

Review Article

Analysis of the curriculum of medical humanities and social medicine in Colleges of Korean Medicine based on KAS2021

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Objectives: The purpose of this study was to examine the curriculum of the medical humanities and social medicine at 11 Colleges of Korean Medicine (CKM) based on the Korean Medicine Education Accreditation Standards 2021 (KAS2021) and suggest ways to improve the quality of Korean Medical education in the future.

Methods: The curricula for each grade were collected from the websites of 11 CKM. Based on KAS2021, medical humanities and social medicine courses were extracted and compiled. Courses offered, frequency of course offerings, time of offerings, credits, and course hours were investigated.

Results: Courses in languages and literature were most frequently offered in CKM. Most medical humanities and social medicine courses were offered in the pre-medical program and the fourth year of the medical program and were conducted as individual courses. Developing a curriculum that integrates conceptual definitions of the medical humanities and social medicine with basic and clinical studies is necessary.

Conclusion: Eleven CKM should reorganize and operate their medical humanities and social medicine curricula based on each college's circumstances. This will allow each college to improve the quality of its educational offerings, creating a foundation for fostering excellent Korean medicine doctors with professional medical skills and communication skills.

Key Words : KAS2021, Korean medical college, Korean medical education, Medical humanities, Social medicine

Introduction

In 2021, the Institute of Korean Medicine Education and Evaluation (IKMEE) proposed Korean Medicine Education Accreditation Standards (KAS2021)¹⁾. These standards meet the basic medical education (BME) standards of the World Federation for Medical Education (WFME) and are

designed to improve the quality of Korean Medical education and train high-quality Korean medicine doctors (KMD). KAS2021 focuses on performance-based, competency-oriented assessments of Korean medical education and emphasizes the continuous improvement of education programs. The education programs covered by KAS2021 include basic science medicine, basic Korean Medicine, clinical

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science medicine, clinical Korean Medicine, and medical humanities and social medicine. The present study focused on '*medical humanities and social medicine*' in Colleges of Korean Medicine (CKM).

Although there is no official consensus on the terms '*medical humanities and social medicine*', it is considered to be an academic field that explores human health and disease from a biological, psychological, and sociocultural perspective based on the exploration of human nature and an understanding and relationships with others²⁾. This field approaches medicine from a humanistic perspective using philosophy, literature, history, and ethics to explain health and medical problems from a social perspective. Forensic science, hospital administration, and public hygiene are used to find solutions.

Interest in the medical humanities and social medicine is a recent phenomenon in Korean medical education. However, CKM have expanded their offerings in this field based on global trends, and they have been included in the medical accreditation standards. But CKM do not have a clear concept of what medical humanities and social medicine entails, and have therefore not agreed about what to teach^{3,4,5)}. KAS2021¹⁾ defined several subfields as part of the medical humanities and social medicine, including: medical ethics, medical law, medical statistics, medical informatics, behavioral science, preventive medicine, epidemiology, public health, hygiene, community social medicine, international health, medical care, medical education, social medicine, sociology of medicine, anthropology of medicine, forensic medicine, medical psychology, history of medicine, philosophy,

art, language and literature, business administration, complementary and alternative medicine.

The KAS2021 require that at least one course or lecture in the medical humanities and social medicine be offered for each grade; each course must also include matters concerning medical professionalism and communication. The purpose of this study was to investigate the curriculum of medical humanities and social medicine at 11 CKM based on KAS2021 and to suggest how these schools should conduct medical humanities and social medicine education in the future.

Methods

1. Study design

This study investigated the pre-med and medical program curricula at 11 CKM for the second semester of 2020 and the first semester of 2021.

2. Data collection

Using the KAS2021, courses at each of the 11 CKM were classified into the following categories of the basic science medicine, basic Korean Medicine, clinical science medicine, clinical Korean Medicine, and medical humanities and social medicine¹⁾. Course information was taken from each school's website, department regulations, and from the curriculum mentioned in the Yearbook of Traditional Korean Medicine 2018⁶⁾.

