

Abstracts of Outstanding Presentations of the 76th Annual Meeting of the Medical Association of Nippon Medical School

Date: September 6, 2008 Place: Nippon Medical School

Abstracts of Outstanding Presentation (1)

A Training Session in a Clinical Simulation Laboratory for the Acquisition of Clinical Skills by Newly-Recruited Medical Interns

Akinobu Yoshimura¹⁻³, Toshiro Shimura¹⁻³, Ryoko Aso^{1,2}, Koji Adachi²,
Toru Kim², Taisuke Morimoto², Shigeo Akira⁴, Takashi Nitta⁴,
Masako Takaoka⁵, Noriko Takehara⁵ and Yuriko Hayasaka⁵

¹Academic Quality and Development Office, Nippon Medical School

²Working Committee of Clinical Simulation Laboratory, Nippon Medical School

³Board of Education, Nippon Medical School

⁴Management Committee of Medical Interns, Nippon Medical School Main Hospital

⁵Nursing Department, Nippon Medical School Main Hospital

Introduction

The Nippon Medical School main hospital now manages the transition from medical student to intern with organized orientation programs. In these programs, the working committee of the clinical simulation laboratory introduced a training session, which was designed to improve the clinical skills of newly recruited medical interns. We present the technique that was used to provide this effective clinical skills training and the results of a questionnaire survey aimed at assessing the value the interns placed on the program.

Subjects and Methods

In April 2008, as part of the organized orientation programs, a training session for clinical skills was implemented using a clinical simulation laboratory and 3 small-group learning (SGL) rooms. The aim of the session was to train medical interns in basic clinical skills. Beforehand, all interns were required to read the training manual, in which the procedures of each training course were described and the specific behavioral objectives were clearly defined. The session consisted of 6 training courses, including an internal examination, tracheal intubation, auscultation (heart sounds and lung sounds) and the collection of a venous and arterial blood samples. Medical interns moved in rotation every 30 minutes and participated in the practical trainings in each room (**Fig. 1**). At the end of the training session, the interns were required to complete a questionnaire survey in which they answered 5 questions using a 4-point scale (1=poor, 4=good).

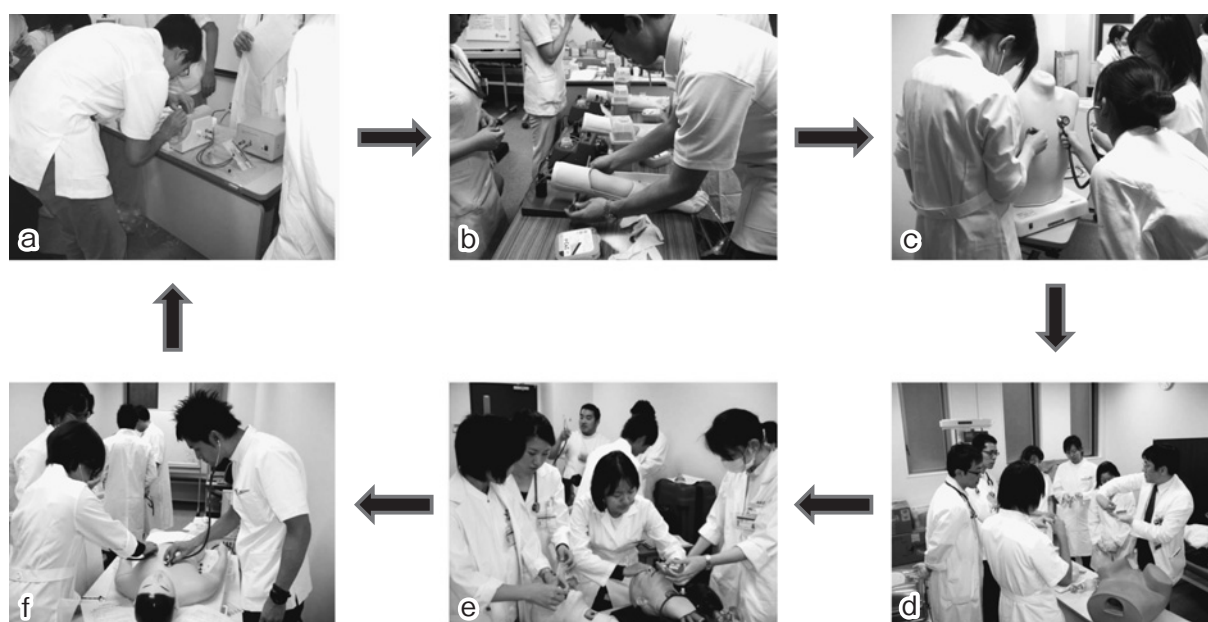


Fig. 1 Appearance of Training Session for Clinical Skill

Medical interns moved in rotation every 30 minutes and took practical trainings in each room.

