



Harvard Japan Trip 2007 The International Symposium on Public Health

Tsumura Extra Talk-Fusion of Western medicine and Kampo medicine



The Harvard Japan Trip 2007 is a tour in which students at the Harvard School of Public Health in the U.S. visit Japan to learn about the country's medical system and culture. As part of the program for the International Symposium on Public Health that was part of the event, the Tsumura Extra Talk was held on traditional Japanese Kampo herbal medicine that has gained attention around the world.

Hosted by: Harvard School of Public Health Student Club of Japan Sponsored by: Tsumura & Co. Date: March 26, 2007 Place: Large conference room on the third floor, Medical Library, University of Tokyo

TALK 1

Japan's Kampo medicine education today

Kiyoshi Kitamura, M.D., Ph.D., International Research Center for Medical Education, University of Tokyo

Eighty schools teach popular Kampo medicine

In a poll of medical students at the University of Tokyo, 95% of respondents said they think it is necessary to have lectures about Kampo medicine. As for the reason, 45% of students said Western medicine lacks something, 39% said Kampo medicine is better depending on the illness, and 37% answered that Kampo medicine is necessary for medical services in the future.



Regarding current lectures on Kampo medicine, 54% think that the current three sessions are not enough, and 85% actively or passively want to take clinical training in Kampo medicine. Furthermore, as for a question of whether or not they would like to use Kampo medicine as doctors in the future, 75% answered that they wanted to use it or thought they will use it. Many medical students are interested in the effectiveness of Kampo medicine and they are willing to learn about Kampo.

Since the Meiji era, Japan's medical education system has focused entirely on Western medicine. In recent years, however, it has finally begun showing interest in Kampo medicine. The government announced educational guidelines called the Medical Education Model Core Curriculum in 2001, and its goals include the subject of Kampo medicine for the first time. Students are to be able to outline traditional herbal medicines. Because of this change, lectures on Kampo medicine began to be included in official curricula at universities. Today, all of the country's 80

faculties of medicine at universities and medical schools offer Kampo medicine classes.

Teacher training, many other problems remain

Japan's Kampo medicine education still has many hurdles to overcome. A first step is to develop excellent textbooks and establish systematic curricula for ongoing education. It is also necessary to offer Kampo medicine education that maintains continuity from academic learning at universities through clinical training after graduation. It is important to teach students through clinical training including giving more hands-on opportunities such as letting students handle herbal ingredients and Kampo medicines, get experience in giving prescriptions, and establishing outpatient Kampo clinics in more university hospitals.

Another major issue is a lack of teachers who can teach Kampo medicine at universities. An urgent task is to train teachers who can teach the subject. In addition, to expand Kampo medicine education at universities, it is also essential to gain the overall understanding of each school.



TALK 2

How Kampo medicine can contribute to global health

Kenji Watanabe, M.D., Ph.D., FACP, Department of Kampo Medicine, Keio University School of Medicine

Kampo medicine gets the attention of WHO, U.S., Europe

Complementary and alternative medicines have been gaining attention in the U.S. and Europe recently. The National Institute of Health (NIH) in the U.S. has established a National Center for Complementary and Alternative Medicine, which conducts research on traditional medicines and herbal remedies with an annual budget of 120 million dollars. Keio University collaborated with Harvard University on Kampo medicine, financially supported by NIH.



The World Health Organization has also begun supporting Oriental medicine. In 2006, an international conference held in Tsukuba approved the standardization of acupoints, and at a Family of International Classifications Strategic Planning Meeting in Tunis, traditional classifications of medical illnesses were discussed. Asian countries have also begun reevaluating traditional medicine, and nationwide projects are being implemented. In light of such circumstances, global attention is focused on Japanese traditional Kampo herbal medicine. Many American and European students are learning about Kampo at Keio University, and more papers about Kampo are being published in English journals.

Kampo medicine targets curing "people" rather than "illnesses." Based on the concept of the "Sho" diagnostic system, doctors focus on the body constitution and characteristics of individual patients, and make diagnoses through interviews, and diagnosis of abdomen, pulse, tongue. Based on each "Sho" (individual diagnosis), preparations made from natural herbs are prescribed. For example, Hachimigan is prescribed for people who show symptoms such as fatigue, frequent urination, chills, and diabetes. With

Kampo medicine, a single remedy can deal with several kinds of illnesses. Unlike Western medicine that requires medications for each symptom, the number of medicines can be reduced, potentially save medical expenses.

Today, herbal preparations are covered by the national healthcare insurance system, and more than 70% of doctors use such medications on a daily basis. In particular, they are used for symptoms that cannot be pinpointed through specific diagnoses using Western medicine, and they are also used to prevent life-style related disease. I am a doctor of internal medicine, and I use a variety of Kampo herbs and make the most of them to improve the health of patients.

Advanced technologies, research promote understanding of traditional medicine

For Kampo medicine to contribute to global health, it is necessary to clearly understand its effects and how it works. A variety of research has begun with that aim recently, and scientific data is being accumulated.

For example, research at Keio University shows that Kampo medication used to prevent intestinal obstructions after colon cancer surgery resulted in shortening hospitalization periods. Some data show that Kampo medicines can cure small intestine ulcer of patients who take analgesics for a long time. Remyelination of demyelinated nerves is also indicated. Kampo may attract attention as an inexpensive regenerative medicine. When thinking of preventive medicine in the future, the antioxidant potential of Kampo medicines is expected to be effective for arteriosclerosis prevention.

