Note

A Comparison of Nursing Education System in Yokohama City University and the University of the Philippines Manila

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I. Introduction

In university education, there is a strong need to foster globally minded students; further, global standards are being adopted for medical education at an accelerated rate. The trend is also found in nursing education systems, owing to the worldwide demand for more and higher-quality nurses, which has increased opportunities for nurses to work in different countries (Youssef, Abou, Tornquist, and WHO, 1997). Consequently, it is necessary to investigate the ideal method and qualitative assurance of nursing education systems from a global perspective, as nursing education systems currently differs across countries (Buchan, 2007).

In this study, we selected Japan and the Philippines, to compare the differences in nursing education systems. In Japan, there are still few nurses who work abroad (Kawaguchi, 2009). On the other hand, the Philippines which is one of major source countries obtains great benefits by sending nurses overseas. The Philippines has a national policy of dispatching its nurses abroad (Lorenzo, Galvez-Tan, Icamina, and Javier, 2007), as one aim of nursing education is that these nurses remit some of their profits back to the nation. Furthermore, sending nurses is worth acquiring of innovative knowledge and skills when nurses return to their home countries (WHO, 2003). According to these backgrounds, a comparative study of nursing education systems in two countries would be beneficial for Japan to explore an ideal method for training more globally minded nurses as the Philippines fosters. We selected two educational institutions for this study - Yokohama City University (YCU), a Japanese university, and the University of the Philippines Manila (UPM), a Filipino university known for its strong international relationships and annual exchange programs. A comparative study of the nursing programs in these universities would not only help identify steps that Japanese education authorities can take to foster global-mindedness in nurses, but also give rise to scope for developing an exchange program between YCU and UPM.

Regarding education system and curricula, Ishikawa (2011) indicates the Filipino education system that comprises six years of elementary school and four years of high school, with matriculation to university at age 16 years, and it is thought that English, Tagalog, chemistry, and other subjects are taught initially at the Japanese high school level. Kawaguchi (2009) compared nursing education curricula between in the two countries, and revealed that more credits in nursing sciences are required in the Philippines. Nevertheless, there have been no detailed studies comparing the Japanese and Filipino nursing education systems that included a detailed overview of course contents and on–site clinical training, which are essential for improving the practical abilities of nurses, particularly those who will be qualified to work outside of Japan. Therefore, we selected representative universities for the detail comparison.

1. Objective

Our study compared the nursing education systems in YCU and UPM, including course contents and practical clinical training, between Japan and the Philippines.

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II. Methods

We compared education guidelines from YCU and UPM which shows mandatory courses per academic year. The selected institutions are public universities which are members of the International Academic Consortium for Sustainable Cities and were selected because they are located in the cities having the biggest population in each country among universities offering master's and doctoral programs of nurses. Therefore, they are appropriate subjects for a comparative analysis of nursing education systems between in Japan and the Philippines. In addition, we also conducted a comparison revealing nursing education systems and educational curricula in two countries with materials issued by Japan's Ministry of Education, Culture, Sports, Science and Technology and the Ministry of Health, Labour and Welfare for Japan, and for the Philippines, CHED Memorandum Order No. 30, Series of 2001, Updated Policies and Standards for Nursing Education and No. 14, Series of 2009, Policies and Standards for Bachelor of Science in Nursing Programs issued by the Commission on Higher Education (CHED).

Ⅲ. Results

1. Comparison of mandatory courses at YCU and UPM (Excluding Public Health Nursing Courses) (Table 1)

YCU provides an orderly, sequenced curriculum aimed at the logical and systematic presentation of subjects grounded in nursing specialties. UPM provides a framework-based curriculum based on teaching skills and abilities.

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Table1 Comparison of Mandatory courses by Academic year at YCU and UPM
                                                                      Ison of Mandatory ocurses by Academic year at YCU and UPM
YCU