a. collection of arterial blood sample, **b.** collection of venous blood sample, **c.** auscultation (lung sounds), **d.** internal examination, **e.** tracheal intubation, **f.** auscultation (heart sounds).

The 5 items in the questionnaire were as follows: Q1: “Were the instructions comprehensible?” (ie, comprehensibility of the instructions); Q2: “Were the descriptions in the manual comprehensible?” (ie, comprehensibility of the manual); Q3: “To what extent did you acquire clinical skills?” (ie, acquisition of clinical skills); Q4: “To what extent were you satisfied with the session?” (ie, satisfaction with the session); and Q5: “Will you use the clinical simulation laboratory for self-training?” (ie, utilization of clinical simulation laboratory).

Results

A total of 37 newly recruited medical interns participated in the session, which was efficiently carried out from a standpoint of both human resources and teaching hours. Eight physicians and 2 nurses were required as instructors. The session lasted for 3 hours 30 minutes and consisted of 3-hours of training plus 15-minutes of orientation and a rest period each. In total, 89% (33 of 37) of interns completed the questionnaire survey provided at the end of the training. Most of interns considered the explanations given by the instructors and the descriptions in the manual to be easily understandable (**Fig. 2**). Although only 12% (4 of 33) of interns thought that they had successfully acquired clinical skills, 67% (22 of 33) were satisfied with the session (**Fig. 2**).

Discussion

Teaching programs to promote clinical skills are attractive to medical interns. The importance of intern education as a component of risk management may be sufficient reason for health-service providers to continue to support intern education. Therefore, one might assume that initial clinical skills training for medical interns in the early stages of their internship would be of great benefit, both from the viewpoint of their motivation, as well as that of risk management. The session was efficiently carried out from a standpoint of both human resources and the teaching hours involved and, therefore, can be considered to contribute to the reduction of the overall teaching burden of instructors. The questionnaire survey revealed that the interns rated the session as high, in terms of the content of the training and the skills they had acquired.

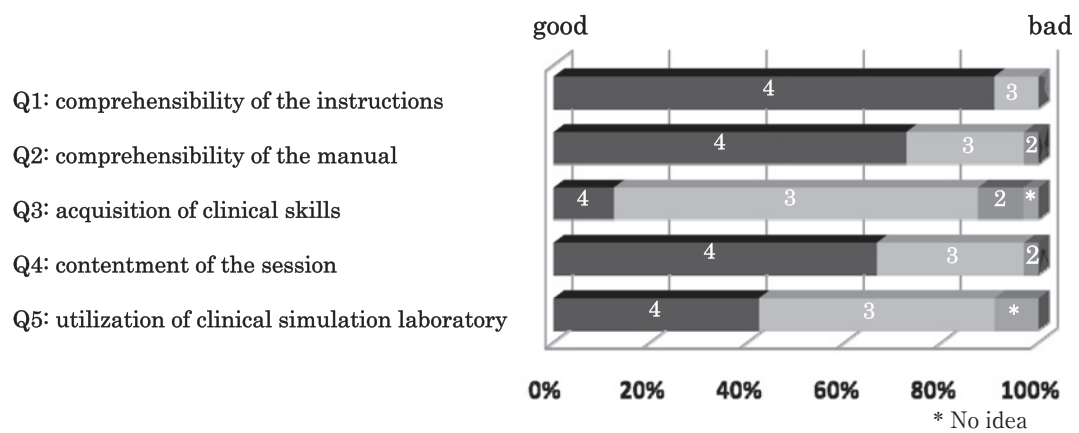


Fig. 2 Result of the Questionnaire Survey

Medical interns must continually engage in self-training to steadily acquire basic clinical skills. The convenience of a clinical simulation laboratory, together with the reinforcement of the education of clinical skills during internship, is necessary to strengthen the educational benefits of the training session.