As Kampo medicine can curb medical expenses, it has great potential in medical services for an aging society. Understanding such excellent traditional medicine has finally become possible thanks to technological advancements. I believe Kampo medicine will make a huge contribution to global health if we continue building scientific evidence in the future and publishing papers in English for overseas audiences.

TALK SESSION

Marriage of Western and Kampo medicines

Kenji Watanabe, M.D., Ph.D., FACP, Department of Kampo Medicine, Keio University School of Medicine
Gregory A. Plotnikoff, M.D., M.T.S., FACP, Keio University School of Medicine

At the end of the symposium, students from the Harvard School of Public Health, University of Tokyo, Keio University, and other schools joined Associate Professor Kenji Watanabe and Associate Professor Gregory Plotnikoff who studies Kampo medicine at Keio University for a discussion under the theme a "marriage of Western and Kampo medicines."



Watanabe: Chinese traditional medicine is widely known in the U.S., but Japanese Kampo is not. The word Kampo refers collectively to medicine traditionally practiced in Japan, as opposed to "Rampo" or Western medicine, imported to Japan during the Edo era. Kampo is a unique Japanese medical culture developed in the country. Hanaoka Seishu was the first in the world to perform breast cancer surgery using general anesthesia, and I believe Japan's medicine was top-class in the world during the Edo era. However, Kampo declined as a result of the Meiji government promoting Westernization and spurning traditional medicine.

Kampo focuses on individual patients' constitutions and complaints, and treatment differs depending on patients even if they show the same symptoms. Because it was difficult to measure and quantify, Kampo did not get much recognition in the 20th century. In the 21st century, however, quality of life and other things that cannot be quantified have received greater emphasis. Scientific understanding of Kampo has also moved forward. A time has come when Western people are properly recognizing Kampo that even Japanese people

had tried to deny. Hanaoka Seishu is said to have adopted anything he believed beneficial for a patient regardless of whether it was based on Oriental or Western medicine. We should be proud of such a tradition and promote a new medical culture amalgamating Oriental and Western practices throughout the world.



Plotnikoff: In the United States, the general public shows a strong interest in what can be called integrative medicine, the marriage of Eastern and Western medicines, of traditional and conventional medicines. In Japan, Kampo represents such a marriage. I believe that Kampo, as one of the world's oldest healing traditions, offers much promise to patients and society.



Kampo medicine focuses on a balance between one's mental state and physical condition. Kampo is a medicine that completely differs from Western medicine culturally and systematically. The two are not in opposition as they complement each other. Combined and integrated in university hospitals in Japan, Kampo care extends patient options with less toxicity and less cost. As such, Kampo's integration represents enhanced care that benefits both patients and society. This integration is the future of medicine.

Students' opinions
● I imagine that patients' complaints can be vague in clinics and tests learned at school may not work sometimes. Kampo is useful in a clinical setting.

- To improve quality of life throughout the world, Kampo, a culture Japan should be proud of, should be promoted more actively to the world.
- Neither Western medicine nor Oriental medicine is perfect. A practical approach combining both should be taken.
- Even if we want to learn about Kampo, there are not many comprehensive textbooks. The government should enhance Kampo education.
- For a wider application of Kampo in Western countries, more scientific and pharmaceutical research like a proof of effectiveness is needed.

Comments after the Talk Session

Want to study relationships with tumors



Mr. David Powers

I am studying pharmacology, so it was good to compare Western medicine and Kampo in the Talk Session. I believe further research is required to widely spread Kampo in Western countries, but it has huge potential. I have heard that Kampo is effective in controlling tumor cell multiplication and metastasis, and I would like to study which components of the medicines actually contribute to this.

Kampo may take off in the U.S.



Ms. Chandra Jackson

I did not know about Kampo until I listened to this Talk Session. However, Kampo has huge potential with fewer side effects. More people are interested in medicinal plants and herbs recently in the U.S. as well. If Kampo is promoted more there, I think many people will show interest and it will spread.

Harvard Japan Trip 2007

High Level Control of Natural Herb Combinations -Tour of Kampo Plant of Tsumura & Co. the next day-



In the sample room

HSPH students visited Tsumura's Ibaraki Plant on the day following the symposium. Kampo medicines are made from several natural herbs. Combining the herbs and standardizing components requires high technology. Tsumura has strict control standards from places of production of herbs to manufacturing process to ensure a high level of quality. The process also uses many analyzing technologies and consistently produces non-contaminated and medicines. Students saw ingredient analysis using high-speed, high-performance liquid chromatography (HPLC) and analysis for pesticide residue using gas chromatography mass spectroscopy analysis (GC-MS) and appeared to be impressed with such modern quality control practices. They then moved to a warehouse where herbal ingredients cultivated in Japan or imported from China and other countries are stored. The temperature, humidity and the stock status of the warehouse are controlled by computers. Ingredients are chopped up, mixed according to the ratio based on the prescriptions, and useful components are extracted, concentrated, dried and granulated to make Kampo preparations. Students later looked at the herb sample room, touch actual herbs and the plant tour ended. It seems that this day's experience contributed greatly to the students' understanding of Kampo medicine.

Comments after the tour



Ms. Ghazi Phillips

Impressed with ideal quality control
I was impressed with the ideal quality control at the Tsumura plant that uses the latest technologies, including herbal ingredients analyzed with HPLC.