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# Early On-site Training Programs at Tohoku Pharmaceutical University —Disability-Simulation Exercises to Understand Patients and the Elderly—

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*Abstract* — It has been pointed out that we need to know how to approach and sympathize with patients' feelings and behavior as health care providers or pharmacists, as well as the importance of ethics education for pharmacists working in the clinical setting. Each university has implemented an ethics training program, such as “visiting a center for mentally and physically disabled persons, nursing facilities, and terminal care patients,” “listening directly to patients suffering from drug-induced diseases,” and “simulating physical disability experiences,” which was newly introduced in pharmaceutical education. Our school also employs the above approaches for early on-site training programs for first-year students aiming to nurture their humanity and achieve understanding of “dignity in life” and “compassion.” A case study involving our students suggested that disability-simulation exercises, which can help them to understand the feelings of patients and the elderly, contributed to nurturing an ethical view and a sense of responsibility, and motivated them to become friendly and trustworthy pharmacists.

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## 1. Introduction

Early on-site training programs have been introduced for 1st-year student classes in many pharmaceutical universities, involving visits to clinical settings where pharmacists work, and motivating student learning after university entrance in line with the educational policy of the “Model Core Curriculum for Pharmaceutical Education” for the six-year program (Taguchi et al. 2010, Teramachi et al. 2010). The early on-site training programs specify “experiencing health care and welfare needs” as objectives (Tsuruta et al. 2009, Furusawa 2010). For students in the six-year program, it helps them learn humanism throughout the entire school period by “understanding patients' feelings through disability simulation exercises” which is required as an objective to “care about patients' feelings.”

The faculty of medicine offers students an opportunity to experience wheelchair assistance or simulation and assistance of patients with visual

impairments at a nursing facility or hospice and palliative care center, with aims to understand patients by confronting their deep emotional pain and realizing their perspectives. In pharmaceutical education, many universities conduct disability simulations in line with the learning objectives for the six-year program in order to understand patients' feelings (Sakai et al. 2008, Mizuno et al. 2009). In our university, “disability simulation exercises” have been introduced since 2008 as a part of early on-site training programs to simulate the experience of people with disabilities or the elderly.

This study examines learning effects of disability simulation exercises conducted for the 1st-year pharmaceutical students of the six-year program, as well as the significance of on-site training.

## 2. Simulation of People with Visual Impairments and the Elderly

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Elderly people often encounter problems in daily activities due to a decrease in physical functioning (muscle, joints, vision, hearing) associated with aging. To experience the inconvenience of elderly people, students simulated a series of daily activities of elderly people, such as walking and going up and down the stairs using a cane, taking money out of a purse, and picking up coins placed on the floor, by wearing apparatus called “the aged simulation set” and special glasses. In the simulation of people with visual impairments, students experienced a loss of vision by wearing an eye mask, and learned how to assist and guide the trainee by communicating and holding hands. After the simulation, the students stated: “I could understand how elderly or disabled persons feel,” “I could understand not only physical, but also psychological distress that people cannot know unless they have had that experience,” “I could more strongly become aware of the difficulties of elderly people and people with visual impairment,” and “I could understand the difficulties of people who have problems with their vision or lower legs,” as they started to think from the perspectives of people with disabilities, and sympathize with their pain. They strongly experienced the fear and anxiety caused by losing vision, which made them realize the importance of “Braille blocks” on the sidewalks to safely guide visually impaired persons.

### **3. Experience of Wheelchair Assistance and Simulation**

In wheelchair experience, the students learned difficulties in controlling the chair, sense of security as well as anxiety when assisted by another person, and how to move across bumps and obstacles easily and safely when assisting wheelchair users. Many students stated the difficulty of controlling the wheelchair and the importance of social support, showing positive feedback regarding wheelchair experience. The students also experienced getting on and off elevators, and learned the meaning of a mirror placed in elevators. Generally, the students gave positive feedback for the on-site training.

### **4. Discussion and Conclusions**

Pharmacists have a responsibility to contribute to

maintaining and enhancing lives and health, as a member of health care providers. Their responsibility is based on the ethics of reverence for life. In pharmaceutical education, therefore, the students are required to confront the critical questions of life and death to learn humanism (medical ethics), which focuses on human values and concerns. To achieve that, it is essential to provide humanistic education to recognize socially vulnerable people (the elderly, patients, hospitalized persons, persons with disability, persons in need of care), share and sympathize with their distress and inconvenience, and treat these people with gentle patience and compassion. In six-year pharmaceutical education, the students are required to learn humanism throughout the entire school period, which includes the critical questions of life and death (dignity of life), attitude toward being a health care provider, communication, and teamwork.

The aim of our on-site training programs is to help students become aware of patients or socially vulnerable people through the disability simulation exercise, understand the feelings of these people, and “treat them with friendliness and compassion” to nurture students’ ethical views, which are necessary for health care providers involved in human life. According to a survey conducted involving the students of our university, most of the students who experienced disability simulation exercises responded that they could “understand the problems and distress” of socially vulnerable people, and became aware of “the importance of compassion” and “the need for assistance.” This may be the result of the disability simulation exercise, as they developed a feeling of compassion by understanding the feelings of socially vulnerable people and the importance of human life. Not surprisingly, most students admitted that the disability simulation exercise was “an important experience to become a member of health care providers.” The students learned how important it is for medical students to experience patients’ (the elderly and people with disabilities) suffering and distress and learn from patients to understand patients’ feelings through their own experience. As a whole, favorable results were indicated regarding “students’ feedback on the disability simulation exercise.” There are, however, many points to reflect upon on the instructor’s side. The future challenges are: to make use of the limited class time with more ingenuity, in a larger and deeper perspective; to be more explicit about behavioral objectives; to motivate

students to explore humanism; and to instill a respect for others and the value of human life into students.

Some health care providers need to communicate with not only patients but also their family members, requiring various considerations. Therefore, the need to nurture an ethical view and communication skills is very important in pharmaceutical education. In the disability simulation exercise, there were many students who stated the importance of communication, suggesting that most students understood that communication is extremely important in order to gently assist and guide people with disabilities.

To nurture ethical views required of pharmacists, it has been suggested to be important to provide ethics education during the six-year program, and not after becoming a pharmacist (Hayase 2009). In this sense, it was considered significant that the 1st-year students could have an opportunity to understand the perspectives of socially vulnerable people through the on-site training of disability simulation exercises for further learning in pharmaceutical sciences.

This training program was conducted using a team-based approach; therefore, the students could learn “the importance of teamwork” and “give considerations to others” that are specified in the core curriculum for pharmaceutical education for the six-year course, as well as the importance of mutual trust in fulfilling their roles with a cooperative attitude. Some students reported their experience of helping the elderly after the program, suggesting the significance of the on-site training.

The Asahi newspaper (20 July, 2008) published an article about our university student. In this article, the student stated: “I used to always hesitate to help people in trouble. However, disability simulation exercises facilitated my understanding of the difficulty of the people with disabilities or the elderly. I would like to actively help these people by considering the situation from their perspectives.”

It is necessary for lower division students to receive education that would help them understand patients. It is suggested that disability simulation exercises serve as an opportunity for a future medical professional to nurture empathy for patients, and that such training is effective for cultivating “compassion” in students’ minds.

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