illness, enhances well-being, and creates healthy lifestyle at all stages of life (Teng et al.2010). A recent study reported that engaging in health-promoting behaviours and lifestyle may help to improve not only on an individual's physical health but also on a physical health-related quality of life (Erci 2011).

Health promotion is seen as an approach to attain a positive state of high-level wellness rather than just avoiding diseases and is geared towards improving the well-being of an individual thereby leading the person to become self-actualized (Pender et al. 2011).

Health Promotion lifestyle is essential in reducing premature morbidity and mortality (Allen, 2014) and can effectively delay or prevent many chronic medical conditions in life (Meihan & Chung-Ngok 2010). A lot of diseases could be prevented if people adopt healthy habits such as eating a balanced diet, not overeating, doing exercises, avoiding smoking, getting enough sleep, laughing more, and avoiding too much stress (Alano 2014).

Researches pertaining to the life of religious are relatively few. Before Vatican II, studies examining the life of religious have concentrated mainly on identity, sexual abuse, stress and adaptation of lifestyle (Brock 2013). A study on clergy leadership revealed that the task of clergy as leaders are focused on transforming not just one's own health or even of one's congregation but that of the community as well (Cutts et.al., 2011).

Women as one vulnerable group in society will significantly profit from the practice of a health promotion lifestyle. The current study group comprises of women who may share the same vulnerability due to several effects of technological advances and environmental hazards. Their communities are also not spared from the effects of technological advances and environmental progress affecting personal, community, and apostolic endeavours.

Along with the demands of the education apostolate of the Augustinian Recollect Sisters (ARS) lies the challenge to develop more rigorous and consistent behaviour that will improve individual health and boost communities to take more actively the path towards improved health and well-being.

Health promotion impacts the lives of religious women working in education apostolate as it significantly affects their capacity to respond to the demands of their daily duties and responsibilities. Factors to consider are the present study group's increased risk to mortality, chronic illnesses and conditions like diabetes mellitus, hypertension, heart disease and eye disorders that would possibly debilitate their capacity to work as educators or may lead them to accomplish little because of illness.

Moreover, life expectancy which accounts for an individual's quantity and quality of life may be shorter and of poor quality for those who are constantly and greatly exposed to multiple stressors. The present study group involving religious women serving the Holy Mother Church through their apostolate of education may actually manifest the same concern since the demands of the present educational system heavily burden them on the physical and psychological level. This study would particularly become an important step in contributing to the development of the main apostolate of the congregation and other services that these women do both within their individual and collective capacity.

The relevance of reduced health costs on the part of the congregation is also a factor to consider for the significance of this study. It is a fact that there is a personal, economic, and environmental burden when people do not engage in healthy practices and lifestyle. For this study group, the encouragement and support to pursue health -enhancing behaviors would greatly influence their lives, as firstly, religious workers in education and in other services which the Church may call them for.

Changes in the pattern of life, work, and environment of the ARS will have significant effects on their lives as educators. This would not only affect their personal, emotional, and psychological well-being but also their own religious communities. The researcher's personal interest on health promotion and its potential contribution to the physical and psycho-spiritual formation of the Augustinian Recollect Sisters motivated her to conduct this study. This study will also help the researcher to determine the potential contribution of health promotion among them as they engage actively in their educational mission and endeavours.

Age and years in religious life of the ARS have significant bearing on this study. On the context of the health promotion model, which was used in this study, both variables are part of individual characteristics and experiences. The age and years in the religious life of respondents vary and this may account for their differences in health behavior and practice. These variables may also reveal descriptions as to respondents' competence, strengths, or weaknesses.

The present study also addresses the gap in literature concerning the depth of information about the health promotion lifestyle of a group of religious women vis-à-vis other groups or individuals.

Methodology

This descriptive study was designed to determine the level of health promotion lifestyle of the Augustinian Recollect Sisters (ARS) and to develop a program that will help them strive for optimal health and well-being. A letter of request addressed to Dr. Karen Sechrist to use the Health Promotion Lifestyle Profile II (HPLP II) and Exercise Benefits/Barriers Scale (EBBS) were sent through electronic mail. The approval to use the said instruments was also received through electronic mail on August 19, 2014 and October 23, 2014 respectively. The researcher has also complied with research guidelines and protocol set by the Research and Evaluation Office of Centro Escolar University in Manila.

The HPLP II provides significant data about individuals' pattern of living or lifestyle. The six dimensions of HPLP II namely, health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management are important in assessing or evaluating an individual lifestyle and in providing a baseline against which other health assessments can be compared. Recent studies (Teng et.al, 2010; Raj et.al, 2012; and Seguin et.al, 2012) have indicated the validity of the Health Promotion Lifestyle Profile II to measure the health promotion lifestyle of a particular population group such as adolescents, middle-aged women, and older people.

Health responsibility in the context of health promotion allows the person to adhere to a healthy lifestyle and to become aware of accountabilities in keeping doctor's appointments and heeding medical advices given on how to work towards improved health. Physical activity, on the other hand, as an important aspect of personal health is the ability of the person to perform activities or exercises essential for healthy and more dynamic living. Nutrition involves healthy eating to avoid diseases and chronic problems of overweight and obesity.

Spiritual growth is the person's ability to improve and cultivate oneself to the fullest potential leading one to be self-actualized (Pender et. al. 2011). Interpersonal relations include individuals or significant others who may influence or affect and provide a person with social or emotional support. Stress management is the capacity of a person to cope and to handle one's self in the presence of stressful events and practice interventions that will help diminish the stress one undergoes.

The six dimensions of HPLP II are significant to the present study group because becoming attentive and responsible over these dimensions will help the ARS pursue decisions and actions congruent to health promotion lifestyle. These mentioned dimensions have crucial roles in developing and maintaining healthy behaviors among this group of women.

The complete set of instruments was pilot tested to evaluate and to refine the instrument and to also determine how much time it takes to administer the entire instrument package and whether or not respondents find this burdensome. Modifications or changes were noted after the pilot testing. The survey questionnaire consisting of HPLP II and EBBS were then sent to a number of ARS (88 School Administrators) who agreed to become respondents of this study with a representative number drawn from the AR communities in the Philippines and in California, USA.

Dimensions of HPLP II, as well as, the exercise benefit and barriers scale were scored separately to obtain group mean scores. High response rate was obtained since all respondents returned the completed questionnaire on time. Descriptive statistics (mean, standard deviation, and percentage) were tabulated for the variables of age and the number of years in religious life. The variable area of assignment was used as an additional description of the respondents. Pearson's r was used to test the relationship between the respondents' demographic profile and their level/degree of engagement in health promotion lifestyle, in terms of, health responsibility, physical activity, nutrition, spiritual growth, interpersonal relationship, and stress management. The level of significance was set at 0.01.