Information communication
Fducation seminar Considering illness scientifically:
introduction to biology considering mental aspects.scientifically ethics)
Nursing anatomy and physiology I
Nursing anatomy and physiology II
Nursing biochemistry
Nursing microbiology
Nursing microbiology
Nursing mutritional science
Introduction to nursing
Fundamental nursing support theory I
Fundamental nursing support theory I
Fundamental nursing practical training I
Nursing integration and practice (introduction to nursing)
Nursing pharmacology
Clinical pathology nursing I
Clinical pathology nursing II
Health and medical statistics
Social welfare science
Health and welfare administration theory
Human development
Public health (community hygiene)
Human relationship theory
Fundamental nursing support theory II
Fundamental nursing support theory III
Fundamental nursing support theory III
Fundamental nursing support theory III
Fundamental nursing methodology II
Adult nursing methodology II
Adult nursing methodology II
Adult nursing methodology II
Adult nursing sembourd in sursing
Maternal anatomy, therapeutics
Maternal nursing methodology
  Academic year
1st
                                                                             Information communication
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Fundamentals of behavioral science in health and illness
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   · Anatomy, physiology
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Pathophysiology
Pharmacology, therapeutics
Nursing fundamentals I (for healthy persons).
Nursing fundamentals II (for persons with illness).
Microbiology
Parasitology
Community nursing (fundamentals).
                                                                                  Maternal anatomy, therapeutics
Maternal nursing methodology
                                                                             Maternal anatomy, therapeutics
Maternal nursing methodology
Introduction to pediatric nursing
Pediatric anatomy, therapeutics
Introduction to gerontological nursing
Introduction to gerontological nursing
Psychiatric anatomy, therapeutics
Psychiatric anatomy, therapeutics
Psychiatric nursing methodology
Introduction to home nursing
Introduction to community nursing
Community nursing methodology I
Community nursing practical training I
Nursing ethics
Family nursing
International nursing I
Infection control nursing (elective)
Nursing anatomy and physiology seminar (elective)
Nursing information science
Adult nursing seminar II
Adult nursing practice training I
Maternal pursing practice training I
Maternal pursing practice training I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               Nursing intervention I
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   (at all sites: oxygen, water-electrolyte balance, reproduction, sex, neonatal).

Nursing intervention 1.

Nursing intervention I
(community: oxygen, water-electrolyte balance, reproduction, sex)

Nursing intervention II (hospital and community: adult)
Nursing intervention II (community)
Community nursing II (until required skills are developed)
Introduction to nursing management and leadership
Introduction to nursing research
Nursing care for the aged and the chronically ill (elective)
Community psychiatric nursing (elective)

Maternity nursing (elective)
                                                                               Adult nursing practice training I Adult nursing practice training II Maternal nursing seminar Maternal nursing practice training Pediatric nursing methodology Pediatric nursing seminar Gerontological nursing methodology Gerontological nursing seminar Gerontological nursing practice tra
                                                                                  Gerontological nursing practice training I
                                                                                  Psychiatric nursing seminar
Psychiatric nursing practical training
                                                                               rsychiatric fursing bractical training
Home nursing methodology I
Home nursing methodology II
Community nursing methodology II
Community nursing methodology III
Nursing integration and practice II (Graduation research I)
International nursing II
International nursing II

Disaster nursing
Clinical safety (elective)
Human relations theory seminar (elective)

4th

Adult nursing practical training III
Pediatric nursing practical training II
Gerontological nursing practical training II
Community nursing practical training II (Home care)
Nursing integration and practice IIV (Graduation thesis research II)
Nursing integration and practice IV (Graduation thesis research II)
Nursing management
Nursing education (elective)
Nursing education (elective)
Underlined parts include practical training
Source: Education guidelines from YCU and UPM each
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Nursing intervention III

    Nursing intervention III (nursing care of patients in life-threatening situations; intensive care) (nursing care for patients with conforming and adaptation (psychiatrio).
    Intensive nursing practice at a hospital
    Intensive community nursing practice
    Maternity nursing (elective)
    Intensive care nursing, and nursing for coronary disease patients (elective)
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YCU describes more detailed course composition, while the number of courses offered at UPM reveals its course composition as being situated within a larger framework. For example, while YCU has a series of related courses for each subject by course type (e.g. theory), UPM has courses for each specific care setting, such as intensive care and community health nursing.

A comparison by academic year shows that, at both schools, first-year students study anatomy, developmental studies, physiology, and fundamental nursing. YCU differs in that students also study nursing biochemistry, nursing microbiology, and nursing nutritional science, with fundamental nursing practical training I in a hospital.

In the second academic year, students at both school study disease physiology in nursing anatomy and physiology seminar and pathophysiology respectively. Moreover, second-year students receive practice training in fundamental nursing practical training, nursing fundamentals I, II and community nursing. Students also begin to study nursing theory during their second year in health and welfare administration theory and human relationship theory, fundamental nursing support theory II, III at YCU. In their second year at UPM, students study microbiology, and different from YCU, parasitology is distinctly studied. At YCU, different from UPM, beginning in the second year, students study health and medical statistics and international nursing I.

In the third academic year, students at both schools have more practice trainings in adult nursing practice training I, II and maternal nursing practice training, gerontological nursing practice training I, psychiatric nursing practical training at YCU, and nursing intervention I and II, community nursing II at UPM, and they begin the required learning for nursing-related research. At UPM, different from YCU,

students begin to learn introduction to nursing management and leadership in the third year; while, at YCU, students begin to learn community nursing, nursing information science and disaster nursing.

In the fourth academic year, UPM begin to learn intensive care; whereas, at YCU, focus is placed on nursing management and graduation-related research in nursing integration and practice IV (graduation thesis research II). While UPM offers elective courses that include lectures on intensive care nursing, and nursing for coronary disease patients and maternity nursing, these two subjects are mandatory at YCU.

