

DEVELOPING HUMAN RESOURCES FOR HEALTH: THE PHILIPPINES AND CAMBODIAN EXPERIENCE

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Introduction

All over the world, the education of health professionals is costly and takes a relatively long period of time. In many countries, physicians, dentists, nurses, and pharmacists, among others, require postgraduate degrees and advanced training before they can fully practise their professions and deliver healthcare services. In their review of health sciences curricula from 1910 to 2010, Frenk *et al.* (2010) reported in the *Lancet* that despite all the advances achieved in biomedicine and other sciences, the same inequities in health persist. They wrote that those health problems eliminated from the population in affluent societies remain in many poor countries. The Carnegie Foundation commissioned a study by Irby, Cooke, and O'Brien to mark the centennial of the Flexnerian or science-based curriculum of medicine. Irby *et al.* (2010) reported that the education of physicians in the United States is heavily hospital-based and poorly linked to public health delivery and that students lacked understanding of the non-clinical roles of physicians. Both publications called on schools of health sciences to develop a truly transformative curriculum that would address the needs of the communities and societies they want to serve. The Global Consensus on Social Accountability for Medical Schools (2010), commissioned for the same purpose of commemorating the traditional science-based medical education curriculum, presented basically the same findings and made similar recommendations.

The World Health Organization (WHO) recognised the pivotal role that competent teachers in the health sciences play in addressing the overall health and well-being of populations. WHO founded teacher training centres in various parts of the world to help health sciences schools develop a critical mass of competent educators in the health professions (WHO, 1969). One of these centres was the National Teacher Training Center for the Health Professions (NTTCHP) based at the University of the Philippines Manila (UP Manila). The University of the Philippines Board of Regents founded NTTCHP on January 31, 1975 (Sana, 1998).

Since 1981, NTTCHP has been offering the Master of Health Professions Education (MHPEd) degree programme. Through this postgraduate course, NTTCHP

was able to develop a critical mass of Filipino educational leaders and managers in the different health professions. University officials and national agencies sought the help of NTTCHP faculty and alumni in developing educational initiatives that respond to changing health problems in the population. These initiatives included the School of Health Sciences (SHS) based in UP Manila, a founding member of the Training for Health Equity Network (THEnet) (2011); the Organ System Integration (OSI) curriculum of the UP College of Medicine (Valbuena, Castillo, & Dimaano, 2013); the Competency Enhancement Training for Family Court Judges and Personnel Handling Child Abuse Cases (Sana, Herrera, Avellano, Legarda, Vilchez, & Madrid, 2013); and the Core Curriculum in Tuberculosis (TB) Control for Philippine Medical Schools (Atienza, Sana, & Roa, 2007). Evaluations of these curriculum innovations proved that developing teachers in health professions education can translate into health personnel who are strongly community-based (Larkins *et al.*, 2013), multidisciplinary teams that are sensitive to children and fight against child abuse and domestic violence (Fajutagana, Grageda, & Fajutagana, 2015), and medical students and physicians who standardise treatment of TB (Sana *et al.*, 2016).

WHO has recognised the role the NTTCHP has had in transforming the education of health professionals. In 2011, WHO collaborated with NTTCHP, the University of Health Sciences (UHS) in the Kingdom of Cambodia, and the French Cooperation. The mission was to develop human resources for health in Cambodia and to help transform its education programme for health professions. It was hoped that by empowering human resources in health, the overall health of Cambodians would be improved. This paper is a review article of this curriculum innovation.

Objectives

The purpose of this article is to describe the off-campus residential graduate degree programme of the Mutual Academic Exchange Program between NTTCHP and the University of Health Sciences in the Kingdom of Cambodia. It also aims to determine the best practices that contributed to the transformation of health professions education and the development of human resources for health in the Philippines and Cambodia.