Results

Table 1. Demographic Profile of the Respondents

Age	*f*	%
31-35	4	4.5
36-40	11	12.5
41-45	15	17.0
46-50	14	15.9
51-55	10	11.4
56-60	11	12.5
61-65	10	11.4
66-70	13	14.8
Total	**88**	**100 %**
Number of Years in Religious Life	***f***	**%**
10 years & below	5	5.7
11-20	24	27.3
21-30	30	34.1
31-40	16	18.2
41-50	11	12.5
51 & above	2	2.3
Total	**88**	**100%**
Area of Assignment	***f***	**%**
Luzon	53	60.2
Visayas	27	30.7
Mindanao	5	5.7
California, USA	3	3.4
Total	**88**	**100%**

Table 1 represents the demographic profile of the respondents in terms of age, number of years in religious life, and area of assignment. For the variable age, 17% of the respondents belong to age bracket 41-45, 15.9% under age bracket 46-50, and 12.5% to both 36-40 and 56-60 age brackets. This data showed that most of the respondents are classified as middle aged and as older adult. This same data is in consonance with the trend in the congregation's education apostolate which commends middle-aged administrators and educators who can respond more easily and more effectively to the demands of the present Philippine Educational System and ARS Education Apostolate.

Surprisingly, a considerable large percentage which is 14.8% falls for the 60-70 age bracket. This may be because ARS who are above 60 years old remain active in the apostolate for as long as their health permits them to serve. Also for this variable, the lowest percentage falls on the 31-35 ages. This low percentage indicates that the ARS' population comprised largely

Table 2. Respondents' Level/Degree of Engagement in Health Promotion Lifestyle

Dimensions	Mean	Std. Deviation	Interpretation
Health Responsibility	2.35	.610	Sometimes
Physical Activity	2.23	.710	Sometimes
Nutrition	2.81	.476	Often
Spiritual Growth	3.42	.494	Often
Interpersonal Relations	2.90	.570	Often
Stress Management	3.03	.566	Often

of middle-aged and older adults. Based on the documented history of the congregation, younger AR are fewer in number as there is a slight decrease in the number of those who enter religious life during the current year as compared to those who entered the congregation in the last five years.

The profile variable number of years in religious life shows 34.1% of the respondents have already spent 21-30 years and this is followed by 27.3% who have spent 11-20 years. Data also indicates that the present study group is dominated by those who have spent more than half of their age in the congregation. Those who have lived religious life for 31-40 years are 18.2%, those who have lived 41-50 years are 12.5%, ten years and below are 5.7%, and those within 51 years and above are just 2.3%. Finally, those who have spent more than 51 years in religious life and are still active in the education apostolate are fewer because of health considerations.

The variable area of assignment shows that 60.2% of the respondents came from Luzon region. This indicates that more ARS are assigned in Luzon since there are more educational institutions managed by the ARS in Luzon region; 30.7% of the respondents are based in the Visayas, and 5.7% are in Mindanao. Only 3.4% of the respondents are in California, USA since there are very few ARS assigned there. The ARS carry out their duties and responsibilities in the above-mentioned places mainly as educators since this is part of their participation in the teaching mission of the Church.

Table 2 represents the respondents' level/degree of engagement in Health Promotion Lifestyle. The results of the rating of dimensions of health responsibility and physical activity were interpreted as *Sometimes* indicating a moderate level/degree of engagement. These show that the ARS may not be paying more attention to their personal responsibility concerning their health and do not do exercises in as much as they may be focused on their daily duties, forgetting their need to heed their physician's advice, and to keep abreast with information and other materials regarding improving one's health.

The ratings of nutrition, spiritual growth, interpersonal relations, and stress management dimension were interpreted as *Often* indicating a high level/degree of engagement in these dimensions of health promotion lifestyle. These show that the ARS have regarded these aspects of a healthy lifestyle as significant and relevant to their current apostolate. As religious, the respondents are wholly conscious of their purpose in life. This is illustrated in the rating obtained from each item under spiritual growth where the ARS have indicated that they always or routinely believe that their lives have a purpose.

According to Moss (2010), people who live with meaning and purpose are mindful of the future and become flexible over time. Since Moss is advocating that if an individual is future-oriented, he/she has a greater capacity for positive behavior and effects on his/her health is more beneficial. In the same manner, this study proposes that when a person takes care or pursues health promoting steps--- the future for good health is ascertained.

The idea of Moss is logically intertwined in the propositions of this study. It is the researcher's premise that if the religious look forward to a healthy future and that their lifestyle and commitments give them a sense of purpose and meaning, then the problems on health and related issues will also be diminished. As a religious Sister embraces the possibility of a healthy future, the tendency to entertain negative stimuli like stress, unhealthy eating, etc. diminishes and there is growth in resilience against temptations and backsliding inclinations.

The ratings of the dimensions of interpersonal relations and stress management were interpreted as *Often*. This may also indicate the respondents' improved relations with their collaborators in schools and effectively manage the pressures of their everyday life and their apostolate.

Table 3 represents the relationship of the age of the respondents and the level/degree of engagement in health promotion lifestyle, in terms of, health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. The relationship of the variable age of the respondents and their level/degree of engagement in health promotion lifestyle was not significant.

Table 3. Relationship of Age of the Respondents and their Level/Degree of Engagement in Health Promotion Lifestyle

Dimensions	r	p-value	Interpretation
Health Responsibility	0.0601	0.5782	Not Significant
Physical Activity	0.0961	0.3731	Not Significant
Nutrition	0.0364	0.7363	Not Significant
Spiritual Growth	0.0531	0.623	Not Significant
Interpersonal relations	0.0693	0.5212	Not Significant
Stress Management	0.1223	0.2561	Not Significant

Table 4. Relationship of the Number of Years in Religious Life of the Respondents and their Level/Degree of Engagement in Health Promotion Lifestyle

Dimensions	r	p-value	Interpretation
Health Responsibility	0.0902	0.403	Not Significant
Physical Activity	0.1781	0.097	Not Significant
Nutrition	0.0377	0.7275	Not Significant
Spiritual Growth	0.0628	0.5608	Not Significant
Interpersonal relations	0.0142	0.8959	Not Significant
Stress Management	0.1618	0.1319	Not Significant

Table 4 represents the correlation or relationship of the variable number of years in religious life of the respondents and their level/degree of engagement in health promotion lifestyle, in terms of, health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. This finding revealed that for this particular study group, the variable number of years in religious life of the respondents has no significant correlation or relationship with their level/degree of engagement in health promotion lifestyle.

Analysis

This study conducted on health promotion lifestyle involving Catholic religious women revealed that this group of women engaged in education apostolate whether young, middle aged or older, in terms of, the six dimensions, have different ways of practice which are not determined by their age. The younger religious may be more conscious of health promotion lifestyle than the older ones, or it may also be the other way around wherein the older religious may be more discerning or more aware of practicing a health promotion lifestyle as compared to the younger religious.

As most of the respondents are in their midlife and older adult stage, different perceptions or interests regarding physical activity may arise from the varied biological or psychological changes and lifestyle-related factors they experience. Moreover, promoting physical activity early in adulthood to promote better physical function later in life is also more advantageous (Cooper, Mishrah & Kuh, 2013).

Physical activity tends to decline as people age (Davies 2011). Decline in physical activity among elderly Augustinian Recollect Sisters (ARS) may be obvious as it may overstress them and put them at risk for other unfortunate effect or conditions. Very often, ARS do the much simpler exercise but they are not considered inactive since they also do the medium and high levels of physical activity as proper and recommended for their age. This decline in physical activity among them may also be the reason for the shift of interest in doing things other than physical activity.