2. Comparison of Nursing Education Systems in Japan and the Philippines (Table 2 and 3)

Both countries have detailed stipulations including the validity of education institutions and teacher (professor) placement. As for the concepts of nursing education, Japan has six goals, while the Philippines has four goals. Regarding professorial qualifications, a characteristic shared by both countries is that faculty must have practical experience in nursing work. Further, in the Philippines, it is specified that a professor must be a Filipino citizen and hold a master's degree in a nursing specialty. In Japan, educational contents are stipulated in the "Designated Regulations for Public Health Nursing, Midwifery, and Nursing Schools and Training Schools". As the designated standard for nursing schools and training schools, including universities, there is a minimum period of study of three years, with a total acquisition of 97 or more credits. In the Philippines, 202 or more credits are required. As for nursing specialist subjects, the Philippines requires approximately 20 more credits than Japan, with considerably more on-site clinical practice hours with 2,346 hours while Japan requires 1,035 hours.

Table2 Comparison of Nursing Education Systems in Japan and the Philippines									
	Japan	the Philippines							
Nursing education concepts	To foster nurses' broad understanding of the integrated nature of human physical, mental, and social dimensions. the dynamic interactions between human life and health natural as well as social and cultural environments, and to view things from these perspectives. To foster nurses' abilities to practice nursing based on ethical principles and to have an empathic awareness and understanding of the diversity of human values, as well as the fundamental abilities for continuous self-learning of the latest knowledge and techniques. to practice scientifically grounded nursing, to respond to human health problems. to practice nursing according to the health and disorder status of individual persons. to understand health, healthcare, and welfare systems, as well as the roles of other workers within these systems.	To foster the abilities of nurses as professionals. nurses' abilities to continuously improve their work quality as professionals. the critical thinking abilities required as a registered nurse. nurses' abilities to proactively utilize research results within their nursing practice.							
Teacher qualifications	Persons regarding whom any of the following apply: - Have five or more years of experience working as a public health nurse, midwife, or nurse, and who have completed the training required to become a full-time teacher, and have academic experience in the education of nurses that is equivalent to or superior to this. - Have three or more years of experience in the same job working as a public health nurse, midwife, or nurse, and who have studied at a university the obligatory courses concerning education and have graduated from such a university.	Persons who fulfill all the following: - Must be a citizen of the Philippines. - Must have a master's degree in a nursing specialty. - Must have three or more years of clinical experience in his/her specialty field. - Must be a reputable member of the Philippine Nurses Association.							
Teacher placement and arrangement	For each course, the number of students who participate simultaneously must be 40 persons or fewer (however, in cases where sufficient educational effects can be expected, this limitation does not apply).	For regular courses, there must be one professor for every 50 students. One class comprises 48-50 persons. Teacher placement ratio during practice training (teacher:students): 3rd year, 1st half: 1.8-10. 3rd year, 2nd half: 1.8-12 4th year: 1:12-15							
Facilities and equipment	 Has a library, practice training room, and at-home care training room. Has equipment and devices required for nursing education, specimens, models, and illustrated books. Facilities appropriate for training can be regularly utilized, with instruction provided by qualified trainers and staff. 	 Has nursing technique practice rooms. Has equipment and resources required for practice training. Has library facilities. 							
Education contents (details in table 2)	97 credits or more, with 3,000 hours or more of lectures or practical training including 1,035 hours or more of practical training. At a facility for practical training in nursing fundamentals and adult nursing, the following criteria must be met: One or more nursing employees must be present for every three hospitalized patients. Clearly organized nursing governance. Appropriate performance of required nursing recordings and record keeping. Sufficient edical staff numbers for instructical guidance.	87 oredits or more in general education, 115 oredits or more in nursing courses, for a total of 202 or more oredits, with 2, 346 hours or more of practical training. In practical training, the following items are considered: • Students' knowledge and abilities. • The scale and characteristics of the learning resources in the facility, community. • Sufficient numbers and diversity of available patients. • Sufficient medical staff numbers for instructional guidance. • Quality of nursing care services. • Comprised such that 51 hours of practice training count as one credit. • Number of patients assigned to each student: 3rd year, 1st half: 1 person 3rd year, 2nd half: 2 persons 4th year, 1st half: 2-3 persons 4th year, 1st half: 2-5 persons 4th year, 1st half: 2-5 persons							