3. Data analysis

Courses offered in the first and second years of the pre-med program and the first to fourth years of the medical program were examined, and those classified as medical humanities and social

medicine were extracted. Information about the school name, course title, period of completion, number of credits, and number of course hours were analyzed.

Preventive medicine was classified as basic Korean Medicine because it is included by KAS2021 in basic Korean Medicine, basic science

medicine, medical humanities and social medicine, and but it was excluded from the medical humanities and social medicine analysis.

Results

Table 1 shows the medical humanities and social

Table 1. Types of medical humanities and social medicine courses and the number of colleges that offer the courses

Subfields	Subjects	No of colleges	Classification	
Medical Ethics	Medical Ethical Studies, Medicine and Ethics, Medical Ethics, Medical Science Ethics, Korean Medicine Ethics	10	Required	
Philosophy	Eastern Philosophy, History of Eastern Philosophy, Medical Philosophy, Korean Medicine Philosophy	10	Required Elective	
Language and Literature	English	Medical English, English Conversation	4	Required
	Chinese	Chinese Reading, Chinese Conversation, Basic Chinese, Medical Chinese, Readings in Chinese Medical Literature, Intermediate Chinese, Chinese for Korean Medicine	7	Required Elective Other
	Chinese Literature	Medical Chinese Literature, Chinese Literature for Korean Medicine, Chinese Literature, General Chinese Literature, Ancient Medical Texts	11	Required Elective Other
Medical Statistics	Medical Statistical Studies, Theories in Medical Statistics, Medical Statistics, Practice in Medical Statistics	9	Required Elective	
Health Informatics	Korean Medicine Informatics, Medical Informatics	4	Required Elective	
Complementary and Alternative Medicine	Complementary Integrated Medicine	1	Elective	
Sociology of Medicine	Medicine and Society	1	Elective	
Medical Leadership	Medical Leadership	1	Elective	
Career	Self-understanding and Career Design, Specialized Practice, Practice in Career Experience	3	Required	
Science History	Perception and History of Science	1	Elective	
Business Administration	Hospital Management, Hospital Management and Practice	4	Required Elective	
Forensic Medicine	Forensic Medicine	6	Required Elective	
Public Health Law	Health Law, Healthcare Law, Medical Law	11	Required	
Medical Communication	Medical Interviews, Medical Communication	2	Required Elective	
Medical Psychology	Clinical Psychology, Psychology.	3	Required Elective	
Community Medicine	Community Clinical Practice	1	Required	
Medical Management	Hospital Administration, Medical Management, Medical Insurance and Hospital Administration	3	Required	

medicine courses offered at the 11 CKM examined, as presented in KAS2021. The analysis showed that medical humanities and social medicine courses were offered, either as required or as elective courses, in all 11 CKM.

Table 2 shows the medical humanities and social medicine courses offered at the 11 CKM and their categories, years, credits, and course hours. Students took medical humanities and social medicine courses most often in the second year of the pre-med program, followed by the first year of the pre-med program and fourth year of the medical program. The range of average credits and course hours for each course was 1.14-3.50 credits and 1.0-7.7 hours, respectively. The average number of medical humanities and social medicine courses was 5.3 for the pre-med program and 3 for the medical program. All 11 colleges offered public health law as a subject in the medical program.

Discussion

The World Health Organization (WHO) strives to establish accreditation mechanisms for health and medical training institutions in all countries. Periodically, the WFME revises international standards for basic medical education to reflect the changing educational environment⁷⁾. Korean Medical education must also transform over time. KAS2021 proposed by the IKMEE was developed to reflect the current trends in medical education, including medical humanities and social medicine programs, which were the focus of this study. Based on the KAS2021¹⁾, CKM must offer at least one medical humanities and social medicine course for each

grade, including content about medical professionalism and communication. In the present study, the authors examined the curriculum of the medical humanities and social medicine at CKM, and recommend how these schools should conduct medical humanities and social medicine education such that they meet KAS2021.

The analysis results and consequent suggestions are as follows.