The findings of the relationship between years in religious life and the dimensions of HPLP II indicated that years in religious life of the respondents do not play a significant role in their practice of health promotion lifestyle. This shows that Sisters who may have spent more years in living religious life maybe more mindful of healthy practices than those who have spent fewer years or vice versa. It shows that their health practices are not determined by the length of years spent in religious life.

Discussions

This study aimed to determine the level/engagement in health promotion lifestyle of the ARS. The findings showed that the respondents practice a moderate level of engagement in terms of health promotion lifestyle. These Augustinian Recollects Sisters need to become more conscious of their responsibilities and accountability to improve health. The ARS have a structured life but somehow also experience burnout in their missions and ministries and tend not to prioritize self-care and health promoting behaviors. Consistent with the findings of Doubova et al. (2012), the current group study comprising mostly of women experience midlife transitions and climacteric changes also need more information about their physical, psychological, as well as, social needs and the possible effect of health during this stage and later in life.

In addition, the ARS, known for their spirituality and charism of fraternal charity, and community life, present a more conscious regard for social relationships as part of health promoting lifestyle. Maintaining social support is associated with more inspiration and encouragement to guard one's self against occurrence of diseases or illnesses and injury (Umberson & Montez, 2013). This is further supported by the findings of Watt (2014) that people have better physical health and well-being as a result of strong and healthier social support or network of caring people and that strengthening and developing social relationships should be highly considered in the promotion and enhancement of health.

Lastly, the ARS need to strengthen or intensify their practice of health promotion lifestyle since as educators this can influence the effectiveness of their apostolates or other ministries they engage in. They need to prioritize health responsibility and physical activity to commit to a healthy lifestyle across their life stages.

Despite the study's limitation to bridge the previous knowledge with the current study in order to yield a new knowledge, this study contributes to nursing practice by providing information on health promoting lifestyle of individuals which may be significant clinically in supporting and educating them and in motivating them to attain personal health. This study may also deliver information on developing knowledge to improve the health of particular population like religious people and clergy. More extensive research may be conducted on self-efficacy and religious' capacity to commit to a plan of action or to commit to a health promoting behavior. This study further recommends that the Superior General together with her council give consideration for the approval and rigorous implementation of the proposed ARHPP (Augustinian Recollect Health Promotion Program) which greatly considers the incorporation of the six dimensions of a health promotion lifestyle. The said program may be implemented parallel to the existing formation plan of the congregation with the goal of forming healthy religious women, as well as, healthy workers in God's mission.

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RESEARCH ARTICLE

GIL P. SORIANO

Relationship between Academic Performance and the Nursing Licensure Examination of Graduates from a City-Subsidized University

Abstract

This study determined the relationship between the academic performance and nursing licensure examination of graduates of a city-subsidized university and the nursing professional subjects that best predict the outcome of the nursing licensure examination. The study used a descriptive-correlation design. Academic records of two batches in 2012 and 2013 were used. Independent variables included the nursing professional subjects and the dependent variables were the subtests in the licensure examination. Means, standard deviations, Pearson r correlation, and Multiple Regression Analysis were used for the quantitative data. Findings reveal that graduates were average performers in their academics. This was inversely correlated with the nursing licensure examination. This still suggests direct relationship since the grading system in the university ranged from 1.0 to 5.0 where 1.0 is excellent. Critical Appraisal II, Nursing Care Management 104, and Nursing Care Management 106 were significant predictors of performance in the licensure examination.

Key words*: Academic Performance, Licensure Performance, Predictors of Nursing Examination*

Introduction

The Philippine government is responsible for the establishment of public educational institutions in the country via legislation. However, through the passage of Republic Act 7160 or the Local Government Code in 1991 with specific provisions in Sections 447, 458, and 468, Local Government Units (LGUs) have been allowed to establish and operate their own colleges and universities which paved the way for the formation of city subsidized universities.

A locally subsidized university located in Pasay City offers 10 degree programs in different areas and one of the courses being offered is the Bachelor of Science in

Nursing (BSN) degree. This is a four-year degree program that teaches students the necessary skills and knowledge to care for the sick and injured. The Commission on Higher Education (CHED) is the agency responsible for the regulation of the nursing education in the country. Regulation ensures the quality of nursing education that is being provided to the students. CHED Memorandum Order No. 30 which was promulgated in 2001 contains the updated policies and standards for nursing education. This was replaced by CHED Memorandum Order No. 14, series of 2009 which contains the policies and standards for Bachelor of Science in Nursing (BSN) including the new prototype nursing curriculum.

As mandated in Section 12, Article IV of the Philippine Nursing Act of 2002 or Republic Act 9173, in order to practice nursing in the Philippines, a new practitioner is required to pass the Nursing Licensure Examination (NLE). Licensure aims to ensure that a professional meets the minimum requirements required by law in order to practice the profession.

In addition, the quality of nursing program in the country is also measured by the number of nursing professionals that passed the nursing licensure examination. With respect to NLE performance of the institution being studied, it was noted that in recent years the first batch of graduates did well but such performance standard declined in the succeeding years.

The study aims to determine the academic and the NLE performance of the graduates of the university Batches 2012 and 2013, as well as, the relationship between the two variables and predictors of the NLE from the academic performance.

Study Framework:

Nursing programs are considered substandard if less than 30 percent of their graduates passed the licensure examination in the last three years, or if they lack competent faculty, training hospital, laboratories, and libraries. According to the CHED Memorandum Circular No. 14, Series of 2009, the bottom 30% of nursing schools whose passing average is below the national passing rate will be phased-out and closed down. Universities concerned receive a notice from CHED regarding their poor performance in the nursing board examination from the periods 2004-2006. As a result, the said academic institutions need to prove their sustainability. Hence, ratings in Figure 1 show much higher rating than the national passing rate since some schools have been affected by this circular starting 2013.

The reality presented above serves as the main context of this study in determining the performance in the academic and licensure examination of nursing graduates, as well as, the nursing subjects that best predict the performance in NLE.

Methodology:

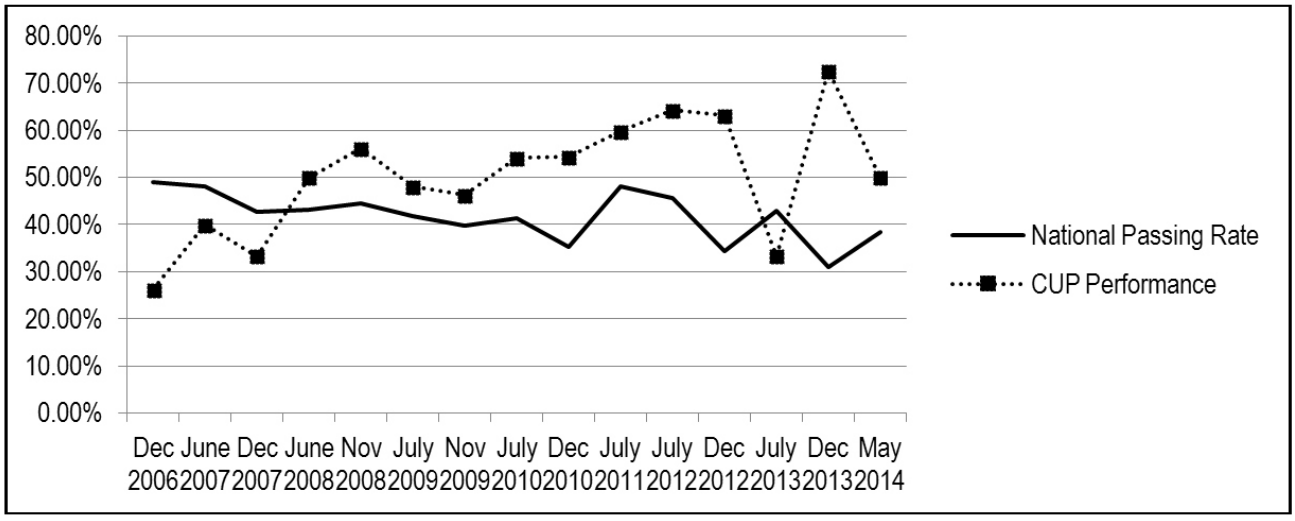
Research Design

The study utilized a descriptive, correlational method which is used to determine the relationship between two variables. It aimed to describe the academic and the NLE performances of Batch 2012 and 2013 and to also determine the relationship between the two. Furthermore, predictors of the NLE were also determined.

