ISSN No. 0048-3318

PHILIPPINE JOURNAL OF NURSING

PJN VOL. 84 NO. 1

OFFICIAL PUBLICATION OF PHILIPPINE NURSES ASSOCIATION, INC. • JANUARY-JUNE 2014

CARE, COMPETENCE, COMPASSION AND NURSING

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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
- Collaboration

PHILIPPINE NURSES ASSOCIATION, INC.

Editorial

Care, Competence, Compassion and Nursing

Nurses are called to care, read as service to humanity. Service to humanity generally means providing compassionate care to the people whose lives we touch in our everyday lives.

Caring is such an important part of nursing practice. It is what defines us. Caring nurses are competent nurses. They understand people's health and health-related needs. They are equipped with clinical and technical knowledge for delivering a research- and evidence-based care. Such care and competence are delivered with empathy, respect and dignity. People expect to receive care from us regardless of color, race, religion, age, ideology, and context. This is exactly what service to humanity is all about.

But service to humanity is a concept that is also laden with various meanings. It means a committed and unwavering dedication to care not only for the people we serve but to our profession and to ourselves. This is exemplified by the collaborative research study of the Professional Regulation Commission, Association of Deans of Philippine Colleges of Nursing, Inc. and the Philippine Nursing Research Society, Inc. (Rosales, Arugay, Divinagracia & Palaganas) entitled, An *Analytical Study of the Performance of Graduates of Philippine Colleges of Nursing in the Nurse Licensure Examination.* Performance in the eight Nurse Licensure Examinations from December 2006 to December 2010 was analyzed to describe how graduates of colleges of nursing nationwide performed in the tests and to determine the factors that correlate with the examinees' scores. The study revealed that selected variables correlate with performance of nursing graduates in the eight licensure examinations and these findings may provide a better understanding of the issues and problems concerning the performance of examinees in the NLE. The findings became the basis for proposed revisions of the Philippine Nursing Law 2002 (RA 9173) which is currently being discussed in Congress.

Maternal and child health are concerns enshrined in the Millennium Development Goals (MDGs). Committed to serving rural Lao PDR village women, Sanaphay, Daenseekaew, Smith, Eckermann, & Scopaz explored the women's views and experiences of recent, or impeding, childbirth to better understand barriers to maternity service usage. The study, *Home delivery in Southern Lao PDR: Challenges to achieving MDG 4 & 5 targets,* showed that recent top-down maternal health initiatives have had little impact in this region. Improving maternal and child-health strategies requires much greater community participation and use of participatory action methodologies, to increase women's engagement in policy and planning and subsequent usage of health service developments. Similarly, the study by Palaganas and Molintas, Learning *with Communities: Structures and Mechanisms for Reproductive Health Programs among Indigenous Peoples of the Cordilleras* revealed that "co-learning and capacity building can be promoted, and knowledge generation and intervention is integrated… inspiring and empowering experience to grow and learn with the people". Palaganas and Molintas illustrate how a "local relevance of public health problems (RH in this case) and

the multiple determinants of health and disease including biomedical, social, economic, and physical environmental factors", which means embracing a holistic concept of caring.

On the other hand, emotional intelligence (EI) according to Cruz and Forbes' *Transforming Nursing Education and Practice through Emotional Intelligence,* has the potential to transform nursing education and practice. Caring nurses just do not just possess a good intelligence quotient, a traditional indicator of success, but human and personal skills. Such skills are translated in one's relationship with clients. Florendo's study, *Explicating Discharge Planning Preferences among a Select Group of Filipino Nurses: A Conjoint Analysis,* shows how an "organized and coordinated system is necessary in facilitating the discharge process and in ensuring a seamless transition of patients from one level of care to another…an analysis and understanding of nurses' preferences serve as an impetus for them to actively engage in the discharge planning process by developing effective structures that will benefit patients.

Caring in the form of health education also empowers clients. Nurses must understand the role of health education in taking care of their patients. Urgel, Mejilla, de Leon, Robles, and Trinidad posit that health education is valuable to increase the level of awareness and extent of compliance of treatment. This is illustrated in their study, *Level of Awareness and Compliance in DM Management among Adolescents Diagnosed of Type 1 Diabetes. Also,* excellent service to humanity means effective practice that is based on theory tested by research and anchored in caring. Tan's study on *Hand Reflexology's Effect on Level of Pain among Postpartum Mothers*, explores the experiences of mother's postpartum pain after receiving an intervention, in this case reflexology. Reflexology involves touch, and indeed, the results give nurses an alternative means in decreasing postpartum pain.

Our organization has shown many faces of caring with competence and compassion. This is poignantly shared by Evio and Bonito in their article, *Facing up to the Challenge of Typhoon Yolanda: he Philippine Nurses Association Experience*. In times of disaster, our ability to genuinely care for our people and our colleagues come to fore. Thus, we are not replete of nurses who shine as public servants, with or without disasters. Such is the case of Hon. Leah Primitiva Paquiz, this year's, most outstanding professional in nursing. This and many more faces of a caring profession made our organization the Most Outstanding Accredited Professional Organization of the Professional regulation Commission for 2014.

In representing Filipino Nurses in the NNA Assembly, Triad Meeting and World Health Assembly, Nuestro and Reboroso write about the "…great challenges ahead for the nursing profession to align its roadmap towards a more responsive accredited professional organization and say, 'We, the Filipino nurses, responding to the needs of society, are engaged in providing humane and globally competent nursing care."

This is to be a nurse…this is nursing…a world of caring, competence, compassion and many more.

ERLINDA CASTRO-PALAGANAS, RN, PhD

President's Message

In response to the challenges of leadership in the nursing profession, this year marks the 92nd year of the Philippine Nurses Association and hallmarks the recognition granted by the Professional Regulation Commission as the Outstanding Accredited Professional Organization.

Every Filipino professional nurse deserves an uplift of the image of a nurse. Without the nurse members of the Philippine Nurses Association here and abroad, the association could have ceased to exist. The existence of the association remains to champion Filipino nurses' welfare. In effect, the program thrusts must be fulfilled and that the formulation of the association's Roadmap 2030 envisions for a culture of excellence and dynamic leadership. Every Filipino professional nurse is enjoined to journey with the association with the hope of strengthening and sustaining the association for the future generation of nurses. The association's effort to uplift the standards of the nursing profession through the nursing coalition is the best effort to have "one strong voice."

The association is incessantly carving the brand of nurses to be caring, competent and compassionate. As the nursing profession evolved through time, human caring remains the distinction of a Filipino professional nurse. The essence of nursing is caring, thus the nurse makes the difference and brings immense impact to patient care.

The professional nurse having imbibed the essence of caring develops positive attitude towards change. The myriad changes in nursing and healthcare have not changed the way nursing is practiced rather the nurse will integrate technological changes with the hope of aiding the sick and well. Competence in nursing makes the essentials in nursing to healthcare changes. It takes the nurse to practice with autonomy and accountability for safe, compassionate, person-centered, evidence-based nursing care in keeping with respect, dignity and human rights.

Compassion in nursing practice will place the person as the heart of the healthcare system where the nurse demonstrates empathy, sensitivity, kindness and warmth. Moving forward to the year 2020 PNA's Centennial Celebration and anticipating the year 2030 for the outcome of the PNA Roadmap, the association remains steadfast for the Filipino nurse professionals.

To all my colleagues in the nursing profession continue nursing the Filipinos and nursing the WORLD!

Mabuhay tayong lahat!

ROGER POLO TONG-AN, DMPA, MAN, RN
National President
Philippine Nurses association

Research Article

Analytical Study of the Nurses Licensure Examination Performance of Graduates of Philippine Colleges of Nursing


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Abstract

Performance in the eight Nurse Licensure Examinations from December 2006 to December 2010 was analyzed to describe how graduates of colleges of nursing nationwide performed in the tests and to determine the factors that correlate with the examinees' scores. The study included all the graduates of colleges of nursing who participated in the eight Nurse Licensure Examinations. Data were collected through a review of secondary data from the Professional Regulation Commission - the passing percentage and average rating of schools, testing centers in the subjects tested and type of examinees. The variables from each NLE were categorized into *Examinee variables*, *Institutional variables*, and *Program and Other variables*. Based on the NLE results, the study concluded that those who took the examination for the first time (first timers) performed better, had higher passing percentage and significantly higher average rating than repeaters in all the NLEs. Among the repeaters, those who took the examination for at most two times showed higher passing percentage and average rating. Examinees from accredited schools also had higher passing percentage and average rating than examinees from non-accredited schools. Those from government-owned schools showed higher passing percentage in all NLEs and significantly higher average ratings in six (6) out of the eight (8) NLEs than examinees from non-government-owned schools. The study found that the accredited and government-owned schools had higher passing percentage and average rating compared to non-accredited and non-government-owned schools. Significant differences were found in the passing percentage and average rating of the examinees across regions and testing centers. Of the five subjects tested, the examinees performed best in Nursing Practice I and III. Their lowest passing percentage and average rating was in Nursing Practice IV. Number of examinees per school appeared not to have affected nor influenced either the passing percentage or average rating of schools in the eight (8) NLEs. The study reveals significant findings that correlate the performance of graduates of Philippine colleges of nursing in the 8 NLEs with selected variables and these findings may provide a better understanding of the issues and problems concerning the performance of examinees in the NLE.

Key words: *Nursing, Licensure Examination, Regulation, Accreditation*

A collaborative study of the PRC-Board of Nursing (Amelia B. Rosales, RN,Ed.D., Yolanda C. Arugay, RN, Ed.D), Association of Deans of Philippine Colleges of Nursing (Carmelita Divinagracia, RN,PhD), and the Philippine Nursing Research Society, Inc. (Erlinda Castro-Palaganas, RN,PhD) and the team's research assistant (Joseph Alvin Santos). Special thanks to Dr. Milagros Ibe, PRC Consultant who provided valuable feedback in the conceptualization and analysis of the data. The assistance of Ms. Desiree Lynn de Ramos, PRC Consultant and OIC Test Development Research and Statistics Office in making the data available and manageable is likewise acknowledged.

he practice environment is increasingly complex and requires that decisions regarding the issues affecting the practice of the nursing profession be evidence-based. This particularly applies to the Nurse Licensure Examination (NLE) where graduates of nursing schools in the Philippines must pass a competency based examination before they can legally practice nursing.

The Board of Nursing adopted, promulgated and issued in March 2006, the "Philippine Nurses' Licensure Examinations Covering Nursing Practice I, II, III, IV and V" through Board Resolution No. 18 series of 2006. The new Philippine Nurses' Licensure Examination Framework was adopted pursuant not only to a new law, Republic Act No. 9173 known as the "Philippine Nursing Act of 2002" and its Implementing Rules and Regulations but also to a new, modern, and updated Bachelor of Science in Nursing curriculum prescribed by the Commission on Higher Education(CHED) as contained in the CHED Memorandum 30, (CMO 30) series of 2001. The nursing curriculum is competency-based. The terminal competencies expected of the graduate are the entry competencies of a nurse occupying the first level position in any setting. The new test framework, likewise, was also based on the Core Competency Standards promulgated through Board Resolution no. 112 series of 2005. The Nurse Licensure Examination Competency-based Test Framework was implemented in June 2006 and in subsequent Nurse Licensure Examinations.

The Nurse Licensure Examination (NLE) is a 500-item multiple-choice examination prepared by the Board of Nursing to test first level nursing competencies . Taking into account the objectives of the nursing curriculum, the broad areas of nursing and other related disciplines are considered, thus making up the five test subjects, each consisting of 100 questions. The test subjects are: Basic Foundation of Nursing and Professional Nursing Practice, Community Health Nursing and Care of Normal and High Risk Mother and Child, and Care of the Clients with Physiologic and Psychosocial Alterations (Parts A, B, and C). The test items are assessed regularly for validity and reliability. The results of the NLE are considered to be a major determinant of the quality of nursing education provided to future professional nurses towards competent nursing practice.

To pass the examination, an examinee must obtain a general average of at least 75 percent with a rating of not below 60 percent in any of the five test subjects. Article IV, Section 12 of the Philippine Republic Act No. 9173 stipulates that," all applicants for license to practice nursing shall be required to pass a written examination, which shall be given by the Board of Nursing in such places and dates as may be designated by the Professional Regulation Commission, provided that it shall be in accordance with Republic Act No. 8981, otherwise known as the PRC Modernization Act of 2000".

For many years, researchers have studied academic and non-academic variables that have the potential to predict performance in the National Council Licensure Examination for Registered Nurses - NCLEX-RN (Davenport, 2007). Examples of academic variables include study habits, such as number of hours spent studying, academic performance/grades and IQ while non-academic variables include demographic variables, stress, number of hours of sleep, and exercise. A pilot study by Beerman and Waterhouse (2003) which explored postgraduate influences on NCLEX-RN success showed that more hours of study are associated with passing the examination. A positive correlation was also found between more study on the week prior to taking the exam and passing. However, no relationship was found between examination success and exercise, sleep, ongoing stress, major life event, or any demographic variables (Davenport, 2007).

Other variables showing no significant correlation with passing the NCLEX-RN are: [1] the number of weeks between graduation and licensure examination; [2] completing a review course; and [3] number of hours worked (Davenport, 2007). In contrast, Crowe, Handley, Morrison, & Shelton (2004) found commercial reviews to be a significant intervention. Differing from Beerman and Waterhouse, the National Council of State Boards of Nursing (2002) reported that the longer a student waits between completing a program and sitting for the NCLEX-RN, the lower the chances of success in the examination.

Griffiths, et.al. (2004) listed these factors identified by unsuccessful candidates: poor program preparation, inadequate study habits, poor test-taking skills, employment, and anxiety. Graduates who initially fail the NCLEX-RN are more likely to fail again unless structured interventions occur prior to retesting. Faculty coaching and mentoring were viewed as reaffirming strategies in helping the graduates' preparation.

A recent study by Bosher and Bowles (2008) on the effects of linguistic modification on ESL (English as second language) students' comprehension of nursing course test

items revealed that a significant barrier to the success of ESL students is the difficulty with multiple-choice tests, including the NCLEX. Linguistic modification, a methodology for reducing the language load of items, allows ESL students to demonstrate their nursing knowledge while increasing the validity and reliability of test scores.

On another note, in the United States of America, nursing programs are also evaluated through their graduates' success rate in the National Council Licensure Examination for Registered Nurses [NCLEX-RN]. Because of the apparent nurse shortage in the United States of America, nursing programs are challenged to produce more graduates who are able to pass the NCLEX-RN on their first attempt and enter into practice immediately [Bondmass, Moonie & Kowalski, 2008].

Background

The vast opportunities in nursing jobs overseas in the 1990s, which peaked after 2000, generated a rapidly growing nurse education sector in the country. To address this, the commercialization of medical/nurse education witnessed the increase of nursing schools from 40 in 1970 to 440 in 2005 to 460 in 2006 and to 475 in 2008, as against 30 medical, 31 dental, 129 midwifery, 35 pharmacy colleges, and 95 physical therapy and occupational therapy colleges (Lorenzo, 2005; http:www.ched.gov.ph, Lorenzo et. al., 2007). According to the Commission on Higher Education (CHED) data, there has been an enormously large fourteen-fold swell in nursing program enrolment from 27,833 in SY 2000-2001 to 397,195 in SY 2005-2006 and an eight-fold increase in nursing graduates from only 4,409 in SY 2000-2001 to 34,589 in SY 2004-2005. Graduates of medical and allied disciplines are the fastest growing groups of graduates in the country and increased more than three-fold from 27,296 in SY 2000-2001 to 86,373 in SY 2005-2006, accounting for one-fifth (20.1%) of the total 421,444 graduates nationwide in SY 2005-2006 (IBON Books, 2008, 93). Lorenzo, Galvez-Tan, Icamina, & Lara Javier (2007) opined that the country has a net surplus of registered nurses based on production and domestic demand patterns, but "the country loses its trained and skilled nursing personnel much faster than it can replace them".

The number of registered nurses and nursing students in the Philippines ballooned into enormous numbers as a response to the increased demand for nurses during the last decade in the developed countries, namely the United States of America, the United Kingdom, Ireland, Saudi Arabia, and Singapore. This increased demand was brought about by their advancing geriatric population. In a study done by Health Alliance for Democracy (HEAD) in 2006, 80% of the Filipino doctors had applied or wished to apply abroad not as physicians but as nurses; while 90% of the municipal health officers in different areas in the Philippines had the same thing in mind, not to mention the number of non-health professionals who left their degree programs to shift or start again toward a BS Nursing degree (Cheng, 2009).

In response to the increasing demand for nurses, schools and colleges of nursing proliferated in the country in the past decade. From 170 in the 1990's, it bloomed to 475[1] schools offering full nursing courses. Of these, 45 offered abridged courses for doctors wanting to be nurses.

Furthermore, Lorenzo et.al. (2007) observed an enormous increase in the number of professional nurse licenses issued from 5,784 in 2000 to 30,423 in 2006, while licenses of professionals, like x-ray technologist, dentist, occupational therapist, and physical therapist declined. Increase in opportunities for overseas employment became a strong motivation for doctors to study to become nurses (known as "nurse medics"). Professional Regulation Commission (PRC) data showed that there were about 2,000 "nurse medics" in 2001; 3,000 in 2003; 4,000 in 2005; and there were likely 80% of all public sector physicians in 2004 who were currently or had already retrained as nurses.

However, the rapid proliferation of nursing schools/programs resulted also in the declining quality of nursing education as indicated in the decrease in the passing percentage in the Nurse Licensure Examination. Existing data from the Professional Regulation Commission (PRC) showed passing rates of 80-90% from 1970-1980. From 1998 to 2008, the average passing rate ranged from 41.23% as the lowest to 57.55% as the highest with 88,649 as the biggest number of examinees. The lowest passing rate was noted in the December 2010 Nurse Licensure Examination where only 35.26% of the examinees passed.

Ordonez and Ordonez (2009) claimed that the decrease in the passing rate of Filipino graduates in the

[1] The Colleges of Nursing increased from 40 in 1970 to 440 in 2005 to 460 in 2006 and to 475 in 2008 (Lorenzo, 2005; CHED, 2006)

various licensure examinations is a symptom of the deteriorating quality of higher education institutions in the Philippines. A possible reason behind this depreciation could be the loose implementation of standards to be achieved by CHED- recognized schools in the country. There are various accrediting bodies in the country aiming to institutionalize standards that CHED intends to implement . The Federation of Accrediting Associations of the Philippines (FAAP) was established to uphold quality in the administration of various education institutions in the Philippines.

With the above cited backdrop, the Nurse Licensure Examination serves as an evaluation of the nursing programs being offered. The graduates' success rate in the Nurse Licensure Examination is on the creation of success not only for the student but also for the nursing program. Taking into consideration relevant factors perceived to contribute to the current state of the passing rate in the Nurse Licensure Examination, this study aims to 1) describe the Nurse Licensure Examination performance of graduates of colleges of nursing; and 2) determine the relationship between the NLE performance of the examinees and selected variables based on data collected in eight NLEs from December 2006 to December 2010[2]. Fig. 1 illustrates the framework of the study.

The following Research Questions guided this study:

1. What is the Nurse Licensure Examination (NLE) performance in terms of passing percentage and average rating of the examinees as influenced by the following groups of variables?

A. Examinee Variables
- i. First timer and repeater
- ii. Number of times the examinee took the examination before
- iii. School type graduated from

B. Institutional Variables
- i. Accreditation status
- ii. School ownership
- iii. Geographic location
- iv. Number of examinees

C. Program and Other Variabes
- i. Test subject
- ii. Testing center

2. Are there significant relationships between the NLE performance in terms of passing percentage and average rating and the following groups of variables?

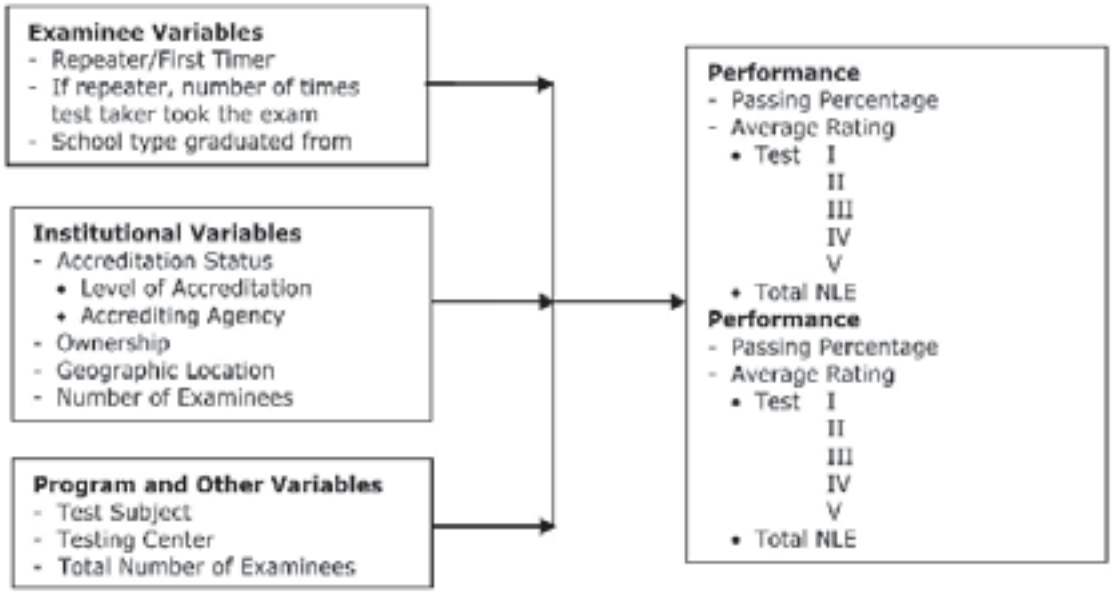


Figure 1: Determinants of Performance in the Nurse Licensure Examination

[2] *November 2009 was excluded since it was used as the pilot study. The data generated in the Nov 2009 NLE is also limited thus cannot be integrated in the report at this stage. The number of variables taken for the 8 periods is not comparable with the November 2009, thus when comparing the results of one NLE to another, there will be a lot of missing comparisons for the November 2009 NLE.*

A. Examinee Variables
I. Number of times examinee took the examination before

B. Institutional Variables
i. Number of examinees

3. Are there significant differences in the NLE performance of examinees in relation to the categories under the following groups of variables?

A. Examinee Variables
i. First timer and repeater
ii. School type graduated from

B. Institutional Variables
i. Accreditation Status
ii. School ownership
iii. Geographic location

C. Program and Other Variables
i. Test subject
ii. Testing center

4. What are the joint and separate effects of the three groups of variables on NLE performance in terms of the passing percentage and average rating of the examinees?

Methodology

A descriptive correlational design was used to: 1) describe the Nurse Licensure Examination (NLE) performance of graduates of colleges of nursing, and 2) determine the relationship between the NLE performance of the examinees and selected variables based on data collected in eight NLEs from December 2006 to December 2010.[3]

Participants

The study included all graduates of colleges of nursing who participated in the eight NLEs. Examinees on conditional status and whose test results were withheld were excluded from the study.

Procedure

The main data collection method was a review of existing secondary data from the Professional Regulation Commission (PRC). Data from the eight NLEs were collected and compiled. The participants of each NLE were divided into groups according to examinee, institution, and program and other variables.

The examination consisted of these five test subjects: *Basic Foundation of Nursing and Professional Nursing Practice, Community Health Nursing and Care of the Normal and High Risk Mother and Child,* and *Care of the Clients with Physiologic and Psychosocial Alterations (Parts A, B, and C)*.

Other data used in the study were obtained utilizing networks and the websites of the Association of Deans of Philippine Colleges of Nursing (ADPCN) and the Commission on Higher Education (CHED). These data are:

a. Lists of accredited and non-accredited schools which participated in the NLE, acquired from the Association of Deans of Philippine Colleges of Nursing from October 2002 to October 2009. The lists included nursing schools accredited by any of the members of the Federation of Accrediting Associations of the Philippines (FAAP).
b. Lists of government and non-government schools which participated in the NLE, downloaded from the Commission on Higher Education's website (http://www.ched.gov.ph/). The lists included CHED supervised institutions classified into state and local universities, and private sectarian and non-sectarian schools. The list from the website was last updated on October 23, 2009.
c. Geographic distribution by region in which the school or testing center belongs, acquired from ADPCN and counterchecked with data from the CHED's website.

Data Analysis

Quantitative data from each NLE were individually entered and analyzed using SPSS Statistics 17.0. The analyses included descriptive statistics, correlations, comparison of means, and multiple regression to determine relationships between variables. Relationships between variables and groups/categories were determined. A p value of = 0.05 was considered statistically significant for all statistical tests used in the study.

[3] As earlier stated in the previous footnote, the November 2009 NLE result was excluded since it was used as the pilot study. Other reasons for non-inclusion were also cited. (Please refer to Footnote 2)

The examination data shown in Table 1 show the following trends.[4]

The number of examinees increased through the years, with July 2010 registering the highest number of examinees. The number of participating schools increased from 270 in the December 2006 NLE to 470 in the December 2010 NLE. The passing percentages of the eight NLEs ranged from 35.26% to 49.15% as recorded in the December 2010 and December 2006 NLEs, respectively. The lowest recorded average rating among the eight NLEs was 68.81 (December 2010) while the highest average rating was 71.95 (June 2008).

Passing percentage and average rating

Analysis of the results was done per NLE. The variables in each NLE were categorized as Examinee variables, Institutional variables, and Program and Other variables.

A. Examinee Variables

Figure 1 shows that in the eight NLEs studied, first timers showed higher NLE performance than repeaters in terms of passing percentage and average rating. The highest computed difference between the passing percentage of first timers and repeaters was 44.66%. The first timers had a 59.44% passing percentage while the

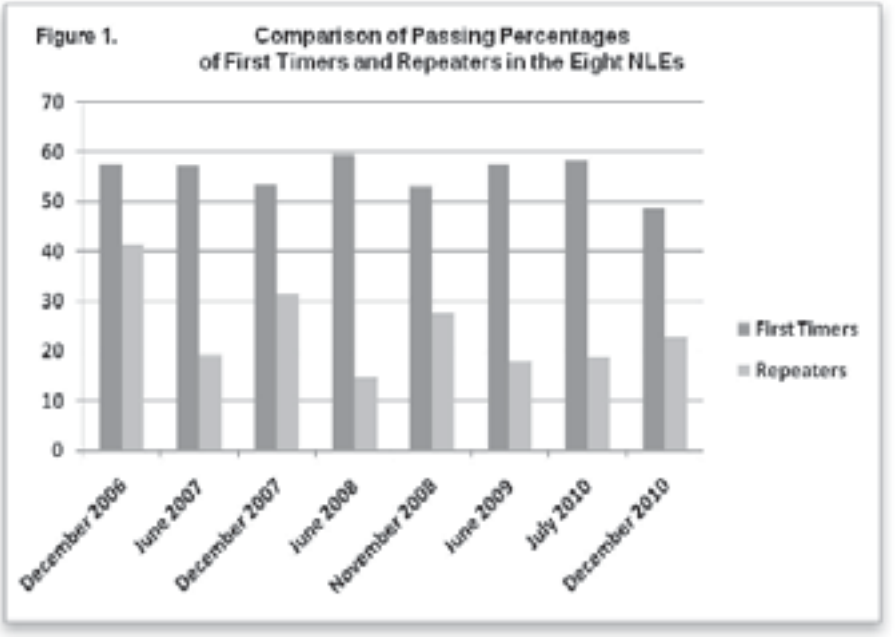


Table 1: *Profile of the Eight Nurse Licensure Examinations, 2006-2010*

	December 2006	June 2007	December 2007	June 2008	November 2008	June 2009	July 2010	December 2010
Total number of examinees	40, 127	65, 256	66, 596	64, 459	88, 649	77, 901	91, 003	84, 285
Withheld results	4	2	0	1	0	4	0	0
On conditional status	41	33	1	23	121	39	92	16
Examinees included in analysis	40, 102	65, 221	66, 595	64, 435	88, 528	77, 853	90, 911	84, 269
Participating schools	279	505	405	429	442	470	463	470
Testing centers	11	11	11	11	12	13	15	18
Examinees who passed	19, 712 (49.15%)	31, 532 (48.35%)	28, 934 (43.45%)	27, 765 (43.09%)	39, 455 (44.57%)	32, 617 (41.89%)	37, 679 (41.45%)	29, 711 (35.26%)
Examinees who failed	29, 390 (50.85%)	33, 689 (51.65%)	37, 661 (56.55%)	36, 670 (56.91%)	49, 073 (55.43%)	45, 241 (58.11%)	53, 232 (58.55%)	54, 558 (64.74%)
Mean average rating	71.52	71.46	70.63	71.95	71.63	70.36	70.77	68.81

[4] *For this study, examinees with conditional grades and withheld scores were not included in the analysis.*

repeaters had only a 14.78% passing percentage. This was recorded in the June 2008 NLE.

In terms of the average rating, the highest achieved mean score by the first timers was 74.20 (June 2008) and the lowest was 70.85 (December 2010). The repeaters scored 70.23 in December 2006 and 66.87 in December 2010, respectively (Fig. 2). First timers also had higher average ratings than repeaters in all of the five test subjects.

