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Perspective

Eastern-medicine doctors in 1910s Korea integrating Western medicine on their own terms



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ARTICLE INFO

Article history: Received 29 November 2020 Revised 1 April 2021 Accepted 24 April 2021 Available online 18 May 2021

Keywords:
Eastern medicine
Incipient bilingualism in medicine
Korean medical journals

Doctors and researchers in the early twenty-first century usually understand integrative medicine as involving a process in which older therapies such as herbal medicine earn validation through applying biomedical analysis to determine efficacy. Eastern-medicine doctors in Korea in the early-twentieth century, however, chose not to accept the hegemony of biomedicine epistemology. Instead, they adopted a modus operandi in which Western medicine could complement Eastern medicine. They continued to insist on the primacy of their own conceptual frameworks based on long historical and practical clinical experience. This article highlights representative discussions in the 1910s journals, East-West Medicine News¹ and the Joseon Medicine World² in which anonymous doctors discussed how they understood the relationship between Eastern and Western Medicine. The case studies here show the typical way in which Eastern medicine doctors understood Western medicine and in fact throughout the entire colonial period in Korea from 1910-1945. After a discussion on doctors' interpretations of Western medicine, the article discusses two clinical cases, hematemesis, and wasting and thirsting. Finally, it examines how Eastern-medicine doctors understood their own diagnostic methods vis-à-vis Western-medicine instruments.

Incipient bilingualism in medicine

To make clear for the readers, we know little of the journals' contributors because the editors and authors remained mostly anonymous in the 1910s. Editorials were attributed to the newspaper while many articles were printed without attribution. No authors' names were mentioned, for instance, in the first five volumes of the *East-West Medicine News*.

In 1919, one author explained, "We accept Western medicine disease analysis, but in the clinic, we apply our Eastern medical concepts." Arguably, the author meant that Western- medicine diagnosis helped to inform the physician of the patient's condition. Having understood the diagnosis, the physician would nevertheless prioritize the Eastern-medicine diagnosis over the Western medical concept. The journal authors did not reject Western medicine, but rather drew on a dual conceptual understanding. As with many discussions on pathology and specific diseases throughout the volumes of all the journals, the authors integrate Western and Eastern medical concepts. For the purpose of analysis, we may say that the physicians' seemingly comfortable alternating between the two concepts demonstrates a form of medical bilingualism.

The historian Sean Lei's analysis of China arguably provides a counter-example to the professed comfort in Korea with the coexistence of the two concepts.³ Lei shows that in 1920's and 1930's China, Chinese medicine physicians grappled with the anxiety caused by apparent incommensurability between some Chinese medical concepts and some Western medical concepts. However, Eastern-medicine physicians in Korea displayed little apparent anxiety with incommensurability, but instead argued for the validity of both systems operating in tandem.

Marta Hanson⁴ calls medical bilingualism the ability not only to read in two different medical languages, but also to understand their historical and conceptual differences. Thus, in "accepting Western medicine disease analysis," while at the same time

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applying "Eastern medical concepts," the Korean Eastern-medicine physicians were arguably practicing medical bilingualism.

Chemistry not substitute for, but rather, complement to Eastern Medicine theory

For example, a discussion of Cold Damage by Zhang Zhongjing (150-219) claims that the theories of the past can be corroborated by modern chemistry.⁵ The author of *East-West Medicine News* reasons that chemistry explains the traditional concepts of generation, production, and transformation of ki (Chinese: qi).²

In Eastern medical theory, we may take the example of Greater yang syndrome from Cold Damage theory. If a patient has Greater yang syndrome, they have maximum yang. With such an extremity of yang, the Heavenly yang consumes the Earthly eum (Chinese: yin) in the form of water. With yang consuming water, the patient's condition will thus transform from excess to deficiency. We can trace this transformation by feeling the patient's pulse.² To interpret the theorization in this passage, it is most important to know that yang corresponded with fire, and eum corresponded with water. Fire in the body may manifest in numerous ways, but a feeling of heat is a common example. In the case of Greater yang, as it corresponds to maximum yang, there may be an intense feeling of heat that rises to the head and affects the body surfaces, as in the skin and muscles. Furthermore, yang corresponded to excess and eum to deficiency. In the case of Greater yang, extreme heat consumes water, and since water is necessary in the body, with water's diminishment, the person's body weakens, which means the person becomes deficient. The physician would then "intervene with herbal prescriptions to rebalance the fire (yang) and water (eum)."2