Setting of the study

The study was conducted in a public, locally subsidized university. It was chosen because it was one of the 14 educational

Figure 1. Performance and the National Passing Rate in the Nursing Licensure Examination (2007-2014)



institutions that first responded to the Local Government Code since its implementation in 1992. In addition, it is also one of the universities that have an inconsistent board examination performance through the years. The study was conducted in the second semester of the school year 2014-2015.

Population and sampling procedure

Purposive sampling technique, a non-probability scheme in the quantitative phase, was used in the study. Records of graduates' grades from Batches 2012 and 2013 were also obtained upon the approval of the Office of the Registrar. These said batches are the graduates of the new prototype nursing curriculum who are not only first time takers but who also took the board exam from the periods of June 2012, December 2012, June 2013, December 2013 and May 2014. It does not include retakers. This study also included 46 students from Batch 2012 and 29 students from Batch 2013. In addition, records of the board performance of the graduates in the NLE were obtained upon the approval of the Office of the Dean of the College of Nursing. All the said records of these batches were used in the study and no sampling was done.

Ethical Consideration

The research was approved by the ethics committee of the university. Academic records of the 2012 and 2013 graduates of the institution were obtained from the university. Since all these academic records was not treated as individual student records but rather completely anonymized and treated as one dataset, there was no need for any sampling procedure to be done and for the researcher to contact each graduate for their consent. Instead, full administrative clearance was secured from the dean of the College of Nursing to access these records.

Data Collection

Prior to the collection of data, a letter of approval to conduct the study was obtained from the Office of the University Registrar and the Dean of the College of Nursing. Data was collected from the academic and board performance of students from batches 2012 and 2013. Actual data on the summative examinations from the two batches in the respective nursing professional subjects were used and did not contain any identification of any particular student. This means that the identity of the student remained anonymous.

The data collection procedures had two phases. The quantitative phase included the review of records of the grades of the students in Nursing. These included all Professional Subjects namely Theoretical Foundations of Nursing, Health Assessment, Community Health Nursing, Health Education, Nursing Research I, Nursing Research II, Competency Appraisal I, Competency Appraisal II, NCM 100: Fundamentals of Nursing Practice, NCM 101: Care of Mother, Child and Family, NCM 102: Care of Mother, Child, Family and Population Group At-risk or With Problems, NCM 103: Care of Clients with Problems in Oxygenation, Fluid & Electrolyte Balance, Metabolism and Endocrine, NCM 104: Care of Clients with Problems in Inflammatory and Immunologic Response, Perception and Coordination, NCM 105: Care of Clients with Maladaptive Patterns of Behavior, NCM 106: Care of Clients with Problems in Cellular Aberrations, Acute Biologic Crisis including Emergency and Disaster Nursing, NCM 107: Nursing Leadership and Management and Intensive Nursing Practicum. The other set of variables were the subtests of the NLE such as Nursing Practice Test I, Nursing Practice test II, Nursing Practice Test III, Nursing Practice Test IV, and Nursing Practice Test V.

Analysis of data

In order to answer the research question posed, the first step in the data analysis was to get the mean grade of the graduates in the nursing professional subjects and subtests in the NLE to determine the overall index of performance of students and the standard deviation to describe the homogeneity or heterogeneity of their performance. Statistical Analysis was then conducted and data was entered using SPSS and Stata software. Then, Pearson's r correlation was employed to determine relationship between the academic performance in nursing professional subjects and licensure examination ratings on the different subtests in the nursing board examination. Multiple Regression Analysis was used to determine what nursing professional subjects may predict the results of the nursing licensure examination.

Results

Academic Performance of Nursing Graduates

Table 2 shows the academic performance of the nursing graduates. Overall, highest mean grade was noted in Health Education with a grade of 1.58 and lowest in Competency Appraisal I with 2.72 based on the grading system used in the university as shown in Table 1. Most of the grades in the different academic subjects were higher among Batch 2013 graduates. There was a significant difference in the performance of batch 2012 and batch 2013 using t test specifically in their grades in TFN, NCM 101, CHN, NCM 102, Health Education, NCM 103, NCM 104, NRES I, NCM 107, NRES II, and INP with p values <0.05 showing better performance among graduates of Batch 2013. On the other hand, no significant difference was noted in the grades in NCM 100, HA, NCM 105, NCM 106, CHN, and CA II with p values >0.05. However, the greatest variability in the mean score was found to be in the subjects TFN, Health

Table 1. Grading System in the University

Numerical Grade	Quantitative Equivalent	Qualitative Equivalent
1.0	98-100 percent	Outstanding
1.25	95-97	
1.5	92-94	Very Good
1.75	89-91	
2.0	86-88	Good
2.25	83-85	
2.5	80-82	Fair
2.75	77-79	Passed
3.0	75-76	
4.0	70-72	Conditional
5.0	<70	Failed