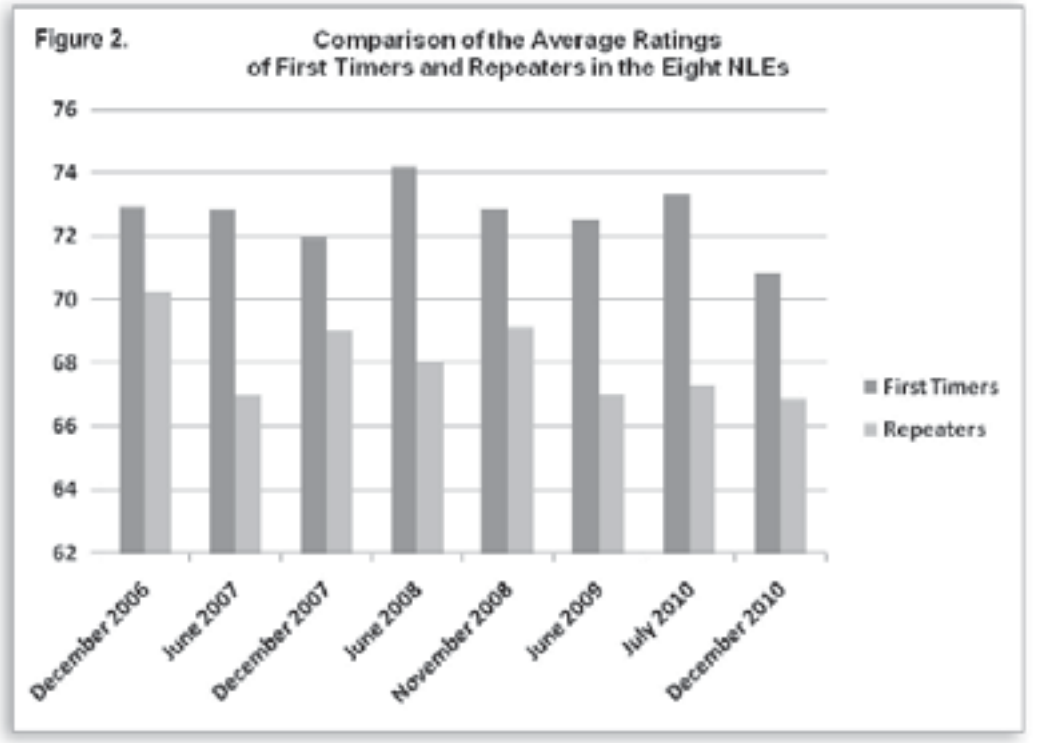
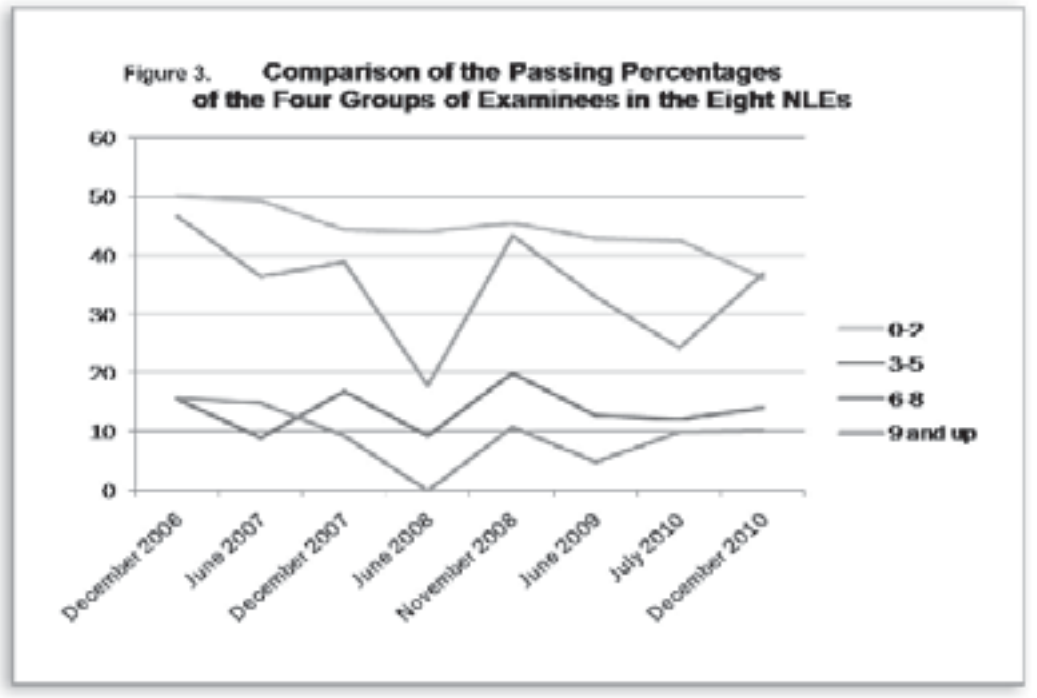


Figure 3 shows that in the eight NLEs, groups of examinees who took the examination for at most two times had the highest passing percentage as well as average rating. There was only one instance when the group of examinees taking the examination for more than 9 times exceeded the passing percentage of this group, which was recorded on the December 2010 NLE, and one instance when the same group of examinees exceeded the average rating. (November 2008 NLE).



In all of the eight NLEs, examinees from accredited schools showed higher passing percentage and average rating than examinees from non-accredited schools. The same was true of examinees from government-owned schools compared to examinees from non-government-owned schools. The latter exceeded the average rating of the first group only in one instance (December 2007 NLE).

Among examinees from accredited schools, those who came from schools with level III accreditation had higher passing percentage and average rating than those who came from schools with level II or level I accreditation status (Fig. 4 and 5). Only in two instances did examinees from schools with level II accreditation status exceed the passing percentage of examinees from schools with level III accreditation status (June 2007 NLE and June 2008 NLE). Furthermore, only in the June 2007 NLE did examinees from schools with level II accreditation status surpass the average rating of examinees from schools with level III accreditation. In all of the eight NLEs, examinees from schools with level I accreditation status ranked lowest in terms of passing percentage and average rating.

Figure 4. Comparison of Passing Percentages of Examinees from Schools with Different Level of Accreditation in the Eight NLEs

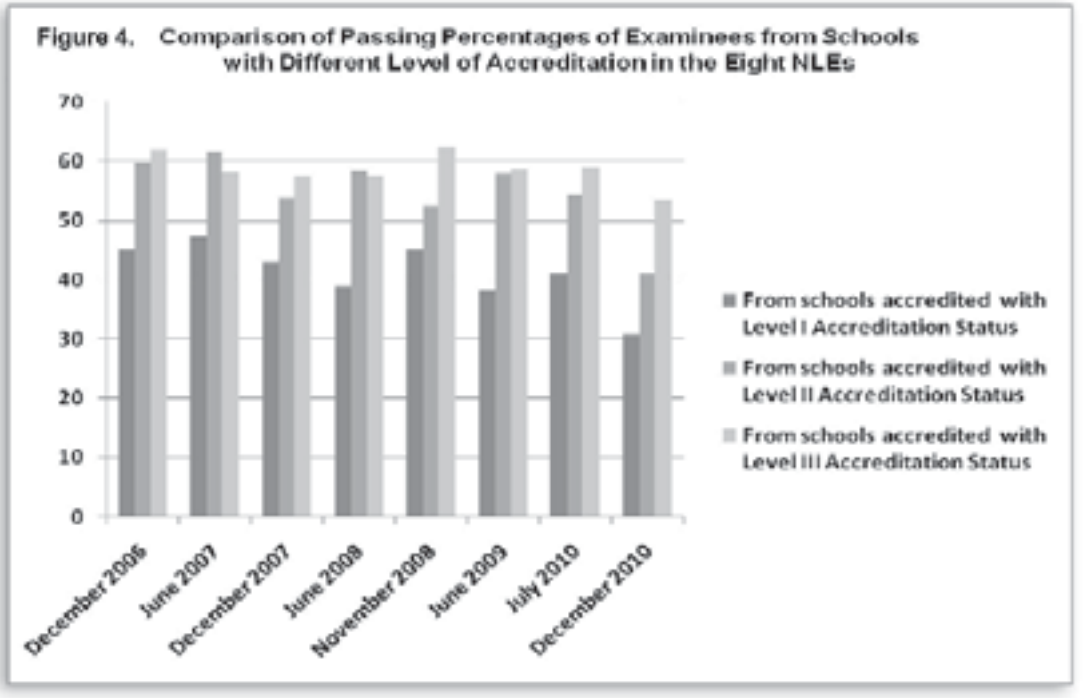
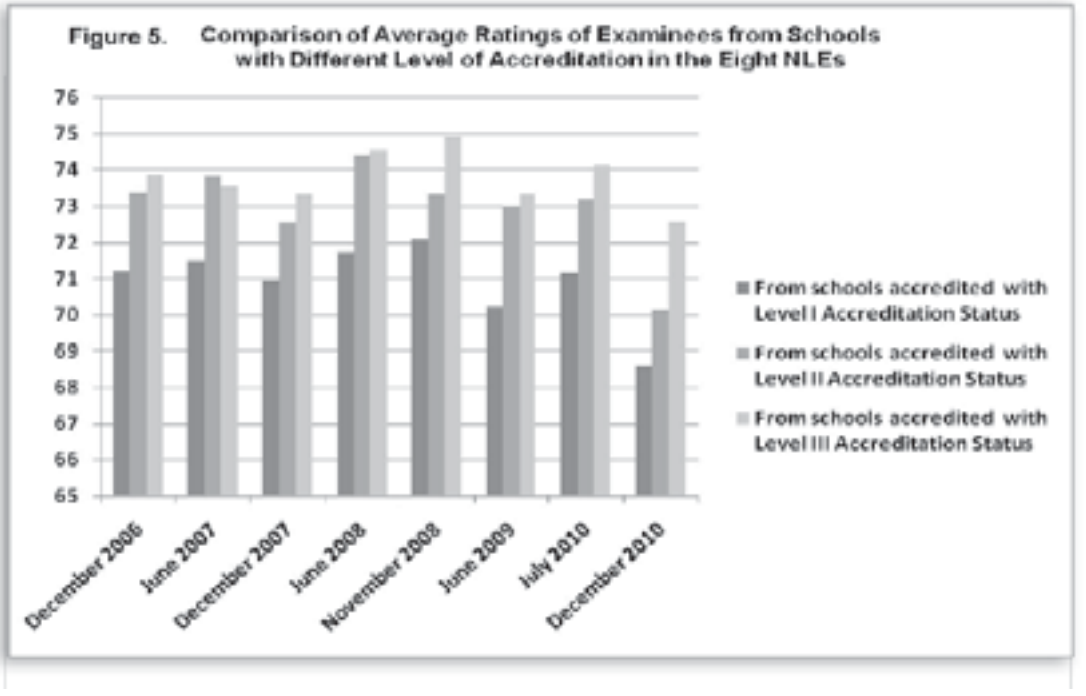


Figure 5. Comparison of Average Ratings of Examinees from Schools with Different Level of Accreditation in the Eight NLEs



In terms of accrediting agency, examinees from schools accredited by PAASCU had higher performance scores in all of the eight NLEs compared to examinees from schools accredited by other agencies. Examinees from AACCUP-accredited schools ranked second, followed by PACUCOA and lastly, ACSCU-AAI.

Among examinees from government-owned schools, those from state universities showed relatively higher performance scores compared to examinees from local universities. There was only one instance in the eight NLEs when examinees from local universities obtained a higher passing percentage and average rating (December 2010 NLE) than examinees from state universities.

Table 2: *Geographic Location and Passing Percentages of Schools in the NLEs*

REGION	DEC 06	JUN 07	DEC 07	JUN 08	NOV 08	JUN 09	JUL 10	DEC 10
Region 1	35.17	35.64	29.78	23.32	31.48	29.59	31.90	26.48
Region 2	58.40	41.85	36.45	41.89	47.56	43.16	38.55	43.60
Region 3	43.82	44.44	31.01	37.87	38.35	34.44	34.55	25.45
Region 4	46.36	36.97	37.94	33.82	41.75	33.13	38.80	34.81
Region 5	31.36	28.17	28.18	34.11	35.87	37.71	39.86	29.67
Region 6	56.27	43.67	48.98	38.82	56.53	38.30	40.33	51.96
Region 7	65.48	58.02	57.02	56.74	53.40	52.63	47.86	41.47
Region 8	53.76	34.32	54.25	21.65	53.65	44.82	38.17	47.46
Region 9	38.23	35.87	34.57	30.05	37.42	37.95	34.54	34.33
Region 10	49.45	35.60	43.62	36.49	50.13	37.95	38.46	45.89
Region 11	50.69	50.01	50.68	24.30	48.92	26.68	22.82	39.18
Region 12	43.54	33.55	42.83	22.63	45.34	32.94	29.17	38.45
CARAGA	41.48	24.54	45.79	17.49	32.92	26.62	21.40	29.08
CAR	55.20	60.04	47.14	47.35	50.79	50.63	43.87	38.44
NCR	57.87	56.24	46.83	47.86	49.34	45.62	45.98	38.33
ARMM	28.89	29.55	29.02	24.20	26.33	20.82	16.93	19.52

B. Institutional Variables

Consistently, accredited schools and government-owned schools performed better in terms of passing percentage and average rating as compared to their counterparts.

Among accredited schools, those with level III accreditation exceeded those with lower accreditation status in terms of both average rating and passing percentage. On the other hand, schools accredited by PAASCU and AACCUP showed higher passing percentage and average rating, ranking either first or second in all the NLEs. Schools accredited by PACUCOA and AACCUP ranked third and fourth. Schools accredited by PACUCOA had better performance compared to schools accredited by ACSCU-AAI.

By geographic location, regions which ranked among the top three highest passing percentages and average ratings in the eight NLEs consisted of: Regions 2, 6, 7, 8, 10, 11, CAR, and NCR. Among the eight regions, only Region 7 appeared in the top three highest passing percentages and average ratings in seven out of eight NLEs. It was followed by NCR which appeared in five out of the eight NLEs, and by CAR which ranked four times among the three highest passing percentages and average ratings (Table 2).

Regions which were listed in the lowest ranks in terms of passing percentages and average ratings are Regions 1, 3, 5, 8, 9, 11, 12, CARAGA, and ARMM. Of these regions, only ARMM ranked the lowest in seven of the eight NLEs in terms of passing percentage and among all of the NLEs in terms of average rating. CARAGA appeared five times among the lowest passing percentages and six

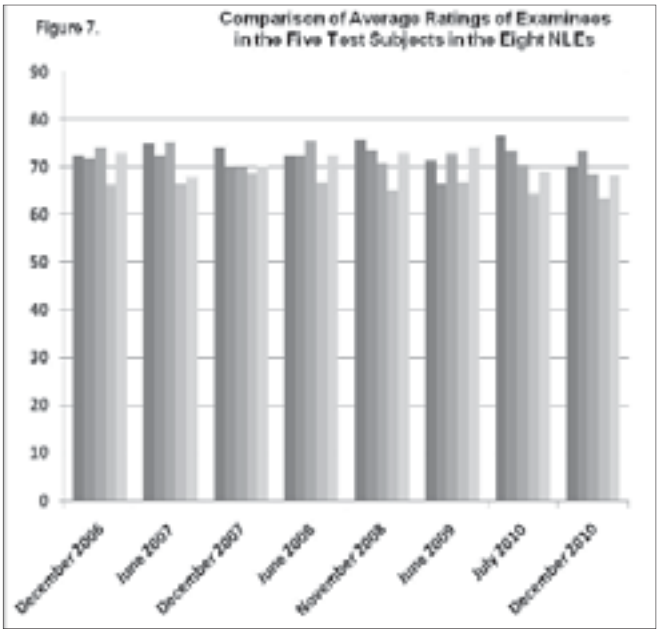
Table 3: *Geographic Location and Average Ratings of Schools in the NLEs*

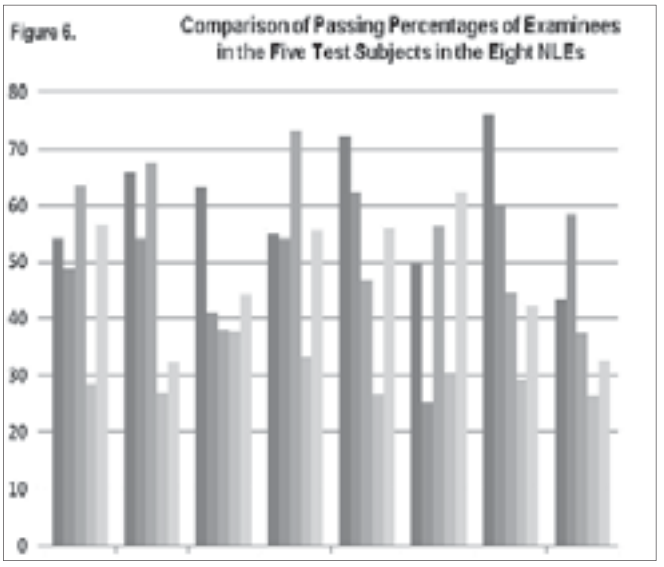
REGION	DEC 06	JUN 07	DEC 07	JUN 08	NOV 08	JUN 09	JUL 10	DEC 10
Region 1	68.64	68.06	67.22	68.51	68.50	67.48	67.77	66.36
Region 2	72.66	70.78	68.89	71.31	72.11	69.96	70.38	69.95
Region 3	70.44	70.61	68.54	70.29	69.78	69.13	69.17	67.17
Region 4	71.18	69.93	70.08	70.62	70.85	69.04	70.21	68.35
Region 5	67.24	67.80	67.50	70.11	69.65	68.89	70.05	67.59
Region 6	73.27	71.82	72.34	71.06	73.50	70.66	71.31	72.16
Region 7	74.32	73.51	72.80	74.25	72.90	72.38	71.96	70.04
Region 8	72.26	67.91	71.05	69.01	73.41	70.95	70.12	71.45
Region 9	68.73	67.46	69.77	69.84	70.19	69.92	69.40	68.96
Region 10	70.41	68.88	70.78	71.04	72.28	70.07	70.13	70.30
Region 11	71.50	71.15	71.94	69.95	72.36	68.38	68.36	69.63
Region 12	70.00	70.04	70.45	68.02	71.65	69.33	68.80	69.37
CARAGA	70.74	67.18	68.65	66.97	69.48	68.24	65.92	66.99
CAR	72.48	73.77	71.63	72.00	72.71	71.52	71.32	70.14
NCR	73.06	72.23	71.39	72.91	72.53	71.24	71.43	69.60
ARMM	63.75	67.45	66.12	65.42	64.73	63.89	61.87	61.64

times among the lowest average ratings (Table 3). Although Regions 8 and 11 appeared in the top three highest passing percentages and average ratings, these two regions also appeared in the lowest ranks in terms of passing percentage. Region 8 ranked second to the lowest in the June 2008 NLE, whereas, Region 11 ranked third to the lowest in the December 2010 NLE. (Table 2).

C. Program and Other Variables

Examinees registered the highest passing percentages and average ratings in test subjects I and III. On the other hand, examinees got the lowest passing percentage and average rating in test subject IV in seven out of the eight NLEs (Fig. 6 and 7).





Nursing Practice I Nursing Practice II Nursing Practice III Nursing Practice IV Nursing Practice V

Cebu, Iloilo, and Tacloban were the testing centers which appeared frequently among the three highest passing percentages and average ratings in the eight NLEs. Conversely, the testing centers which appeared most often among the three lowest passing percentages and average ratings were Davao, Baguio and Legazpi (Tables 4 and 5). It is noted that the examinees are allowed to choose the testing centers where they take the NLE. Thus, the testing centers where the examinees took the examination is not necessarily the location of their school.

Table 4: *Testing Centers and Passing Percentages of Examinees in the NLEs*

TESTING CENTER	DEC 06	JUN 07	DEC 07	JUN 08	NOV 08	JUN 09	JUL 10	DEC 10
Manila	48.03	50.24	40.04	45.80	40.90	44.39	42.67	30.72
Baguio	40.79	41.06	37.55	35.84	37.95	34.80	39.00	31.82
Butuan	-	-	-	-	-	-	-	37.15
Cagayan de Oro	51.09	47.63	51.19	41.92	54.80	35.92	40.19	49.38
Cebu	56.18	56.74	52.50	52.87	50.52	52.86	47.78	40.35
Davao	52.43	39.43	51.26	26.66	52.23	26.88	27.93	41.21
Iloilo	58.84	52.11	58.23	42.08	62.66	38.45	37.87	49.45
La Union	-	-	-	-	-	-	40.67	23.42
Legazpi	37.72	37.72	33.42	43.21	38.52	43.83	43.20	31.13
Lucena	46.48	44.57	35.03	44.52	41.01	38.74	39.55	39.58
Pagadian	-	-	-	-	-	21.47	23.20	24.14
Pampanga	-	-	-	-	-	-	59.30	27.25
Sulu	-	-	-	-	27.81	31.85	-	-
Tacloban	60.82	68.77	63.67	36.71	62.86	30.38	34.34	53.83
Tuguegarao	61.47	47.19	47.93	31.43	51.42	36.16	39.73	49.58
Zamboanga	44.26	47.11	35.97	37.77	39.79	49.01	44.22	34.85
Dagupan	-	-	-	-	-	-	31.91	21.95
Ilocos Sur	-	-	-	-	-	-	-	29.36
Nueva Ecija	-	-	-	-	-	-	-	22.62

Table 5: *Testing Centers and Average Ratings of Examinees in the NLEs*

TESTING CENTER	DEC 06	JUN 07	DEC 07	JUN 08	NOV 08	JUN 09	JUL 10	DEC 10
Manila	71.33	71.81	70.22	72.34	71.14	70.79	71.04	68.15
Baguio	70.14	70.19	69.35	70.72	70.20	68.87	70.52	68.48
Butuan	-	-	-	-	-	-	-	68.94
Cagayan de Oro	71.58	71.27	71.90	71.73	73.31	69.71	70.58	71.28
Cebu	72.68	72.87	72.02	73.55	72.71	72.30	72.07	69.95
Davao	72.12	69.98	71.96	69.73	72.93	68.19	68.83	69.83
Iloilo	73.48	72.40	73.28	72.43	74.89	70.64	70.82	71.71
La Union	-	-	-	-	-	-	70.69	66.65
Legazpi	69.11	69.23	68.42	71.68	70.41	70.48	70.44	67.50
Lucena	71.28	70.94	69.55	72.25	71.12	69.99	70.35	69.66
Pagadian	-	-	-	-	-	64.74	65.98	65.63
Pampanga	-	-	-	-	-	-	73.70	68.03
Sulu	-	-	-	-	68.41	67.15	-	-
Tacloban	73.34	74.34	73.84	71.39	75.16	69.35	69.72	72.43
Tuguegarao	73.46	71.28	71.50	70.12	72.61	69.24	70.53	71.11
Zamboanga	70.35	70.94	68.44	70.55	69.80	71.14	70.56	67.87
Dagupan	-	-	-	-	-	-	68.21	65.22
Ilocos Sur	-	-	-	-	-	-	-	68.22
Nueva Ecija	-	-	-	-	-	-	-	65.67

PHILIPPINE NURSES ASSOCIATION, INC.

Relationship between the NLE passing percentage and average rating and Examinee and Institutional Variables

The examinee variable *number of times test taker took the examination before* was found significantly correlated with the overall average rating of examinees in all the NLEs (Table 6). Results revealed a strong negative correlation between the above variables. This means that as the number of times the examinees take the exam increases, their average rating decreases, and vice versa.

Number of examinees had a weak correlation with overall average rating in three of the eight NLEs. The variable *number of examinees* was found significantly correlated with overall passing percentage only in the June 2008 NLE. No significant relationships were found with the rest of the NLEs.

Table 6: *Correlations Between Number of Times Examinee Took Exam Before and after Overall Average Rating*

NLE	Pearson Correlation Coefficient	Sig. (2-tailed)
December 2006	-.240(**)	.000
June 2007	-.302(**)	.000
December 2007	-.203(**)	.000
June 2008	-.352(**)	.000
November 2008	-.227(**)	.000
June 2009	-.300(**)	.000
July 2010	-.310(**)	.000
December 2010	-.209(**)	.000

** Correlation is significant at the 0.01 level

Table 7: *Comparison of Mean Average Rating of First Timers and Repeaters in the Eight NLEs*

NLE	MEAN AVERAGE RATINGS		t-RATIO	p-value
	FIRST TIMERS	REPEATERS		
December 2006	72.90	70.23	t = 34.84	.000
June 2007	72.85	66.98	t = 87.65	.000
December 2007	71.94	69.04	t = 51.63	.000
June 2008	74.20	68.07	t = 113.55	.000
November 2008	72.89	69.10	t = 72.32	.000
June 2009	72.52	67.00	t = 106.92	.000
July 2010	73.32	67.31	t = 117.92	.000
December 2010	70.85	66.87	t = 71.68	.000

Effects of Examinee, Institutional, and Program Variables on Performance Scores

Table 7 compares the difference between the mean average ratings of first timers and repeaters in the eight NLEs. First timers consistently had higher mean average ratings than repeaters in all the eight NLE.

Comparison of the means of the level of accreditation of schools from where examinees came as well as the accrediting agencies revealed statistically significant differences between the mean average rating for the different groups, in all the NLEs. The same applies to the comparison of the means of examinees from state and local universities.

There was a statistically significant difference between the mean average rating and mean passing percentage of

accredited and non-accredited schools in the eight NLEs. Accredited schools have higher mean average rating and mean passing percentage than non-accredited schools (Fig. 8). There were statistically significant differences found between the mean passing percentage and average rating of schools with different levels of accreditation in seven of the eight NLEs (except June 2007). In addition, there were statistically significant differences between the mean passing percentage and average rating of schools with different accrediting agencies in all the NLEs.

Government-owned schools have higher mean average rating and mean passing percentage than non-government-owned schools (Fig. 9). Analysis revealed that there was a statistically significant difference between the two variables in six of the eight NLEs. However, no significant difference was found between the mean average ratings and the passing percentages of state and local universities, although the former had relatively higher average ratings and passing percentages than the latter.

One way ANOVA results revealed statistically significant differences among the mean passing percentages as well as mean average ratings for the different regions in all the NLEs.

Figure 8. **Comparison of Average Ratings of Examinees from Accredited and Non-Accredited Schools in the Eight NLEs**

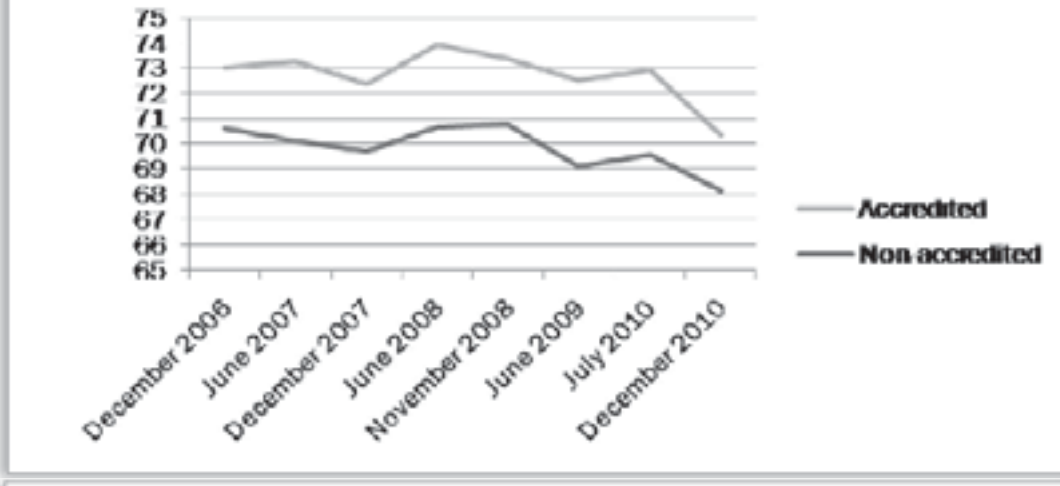
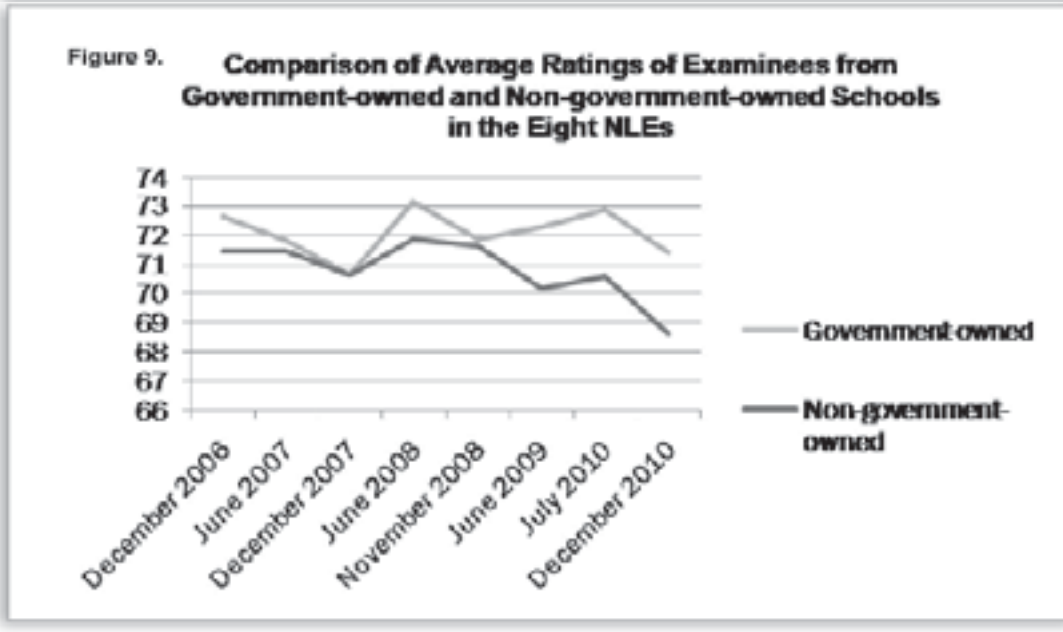


Figure 9. **Comparison of Average Ratings of Examinees from Government-owned and Non-government-owned Schools in the Eight NLEs**



Average ratings of first timers and repeaters were compared in the five test subjects. First timers have higher performance scores than repeaters. Statistically significant differences between the performance score of first timers and repeaters were found in all the test subjects in all the eight NLEs except in test subject III in the November 2008 NLE.

One way ANOVA showed significant differences in the mean average ratings of the testing centers in all the NLEs.

Stepwise multiple regression of the variables revealed how much each influenced the average rating and passing percentage of the examinees in each NLE. The top predictor of average rating was being a first timer or repeater. Number of times test taker took the examination before follows. It predicted the average rating of examinees in two NLEs (December 2006 and December 2007).

School type graduated from: accredited or non-accredited exceeded the variable school type graduated from: government-owned and non-government-owned in the list of top predictors of average rating in all the NLEs.

