

## Education Section

# Education in Oriental Medicine in Kyung Hee University

Bum-Sang Shim, Byung-Hee Koh and Kyoo-Seok Ahn

College of Oriental Medicine, Kyung Hee University, Seoul 130-701, Korea

### Introduction—Status of Oriental Medicine in Korea

Oriental medicine has been developed over a long period of time. When the Medical Service Act was legislated in Korea in September 25, 1951 for the first time, Oriental medicine began to have the support of the legal system. Presently, Oriental medicine has the same legal status as Western medicine in Korea. Students of Oriental medicine are qualified for the National License Examinations for Oriental Medicine Practice after finishing 6-year courses in a College of Oriental Medicine. Before the Medical Service Act came into force in 1951, acupuncture was taught based on the acupuncturist system. However, after this legislation, the acupuncturist system was invalidated and legally assimilated into the Oriental medicine system since 1962. Presently doctors of Oriental medicine are entitled to practice all aspects of Oriental medicine, including acupuncture and prescription of traditional medicine.

When medical resources are compared between Western and Oriental medicines, the numbers of licensed doctors are 62 609 and 10 707 for Western and Oriental Medicine, respectively, and the number of such medical schools are 41 (entrance quota of 3300) and 11 (entrance quota of 750), respectively. The number of hospitals and local clinics is 16 643 (hospital 767, local clinic 15 876) for Western medicine and 6272 (hospital 115, local clinic 6520) for Oriental medicine (Table 1).

In Korea, a medical insurance system for Western medicine was started from July 1, 1977, but was not available for Oriental medicine until February 1, 1987. The insurance coverage is quite limited covering only some areas of Oriental medicine, such as diagnosis, acupuncture and cupping glass categories. Medical expenses in Korea are estimated at about 6.0% of the gross domestic product (GDP) in 1996, of which

**Table 1.** Status of Oriental and Western medical resources.

Classification	Western	Oriental
Licensed doctors	62 609	10 707
Medical schools (entrance quota)	41 (3300)	11 (760)
Hospitals and local clinics (beds)	16 643 (213 908)	6635 (6668)
Hospital (beds)	767 (164 322)	115 (6549)
Clinics (beds)	15 876 (49 586)	6520 (209)

In December 1997 for Western medicine and 1998 for Oriental medicine.

15% is spent on Oriental medicine. This reflects the fact that the number of licensed doctors of Oriental medicine is one-sixth that of the number of doctors of Western medicine. As the insurance coverage for Oriental medicine is expanded, the number of visitors to clinics of Oriental medicine is increasing already and is expected to increase rapidly.

To promote Oriental medicine, the medical specialties system has been required by Oriental medicine doctors and government recently. After graduation from medical college, medical licenses should be required by the ministry and graduates have to complete a 1 year internship and 3 year residency. Those seeking to become specialists should have to take a training course at the designated hospitals and pass the qualifying examination for specialists provided by the Association of Korean Oriental Medicine. The Association has produced 436 specialists through two examinations up to the present. Eight specialty fields make up the systems, i.e. oriental internal medicine; acupuncture and moxibustion; oriental gynecology; oriental pediatrics, oriental neuropsychiatry, dermatosurgery and ophthalmology-otolaryngology; oriental rehabilitation medicine; and *Sasang* constitutional medicine.