Project Design

This review article describes the learning experiences and best practices acquired by the National Teacher Training Center for the Health Professions of the University of the Philippines Manila in partnership with the World Health Organization-Western Pacific Regional Office (WHO-WPRO), the University of Health Sciences (UHS) in the Kingdom of Cambodia, and the French Cooperation-Cambodia. Review articles contain critical evaluation of defined topics or emerging fields of investigation, sometimes including historical accounts of topics (Philippine Journal of Health Research and Development, 2015). This article is a reflection on the Master of Health Professions Education (MHPed) graduate degree programme offered in the Kingdom of Cambodia in an off-campus residential mode. This curricular offering was the first of its kind for both the University of the Philippines Manila and the University of Health Sciences in Cambodia.

Project Sites

The NTTCHP is at 3F, Joaquin Gonzales Hall, Padre Faura Street corner Maria Orosa Street, Ermita 1000, Manila, Philippines. Information about it can be accessed at www.upm.edu.ph and <https://sites.google.com/site/nttchp/>. The University of Health Sciences is located at 73 Monivong Boulevard, Phnom Penh, Cambodia. Classes were held from June to November 2011 in the Faculty of Medicine Conference Room. Subsequent classes were held from January 2012 to October 2014 in the Faculty of Nursing, Technical School for Medical Care, an extension campus of UHS located at Street 271, Sangkat Toeuk Laak II, Khan Chamkar Morn, Phnom Penh, Cambodia. Information on UHS can be accessed at www.uhs.edu.kh.

Data Collection Procedures

This paper draws on policies of UP Manila, such as application guidelines for new graduate students, rules on the admission of foreign students and retention and promotion in the programme for those students of good standing, graduation policies, and the maximum residence rule, which affects those who will exceed the five years of residence allowed in the degree. Student records from UP Manila were used in all phases of the project. Secondary documents were also used; these included memorandums of understanding, progress and annual reports, oral and written feedback on the project from students and partner agencies as reflected in minutes of meetings, selected emails, and communications. Other sources of data included communications with key officials from WHO-WPRO and partner agencies, namely, the French Cooperation-Cambodia; the Ministry of Health-Cambodia; students, faculty, and personnel from both universities.

Analysis of Data

Data were analysed according to themes and phases in the implementation of the project, such as admission of students, their progress in the MHPed programme and the impact on and palpable achievements of Cambodia's human resources for health. Descriptive categories of best practices, challenges, and lessons learned in the context of transformative learning in health professions education were identified according to how the programme materialised.

Project Outcomes

The Off-Campus Residential Graduate Programme at UHS

Consultation and needs assessment with multi-stakeholders

In May 2009, in keeping with its commitment to develop human resources for health (HRH) in the Western Pacific Region, WHO-WPRO called for a consultative meeting in Manila with HRH officials from nine countries. The said meeting served as needs assessment for faculty members of state-run schools for health sciences in the region. As a result of this meeting, a month-long training programme was conducted by the NTTCHP in Manila. It was attended by five faculty members selected from the

University of Health Sciences in Lao People's Democratic Republic and seven staff members from the UHS. The training programme was held in July/August 2009 and equipped the participants in the basic principles and applications of curriculum planning, instructional designing, effective facilitation skills, clinical teaching, constructing examinations, and educational organisational management.

Institutionalisation of health professions education in Cambodia

Programme evaluation was built into the one-month training. Feedback was sought regularly from participants during the training. Participants were monitored to see how they applied what was taught in the programme to their actual workplaces. They initiated the development of a formal unit that would prepare all faculty members to become effective facilitators of learning. This initiative was supported by top officials in WHO-WPRO, Cambodia's Ministry of Health and UHS, Technical Experts from Higher Education and Research, the French Ministry of Foreign Affairs based in Cambodia, and Professor Emeritus Arie Rotem from the University of New South Wales who served as a consultant at that time. By January 2011, the Center for Educational Development for Health Professionals (CEDHP) was established in the UHS. The creation of the CEDHP was consistent with the WHO master plan of establishing centres for teacher training. The new unit was founded to meet the urgent need to scale-up and improve the quality of health professions education and to develop educational resources which produce health professionals who can deliver quality health services (Rotem, 2012).