Among the institutional variables (accreditation status, school ownership and number of examinees), multiple regression performed revealed that the number of examinees did not influence either the average rating or passing percentage of the schools which participated in the eight NLEs (Table 8). In contrast, accreditation status and school ownership influenced both the average rating and passing percentage of the schools. In the eight NLEs, accreditation status had a stronger predictive ability than school ownership (Table 9).

Table 8: *Multiple Regression Results of Institutional Variables and Average Rating in the Eight NLEs*

NLE	ADJUSTED R SQUARE	NO. OF PREDICTOR VARIABLES	PREDICTOR VARIABLES		
			LIST OF PREDICTORS	BETA	P
December 2006	.154	2	Accreditation Status	-.337	.000
			School Ownership	-.232	.000
June 2007	.039	1	Accreditation Status	-.202	.000
December 2007	.086	2	Accreditation Status	-.286	.000
			School Ownership	-.112	.019
June 2008	.107	2	Accreditation Status	-.277	.000
			School Ownership	-.199	.000
November 2008	.102	2	Accreditation Status	-.286	.000
			School Ownership	-.165	.000
June 2009	.133	2	Accreditation Status	-.297	.000
			School Ownership	-.234	.000
July 2010	.177	2	Accreditation Status	-.335	.000
			School Ownership	-.275	.000
December 2010	.157	2	Accreditation Status	-.296	.000
			School Ownership	-.285	.000

Table 9: *Multiple Regression Results of Institutional Variables and Passing Percentage in the Eight NLEs*

NLE	ADJUSTED R SQUARE	NO. OF PREDICTOR VARIABLES	PREDICTOR VARIABLES		
			LIST OF PREDICTORS	BETA	P
December 2006	.174	2	Accreditation Status	-.354	.000
			School Ownership	-.251	.000
June 2007	.036	1	Accreditation Status	-.195	.000
December 2007	.067	1	Accreditation Status	-.263	.000
June 2008	.099	2	Accreditation Status	-.268	.000
			School Ownership	-.190	.000
November 2008	.087	2	Accreditation Status	-.262	.000
			School Ownership	-.157	.001
June 2009	.113	2	Accreditation Status	-.289	.000
			School Ownership	-.197	.000
July 2010	.180	2	Accreditation Status	-.338	.000
			School Ownership	-.270	.000
December 2010	.158	2	Accreditation Status	-.300	.000
			School Ownership	-.283	.000

For each of the eight NLEs, predictors of the performance scores in terms of passing percentage and average rating of examinees were identified. The adjusted R square values ranged from .087 to .218, the beta coefficients are all negative but significant at p = .000.

Multiple regression performed in all the eight NLEs revealed the following variables as significant predictors of performance scores:

1. First timer or repeater
2. Number of times test taker took the examination before
3. School type graduated from: accredited or non-accredited
4. School type graduated from: government-owned or non-government-owned

The four came out as significant predictors in the same sequence as listed above. Thus, it can be said that it matters much in the prediction of performance that the examinee is taking the test for the first time, or if a repeater had taken the NLE at most twice before, and that he/she graduated from an accredited or government-owned school. The summary of the stepwise regression analyses are shown in Tables 8 and 10.

As far as the institutional variables are concerned, only two variables emerged as significant predictors of performance. The two are: 1) accreditation status, and 2) school ownership (See Table 9).

Joint and Separate Effects of the Three Groups of Variables on the Performance Scores

Table 10: *Multiple Regression Results of Examinee Variables and Average in the Eight NLEs*

NLE	ADJUSTED R SQUARE	NO. OF PREDICTOR VARIABLES	PREDICTOR VARIABLES		
			LIST OF PREDICTORS	BETA	P
December 2006	.100	3	Number of times test taker took examination before	-.168	.000
			School type graduated from: accredited or non-accredited	-.136	.000
			School type graduated from: government-owned or non-government-owned	-.039	.000
June 2007	.145	3	First timer or repeater	-.228	.000
			School type graduated from: accredited or non-accredited	-.176	.000
			Number of times test taker took examination before	-.062	.000
December 2007	.087	4	Number of times test taker took examination before	-.090	.000
			School type graduated from: accredited or non-accredited	-.169	.000
			First timer or repeater	-.094	.000
			School type graduated from: government-owned or non-government-owned	-.008	.036
June 2008	.218	3	First timer or repeater	-.312	.000
			School type graduated from: accredited or non-accredited	-.159	.000
			School type graduated from: government-owned or non-government-owned	-.024	.000
November 2008	.108	4	First timer or repeater	-.177	.000
			School type graduated from: accredited or non-accredited	-.153	.000
			School type graduated from: government-owned or non-government-owned	-.031	.000
			Number of times test taker took examination before	-.025	.000
June 2009	.181	3	First timer or repeater	-.266	.000
			School type graduated from: accredited or non-accredited	-.171	.000
			School type graduated from: government-owned or non-government-owned	-.048	.000
			Number of times test taker took examination before	-.020	.000
July 2010	.190	4	First timer or repeater	-.246	.000
			School type graduated from: accredited or non-accredited	-.146	.000
			School type graduated from: government-owned or non-government-owned	-.044	.000
			Number of times test taker took examination before	.029	.000
December 2010	.106	4	First timer or Repeater	-.177	.000
			School type graduated from: accredited or non-accredited	-.120	.000
			School type graduated from: government-owned or non-government-owned	-.075	.000
			Number of times test taker took examination before	.021	.000

Discussion

Performance in the NLE of the different schools in the Philippines reflects state of Nursing Education in the country. This study explored the reliability of the NLE results as measures of the quality of nursing education being provided by the different higher education institutions in the Philippines.

In principle, all nursing programs strive to offer an educational experience that will train their students for competent practice. However, there are situations when factors such as the export policy of the government determines the opening of a College or School of Nursing and not its capacity to produce quality graduates. Anyway, the performance of the school's graduates in the NLE represents a mark of success, not only for the student but also for the nursing program. It is , therefore, considered a visible measure of program quality. The low passing percentage of the eight NLEs (range: 35.26% to 49.15%) and low average rating among the eight NLEs (range: 68.81 to 71.95) is an indication of the declining quality of education. It is significant to note that about this period, there was an unprecedented mushrooming of nursing schools in the country from over 200 in 2006 to 470 in 2010. This fact created a gap of qualified deans, faculty and adequate facilities. This observation added to the pressing concerns of nursing leaders.

Another factor that contributes to the above scenario is the situation where the greater number of examinees who fail in the past Nurse Licensure Examinations take the succeeding NLEs. This adds to the number of new examinees in each subsequent NLE. First-time takers consistently have higher passing percentage and statistically significant higher average rating than repeaters in all the eight NLEs analyzed. The number of repeaters increases after every NLE schedule. Examinees who took the examination for at most two times had higher passing percentages and statistically higher average ratings than the other groups of examinees. Being a first timer or repeater and the number of times an examinee had taken the examination prior to a particular NLE are the leading predictors of the average rating of an examinee. While it is a welcome change in the Nursing Law that an examinee who fails several times can take the NLE for as long as he/she wants, the value of undergoing a refresher course after the third failure (similar to the Nursing Law: RA 7164 of 1991) may have to be reconsidered. This and other provisions of the nursing law and the nursing curriculum that may contribute to this NLE result phenomenon must be looked into, for example; qualifications of deans and faculty, facilities, and the like.

Quality in higher education means the pursuit of quality assurance. It focuses on developing and managing educational programs and services that are usually benchmarked on standards set at the national, regional and/or international higher education. The value of accreditation needs to be underscored. The Commission on Higher Education (CHED) has a very critical responsibility to make sure that all the recognized schools follow the Policies, Standards and Guidelines set for the BSN program. Likewise, the Professional Regulation Commission and the Board of Nursing have equally important responsibilities in making sure that the policies, standards and guidelines are implemented in all Higher Education Institutions (HEIs). In the Philippines, accreditation is voluntary. Accrediting bodies assess the quality of teaching and learning as supported by governance and management. The process of accreditation specifically monitors and evaluates the institutions' support for students, relations with the community and management of resources. Such areas are recognized to contribute to the effectiveness of the institution and ensure the quality and standards of the programs offered (Ordonez & Ordonez, 2007).

Dator's study (2010) supports the significance of a school's accreditation to its performance in the NLE. The results of the study showed that the performance of higher education institutions (HEI) in the 2000 to 2004 NLE was greatly affected by the accreditation of their nursing programs mainly by certain accrediting bodies such as PAASCU, PACUCOA, ACSCU-AAI, and AACUP. Schools which were accredited performed better in the NLE compared to non-accredited schools. The structures and processes of the different HEIs are reflected by their accreditation status, making accredited schools more qualified to teach the nursing program they have presented. Moreover, the level from which accredited schools belong, based on the categories set by the above mentioned accrediting bodies, is positively related to their performance in the NLE. HEIs that have been accredited by these institutions are classified into three levels which indicate the quality they have already achieved. Their classification from Level I to III also translated to their performance ranking in the NLE. This implies that the accreditation of a higher education institution is a reliable indicator of the quality of the

nursing education program in the country with the NLE results used as basis of the desired outcome in measurement.

In the current study, examinees from accredited schools have higher passing percentage and significantly higher average rating than examinees from non-accredited schools in all the NLE. It was also noted that the higher the level of accreditation of a school, the higher the passing percentage and average rating of its examinees. Examinees from schools accredited by PAASCU and AACCUP have higher passing percentages and significantly higher average ratings than examinees from schools accredited by PACUCOA and ACSCU-AAI. Level III accredited schools have statistically higher passing percentages and average ratings than schools with lower accreditation status in seven of the eight NLEs studied. Furthermore, PAASCU-accredited and AACCUP-accredited schools perform statistically higher than PACUCOA- and ACSCU-AAI-accredited schools. Thus, the value of accreditation as a predictor of quality education must be seriously considered by the regulating bodies and professional organizations such as the PRC-BON, CHED, and the ADPCN. The rigor of accreditation should be maintained and respected by any accrediting body.

Quality is ensured when a HEI accepts students based on its capacity and resources, an aspect covered by accreditation processes. This is true with government-owned schools, specifically the state universities and colleges . Due to limited resources from the coffers of the national or local government, the admission of students is limited to a quota identified by the school. This specified quota limits the number of students to be accepted. Academic performance in secondary education and results of admission tests contribute to ranking for admission. This policy of selective admission could be a contributory factor to the findings that examinees from government-owned schools have higher passing percentage in all the NLEs, and significantly higher average rating in six of the eight NLEs. Examinees from state universities have higher passing percentages and higher average ratings than their counterparts in seven of the eight NLEs. This makes school type graduated from (government or non-government-owned) a predictor of the average rating of an examinee.

Significant differences were found between the passing percentage and average rating of the examinees by testing center in all the eight NLEs. Among the five test subjects in all the NLEs, the highest passing percentage and average rating is in Nursing Practice I and III; and their lowest performance scores were in Nursing Practice IV. While it is a welcome finding that the examinees, both first timers and repeaters, rated highest in Test I (*Basic Foundation of Nursing and Professional Nursing Practice*) which reflects the state of their foundation in nursing education, the mean average still needs improvement. Educators and examiners must seriously look into reasons why Test IV (*Care of Clients with Physiologic and Psychosocial Alterations*) is performed most poorly as shown by the mean average score. Aware that Test IV looks into integrated medical surgical concepts, factors such as content, related learning experiences and competencies measured must be looked into. This is a reflection of lack of learning experiences or opportunities due to the large influx of students in limited learning hospitals. It becomes a double jeopardy when both theory and practice are weak. Analyzing each examination question by focusing on both test question construction and analysis of answers can be done vis-à-vis expected competencies. This brings the issue of implementing Article XI of CHED Memorandum 14, Series 2009 (CMO 14 s. 2009). This article states the sanctions that" non-compliance with the provisions of the CMO, shall after due process, cause the Commission to revoke government permit/recognition or deny issuance of authority to operate the nursing program". The provision further states that the official results of the Nurse Licensure Examination issued by the Board of Nursing of the Professional Regulation Commission and that Higher Educational Institutions (HEIs) with an average passing rate of below 30% in the Nurse Licensure Examination for the past three years shall be the basis in phasing out of the nursing programs. If strictly implemented as provided for in the policies, standards and guidelines of the CHED, this will send a message to the public that the regulating bodies ensure the delivery of safe and quality nursing care to clients by professional nurses .

To maintain the stature of Philippine Nursing in the global market as one of the best source of competent and caring nurses, it is a must to continue conducting evaluation measures such as this research to improve nursing practice. This is not only the concern of the PRC Board of Nursing but of all stakeholders, thus the value of collaborative efforts.

Conclusions and Recommendations

Findings of the study lead to these conclusions: being a first timer or repeater and the number of times the examinee has taken the examination are predictors of the average rating obtained by the examinee in the NLE. Therefore, through the leadership of the PRC Board of Nursing and with the support of all recognized nursing organizations, policies relevant to application to the NLE by first timers and repeaters should be reviewed and revised to conform to existing situation. Other factors that possibly apply to repeaters also need to be explored. Further research studies on variables which may influence the performance of repeaters in the NLE may be studied . These variables may include the following: 1) primary purpose in enrolling in the nursing program, 2) BSN as a secondary course, 3) time gap from date of graduation to the date of first examination, and 4) other relevant demographic variables.

Accreditation status has a strong predictive ability: examinees from schools with level 3 accreditation status have high passing percentage and average rating. It is recommended that colleges of nursing pursue accreditation. Meeting the minimum standards of nursing education set by the Commission on Higher Education is not enough to ensure quality nursing education. The Association of Deans of Philippine Colleges of Nursing could explore programs which will assist the schools to achieve accreditation status.

CHED must continuously use the performance of examinees in the NLE in evaluating schools offering the BSN program. The system by which results and findings are processed and provided to CHED by PRC should be reviewed and improved accordingly to ensure that these data could be used promptly and effectively for school monitoring and evaluation.

Continuous validation studies should be done. A competency based framework should be used to ensure that the test items measure the nursing competencies expected to be developed by the Nursing schools. Further studies should be conducted to determine the extent to which the core competency standards integrated in the BSN curriculum are implemented.

Evaluation should be conducted by the Professional Regulation Commission (PRC) to determine the efficiency and effectiveness of its systems, processes, and facilities related to the administration of the Nurse Licensure Examination.

This research could be replicated to include other variables which affect performance of examinees in the Nurse Licensure Examination. Colleges of Nursing are encouraged to do studies to determine other variables.

Policy Implications

The declining performance in the NLE is an important issue to health policy makers. Deriving policy implications from the study entails understanding the context of the phenomenon. Reflections from the above study mirror the situation at the macro level. The current situation of low performance in the NLE for the past five years is multi-faceted. It is but a tip of the iceberg of larger national and global developments. According to Lorenzo, et. al., (2007), the rampant global nursing shortages in the late 1990s, made recruitment conditions more favorable to destination countries that created strong “pull factors” (p.1408). Filipino labor migration was originally intended to serve as a temporary measure to ease unemployment. Perceived benefits included stabilizing the country's balance-of-payments position and providing alternative employment for Filipinos. However, dependence on labor migration and international service provision has grown to a point where there are few efforts to address domestic labor problems (Villalba, 2002).

The vast opportunities in nursing jobs overseas in the 1990s, which peaked after 2000, generated a rapidly growing nurse education sector in the country enhanced by the export policy of the government. The consequent rapid proliferation of nursing schools/programs, however, has adversely affected the quality of nursing education. Palaganas (2004) contends that the prevailing commercialized educational system has turned the schools to diploma mills, as passports to a “brighter future” and where values of social commitment and responsibility have been continually eroded.

According to IBON (2008), a paradox of the Philippine health sector is that it has a huge health force for an underdeveloped country and yet it experiences severe domestic shortage. Thus, there is a need to examine the shared responsibility of government agencies ,such as; the Commission on Higher Education (CHED), Professional Regulation Commission (PRC), Board of Nursing (BON), Department of Health (DOH) and

Department of Labor and Employmnet (DOLE) in line with the government's priority thrusts.

Strict implementation of the CHED Policies, Standards and Guidelines must be supported by intensive monitoring of schools with consistently low passing percentage by the PRC-BON-CHED. To ensure the quality of students who enter the nursing program, it is important to consider students' motivations in taking up nursing. There is a need to assess, measure, and/or evaluate aptitude and qualifications of applicants in nursing. Likewise, retention policy of the school to progressively assess capability of students to demonstrate competencies expected in each level of the nursing program must be continuously reviewed and evaluated for improvement. On the other hand, capacity building for competency development among deans and faculty members must be enhanced to promote effective and efficient implementation of the policies, standards and guidelines set for nursing education.

The oversupply of nurses is likely to alter the country's human resource portfolio because on the supply side, there are 332,206 Filipino nurses, but the demand side is only in need of 193,223. Of the 193,223 employed nurses, 29,467 (15.25%) are based in the local and national labor market, but there are 163,756 (84.75%) employed in the international scene (Lorenzo et.al., 2007, 1409).

There are other factors underlying such a phenomenon, such as the state of wages and working conditions obtaining in the country. R.A. 7305 or the Magna Carta for Public Health Workers of 1992 was promulgated to address policy issues on salaries and benefits for health care workers. Unfortunately, this law has been poorly implemented and has been further undermined in mid-1990s by the devolution of public health services to the local government units (LGUs).

Despite the problems related to the training/education, employment and migration of the country's health professionals, certain policy gaps exist: 1) "there is no official unified government policy in health human resource development; 2) there is no single government agency responsible for concerted health human resource development planning and management; and 3) there is no official information and data base of health human resources in the country". (*UP Forum,* July-August 2005). Added to these concerns is the chronic underfunding of the health sector, the government's sheer neglect of the people's health and the privatization of the health system that fails to create an enabling environment for nurses and other health personnel for employment and for productive use in the country (IBON, 2008).

This web of causes related to the situation necessitates policies on rational production and utilization of human health resources to make more efficient use of available personnel. It also necessitates policies related to compensation and management strategies, especially on public health personnel.

The number and types of health personnel produced should be consistent with the needs of the country. Most of the strategies involve education and training. This is ensured by policies related to rational production of human health resources. Therefore, there is a need for more effective regulation of nursing schools: the opening of new schools and the closure of non-performing schools of nursing. The moratorium on opening of new nursing programs must be strictly enforced.. This has implication in the Human Resources for Health (HRH) Master Plan 2005-2030 where the recruitment, retention, career development, compensation and benefit development for health human resources must be in place.

In the rational utilization of human health resources, it is important to look at the geographic distribution as well as using multi-skilled personnel. This implies developing innovative health sciences education experiments that can address the severe shortage of health professionals in rural and marginalized communities. Along this line, the mandatory service in underserved areas by new graduates can be explored. The institution of the National Health Service Act (NHSA) should compel graduates from state-funded nursing schools to serve locally for the number of years equivalent to their years of study.The University of the Philippines (UP) College of Medicine already has this in place by having anyone wanting to study in UP for a medical degree sign a contract of mandatory service for three years. Monetary and other forms of incentives can be explored for health professionals wanting to serve the country side. On a more holistic note, a long-term comprehensive health human resource development plan can be formulated.

Policies related to public sector personnel compensation and management strategies need to be designed to improve the productivity and motivation of

public sector health care personnel. This can include short term/immediate interventions such as increasing wages, increasing budget for health, holding national consultations with all stakeholders, improving regulation of nursing schools and rethinking commitments to the General Agreement in Trade and Services (GATS). Long-term strategic interventions can include a review of the over-all health care system.. Thus, health-related organizations such as the Professional Regulation Commission(PRC), Board of Nursing (BON), Philippine Nurses' Association (PNA), Association of Deans of Philippine Colleges of Nursing (ADPCN) ,Association of Nursing Service Administrators of the Philippines (ANSAP) , nursing specialty organizations and other interest groups should collectively work to prevent work-related exploitation, domestically and internationally.

If the Philippines were able to produce and retain enough nurses to serve its own population, there would be widespread support for additional quality nurse production and migration (Lorenzo, et.al., 2007) Attending to source country needs will also benefit the global health workforce and ensure improved quality of health care services for all.

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"The basis of great nursing in not only caring, but a commitment to a lifestyle that's dedicated to serving the people."

(Chestcore 2010)

Research Article

Home delivery in Southern Lao PDR: Challenges to Achieving MDG 4 & 5 Targets

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Keywords: *Home delivery, maternal and child health, Lao PDR.*

Abstract

This study investigated rural Lao PDR village women's views and experiences of recent, or impeding, childbirth to better understand barriers to maternity service usage. Lao PDR has the highest maternal mortality rate (MMR) in the South-East Asian region with very low utilization rates for skilled birth assistance and health sector delivery services. The study site, Sekong, a southern Lao province, was lowest in the country on virtually all indicators of reproductive and maternal health, despite several recent maternal health service interventions. The study's aim was to gain a fuller understanding of barriers to maternity services usage to contribute towards maternity services enhancement, and district and national policy-making for progressing towards 2015 MDG 4 & 5 targets.

A descriptive cross-sectional study was used. First, face-to-face questionnaires were used to collect demographic and reproductive health and health care experience data from 166 village woman (120 with a child born in the previous year, and 46 who were currently pregnant). In-depth individual interviews then followed with 23 purposively selected woman, to probe personal experiences and perspectives on why women preferred home birthing.

The majority of women had given birth at home, assisted by untrained birth attendants (relatives or neighbours). While seventy percent had accessed some antenatal services, postpartum follow-up attendance was very low (17 percent). Limited finances, lack of access to transport and prior negative health service experiences were important factors influencing women's decision making. Giving birth at home was seen by many, not just as unavoidable, but, as the preferred option.

Recent top-down maternal health initiatives have had little impact in this region. Improving maternal and child-health strategies requires much greater community participation and use of participatory action methodologies, to increase women's engagement in policy and planning and subsequent usage of health service developments.

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Introduction

Lao PDR, like the rest of the developing world, is striving to reduce maternal, infant and child mortality to meet Millennium Development Goals 4 and 5 (MDG 4 and 5) by 2015. The MDG 5 target is three quarters reduction in maternal mortality rate (MMR), and MDG 4 a two thirds reduction in under 5 mortality rate (U5MR) by 2015 (UNDP, 2010). Among the 68 countries in the MDG countdown, Lao PDR is one of 21 on track to achieve MDG4, but is considered most unlikely to achieve MDG5 (MOH, 2009).

Although the Lao PDR 1998 Safe Motherhood initiative was an encouraging development, the country still has the highest MMR in the region (Acuin et al., 2011); Lao PDR MMR was estimated at 480 in 2008, compared to near neighbors, Cambodia (290), Myanmar (240), Vietnam (56), Thailand (48), and China at (38) (WHO, 2010). Everyday at least two Lao women die due to pregnancy and childbirth problems. One in every 49 women giving birth is at risk of dying. In this region, Thailand has already achieved MDGs 4 and 5, China and Vietnam are considered on track to achieve MDG5 by 201; Myanmar has made insufficient progress, while Lao PDR and Cambodia have been identified as making steady progress (WHO, 2010).

The 2005 Lao National Reproductive Health Survey ((CPI, 2007) showed the majority of Lao women (85 percent) give birth at home with only 28.5 percent of children being born to women who had received antenatal care. Most (91 percent) of the births in Southern Lao took place at home and more than half (52 percent) of live births were assisted by relatives. The main reason for home births was the mothers' belief that it is unnecessary to deliver at hospital (76 percent). Several studies show that traditional cultural beliefs and decision-making practices influence birthing practices and choice of delivery site (Doussantouse, 2011; Eckermann, 2006: Eckermann & Deodato, 2008; Sychareun, Phengsavanh, Hansana, Somphet, & Menorah, 2009). Reasons for giving birth at home, even if complications are anticipated included: hospital attendance delayed by geographical barriers, traditional beliefs such as sacrificing an animal would protect them against complications, fear of mounting and unaffordable costs, and fear of unwelcome medical intervention (Yabuta, 2008).

Southern Lao PDR's Sekong province has the highest unmet need for reproductive health in the whole country and fares lowest on virtually all indicators of reproductive and maternal health and wellbeing; knowledge of family planning is 69.6 percent compared to the national average of 89 percent, and 85 percent of couples use no contraception compared to the national average of 61 percent. Only 6 percent of women deliver in the provincial or district hospital compared to 15 percent nationwide. Almost all births occur in the home (92.5 percent), compared to 85 percent nation-wide, and births are assisted by unskilled people such as mothers and husbands in 80 percent of cases, compared to 63 percent nationwide (District Health Office, 2011).

In 2006 a maternal health services needs assessment in Sekong's Thateng district found most babies (92 percent) were born in the villages; only 8 percent in a hospital (Eckermann & Deodato, 2008). Only 25 percent of reproductive age women used any contraceptive method. Thirty-one infant deaths were reported and one mother died across the 18 villages that year. Women often felt uncomfortable with the Western birthing position imposed in hospital births and preferred to give birth in the traditional position in the villages. Women from some ethnic groups gave birth outside, or, under the house without their husbands. All villages used a newly cut piece of bamboo to cut the umbilical cord rather than sterilized knives. Traditional Birth Attendants (TBA) or family members assisted at most births. In some cases women gave birth alone. Minority ethnic groups felt unhappy with the health system because they also considered that they were patronised or treated badly by health staff.

Although, health management systems had been upgraded and many maternal health intervention programs initiated in Thateng district, after a decade, maternal and reproductive health indicators had shown little improvement (District Health Office, 2011). This study was a follow-up study to Eckermann and Deodato's (2006) assessment for the need for a Maternity Waiting Home intervention that led to the “Silk Homes” project in Southern Lao PDR. Seventeen maternity waiting homes were built, in each of the 17 districts of Sekong, Saravan, and Attepu provinces to provide a place for women from isolated villages to await the birth of their child near a district hospital. As women from rural or isolated villages could not access a hospital if an emergency arose during labor, the Silk Home project provided safe places nearer to a hospital where women could stay while awaiting the birth. Each “Silk Home” provided a range of ante and post-

natal care, free medicines, and free delivery care. In addition, a per-diem allowance was paid for each day women were waiting to compensate for being away from the fields or other income generating activities. Initially women gave birth in the home itself but later all women were transferred to the district hospital at birth onset. However, despite the potential benefits of this initiative, the homes still remain under-utilized.

Over more than a decade the Silk Home project, and other maternal and child health initiatives, had proved ineffective in increasing skilled birth attendant, or hospital delivery service usage in this region. This study's aim was to further understand barriers/resistance to maternity services usage, as a way to enhance those services, and, to contribute to further district and national level policy-making for strategies to progress towards MDG 4 & 5 targets by 2015.

Method

This was a descriptive cross-sectional study with data collection in December 2011. The setting, Thateng district in Sekong province, was purposively selected given the lack of improved usage of maternal and child health services after a decade of maternity health services interventions. The district has 6 sub-districts: Thateng, Kokphoung-Neua, Thongvai, NongNok, Thonenoy, and Chula. The total population was 34,399, almost all (98%) from ethnic minority groups (Ministry of Planning and Investment, 2009). Among the 6 sub-districts, NongNok, with 7 villages (total population 3461; 54% female) and 8 different ethnic groups was randomly selected as the study area.

All 166 women in the sub-district who had a child in the past year, or were currently pregnant (120 births, 46 currently pregnant), were approached by their respective village "nai-bans" (leaders) about the study. All agreed to meet with the researcher (first author), and interpreter when necessary, and all subsequently agreed to participate. All spoke Laoloum (Lao national language) but, for many it wasn't their first language. As almost all participants were illiterate and unable to provide written consent an audio taped consent process was adopted. After explaining the research project and privacy/confidentiality provisions, the researcher tape recorded his invitation to join the study and each participant's verbal consent.

Ethics approval was obtained from Khon Kaen University's Humanities and Social Sciences Ethical Committee (HE 542073) and Lao PDR's Ministry of Health National Ethics Committee for Health Research. Permission was also obtained from the provincial and district health offices in the study area.

Data collection

Quantitative and qualitative data was collected. First, quantitative data was collected from all 166 participants using face-to-face questionnaires covering demographic and past maternal health-care data. A 19 point structured questionnaire was developed from previous research literature and validated by two academic experts in reproductive health and two working for local reproductive health NGO's (questionnaire available from first author). Qualitative data were gathered later, using in-depth interviews with a structured open-ended questionnaire to probe personal experiences and perspectives on why women preferred to birth at home. Twenty three participants were purposively selected for interview on the basis of having had either past delivery difficulties, or difficulties with maternal health services, and were thus considered to have potentially rich insights germane to the study's aims (nine had given birth in the previous year and 14 were currently pregnant).

Data analysis

Quantitative data was analyzed using descriptive statistics such as frequency, central tendency and percentages, using SPSS version 17. Qualitative data were analyzed using content analysis (Neuman, 2011; Silverman, 2005). Interview tape recordings were transcribed and checked for completeness with written notes. Separate ideas were then coded throughout the transcripts and cast into categories, with related categories eventually collapsed into broad themes.

Results

Demographic and reproductive health data

Maternal demographic data shows mean age of the 166 participants was 26.8 years (range 15-45 years). Almost all were married, the majority (85%) had no, or very limited, formal schooling and they came from a variety of ethnic groups. Table 1 displays demographic data.

Table 1. Demographic characteristics of participants who either gave birth in the previous year and/or were pregnant during the study (N=166) .

	N	%
Mean age 26.8 years (SD 6.8)		
Age distribution		
15-25 years	84	50.6
26-35 years	59	35.5
36-45 years	23	13.9
Marital status		
Married	164	99.2
Divorced	1	.4
Separated	1	.4
Religion		
Buddhism	16	9.6
Animism	150	90.4
Educational level		
No formal schooling	52	31.3
Incomplete primary school	90	54.2
Secondary school	13	7.8
Certificate of adult education	11	6.6
Ethnic group		
Katu	54	32.5
Gne	2	1.2
Taoy	17	10.2
Talieng	6	3.6
Alak	70	42.2
Xouy	4	2.4
Laoloum	13	7.8

Table 2. Reproductive health data of participants who gave birth in previous year (N= 120).