Having explained an aspect of Eastern medical theory, the author then made a comparison with Western medical theory:

In Western chemistry, we know that air contains water. We know that fire evaporates water. Also, we can produce hydropower through heating water. Thus humans can work with the relationship of heat and water to produce energy. We can do it mechanically. However, this phenomenon resonates with the relationship of Heavenly Fire and Earthly Water in the human body. Heat transforms water, and also consumes energy.²

Here, the author argued that Western scientists, who harnessed the study of the properties of substances and how they interact with each other to create energy, were expressing ideas familiar to Eastern-medicine physicians. According to the author, Eastern medical concepts based on the physician's careful balancing of eum-yang in the human body, and manifested through the five agents, were concerned with the management of energy, in the form of ki. In short, both East and West shared the concept of the importance of the interrelationship of fire and water in explaining energy. The author did not claim equivalence of East and West, but argued there was complementarity in using similar concepts to explain the workings of the human body on the Eastern medicine side and in chemistry on the side of Western science. Thus, unlike the Chinese-medicine physicians who aimed to "scientize" their medicine by incorporating Western science in China during roughly the same period, the Korean authors believed that science, in fact, validated their own medical ideas.

How historians of medicine interpret diseases of the past

The journals show that the Eastern-medicine physicians interpreted Western science to valorize their own medicine, and to justify the insistence on continuing to use their own terminology such as the concepts of *ki, eum*-yang, five agents (aka five elements), and so on. The historian Adrian Wilson's analysis of the historicity

of disease concepts helps in considering the problematic of using modern science to understand diseases of the past.⁶ In his study of pleurisy, he identifies two methodological approaches among historians of medicine who analyze diseases: 1. The historicalistconceptualist approach considers disease concepts as objects of historical study. In this approach, disease changes meaning over time according to socio-historical context. 2. The naturalist-realist approach excludes disease concepts from historical investigation since it considers modern disease concepts as the mirror of natural reality. This means that the modern disease concept is extended backwards in time, and is conceived as an unchanging discrete entity. Randall Packard,⁷ in his study of a disease outbreak in Philadelphia in 1780, adds to the debate on the historicity of disease concepts by declaring that both approaches are attractive and important to follow in historical scholarship. He argues that the different framing of questions results in different answers that combined together contribute to a more complete historical understanding of epidemics and human responses to them. This article mostly takes the historicalist-conceptualist approach, but, following Packard, also sees the value in the naturalist-realist approach. The historicalist-conceptualist approach helps scholars to take seriously the Korean authors on their own terms, but it is also useful to accept their use of Western disease concepts in their integrated East-West approach to medical reasoning at that time.

Following the general-policy editorial in *East-West Medicine News* in 1916, the subsequent section in the journal explains the type of content readers will find in the first Volume.² Aiming for comprehensive coverage of the broad field of Eastern medicine, there are articles on external medicine, acupuncture, diagnosis and treatment of discrete disease categories, and herbal medicine.²

Two representative examples can help to illustrate the type of reasoning that the physicians employed in attempting to integrate Eastern and Western medical ideas underneath the essentially Eastern-medicine umbrella.

Hematemesis

First, in an article titled "Discussion on Blood Diseases," the author focuses on hematemesis (vomiting blood).¹

Western medicine explains the physiological and chemical reasons for hematemesis. We accept this type of analysis, and agree it is useful. However, in our clinical practice we still apply our Eastern medical concepts. For example, we will diagnose whether the hematemesis is caused by, for example, liver wood attacking the stomach, or an issue with turbidity and overcoming the clear ki. Or if the patient has a headache, it might be a lesser yang problem. In that case, there would be a liver fire problem. We [then would] need to give therapy to clear wind.\frac{1}{2}

This representative passage demonstrates that the authors were thinking in terms of the individual patient's overall condition, rather than only a symptom or a disease. The discussion here clarifies that Eastern medicine physicians prioritized individualized diagnosis over the mechanical phenomenon of bleeding. The cause of bleeding is attributed to a patient's particular imbalance of ki and among the five agents of wood, fire, earth, metal, and water. The healing approach, therefore, is to rebalance the individual patient's ki rather than to simply stop the bleeding. In the example of the patient with a headache, the author suggests that the physician needs to refine his or her diagnosis to ascertain the cause. For example, in the five agents concept, a lesser yang syndrome corresponds to the liver area and so in turn wood and wind. In this conceptual system, therefore, wind as a pathogenic factor is considered to have caused the headache. The physician would then prescribe a treatment to clear wind from the patient's body and thereby also clear the headache.