The CEDHP could immediately access all health professions teachers at UHS and its satellite campus at the Technical School of Medical Care (TSMC). UHS offers academic degree programmes in medicine, dentistry, and pharmacy. TSMC offers academic programmes in nursing, medical technology, midwifery, physiotherapy, and radiological technology (Ly, 2016). Furthermore, CEDHP's target population includes all faculty members not only based in the capital city of Phnom Penh but also across the country's four regional training centres (RTC) in Kampong Cham, Battambang, Stung Treng, and Kampot.

The specific tasks of the CEDHP included the following (Rotem, 2012):

1. Designing and conducting short courses on improving teaching skills
2. Advising faculty in relation to the development of intended learning outcomes, task analysis, lesson plans, selection of active learning methods, and assessment approaches
3. Developing specific teaching approaches, such as encouraging students' critical thinking, problem-based learning, teaching in small and large groups, research techniques, measuring professional behaviour, assessing students with written examinations, and measuring skills using the objective structured clinical examination
4. Developing clinical teaching skills
5. Developing materials suitable for teaching in a wide range of settings (clinical areas, skills laboratories, and hospital settings)
6. Developing study guides and notes to promote self-learning and active performance

7. Facilitating curriculum review and development contributing to education standards
8. Undertaking studies and evaluation of teaching and learning
9. Disseminating evidence concerning trends in health profession education

Recognising that this was a huge task for CEDHP, WHO-WPRO facilitated the signing of a Memorandum of Understanding (MOU) between NTTCHP and UHS. This MOU paved the way for the Mutual Academic Exchange Program and stipulated that the NTTCHP’s MHPEd degree programme would be offered at UHS in off-campus residential mode. The programme was called off-campus residential because the main delivery strategy remained face-to-face between the teachers from NTTCHP and learners from UHS and with classes held in Cambodia.

The ladder-type academic programme in health professions education (HPEd)

Among the teacher training centres founded by WHO, only NTTCHP in UP Manila has become a degree granting unit attached to a university. In the entire Western Pacific Region, composed of 37 countries and areas, NTTCHP is the only centre offering the ladder-type academic programme in HPEd (Srinivas & Adkoli, 2009). At the bottom of the ladder is the Basic Course in Health Professions Education; in the middle is the Diploma; and at the top is the MHPEd. Figure 1 presents the summary of the curriculum. The curriculum design is ladder-type because health professions educators who are interested in pursuing the programme can apply for admission at any entry point and finish at any exit point. For example, busy clinicians can take just the 10 units required in the Basic Course and be able to design and teach a lesson well and assess learner achievement with valid tests. Should they be interested in pursuing more courses, they can apply for admission to the Diploma programme with all 10 units credited from the Basic Course. Others enrol in the Master’s degree programme but for unforeseen circumstances might not be able to complete the required 33 units. In this case, they can settle for the Diploma upon satisfactorily completing the required 27 units.

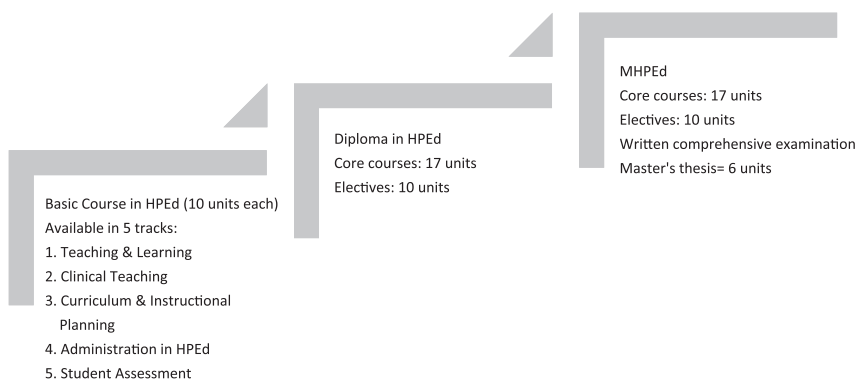


Figure 1. The ladder-type curriculum in health professions education offered by NTTCHP.