		N	%
Mean age at first child	18.7 years (SD 2.83)		
Mean pregnancies per woman	4.09 (SD 3.098)		
Mean children born per woman	3.83 (SD 2.83)		
Number of pregnancies per woman			
1		23	19.2
2-3		43	35.8
4-5		25	20.8
6-7		12	10.0
>7		17	14.2
Number live deliveries per woman			
1-3		76	63.3
4-6		20	16.7
7-9		18	15
10-12		6	5
Site of last delivery			
Home		94	78.3
Health facility		26	21.7
Prior experience with infant death			
All live births		73	60.8
Infant death		47	39.2
Delivery assistance at last home birth			
Trained birth attendant		11	13.5
Relative and/or neighbor		70	86.5
Antenatal care attendance in past 12 months			
Yes		83	69.2
No		37	30.8
Postpartum care attendance			
Yes		21	17.5
No		99	82.5
Postpartum traditional practice			
Yu Fai. (Use of charcoal fire beside/under bed)		90	75
Herbal medicine		30	25
Smoked cigarettes during pregnancy			
Yes		63	52.5
No		57	47.5

Reproductive health data of the 120 participants who had given birth in the previous year showed first child birth at a young age (18.7 years) and an average of 3.83 children born per women. The majority of deliveries had been at home (78.3 percent) and again the majority (86.5 percent) assisted by untrained birth attendants. Almost seventy percent had accessed some antenatal care services but less than 20 percent had followed through with postpartum care services. Full details are presented in table 2.

Reproductive health data from the 46 participants who were pregnant during the study showed most had given birth previously (89.1 percent), about 70 percent

had accessed antenatal services and over half (56.5%) were anticipating giving birth in a health facility. Table 3 displays their data in full.

Table 3. Reproductive health data of participants pregnant during study (N= 46).

	N	%
Birthing experience		
Previous deliveries	41	89.1
First delivery	5	10.9
Antenatal care visits		
Yes	32	69.6
No	14	30.4
Smoked cigarettes during pregnancy		
Yes	18	39.1
No	28	60.9
Expected birthing site		
Health facility	26	56.5
Home	20	43.5
Expected delivery assistance		
Skilled birth attendant	34	73.9
Traditional birth attendant	5	10.9
Birth alone	5	10.9
Don't know	2	4.3

Delivery experiences and preferences

Quantitative data above clearly show the majority of the women had opted for home delivery. Qualitative data revealed several themes underlying this option: Lack of funds for transport to health services and/or payment for services was common, as was expectations of easy births given prior experience. Prior negative experiences with health services also reduced the likelihood women would use health services in future. However, women with prior birthing complications felt they would be much safer in future with health centre or hospital assisted births.

Women who lacked funds for transport and services also often preferred unskilled birth attendants as first choice, such as husband, mother, and sister. They trusted the people selected, and maintaining personal relationships within the village. For example;

"I gave birth at home because I don't have money for transport. My mother assisted my delivery. I thought my mother could help me to give birth because my first baby was assisted by her too and now my baby is safe. For my next birth I am not sure where to give birth, if it is not a difficult birth I will give birth at home and if becomes difficult we will go to hospital" (Woman - 2 pregnancies).

"It is because there is no money and we have no transport that I gave birth at home. My husband and mother assisted with the births. I am afraid of unsafe birth too, but I had no choice. When we go to hospital we have to pay for services so I prefer to give birth at home" (Woman - 4 pregnancies*).*

"*My husband assisted both of my two babies at home. I had my last birth at home with my husband assisting because we cannot find anyone to help. We do not have money or a vehicle, so we didn't go to hospital. In addition, I cannot estimate the birthing date"*(Woman - 2 pregnancies).

"*All of my 5 babies were born at home. I gave birth at home because they came quickly and I had no time to go to the hospital. A midwife assisted me… I was shy to go to hospital and I was afraid of the cost. I was not satisfied with giving birth at home but had no money to go for hospital services. I would like the government to pay for my transportation. For the next pregnancy I will go to hospital*" (Woman with 5 pregnancies).

The majority of women claimed that they did not see the necessity for health centre or hospital assisted births given their previous successful home birth experiences. For them home birth was the preferred choice rather than driven by financial or other considerations.

"I prefer to give birth alone at home because my previous experiences in birthing were that they were easy and I had no problems. My mother can help me to cut the umbilical cord of the baby. I don't want to spend money for services I don't need" (Woman 3rd pregnancy, currently 5 months pregnant).

"If it is an easy birth, I will not go to hospital. I don't want any help from other people because I have always given birth easily" (Woman 9th pregnancy, currently 6th months pregnant).

Negative perceptions from previous health sector contact also underscored choice for birthing at home. Some reported that on previous hospital contact for medical advice during pregnancy they had been turned away because contractions had not started. Given the efforts they had made to attend hospital, they were now unlikely to seek medical assistance again. They said:

"If it is not difficult during the delivery I will give birth at home. When I attended at the hospital the doctor told me that my baby was not ready to be born yet so I came back home and don't want to go back again. If I do go back I will have to pay for transportation and services again" (Woman 7th pregnancy, currently 5 months pregnant).

"All my previous 5 babies were born at home. For this pregnancy, I still prefer to give birth at home. I would like to give birth at hospital but I am afraid that the doctor will not admit me. Twice before I have been to the hospital but they did not admit me and then I returned home and gave birth at home and I don't want to go hospital again. At home my husband assisted me without any problems" (Woman 6th pregnancy, currently 8 months pregnant).

"It depends on the circumstances. If it is not a difficult birth, I will give birth at home. My previous time in a hospital the doctor told me my baby was not ready to be born. I come back home and don't go back again (Women 3rd pregnancy, currently 9 months pregnant).

Previous experiences of complications and prolonged labor strongly increased the chances of preferring a hospital birth. Several women reported feeling safer in hospital;

"*I have planned for my coming baby to be born at the health centre or hospital because I need a doctor to assist. My previous experiences are that it took many long hours before the baby finally came out.*" (Woman 4th pregnancy, currently 8 months pregnant).

"For this pregnancy I will give birth at the hospital because I require the doctor's help because my previous birth was very difficult."(Woman in 8th pregnancy, 8 months pregnant).

Discussion

These findings clearly show home delivery and with unskilled attendants as the preferred delivery mode. This preference prevails despite new health care service interventions and programs in Thateng district, and fee-exemptions for maternal health care services for poor people provided through Lao Prime Ministerial Decree No.52 (1995) and *Health Equity Fund* support for transportation costs for delivery.

This pattern of home births mirrors data from provincial and nationwide surveys (Committee for Planning & Investment, 2007; District Health Office, 2011). and needs assessment research for establishing the Silk Homes maternity waiting homes project in the district (Eckerman, 2006). Little has changed over the past decade. The proportion of births attended by SBAs or TBAs is used as a proxy measure for maternal and child deaths and to track progress towards Millennium Development Goals targets (United Nations, 2009). Of babies born at home, only 11 (13.5%) were assisted by a TBA. Similar results were reported in the 2005 Lao Reproductive Health Survey (MoH, 2009) with 80% of Sekong births assisted by unskilled people. This does not auger well for Lao PDR meeting MDG 5 by 2015.

Lao health ministry policy as well as health intervention programs are intended to encourage women to deliver in health facilities with skilled birth attendants to minimize complications. However, many women's experiences of previous healthy home deliveries make health sector assistance appear unnecessary. Limited economic resources and prior negative experiences with the health service appear as barriers to health service usage making health facilities inaccessible or seen as the last resort for delivery.

Current results are similar to those in other Lao provinces (Sychareun, Phengsavanh, Hansana, Somphet, & Menorah, 2009), and other developing countries such as Afghanistan, Tanzania and Indonesia (Kaartinen & Diwan, 2002; Mrisho et al., 2007; Titaley, Hunter, Dibley, & Heywood, 2010). The experience of antenatal care visits did not change delivery practices in this study. Most women who had at least one ANC visit still chose home birthing. However, results were different in rural Cambodia where antenatal care attendance was a

significant determinant of facility delivery, though more ready access to transport in Cambodia, even in rural areas, may contribute to this (Yanagisawa, Oum & Wakai, 2006).

Contact with maternity services did not appear to increase understanding of advantages for birthing in health facilities. First-parity women claimed they did not know a safe place for their delivery, or, who they could call upon for birth assistance. This is consistent with reports that other maternity health education campaigns have not had behavior change impacts (Ministry of Planning and Investment, 2009). Many felt it was time-wasting to wait at hospital for birthing, rather than as an opportunity for child care and health education. Notably, when women were turned away from the hospital because labor was not advanced enough, they rarely returned.

These results are consistent with earlier observations about women's responses to the health system when they felt that they were patronized or treated badly by health staff (Eckerman, 2006). Economic, geographic, and social factors also influenced these women's decision making about place for birthing, such that home delivery was not just seen as unavoidable, but, as the preferable option. Furthermore, maternity health interventions for example, the Silk Homes project did not bring about sustainable changes to maternity facility utilization or use of skilled attendants or midwives.

Conclusion and recommendation

Preference for home delivery, either alone, or, with unskilled birth attendants, hinders maternal and infant health improvements in Lao PDR. In this study women's satisfaction with previous home deliveries, limited transport or funds, and, prior negative experiences all appear as contributors to very low maternity health service usage. Maternity-focused public health services provided by national, provincial, district and local health offices are typically “top-down” and do not engage local communities in planning and decision-making about service provision or evaluation. Trust in, and a sense of community ownership of, health service is low, no doubt contributing to low service utilization.

To more fully understand current problems and barriers to maternity service provision women's views must be actively canvassed. Future researchers should use more appropriate methodologies such as Participatory Action Research (PAR) to enhance the chances of getting active engagement from the communities themselves. Understanding rural village women's lived childbirth experiences should add significantly to building strategies for improving maternal and child health development in Lao PDR.

Acknowledgements

This study was part of the first author's requirements for a PhD in Public Health at Khon Kean University, Thailand. Funding support was provided by the Faculty of Postgraduate Studies, University of Health Sciences, Lao PDR, Postgraduate School, Khon Kaen University, Thailand and Faculty of Arts and Education, Deakin University, Australia. Special thanks to the mothers who participated in this study for sharing their experiences and to government officials of Thateng district and Sekong province for their cooperation. Further thanks are due to AusAID for funding the Australian Leadership Award Fellowship which allowed the first author to spend three months at Deakin University furthering his research and publication skills.

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Research Article

Learning with Communities: Structures and Mechanisms for Reproductive Health Programs among Indigenous Peoples of the Cordilleras

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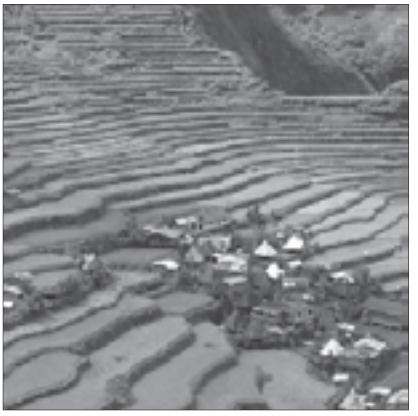
Ma. Visitacion Perez-Molintas

Abstract



This paper attempts to capture how the principles of Participatory Action Research (PAR) were put into life in the integrated reproductive health (RH) programme in the Cordilleras, Northern Philippines. Document Review and interviews of program staff were utilized to learn from the field and data were derived from participatory methods such as Group and Team Dynamic Methods, Interviewing and Dialogue Methods, Sampling Methods, and Visualization and Diagramming Methods. Results show that Community Needs Assessment, (CNA) as a baseline for integrated planning of programme partners, laid a PAR framework for the entire development process. With the guidance of the integrated RH framework, the CNA ensured relevant and correct interpretation and analysis of data which then led to meaningful plans, actions and partnership, having gained the acceptance of communities. Community structures – People's Organizations with Health Committees that oversee income generating projects and RH education activities in the *barangays* (villages)[2], were strengthened; partnerships with the *Barangay* Councils (BC) and the *Barangay* Health Stations (BHS) are continually enhanced to make policy formulation and service delivery more responsive to RH needs. Through this, the community was presented as a powerful unit of identity that builds on the strengths and resources of the community. The experience revealed that co-learning and capacity building can be promoted, and knowledge generation and intervention is integrated. The experience also emphasized the local relevance of public health problems (RH in this case) and the multiple determinants of health and disease including biomedical, social, economic, and physical environmental factors. To the researchers, it has been an inspiring and empowering experience to grow and learn with the people.

Key words: *Participatory action research, reproductive health, gender, population development, training/community education, advocacy, networking*

Introduction

Participatory action research (PAR) has long been recognized as a methodology for intervention, development and change within communities. This claim has been supported by the work of many international development agencies, university programs and local community organizations around the world. Lewin wrote about 'action research' as early as 1946 in his paper “Action Research and Minority Problems” while

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[2] *Barangay is the local term for village, the smallest administrative unit in the Philippines.*

Susman's work on Action Research: A socio-technical systems perspective was published in 1983. PAR has been used extensively in the social sciences after these seminal works.

More recently, Wadsworth (1998) defined PAR as research that involves all relevant parties in examining problematic action through reflection on historical, political, cultural, economic, geographic and other contexts. In bolder terms, Mustafa describes PAR as it "involves the political participation of the oppressed and exploited classes in conducting research on the causes of their exploitation (in Carlos and Santos, 1993)." It is because of these characteristics that PAR separates from other types of research. O'Brien (1998) aptly explains, PAR is "learning by doing" where a group of people may identify a problem, do something to resolve it, observe how the results of their efforts, and if not satisfied, repeat the process. PAR also strongly emphasizes scientific study where researchers not only study the problem but ensure that theoretical considerations are guided by scientific study.

PAR, as a framework, has been modified many times. One variation of which is action research, which validates academically-formulated theories through the people. Another variant, labelled as participatory research, raises awareness by objectifying their situation and by closely looking at the data and information collected. In particular, this paper focuses of PAR's principles and and how these were pursued in learning experience for the promotion of reproductive health (RH).

Background

In 1978, the World Health Organization (WHO) adopted Primary Health Care as an approach in achieving its goal of Health for All by the year 2000. This goal was later update to be included in the eight (8) Millennium Development Goals; the fifth of which pertained to RH. Despite all the global and local initiatives, the goal of "health for all" is still a challenge. The rural poor remain to have less access because of the concentration of resources in the urban areas. The lack of financial resources, limited knowledge of health matters, and limited access and use of health services have handicapped the disadvantaged. Part of the efforts at alleviating health standards is the development of poverty-oriented reproductive health goals for monitoring progress in the health of the poor.

The UNFPA 6th Country Programme of Assistance for the Philippines (CPAP) aims to improve the reproductive health of Filipinos through better population management and sustainable human development and is guided by the principles of the International Conference on Population and Development's (ICPD) and its mission of assisting developing countries in addressing reproductive health by ensuring universal access to high-quality RH services by 2015. A country review in the Philippines was conducted to improve the efficiency and strategic direction of the UNFPA reproductive health programmes. The country review yielded several recommendations for the Department of Health, including: (1) to take charge of the RH programme and develop an operational strategy, a phased implementation plan, and organizational structure and a realistic budget and; (2) take the lead in preparing its 10-year investment plan and coordinating donor investment to support the projects on reproductive health (UNFPA, 1999).

The UNFPA 6th CPAP directed its resources to ten pilot provinces prioritized according to key poverty and reproductive health indicators, such as: population size; maternal mortality rate (MMR); infant mortality rate (IMR); contraceptive prevalence rate (CPR); proportion of moderately and severely malnourished children; percent of births attended by skilled workers; income class; poverty index; high school drop-out rate; and high school survival rate. Aside from the fact that it was one of the 10 poorest provinces in the country, Mountain Province[3] was identified most in need of an integrated reproductive health programme based on the following baseline RH situation in 2005:

1. Sustained and thorough-going IEC seemed to be lacking as manifested by the decreasing coverage of pre-natal and post-partum services and the differentials in FP performance across municipalities.
2. There was no mechanism for the pro-active detection of emerging health issues like sexually transmitted diseases (STDs).
3. Majority of the barangays (villages) in Bontoc and Sagada did not have their own Barangay Health Station (BHS), while those in Paracelis were either in deteriorating condition or geographically inaccessible to other sitios or parts of the village.
4. There was no program related to adolescent sexuality and RH or life-skills building, whether in school or the communities.

[3] *Mountain Province is among the six provinces of the Cordillera Administrative Region (CAR), a region located in the northern part of the Philippines.*

5. Violence Against Women (VAW) was admittedly a growing concern but data was lacking to establish the extent of the problem. IEC on VAW was lacking. There was no clear policy on VAW nor was there a clear referral system for handling VAW cases.

In response, strategic interventions were developed along three major components -- population development, reproductive health and gender. Congruent to primary health care's principle of community participation, PAR has been deemed appropriate for the development of integrated RH programmes specifically in the Cordilleras. This approach involves the people in the process of decision-making, planning, and project implementation to solve their community problems or issues.

Conceptual Framework

PAR is a continuous process which starts with the identification of major issues, concerns and problems and the initiation of research. This research, in turn, is expected to originate action, from which lessons may be learned and new research questions raised. Participants continuously reflect and proceed to initiate new actions on the spot. Outcomes are difficult to predict, challenges are sizeable and achievements depend, to a very large extent, on the researchers' commitment, creativity and imagination. Gerald Susman (1983) distinguishes five phases to be conducted within each research cycle and action (Figure 1).

Initially, a problem would be identified and data collected, followed by a collective postulation of several possible solutions, leading to a single plan of action to be implemented. Data are collected and analyzed, findings are interpreted and the problem is re-assessed, leading to another cycle of the process. This process continues until the problem is resolved. Learning and insights were derived in all these phases using triangulation of methods.

Figure 1: *Adapted from Gerald Susman (1983)[4]: Five phases of the PAR cycle*

Study Context and Methods

More than 4 years of implementing PAR with LGUs and pilot/expansion communities in the Mountain Province enabled the integrated RH programme to lodge complementing structures and mechanisms in achieving program goals and outcomes towards improving the RH of indigenous peoples in this part of northern Philippines.

The Philippine Health Social Science Association in the Cordillera Administrative Region (PHSSA-CAR)[5] has worked as the local NGO partner for RH demand-generation under the UNFPA's 6th CPAP. It has stood as the catalyst for generating, disseminating and applying knowledge generated from the Community Needs Assessment (CNA) conducted in Mountain Province. It linked the LGUs to the communities in raising awareness about the needs at the

[4] Gerald I. Susman is credited with establishing Action Research in his seminal work: Action Research: A socio-technical systems perspective, edited by G. Morgan and published in 1983 by Sage Publications.

[5] PHSSA-CAR is a non-government organization guided by a vision of persons, groups, and communities coming from different work settings, experiences, backgrounds and disciplines, working together as partners, sharing their knowledge, expertise and resources in promoting the health of the people through empowering strategies. PHSSA-CAR is also committed to the development of health social science as an integrated domain of effective, accessible and responsive health policies, programs, and services.

grassroots. In turn, the communities were able to demand for and assert their RH needs. While the LGUs were continuously being strengthened to provide RH information and services (supply), PHSSA-CAR focused on generating quality RH information and services. Thus, effective mechanisms were developed and access and utilization of RH information and services were also increased.

PHSSA-CAR worked in 25 project *barangays* in the Mountain Province from 2005 to 2009, starting with 10 pilot *barangays* in 3 municipalities and later in 2008, included 13 expansion *barangays*. The four-year experience of PHSSA-CAR in PAR and project implementation under the UNFPA 6th CPAP is summed up as: community needs assessment and objective setting; project development and start-up activities; implementation of community-based initiated (CBI) projects; group enhancement activities and municipal-level federation building of people's organizations (POs); group sustaining activities and beneficiary expansion of CBI projects; expansion of CBI projects and support network for RH; and monitoring and evaluation (M & E).

The experience enabled program partners and other players to gather valuable lessons as the researchers strove to collate the results and learning presented here in the context of the PAR process and the different phases in implementing the integrated RH program in the Mountain Province. Review of documents provided a wealth of secondary data and interviews of program staff, communities and partners drew out insights and infused life to the stories of learning from the field.

As per the recommendations made by Huberman and Miles (1994), data collection and data analysis were combined into an interactive process. The analysis phase included all the stakeholders and sources of information. Interpretations and explanations were offered and the participants in the study were the members of the community themselves. Also, by conducting analysis as a joint activity, the team brought its perspectives forth into the discussion, as an opportunity for dialogue and debate about the findings.

Ethical Considerations

As researchers, we dealt with several ethical issues. Several methods were used to ensure utmost integrity protecting the rights of the participants. Free prior informed consent was solicited. Even as partners in the community, full disclosure was given on what study/project was about. The research concept and framework was presented and received approval from the officials at the provincial, municipal and *barangay* level. Through community assemblies at the *barangay* levels, the research concept was presented. We disclosed the end users or stakeholders with access to study results/data; funding; methods used and the specific roles of the participants. The nature of PAR required the participation of the people in the communities in all the phases of the project. The process of organizing complementing structures and mechanisms in achieving program goals and outcomes towards improving the RH of indigenous peoples in this part of northern Philippines was documented, analyzed and validated through a feedback session in the communities. Actions/activities were analyzed with the players which brought perspectives to discussion and an opportunity for dialogue and debate about the findings. These enhanced the trustworthiness of the data as they become springboard for the next action/s or step/s.

Findings

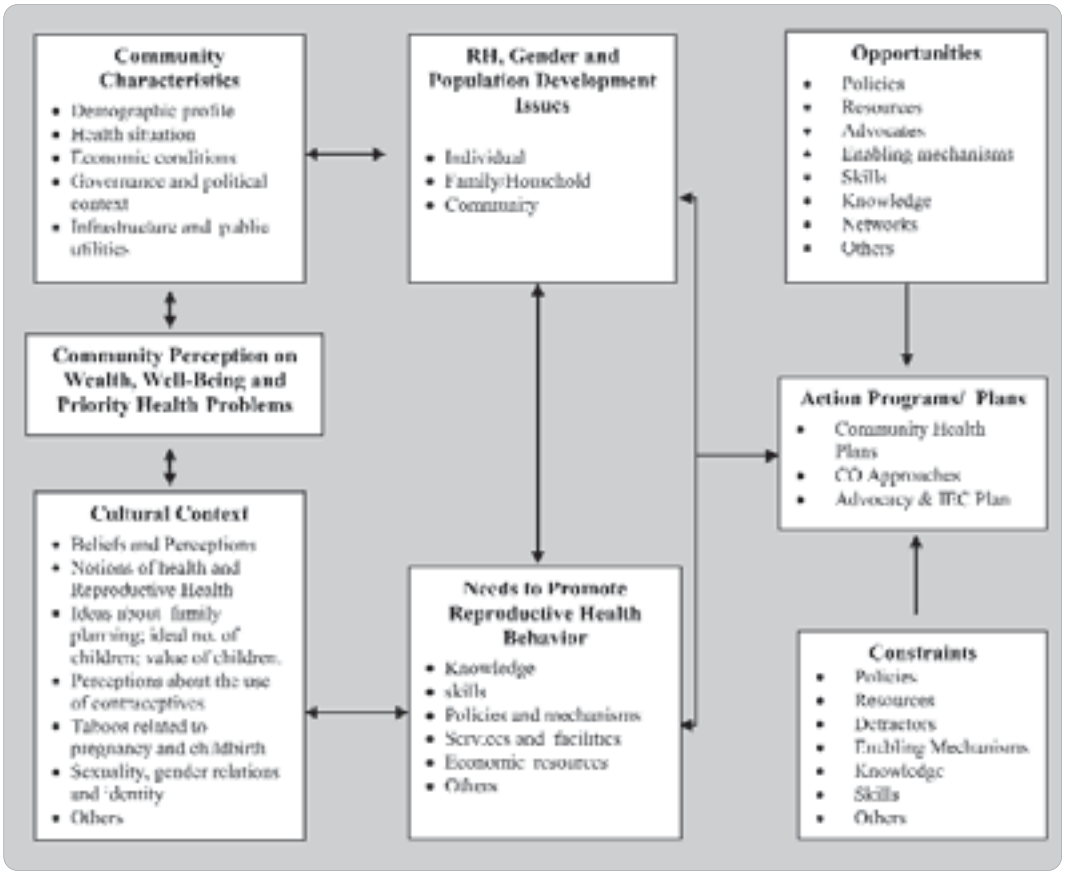
The following sections present the various facets of learning with the communities as we journeyed with them in forming structures and mechanisms for RH Programs. Data presentation follows the five phases of the PAR process adapted from Susman (1983).

Diagnosing: Community Needs Assessment

Community Needs Assessment (CNA) was the first phase in the implementation of the integrated RH programme in the Mountain Province. PHSSA-CAR, through its community organizers (Cos), facilitated the CNA in late 2005 in the pilot municipalities and took 10 months to complete the entire process of data collection, analysis, and report writing.

The CNA gathered baseline data to assess the RH needs and provided information from which future plans and interventions were based. Among others, the CNA described the health situation and summarized key problems and possible solutions. Sexual and reproductive health issues and related concerns were articulated which led them to analyze and reflect on their family and community conditions, problems and needs that are inter-linked to health and well-being, thus enabling them to have an integrated perspective of RH.

Figure 2. *Analytical Framework for the Community Needs Assessment*



The CNA as designed by Sobritchea (2006, Fig. 2) and aimed to: generate qualitative information on prevailing beliefs, values and norms on health, sexuality, gender and local governance issues; provide a political, social, economic and cultural context of reproductive health problems; identify the needs of the community by sex, age, and civil status; determine proposed actions for resolving problems by various stakeholders, and develop a community vision for health. Its framework called for the generation of 7 data sets from the following research methods: 1) wealth ranking and mapping; 2) free-listing of problems; 3) focus group discussions (FGDs); 4) case studies; 5) key informant interviews; and 6) secondary data gathering.

Correct identification and analysis of RH-related problems and concerns through the CNA led to RH interventions that were identified in the planning sessions with the communities. By assessing the state of RH-related programs and services at the community-level, and the prevailing perceptions on well-being and health in the community, the CNA created an initial demand for integrated, responsive, high quality and sustained RH information and services, especially for youth and adolescents, mothers and children. The findings helped identify the essential elements by which to respond (supply side) to the needs and concerns of the communities (demand side). The identified gaps in RH information and services determined the output indicators towards increased community awareness, and stronger community mechanisms and structures for integrated health planning, advocacy, resource-sourcing and service delivery.

Co-construction/Action Planning: Considering alternate courses of action

The list of responses to problems in the CNA served as the basis of the action plans and proposals for community-initiated projects. Results showed that the lack of income opportunities ranked high in all the pilot sites and it came up persistently alongside problems like maternal and reproductive health, violence against women, and the lack of water and the presence of external threats. The findings, interpretations and conclusions were presented to the community members, for the following purposes: 1) for comments and suggestions; and 2) to draw out specific proposals, plans, and recommendations for the formulation of a people-based, gender and culturally-sensitive and people-managed action plans dependent on identified needs, issues, and aspirations.

The co-construction of the RH programme followed. It focused on strengthening peoples' organizations (POs) and setting-up income-generating projects (IGPs) that

incorporate RH services. Working meetings were organized to develop a program to promote their own well-being as co-clients of the municipal and provincial health care setting. The discussions involved the creation of health committees of POs, the raising of counterpart funds for the POs' start-up capital, the creation of organizational savings for health and reproductive health emergencies, the generation of health and RH funds to augment the existing budget for essential drugs and family planning (FP) supplies, individual or household savings for RH, and the conduct of RH and gender information, education and advocacy. This approach involved stakeholders as principal players in the process of co-construction of programs aimed at meeting their needs (Guba & Lincoln, 1989), in accordance with the principles of participatory action research (Henderson, 1995).

Taking Action/Community-based Initiatives: selecting a course of action

Community Organizing (CO) was utilized in the planning and implementation of RH. It was also used in the organization and strengthening of core of organizations working for reproductive health and rights in the three municipalities; and strengthened coordination between community RH networks for an integrated CNA-based health development. Planning and implementation were identified as output indicators for the component of capability building.

The communities were strengthened with knowledge and encouraged to assert the utilization of high quality RH information and services. Officers and project teams worked for extended hours of discussion and paperwork to complete all other requirements in the criteria checklist for CBI projects. Such requirements included Constitution and By-Laws, minutes of meetings, election of officers, policies on how to utilize earnings from CBI, Memorandum of Agreement for the CBI projects, and opening of bank accounts of recipient organizations.

PHSSA-CAR, with the assistance of different POs, drew up, discussed and explained basic guidelines and terms on the use of the CBI funds. The guidelines and policies developed by the POs were finalized together with the LGU partners. Before project approval and release of funds, the project proposals were presented to program partners at the municipal level for validation. Community assemblies and project orientation of POs were likewise required for review of guidelines before fund release and project implementation. Awarding of funds for CBIs was guided with conditions and agreements stipulated in the Memorandum of Agreement signed by the local partners involved.

Following the release of funds, start-up activities were conducted for managing community projects and resource mobilization for RH. Project management policies and structures, implementation and budget plans were further reviewed. Moreover, project-based training was conducted to provide hands-on knowledge on their CBI projects, credit management and savings mobilization, project M & E.

The latter phase of the CBIs involved deepening of RH awareness and organizational capacity of POs to manage the projects and sustain RH outcomes. At this stage, the POs were strengthened to conduct planning and networking for generating local and external resources for community initiatives and participatory resolution of priority RH problems.

Monitoring and Evaluating: studying the consequences of an action

Evaluation in the action research process took place throughout the study and during evaluation, as both stages were assessed. Questions were asked and reflected on, such as: Are we using the correct instruments? Are we getting the data we need? Who else do we need to interview? Is the process working? These questions kept the focus of the project. In the process, the main facilitating and constraining factors affecting implementation and the achievement of results were derived.

This phase was a reflective critique of the content of the co-constructed RH programme. Both quantitative and qualitative methods of evaluation were utilized but qualitative evaluation methods such as on-going/built-in evaluation; process documentation on program implementation, involvement of stakeholders in the implementation of the programme, strengths and constraints in program implementation, sustainability and replicability of the programme were given more weight for this study.