Table 2. Academic Performance of Nursing Graduates

Academic Subjects	Batch 2012 (n=46)		Batch 2013 (n=29)		Overall (n=75)	
	Mean Grades (SD)	Lowest-Highest Grades	Mean Grades (SD)	Lowest-Highest Grades	Mean Grades (SD)	Lowest-Highest Grades
TFN	2.66 (0.24)	2.25 – 3.00	2.34 (0.32)	1.75 – 3.00	2.53 (0.32)	1.75 – 3.00
NCM 100	2.58 (0.26)	2.25 – 3.00	2.53 (0.26)	2.25 – 3.00	2.56 (0.26)	2.25 – 3.00
HA	2.50 (0.33)	1.50 – 3.00	2.36 (0.29)	2.00 – 3.00	2.44 (0.32)	1.50 – 3.00
NCM 101	2.60 (0.20)	2.25 – 3.00	2.40 (0.18)	2.25 – 2.75	2.53 (0.22)	2.25 – 3.00
CHN	2.48 (0.26)	2.00 – 3.00	2.10 (0.26)	1.50 – 2.50	2.33 (0.32)	1.50 – 3.00
NCM 102	2.74 (0.24)	2.00 – 3.00	2.56 (0.18)	2.25 – 3.00	2.68 (0.23)	2.00 – 3.00
Health Ed	1.72 (0.29)	1.25 – 2.75	1.36 (0.20)	1.00 – 2.00	1.58 (0.32)	1.00 – 2.75
NCM 103	2.77 (0.18)	2.25 – 3.00	2.56 (0.20)	2.25 – 3.00	2.69 (0.22)	2.25 – 3.00
NCM 104	2.51 (0.21)	2.25 – 3.00	2.38 (0.22)	2.00 – 3.00	2.46 (0.22)	2.00 – 3.00
NCM_105	2.47 (0.20)	2.00- 2.75	2.53 (0.24)	2.00 – 3.00	2.50 (0.22)	2.00 – 3.00
NRES 1	2.61 (0.26)	2.00 – 3.00	2.46 (0.26)	2.00 – 3.00	2.56 (0.26)	2.00 – 3.00
NCM 106	2.34 (0.28)	1.75 – 3.00	2.25 (0.18)	2.00 – 2.75	2.30 (0.24)	1.75 – 3.00
NCM 107	2.52 (0.16)	2.25 – 2.75	2.36 (0.28)	2.00 – 3.00	2.46 (0.22)	2.00 – 3.00
NRES 2	2.71 (0.24)	2.00 – 3.00	2.42 (0.31)	2.00 – 3.00	2.60 (0.30)	2.00 – 3.00
CA 1	2.70 (0.20)	2.25 – 3.00	2.76 (0.24)	2.00 – 3.00	2.72 (0.22)	2.00 – 3.00
INP	2.27 (0.20)	2.00 – 3.00	2.16 (0.18)	1.75 – 2.50	2.22 (0.20)	1.75 – 3.00
CA 2	2.72 (0.22)	2.00 – 3.00	2.67 (0.20)	2.25 – 3.00	2.70 (0.22)	2.00 – 3.00

*p value of <0.05 is considered significant

Assessment, CHN, and Health Education with standard deviation of 0.32.

Performance in the Licensure Examination for Nurses

To pass the examination, an examinee must obtain a general average of at least seventy five percent (75%) with a rating of not below sixty percent (60%) in any of five test subjects and based on the results. Overall mean score in NP III showed 73.98, with batch 2012 having a mean score of 73.28, and batch 2013 with 75.10. On the other hand, performance of graduates in NP IV shows an overall mean score of 72.17 with batch 2012 having a mean score of 71.56 and batch 2013 with 73.14. The performances of both batches in these two subtests were much lower compared with the three other subtests. In the last nursing practice test, batch 2012 got a mean score of 74.44 and batch 2013 got 78.10. Overall mean score for this test was 75.85. For the general average, batch 2012 got a mean score of 74.41 and batch 2013 got 75.72. Overall mean score shows 74.92. In sum, the highest mean grade was noted in Nursing Practice I with a mean score of 76.93 and lowest in Nursing Practice IV with a mean score of 72.17. Furthermore, the latter also showed greater variability with an overall standard deviation of 6.52.

Correlation of the Academic Performance and Licensure Examination Results of Nursing Graduates

Correlation coefficients of the nursing graduates' (Batch 2012 and 2013) academic performance in each subject with the NLE results are shown in Table 4. The results showed that there were significant correlations using Pearson r as proven by all p values of <0.05 except for health education with p value of 0.075 and NRES I with a p value of 0.097. The null hypothesis is therefore rejected since an inverse correlation was noted as shown by the negative sign in the correlation coefficients. The grades used in the university were numerical grade with 1.00 as highest and 5.00 as failure while the licensure grades were expressed in percentile ranks.

Predictors of Performance in the Licensure Examination for Nursing

In determining the nursing professional subjects that best predict the performance in the

Table 3. Performance in the Nursing Licensure Examination of Graduates

NLE Test Subjects	Batch 2012 (n=46)		Batch 2013 (n=29)		Overall (n=75)	
	Mean (SD)	Lowest-Highest Grades	Mean (SD)	Lowest-Highest Grades	Mean (SD)	Lowest-Highest Grades
Nursing Practice I	77.80 (5.43)	62 – 85	75.55 (6.67)	54 – 83	76.93 (6.00)	54 – 85
Nursing Practice II	74.98 (6.24)	56 – 85	76.69 (4.69)	62 – 83	75.64 (5.72)	56 – 85
Nursing Practice III	73.28 (6.98)	57 – 82	75.10 (4.44)	59 – 83	73.98 (6.16)	57 – 83
Nursing Practice IV	71.56 (5.80)	56 – 79	73.14 (7.51)	56 – 84	72.17 (6.52)	56 – 84
Nursing Practice V	74.44 (6.44)	50 – 84	78.10 (3.83)	68 – 83	75.85 (5.82)	50 – 84
GWA	74.41 (4.80)	60 – 80	75.72 (4.18)	64.6 – 82	74.92 (4.59)	60 – 82
Remarks	Frequency (%)		Frequency (%)		Frequency (%)	
Passed Failed	28 (60.9%) 18 (39.1%)		23 (79.3%) 6 (20.7%)		51 (68.0%) 24 (32.0%)	

*p value of <0.05 is considered significant

Table 4. Correlation of the Academic Performance and Licensure Examination Results of Nursing Graduates

Academic Subjects	r coefficient	P value	Interpretation
TFN	-0.373	0.001	Significant
NCM 100	-0.492	0.000	Significant
HA	-0.463	0.000	Significant
NCM 101	-0.47	0.000	Significant
CHN	-0.44	0.000	Significant
NCM 102	-0.45	0.000	Significant
Health Ed	-0.21	0.075	Not Significant
NCM 103	-0.43	0.000	Significant
NCM 104	-0.40	0.000	Significant
NCM_105	-0.36	0.002	Significant
NRES 1	-0.19	0.097	Not Significant
NCM 106	-0.52	0.000	Significant
NCM 107	-0.34	0.003	Significant
NRES 2	-0.445	0.000	Significant
CA 1	-0.43	0.000	Significant
INP	-0.34	0.003	Significant
CA 2	-0.50	0.000	Significant

*p value of <0.05 is considered significant

NLE, a backward step multiple regression analysis was done. The findings indicate that among the 17 nursing professional subjects, only three came out as the predictors of NLE. These three predictors are CA II, NCM 104 and NCM 106.

The regression model of the study as shown in Table 5, explained that the 3 predictors namely: CA II, NCM 104, and NCM 106 bears an inverse relationship with the NLE results as noted by negative regression coefficients, thereby, rejecting the null hypothesis. This outcome means that the lower the numerical value in the three subjects, the higher the chance of passing the board examination and vice versa. The regression equation is Nursing Licensure Examination Performance= 120.79 – 7.08 Competency Appraisal II- 5.77 Nursing Care Management 106- 5.45 Nursing Care Management 104.

In combination, however, the three predictors resulted only to 43.19% chances of passing the licensure examination. Therefore, 56.81% of passing the licensure examination is related to factors other than the academic performance of the graduates. Possible factors not included in this study which are shown to be predictors in other studies are the College Entrance Examination, Nursing Aptitude Tests, Nursing Board Review Grades, the number of times a student repeat a nursing course, demographic profiles, study habits, teaching-learning methods utilized, faculty profile, as well as, clinical facilities.

Discussions

The purpose of this study is to determine the relationship between the academic performance and the NLE of the nursing graduates and the nursing professional subjects that best predict the outcome of the NLE.