NTTCHP offered the same ladder-type curriculum to UHS. The course description available to UHS students is appended to this article (Appendix 1). Unlike students at the Manila campus who could choose their electives, Cambodian (or Khmer) students completed blocked classes per semester, commencing in the first semester of 2011/12 (June to September 2011). The courses were determined by Professor Erlyn A. Sana, who was the NTTCHP Dean at that time, after a series of consultations with the Rector, Professor Doctor Oum Sophal, and other officials from UHS; the Chief of the Ministry of Health's Human Resources for Health Bureau, Madame Keat Phuong; WHO-WPRO, through Anne Robins and Rodel G. Nodora, who was Technical Officer; and the French Cooperation-Cambodia, represented by Pascal Millet. Factors considered in the choice of courses were the professional backgrounds of students admitted to the programme, the core competencies that were required by the Cambodian Ministry of Health, and the long-term plan of UHS. All courses contained basically the same concepts, principles, theories, and methodologies, but the context of each subject required students to complete projects that were based on their particular institutional and national milieu. The finished output of students included improved curriculum designs, revised syllabi, valid assessment tools and procedures, and improved instructional designs, with constructively aligned objectives, content, delivery strategies, and assessment. Classes were able to develop a collection of interactive instructional materials in clinical teaching and mentoring. These materials were available on compact discs and were transportable and reproducible. The first batch of students were also able to plan, conduct, and evaluate a workshop on the oral health and overall well-being of the students and their families, integrating basic principles of teaching and learning and facilitating student interactions in small and large group settings.

Logistics and administrative components of the joint programme

The off-campus residential MHPED programme followed the same academic calendar as the Manila campus. The timetable for the programme is presented in Table 2. Upon the mutual understanding of the two universities, the programme was conducted by one or two faculty members who taught up to 14 units of courses per semester. The first two authors of this review article taught most of the courses. Classes were held for five straight days from Monday to Friday, 8:00 a.m. to 5:00 p.m. Initial classes were held at UHS and at TSMC in successive semesters. The classes were composed of inputs from faculty members, small group activities, student presentations across courses, workshops with plenary sessions, and practice teaching. For the remainder of the month, students and faculty members maintained contact through online communication.

The basic logistics expenses of the programme were funded by WHO-WPRO. These expenses included round-trip plane fares for faculty members from Manila to Phnom Penh, as well as a cost of living allowance for five to seven days and full scholarships for 11 students. The French Cooperation-Cambodia provided full scholarships for the remaining 17 students.

Table 2. Official timetable of the MHPEd programme at UHS. Source: Sana (2015).

Academic activities	First batch of students	Second batch of students
Admission to the programme	First semester, 2011-2012 (June to September)	Second semester, 2012-2013 (November to March)
Completion of coursework (27 units)	First semester, 2012-2013	Second semester, 2013-2014
Completion of written comprehensive examinations (remediation)	November 2012 (June 2013)	May 2014 (February 2015)
First Diploma graduates	First semester, 2013-2014	First semester, 2014-2015
First MHPEd graduates	First semester, 2013-2014	Second semester, 2015-2016

The MHPEd Students from the Kingdom of Cambodia

The MHPEd programme at UHS recruited a total of 28 students. Table 3 presents the distribution of students in the programme according to batches, institutional affiliations, and health professions. As of the end of the second semester 2015-2016, five students from the first batch have obtained a MHPEd, and five have graduated with a DHPEd. One student has been withdrawn for scholastic delinquency, and four students remain as candidates for graduation. Five students from the second batch are now graduates; three of them graduated with a MHPEd and two with a DHPEd. The rest of the remaining eight students from the second batch are, at the time of writing, candidates for graduation.

Table 3. Distribution of HPEd students in the programme.