Specifying Learning and Insights: Identifying general findings

The quality of research output was achieved for baseline study on which future integrated programme

interventions in the different components were based. This was attributed to the following factors such as: a clear and integrated framework for analysis and methodology that provided an overview of the information needed (thru the data sets) and how these are interrelated; the CNA tools (FGD/KII guides) are exhaustive but identify the most significant information for more focus and probing, given the time constraint for the discussions; technical assistance of consultants whose expertise were sought for the CNA reports; research staff with research training and experience, and dedication to the completion of the task regardless of continuous and rigorous fieldwork; the reliability and validity of data was ensured with the hands-on involvement of the staff in the CA process, closely working with the consultant/s in doing write-ups and editing; staff workshops with the consultants; and field demonstration of FGDs/KIIs in the first *barangay* and team reflexivity sessions that helped improve the facilitation skills of COs and the process of FGDs.

Factors that facilitated continuing community education and behavior change communication (BCC) for RH led to the formulation and implementation of responsive policies and services for integrated RH. The CO approach was vital for utilizing the CNA results and PO meetings as continuing activities for BCC and policy advocacy at the *barangay* level, and networking for implementing the integrated RH programme at the municipal and provincial levels. The CA activities spurred interest on issues related to adolescent sexual and reproductive health (ASRH), and led to community education sessions of POs that integrated RH issues especially for out-of-school youth (OSY). LGU partners consciously integrated services for young people, although these were made under the provision of information for awareness-raising. Assistance and support of programme partners, as well as that from the academe, helped in developing community skills and potentials for locally appropriate forms of IEC. A theatre workshop became a venue for enhancing understanding and skills at dissemination of SRH issues. Follow-through workshops were conducted with the collaboration of the LGUs, NGO and partners from the academe.

Strengthening the knowledge and skills of POs and local partners was attributed to key CO approaches. A grasp of issues and social and cultural dynamics gained from the CNA and initial community integration are the primary assets for development. This participation kindled their enthusiasm for training and capability building activities and to facilitate the formation of core groups of POs that later on managed CBIs. The support of *barangay* leaders and health service providers facilitated the coordination for community orientation and assembly meetings. Continuing community education and the integration of RH-related concerns in community activities, as well as the complementing of NGO and LGU/RHU resources and expertise to facilitate RH education and deepen RH orientation (health/economics – RH link), were effective strategies for sustaining community action.

Identifying RH-related needs facilitated project conceptualization and development. The core of community leaders initiated and motivated project planning and implementation with community health workers throughout the process and technical assistance of LGU partners and resource persons were seen as a great help. Regular monitoring proved vital in providing technical assistance for proper project orientation and management.

Improved partnership and networking efforts to coordinate at the municipal level for conduct of activities on RH education, IEC and CBIs facilitated community activities. Monitoring and evaluation were facilitated with regular assessment at the level of PHSSA-CAR. Programme reviews helped partners arrive at a common perspective. Conduct of intensive programme evaluation was significant in directing integrated programme planning and implementation based on a common framework for assessing achievements and areas for improvement, and in refocusing future plans on clear programme direction.

Nonetheless, some challenges were met in the course of PAR and program implementation. The CNA has built-in limitations in terms of IEC inputs and organizing based on the framework and ethical standards of research. Thus, follow-ups were necessary in the succeeding steps of PAR, or with CO as a key approach. Significant gaps in the RH knowledge of CNA participants necessitated deeper probing and more time during FGDs/KIIs. Such gaps were opportunities, since these identified needs for IEC and RH service delivery, which the programme sought to address. Health service providers have basic knowledge and training on MCH and FP but most are still unfamiliar with RH concepts and components. However, low realization and awareness of SRH and rights of the project communities is an opportunity as well for community organizing.

The geographic distance between *sitios* in the *barangays*, especially in Paracelis, limited the reach of CNA findings and had an effect in the balanced representation of CNA participants, and. Inaccessibility and underdevelopment have affected the cost and timetable of the CNA.

Continuing community education has been utilized in disseminating community and sectoral RH needs, issues and concerns. It is also a regular activity of POs through CBIs. However, improved RH knowledge and practices, as well as the assertion of SRH, were constrained by the inadequacy of resources and policies for RH-related services in the communities. The concrete benefits from CBIs paved the way for the POs'/communities' acceptance and participation in the income generating projects.

Although capability building as a means of responding to RH needs was facilitated through community organizing, intensive overall and technical support to POs and community leaders were needed to sharpen their skills on integrated health planning and management. The very limited number of COs also constrained the time and depth of community organizing, taking into consideration the geographical condition of the *barangays.* Modifications in project components and parallel changes in organizational systems and project documents of CBIs in some *barangays*, as well as the dynamics between sitio-cluster members, barangay officials, old versus. the relatively new PO members delayed decision making and project implementation.

Networking was limited to coordination and orientation activities rather than in collaboration. Partners were more concerned about their own deliverables and timelines instead of integrative approaches and collaborative work attitudes among partners to achieve more meaningful results of networking. Gaps and dynamics were perceived to hinder better networking for efficient program planning and implementation of activities.

Learning with the Community: Specifying learning and insights Drawing lessons and insights from the field

Given the above factors on facilitation and implementation, the knowledge gained from research, capability building, M & E activities conducted in the course of the PAR and the RH programme were used to improve project performance.

Awareness building and advocacy gained improvement in terms of the depth of orientation through the POs and the CBIs. However, a more sustained, focused and synchronized advocacy plan can lend a greater impact in pushing for policy support for RH and gender. Although the PO members were aware of their roles, they had yet to find the resolve to take up the challenge.

Integrating the CNA entailed discussions and analysis among the COs and the project staff. This presented opportunities to deepen their understanding of RH issues and dynamics. Activities continuously took shape for awareness and capacity building, and for the CBIs. The need to align and link different activities for the desired RH outcomes and outputs were seen as important for the consideration of COs and partners. Similarly, the need to integrate in continuing community education to underscore the relevance of the programme and further encourage community participation needs more attention.

Initial efforts were made to integrate the CNA results to emphasize the importance of including the identified RH-related concerns in community development planning. Such sessions revealed gaps, skills and integrated approaches for community development planning. This revealed the need for better working relations and for the strengthening of health structures primarily tasked for health planning and implementation. The PAR experience and project implementation proved the necessity of partnerships and collaboration to maximize opportunities, technical and material resources for an integrated health and RH development work in the project areas. The project's progress and success depend largely on this factor. However, experience shows the need for greater efforts to work together based on a common understanding of programme framework and orientation.

The strengthening of RH support networks and the upgrading of local health system provided the impetus and basis to set up mechanisms for increased access to comprehensive high quality RH information and services. The LGUs, local health systems and other partners have been oriented on programme directions. Nevertheless, local implementing partners need to seriously work for integration of plans and activities. The RH component, along with the components on Gender and Population Development planned and worked together to address the gaps in institutionalizing policies, structures and mechanisms to integrate and sustain earlier gains, and to advance the programme towards concrete. Such efforts of programme partners are envisioned to provide the vulnerable communities greater access to and utilization

of high quality integrated RH services, which is part and parcel of basic social service delivery.

Discussion

This particular PAR experience illustrates its social dimension and ability to solve real-life problems. For example, the identified RH needs and problems stirred awareness and desire to act; provided the context for relevant plans of interventions; and prepared partners for the programme implementation. It contributes both to the practical concerns and the goals of social science. Indeed, there is a dual commitment to study a system and to collaborate with members of the system towards redirecting it towards progress. Accomplishing this twin goal requires the active collaboration of researcher and client, and stresses the importance of co-learning as a primary aspect of the research process. It is an approach that promotes "democracy to become reality" (Ataov 2007, p. 333).

The local partners and community members were aware of the impact that their participation in the process will have on their lives. They considered the differences of those concerned in order to establish support for an effective RH programme. The experience also emphasized the local relevance of public health problems and the multiple determinants of health and disease including biomedical, social, economic, and physical environmental factors. PAR implies "ongoing social learning that ought to lead to personal and institutional transformation". The PAR process is cyclical and iterative, and research goals are not always known at the beginning of work with a community (Blackstock, Kelly and Horsey 2007, p. 726). The movement toward improved action, according to Wadsworth (1998), involves an imaginative leap from a world of 'as it is' to a glimpse of a world 'as it could be.' Where existing situations benefit or promote some but disadvantage or subordinate others, the creative change may be construed as 'political'. Collie, Liu, Podsiadlowski and Kindon (2010, p.147) contend that "researchers committed to PAR ethical principles must be prepared to adapt the process so that it best meets what the community want to achieve." Also, Winter & Munn-Giddings (2001) argue that PAR involves the principle of r*eflexive critique* which ensures that people reflect on issues and processes and make explicit interpretations, biases, assumptions and concerns upon which judgments are made. Practical accounts can give rise to theoretical considerations through the evaluation process.

Regular and periodic M & E identifies the current gaps and emerging problems in project implementation and operation, and actions to mitigate them. The role of the CO is important in M & E, and in rendering appropriate technical assistance. However, it serves the organizations and the projects well when the members themselves have developed the skills to monitor their own projects which build their capacity to analyze, draw lessons and plan enhancing measures, thereby generating ownership of the project. Crafting their own process and success indicators is a means of matching the projects' plan of action with the needs and aspirations of. Sustainability of the project therefore is increased with the benefits derived from answered needs.

The experience showed the importance of giving attention to community dynamics and other factors that are external in project development. Relations and coordination with the local political machineries should be developed to level out roles and potential support of community stakeholders in the project. LGU partnership is essential in the sharing of expertise, providing resources, supporting activities, active involvement in M & E, technical support for improved coordination with community partners and development workers. It facilitated the implementation of the projects. Moreover, the LGUs through its network can provide the legitimate representation and participation of the community in development planning and economic programs.

After this, initial efforts were made to integrate the CNA results in order to emphasize the importance of including the identified RH-related concerns in community development planning. Such sessions revealed gaps, skills and integrated approaches for community development planning. This surfaced the need for better working relations and to strengthen the health structure primarily tasked for health planning and implementation. The PAR experience and project implementation proved the necessity of partnerships and collaboration to maximize opportunities, technical and material resources for an integrated health and RH development work in the project areas. The progress and success depend largely on this factor. However, experience shows the need for more efforts to work together based on a common understanding of programme framework and orientation.

Monitoring visits are sources of continuing learning for improving programme performance. It helps identify the progress of project conceptualization and to generate insights on program-related problems and concerns, and strategies/solutions, given the resources and capabilities of the staff. Monitoring and Evaluation facilitates programme integration and determines strategies and approaches in each component, ensuring common programme direction and focus. Integrated planning, implementation and service delivery establish the core message for advocacy that

connects the activities and services together; synchronize the conduct of activities; and allow pooling or sharing of resources. Thus, players' work are complementary to each other for the goal of achieving greater programme impact.

Conclusion

More than four years of continuing PAR and programme implementation paved the way for the installation of complementing structures and mechanisms intended in achieving program outcomes. The CNA as baseline for integrated planning of programme partners was completed through PHSSA-CAR. Community structures that would oversee CBIs and RH education activities in the *barangays* have been formed, though their partnerships with the Barangay Councils and the BHSs/RHU have yet to be enhanced to make policy formulation and service delivery more responsive to the identified RH needs.

The CNA activities and deepening RH education built community awareness of RH needs and rights that spurred the project barangays to articulate and take on initiatives to address the gaps in resources, information and services for RH. The operation provided an opportunity to access livelihood, resources and services for health and RH. Sustaining their growing RH consciousness and strengthened capacity to access health and RH resources and services has enabled them to increase the clamour for comprehensive health service delivery that includes quality RH information and services.

Programme reviews still lacked an overall perspective and were more focused on each partner or component's list of accomplishments. Strategies for stakeholders to support and complement each other need to be strengthened. Programme M & E has not yet given way to a more integrated planning that should identify periodically monitored and assessed process indicators. However, the experience has shown that PAR can promote co-learning and capacity, and integrates knowledge generation and intervention for their mutual benefit.

The PAR experience has illustrated that empowerment can be attained through the development of common knowledge and crucial awareness. The experience recognized the community as a powerful unit and the process builds on the strengths and resources within the community. PAR also facilitates collaborative, equitable partnerships and involves an empowering process. In this experience, a true collaborative research process showed the investigators and communities working together to define the problem, collect data, and interpret results. This nature of PAR was the major challenge and will continue to be for all researchers -- that is to design a process which can result in maximum creativity and imagination.

Indeed, PAR, as illustrated by this experience, involves a long-term process and commitment. It is critical for researchers to continue working even when they are no longer funded to do so.

Acknowledgement

The program where the study was generated from was supported by the UNFPA. The authors would like to sincerely thank the indigenous peoples of the Cordilleras who unselfishly generated the data with us. In the process, we became better development workers as we learned with them. Also, we wish to thank the UNFPA Program officers who assisted us along the way, together with the community organizers cum researchers.

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Research Article

Transforming Nursing Education and Practice through Emotional Intelligence

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Key words: *Emotional intelligence, nursing education, nursing practice*

Abstract

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Emotional intelligence (EI) and its potential to transform nursing education and practice were examined using available literature. The concept of EI was explored and its relationship with intelligence quotient, a traditional indicator of success, was discussed. Current literature indicates EI's potential to enhance an individual's chances of success in his or her career. As a relational based discipline, the integration of EI with nursing education and practice may potentially contribute to the transformation of the nursing profession. Further studies are required to more accurately measure or understand the various facets of this uniquely human and personal skill and how it directly relates to success in higher education, nursing education, and nursing practice, and ultimately transform nursing practice.

Introduction

Emotional intelligence (EI) is a relatively new concept in the field of nursing. This concept was initially introduced by Salovey and Mayer (1990) who suggested that some individuals possess the ability to reason about and use emotions to enhance thought more effectively than others and, subsequently, considered as having the potential "to predict educational criteria… above and beyond general (cognitive) intelligence and personality" (Matthews, Zeidner, & Roberts, 2006, p. 167; Mayer & Caruso, 2008). Owing to the relational nature of the discipline of nursing, it is therefore not surprising to see nurses, nursing educators, and nursing researchers become interested in this topic. But what exactly is EI? How is it different from or related to intelligence quotient? How might EI be relevant to nursing? EI, as a concept, has the potential to contribute to the transformation of nursing practice. In this paper, we will discuss the concept of EI and will compare it with intelligence quotient (IQ) as a strategy to transform nursing practice. We will also explore the literature to describe the current state of understanding on the relationship between EI and higher education, with a focus on its application to nursing education and practice.

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Emotional Intelligence Defined

Salovey and Mayer (1990) defined EI "as a set of skills... [that] contribute to the accurate appraisal and expression of emotion in oneself and in others, the effective regulation of emotion in self and others, and the use of feelings to motivate, plan, and achieve in one's life" (p. 185). Cherniss (2000) further described it as "a person's ability to perceive, identify, and manage emotion [that] provides the basis for the kinds of social and emotional competencies that are important for success in almost any job" (p. 10). The concept was further popularized following the publication of the work of Goleman (2005) in 1995 where he described EI as the ability of individuals "to motivate oneself and persist in face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to empathize and to hope" (p. 34). This work evolved into a theory that sparked the interest of educators, managers, and researchers on EI and sought its application in different areas. More recently, Akerjordet and Severinsson (2007) defined EI "as an ability that encompasses personal and social competence, in which the core values of one's professional identity is reflected by self-awareness, emotional management, responsibility, authenticity, and empathetic understanding" (p. 1411). From these definitions, it can be inferred that EI may be a potential tool that a person can use to navigate difficult organizations, systems, and situations that do not otherwise respond to logic or other traditional forms of knowledge and standards. EI also realizes the value of how humans relate to each other in contributing to one's success.

Emmerling and Goleman (2003) noted the impact of EI on popular culture and the academic community. Among business leaders, there was a realization as to how *unconventional abilities* helped customer service representatives excel in their jobs while the technically and academically savvy employees saw their careers stalled because they were *not* emotionally intelligent (Cherniss & Goleman, 1998). Accordingly, Kaschub (2002) remarked that Goleman's theory of EI views success as resulting from "an awareness of one's own emotional state and an awareness of another's emotional state that lead to productive action" (p. 10). Ten years after the initial publication of Goleman's work, the previously unnoticed field had generated over 700 completed doctoral dissertations investigating various aspects of EI and numerous studies completed by academics and other researchers (Goleman, 2005).

Emotional Intelligence and Education

Sherlock (2002) noted that EI "begins with self-awareness and self-understanding, progressing toward the goal of student learning to manage his or her own emotions" (p. 143). Studies indicate that EI helps students and individuals academically, emotionally and socially (Cherniss, Extein, Goleman & Weissberg, 2006; Jaeger, 2003; VanderVoort, 2006). VanderVoort outlined the value of EI in academia that could significantly impact postsecondary education by providing immeasurable "positive personal, social, and societal outcomes" (p. 6). Kristjánsson (2006) reported that there is a pressing realization among educators, particularly those in the United States, to promote emotional literacy in schools. It was further emphasized that incorporating EI within the postsecondary curriculum not only facilitates the teaching-learning process; it also improves career choice and the likelihood of success, and social adaptation in general (Cherniss, et al.; VanderVoort). Kaschub (2002) aptly described the meaning of success in this situation "as happiness, solid career choice, positive family life, or the 'American Dream' in general" (p. 10).

Unfortunately, the use of feelings and emotions in assessing academic performance has not received enough discussion, ignoring their value in providing people with valuable information that they can use to enhance their lives, careers and the way they deal with people around them (Jaeger & Eagan, 2007). Kovalik and Olsen (1998) point out that the prevailing curriculum is not helpful to today's learner's brain that requires emotional engagement at an intrinsic level. Not many graduate programs use EI research to look into the intrapersonal and interpersonal capabilities of students that will help them succeed in graduate education and, eventually, in the workplace (Jaeger, 2003). This may be particularly true in today's society where emphasis is placed on entry-to-practice competencies and practice standards to the extent that EI skills are overlooked. With additional research, it may be possible to prove that "EI has the potential to enrich the understanding of how to train excellent physicians" (Grewal & Davidson, 2008, p. 1202). In medical school, a study suggested the importance of incorporating EI as an admission criteria as they acknowledged the difficulty associated with the teaching of EI to aspiring physicians (Weng, Chen, Chen, Lu, & Hung, 2008). This may also be the reason why there are healthcare programs such as medicine and nursing that are having a hard time retaining students who were deemed to be suitably qualified and who have met their stringent admissions requirements. Jaeger (2003) points

out that curricula are not designed to help students discover and improve their EI. Instead, programs focus on having the students acquire the discipline-specific knowledge and skills to ensure competence in their field. This may potentially lead to graduating professionals who are task-oriented, and who focus on disease conditions as opposed to acknowledging the unique human person in each client.

Is EI *more* important than IQ in measuring intellect and, ultimately, determining success? Goleman (2001) pointed out that "IQ would be a much stronger predictor than EI of which jobs or professions people can enter… IQ predict[s] what technical expertise that person can master" (p. 22). This was confirmed by Barchard (2003) who noted in her study that EI is not an effective indicator of academic success as IQ but suggested that EI may be a good tool to measure personality, as well as success in specific areas such as graduate education for counselors. Jaeger (2003), on the other hand, gathered from her research data that EI is positively correlated with academic performance, and that it can be taught in a traditional classroom. This was supported by VanderVoort (2006) who suggested that incorporating EI in the college curriculum is a means to promote a positive and holistic learning environment in higher education institutions that can impact on personal, social, and societal outcomes. These studies highlight the importance of developing the entire person beyond their discipline specific knowledge if they are to become well-rounded individuals who can potentially succeed in their chosen careers.

Emotional Intelligence, Nursing Education, and Nursing Practice

While EI has become a buzz word in the field of education in general, it was only recently that the nursing profession started to show interest in this topic. For example, a literature search using the Cumulative Index of Nursing and Allied Health Literature (CINAHL) and Medline only yielded 82 materials written on EI and nursing that were published in English and peer-reviewed, academic journals, with the earliest being published in 2002. Kooker, Shoultz, and Codier (2007) remarked that the study of the relationship of EI to nursing is still in its infancy. Researchers began to take interest in the value of EI as a way to develop the various aspects of the discipline including education (Allen, Ploeg, & Kaasalainen, 2012; Freshwater & Stickley, 2004), leadership (Akerjordet & Severinsson, 2010), and practice (Codier, Freel, Kamikawa & Morrison, 2011; Codier, Kamikawa, Kooker, & Shoultz, 2009; Görgens-Ekermans & Brand, 2012; McQueen, 2004; Smith, Profetto-McGrath, & Cummings, 2009). In this section, we will present some of the literature published recently on EI and its application to nursing education and nursing practice.

Montes-Berges and Augusto (2007) conducted a quantitative study to determine the relationship between perceived EI and coping, social support, and mental health variables among 119 first year nursing students from one nursing school in Spain using the Trait Meta-Mood Scale. Their results showed the value of perceived EI in stress coping among the participants. In a related study done by Landa, Lopez-Zafra, Aguilar-Luzon, and Salguero de Ugarte (2009), it was reported that perceived EI is positively related to self-concept amongst nursing students, and advised that nursing curricula ought to include EI in training future nurses. Montes-Berges and Augusto (2007) further suggested that the nursing curriculum, and the students in particular, would greatly benefit from the inclusion of "reflective learning experiences, supportive supervision and mentorship, modeling, developing empathy, and emotional competency" in the program of studies (p. 169). This was observed from the experience of one of the authors (Montes-Berges) who reported getting positive results based on improvement in students' skills and their encouraging evaluation of the program. While these findings seem interesting, we question how the results from one cohort of students can be used to make such generalizations.

Hurley and Rankin (2008) discussed EI as a framework to address the many challenges confronting the expanding role of mental health nurses in the UK, including but not limited to community services, proliferating specializations, and increased client expectations. In establishing the relationship between EI and nursing practice, Hurley and Rankin suggested that mental health nurses typically require human qualities to help them thrive as their scope of practice expands, and that this is best addressed through curricular innovation by including EI training within the nursing program. The authors, however, caution that while EI is a desired characteristic for mental health nurses, it should be approached with further investigation to ensure that EI concepts are appropriately and practically incorporated into the nursing curricula (Hurley & Rankin). Ultimately, the increasing emphasis of EI in the nursing curricula has the potential to bring about the individual student nurse's "personhood" and will better equip them to meet their own needs, their clients' needs, and those of the organization (Hurley and Rankin, p. 203). The inclusion of EI in nursing education

emphasizes the relational aspect of our profession. It has the potential to help nursing students better address the unique needs of clients entrusted in their care, as well as promote self-care through self-awareness.

Millan's (2008) doctoral dissertation examined and compared the EI skills of students from different nursing programs at a South Texas College, namely: Licensed Vocational Nurse (LVN), Registered Nurse (RN), LVN-RN Transition Option, and Paramedic-RN Transition Option using the Emotional Skills Assessment Process Questionnaire. Her results indicate that, in general, EI does not differ between students enrolled in the programs studied nor does the nursing program pose any significant effects on the students' EI (Millan). She noted, however, that as the student became more advanced with age, higher levels of EI might be expected (Millan). This supports the need to develop the nursing students' EI in all programs to assist them in dealing with the affective strains of the nursing profession (Millan). One barrier to incorporating EI within the nursing curriculum that Millan recognized was the need for each program to set its own requirement to fulfill its student learning objectives. She suggested assessing the a student's affective process as a criteria for admission to nursing schools, alongside innovations in pedagogy such as the use of service and problem-based learning approaches to develop and improve students' EI capabilities. Millan's findings and recommendations may be useful in the recruitment and retention strategies that can help alleviate the nursing shortage in Texas and elsewhere. She recommended the use of a qualitative approach to better examine EI differences between LVN and RN by investigating how students in the different nursing programs understand these affective skills (Millan). We find this recommendation interesting and worthy of consideration. While validated measures do exist in regards to measuring EI for various purposes, it is not certain how effective these are in measuring a personal human skill. A qualitative approach may thus be timely and appropriate to better explore this experience of nursing students.

Kooker, Shoultz, and Codier (2007) used a qualitative research approach to determine if improved process and outcomes in nurses' professional practice were related to EI. They analyzed 16 narratives written by nurses who were asked to write a story of their lived experience where nursing knowledge made a difference (Kooker, et al.). Kooker and colleagues noted that Goleman's four domains of EI, namely social awareness, social/relationship management, self-awareness, and self-management, were identified in all 16 stories. Social awareness and social/relationship management were the most commonly demonstrated domains (Kooker, et al.). Their study further revealed that "elements of professional nursing practice, such as autonomy, accountability, mentoring, collegiality, integrity, knowledge, activism, and the professional practice environment, were all identified in the excerpts of the stories" (Kooker, et al., p. 34); these were positively correlated with the competencies of EI. The authors noted the potential application of EI as a means to keep nurses engaged in professional nursing practice and to improve nurse retention and patient outcomes (Kooker et al.).

Landa, Lopez-Zafra, Martos, and Aguilar-Luzon (2008) explored the interrelationship among EI, work stress and nurses' health. The study was based on the premise that health care professionals are frequently exposed to stress resulting from the inherent nature of their work with acutely ill individuals and the working conditions found in hospitals (Landa, et al.). A questionnaire survey was administered to nurses working in one of Spain's general public hospitals (Landa, et al.). Results indicated that a positive correlation exists between EI dimensions and stress and health; specifically, the authors reported that EI served to protect nurses from stress and provided a facilitative factor for health (Landa, et al.). The authors recognized the need to possibly incorporate EI training programs in hospitals as a means to help "improve nurses' EI abilities, facilitate coping with job stressors" thus contributing to positive patient outcomes (Landa, et al., p. 899).

McCallin and Bamford (2006) discussed how EI contributes to improved patient outcomes through effective interdisciplinary teamwork. They suggested that healthcare providers working in a team combine their interactional skills and EI to affect team behavior and performance (McCallin & Bamford). This underlines the role of developing a nursing manager's EI skills in order to promote team effectiveness, quality of client care, staff retention and job satisfaction.

The relationship between the nurse manager's EI and its empowering effect on staff nurses at a Canadian hospital was investigated by Lucas, Spence Laschinger, and Wong (2008). They also looked into the moderating effect of the nurse manager's span of control, i.e., the number of people he or she supervises, in empowering his or her staff nurses (Lucas, et al.). Results of this study indicate that staff empowerment was directly related to greater manager EI (Lucas, et al.). This may be related to the ability of an emotionally intelligent manager to

predict staff needs and resources that they require to provide the kinds of patient care expected of them (Lucas, et al.). A key finding in this study was the significant moderating effect of span of control on the nurse manager EI/staff nurse manager empowerment relationship. Lucas and colleagues noted that as the nurse manager's span of control increased, there was a corresponding decrease in his or her ability to empower the nursing staff, suggesting that even managers who may have high EI skills may not be able to effectively empower the staff if there is no meaningful interaction taking place due to increasing span of control.

Feather (2009) discussed the concept of EI in relation to its importance in nursing leadership. Feather pointed out how the EI levels of nursing leaders affect job satisfaction among staff nurses and subsequently their retention in the workplace. This is particularly important even from an economic point of view when one considers the amount of money health care institutions invest in hiring, orientating, and retaining new staff nurses. Feather pointed out the need for nurse managers to recognize and be aware of their own emotions and to be able to express these feelings to others, particularly their staff as a way to influence them and facilitate understanding and appreciation of the organization's mission and vision.

Discussion and Conclusion

There are conflicting reports in regards to the relationship between EI and success, particularly in regards to its applications in academia. The field of EI can presumably be considered to be in its infancy stage. While researchers from both sides of the fence present their views and findings on the topic, one can only assume that more studies will be required to address the issues and misunderstandings its proponents currently face. Among other things, proponents of the field need to come together and attempt to agree on common language and concepts that they can use to further advance the field.

The value of EI in higher education appears to be related to its ability to enhance the teaching-learning process. Based on the findings of the studies cited in this paper, EI has the ability to promote career success beyond what can be provided by academic excellence. The challenge lies in determining the most appropriate way to incorporate it within curricula of different programs without displacing the program/course learning outcomes.

EI also appears to be gaining some appreciation in the area of nursing education and practice. As EI directly involves human emotions, it seems to be appropriate to use it as a guiding framework as nurse educators move towards designing a truly caring curriculum for nursing programs. Limited studies have pointed out the benefits of and the need for including EI training for nursing students. There also appears to be a positive correlation between EI and quality, patient-centered care. Studies also pointed to the need of providing EI training to nurse managers to better improve their leadership and mentoring skills, and ultimately contribute to the transformation of the profession. However, one cannot discount the importance of an individual's cognitive abilities. This was pointed out by the authors of the studies cited in this paper.

In closing, we would like to refer to Herbst (2007) who noted that individuals will continue to need, first and foremost, superior intellectual abilities; such competencies will need to be augmented with the emotional relationship competencies associated with success which may inevitably include, among other things, *emotional intelligence*. It would thus appear that IQ and EI may be suitable ingredients to promote an individual's success in any field, more importantly in a highly relational discipline such as nursing. However, as Matthews et al., (2006) noted, many EI studies used "questionnaires eliciting self-reports of emotional competence" and may prompt one to ask whether the respondents have "accurate insight into their emotional functioning" (p. 167). Further studies are required to more accurately measure and understand the various facets of this uniquely human and personal skill and how it directly relates to success in higher education, nursing education, and nursing practice, and ultimately transform nursing practice.

Disclosure and Acknowledgment

This paper is based on a course requirement of EVC for NURS 505 – Transforming Nursing Practice, Faculty of Nursing, the University of Alberta, under the supervision of Dr. Dorothy Forbes.

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Research Article

Explicating Discharge Planning Preferences among a Select Group of Filipino Nurses: A Conjoint Analysis

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Abstract

Photo source: http://dlsii.com/

Discharge planning is integral in the delivery of effective patient care in clinical settings. Hence, an organized and coordinated system is necessary in facilitating the discharge process and in ensuring a seamless transition of patients from one level of care to another. The purpose of this study is to identify the preferences of nurses on discharge planning, and to analyze the significant differences of nurses' discharge planning preferences and their demographic information. A two-part researcher-made instrument was utilized in the conduct of the study including the *robotfoto* and plan cards. Preliminarily, the plan cards having nine attributes with two levels each were validated by experts and was pilot-tested to a select group of respondents from the target population. A conjoint analysis survey of 230 nurses in a teaching-and-training hospital was conducted from May and June 2013.