One of the most important criteria for the evaluation of the scholastic standing of a students is his/her academic performance (Salustiano, 2013). In the study, academic performance includes the grades of the graduates in all the nursing subjects The findings revealed that the two batches performed satisfactorily with an overall mean grade of 1.75 to 2.75 especially in

Table 4. Predictors of Performance in the Licensure Examination for Nursing

Variable	Regression Coefficient	Std. Err. Coefficient	Tolerance	Probability	Interpretation
Constant	120.79	6.54	18.48	0.0000	
CA 2	-7.08	2.09	-3.38	0.0010	Significant
NCM 106	-5.77	1.88	-3.07	0.0030	Significant
NCM 104	-5.45	1.94	-2.82	0.0060	Significant

*p value of <0.05 is considered significant S= 3.532 ; R sq=43.19%

the subjects that are significantly related with the NLE. Specifically, grades of the graduates in NCM 104, Nursing Care Management 106, and Competency Appraisal 1 ranges from 2.25 to 2.75. The said subjects are proven to be predictors of board exam which is also related to the result of their licensure examination rating which ranges from 72.17 to 76.93. This shows that the students are average performers both in the academic performance and also in the board examination. It was supported by the study conducted by De Guzman and Guy (2013) and De Leon (2016) stating that nursing students perform fairly in major subjects

Within the university, the College of Nursing is the only college with the highest grade requirements when it comes to the admission and retention policy where a general average of 85% or better is required before students can enrol in the program and in addition, must also consequently have a minimum grade of 2.75 or better in all their nursing professional and minor subjects. Moreover, in case they got a grade of 3.0, they must not accumulate three 3s and must get a score of 500 and above in the Nursing Aptitude Test (NAT) in order to proceed to the next level.

In terms of the nursing licensure examination, the overall mean ranged from 72.17 to 76.93 which are much higher than the minimum grade of 60% in any subject. Furthermore, the board rating of the university is much higher than the national passing rate. Despite political pressures leading to transgression of admission and retention policies, the academic preparations of the college were able to prepare most of the graduates to take the licensure examination with successful results. Furthermore, the findings conform to the results of the study conducted by Martinez (1980) and Hilario (2000) that admission and retention policies predict the nursing graduates' performance in the NLE.

Finally, out of the five nursing practice tests, Nursing Practice IV has the lowest rate in both batches. This part is dubbed as the hardest part in the entire NLE that covers Medical-Surgical Nursing concepts. This finding is supported by the study conducted by Neri (2009) that stressed that although graduates succeed in hurdling the exam, they get low passing scores and that the lowest scores are in the areas of Medical-Surgical Nursing concepts. According to Rosales, Arugay, Divina Gracia, and Palaganas (2014) this is a reflection of lack of learning experiences and competencies of nursing board examinees brought about by limited learning hospitals. This result also conforms with another study of Palaganas, Divina Gracia and Rosales (2013), De Leon (2016) and De Leon et al. (2016).

In the study, grades of the graduates in all the nursing professional subjects are positively correlated with graduates' performance in the NLE's Health Education and Nursing Research 1 parts. It shows an inverse correlation between the academic performance and the nursing board examination performance which means that as the grade of the graduates decrease numerically, the higher the chance the student will pass the board examination using the numerical grade of the student in the grading system of the university. Such correlation is supported by the study conducted by Navarro et al. (2012), Neri (2009), Tolentino (2010), Besingue et al. (2000), Ong et al. (2012), Naron and Wedlack (1991), McClleland (1992), Salustiano (2013) and Rubio (1992).

Competency Appraisal 1, Nursing Care Management 106, and Nursing Care Management 104 were shown to be significant predictors in passing the. These subjects are being offered primarily in the 3rd year 2nd semester and 4th year 1st semester of the school year. All these courses are covered in the said examination. This finding is supported by Martinez et al. (1980) that academic achievement is a good predictor of performance in the NLE. However, no other literature was found regarding the specific nursing subjects primarily because these batches are the graduates of new prototype nursing curriculum which is stipulated in the CHED Memorandum Order No. 14 series of 2009.

Conclusion

Graduates of the city government-subsidized university are average performers in their academics. Although they were able to pass the licensure examination for nursing, they tend to have lower passing scores especially in the Nursing Practice 4 and 5.

Competency Appraisal II, Nursing Care Management 104, and Nursing Care Management 106 are found to be predictors in passing the licensure examination. When combined, the three courses accounted for 43 percent predictability. It is recommended that strict admission and retention policies be implemented especially in the subjects that correlates with the NLE. Also, further research must be done focusing more on other factors affecting the board examination performance of nursing graduates and involving more city-subsidized university to have a bigger picture. •

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Gil P. Soriano, RN, MHPEd earned his Bachelor's degree at the City University of Pasay (formerly Pamantasan ng Lungsod ng Pasay) in 2010 and passed the Nurse Licensure Exam in the same year. He worked as a staff nurse at Daniel O. Mercado Medical Center in Tanauan City, Batangas from 2011-2013. He received two (2) College Scholar Awards from the University of the Philippines- Manila and graduated with the degree of Master of Health Professions Education at the National Teacher Training Center for the Health Professions (NTTC-HP) under a UP Presidential Scholarship Grant in 2015. His master's thesis received funding from UPM-NIH and UP NTTC-HP. Currently, he is an Assistant Professor at Centro Escolar University Manila and De La Salle Health Sciences Institute. He is a member of Philippine Nurses Association, Philippine Biosafety and Biosecurity Association and Philippine Nursing Research Society Inc.

FEATURE ARTICLE

MARIAN G. SANTOS, MAN, RN[1]
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The Resilience of Filipino Nurses

Resilience, according to PNA National President Paulita B. Cruz, is defined as "a source of emotional strength for nurses to remain calm and keep their cool given the obstacles they encounter in the pursuit of their profession." Such resilience among Filipino nurses was once more tested after outgoing national chief executive PNOY vetoed House Bill No. 6411 and Senate Bill No. 2720 titled "An Act Providing for a Comprehensive Nursing Law Towards Quality Health Care System and Appropriating Funds Thereof" that proposed a base salary hike for nurses in both the public and private sector of up to approximately P25, 000 pesos. The reasons he stated regarding this saddening decision was due to "detrimental financial consequences."

As a novice nurse who has only recently practiced her profession, I began to understand better how the Philippine Health System will continue to be frail due to the shortage of experienced nurses in the country. A shortage that is highly ironical to boot because of the reported surplus of nurses in the country who are either jobless or underemployed. Yet a shortage, nevertheless, due to the continuing brain drain caused by the dim hope of having a nursing job that can actually support a family. This distressful reality is something I had proven in a phenomenological study I did on Filipino nurses' professional journeys. Immigration to other countries and underemployment is, in fact, where most nurses find their professional salvation given their common goal of landing a stable job. Stable in the sense that such financial endeavor does not only sustain one's individual needs but also that of one's family members.

[1] Presently a new faculty in the Institute of Business and Management at the Tarlac Agricultural University in Camiling, Tarlac where she believes she can best make a difference through vast opportunities that are available for research and extension services that would benefit the overall well-being of local communities.