### Colleges of Oriental Medicine in Korea

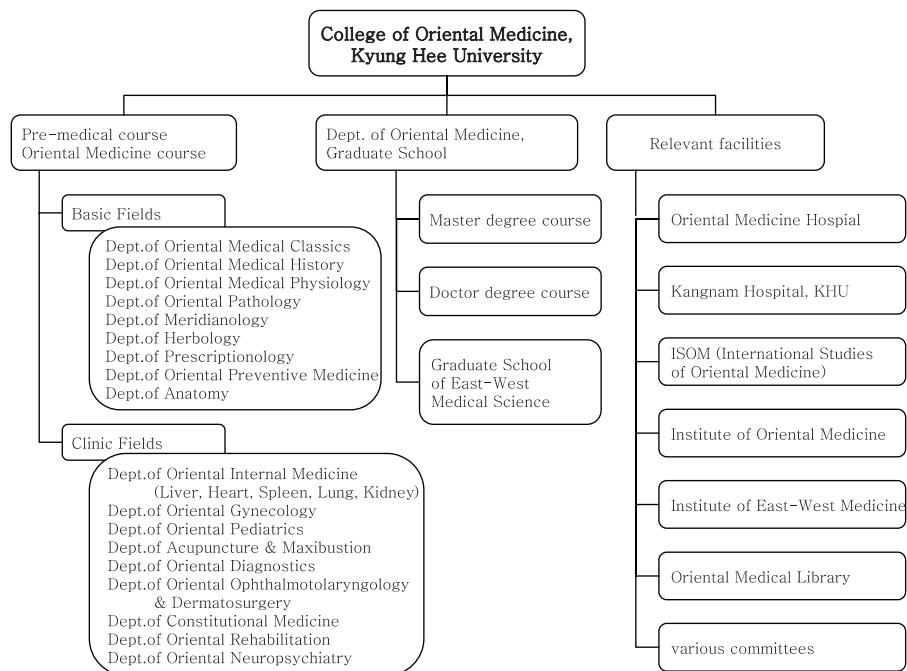
There are now 11 colleges affiliated to private universities since 1948 when 'Dongyang College' was founded, which was the former name of the College of Oriental Medicine, Kyung

For reprints and all correspondence: Byung-Hee Koh, College of Oriental Medicine, Kyung Hee University Medical Center, Dept. of Sasang Constitutional Medicine, Seoul, Republic of Korea. Email: kmc2516@khmc.or.kr

The online version of this article has been published under an open access model. Users are entitled to use, reproduce, disseminate, or display the open access version of this article provided that: the original authorship is properly and fully attributed; the Journal and Oxford University Press are attributed as the original place of publication with the correct citation details given; if an article is subsequently reproduced or disseminated not in its entirety but only in part or as a derivative work this must be clearly indicated.

**Table 2.** Status of Colleges of Oriental Medicine in Korea (in February 1999)

University	Enrollment	Faculty		Hospital (beds)	Facility (area: m <sup>2</sup> )			
		Basic	Clinic		Education	Research	Office	Library
Kyung Hee	720	13	37	3 (519)	10 (2173)	45 (1594)	1 (59)	1 (363)
Wonkang	600	16	34	4 (515)	10 (1768)	20 (3492)	3 (772)	–
Dongguk	480	14	17	4 (264)	15 (1521)	18 (857)	3 (77)	1 (234)
Kyungsan	720	9	8	2 (140)	10 (2691)	21 (476)	3 (45)	1 (182)
Taejon	480	13	14	3 (275)	12 (1692)	22 (1337)	3 (95)	1 (35)
Dongguk	300	8	11	2 (180)	14 (1389)	27 (1133)	3 (84)	1 (1013)
Woosuk	180	6	9	2 (170)	10 (763)	12 (629)	3 (82)	1 (76)
Sangji	360	10	9	1 (83)	13 (1421)	10 (346)	2 (73)	1 (146)
Kyungwon	180	7	9	1 (72)	11 (356)	13 (518)	2 (65)	–
Dongshin	240	7	9	1 (100)	17 (1522)	25 (1104)	1 (83)	1 (611)
Semyung	240	10	5	1 (70)	11 (1627)	20 (845)	1 (53)	–

**Figure 1.** Organization of the College of Oriental Medicine, Kyung Hee University.

Hee University. By 1999, the colleges had an intake of 750 students. The total number of faculty members is 275 (average 25 per college) who belong to basic fields (113 persons, average 10.3 persons per college) and clinical fields (162 persons, average 14.8 persons per college) (Table 2).

Colleges consist of several subdepartments of basic and clinical fields. Most colleges have 10 subdepartments of basic fields such as oriental medical classics, oriental medical history, oriental physiology, oriental pathology, meridianology, herbology, prescriptionology, oriental preventive medicine and anatomy. Some have a subdepartment of immunology, biology or pharmacology as needed. In clinical fields, there are subdepartments of oriental internal medicine (liver, heart, spleen, lung and kidney), oriental gynecology,

**Table 3.** Curriculum of the College of Oriental Medicine, Kyung Hee University

Courses	Subjects	Credits	Hours
General studies course			
CRS	2 (1.2%)	6 (2.5%)	96 (1.4%)
Required	2 (1.2%)	12 (4.9%)	256 (3.7%)
Elective	8 (4.9%)	24 (9.8%)	384 (5.5%)
Required course for major			
Oriental medical	104 (63.8%)	152 (62.3%)	4496 (64.9%)
Medical	32 (19.6%)	50 (20.5%)	1216 (17.6%)
Elective course for major	15 (9.2%)	0 (0.0%)	480 (6.9%)
Total	163 (100.0%)	244 (100.0%)	6928 (100.0%)

CRS = Competence Requirement System.