Characteristics and background	First batch	Second batch	Total
Total number of students	15	13	28
<i>Institution</i>			
UHS	7	5	12
TSMC	3	3	6
Regional Training Centers	3	5	8
Private University	1	0	1
Ministry of Health	1	0	1

Table 3 continued over page

Characteristics and background	First batch	Second batch	Total
<i>Sponsoring Agency</i>			
WHO-WPRO	6	5	11
French Cooperation	9	8	17
<i>Profession</i>			
Physicians	6	5	11
Dentists	2	0	2
Nurses	2	8	10
Pharmacists	2	0	2
Others: Midwife, Medical Technologist	3	0	3

Best Practices, Lessons Learned, and Challenges in Offering HPed at UHS

From the very beginning, the HPed programme implemented at UHS followed a pragmatist-reconstructionist philosophy. Pragmatism refers to a philosophical movement that started in the United States in the latter part of the 19th century. Pragmatism argues that “only those things that are experienced or observed are real.” This philosophy challenged the idealist view that, from the beginning, there were absolute truths and reality coming from either a supreme being or the thoughts of the human mind (McDermid, 2006). From the general pragmatist philosophical tradition, reconstructionism evolved. This educational philosophy does not believe in a predetermined curriculum. Reconstructionists use the subject matter from any or all disciplines when needed to solve a problem. Ornstein and Hunkins (1998) explained that reconstructionism encourages students to be self-directed and to explore and build their own knowledge and reality.

In the same vein, the HPed programme inculcated in Cambodian students the value of establishing their own knowledge and reality. In appreciating the various concepts, theories, and methodologies in HPed, Cambodian students were asked constantly to reflect on their own contexts, as health professionals. They studied the epidemiology of common diseases in their respective regions and analysed the profile of their human resources for health and how they should be brought into class discussions when they teach their respective courses.

During routine classroom interactions, Khmer students demonstrated consistent enthusiasm in integrating their specialisations in the health sciences into education. The result provided real evidence of transformative learning. Mezirow (1991) explained that transformative learning is a uniquely adult, abstract, idealised, and grounded process

in the nature of human communication. It uses prior interpretation to construe a new or revised interpretation of the meaning of one's experience in order to guide future action. Transformative learning is a pragmatist-reconstructionist type of learning that pervades the HPed programme implemented by the NTTCHP at UHS.

Some notable class outputs reflective of their embracing the pragmatist-reconstructionist view of education are presented below:

1. Analysis of the teaching competencies and training needs of faculty members of the Technical School for Medical Care (started as a course project in Health Professions [HP] 211: Curriculum Planning and Development and HP 261: Organisation and Management, it was completed in HP 300: Master's Thesis, October 2013) (Team, 2013).
2. Perceptions of nursing students on effective clinical preceptors in Phnom Penh National Hospitals (started as a course project in HP 221: Instructional Design, HP 223: Clinical Teaching and Evaluation, HP 231: Evaluation in Health Professions Education, it was completed in HP 300, March 2014) (Koy, 2014).
3. Descriptive study of clinical teaching and learning in the Associate Degree in Nursing (started as a course project in HP 221, HP 223, HP 242: Small Group Learning, it was completed in HP 300, October 2014) (Ahmad, 2014).

In terms of applying their course to their actual workplace, full utilisation of the programme has been noted, including the student dropped from the roll and the two others who have retired. Except for one physician who has left academia to work for a non-government organisation, all 27 students remain active faculty members in their respective institutions. The first MHPEd graduate, who also holds degrees in Medical Technology and has a Master of Business Administration, now works concurrently as the Head of CEDHP and as the Administrator of the National Institute Public Health. The NTTCHP invited him to present a paper on the CEDHP's role in UHS at the International Conference in Health Professions Education in Manila in 2013. The first nurse-alumnus is currently the Vice-Chancellor of Chenla University and is pursuing a PhD in Thailand. He is also the president of the Cambodian Council of Nurses. Five alumni hold Vice-Dean positions in Colleges of Medicine, Dentistry, or Pharmacy, while eight alumni and students are currently serving as Directors or Vice-Directors of the TSMC, Research and Information Offices, and RTCs. The CEDHP now based at TSMC regularly conducts faculty development programmes on selected topics. The CEDHP has institutionalised its Basic Course in HPed and conducts the course at least twice a year for various groups of faculty members (Asia Pacific Observatory on Health System and Policy, 2015).