In the historic summer conference of PNA last May 13, 2016 on how nurses play a powerful role in health systems' resilience, I took note of these salient points that were raised by distinguished speakers and concerned nurse leaders that made me feel even more the weight of responsibilities that I, together with other nurses, in this country bear despite our continued state of helplessness in terms of the generally poor work conditions: firstly, more nurses are needed in local communities to facilitate health promotion practices to help lessen hospital-related expenses that unreasonably burden the poor (who remain to be among those who are most vulnerable to diseases); secondly, nurses must still strive to give quality nursing care given their ongoing experience of dire hospital conditions such as the extreme nurse to patient ratio, among others; thirdly, nurses must intensify efforts to meet the sustainable development goals that have replaced the former MDGs; fourthly, nursing specialty groups must further push for a more concentrated effort in helping the BON finish the National Nurses Career Progression Program that is several years behind in implementation compared to its international counterparts; and lastly, nurses must have an active voice, against all odds, in issues that address the importance of protecting mother earth since health is indeed connected to her overall welfare, such as climate change and the resulting diseases that materialize.

First District Representative Eric L. Olivarez of Parañaque City could not be more clear in his words when he emphasized how nurses "can be catalysts of change in communities." He added that when it came to advocacies such as environmental activism, there is no need for a graduate or a post-graduate degree to be qualified in taking a stand on what is right, like in the case of taking a stand for the environment. Even Dr. Jonathan David Flavier, the Director for Philippine Center for Population and Development, further affirmed the reality that nurses are indeed catalysts who are in that "wonderful opportunity to bring about changes." Yet, as I ponder on the empowering feeling that these words bring about--- I, for one, believe that real change can be possible if there is concrete or, at the very least, tangible support given by the national government to its nurses. I cringe at the remembrance of how most patients in this country treat nurses like their ordinary house help due to the continuous blows received by this profession in terms of pay and other work related conditions implemented everywhere. How can one speak of nurses as agents of change and hope for health systems' resilience in this country when nurses are not treated fairly? I cannot imagine how health institutions locally and abroad can survive without nurses' vital participation. It is like taking the blood out of one's cardiovascular system. Nurses in this country are pumped incessantly to ensure that the health systems are supplied with enough manpower so that they operate smoothly and do not die and collapse. But, unfortunately, nurses' crucial role in this country's health systems continue to be undermined and worse, go unnoticed.

I think that building resilience is personal to most nurses.

It literally means "survival" to most.

I do not want to lose all hope. I want to believe that at some point, nurses in this country will have the adequate support they deserve to make them stay and serve their own people. It is this belief that makes me resilient in the endurance of trials as a struggling nurse beginner.

Resilience, after all, does not only come from the strength of one's heart, mind, even spirit but it also comes from the strength of support that one finds among those who can influence the quality and quantity of one's everyday life at work.

Ultimately, it emanates from the possibilities that are brought upon by those who have the power to make or break nurses' will to survive. •

About the Author

Marian G. Santos or Maan, as she is more popularly known, is presently working as an instructor at the Tarlac Agricultural University's College of Business and Management where she plans to further hone her skills in research studies that will benefit her community's well-being in general.

"What helps you persevere is your resilience and commitment."

— Roy T. Bennett, The Light in the Heart

FEATURE ARTICLE

JASMINE BALAKUMARAN, RN, BScN, MScN

Post Colonial Scholarship

Abstract

Post colonial research and scholarship and its potential to transform the experiences of Internationally Educated Nurses (IENs) is an area needing consideration in research today. This paper focuses on the personal experiences encountered when teaching and learning with IENs using available literature to question how nursing education is perhaps colonialist and not able to meet the needs of this vulnerable population. Findings suggest that there are macro levels of political and socio-economic influences dominating nursing education. Hence, post colonial research can assist nurses to explore and to challenge the manner in which nursing education is developed.

Key words: *post colonial scholarship, research, nursing practice, Internationally Educated Nurses*

Post Colonial scholarship provides nurses with powerful analytical tools to challenge the status quo and question dominant discourses that influence nursing (Kirkham & Anderson, 2002). This research approach moves beyond individual culture to explore the macro levels of politics and socio-economic influences that frame and dominate reality (Kirkham & Anderson, 2002). In this paper, I will attempt to understand how colonialism is situated in nursing education today and how post colonial scholarship can be beneficial in this area.

I currently work at an educational institution and have developed and taught curriculum to Internationally Educated Nurses (IENs) who are integrating into the Canadian workforce. These IENs are diverse in terms of their country of origin, experience, level of expertise, age, gender, knowledge, skills, and judgment. In the classroom and clinical setting, I am often confronted by frustrated students who voice concerns about the nursing curriculum. Questions such as “why do we have to take courses such as pathophysiology and theory when we already took them back home”, “why don't we have more personal classes”, “how is the curriculum developed”, and “whose purpose is the curriculum serving”, are often at the forefront of these students' concerns. Although, I attempt to listen to these students concerns and perceptions, the underlying roots of this problem never really dawned on me until I learned about colonialism and the importance of post colonial scholarship. The main question that I have been thinking about is the following: How do political, social, and economic factors influence and play a role in dominating IEN's nursing curriculum? I will analyze the literature to assist in answering this question to gain an understanding of how post colonial research can be applied in my workplace and to other educational institutions as well.

In my quest to discover the historical roots of nursing education, I was surprised to find minimal and many outdated studies on this phenomenon which highlights the need for further research on this area. Holmes, Roy, and Perron (2008) stated that there are dominant discourses and truths that have mapped the nursing profession and discipline. Foucault (as cited in Grant, Giddings, and Beale, 2005) declared that a discourse is an overarching system of meaning which includes social practices, rituals, language, and relations that offer coherent ways of thinking and behaving. In addition, within a discourse is the existence and execution of power relations that is believed to provide structure to a nurse's education and practice (Grant et al., 2005). In citing Grant, et al. (2005), there are many discourses that constitute and surround a nurse's practice but one of the main ones is the scientific-medical discourse. Since the nursing profession has been closely allied with the discipline of Western medicine, this discourse originates from this relationship (Grant et al., 2005). The said influence of such relationship has dominated nursing ever since the profession emerged in the late 19th century and continues to prevail today where nurses are often told what to do, how to perform, and what to know (Grant et al., 2005). Hence, nursing education tends to focus and to favor the study of sciences which includes anatomy, pathophysiology, and Western treatments that are believed to be important as they support physicians (Grant et al., 2005). Furthermore, nurses have been led to believe that it is acceptable for the biomedical model to exert control over the entire health care industry (Grant et al., 2005).

After reading and analyzing this discourse, I understood better why IENs should receive a sound understanding of Canadian nursing practice in order to function as a team player in the health care industry. My only concern, however, is if their learning from the biomedical model the only efficient route of discovering knowledge? Furthermore, since nursing is more than just plain science but also an art which is often missed or ignored. I also strongly believe that our curriculum is grounded and influenced by the biomedical discourse which values objective, well-grounded reasons and rationales to inform decisions and practice. In addition, the huge focus in common western practices and treatments is to provide effective care to clients. In sum, I learned why my IEN students have voiced concerns and have also came to question the curriculum as they are not allowed the opportunity to make sense of nursing practice based on their own interpretation of it---which are often the areas they would like to explore.