**Table 4.** Required course for major

Oriental medical subjects	Credits	Hours	Medical subjects	Credits	Hours
Introduction of Oriental Medicine I, II	4	128	Medical English I, II	2	64
Classical Chinese I, II	4	128	Medical Statistics	1	32
Chinese Language	1	32	Biochemistry and Lab I, II	7	160
Chinese Literature of Oriental Medicine I, II	3	96	Embryology I, II	2	64
Classics of Oriental Medicine I, II	6	192	Anatomy I, II and Lab I, II	9	192
Oriental Medical History I, II	2	64	Histology and Lab	2.5	64
Famous Theories in Oriental Medicine I, II	2	64	Physiology I, II	4	64
Oriental Physiology I, II and Lab I, II	9	192	Pathology I, II	4	64
Oriental Pathology I, II and Lab I, II	9	192	Microbiology and Lab	2.5	64
Meridianology I, II and Lab I, II	6	192	Preventive Medicine I, II	4	64
Herbology I, II and Lab I, II	9	192	Diagnostics	2	64
Oriental Pharmacology I, II and Lab I, II	5	128	Legal Medicine	1	32
Prescriptionology I, II and Lab I, II	7	160	Health Laws	1	32
Lab of Processology I, II	1	64	Radiology I, II	2	64
Oriental Preventive Medicine I, II and Lab I, II	5	128	Clinical Pathology I, II	2	64
Medical Qi-gong I, II	2	64	Emergency Medicine I, II	4	128
Shanghanlon	2	64	and Lab I, II		
Science of Epidemic Febrile Disease	1	32			
Internal Medicine I, II and Lab I, II Liver System	5	160			
Heart System	5	160			
Spleen System	5	160			
Lung System	5	160			
Kidney System	5	160			
Acupuncture and	6	192			
Moxibustion I, II and Lab I, II Gynecology I, II and Lab I, II	6	192			
Pediatrics I, II and Lab I, II	5	160			
Oriental Dermatology and Surgery I,II and Lab I,II	5	160			
Ophthalmology and Otorhinolaryngology I, II and Lab I, II	5	160			
Neuropsychiatry I, II and Lab I, II	5	160			
Sasang Constitutional Medicine I, II and Lab I, II	5	160			
Rehabilitation Medicine I, II and Lab I, II	5	160			
Oriental Diagnosis I, II and Lab I, II	5	160			
Manipulation I, II and Practice	2	80			

oriental pediatrics, acupuncture and moxibustion, oriental diagnostics, oriental ophthalmotolaryngology and dermatosurgery, *Sasang* constitutional medicine, oriental rehabilitation and oriental neuropsychiatry. Some have subdepartments of east–west integrated medicine, biofunctional medicine and diagnosis, *Qi-gong*, radiology, neurosurgery or emergency medicine as needed.

### College of Oriental Medicine, Kyung Hee University

The College of Oriental Medicine, Kyung Hee University is the most prestigious academic institute of Oriental medicine in the world. Our college was established in 1948, originally named ‘Dongyang College’. Later, its name was changed to ‘Seoul

Oriental Medical College’ and ‘Dongyang Medical College’. In 1965, it was affiliated with Kyung Hee University and has produced many noted Oriental medical doctors and scholars in almost 50 years and has strived to adopt a modern scientific approach to treatment based on advanced medical science.