Best Practices and Lessons Learned

The MOU between the two universities and the Agreement for Performance of Work with WHO-WPRO proved to be most useful resources to inform what should be done, by whom, and at what stage of the programme. The mutual academic exchange programme proceeded according to schedule, following the semesters and registration in regular courses that required five-day face-to-face class contacts. The international

off-campus residential programme at UP Manila was the first of its kind. Prior to 2011, degree programmes at UP Manila were offered outside the Manila campus but they were conducted only within the Philippines.

Some cultural norms posed difficulties in arranging class schedules. Since face-to-face classes were limited to only five days a month in each semester, the schedule was full from 8:00 a.m. to 5:00 p.m. every day. An extra hour, stretching the schedule to 6 p.m., was set aside for feedback and mentoring. However, students requested an extended lunch break from 11:30 a.m. to 1:30 p.m. daily. Khmer parents usually start work after taking their spouses to work and children to school in the morning, at lunchtime, and after work. Hence, classes were scheduled to end at 11:30 in the morning and resume in the afternoon at 1:30 p.m. Very few students stayed for mentoring beyond 5:00 p.m. Questions and reinforcements were therefore usually handled by the teacher either online or by phone at night during the residential teaching block.

The official language of instruction was English. Admission rules stipulate that candidates should have a score of at least 500 in the Test of English for Foreign Language (TOEFL) or its equivalent, and those who were admitted to the programme met the requirement. However, during classes and despite the presence of a translator in the first batch of classes, communication still became a major hurdle for both teachers and students. This problem was worst when students were required to submit written outputs to complete their thesis work. Constant reminders about the use of English and motivating students by explaining how this language will help them in future international work proved to be effective strategies for many students.

Heterogeneous groups of health professionals of all ages, from all backgrounds, and both genders are the norm in Manila classes. However, in Phnom Penh, it was unusual for physicians to interact with other professionals as equals, especially if those others were women and non-medical personnel. Such dynamics of inter-professional relationships needed careful attention. Open dialogue and the continuous clarification of values were used to enable students to appreciate open communication, inter-professionalism, and a multi-disciplinary approach to health professions education.

Other administrative problems arose during the project. The programme in Cambodia required regular internet connectivity, from the filing of application forms to the National Graduate Office for the Health Sciences, to electronic enrolment, the payment of matriculation fees, the use of online UP Manila library collections, the submission of class outputs, and the exchange of feedback in all classes. Such internet requirements between the two campuses were still in their formative years and the faculty, students, and administrative personnel involved in the programme were still learning how the internet works. Payments of registration fees proved to be a real challenge because the UP Manila system was not initially programmed to receive US currency through bank transfers. The NTTCHP Program in Cambodia hastened the operationalisation of internationalisation in higher education within the UP Manila organisation.

Transformative Scale-up of Health Professions Education in Cambodia

The programme offered by the NTTCHP at UHS Cambodia involved first-hand experience for both institutions in undergoing transformative learning. In terms of experiencing institutional reforms, the programme required constant joint-planning mechanisms, strong networks, and linkages with partners. With regard to instructional reforms, the programme employed inter-professional and trans-professional education, maximised the use of information and communication technology, harnessed global resources and adapted local resources, strengthened local educational resources, and promoted professionalism. Frenk *et al.* (2010) and the Global Consensus on Social Accountability for Medical Schools (2010) have called on health professions schools to inculcate a culture of critical inquiry through the implementation of a competency- and outcome-based instructional approach. Making use of local contexts and health professions educational projects adapted to local health problems in Cambodia paved the way for students to develop educational programmes that responded to actual health issues and therefore responded in a timely way to WHO's transformative scale-up of health professions education. The integration of the basic concepts, principles, and theories in the Cambodian context gave students the opportunity to improve not only their intellectual and motor competencies, but also their professional attitudes and values.