Capitalizing on the power of conjoint analysis, preferences of nurses have been unveiled. The most important attribute is the structure (importance value= 19.25%) in which nurses utilize in facilitating the discharge plan. Nurses prefer to employ formal structure (part worth value= 0.442) as it encompasses patient and family involvement following an organized protocol and has detailed documentation. Conversely, comprehensive patient assessment has been the least preferred attribute (importance value= 3.71%) in which the head-to-toe assessment had its part worth value of 0.86.

As a whole, an analysis and understanding of nurses' preferences serve as an impetus for them to actively engage in the discharge planning process by developing effective structures that will benefit patients.

Key words: *Registered nurses, discharge planning, conjoint analysis, preferences*

Introduction

Discharge planning has been defined as an interdisciplinary responsibility (Foust, 2007) and approach (Lin, Cheng, Shih, Chu, & Tjung, 2012) that aids in ensuring continuity of care (Han, Barnard, & Chapman, 2009). Moreover, it is a quality link (Lin et al., 2012), a critical point (Foust, 2007), and an essential process (Holland, Rhudy, Vanderboom, & Bowles, 2012) in facilitating a seamless transition (Kerr, 2012) from one level of care to another. Undeniably, discharge planning is a complex aspect of nursing practice. According to Foust (2007), it is often difficult to complete, is subject to misjudgment, and can be

overlooked due to competing care requirements (Holland et al., 2012). Furthermore, nurses and healthcare professionals' role is not yet fully defined (Han et al., 2009) and lack understanding over their responsibility on the process (Morris, Winfield & Young, 2012). Amidst the many competing demands vested on nurses (Rhudy, Holland, & Bowles, 2010), they play a pivotal role (Kerr, 2012) in the discharge planning process. Indeed, nurses' decision-making in a chaotic and fast-paced arena (Rhudy et al., 2010) affects patient outcomes (Foust, 2007) where their simple initiatives can yield major impact on the process (Morris et al., 2012).

It is against the foregoing context that this paper was conceived. Cognizant of the fact that discharge planning should be delivered in a collaborative manner, this study is anchored on a belief that nurses possess a distinct role in the process as they tend to facilitate the discharge plan. Understanding their involvement and their own concept of discharge planning, this present study specifically focuses on a generative lens to identify the preferences of nurses on discharge planning. Attributes revolve in the axis of comprehensive patient assessment, timing and implementation, specific nursing skills, communication expectations, structure, documentation type, and patient readiness for discharge and health education. According to Rhudy, Holland, and Bowles (2010), these arrays of attributes set influence on patient outcomes as nurses are involved in a serial and complex decision-making activities. It is, therefore, important to understand the core aspects of discharge planning to ascertain the preferences of nurses which are particularly significant to spell out directions, improve standards, and better the priorities of nurses, who play as important resources of patients' health state. This paper argues that unfolding of a knowledge base on nurses' preference is vital as such can neither be overlooked nor underestimated.

Methods

Descriptive measures were used to describe the characteristics of the study population by using frequency and percentage. For the meat of the study, conjoint analysis was utilized to compute the importance and utility values of the attributes and levels of discharge planning.

The salient results were yielded from two-hundred thirty (230) nurses in a tertiary training hospital in La Union. This institution provides specialized training for doctors, medical practitioners, midwives, researchers, and nurses in particular. Notably, the Department of Health designated the institution as Heart-Lung-Kidney Collaborating Center for Northern and Central Luzon. Such affirmation provides nurses an arena of strengthening and molding their practice in providing effective and holistic care.

The overall intent of this quantitative study is to explicate nurses' preferences relative to discharge planning. Hence, the researcher decided to utilize conjoint analysis, a market-based research model. The overall effect of attributes on preferences for products and services has made this model valuable. Notably, researchers from the healthcare industry have also discovered its value in various preferential issues (Mele, 2008).

The researched developed a two-part corpus of data to effectively facilitate data gathering. The first part, a respondent's *robotfoto* (Kelchtermans and Ballet, 2002) was fielded for the purposes of establishing baseline characteristics of nurses under study and deemed to be useful on the analysis and interpretation of data. Part II of the instrument, called the plan cards, were primarily designed to identify nurses' discharge planning preferences. Sixteen (16) cards have been reviewed for content validity by two nursing administrators and a dean of nursing. Pilot testing has also been done in which test and retest reliability coefficients yielded 0.998 to 1.00 indicating that the cards were satisfactory in two different time points. Through an extensive review of literature, nine major attributes have been identified and constructed by incorporating concepts highly indicative of the aspects of discharge planning. The nine attributes are comprehensive patient assessment, timing and implementation, role involvement, specific nursing skills, communication of patient status, discharge planning structure, type of documentation, patient readiness for discharge and health education respectively. In this study, each attribute was described in terms of two levels or utility values. An orthogonal array was then developed which resulted to five hundred twelve (512) choice bundles for discharge planning. From there, sixteen (16) choice bundles were obtained (twelve actual choice bundles and an additional four were included for reliability purpose). Each choice bundle was represented by the combination of attributes and utility values; those were presented through orthogonal cards that were coded and laminated cardboard cut-outs.

The researcher advised the respondents to complete the survey individually to prevent the results from being influenced by their colleagues; to answer effectively and not in a hurried manner. Preferences are considered nominal data. These data were collected by asking the respondents about their preferences on discharge planning as defined by attribute combinations. The respondents were instructed to sort the sixteen (16) choice bundles and rank them from 1-16. The survey was performed and process has been repeated with each level of preference until all choice bundles are ranked accordingly. Additionally, a numerical utility, or part-worth utility value, was computed for each level of the attributes. Large utilities ranges are assigned to the most preferred data and the small utilities range denote the least preferred data.

Results

Profile of the Nurse Respondents

Table 1 depicts the demographic profile of the respondents. Of the 230 respondents, there is a preponderance of staff nurses (88.70%), who are bachelor's degree holders (88.70%), and 87.39% are nurses who are working with less than 10 years of experience. Majority of the respondents are contractual or in contract-of-service status (71.74%). More than half of the respondents are female (63.91%), and are within the age range of 20-25 years old (58.70%).

The results of the conjoint technique as depicted in Table 2 showed discharge planning structure (19.25%) as the most important factor that nurses considered when facilitating the discharge plan. This most important factor was obtained based from the percentage of respondents who voted for each item as most important

Table 1 - *Profile of the Nurse Respondents (N=230)*

Profile		N	%
Age	20 – 25	135	58.70
	26 – 30	38	16.52
	>30	57	24.79
Gender	Male	83	36.09
	Female	147	63.91
Education	Bachelor's degree	204	88.70
	MAN/MAN units	26	11.3
Work Experience	<10 years	201	87.39
	>10 years	29	12.61
Employment Status	Permanent	65	28.26
	Contractual	165	71.74
Rank/ Position	Staff nurse	204	88.70
	Nurse administrators	26	11.13

Table 2 - *Discharge Planning Preferences, Attributes and Levels (N=230)*

Levels of Attribute	Utility (Part Worth)	Importance Value (%)
Comprehensive Patient Assessment		
Head-to-toe assessment	.0855	3.706
Affected System only	-.0855	
Timing and Implementation		
On admission	.2804	12.155
Prior to leaving	-.2804	
Role Involvement		
In collaboration	-.2949	12.783
Nurse alone	.2949	
Specific Nursing Skills		
Time Management & Organization	.0957	4.146
Problem Solving & Communication	-.0957	
Communication of Patient Status		
Daily basis	-.1986	8.606
Time of discharge	.1986	
Discharge Planning Structure		
Formal	.4442	19.253
Informal	-.4442	
Type of Documentation		
Structural & Clinical data	.3051	13.222
Structural data alone	-.3051	
Patient Readiness for Discharge		
Normal Vital Signs	-.2572	11.149
Doctor's approval	.2572	
Health Education		
Across Hospitalization	.3457	14.981
Routine care accomplished	-.3457	

(importance value). This was followed by health education (14.98%), type of documentation (13.22%), role involvement (12.78%), timing and implementation (12.15%), patient readiness for discharge (11.15%), communication of patient status (8.61%), specific nursing skills (4.15%), and lastly on comprehensive patient assessment (3.71%).

Discharge Planning Levels and Nurses' Preferences

The foregoing accounts depicted in Table 2 also present the utility values of the attributes of discharge planning. These utility values were derived from the two (2) levels listed under the nine (9) discharge planning attributes basing on nurses' preferences or priority. The opposite numbers, indicated by the two (2) levels respectively, were based from the actual decisions that a nurse can decide on as conferred by various authors. Paired comparison was utilized in the measurement and scaling task

The following results convey nurses' preferences under the levels of each attributes. In regard to the part worth of comprehensive patient assessment, head-to-toe assessment has been preferred. As for timing and implementation, nurses prefer to commence the discharge plan on admission or twenty-four (24) hours from admission. When it comes to role involvement, nurses preferred to take part in the process alone. Further, nurses prefer time management and organization as the specific nursing skills required in facilitating the discharge plan. Moreover, in contrast with the common belief that the communication of patient status should be done in a daily basis wherein any updates or progress should be relayed to the patient and their family members, nurses preferred communication at the time of discharge. The study resulted to formal discharge planning structure as the preferred level of nurses. In terms of type of documentation, nurses preferred the endorsement of both structural and clinical data reflecting nurses' responsibility in legal documentation. Patient readiness for discharge should start upon doctor's approval. And lastly, health education should be given across hospitalization.

Discussion

Using preference-based conjoint analysis, this study elicited the discharge planning preferences of a select group (N=230) of Filipino nurses. According to the assessed discharge planning preferences, the structure of the discharge planning process was deemed most important, and the attribute, comprehensive patient assessment showed the least importance. The structure of discharge planning which is preferred to be formal ranked most important because nurses utilize it as they facilitate and participate in the process. Bounded by hierarchical and historical norms of institutions, nurses adhere to protocols and policies mandated by the institution. This finding is strengthened by the study of Yam, Wong, Cheung, Chan, Wong, & Yeoh (2012) which affirms that whichever the case maybe—requiring simple or complex needs, a well-defined structure or framework of discharge planning must be employed. Interestingly, it is by following a discharge planning structure that nurses work best; as this facilitates nurses as they perform their tasks in an organized manner to provide better discharge plans. A structure brings ease in the performance of their workload and maximizes their time in the clinical area.

Conversely, the comprehensive patient assessment has been regarded as the least preferred attribute because of the compelling demand of tasks on nurses. Apparently, patient assessment as a vital aspect in the nursing process is one of the skills of nurses that is not well practiced and developed especially in a developing country like the Philippines. Grimmer et al. (2006) revealed in their qualitative findings that the amount of time spent with patients such as in physical assessment suggest that “little-patient centered time” was spent.

Moreover, the results from the levels or utility values from the discharge planning attributes depicted relevant and meaningful findings. First, in comprehensive patient assessment, head-to-toe assessment has been preferred. This can be ascribed to the importance of obtaining a coherent assessment as basis to yield effective interventions. In timing and implementation, nurses prefer to commence the discharge plan on admission or twenty-four (24) hours from admission. Starting the discharge planning process early paves the way to develop a working framework to effectively manage patient care and entails the assessment of current home situation and potential barriers to discharge (Marshall, 2012). When it comes to role involvement, nurses preferred to take part in the process alone. Nurses, nowadays, hold positive beliefs and attitudes as they enable innovative decision making resulting in the best patient outcomes. The “autonomy through empowerment” is now an emerging perspective to nurses as they challenge current practice giving them a

sense of their "voice" (Balakas, Sparks, Steurer, & Bryant, 2013). Further, nurses prefer time management and organization as the specific nursing skills required in facilitating the discharge plan. The study of Kaya, Kaya, Pallos, and Kucuk (2012) affirms that efficient time management is considered a criterion in attaining and achieving desired goals at the minimum time possible. It is also in prioritizing activities that one can utilize time appropriately; it means that control, handle, and act on various tasks with ease and satisfaction. Moreover, in contrast with the common belief that the communication of patient status should be done in a daily basis wherein any updates or progress should be relayed to the patient and their family members, nurses preferred communication at the time of discharge. On another stance, the structure being employed in the discharge planning process varies from one case to another. The study resulted to formal discharge planning structure as the preferred level of nurses. Lin et al. (2012) conferred that in formal discharge planning- patient and family participation, well-defined structure and guidelines, effective communication with the hospital and the community, and detailed communication through proper documentation are relevant. In terms of type of documentation, nurses preferred the endorsement of both structural and clinical data reflecting nurses' responsibility in legal documentation. Both types of data serve not only as a proof that something has been done but also serve as a reference in determining innovative interventions for patients. Patient readiness for discharge should start upon doctor's approval. Undeniably, Filipino nurses still acknowledge historical and hierarchical dispositions of physicians as the primordial source of authority. And lastly, health education should be given across hospitalization. Indeed, it is a core component of support and a key determinant of an effective discharge planning process.

Conclusion

This study has ascertained the potential use of conjoint analysis as a powerful tool in nursing research by highlighting its ability to look deeper into the preferences of nurses on discharge planning. Remarkably, the most preferred attribute in discharge planning is the structure in which the discharge plan is facilitated while the least viewed is the comprehensive patient assessment. Generally, nurses work best by following a formal structure of discharge planning. It is in this manner that they are able to collaborate with the patient and their family as guided by standardized protocols and policies. This structure also includes the vitality of providing proper documentation. It is with the use of formal discharge planning structure that facilitates nurses to provide better discharge plans and work in an organized manner. On the other hand, head-to-toe assessment is the popular choice among respondents in terms of comprehensive patient assessment as this process provides nurses and other health care professionals a baseline on how to yield effective interventions on patients. It is on the basis of the assessment cues that the discharge plan can be further actualized. Additionally, by virtue of the nurses' effective and efficient knowledge, skills and implementation of patient assessment that quality health care can be provided. The quality and consistency of nurses' head-to-toe assessment to patients contributes an improvement in the health care process by avoiding unnecessary repetition and providing ample time to address the perceived needs upon hospitalization.

Knowing the preferences of nurses serves as an impetus for them to actively engage in the process by developing effective structures that will benefit the recipient of quality care, the patient. Further, an analysis and understanding of their preferences should not be undermined because it acts as springboard for receptivity and empowerment in nursing care as nurses take the lead in discharge planning.

Moreover, educators in the nursing field scarcely delved into and hardly include discharge planning in the nursing curriculum. In addition, in-depth discussions and related-learning experiences barely focus on the vital concepts in regard to discharge planning process. It is then imperative that nursing educators integrate discharge planning in co and extracurricular activities to strengthen students' academic and clinical preparation; thus, providing them adequate knowledge about the principles, guidelines, and structures in planning and facilitating the discharge plan. Since health education is one of the core tenets of nursing, students and educators should give more importance in honing their assessment of learners, learning needs and learning styles for them to effectively carry out their mandated responsibility on discharge planning. Significantly, students and nursing professionals should be able to clearly put across theories in a way those patients and their family members can understand.

This study serves as a basis of wisdom to address the seeming paucity in literature highlighting the preferences

of nurses in discharge planning especially in the Philippine context. In line with this, future researches may stem from the findings of the conjoint analysis. Significantly, through the continuing efforts of all areas of nursing, we will be steadfast enough in continuing our quest to a positive-practice environment, and by our strong determination we can build the theory-practice gaps.

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"CARE IS THE ESSENCE OF NURSING AND THE CENTRAL, DOMINANT, AND UNIFYING FOCUS OF NURSING"

(LEININGER 1991)

Research Article

Level of Awareness and Compliance in Diabetes Mellitus Management Among Adolescents Diagnosed with Type-1 Diabetes

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Key words:
Awareness to diabetes, compliance to diabetes management, diabetes, diabetes management

Abstract

Photo taken from: http://www.uniteddiabeticsupplies.com/

The study aimed to determine the level of awareness and to assess compliance to Diabetes management of adolescents diagnosed with Type-1 Diabetes. A descriptive correlational type of research was utilized to gather information on the level of awareness and compliance of adolescent patients to diet, exercise and drug management suffering from Type-1 diabetes mellitus. The patients (n=20) were recruited from Institute for Studies on Diabetes Foundation Incorporated, Philippines. A purposive sampling was utilized to select twenty adolescents. A researcher-made questionnaire was utilized as the main instrument in gathering data. Focus group discussion was also done to further assess patient's level of awareness and compliance to diabetes management. Results showed that patients have a moderate level of awareness and some extent of compliance to diabetes. Patients have extreme awareness in diet management and moderate awareness in exercise and drug management. In terms of compliance, patients are compliant to some extent only, while drug management has the highest level of compliance, followed by exercise and diet. There is a low correlation between level of awareness and compliance in diabetes management (r = .32 p = 0.15), indicating that the moderate level of awareness of patients to DM management is not related to their compliance. The results are limited only to the participants of the study. Further study using a larger population and different setting is recommended. Nurses taking care of adolescent patients with diabetes mellitus must understand the importance of health education. Health educations are valuable to increase level of awareness and extent of compliance of adolescent patients with Type-1 diabetes.

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Introduction

The incidence of Diabetes Mellitus (DM) is rapidly increasing in a global basis according to the World Health Organization (Parker & Irons, 2006), resulting in the development of evidence-based guidelines for control and management of DM in many countries around the world. The Asia-Pacific has the largest diabetes burden in the world exemplified by a number of overweight and obesity in almost of the entire region according to Sy (2008).

In the Philippines out of its thirteen regions included in the cohort study by Gallardo (2009), six regions show the alarming growth of diabetes with Impaired Fasting Glucose (IFG) and Increased Glucose Tolerance (IGT). The Philippines warrant early aggressive intervention for diabetes mellitus prevention and management which is comprise of diet, exercise and drugs to effectively manage patients with Type-1 diabetes.

Diabetes Mellitus is a condition requiring a high incidence of self-management along with intensive medical care to reduce the incidence of its acute and chronic complications. DM is one of the chronic lifestyle diseases affecting a large sector worldwide. Figures published by World Health Organization (WHO) estimated that 150 million have DM and that this figure will double by the year 2025. Management studies for DM in first world countries may vary largely from management strategies applied in the third world areas because of economic and manpower factors. In the Philippines, the Department of Health (DOH) included DM prevention control under the Healthy Lifestyle program. It ranks third among the dreaded lifestyle-related diseases in the country today.

The study of Ardena (2010) revealed that, in the Philippines most of the patients with Type-1 diabetes do not own a glucose- meter and do not consult the doctor on a regular basis. The findings may be related to the increased untreated cases of diabetes mellitus. The knowledge, attitudes and practices of Type-1 diabetes patients were impaired and there is a need for health education to improve management of diabetes and prevent complications. In addition, according to Higuchi (2010) there is also an ineffective access to diabetes care and management in the Philippines. The application of standard treatment/management guidelines will be of help to encourage patients to seek and receive regular care.

Similar studies on knowledge regarding causes of Type-1 diabetes, its prevention and the methods to improve health were conducted. Flores (2006) explained that the tools used in diet management include the Food Exchange List (FEL), Food Composition Table (FCT) the nutritional guidelines and the food pyramid. Results of the study by Krousel-Wood (2008) also emphasized the importance of exercise management. Physical activity, tele monitoring and low calorie diet can be effective in lowering the glucose and HbA1c levels. American Associations of Clinical Endocrinologists (AACE, 2007) recommended that intensive insulin therapy may reverse hypoglycemia unawareness in patients with Type-1 diabetes and can substantially prevent hypoglycemia and maintain target glycemic level.

It is of great importance to understand the possible effects of the disease on the lives of these patients which somehow affect their compliance to the management of Type-1 diabetes. Having much knowledge on the effects, anxiety and adjustments confronting these patients, it is important to empower the patients to effectively manage their own disease. For effective management and to be successful in preventing complications of this chronic and debilitating disease, patients must be equipped with necessary knowledge, skills, and attitude.

Objective of the study

The study was conducted to determine the level of awareness and compliance to DM management of adolescents with Type-1 diabetes. It also determined the relationship of the level of awareness and compliance to DM management.

Method

Research Design

The study utilized a descriptive correlational research design to describe the level of awareness and compliance to DM management of adolescents with Type-1 diabetes. Beck and Polit (2009) stated that descriptive research is focused on understanding the causes of behavior, conditions and situations and in which data gathering is done through observation, survey and interview.

Study Site

The study was conducted at the Institute for Studies on Diabetes Foundation Incorporated (ISDFI) located at

Marikina City, Philippines. The foundation is known in the Philippines in delivering excellent and humane diabetes care and caters to adolescent patients with Type-1 diabetes (ISDFI, 2009). ISDFI is a private institution operated by different private and government organizations led by medical practitioners and support groups.

Participants

There is an increase incidence of diabetes in children and adolescents in the Philippines, but data on childhood diabetes is scarce (Sy, 2008). In the ISDFI only few adolescent patients with Type-1 diabetes receiving care, falls on our inclusion criteria. A purposive sampling was conducted to identify twenty adolescent patients. Participants were selected according to the inclusion and exclusion criteria set in the study. They are adolescent patients who were diagnosed of Type-1 diabetes and whose age ranges from 12 to 18. They were diagnosed of Type-1 diabetes at least six months before the conduct of this study and were regularly visiting the ISDFI for check-up at the clinic's foundation.

Ethical Clearance and Informed consent

The study has an approved ethical clearance from Centro Escolar University (CEU) Institutional Review Board (IRB) and the ISDFI IRB committee. Informed consents were sought from the parents or guardians of the twenty participants. The rights, privileges, obligations, risks and benefits of the participants were included in the orientation process. They are also oriented about the instrument and the conduct of the Focus Group Discussion (FGD) prior to data collection. Anonymity and confidentiality were observed during the conduct of research and audio-taped used in the FGD were destroyed after analysis of data.

Formulation and Administration of the Questionnaire

A researcher made questionnaire was developed based on the context of the disease process and the management of Type-1 diabetes with the specific treatment protocols and the responses of the participants to the treatments. The instrument was validated by five experts in diabetes management and had undergone reliability testing using Cronbach's alpha coefficient reliability (α coefficient =0.80) with ten respondents excluded in the total sample of the study. The validated questionnaire comprised the level of awareness and compliance of adolescents with Type-1 diabetes to DM management. Responses for each item were weighed using Likert's five point scale which ranges from extremely aware (5) to not aware (1) for the level of awareness; and to a very great extent of compliance (5) to a very small extent of compliance (1) for the level of compliance to Type-1 diabetes management.

A focus group discussion (FGD) was done to deepen the assessment of the level of awareness and evaluate the extent of their compliance to DM management. The FGD was conducted to validate the answers of the patients in the self-made questionnaire regarding their knowledge of the disease and compliance with diabetes management. Results of the FGD were validated from member check.

Data Analysis

The results were analyzed utilizing Statistical Package for Social Sciences (SPSS) version 19 software. Mean and SD was used to describe the level of awareness and compliance of the patients to diabetes management. Pearson correlation was utilized to determine relationship of the level of awareness to the extent of compliance of the patients to diabetes management.

Results

Patients are mostly female (65% n=20); 12 years old (30% n=20) finished primary education (80% n=20); catholic (85% n=20); no vices such as smoking and drinking alcohol (95% n=20); have no physical activity (45.84% n=20); diagnosed of Type-1 diabetes for > 5 years and with history of diabetes in the family (65% n=20). Patients were regularly visiting the ISDFI for check-up at the clinic's foundation.

It can be seen in Table 1 that patients with Type-1 diabetes are extremely aware on the importance of blood sugar control, signs and definition of hyperglycemia and with diet, exercise and drug as part of diabetes management (mean= 5.0, mean= 4.85, mean=4.75, and mean= 4.60 respectively). Patients have moderate awareness on symptoms of diabetes (mean= 4.45), signs of hypoglycemia (mean=4.30), diabetes as a lifestyle related disease (mean= 4.0), obesity and family history as risk factors for diabetes (mean=3.95), and Type-2 diabetes (3.75).

These responses were confirmed during the FGD, two of the patients mentioned the common factors that can contribute to an increase in blood sugar are lack of

Table 1: Level of Awareness of Patients with DM

Awareness to Diabetes Mellitus	Mean ± SD	Verbal Interpretation	Rank
1. Diabetes Type 2 is non-Insulin dépendent Diabetes Mellitus	3.75 ± 1.37	Moderately aware	10
2. Diabetes is a lifestyle-related disease	4.00 ± 1.30	Moderately aware	7
3. Obesity is one of the risk factor of Diabetes Type 1	3.95 ± 1.23	Moderately aware	8
4. A family history of diabetes will increase the chance of getting diabetes mellitus	3.90 ± 1.17	Moderately aware	9
5. Fatigue, increased thirst and urination are one of the many symptoms of diabetes	4.45 ± 1.05	Moderately aware	5
6. Hyperglycemia is increased blood sugar level	4.75 ± 0.55	Extremely aware	3
7. Blurred vision, confusion, headache are signs of hypoglycemia or low blood sugar level.	4.30 ± 0.86	Moderately aware	6
8. 7Increased thirst, frequent urination, nausea and fatigue are signs of hyperglycemia or high blood sugar level	4.85 ± 0.37	Extremely aware	2
9. The key to optimal blood sugar control is to balance food, exercise, insulin and medication.	5.00 ± 0.00	Extremely aware	1
10. The diabetes management for diabetes is diet, exercise and drugs	4.60 ± 0.94	Extremely aware	4
Total	4.36 ± 0.16	Moderately aware	

exercise and eating sweet foods. Patients are aware that they can definitely control their blood sugar especially if they have high level of awareness to disease process.

"Diabetes results to lack of exercise"
"Diabetes results to eating too much sweet"
"Proper education may help us to comply with diabetes management"

As reflected in Table 2 patients are extremely aware on diet management (mean=4.51) and moderately aware on exercise (mean=4.31) and drug management (mean=4.16). But, many of them during the FGD verbalized that they do not anymore prepare meal plan.

"We don't prepare meal plan"
"I have to choose my meal"
"My food has to be measured"

Adolescent patients do not need close supervision from health personnel on diet management because they are taught by the ISDFI through the conduct of series of training. Thus, on the view of the patients they do not need close supervision.

"We are taught inside the camp"
"Carbohydrate counting and serving size are included in our training"

The moderate awareness of patients to exercise is supported by only a few of them engage in regular exercise and physical activity. Although they have extreme awareness on exercise and physical activity as part of diabetes management, many of them preferred to watch television and read books. Many of the patients believed that there is a need for patients with Type-1 diabetes to be exempted in physical education classes and team sports because this has been imposed to them by people around them.

"We don't have any more time for exercise"
"I preferred reading books and watching TV"
"We are exempted from PE classes"
"My parents feared that if I'll join the PE class, I might experience hypoglycemia"

Table 2: Awareness and compliance of patients to DM Management

Criteria	Awareness Mean ± SD	Verbal Interpretation	Compliance Mean ± SD	Verbal Interpretation
Diet	4.51 ± 0.32	Extremely Aware	3.16 ± 0.58	Some Extent
Exercise	4.31 ± 0.44	Moderately Aware	3.24 ± 0.76	Some Extent
Drugs	4.16 ± 0.47	Moderately Aware	3.42± 0.99	Some Extent
Total	4.33 ± .315	Moderately Aware	3.27 ± 0.55	Some Extent

Further, in Table 2, the patient's compliance to diabetes management are somewhat compliant to drug (mean=3.16), exercise (mean=3.24) and diet management (mean=3.42). The low compliance on these items can be explained by the limited financial resources of the patients as explained during the FGD. Some of the patients were supported by the foundation (ISDFI) in terms of drug management; they are provided assistance in their insulin.

"Our parents support us but we have limited finances"
"We only rely on the foundation -ISDFI"

Patient's higher compliance in drugs can be attributed to their training on the types, uses and proper administration of insulin. The patient's competence in managing their insulin has been the focus of the training in ISDFI.

"ISDFI help us in managing our drugs"
"We *are taught on proper insulin injection"*

Patient's compliance to walking as an exercise management is also of great extent. Walking has been the usual exercise done by the patients because most of them walk when they go to school. On the other hand, aerobic and cardiovascular exercises are to some extent only because of the busy schedule of the patients in school activities. Most of them are already tired because of the too many activities in school.

"I walk going to school"
"I cannot exercise anymore after school, I'm already tired"

Although, patients are extremely aware that individualized meal plan is necessary to control diabetes, results show that they only comply with some extent.

From this research results, it revealed that there was a low correlation between diabetes level of awareness and compliance to DM management. The correlation between level of awareness and compliance was not significant (r = .32 p = 0.15) to consider in the study. It indicates that the moderate awareness of patients to diabetes management is not related to their extent of compliance.

Discussion

The purpose of the study was to determine the patient's level of awareness and extent of compliance to DM management. In addition it sought to determine the relationship between awareness and compliance to DM management.

Results revealed that patients have extreme awareness on blood sugar control and signs of hyperglycemia but moderate awareness only on signs of hypoglycemia. It is of primary importance in the prevention of long-term complications the maintenance of normal glucose level and awareness in the signs and symptoms of both hyperglycemia and hypoglycemia.

In the study, patient Self-Monitoring of Blood Glucose (SMBG) control is one of the effective primary techniques patients utilized to assess the glycemic control. However, guidelines in diabetes care suggested evidence-based approaches. Effective management of blood glucose levels have been shown to reduce the risk of diabetes complications according to American Diabetes Association (ADA, 2012). A study also recommends Continuous Blood Glucose Monitoring (CBG) in conjunction with intensive insulin regimens to lower A1C in children, teens and young adults (Pick-up, Freeman & Sutton, 2011). CGM is also found effective in handling wide variability in glucose profiles before, during, and after physical exercise (Kapitza, Freeman & Sutton, 2010).