First, in terms of the frequency of offered subjects, Chinese literature and medical law were most frequently offered, which were offered in all 11 CKM, followed by medical ethics and philosophy, which were offered in 10 colleges. Chinese literature was offered as an 8 credit course, which was the largest number of credits offered. Although Language and Literature are classified under medical humanities and social medicine by KAS2021 standards, its place within this classification must be discussed. Medical humanities and social medicine can be defined in various ways, from 'an interdisciplinary concept that encompasses humanities or social science subject matters relevant to facilitating the understanding and practice of medicine' to 'an approach to promote good medical practice'⁸⁻¹⁰⁾. Considering that medical humanities and social medicine aims to promote a comprehensive understanding and reflection on humanity, patient and disease, as well as the role of a doctor in Korean Medicine in society, there is a need for clear classification of what course can be included in this field.

Second, in terms of the offered timing, KAS2021 requires that 'at least one medical humanities and social medicine course be offered for each grade',

Table 2. Educational Status of Medical Humanities and Social Science Courses in 11 Colleges of Korean Medicine (Number: credit, Parentheses: hours)

Subject areas	Dimensions	A	B	C	D	E	F	G	H	I	J	K	Average of no courses
Medical Ethics	Pre	1						2(2)	2(2)			2(2)	
	Med	2	1(2)	2(2)	1(2)		1(2)			2(2)	1(2)		
	Med	2		1(2)									
Philosophy	Pre	1		1(2)	2(2)		2(4)	4(6)	2(2)			2(2)	
	Med	2	2(4)			4(4)				1(2)	2(2)		
English	Pre	1		2(2)			2(4)	2(4)					
	Med	2				2(4)							
Language and Literature	Pre	1					2(4)		4(4)		2(4)	4(4)	
	Med	2	2(4)	1(2)		4(4)					2(4)	4(4)	
Chinese Literature	Pre	1	4(8)	4(8)	4(4)	2(4)	4(4)	4(4)		6(6)		4(4)	4(4)
	Med	2	4(8)	3(6)		2(4)	4(6)	2(4)	3(4)	4(4)	6(8)	2(4)	
	Med	1				1(2)							
Medical Statistics	Pre	1		2(2)									
	Med	2	1(2)	1(2)		1(2)	2(2.5)		4(6)	1(2)			
	Med	3						2(2)				2(2)	
Health informatics	Pre	1								4(6)			
	Med	2		1(2)	2(2)								
	Med	1									1(2)		
Complementary and Alternative Medicine	Pre	2		1(2)									
Sociology of Medicine	Pre	2						1(2)					
Medical Leadership	Pre	1									1(2)		
Career	Pre	1		1(1)									
	Med	4										1(2)	
History of science	Pre	1		1(2)									
	Med	4		1(2)		2(2)			1(2)	2(4)			
Business Administration	Pre	2		1(2)							1(2)		
	Med	3							1(2)	1(2)			
Forensic Medicine	Pre	4	1(2)			2(2)							
	Med	2		1(2)								2(3)	
Public Health Law	Pre	3								2(4)			
	Med	4	1(2)		2(4)	2(4)	2(2)	2(4)	4(4)	4(4)			2(2)
Medical Communication	Med	2		1(2)		1(2)							
Medical Psychology	Pre	1					1(2)				1(2)		
	Med	3	2(4)										
Community Medicine	Med	4		4(8)									
Medical Management	Med	4		1(2)	1(1)							2(2)	
Total	Pre-Med	6	7	7	4	5	5	5	5	5	5	5	5.36
	Med	3	4	3	3	3	1	2	2	3	5	4	3.00

1) Pre Medical Course(Pre-med), Medical Course(Med)

but no CKM that satisfied this criterion. CKM were teaching five to six medical humanities and social medicine courses on average in the pre-med program. All the 11 colleges were teaching 'public health law' in the medical program. The average number of these courses in the medical program was 3, all of which were offered in the fourth year. This does not adhere to the KAS2021. The fact that CKM mostly offered public health law in the fourth year can be seen as the impact of the national medical licensing examination.

