
Editorial

The Pharmacopedics in Japan

In 2006, pharmacy education in Japanese universities was changed into two different curriculums offered in parallel. One is six-year program that was strengthened with the addition of a two-year program allotted to the subjects relating to clinical pharmacy to the conventional four-year program and mainly aimed to develop pharmacists who work in the medical field. Another is the four-year program mainly focused on developing pharmaceutical researchers and engineers. Under the new system, those who wish to take the national examination for pharmacists must graduate from the six-year program. These changes have come to be made in response to growing expectations for the pharmacists to play active roles in healthcare, also as a possible measure for addressing diverse issues facing the future of healthcare in Japan, including the issue of declining birthrate and aging population.

Against this backdrop, there are high expectations for Kampo medicine, or traditional Chinese herbal medicine, within the medical field in Japan. In fact, 90% of physicians in Japan prescribe Kampo as appropriate, and 8% of all prescriptions that are given include Kampo. Thus, Kampo is a requisite part of clinical pharmacy education, and many universities with a pharmacy department have begun to offer classes on Kampo. However, as the most universities do not have faculty members who specialize in Kampo medicine, it was decided that pharmacognosy teachers would teach Kampo, as pharmacognosy relates most closely to Kampo medicine.

In a period when the most pharmaceutical products were not synthetic but crude drugs derived from natural sources, pharmacognosy aimed to eliminate fraudulent and inferior products to assure the quality of pharmaceutical products, and secure their safety and effectiveness. In order to secure the quality of such crude drugs, it was most important to clarify the pharmacologically active chemical ingredients they contain and manage their content to a certain level. Thus, in recent years, pharmacognosy had come to be regarded as a study for isolating chemically pure compounds from crude drugs and developing new drugs. Still more recently, however, as it has become rare to find new compounds contained in crude drugs that are used as ingredients for Kampo, pharmacognosists have shifted their attention to natural resources such as microorganisms and marine organisms that were not conventionally used as crude drugs, and have basically lost interest in Kampo.

The recent changes in pharmacy education are prompting pharmacognosists to return to pharmacognosy in its original sense. As matters stand, Kampo is used in the medical field despite its various issues as a drug, but modern society demands that these issues be addressed through research. Therefore, in response to such demand, it is hoped that Kampo studies will be actively pursued in the future.

Toshiaki Makino, Ph.D.

Associate Professor, Department of Pharmacognosy
Graduate School of Pharmaceutical Sciences
Nagoya City University