Wasting and thirsting

A discussion on "wasting and thirsting" serves as the second example.¹

In Western medicine, there is an identified disease called diabetes. We accept this concept. However, we believe that Eastern medicine has the best therapy. For example, we prescribe herbs such as magnolia berries and ophiopogonis. Also, Bamboo Leaf and Gypsum Decoction is an excellent prescription for wasting and thirsting.⁸

In sum, the overarching argument in the above examples is that Western medical concepts, such as physiology and biochemistry, have merit and should be understood. However, Eastern medical concepts, in terms of diagnosis and therapy, are the most efficacious. The author insists that older concepts such as the turbid and clear ki continue to be used as concepts in diagnosis.

The term used by Eastern-medicine physicians, "wasting and thirsting" refers to a condition where the patient suffers from significant loss of weight in conjunction with unquenchable thirst. The author also refers to the Western disease concept of diabetes, suggesting a one-to-one correspondence between the two terms.⁹ Whereas diabetes involved pathology of the endocrine system related to an imbalance in newly measurable blood sugar levels, the Korean disease pattern of "wasting and thirsting" was diagnosed through the two primary symptoms. Even though conceptualized differently, there was clear overlap between the two disease concepts, since a typical diabetic patient also suffers from weight loss and excessive thirst. Since not until 1921 could Western-medicine physicians offer insulin for diabetic patients, the author's claim in 1916 of Eastern medicine's superiority for this condition most likely had a concrete basis from clinical experience in the absence of anything more effective from Western medical options in the same period. At the time of writing, Bamboo Leaf and Gypsum Decoction was an example of an efficacious therapy for a patient presenting with a "wasting and thirsting" pattern. In this early twentieth-century context, the Eastern-medicine physicians did not accept assessments about the inferiority of their own medical knowledge. The diabetes/wasting and thirsting example above illustrates one way in which Western-medicine physicians' claims of superiority did not convince contemporary Eastern-medicine physicians. As the medical records show, even though Westernmedicine doctors began to prescribe insulin in 1921, nevertheless, Eastern-medicine doctors continued to treat patients who suffered from wasting and thirsting. The advent of Western medicine did not supplant Eastern-medicine therapies.

Eastern-medicine doctors validate the use of the human senses to diagnose patients

Having analyzed some of the differences in approach to disease concepts, the Eastern-medicine physicians also questioned Western-medicine physicians' assumption of the superiority of using instruments in making diagnoses. A representative editorial summarizes the overall thinking regarding comparative methods of diagnosis.² The editor began by asking whether physicians needed to change their diagnostic methods.

Nothing surpasses the four diagnostic methods of looking, listening [and smelling], asking, and feeling the pulse in subtlety and refinement. Of the four methods, the last-pulse diagnosis is the most crucial... We should continue with that method. But now we have immature Western medicine with its cellular biology, germ theory, and its emphasis on physical anatomy. Western medicine has the concept of relying on instruments to make diagnoses. It's actually not that much different to our

four methods. Western medicine has a very similar approach, with looking, listening, smelling, and percussing. The difference is the reliance on instruments, such as the thermometer, the stethoscope, and the microscope. In Western medicine, there is still the emphasis on seeking observable signs, as we do. But here, we should accept the merits and convenience in using instruments. For example, it is useful if we identify bacteria through a microscope. Such instruments are cheap. While using our diagnostic methods, we should also use instruments such as stethoscopes.²

The argument here is on the effectiveness of the traditional four methods of diagnosis – namely, 1) looking, 2) listening and smelling, 3) asking, and 4) feeling the pulse – while supplementing with Western instruments when they are useful. The author argues that Western medical diagnostic instruments have their merits such as the stethoscope for percussion and the microscope for identifying bacteria. However, these new medical instruments are more or less aids that are not able to reach the accuracy of "the most crucial" pulse diagnosis and the four diagnostic methods as a whole

Having accepted that there are differences in diagnostic methods between Eastern and Western medicine as well as in use of new diagnostic instruments, it is important to note that the authors recognized similarities between the two medical systems. The passage above states, for instance, "It's actually not that much different to our four methods. Western medicine has a very similar approach, with looking, listening, probing (with instruments), and touching."

