

## **Pharmacy practice for patient's compliance education for drug administration using IT multimedia teaching materials**

Kenji Matsuyama, Professor, Faculty of Pharmaceutical Sciences, Mukogawa Women's University, 11-68 koshien-kyubanchou, Nishinomiya, 663-8179, Japan

Japanese education for pharmacy mainly consists of organic chemistry, physical chemistry, biochemistry, analytical chemistry, hygiene, microbiology, radiochemistry, pharmacognosy, botanical chemistry, pharmacology, and pharmaceuticals, together with each practice.

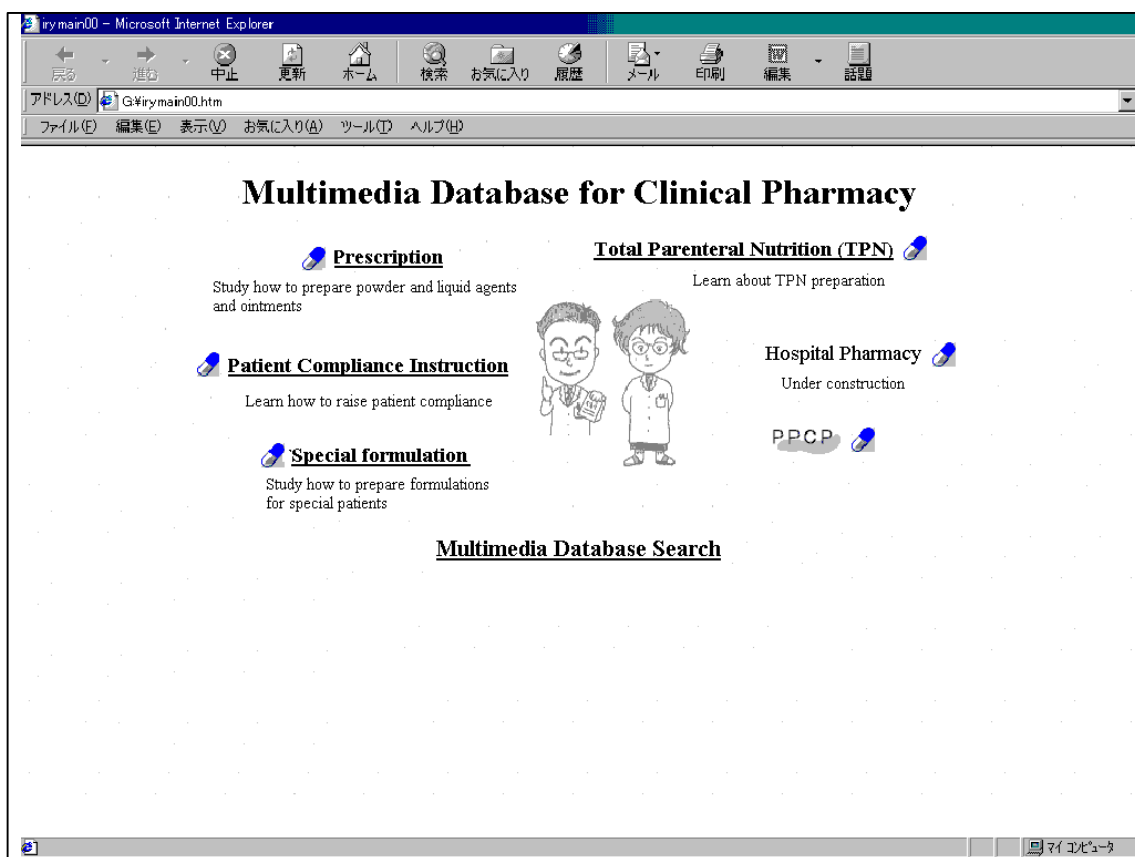
I am in charge of the education of pharmacy and pharmacy practice at my university. The latter become gradually important according to the progress in the function of pharmacist, i.e., from a mere pill-pusher to a person in charge of pharmaceutical care.

Under Japanese medical insurance system, both hospital pharmacist and community pharmacist are able to charge a fee for the patient's compliance instruction for drug administration. The patient's compliance instruction for drug administration is to inform patients not only the drug effect, but also the adverse effect, the drug interaction, how to use the drug and so on. During patient's education, pharmacist checks the symptom of the adverse effect, followed by feedback to the doctor in charge.