Cambodia has achieved major breakthroughs in population health, achieving most targets in the development goals for the millennium (Asia Pacific Observatory on Health Systems and Policies, 2015). The Cambodian Ministry of Health has associated these milestones with the many reforms the country has embraced since the 1990s. Among the initiatives identified to be of significant value was the project to develop human resources for health through improving the teaching of the country's health professionals.

The transformative scale-up of health professions education in the Philippines and the Kingdom of Cambodia is a work in progress. The last five years have borne witness to the effective training of Cambodia's health professions teachers in curriculum and instructional design, facilitating teaching, clinical teaching, assessment of learner achievement, educational evaluation, organisational management, and research. The programme has positively impacted on the health professions culture in Cambodia, promoting collaboration between and among different professions, thereby increasing opportunities to break "silos" that often serve as barriers to maximising transformative education in the health professions. Graduates and continuing students in the programme perform these roles in their respective institutions. Positive contributions by these human resources for health are expected to continue to impact on the overall well-being of the population and make Cambodia globally competitive in the years to come.

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Biographical note

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Melflor A. Atienza is Professor in health professions education, medical education, and gastroenterology at the National Teacher Training Center for the Health Professions and the College of Medicine, University of the Philippines Manila. She is also Professorial Lecturer at the Philippine Judicial Academy, Supreme Court of the Philippines. Melflor is a practising internist and gastroenterologist and Fellow of the Philippine College of Physicians, Philippine Society of Gastroenterology, and the Philippine Society of Digestive Endoscopy. Her recent publications include *The development of an electronic undergraduate curriculum in Pediatrics* (commissioned by the Philippine Pediatrics Society in 2013), *Teaching and learning in the Health Sciences* (second

author; University of the Philippines Press, 2013), and *The Integration of the Enhanced Curriculum in Tuberculosis Control for Philippine Medical Schools* (2016). Melflor was UP Manila's Outstanding Teacher in 2006 and 2012.

Rodel G. Nodora is presently the Technical Officer, Country Support Unit Division of Programme Management, World Health Organization, Regional Office for the Western Pacific, Manila, Philippines. Rodel helped in the development of the Pacific Open Learning Health Net (POLHN) in 2012. Prior to his engagement with WHO-WPRO, Rodel was with the Health Human Resource Development Bureau of the Philippine Department of Health. He is currently Vice-Chair of the Pinoy MD scholarship programme that awards full-time scholarships to deserving students in medicine committed to serve in the countryside. He recently co-authored an article entitled "Assessment of factors influencing retention in the Philippine National Rural Physician Deployment Program" (*BMC Health Services Research*, 2012).

Appendix 1. The NTTCHP ladder-type curriculum at UHS, Cambodia.

Core Courses: 17 Units

HP 201	Psycho-Philosophical Foundation of Teaching-Learning in the Health Sciences	2 units
HP 211	Curriculum Planning in the Health Professions	2 units
HP 221	Instructional Design in the HSC	3 units
HP 231	Evaluation of Health Professions Education	3 units
HP 241	Practicum: Teaching Skills in Health Professions Education	2 units
HP 261	Organisation and Management of Health Programs	2 units
HP 299	Research Methods in Health Professions Education	3 units

Electives: 10 Units (two batches)

HP 215	Trends in Health Sciences Curricula	1 unit
HP 223	Clinical Teaching and Evaluation of Clinical Competence	2 units
HP 224	Attitude Development in the HP and Its Assessment	2 units
HP 225	Teaching Health Professionals on Designing Community Based Training Programs	2 units
HP 232	Test Construction and Analysis in HS	2 units
HP 242	Learning in Small Groups in the HS Courses	2 units
HP 243	Learning in Large Groups in the HS Courses	2 units
HP 246	Mentoring in the Health Professions	2 units
HP 263	Selection of Students for the Health Sciences	1 unit

Master's Thesis: 6 Units

HP 300	Master's Thesis	6 units
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TOTAL: 33 units