The issue here was that the traditional four methods of diagnosis measure different things than did instruments. The four methods ascertain qualities such as ki and the five agents. Specifically, physicians felt the pulse to ascertain many aspects of a patient that Western medical instruments could not detect. For example, the pulse could give information on all parts of the body, and on many parameters of the body's function. For example, by feeling the pulse, a skilled physician could detect a urinary problem, a lung problem, and a headache all at once. The reasoning was that the physician could feel many permutations of the patient's ki, by judging the pulse qualities. Instruments, on the other hand measured specific parts of the body, such as stethoscopes for lungs. Demonstrating medical bilingualism in practice, however, the physicians in Korea argued for both methods' benefits.

Western medicine as an adjuvant to Eastern medicine

While arguing for Eastern medicine's relevance and clinical effectiveness, the Eastern-medicine physicians in Korea in the 1910s perceived similarities with Western medicine but also drew on their own historical imagining to position Eastern medicine as part of a world medicine. After all, as the doctors pointed out, what they imagined as the East and the West were historically connected with regards to knowledge flows. Arguing that Eastern medicine may be judged on its own terms neither invalidates Western medicine nor concedes hegemonic privilege to it. These Korean doctors' analyses offer insights into possibilities, for even today, of conceptual convergence more than binary difference. Rather than believing that Western medicine would replace, or seriously challenge, Eastern medicine, they saw it as an alternative way of interpreting the body and disease. In other words, Western medicine could complement and act as adjuvant to Eastern medicine. Such confidence in Eastern medicine in the 1910s stands out as an unusual case of colonial medicine and differentiates Korea from both Japan and China where East Asian medicine came under serious challenge from Western-medicine doctors and intellectuals. This self-belief helps to explain why Korean medicine

not only survives, but also flourishes in South Korea into the early twenty-first century.

Acknowledgements

The author would like to thank Marta Hanson (Johns Hopkins University School of Medicine), Kim Taewoo (Kyung Hee University College of Korean Medicine), Yumi Kim (Johns Hopkins University), and Gianna Pomata (Johns Hopkins University School of Medicine) for comments and suggestions on the manuscript.

Author contribution

This is the sole author's work.

Conflict of interest

The author declares that he has no conflicts of interest.

Funding

This research was supported by the Johns Hopkins University School of Medicine, and the Brain Pool Program funded by the Ministry of Science and ICT through the National Research Foundation of Korea, grant no. 2020H1D3A1A04081570.

Ethical statement

Not applicable.

Data availability

Not applicable.

References

- JoseonUihakgye (Joseon Medicine World). 1918-1919, 11 volumes, Korean Medical World Association [In Korean].
- Dongseo Üihakbo (East-West Medicine News). 1916-1917, 8 volumes, Registered Physicians' Medical Lecture and Study Association [In Korean].
- Lei S. Neither Donkey nor Horse: Medicine in the Struggle over China's Modernity. Chicago: University of Chicago Press; 2014.
- Hanson M. Is the 2015 nobel prize a turning point for Chinese Medicine? The Conversation. October 5, 2015. Accessed December 31, 2018 from:. https:// theconversation.com/is-the-2015-nobel-prize-a-turning-point-for-traditionalchinese-medicine-48643.
- Feng Y, Wiseman N, Mitchell C. Shang Han Lun: On Cold Damage, Translation, and Commentaries. Taos: Paradigm Publications; 1998.
- Wilson A. On the history of disease-concepts: the case of pleurisy. Hist Sci. 2000;xxxviii:271–319.
- Packard R. Break-bone" fever in Philadelphia, 1780: reflections on the history of disease. Bull Hist Med. 2016;90:193–221.
- Jun Heo. Donguibogam (Treasured Mirror of Eastern Medicine). Seoul: Korean Ministry of Health and Welfare; 2013:1834.
- Feudtner C. Bittersweet: Diabetes, Insulin, and the Transformation of Illness. Chapel Hill: University of North Carolina Press; 2003:6–8.
- 10. Kuriyama S. The Expressiveness of the Body. New York: Zone Books; 1999.