As to these works described above, an achievement of pharmacy practice is quite difficult in such the university without an attached hospital. My university does not operate a hospital. This is the reason for constructing the multimedia database with moving picture for clinical pharmacy practice.

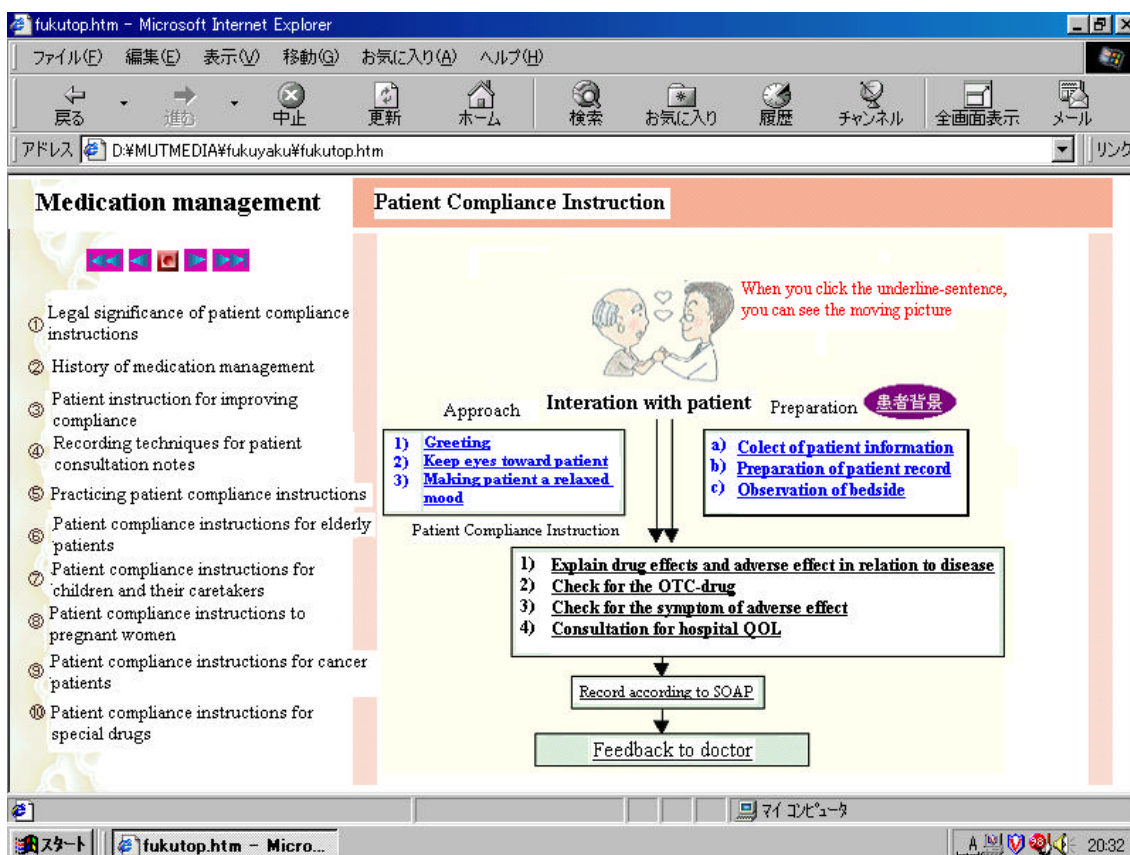
As illustrated in Fig.1, there are several items regarding clinical pharmacy practice, i.e., the prescription, the patient's compliance instruction, the special formulation for inpatients, and the preparation of Total Parenteral Nutrition. By using this multimedia database, pharmaceutical students can study how to prepare powder and liquid agents and ointments, the basic works of pharmacist. Furthermore, the database makes student learn how to raise patient compliance.

Fig. 1



After clicking the patient's compliance instruction, you can see Fig.2, which illustrates how to practice the patient compliance instruction, how to record for patient consultation, and how to feedback the symptom of adverse effect to doctor, including how to approach inpatient.

Fig. 2



Pharmaceutical students can study an actual clinical pharmacy by using the Information Technology material even if there is no hospital. The method for education has now drastically changed. Especially for pharmacy schools, which are facing the difficult task of adapting to change in the professional practice at pharmaceutical education utilizing the Information Technology is a positive procedure.

I want to finish the lecture with following paragraph described by Darwin. [ It is not the strongest of the species that survives , not the most intelligent, but the one most responsive to change]