Our college was founded with the objective of promoting modernization and a scientific basis of Oriental medicine and establishing a ‘third integrated medicine’ through the comparative study of and the synthetic research in both Oriental and Western medicine. To achieve this goal, first we studied the basis of Oriental medicine including the *yin-yang* and the five phase theory, organs, meridian, diagnosis and treatments. Secondly, we studied the medical practice at the Oriental medical hospital. Thirdly, we combined Oriental medicine and Western medicine so as to make a novel field of medicine

**Table 5.** Elective course for major

Subjects	Credits	Hours	Subjects	Credits	Hours
Lecture on Donguibogam	0	32	Aqua-acupuncture of Herbal extract	0	32
Nan Jing	0	32	Acupuncture according to Sa Am	0	32
Jin Gui Yao lue	0	32	Acupuncture according to Dr Dong	0	32
Clinical Prescriptionology	0	32	Spiral Valance Taping Treatment	0	32
Theory of the Five Elements and Six Climates	0	32	Diagnosis and Treatment According to Morphology	0	32
Zhou Yi	0	32	MPS	0	32
Anatomy Associated with Meridian	0	32	Medical Ultrasound	0	32
Immunology	0	32			

Education in Oriental medicine in Kyung Hee University.

which can selectively capture the virtue of each medicine—analytical Western medicine and organic Oriental medicine.

The faculty members include 54 professors and eight lecturers and the student enrollment is about 780. Now there are two educational hospitals with 500 beds related to our college (Fig. 1).

## Curriculum

The academic year comprises two semesters, beginning in March and in September. Admission is restricted to the spring semester. The program is composed of 2 years of study in the Pre-Oriental Medical Course (a minimum of 77.5 credits are required to complete this) and then 4 years of work (a minimum of 166.5 credits are required to complete this) in the Department of Oriental Medicine.

The Oriental medical curriculum consists of 163 subjects, which are 12 subjects of a general studies course (42 credits, 736 h), 104 subjects of Oriental medical lectures and 32 subjects of medical lectures in the required course for a major (Tables 3, 4 and 5).

The curriculum is characterized by harmony of Oriental medicine (holism) and Western medicine (science). To achieve the third integrated medicine, educational goal, there are 13 East–West Integrated Medical Centers or Clinics in Kyung Hee Medical Center. Accordingly, Oriental and Western medical studies are well harmonized on all sides in the curriculum. Another main feature of our curriculum is Korean peculiarities such as various subjects of *Sasang* constitutional medicine, acupuncture according to Sa Am, diagnostics and treatment by morphology, etc.

## Discussion

Complementary and alternative medicine (CAM) is becoming increasingly popular worldwide. In the USA, it was estimated in 1992 that at least one in three Americans utilized one of the CAM therapies, and the number of annual visits to CAM providers exceeds the number of visits to all primary care

physicians (1). In a 1998 follow-up study, the percentage of CAM patients had increased to 42% of the US population (2). This continuing demand for CAM therapies has generated attention on the curricular integration of this topic by medical schools. The number of US medical schools reporting the inclusion of CAM in their curricula has increased from 46 out of 125 schools in 1996–1997 to 75 schools in 1998–1999 (3,4). However, CAM education studies show that this area of the medical curriculum is at an early stage of development and appears to have few guiding principles. Wetzel *et al.* proposed practical steps toward inclusion of CAM in medical curricula such as to define a core curriculum in CAM, to teach one medicine, to create opportunities for cross-fertilization and to include an experiential component (5).

When beginning the first steps of CAM education in medical schools, it must be emphasized that students should have an opportunity to experience CAM practice and educators should have evidence-based strategies to distinguish useful from useless interventions. If educators want to educate doctors who can understand and practice two medical systems properly, our school's experience will be one of a model curriculum in a medical school.

## References

1. Eisenberg DM, Kessler RC, Foster C, Norlock FE, Calkins DR, Delbanco TL. Unconventional medicine in the United States. Prevalence, costs, and patterns of use. *N Engl J Med* 1993;328:246–52.
2. Eisenberg DM, Davis RB, Ettner SL *et al.* Trends in alternative medicine use in the United States, 1990–1997: results of a follow-up national survey. *J Am Med Assoc* 1998;280:1569–75.
3. Wetzel MS, Eisenberg DM, Kaptchuk TJ. Courses involving complementary and alternative medicine at US medical schools. *J Am Med Assoc* 1998;280:784–7.
4. Barzansky B, Jonas HS, Etzel SI. Educational programs in US medical schools, 1999–2000. *J Am Med Assoc* 2000;284:1114–20.
5. Wetzel MS, Kaptchuk TJ, Haramati A, Eisenberg DM. Complementary and alternative medical therapies: implications for medical education. *Ann Intern Med* 2003;138:191–6.

Received June 21, 2004; accepted October 21, 2004