Table3 Comparison of Educational Curriculum in Japan and the Philippines

Japan					the Phillippines			
Education contents		No. of credits	Total	Education contents	3	No. of credits	Total	
Fundamental fields	Fundamentals of scientific thought Understanding human life and society	13	97	Nursing sciences	Nursing theory Health assessments	3	115	
Fundamental specialty fields	Human body structure and functions	15			Community nursing	5		
	Occurrence of illness and promotion of recovery				Nutrition science and diet therapy	4		
	Health support and the social health insurance syste	n 6			Health education	3		
Specialty fields I	Fundamentals of nursing	13			Pharmacology	3		
Specialty fields II	Adult nursing	12			Nursing research I	3		
	Gerontological nursing	8			Nursing research II	2		
	Pediatric nursing	6			Techniques and skills evaluation I	3		
	Maternal nursing	6			Techniques and skills evaluation II	3		
	Psychiatric nursing	6			Elective I	2		
Integrated fields	Theory of home nursing	6			Elective II	2		
	Nursing integration and practice	6			Nursing fundamentals	5		
					Maternal and family nursing	8		
					High-risk maternal and family nursing	11		
					Nursing for respiratory, electrolytic, and metabolic disorders	14		
					Nursing for immune and regulatory function disorders	9		
					Psychiatric nursing	6		
					Acute care nursing	11		
					Nursing management and leadership	7		
					Intensive care nursing	8		
		Time (No. of hours)	Total			Time (No. of hours)	Total	
Clinical Practice	Fundamentals of nursing	135	1, 035	Clinical Practice	Intensive care nursing	408	2, 346	
	Adult nursing	270 180		Traning in the	High-risk maternal and family nursing	306 306		
	Gerontological nursing Pediatric nursing	90		Philippines	Nursing for respiratory, electrolytic, and metabolic disorders Acute care nursing	306 255		
	Maternal nursing	90			Maternal and family nursing	204		
	Psychiatric nursing	90			Nursing for immune and regulatory function disorders	204		
	Theory of home nursing	90			Nursing management and leadership	153		
	Nursing integration and practice	90			Community nursing	102		
					Nursing research II	102		
					Nursing fundamentals	102		
					Psychiatric nursing	102		
					Health assessments	51		
					Nursing research I	51		

Source: Designated Regulations for Public Health Nursing, Midwifery, and Nursing Schools and Training Schools, CHED Memorandum Order No. 14, Series of 2009, Subject: Policies and Standards for Bachelor of Science in Nursing Programs

Tables 3 shows curriculum details for each of the two countries. The Japanese curriculum is mainly divided by developmental stage; however, the curriculum in the Philippines is mainly divided by nursing care setting, with more academic credit requirements, especially for maternity and family nursing.

IV. Discussion and Conclusion

The results of this analysis revealed that the nursing courses in both universities are likely to establish an effective curriculum that deals with the domestic health issues first, even those that utilize it for nursing globalization with their global perspective, especially in the Philippines. As well as the comparison of educational systems between two countries, Japan imposes 97 or more credits to become a nurse; however, in the Philippines, 202 or more credits are stipulated for the acquisition general credit requirements in the Philippines are also high, at 87 credits. Nursing specialized subjects in the Philippines are about 20 credits more than in Japan, and 2,346 hours are required especially for clinical trainings.

As the number of physicians and nurses per capita in the Philippines is reported to be one-fourth to one-fifth that of Japan (Ishikawa,2011), insufficient number of healthcare workers causes the hard access to healthcare facilities. Thus, Filipino nurses need to be immediately ready for active nursing work after graduation. In order to secure high-quality practical training, the number of teachers are assigned to each grade and

the number of patients were carefully defined in the system. In addition, the Philippines, there is a nationwide low standard of maternity health (WHO, n.d.); maternity care is thus a key healthcare issue in the Philippines. The Philippines' nursing education system is structured according to healthcare requirement levels, including health centers and communities. Owing to this structure and the overall healthcare situation, it can be argued that the Philippines needs a nursing practice that is based on each type of care setting. On the other hand, Japan has a rapidly aging society. Thus, Japan's nursing curriculum focuses on a division by developmental life stages. Moreover, in Japan, there is an intense argument of patients' rights and securing safe care, the scope of nursing techniques that can be performed by students in clinical practice is limited; thus, new graduate nurses tend to suffer from a gap between their own skills and practice skills expected in clinical settings (Tamura, 2009), which might prevent nurses from overseas work because working abroad requires them to become an immediate work force, while Japan promotes dedicated training for new graduate nurses (JANPU, 2008).

The Philippines set their nursing education systems that students are able to adopt to diverse environment including foreign countries with more matured clinical practical skills than Japanese students. Therefore, YCU and other Japanese universities are also necessary to increase the clinical practice training by the corporation of training facilities. In addition, securing qualified teachers who can teach international nursing and medical English is essential for raising globally-minded

students. Implementing these measures can help develop an intense and fruitful exchange program between the two universities. However, further investigations are needed to clarify other universities' situation and each national policy with materials apart from open resources for the detailed comparison of the nursing education system in Japan and the Philippines.

Conflict of Interest Statement

There are no conflicts of interest to declare.

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