Patients were extremely aware on diet management exclusively on individual meal plan, physical activity, cardiovascular fitness and checking of blood glucose level. Although patient's awareness in exercise management were moderate; patients are extremely aware in physical activity, cardiovascular fitness and checking of blood glucose level. They also have moderate awareness on exception in physical education classes and adjustment of insulin during exercise. However, ISDFI encouraged patients to engage in household chores and play as their means of exercise and activity. These are more appropriate to their age, more manageable and of no expense on their part as adolescents. Patient's education on DM management given by the ISDFI was helpful in increasing their level of awareness. In related studies on exercise, diet and drug management, there is increased awareness in physical activity to promote fitness and a diet that includes carbohydrate counting and decreased saturated fat intake (Delahanty, 2009; Al-Agha et al., 2011, Michaliszyn, 2009). These are recommended therapeutic modalities in the management of diabetes. However, patients have only moderate awareness on carbohydrate counting and the used of decreased saturated fat intake. Health education on carbohydrate counting and used of decreased saturated fat intake may be the focus of further health education to help patients effectively managed diabetes.

Patients followed the diabetes management to some extent but shows great extent of compliance on insulin management. The ISDFI staff taught them on insulin management as revealed in the FGD. In drug management of patients with Type-1 diabetes, it is recommended by ADA (2012) to use multiple dose insulin injections (three to four injections per day of basal and prandial insulin). Continuous Insulin Infusion (CII) therapy was recommended in the study of Valla in 2010. But the use of CII is not evident in the study because in the Philippines, only few patients use CII because it is too expensive. The adolescent patients are only using multiple dose insulin injections which were monitored and supervised by their doctor's and funded by ISDFI. This shows that the health education conducted by ISDFI is sufficient to manage insulin treatment.

The result also shows that patient have some extent of compliance in monitoring blood glucose before injecting insulin and performance of exercise or physical activity. Although, ISDFI taught them on SMBG, most of the patients do not own a glucose meter or if they have they cannot afford to buy the glucose strips needed for regular monitoring of blood glucose. This may be due to lack of financial resources and most of them are relying on the assistance of ISDFI. ADA (2012) guidelines on diabetes management recommended that in individuals taking insulin, physical activity can cause hypoglycemia. It is recommended that regular blood glucose monitoring is important to avoid hypoglycemia during and after exercise (Younk, Mikeladze, Tate and Davis, 2011). The possibility of the occurrence of hypoglycemia after exercise or physical activity on patients is high. Health education is necessary to teach the patients on effective blood glucose monitoring.

Patient's lowest compliance is on diet management. Although patients have high level of awareness in individual meal plan they only follow the management to some extent. The health education given by the ISDFI may be sufficient for these patients to comply on diet management, however patients do not anymore prepare meal plan as revealed in FGD. This may be attributed to lack of motivation, support in the family and school canteen. ADA (2012) recommended individualized meal planning and optimization of food choices to meet recommended daily allowance (RDA)/ dietary reference intake (DRI) for all micronutrients in patient with diabetes.

The study also determined the relationship of awareness to compliance to DM management. Results show that there is low correlation between the patient's awareness and compliance to DM management. Although there is correlation, it is not statistically significant. The results show no support to the study hypothesis. This may be due to limited participants included in the study.

Conclusion

Health education is necessary to increase the level of awareness and extent of compliance of patients in diabetes management particularly in the importance of individual meal plan and controlling blood sugar level before exercise and physical activities. Level of awareness is important but adherence to diabetes management is of higher importance to prevent long term complications of DM. Health education process that is more specific and appropriate to their needs can improve more the compliance of the patients to the three diabetes management. The nurse's role is important in educating adolescent patients with Type-1 diabetes. The results of the study may only be applicable to the participants because of low statistics significance and further study

with a larger population and multiple setting is recommended to achieve adequate results.

Acknowledgement

The study was funded by Centro Escolar University (CEU), Manila, Philippines. Special thanks to ISDFI staff and patients who supported this study. All authors in the study take full responsibility in its content and its originality. There is no conflict of interest.

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PHILIPPINE NURSES ASSOCIATION, INC.

Research Article

Hand Reflexology's Effect on Level of Pain among Postpartum Mothers

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Abstract

In every 10 seconds, there is a woman who is giving birth around the globe and what binds them is the pain that goes through with the birthing process. This study aims to determine effects of hand reflexology in reducing postpartum pain as measured by comparing pain level between control and study group after establishing comparability of the two groups based on age, parity, income and work status. Furthermore, this study explores the experiences of mother's postpartum pain after receiving an intervention. The results should give nurses an alternative means in decreasing postpartum pain. This study makes use of a pretest and posttest control group design with a qualitative data on the experience of pain after receiving an intervention obtained through interview among mothers within 24 hours post-delivery. Respondents were randomly selected wherein study groups (n=10) received a 10 minute hand reflexology massage (ROM, pressure, thumb walking) while the control group (n=10) received no intervention. Pain level was measured using a numeric pain scale rating. Chi-square and pooled t-test was used to infer study findings. No significant difference was noted on the demographic profile in terms of age (p-value of 0.31), parity (0.36), income (0.65), and work status (0.61) between the study and control group thus variability of the respondents profile was controlled thereby reducing extraneous variables to affect study findings. Pain decreased significantly before and after in the study group (p value 0.01) but not in the control group (p value 0.21). Likewise, comparing study and control group did show significant result (p value 0.01). Qualitatively, a linear transition emerges from experiencing discomfort to comfort. Quantitatively, this study supports empirical evidence that hand reflexology massage is effective in reducing postpartum pain. Overall, respondents were satisfied and comforted with hand reflexology as an intervention. Further research on its longitudinal effect on relieving postpartum pain needs to be established after receiving an intervention.

Key words :*Hand reflexology, massage, postpartum pain, experimental, maternal and child nursing, nursing intervention, Philippines*

Introduction

Pain is an experienced that every person encounters throughout their lifetime. It is a concept that is so abstract thus is hard to quantify. Despite its universality, it is still elusive and complex (Taylor et. al, 2005). McCaffery (1979) define pain as "whatever the experiencing person says it is, existing whenever she (he) says it does". Thus, pain is a highly individualized experience that is very subjective in nature. The binding force of any kind of distress is manifested through the symptoms of pain and birthing is one of them.

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Globally, the world crude birth rate in 2012 registered 19.14 births per 1000 population (World Birth Rate – indexmundi). This could mean that in every second, 4.3 women are giving birth or 255 births per minute. In the Philippines, although the birth rate is declining dramatically, we are still above the global rate accounting for 25.09 births per 1000 population (World Bank Indicators) in 2010 and 24.90 in 2012. It was estimated that 3,000 Filipino babies are born every day (Gonzales, 2008). What binds these women around the globe apart from the privilege of giving forth a life is the pain that goes with it. Data reveal that 92% who delivered vaginally complain of significant pain in the perineum, on the day after normal spontaneous delivery (Andrews et. al, 2008). More so, almost half (48%) of mothers with vaginal births (68% among those with instrumental delivery, 63% with episiotomy, 43% spontaneous vaginal birth with no episiotomy) reported experiencing a painful perineum, with 2 percent reporting the pain persisting for at least 6 months (Declereq et.al, 2008)

Clinically, nursing actions given to reduced postpartum pain can include pharmacological and non-pharmacological modalities. Multiple studies on pharmacological intervention (Jones et. al, 2009; Asti et. al, 2011; Jangsten et. al, 2011) and non-pharmacological one (Borup, 2009; Eogan, Daly, & O'herlihy, 2006, Oliviera et. al 2012) appears to be effective in reducing pain. However, alternative and complimentary treatment is gaining grounds as a means of managing pain. One of the promising aspects that need to be looked into is the use of hand reflexology. Previous researches have shown that 20 minutes foot and hand massage showed a positive reduction in relieving pain (Carlson, 2006; Wang and Keck, 2004). It is a massage on the pressure point that stimulates the mechanoreceptors that will activate the "non-painful" nerve fibers, thus, preventing pain transmission from reaching consciousness. These statements was further supported by an integrative review conducted by Steenkamp (2009) indicating that reflexology is clinically significant in the reduction of pain in patients with cancer and fibromyalgia syndrome and in turn increases their overall well-being and quality of life. Unfortunately, the effectiveness of 10 minute hand reflexology has not been tested if it can also be applicable in reducing the level of pain among postpartum mothers and the meaning that they attached to pain experienced after receiving hand reflexology, thus the researcher becomes interested to explore both the concept and phenomena. Basically, this study aims to determine the effects of hand reflexology in reducing postpartum pain measured by comparing postpartum pain between the study and control group after establishing comparability of the two groups based on age, parity, income and work status. Furthermore, this study explores the experiences of mother's postpartum pain.

Methodology

Research Design

The study utilized a quasi-experimental method as its research design. Polit and Beck (2008) define quasi-experimental as a design for an intervention study in which subjects are not randomly assigned to treatment conditions. In this study, the researcher still makes use of randomization without blinding. Ten respondents randomly selected were assigned as the control group of which no treatment was given pre and posttest whereas; another 10 randomly picked respondents were assigned to the study group of which data were collected prior to an intervention which served as the pretest then hand reflexology were rendered for 10 minutes after which data were collected again to serve as the posttest. Qualitative data was added to get a clearer picture of the phenomena being studied by viewing it from a different perspective known as data triangulation (Bachman and Schutt, 2008). Data triangulation involves the use of multiple data sources for validating conclusions, which can enhance the credibility results of the study. Likewise, triangulation also helps to capture a more complete picture of the phenomenon under study (Polit and Beck, 2004). The researcher triangulates the data by asking respondents in the study group about their experience on postpartum pain after receiving the intervention.

Population and Sampling

Twenty (n=20) respondents were recruited for the study. According to Roscoe (1975), in simple experimental research with tight controls research may be conducted with samples as small as 10 to 20. The researcher established the eligibility criteria as follows: (a) 18-45 years of age, (b) undergone normal spontaneous delivery, (c) within 24 hours post-delivery, (d) complaint of postpartum pain, (e) did not take any analgesics or pain medications during postpartum period and (f) are willing to participate. However, excluded in the study were (a) age greater than or less than 18 and 45 years of age, (b) underwent caesarean section, (c) patients without pain, (d) had taken analgesics or pain medications during postpartum period.

Research Instrument

The researcher used a numeric pain scale rating wherein 0 being no pain while 10 being the highest level of pain (McCaffery & Beebe, 1993) to measure the intensity of pain experienced by postpartum women within 24 hours after delivery. According to Kelly (2011) reviewers recommend the use of numeric pain scale for estimating the patient's pain intensity for it is easy to administer and simple enough to be used at the point of care. Likewise, the researcher also makes use of an interview guide semi-structured instrument to explore the experience of pain 24 hours after childbirth after receiving 10 minute hand reflexology. This is to triangulate the subjectivity of numeric pain scale to determine its congruency with their experience. The researcher jot down the respondents responses, subject the statement to validation then data were encoded using a software program to help facilitate data analysis.

Data Collection Procedure

A self-report through interview schedule was used as the method for collecting data. The researcher first secures a written approval for conducting the study both from the Institute and the hospital for ethics review. After approval had been sought, the researcher started to recruit respondents' base on the eligibility criteria set. Once qualified, respondents were asked if they are willing to participate in the study. Those who agree were asked to sign an informed consent after the purpose of the study and its content had been explicitly explained. Confidentiality on the data was also emphasized. Fish bowl technique was utilized to allocate respondents to be either in the study or control group in order to ensure that selection of respondents were unbiased as well as to equalize the characteristics of respondents through counterfactual method. Before picking a paper from the box, respondents were informed that she could either be in the study or control group. Names were coded to observed confidentiality. Intervention protocol consisted of 10 minutes hand reflexology. Each hand received a 5 minute massage consisting of the following procedure (a) range of motion (15 seconds); (b) applying pressure on the digitalis of each hand (1 minute); (c) thumb walking on the palmar part of the hand (2 minutes); (d) applying pressure in between the metacarpal bones of the dorsal part of the hand (30 seconds); (e) applying pressure in the arm (1 minute) and (f) range of motion (15 seconds). Hand reflexology was administered by nursing students who underwent training and seminar with certification from Technical Education and Skill Development Authority, a DOH accredited institute. While those in the non-intervention group or control received no intervention. Level of pain through the numeric pain scale was collected pretest and after 10 minutes posttest for both the control and study group. However after collecting the posttest data from both groups, those in the study group were further interviewed using semi-structured guide questions for qualitative data to explore the experiences of mother's postpartum pain after receiving the intervention.

Data Analysis

For statistical treatment, percentage and frequency distribution, a chi-square test and pooled t-test were used to infer quantitative study results. For qualitative aspect, the researcher analyzed the subjective data extracted from the interview guided by the principle of Giorgi's methodology. The researcher first read the statement several times to get a sense of the whole. Significant statements from respondents' utterances were highlighted. Those highlighted statement were clustered after formulation of a meaning unit until themes emerges.

Results

Frequency and percentage distribution, Student's t-test, and chi-square test were used for the quantitative analysis. Giorgi's method of data analysis was also used to analyze qualitative data. The following tables show the results of the data to answer the research problems under study.

Demographic profile

Table 1 shows the frequency and percentage distribution of respondents when grouped according to control and study group.

Table 1: *Demographic profile of control and study groups*

Demographics	Control Group	Study Group
	n (%)	n (%)
Age		
Young Adult	10 (100%)	9 (90%)
Middle Adult	0 (0%)	1 (10%)
Parity		
Nulligravida	3 (30%)	5 (50%)
Multipara	7 (70%)	5 (50%)
Income		
Low Class	6 (60%)	5 (50%)
Middle Class	4 (40%)	5 (50%)
Work Status		
Employed	3 (30%)	2 (20%)
Unemployed	7 (70%)	8 (80%)
Total	**10 (100%)**	**10 (100%)**

Data show that in terms of age, majority of the respondents belong to young adult that typically ranges between 20-40 years of age for both the control (100%) and study group (90%) respectively.

In terms of parity, data revealed that multiparous postpartum mothers tend to account for a 70% as compared to 30% for first time mothers who gave birth in the control group. However, an even distribution of percentage (50%-50%) was noted in the study group.

The income of the family in the control group shows a 60-40% breakdown that constituted from low to middle class status respectively whereas an even 50-50% class status was again noted in the study group.

Lastly, majority of the respondents (70% of the control and 80% in the study group) were unemployed.

Table 2 shows the computed statistical test for significance difference when grouped according to age, parity, income, and work status.

In terms of age, result appears to show a p-value of 0.30 which is greater than the level of significance of 0.05, thus the null hypothesis was supported. Therefore, there is no significant difference in age group between the control and study group. This could only mean to show that the characteristics of age group between two groups were similar. Looking into table 1, majority of the respondents were young adult ranging from the age group of 20-40.

In terms of parity, a p-value of 0.36 was obtained which is greater than the significance level of 0.05, thus the null hypothesis was supported. Therefore, parity is not statistically different. Data revealed that the distribution of number of pregnancy between the control and study group were likewise similar in characteristics. Those who gave birth for the first time and those with several births are almost equal in terms of their distribution as a result from randomization.

Income shows a p-value result of 0.65 which is again greater than the significance level of 0.05, thus supports the null hypothesis. Income therefore is not significant statistically. This can be deduced from the data that most of the respondents are well distributed between low income and middle income family group as reflected in Table 1.

Table 2: *Comparison of demographic profile of control and study groups*

Variables	Chi-square value	p-value	Decision
Age	1.05	0.30	No significant difference
Parity	0.84	0.36	No significant difference
Income	0.20	0.65	No significant difference
Work Status	0.26	0.61	No significant difference

Lastly, in terms of work status a 0.61 p-value was obtained which is greater than the significance level set at 0.05 thus no significance difference was noted. Majority of the respondent for both the control and study group were unemployed. Data suggest that majority of the respondents are plain housewife.

Overall, as can be analyze the variables age, parity, income and work status were being distributed almost consistently between the study and control group as a result from randomization or random assignment. Thus, the researcher can confidently say that two were alike and could play a major role in the credibility of study findings.

Pain Level

Table 3: *Comparison of pain level difference between control and study group*

	Difference of Level of Pain Pre and Post test	
Respondents	Control group	Study group
1	0	4
2	0	4
3	2	3
4	0	4
5	0	3
6	-1	5
7	0	1
8	3	1
9	1	2
10	0	2
Mean	0.5	2.9
SD	1.18	1.37

Table 3 illustrates difference in the pretest and posttest between the control and study group. As can be gleaned from Table 3, a 0.5 difference in the level of pain between the pre-test and the posttest were recorded in the control group after receiving no intervention whereas, a markedly difference of 2.9 in the level of pain was registered among the study group after receiving the 10 minute hand reflexology between the pretest and posttest.

Table 4: *Comparison of the pain level pretest and posttest in the control group*

Control Group	Mean	SD	p-value (2-tailed)	Conclusion
Pretest	5.9	1.60	0.21	No significant Difference
Posttest	5.4			

α = 0.05; df=9

Table 4 shows pooled t-test (dependent t-test) on the difference between pretest and posttest without intervention. Looking at the table, the mean score obtained on the pretest was 5.9 and 5.4 for the posttest. T-test shows a p-value of 0.21, which is greater than the level of significance set at 0.05; thus the null hypothesis was rejected. No significant difference was found. This could indicate that the pain is consistent or stable between pretest and posttest. It means patient really suffers from postpartum pain and that nurses really need to manage them. The results are confirmatory of the study of Declereq (2008) that 48% of women who delivered vaginally suffer from postpartum pain.

Table 5: *Comparison of the pain level pretest and posttest in the study group*

Study Group	Mean	SD	p-value (2-tailed)	Conclusion
Pretest	6.7	2.65	0.01	Has significant Difference
Posttest	3.8			

α = 0.05; df=9

This table shows the result of pooled t-test (dependent t-test) on the difference between pretest and posttest within study group. As presented on the table, since the p-value of 0.01 is less than the alpha set at 0.05, the null hypothesis is rejected thus there was a significant difference between pretest and posttest in the study group. This could indicate that the intervention received by the patient appears to help in reducing the level of postpartum pain felt by the mothers. This can be related to the stimulation of the hand that helps to block pain transmission through the mechanoreceptors. The result confirms the study of Carlson (2006) which reveals that a 20 minute foot and hand massage showed positive result on reducing pain.

Table 6: *Comparison of pain level between control and study group*

Category	Mean Score	SD	p-value (2-tailed)	Conclusion
Control Group	5.4	2.26	0.01	Has significant difference
Study Group	3.8			

α = 0.05; df=18

This table shows the result of pooled t-test (independent t-test) on the difference between control and study group. As can be gleaned from the table, since the p-value of 0.01 is less than the alpha set at 0.05, the null hypothesis is rejected thus a difference was statistically significant. This could indicate that a ten (10) minute hand reflexology appears to provide empirical evidence in reducing the level of pain among postpartum mothers. Ten (10) minute stimulation on the pressure point can already trigger the mechanoreceptors to activate the "non-painful" nerve fibers, this in turn, prevents pain transmission from reaching consciousness. The result supported the integrative review on the effectiveness of reflexology conducted by Steenkamp (2009) that shows a clinically significant reduction of pain in patients. Likewise, the study of Wang and Keck (2004) on foot and hand massage decreases pain intensity (from 4.65 to 2.35; p=<.001).

Table 7: *Themes and examples that represent meaning of experiences felt by postpartum mothers before and after receiving intervention of hand reflexology*

Themes	Examples of Experiences
Experience of Discomfort	"may pumipintig yong sakit sa puson" (the pain seems to be pulsating in my loins area) "Makirot parang hinihiwa o tinutusok" (it is painful, it seems like it is being cut or stab) "humihilab, pasulpot sulpot" (on and off contractions) "makirot ang tahi ko, lalo na pag gumagalaw" (it is painful specially when moving)
Experience of Comfort	"Wala ako naramdamang sakit, nakakaantok" (no more pain, I just feel sleepy) "Parang nawala kasi namasahe na" (seems like the pain is gone after being massage) "Nawawala yung sakit at kirot" (the pain is gone) "Mas okay na ngayon. Mahapdi nalang" (I feel fine, the pain is tolerable)

Understanding postpartum pain experience

Two themes emerge from the pain experienced by postpartum mother before and after receiving the 10 minute hand reflexology in the study group.

Theme 1: Experience of Discomfort

Almost all of the women before the intervention in the study group were experiencing diverse intensity of pain that ranges from mild to severe. Pain is commonly felt by mothers who underwent a birthing process. This could be related to the pushing during labor as well as from the episiotomy. As one mother have stated, "makirot ang tahi ko, lalo na pag gumagalaw" (it is painful specially when moving). Another mother replied, "Makirot parang hinihiwa o tinutusok" (it is painful, it seems like it is being cut or stab). Postpartum mothers complaint of diversity of pain ranging from stabbing, to sharp pain, to severe pain. Results suggest to confirm that 92% who delivered vaginally complain of significant pain in the perineum, on the day after normal spontaneous delivery (NSD), of which the frequency and duration of perineal pain are related to the degree of trauma or tearing of the perineum that occurred during childbirth, or use of an episiotomy, a surgical procedure that widens the birth canal (Andrews et. al, 2008).

Theme 2: Experience of Comforting

Majority of the women felt being comforted after the intervention (10 minutes of hand massage) was provided. Research study shows that a 20 minute foot and hand massage on subjects who were recovering from a variety of surgeries including gynecological surgeries showed a positive result on reducing pain. It demonstrated that foot and hand massage is a very effective and inexpensive way to help people manage pain, even following surgery (Carlson, 2006). Moreover Wang and Keck (2004) stated that foot and hand massage has the potential to assist in pain relief as these stimulate the mechanoreceptors that activate the "non-painful" nerve fibers, preventing pain transmission from reaching consciousness. This statement was clearly supported by the verbal account of the respondents. A mother stated, "Wala na ako naramdamang sakit, nakakaantok" (no more pain, I just feel sleepy), while another said "Parang nawala kasi namasahe na" (seems like the pain is gone after being massage), "nawawala yung sakit at kirot" (the pain is gone).

Discussion

Pain is the common denominator that every woman around the globe encounters during the birthing process. As can be noted from the study of Declereq (2008), 48% or almost half of women are suffering from postpartum pain. It was evidently shown from the data collected that mother do suffers moderate postpartum pain either from the control or study group. This type of pain according to McCaffery and Beebe (1993) can already affect activities of daily living and can likewise significantly interfere their quality of life (Breivik, 2008) therefore great concern from nurses must be undertaken to address the issue. Nurses had been using predominantly pharmacological intervention as prescribed by the physician to alleviate postpartum pain. Pain management among postpartum mother varies from institution to institution. Some doctor orders pain reliever on a round the clock basis while others on a PRN (when necessary) basis. As nurses, we are very much dependent on doctors for pharmacological intervention. This could partly be because that non-pharmacological nursing intervention seems to be scanty thus researches must be explored in order to give nurses a wider choice or alternative in providing nursing care. A ten (10) minute hand reflexology was tested to determine if this can be effective in reducing level of postpartum pain post-delivery that can served as an alternative choice of non-pharmacological nursing intervention. Although pain scale has been widely accepted as a tool to measure pain objectively, however, there are still factor that cannot be accounted for such as pain tolerance which is highly individualized. Another consideration is the adequacy of sampling subjects used in the study and tight control such as blinding. Thus, in order for the study findings to be credible, the researcher triangulates the data in order not to confound the results such as randomization, comparability on profile variables between the control and study group, and narrative data. The study groups were given a 10 minute hand reflexology through a massage. Massaging both hands can essentially serve as an inhibitory impulse that would trigger the gate to close thus, pain is not felt (Melzack and Wall 2000). Lewis (2010) likewise stated that pain can be controlled by reflexology. It encourages the release of endorphins that can inhibit the transmission of pain signals to the spinal cord. Finding from the study revealed that a 10 minute hand reflexology reduces the level of postpartum pain. Several studies are in consonance with the study finding such as those of Steenkamp (2009), Wang and Keck (2004)

and Carlson (2006) which all reveal that foot and hand massage showed positive result on reducing pain. The result was further strengthened by the participants' verbal accounts in terms of the comfort that the ten minute hand reflexology gave them apart from the fact that respondents from both groups were indifferent in terms of their characteristics. Thus, this intervention can give us a vivid insights that ten minute hand reflexology may be an alternative of choice in reducing postpartum pain.

Conclusion

Qualitatively, a linear transition emerges from experiencing discomfort to comfort. Quantitatively, empirical evidence shows that ten (10) minute hand reflexology massage is effective in reducing postpartum pain. Overall, respondents were satisfied and comforted with hand reflexology as an intervention.

Recommendation

Practical and theoretical implications based on the conclusion of the study, the researcher makes the following suggestions:

1. Nurse clinician should consider using this as an alternative intervention (10 minute hand massage) in order to relieve or reduced the pain intensity felt by postpartum mothers.
2. Longitudinal effect of postpartum pain must be established.
3. Further research can be undertaken using tight control method such as blinding.
4. Nurse educators should teach nursing students about the usefulness of 10 minute hand reflexology as a means of pain management.
5. A larger sample should be conducted in order to verify study findings
6. To determine if foot reflexology could likewise have the same result.

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Feature Article

Facing Up to the Challenge of Typhoon Yolanda: The Philippine Nurses Association Experience

Bettina D. Evio
PNA Disaster Preparedness Committee

Sheila R. Bonito
PNA Disaster Preparedness Committee

Introduction

Considered as one of the deadliest tropical cyclones to have hit the country and the strongest typhoon recorded at landfall, Typhoon Yolanda (internationally known as Haiyan) swept across the Visayan region, leaving behind a devastation that mobilized national and international humanitarian efforts on a grand scale.

In response to the growing global awareness for the need for disaster preparedness, the Philippine Nurses Association (PNA), through its Disaster Preparedness Committee, has been training members from different local chapters on emergency and disaster management for the past four years[1]. The training seminar aimed to capacitate the participants and, eventually through them, their respective chapter members in preparing for and managing disaster events in coordination with government agencies and international humanitarian relief efforts. The PNA Board of Governors has also approved its Emergency Response Plan and Policy outlining the communication and coordination mechanism in times of emergency and disaster. Networking and linkage with the Department of Health - Health Emergency and Management Staff has also been formalized through a Memorandum of Understanding making PNA a member of the Health cluster, Mental Health and Psychological Support Services (MHPSS) cluster and Water and Sanitation and Hygiene (WASH) cluster.

When super typhoon Yolanda made its landfall and left devastation behind its path across the country, the capacity for response of the local and national government has been truly tested. PNA for its small part has also been challenged to review its preparedness efforts in terms of capacity building, policy and advocacy, as well as networking and coordination.

Initial response

Immediately after news from national media about the devastation of super typhoon Yolanda started pouring in, the Emergency Response Plan of PNA was activated

[1] *Fischetti, Mark (November 27, 2013). . .*

jumpstarting the communication and coordination between the PNA National Office and the Disaster Preparedness Committee to establish contact with the PNA local chapters of the affected areas. The use of social media was maximized, PNA website, facebook, twitter and email to ask for situational reports[2]. These reports became essential in determining the kind and extent of assistance to be provided.

A call for donations as well as for services to disaster survivors was issued, to which a good number responded. Early responses included those from Gov. Lolita Oracion (CAR Region), Gov. Fred Ruiz (NCR Zone 2), and former Gov. Ruth Tingda (PNA Baguio) for collection of donations at designated places. PNA officers and members who have participated in the national training seminars also started mobilizing their respective chapters to provide assistance to the typhoon survivors. These included among others coordination between PNA Region X through Gov. Neil Martin, Plan Philippines and UNICEF; response efforts to Tacloban City through PNA Davao City Gov. Roger Tong An in cooperation with the Office of the Mayor of Davao City; and PNA Cebu Chapter former President Jessie Empaces in participation with DOH Region 7[3]. Reports of their activities were regularly sent to the Disaster Preparedness Committee and the PNA National Office. The Disaster Preparedness Committee Chair Sheila Bonito with then PNA National President Noel Cadete and Vice President for Programs and Development Mila Llanes decided on priority actions for the response efforts of PNA. Priority actions included provision of calamity funds to local chapters severely affected, organizing and mobilization of nurse volunteers to help in medical missions and relief operations, participation in the meetings with national agencies, particularly with DOH - HEMS, Philippine Medical Association, Department of Social Welfare, and several agencies.

Provision of calamity funds to affected areas

The PNA National Office through Executive Director Leonardo Nuestro initiated an active search and offering for calamity fund to PNA local chapters in affected areas.

Organizing PNA nurse volunteers

Anticipating the need for nurse volunteers for possible deployment to any of the affected areas and/or evacuation areas, the Disaster Preparedness Committee conducted a series of orientation seminars for nurse volunteers. The orientation briefed them on the current situation in the affected areas and the PNA response efforts and provided a review of psychological first aid, and prepared the nurse volunteers on what to expect during response activities[4]. A total of 42 nurse volunteers attended the orientations. These nurses, eventually, were deployed to assist in the "OPLAN Salubong for Yolanda Survivors" at Camp Aguinaldo last November 21 and in Villamor Air Base in Pasay City last November 26, 2013.

To put a system to the increasing number of nurses wanting to volunteer, PNA Disaster Preparedness Committee set up a database to screen the volunteers and for a more efficient communication and coordination. All volunteers were asked to register in this database to indicate their current affiliation, previous training and skills related to disaster management, and their availability for volunteer work. The enthusiasm and optimism among the nurse volunteers were very encouraging which reflected the spirit of caring and humanitarian heart of Filipino nurses.

Oplan Salubong for Typhoon Yolanda survivors

The rise in the number of survivors being flown in to Manila by Philippine and American C130s, being mostly from Leyte and Samar, prompted a decision from the national government to transfer the processing area from Villamor Air Base to Camp Aguinaldo in Quezon City.

[2] *PNA Emergency and Disaster Management Committee Reports (2010-2013)*
[3] *PNA Situational Report on Typhoon Yolanda, November 13, 2013*
[4] *Ibid.*

Sheila Bonito and Bettina Evio of the Disaster Preparedness Committee participated in the planning meetings conducted by the National Disaster Risk Reduction and Management Council (NDRRMC) together with DOH-HEMS and DSWD and other different agencies both from the local and private sectors in Camp Aguinaldo.

