Application of cross-disciplinary learning in teaching clinical reasoning

Traditionally, nurse and physician educations took place in silos and nurses had been regarded as auxiliaries working under doctors. Studies found that skills of communicating with physicians, developing relationships with colleagues, responding appropriately to emergencies, and handling new situation are meaningful stressors for new graduate nurses. However, nurses and physicians need to work closely to enhance patient health. Thus, developing a course that provide opportunities for nursing students for not only receiving interdisciplinary knowledge, but also experiencing interaction, communication, and cooperation with clinical professionals, especially physicians, to learn each other’s professional roles and responsibilities is important. The study applied cross-disciplinary teaching to develop clinical reasoning course with nursing faculty, nurse practitioner, and medical doctors in classroom and clinical setting. After taking the course, nursing students gain interdisciplinary knowledge in patient care as well as communication skills and cooperation with physicians as a team. The course was based on Avraham’s statements about cross-discipline teaching. The course is a 3 credit elective course taught in 18 weeks including 8 units (respiratory system, cardiovascular system, endocrine system, renal system, liver, cranial neural system, sepsis and septic shock, multiple traumatic injuries, and multiple organ failure syndrome), 4 hours for each unit (2 in-class and 2 clinical) and concept mapping and evaluation. In class, students learned from lectures, case scenarios and team-based, concept mapping learning. In clinical, 4-5 students teamed up and were instructed by physicians and nursing lecturers. Each group of students observe and join assessment and management with medical colleagues interdisciplinarly. Panel discussions/ debriefing were held during clinical with physicians and with nursing lecturers after clinical when concept maps were drawn. Evaluation of student course performance included in-class observations and team-reflections as well as cocept-maps, oral presentations, and self-evaluation. Via these activities, students practiced interprofessional interaction, communications and cooperation, and finally, promoted their clinical competence. Additionally, interprofessional interactions helps to relieve tensional and uncomfortable relations between nurses and physicians and that benefits students’ successful survival in their future work. Interdiscipline learning could be the future teaching/learning model.

Biography
Ms. Hsiu-Chen Liu is currently a PhD student at Chang Gung University as well as a senior faculty at Chang Gung University of Science and Technology in Taiwan. Her clinical specialty is in the field of critical care and she teaches critical care nursing for more than 20 years. Her research interests focus on nursing education and critical patient care.