Moreover, although KAS2021 'requires matters related to the inclusion of classes on medical profession and communication,' only two colleges offered communication-related courses. In medical schools, courses such as patient-doctor relationships, doctor-social relationships, or communication skills between patients, caregivers, and colleagues are taught as a requirements prior to beginning clinical practice¹¹⁾. Considering that the purpose of medical humanities and social medicine education is the comprehensive understanding and reflection of disease, patients, and society, the field should be taught throughout CKM curriculum instead of limiting the courses to teaching periods that do not interfere with basic and clinical medicine courses or the national medical licensing examination.

Third, in terms of integrated education, there was almost no integration in education between the medical humanities and social medicine subjects that were taught in conjunction with basic science medicine and clinical studies, or subjects offered in a particular grade or time period. Most courses were offered as individual subjects. KAS2021¹⁾ recommends that basic science medicine, basic Korean Medicine, medical humanities and social

medicine, and the clinical medicine curriculum be integrated horizontally or vertically. To link theory and practice and form organic relationships with other subjects, interdisciplinary course offerings should be increased, and the curriculum should be organized based on experience-based learning instead of treating medical humanities and social medicine as a separate academic discipline. In other words, it is necessary to establish a system of integrated education that combines clinical medicine, such as medical statistics, medical informatics, business management and medical management, with subjects like philosophy, the history of science, and medical history. Medical counselling could also be offered in conjunction with clinical practice courses such as clinical medicine and clinical performance examination¹²⁾.

Finally, comparing the medical humanities and social medicine classification in KAS2021 with the courses included in the curriculums of 11 CKM showed that there were subjects included in the KAS2021 that were offered only in a few colleges or not offered at all. For example, there was no CKM that offered courses related to arts or medical education. Furthermore, although complementary and alternative medicine was offered in one college, it was difficult to identify the purpose and meaning of offering it in the CKM in this study. It is necessary to review and agree on why CKM should offer such subjects as 'arts', 'medical education', and 'complementary and alternative medicine'. The classification issue regarding whether preventive medical and medical history should be included as basic Korean medicine or in the medical humanities and social medicine needs to be discussed. KAS2021 classifies medical

history as basic Korean medicine, but the validity of this classification is controversial. There were four colleges that offered courses related to health informatics. It is necessary to discover new content in line with current trends and to evaluate and improve existing education to cultivate graduates with the best medical competency in the new normal era. Although it is not currently covered by the classification system in KAS2021, it is necessary to review in the future the contents of professional identity formation courses such as ‘becoming a doctor’, ‘death’, ‘hospice’, ‘interprofessional education’, and ‘patient safety’, etc.

Conclusions

The year 2021 marks the first year that KAS2021 is applied to accreditation. If CKM across the country face this challenge by reorganizing and operating their medical humanities and social medicine curricula based on each college’s circumstances, this will improve the quality of Korean Medical education and can foster the training of excellent Korean Medicine Doctors with professional medical and communication skills.

The year 2021 marks the first year that KAS2021 is applied to accreditation. If CKM across the country face this challenge by reorganizing and operating their medical humanities and social medicine curricula based on each college’s circumstances, it will improve the quality of Korean Medical education and can foster the training of excellent Korean Medicine Doctors with professional medical and communication skills.

Since data were gathered through curricula mentioned in the 11 CKM's websites in 2020, the

actual courses offered may have differed. Additionally, since colleges may be reorganizing their curricula in preparation for KAS2021, their curricula context may change. Most, but not all, colleges presented their revised curriculum online, so there may be an overlap in the completion period for certain subjects due to changes.

Despite these limitations, identifying the current status of the medical humanities and social medicine curriculum as it reflects KAS2021 is necessary to develop medical humanities and social medicine courses, which are an important part of Korean medical education. Furthermore, the KAS2021 will be applied starting in 2021 and can be used as a foundational material to discuss reforming the medical humanities and social medicine curriculum at CKM. This will allow for the evaluation of the revised performance-based, competency-based Korean medical education at a level above the WFME’s international standard of basic medical education through the accreditation of Korean Medicine in the first period of 2012-2017 and the accreditation of Korean Medicine in the second period of 2017-2020.

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