For this particular activity, PNA was tasked to handle triage and initial assessment of all survivors requiring medical attention, the "under 5" children, pregnant women, and senior citizens requiring vaccination, and assist in providing emergency treatment as needed. A total of 20 nurses took part in this during the day[5], and an addition of six more nurse volunteers showed up for the evening shift.

When "Oplan Salubong" went back to Villamor Air Base, another group of PNA nurse volunteers were mobilized on November 26 to render health service, psychological first aid, and other forms of assistance as needed[6]. Participation was made possible through invitation from Ms. Navie Veloria from NV Life Coach, Inc., who has been providing counseling and psychosocial support services to survivors of Typhoon Yolanda since operations started in Villamor Air Base. To formalize PNAs volunteer work under the health sector coordination was made with DOH-HEMS. Since the activity lasted for several days, a schedule for shift work was organized.

Mobilization of PNA Local Chapters[7]

PNA local chapters have been very active in mobilizing their members in supporting response efforts in the affected areas.

PNA local chapters mobilized nurses from different sectors - academe, hospitals, community - to help in repacking supplies and goods in coordination with DSWD and PNRC for distribution to typhoon survivors in the different evacuation areas.

PNA Cebu Chapter, led by Chapter President Edith Santos coordinated with "Ang Nars Visayas", and DOH-Region VII in the relief efforts for Bantayan Island in northern Cebu. Forty nurses and 20 students were given orientation on MHPSS, WASH, Nutrition, and SPEED and deployed to Bantayan Island on Nov 14-17, 2013.

PNA Region X Gov Neil Martin and PNA Misamis Oriental Chapter President Mary Joy Neri coordinated with Balay Mindanaw for possible sending of nurse volunteers to join the medical team from Germany on medical mission to Panay: Capiz and Iloilo.

Coordination with national agencies and NGOs

The local chapters in the Visayan region continued their direct provision of relief efforts, services and assistance to the survivors of Typhoon Yolanda. The PNA National Office, on the other hand, continued coordination with national agencies and private organizations: DOH-HEMS, DSWD, PMA, PNRC, Project HOPE and PNAA, so that PNA can further determine the type and extent of assistance it could provide through its nurse volunteers.

Conclusion

By mid-April 2014, super typhoon Yolanda affected a total of 3,424,593 families (16,078,181 individuals) in Regions IV-A, IV-B, V, VI, VII, VIII, X, XI, and CARAGA, of which, 890,895 families (4,095,280 individuals) were reportedly displaced. Total number of dead individuals has increased to 6,300, while the number of injured and missing still remains at 28,689 and 1,061 persons, respectively[8].

Humanitarian relief efforts will continue for quite a while as people move towards recovery and rehabilitation, and PNA nurses, within their respective local chapters, will continue giving their full support. Nurses are always at the forefront in any emergency and disaster event. The services they render are invaluable. But they can only maximize their full potential in facing up to the challenge of responding to disaster events at the level of their preparedness.

The experience that super typhoon Yolanda gave the country will not be forgotten for a long time, not only by those who suffered loss of family members and property, but also by those who stood to face the challenge of helping the survivors discover *Hope* at the end of the tragedy.

[5] PNA Situational Report on Typhoon Yolanda, December 13, 2013
[6] PNA Report, "Oplan Salubong for Typhoon Yolanda Survivors," November 21, 2013, Camp Aguinaldo (Submitted "Operation Salubong": Yolanda Survivors, Villamor Air Base, Pasay City, November 26, 2013
[7] PNA Situational Report on Typhoon Yolanda, December 13, 2013
[8] NDRRMC Update, "Effects of Typhoon Yolanda (Haiyan)," April 17, 2014

PHILIPPINE NURSES ASSOCIATION, INC.

Feature Article

Outstanding Professional of the Year (for Nursing), 2014

Cecilia M. Laurente, PhD, RN
Member, PJN Editorial Board

Leah Primitiva S. Paquiz PhD, RN Opted for Legislative remedies for Health and Nursing Reforms

Motherly, energetic, passionate, dedicated, Nurse Leah, as she is fondly called , has nursing in her system ever since she was a young girl. To date, she has not ceased looking for strategies to help nurses gain their dignity as a person and as a professional, which she did at different levels of engagement.

Passion for Nursing and Teaching

After finishing her secondary schooling in her hometown in Mindoro, she took up Nursing in a prestigious school, the Trinity University of Asia , Cathedral heights in Quezon City in l973.After obtaining her license from the Professional Regulation Commission, she returned to her hometown , and worked as a staff nurse at Oriental Mindoro Provincial Hospital li l973 , a sort of return-service to her province where she grew up and dreamed to be a nurse. With this experience, she started to realize the plight of nurses—overworked but low-salaried professionals. Her experience was just in one province, what about in other provinces? She had the opportunity to work as a public health nurse at the Division of City Schools in Quezon City.

In l985 she continued her nursing career by taking up Master of Public Health at the College of Public health, University of the Philippines. Then preparing herself for administrative and leadership position, she took up Doctor of Education, Major in Educational Administration in l990-94 at the University of the Philippines College of Education, and Master of Arts in Nursing, Major in Nursing Education in l995-97 at School of Advanced Studies, Trinity University of Asia.

Equipped with managerial and leadership skills, she was hired as acting Dean then eventually as Dean of her alma mater, St Luke's College of Nursing, Trinity University of Asia.. This college produced eleven l00% passing rates in National Licensure examination for nurses.
Nurse Leah is not only a NURSE but also a TEACHER. For the latter, she took licensure exam for professional teacher in l992.

Continuing leadership in nursing

Recognizing her leadership potentials and her advocacy , she was elected national President of Philippine Nurses Association ln 2007 where she fought against exploitation of nurses, especially those working abroad of OFW.. She envisioned to work for their upliftment of their working conditions of nurses towards an empowered workforce. HER BATTLE CRY is and was TAMANG TRABAHO! TAMANG SUWELDO!

But it seems the response is still nowhere to be heard and found. Hence she thought of forming an organization, ANG NARS, inc, a socio-political group that is" the vanguard for the rights of health workers and health stakeholders committed to stand as one voice for them to be heard, and empower them to protect their rights and dignity to deliver safe and quality health care for the Filipinos". She had many ideas in her mind but strategies did not move much so she thought of opting for legislative remedies for the needed health and nursing reforms. This

group(Ang Nars) was later transformed into a partylist, called ANG NARS PARTYLIST. Fortunately, she won a seat in Congress.

Nurse Leah in Congress

Even as a newcomer in Congress, she was able to file significant Bills on her first day, which include the Comprehensive Nursing Law, Freedom of Information Act, Security Tenure for Government Employees, Whistle blower Act, and Civil Service Code of the Philippines. More Bills were filed in days to come including, Picture-based Health Warning Law, Plastic Bag regulation Act, Health Workers Incentives and Reform Act. To answer the call for "No to Privatization of Government Hospitals and health Services", Nurse Leah filed House Resolution 819: a resolution directing the Committee on Government enterprises and Privatization to investigate in aid of legislation, the Privatization, Corporatization and Modernization of Public Hospitals such as its infrastructures, facilities, health Human resource, operation and maintenance in relation to RA6957 as amended by RA7718, entitled "An Act authorizing the financing, construction, operation and maintenance of infrastructure projects by the private sector, and for other purposes" and other related laws.

With her, the nursing and health sector has a VOICE in the House of Representatives working through legislation to bring reforms to Filipinos' health. To support her battlecry of 'Tamang Trabaho, Tamang Sweldo, she formed the KatipuNARS-PSLINK, the first union of nurses in the Philippines.

NURSE LEAH'S CONTINUING CALL:
NURSES AND HEALTH WORKERS,
LET'S UNITE AS ONE WITH ONE VOICE!!

Nurse Leah delivers more than she promised. As a professional and a leader with her deep-seated love of God, country , environment and people, she was awarded the OUTSTANDING PROFESSIONAL AWARD OF THER YEAR (in Nursing), 20l4, with the following citation inscribed in her plaque:

For her outstanding public service and achievements as a nurse that has taken to the hall of Congress; for utilizing her undying passion for reforms in the health sector to attain primary health care and health human resource development thereby becoming the champion of health workers and Filinos' health; for her valuable assistance to the organization, ANG NARS, that progress to ANG NARS' PARTYLIST, for her pioneering efforts in the formation of KatipuNARS-PSLINK, the first union of nurses in the Philippines supporting her"TAMANG TRABAHO, TAMANG SWELDO' advocacy, and for her sterling service as Philippine Nurses Association president and now a congresswoman for health bringing pride to the nursing profession".

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About the Author: Assistant Professor Renante Dante G. Tan is a full time faculty at Far Eastern University, Institute of Nursing, for almost 11 years. Earned his Bachelor of Science in Nursing degree from Centro Escolar University and Master of Arts in Nursing at Far Eastern University. Currently, is pursuing his doctoral degree (Doctor of Education major in Educational Administration) in Far Eastern University. He teaches both in the undergraduate and graduate study handling lectures on Theoretical Foundations in Nursing and Nursing Research. He sits in research projects and thesis both as adviser and panel member. He currently heads the research committee. His research interests include caring in teaching, cancer, death and dying.

News Feature

PNA represents Filipino Nurses in the NNA Assembly, Triad Meeting & World Health Assembly

Leonardo M. Nuestro, Jr., MAN, RN
PNA Executive Director

Gerelyne R. Reboroso, RN
PNA Manager for Programs and Development

The national president of the Philippine Nurses Association (PNA), Dr. Roger Tong-an, was among the leaders of National Nurses Association (NNAs) around the world, who attended the International Council of Nurses (ICN) NNA Assembly held last May 14-15, 2014 in Geneva, Switzerland. Judith Shamian, ICN President gave the President's Update while Dr. Masako Kanai-Pak gave the financial support and David Benton shared the CEO update. Talks in the meeting included the following: Changing times require NNAs to adapt to the different needs of their membership; Advancing the role of nurses within National Health Systems; Nursing and health worker shortages; Aging and the impact on demand for health care; Using policy influence to improved the working conditions for nurses; and the goal of Universal Health Care.

The PNA President then joined the Triad Meeting 2014 held last May 16-17, 2014 still in Geneva. He was joined by the other government chief nursing and midwifery officers from 83 countries, together with the International Confederation of Midwives, the International Council of Nurses and the World Health Organization. The meeting addressed issues critical to the provision of safe, quality nursing and midwifery care, the development of nursing and midwifery professions and the effective regulation of these professions. Crucial topics discussed were: Leadership and Policy Direction for Universal Health Care (UHC); Quantity, quality and relevance of nursing and midwifery workforce; and Collaborative partnerships in the current social and economic realities and beyond.

Strengthening the nursing and midwifery workforce to support universal health coverage (UHC) as a means to achieve health goals was the main focus of the fifth Triad. It was emphasized the goal of UHC cannot be achieved without a strong focus on human resources for health, including the education and training, regulation, management, remuneration and continuing development of a quality nursing and midwifery workforce equitably deployed to meet population needs.

Highlighted was the relevance of nurses and midwives in improving the health of the population as well as contributing toward the achievement of global development goals. Investing in nursing and midwifery makes a difference as evidences show. The triad had been a good avenue to involve the key players in policy dialogue and decision-making regarding the planning, development and evaluation of services and policies. Participants at this meeting committed to work with others to transform nursing and midwifery education so that the next generation of nurses and midwives will be much prepared and sufficient in quantity, quality and relevance so as to

contribute to meeting the current and future health needs of the populations they serve throughout the world.

Nursing and midwifery leaders called on governments, educators and employers to collaborate with them to establish and support effective regulatory frameworks and that nurses and midwives continuously work to their full scope of practice.. An educated and competent nursing and midwifery workforce and a good work environment result in high quality care.

After the triad meeting, the 67th session of the World Health Assembly (WHA) followed last May 19-24 2014 at the Palais des Nations in Geneva[1]. The WHA is the supreme decision-making body of WHO. It was attended by around 3,500 delegations from all 194 WHO Member States including the Philippines.WHA opened its Sixty-seventh session with the election of Dr. Roberto Tomas Morales Ojeda, Cuba's Minister of Public Health, as its new President. Five vice-presidents were also appointed from Bahrain, Congo, Fiji, Lithuania, and Sri Lanka, representing their respective regions.

WHO Director-General Dr Margaret Chan aired her concern about the increase worldwide of childhood obesity, with numbers climbing fastest in developing countries. To gather the best possible advice on dealing with this crisis, Dr Chan announced that she has established a high-level Commission on Ending Childhood Obesity that will produce a consensus report specifying which approaches are likely to be most effective in different contexts around the world.

Dr. Christine Kaseba-Sata, First Lady of Zambia (WHO Goodwill Ambassador against gender-based violence) and Melinda Gates, co-Chair of the Bill and Melinda Gates Foundation also addressed delegates at the World Health Assembly. Dr Kaseba-Sata abhorred the prevalence of violence against women and girls and the extent to which cases of violence remain hidden and unrecognized. She stressed that the health sector has a responsibility to address the causes and consequences of violence. She called on delegates to ensure that everyone affected by violence has timely, effective and affordable access to all the health services they require, and that those services are free of abuse, disrespect and discrimination. Ms Gates then highlighted ways to improve the health of mothers and newborn babies, emphasizing the value of linking efforts to improve reproductive, maternal, newborn and child health – "the continuum of care".

The following were the other highlights of the WHA:

1. Member States' approval of a resolution endorsing a new global strategy and targets for tuberculosis (TB) prevention, care and control after 2015.
2. Member States' approval of a global monitoring framework on maternal, infant and young child nutrition.
3. Discussion on the increasing number of attacks on health workers, in both conflict and non-conflict settings which included review on common actions to address the problem and reaffirmed the principles of the sanctity of health-care facilities and the safety of health-care workers.
4. Approval of a resolution to improve the prevention, diagnosis and treatment of viral hepatitis and proposals to improve global coordination of efforts to address non-communicable diseases like diabetes, cancers, heart disease and stroke.
5. Presentation of awards to leaders in public health.
6. Approval of nine (9) indicators to measure progress in implementing the WHO Global NCD Action Plan.
7. Approval of plans to improve incorporate palliative care, expand inclusion of the needs of those affected by autism, improve access to health care for those with disabilities, better integrate the use of traditional medicine and raise awareness of psoriasis.
8. Approval of a new WHO global disability action plan 2014–2021 which aims to improve the health and quality of life of the one billion people around the world with disabilities by improving their access to health care and creating new and strengthening existing services and technologies that help them acquire or restore skills and functions.
9. Approval of a resolution on autism which aims to strengthen countries' capacities to address autism spectrum and other developmental disorders; facilitate resource mobilization; engage with autism-related networks; and monitor progress.
10. Approval of a resolution on psoriasis which encourages Member States to raise awareness about the disease and to advocate against the stigma experienced by so many people who suffer from it.
11. Approval of a resolution on antimicrobial drug resistance urging member states to strengthen drug management systems, to support research to extend the lifespan of existing drugs, and to encourage the development of new diagnostics and treatment options.
12. Revision of provisions on yellow fever vaccination or revaccination under the International Health Regulations

[1] *The members of the PH delegation to the WHA: Dr. Enrique T. Ona – Secretary of Health; Ambassador Cecilia B. Rebong; Deputy Permanent Representative Noralyn Baja (Geneva); Dr. Jaime Lagahid – DOH Chief of Staff; Dr. Roland Cortez – DOH Assistant Secretary; Dr. Irma Asuncion – DPCB Director; Dr. Jose R. Llacung, Jr. – CHO - 8 Director; 3rd Secretary Sharon Johnnette Agduma (Geneva); Dr. Cirilio R. Galindez – Chief of EVRMC; Attache Michelle Eduarte (Geneva); Dr. Oscar Guitierrez – OIC-PPO, FDA; Dr. Allan Evangelista – BIHC Chief HPO; Dr. Cherylle Gavino- DOH Secretary Executive Assistant; Dr. Linda Milan – DOH Consultant; and Dr. Roger P. Tong-an – PNA National President*

(2005) which includes extending the validity of a certificate of vaccination against yellow fever from 10 years to the extent of the life of the vaccinated person.

13. Implementation of the Minamata Convention on Mercury. The 2013 Minamata Convention aims to "protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds".
14. Reminder on the Recife Political Declaration which formulated and adopted by participants of the Third Global Forum on Human Resources for Health, in November 2013. Rooted in the right to health approach, the Recife Declaration recognizes the centrality of human resources for health in the drive towards universal health coverage. It commits governments to creating the conditions for the inclusive development of a shared vision with other stakeholders and reaffirms the role of the WHO Global Code of Practice on the International Recruitment of Health Personnel as a guide for action to strengthen the health workforce and health systems.
15. Approval of a resolution that significantly advances the quest for innovative, sustainable solutions for financing and coordinating health research and development (R&D) for diseases that disproportionately affect developing countries.
16. Approval of WHO's strategy to help countries improve access to essential medicines. Key principles include selecting a limited range of medicines on the basis of the best evidence available, efficient procurement, affordable prices, effective distribution systems, and rational use.
17. WHO's support for capacity-building for health technology assessment in countries. It will provide tools and guidance to prioritize health technologies and intensify networking and information exchange among countries to support priority setting and prevent wasteful spending on medicines and other technologies has been identified as a major cause of inefficiencies in health service delivery.
18. Approval of a resolution on health in the post-2015 development agenda, stressing the need for ongoing engagement in the process of setting the agenda. This includes a need to complete the unfinished work of the health Millennium Development Goals, newborn health, as well as an increased focus on non-communicable diseases, mental health and neglected tropical diseases. The resolution also stresses the importance of universal health coverage and the need to strengthen health systems.

DOH Secretary Dr. Enrique Ona, addressed the Assembly during the plenary debate on the relationship between climate and health, and remarked that health is one of the most visible dimensions of climate change. He said that the health impacts of climate change are diverse and real, and that a united front against the health impacts of climate change is needed to achieve UHC for the people.

There are great challenges ahead for the nursing profession to align its roadmap towards a more responsive accredited professional organization and say, "We, the Filipino nurses, responding to the needs of society, are engaged in providing humane and globally competent nursing care."

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Ms. Ma. Visitacion Perez-Molintas is a community development worker. She was the Project Manager of the UNFPA 6th Country Programme of Assistance for the Philippines (CPAP) implemented from 2005-2010 in Mt. Province. She has worked in the Cordillera Administrative Region for more than four decades.

News Feature

PNA: Champion of the Filipino Nurses, 2014 Outstanding APO

Eleanor M. Nolasco, RN

The PNA was proclaimed the *2014 Outstanding Accredited Professional Organization (APO) Category A* by the Professional Regulation Commission (PRC) during the Awarding Ceremonies that highlighted PRC's 41st Founding Anniversary celebration in June 20, 2014 held at the PICC Hall with the theme, "Rising in Unity for Nation-building." Similar awards were given to Outstanding Professionals in their respective fields of professional practice with the highest singular award, "Nubla Excellence Award", given to the one adjudged the best among his outstanding peers. This year's roster of outstanding professionals included the nurses' own, Primitiva "Leah" Samaco-Paquiz, former PNA president now sectoral party-list representative in the 16th Philippine Congress. This year's search by the PRC for the aforementioned Awards was in coordination with the Philippine Association of the Professional Regulatory Board Members, Inc., Foundation for Outstanding Professionals, Inc., and Philippine Federation of Professional Associations, Inc.

"Proud" must have been the general feeling of the PNA contingent present during the Awards night especially so when they took centerstage to accept the trophy for the distinct title recognizing the PNA's outstanding performance as an APO. These men and women, nursing leaders all, have mostly served with utmost dedication and selflessness in steering the professional association through the challenging journey of the past year. It was an overwhelming moment to be declared "winner" over four (4) other equally outstanding APOs. This was a sweet culmination from the previous year when the PNA reached the final round for the same award. Leading the nursing delegation was 2013 PNA National President Noel C. Cadete from whose term was drawn the portfolio submitted to the selection committee for the annual PRC search. With him were Gov. Roger P. Tong-an, who succeeded him as president; other members of the PNA Board and chapter officers/representatives who were there to share the glorious moment, and not the least, to cheer a colleague, Congresswoman Leah S. Paquiz, 2014 Outstanding Professional Nurse Award recipient.

In 2003, the PNA earned the same distinguished title and in 2008, PNA was recipient of the "Most Outstanding National Health Provider Organization" Award by the Council of Health Agencies of the Philippines (CHAP).

"Championing the Filipino nurse": A fitting tagline to underscore the vision-mission of the PNA and its core values. Its vision, *By 2030, PNA is the primary professional association advancing the welfare and development of globally competitive Filipino nurses*. Its mission, *Championing the global competence, welfare and positive and professional image of the Filipino nurse* anchored on the core values of *Love of God and country, caring, quality and excellence, integrity and collaboration*.

Regarding itself as a "champion of the Filipino nurse" is also not an empty boast by the Association. The PNA's Roadmap 2030 that served as blueprint for the APO's program thrusts for 2013 stand on two pillars namely culture of excellence and dynamic leadership. These serve as guideposts for the APO to be recognized as a positive leading force within the nursing sector with its diverse composition of nursing specialties and interest groups working toward the same goal of "developing a competent nursing resource that is globally competitive". The APO has also committed to "advance the holistic welfare of the Filipino nurse" by being a "responsive organization with an engaged and pro-active membership."

For the 2014 search, stringent criteria were applied in the selection of nominees and candidates who went through a "meticulous and thorough scrutiny". For the "Outstanding APO Category A" award, the candidates were required to submit a detailed portfolio of their organizational profile and accomplishments that should have included programs along "social protection, continuing professional development and career advocacy" as broadly put by PRC Chair Teresita R. Mananzala in her message.

The following standards were used as guide to measure and evaluate the APO's performance as the lead organization in its respective sector: 1) Leadership and initiative in participating in PRC activities , 2) Quality of performance of appointees to the Professional Regulatory Boards related to licensure examinations and regulatory functions, 3) Quality and relevance of Continuing Professional Education (CPE) programs, 4) Corporate responsibility: attaining objectives of org, welfare and placemetn assistance, enhacement of stature/prestige of profession and practitioners, 5) effective discharge of social responsibility through socio-civic activities, 6) Quality of relations among members and officers of the APO and between the APO and other professional organizations in the same sector, 7) Leadership and initiative in undertaking programs that contribute to the improvement of professional practice with beneficial impact to community and country in general, 8) Quality of relationship with the PRC and the Professional Regulatory Board in terms of cooperation and coordination, 9) Conduct of orderly and peaceful elections leading to smooth transition of leadership as part of organizational integration, 10) sponsorship of and participation in local and international events within the profession and with other professional groups, 11) Regular publications, bulletins and technical journals, and submission of annual reports (financial and operations) to PRC and SEC, and 12) Acquisition of own building and maintenance of financial solvency of the association.

The volume of evidentiary documents submitted by the PNA to substantiate its "accomplishments" along the 12 indicators or standards aforementioned portrays a professional association that is vibrant, dynamic with an able leadership attuned to the sentiments, needs and aspirations of its members and conscious of its important role in the bigger society.

Even then, PNA continues to face the formidable challenge to unite, consolidate and harness under its banner the thousands of Filipino professional nurses based in the country or working overseas. The PNA's current membership is estimated at 73,000 nurses organized under 92 local chapters all over the country plus, a growing membership of nurses based abroad who have organized eleven chapters to date.

To entice more professional nurses to become part of the Association and to encourage renewal of membership, the Association offered a package of programs for professional advancement and career development through Continuing Professional Development sessions undertaken in partnership with nursing specialty groups who lent their expertise for such activities. In addition, leadership seminars and educational fora on social issues were held to increase the nurses' critical awareness and deepen their understanding of factors affecting the practice of the profession.

In his report, 2013 President Noel Cadete cited the efforts of the Association in preparing our nurses to be globally competitive. One was the PNA's participation in the International Council of Nurses (ICN's) 25th Quadrennial Congress held on May 18-23, 2013 at Melbourne, Australia where representatives of national nursing associations gathered "to share evidence, experience and innovations to demonstrate the role of nurses in the attainment of equity and access to health care for peoples and communities." Part of the report said, "The Congress provided a global platform for the dissemination of nursing knowledge and leadership across specialties, cultures and countries." In the same Congress, PNA Executive Director Leonardo M. Nuestro, Jr. and Gov. Roger Tong-an won top 3 and top 10 places respectively, for their entries in the ICN's Wellness Photo Contest that was part of an international campaign to promote Wellness or Healthy Lifestyle to counter the rise of Non-Communicable Diseases.

On November 20-22, 2013, with PNA acting as host, two international meetings were held: 14th Asia Workforce Forum (AWFF) and the 10th Alliance of Asian Nurses Association (AANA) Meeting. Delegates of nursing associations in Asia convened and discussed critical issues affecting nurses and their practice.

Equal attention and time were allotted in strengthening linkages with agencies, committees and similar bodies attached to the nursing regulatory board in the task to develop "nursing core competency standards" and "Nursing Advancement Recognition and Specialization".

On the *promotion of the general well-being of nurses,* the PNA was a regular participant in the Philippine Professional Nursing Roadmap Coalition (PPNRC) which is an initiative of the Professional Regulatory Board of Nursing (PRBON). Among the topics tackled were Professional Competitiveness and the ASEAN Roadmap and Nursing Core Competency Standards.

The PNA continued to take on the issue of socio-economic and general well-being of nurses even beyond the Board room or conferences through lobbying in Congress and occasionally participating in rallies and similar activities to publicly raise its legitimate concerns. The PNA joined and initiated campaigns to encourage the members to be involved in important advocacies pertaining to people's health and nurses' welfare. The International Council of Nurses (ICN) which the PNA is a member of, has termed this Positive Practice Environment (PPE) to generally refer to the condition of work of nurses.

A *strong advocacy* that projected PNA's relevance and social responsiveness was in the on-going campaign against privatization of health services particularly in the case of the Philippine Orthopedic Center that is pending takeover by private business. The PNA has joined a coalition of health workers opposed to privatization of health. This particular position and advocacy of the PNA is proof positive that the caring quality of nurses remained intact and was vibrant. The PNA was just as steadfast in its role as partner of the health department in pursuing programs supporting the Universal Health Care program of the government. With both public and private sectoral linkages, the PNA pursued and joined initiatives that served the greater good and the nurses' interests.

Promotion of research as a critical component in nursing practice is another important thrust of the PNA. Developing research and analytical skills in nurses is part of competency building that make for better quality of care.

Corporate viability through sound financial management. Through the more than 9 decades of its organizational existence, the PNA has wisened up to the importance of sound and judicious management of its resources. Having the best men and women with the best programs meant little without the means and resources to put these in reality. So, it is to the credit of the PNA leadership that despite the constriction of its revenue sources, it has remained afloat and has not diminished its operations and program pursuits. The Association has even made a major acquisition of a property asset that is now being developed for potential revenues to further enhance

the benefits and services to its members.

Most deserving. Even as the above narrative highlighted only parts of the PNA portfolio presumably used as basis in the PNA's selection as 2014 Outstanding APO in Category A, it is enough to make one conclude that the PNA indeed was worthy and deserving of the award. As a national organization with a mass membership of service-oriented professionals, it has proven itself a major player and contributor in the efforts toward nation building and people's development. The PNA, as an institution, has every reason to bask in the pride and glory brought by the Award. However, with the Award came the responsibility to work even harder in pushing for programs that will affirm the dignity of the nurse as a competent provider of quality care and an empowered player in nation-building here or elsewhere. The PNA should also be humbled by the knowledge that it is still a long tortuous walk to final glory where the Filipino nurse is not only a competent, globally competitive nurse but a socially attuned competent nurse who has the choice to remain local or go global. That should add more perspective to the PRC's call for professionals to rise to the challenge of nation-building.

GUIDELINES FOR AUTHORS

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

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

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

Manuscript Preparation and Submission

1. Manuscripts are voluntary contributions submitted for exclusive review for publication in the PJN. Manuscripts containing original materials are accepted for consideration if either the article or any part of its essential substance, tables, or figures has been or will be published or submitted elsewhere before appearing in PJN.
2. Authors submit their manuscripts for consideration by the PJN with the understanding that their work may be submitted to a plagiarism detection software at the discretion of the Editorial Board to ensure originality of the work submitted.
3. For additional information about manuscripts and queries about submitting manuscripts, please contact the editor:
   E-mail: ***philippinenursesassociation@yahoo.com.ph.***

The information below indicates the required presentation of manuscripts.

Format and Style

1. The PJN follows the Publication Manual of the American Psychological Association (APA) 6th edition with respect to manuscript preparation. Authors are encouraged to refer to the manual, whenever possible. Alternatively, the following internet resource may be used: Angeli, E., Wagner, J., Lawrick, E., Moore, K., Anderson, M., Soderlund, L., & Brizee, A. (2010, May 5). *General format*. Retrieved from http://owl.english.purdue.edu/owl/resource/560/01/
2. Please submit two copies of manuscript, which should not be more than ten pages, including abstract, text, references, tables, and figures. The author is responsible for compliance with APA format and for the accuracy of all information, including citations and verification of all references with citations in the text. Spelling may be in either American or British English; submission must be typed, double-spaced on letter-size (8.5" x 11") paper with at least 1" margin on both sides. Include a cover letter listing the author's contact number, address, title, institutional affiliation, position and other relevant credentials. All articles should be addressed to the PNA Office at 1663 Benitez St., Manila, Philippines or sent through e-mail: ***philippinenursesassociation@yahoo.com.ph***
3. Manuscripts should be 12 font, double-spaced with standard margins (about 1 inch). Fancy typefaces, italics, underlining and blooding should not be used except as prescribed in the APA 6th edition guidelines.

Content

The content of a typical manuscript includes:

Title page

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

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

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

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

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

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

- Introduction
- Background
- Methodology and Methods
- Findings
- Discussion
- Conclusions

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.

Systematic Reviews

Authors considering to submit a systematic review must adhere to the PRISMA Statement. Such submissions must be accompanied by a PRISMA 2009 Checklist. Further information about the PRISMA Statement and the PRISMA 2009 Checklist can be obtained from the following link:
PRISMA. (n.d.) *The PRISMA statement*. Retrieved from http://www.prisma-statement.org/statement.htm

References

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

Tables and figures/photos

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