Furthermore, Thompson (1987) emphasized that undergraduate nursing education is situated in a strong liberal world view that is consistent with white middle lass males' ways of defining reality. Although this article is outdated, Thompson (1987) posits several arguments that hold to be true in today's nursing education. Thompson (1987) argues that this liberal perspective includes the following assumptions: the positivist paradigm is favored; functionalism is essential to frame the social world; and that professionalism is an ideology that legitimizes class divisions. In my nursing curriculum, there is a strong focus to teach students to base his or her decisions on evidenced-based practices which is derived from randomized controlled trials that are considered the gold standard. Why are nurses trained to practice in this manner? Although it is important to adopt best practices, this is not the only method of gathering new knowledge that can be used in nursing. It is evident that the power and influence of the biomedical model plays a huge role in the manner in which nurses' practice, think, and learn. Whose interests are served as a result of this dominance? Nurses must be empowered to challenge this ideology.

Post colonial research is situated in a postmodern and critical paradigm that reaches beyond conventional research methods. Kirkham and Anderson (2002) state that post colonial scholarship provides access into the everyday experiences of marginalization and oppression which have been developed by politics and the macro dynamics of historical and structural power. Although nursing has evolved in many ways, it is still evident that nursing education, including the curriculum I teach, is dominated and oppressed as rooted in a historical context. Hence, this revelation highlights the need to arm nurses to challenge and deconstruct the prevailing and dominant discourses that continue to shape and influence the nursing profession (Holmes et al., 2008).

I have also been made more aware through post colonial scholarship and have, thus, been attempting to understand how I can participate in dominating structures, promoting power and privilege when educating future nurses. Why is the nursing curriculum, within the program I teach, heavily situated in a scientific focus and at the same time, greatly lacking in addressing the theoretical and clinical gaps that IENs are experiencing? Edwards and Davis (2006) and Coffey (2006) state that in the absence of specific bridging programs that are tailored for the IEN population, the alternatives to practice within Ontario include lengthy and costly programs that do not value the perceptions, knowledge, skills, and judgment of IENs. Based on the unique needs of IENs, bridging programs should be designed to include English language assessment and support, personal experiences, theoretical courses on nursing and mentorship networks (Edwards & Davis, 2006; Coffey, 2006)----yet, sadly, this is not the case. Even though a vast amount of literature, primarily using phenomenological inquiry, has been conducted to understand the struggles of IENs while integrating into the Canadian health care system, I think it is also imperative to understand how the political, social, and economic external forces also play a role in this process that lead to a discussion on post colonial research.

Post colonial research is situated in an interpretative paradigm that values subjectivity and believes that there is no single truth in this world. Therefore, its ontology is based on the notion that reality is subjective, multiple, and shaped by history (Kirkham & Anderson, 2002). The epistemology of post colonial

scholarship arises from the perception of individuals who have been affected by colonization. With regards to my paper, this would not only be IENs but also other nurses in general. Anderson (2002) states that knowledge production in this method does not stem from an outsider's perspective as this approach values listening to the voice of those who have suffered the sentence of history which includes domination and subjugation. Hence, post colonial research values dialogue with people who have been affected by history, marginalization, and oppression--- in an attempt to challenge dominant discourses that shape the manner in which society is structured (Anderson, 2002). Moreover, this endeavor to dialogue would is vital especially to nurses in Ontario and IENs who would be given the opportunity to challenge the manner in which the nursing curriculum they are subjected to is developed and how it has been shaped by dominance and power. The importance of this endeavor, as cited by Sochan (2011), is that nursing structures in the past whether knowingly or unknowingly have participated in marginalizing nursing knowledge development and that since the post colonial framework values communication and reflection, the researcher and nurse will then be led to discover truth as rooted in a historical and political context (Streubert Speziale & Carpenter, 2007).

Given post colonialism's place in postmodernism, poststructuralist, and critical paradigm, Reed (1995) states that there is no single manner in conducting this research. The exploration of history is a major aim, hence, knowledge can be developed in many different ways where the key is to ensure inclusivity and challenge the status quo (Kirkham & Anderson, 2002). Thus, this study can also be used in conjunction with other theoretical frameworks, such as critical feminist theory and participatory action research.

Through the process of in-depth interviews, textual analysis, and observations, knowledge will be co-produced by those who have been marginalized (the IEN and nurses) and through research can be empowered and given their own voice (Kirkham & Anderson, 2002). Kirkham and Anderson (2002) also stressed that there is a need to redefine what nursing science should encompass as the majority of literature in this discipline has been "written out" by Westerners. Furthermore, Sochan (2011) stated that institutionalization and ascendency of medicine, combined with hospitals where medical research takes precedence over other disciplines research--- have deliberately marginalized nursing education. Hence, post colonial research is the stepping stone for nurses to challenge predominant ideologies and gain access into the everyday practices that influence nursing education. Research, therefore, will assist nurses, including IENs, to gain independence and liberty to base nursing knowledge on their preferences in promoting care for a diverse population.

In conclusion, through the process of analyzing and understanding post colonial scholarship, I have pondered about nursing education and how colonial discourses have shaped and influenced nursing knowledge and I had learned that post colonial scholarship is the avenue to promote change and empower nurses to ask why certain practices prevail in nursing today. Such avenue will positively contribute to a more just society that looks at macro levels of understanding rather than limiting it to individuals.

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About the Author

Jasmine Balakumaran, RN, BScN, MScN is a master's prepared Registered Nurse with a background in medical surgical nursing. With her passion for patient care and education, she decided to focus on a different aspect of nursing and teach and learn with nursing students. Jasmine is faculty within the School of Community and Health Studies at Centennial College, for the past 8 years, and has worked in various programs such as the RPN to BScN Bridging Nursing program, Practical Nursing Bridging Program for Internationally Educated Nurses and the Bachelor of Science in Nursing (BScN) Collaborative Nursing Degree Program. Along with teaching and learning with a diverse range of students in the classroom and clinical setting, her interest expands to curriculum development and online education.

GUIDELINES FOR AUTHORS

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The content of a typical manuscript includes:

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Indicate for each author:
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Acknowledgements
Briefly state name of funders, grant number and name of mentors/people with significant contribution.

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A structured abstract with headings should be included as part of the manuscript. The abstract denotes: (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.
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A few words that are recommended for use in indexing should be listed at the end of the Abstract.

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Successful articles have clear, succinct and logical organization and flow of content. It contains the following:

- Introduction
- Methodology and Methods
- Results or Findings
- Discussion
- Conclusions and Recommendations

The text should indicate the characteristics of the setting in which the study was conducted. The review of literature and the discussion, interpretation and comparison of findings should include reference to relevant works published in other countries, contexts and populations.

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References

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We shall travel on
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To carry on our work each day
And grant us grace to serve the sick
And love to help the weak

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About the Cover

The raised hands, indicate partnership, collaboration and willingness to work together or alongside one another in achieving a shared goal - improving health systems' resilience and research. The different colours of hands also indicate different perspectives or lenses that are used to meet and/or address the shared goal. The changing colours in the background, from yellow to red, represents the different disciplines, sectors, environments, or health systems within which the raised hands collaborate and work together. It may also indicate the three main islands, and its people working together to achieve this goal. The arrows directed upwards behind the hospitals and the other elements of the social-healthcare systems represents the eventual outcomes of collaboration, and transcendence of society as it they work together to address the needs of the population. (Dr. Edward Cruz, 2016)