# Video-assisted Faculty development of Medical Student Empathy Training: A Pilot Curriculum of Patient-physician Communication Teaching Skill

Shih-Li Tsai

***Abstract*—**Patient-physician communication skill is a core clinical competency that is indispensable to medical education. Literature reviews suggest that empathy training is an essential part of patient-physician communication skill, and an integrated teaching strategies including video-assistance is the better way to develop a curriculum of this skill. The aim of this study is to determine the effect of a faculty development curriculum with video-assistance. A four-hour curriculum was developed taking into consideration of the local cultures. Eighty-nine medical teachers from National Taiwan University Hospital were invited to participate in this curriculum in December 2014. During curriculum, five video clips were shown followed by small group discussion, role-play, video replay and feedback. Every participant completed a questionnaire before and after the curriculum and that questionnaire was to evaluate medical teachers' perspectives of the importance and confidence of patient-physician communication teaching skill. Significant improvements were noted after the curriculum in terms of the importance of communication teaching skills(before 3.81 vs. after 4.52, $p<0.05$) and self-confidence of demonstrating empathy training (before 4.20 vs. after 4.82, $p<0.05$). **Conclusion:** The use of video in medical teachers' empathy training was effective in improvement of confidence of demonstrating empathy. An integrated design with teaching strategies including video-assistance is a good way to develop a faculty development curriculum of patient-physician communication teaching skill.

***Keywords*—F**aculty development, patient-physician communication skill, video-assistance

## I. Introduction

EFFECTIVE clinical communication skills are able to enhance the quality of physician-patient communication, clarify patients' problems, and facilitate diagnostic accuracy [1]-[4]. In addition, effective clinical communication skills help patients follow the doctor's advice, which positively impacts on both physicians and patients [5]-[7]. Teaching and assessment of communication skills must be consistent[8]. Interpersonal relationship and communication skills should be considered simultaneously and should focus especially on the physician-patient relationship, on the patient' s perspectives, and on relationship-centered care [9]-[11]. Literature reviews suggest that an integrated design is the best way to develop patient-physician communication curriculum for physicians [12]-[14]. Recently, the integration of different teaching strategies has drawn much more attention in continuing medical education. The more engaged way the curriculum applied, the better behavior change the participants were observed [15], [16].

The Department of Medical Education at National Taiwan University Hospital (NTUH) developed a continuing education curriculum of patient-physician communication teaching skill for medical teachers in 2014. Instead of traditional didactic lectures, we employed different educational strategies: audio-visual technique, role-play, feedback and small group discussion in the curriculum. The objectives of the study are to investigate the effects of intervention using an integrated interactive strategy for continuing education of patient-physician communication teaching skill for medical faculty, and to explore significant factors influencing the improvement in confidence of tutoring skills of patient-physician communication.

## II. Materials and Methods

Eighty-nine medical teachers from internal medicine, surgery, gynecology, pediatrics, and emergency medicine departments of NTUH were invited to participate in continuing education curriculum for "patient-physician communication teaching skill' in December 2014. We developed a four-hour integrated interactive curriculum. The first hour session is a lecture introducing the importance and practice of interactive teaching skills, utilization of teaching styles and learning styles, and utilization of teaching materials. The second hour session is to have participants do the role-play with audio-visual technique assistance. Observing verbal and non-verbal teaching skill and interacting with group members were practiced. The third hour session is small group discussion. Eight to ten medical teachers composed a group to discuss their observation and reflection on the previous two sessions. Teachers also shared their opinion on what tutoring skills would be effective in clinical teaching. The fourth session is a panel discussion. Eight representatives from each group shared their conclusion precipitated from the third session discussion. All participants discussed about the practical part of how to teach patient-physician communication medical students at the last part of the curriculum.

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All the participants were asked to complete the same questionnaire before and after the curriculum, and that questionnaire was to evaluate teacher's perspectives of the importance and confidence of patient-physician communication teaching skill. There were two parts of the questionnaire. Two parts of the questionnaire are to evaluate teacher's perspectives of the importance on clinical teaching and of self-confidence on tutoring issues. The same nine items consists each part of the questionnaire: "Utilize interactive teaching skills", "Utilize teaching materials well", "Perceive psychological demand of students", "Realize perspectives of students", " The ability to perceive difference between students' learning styles", "The ability to perceive difference between teaching styles", "Interact well with students", " Tutoring skills", "Questioning skills".

## III. Results

89 medical teachers were included in the study. 26 were female physicians and 63 were male physicians. 49 internist, 18 surgeons, 8 gynecologists, 7 pediatrics and 7 emergency doctors composed of the study population. The questionnaire survey results showed significant improvements after the course in every item in terms of the awareness of the importance on clinical teaching and self-confidence on tutoring issues. Improvements of tutoring skills (before 3.81 vs. after 4.52, $p<0.05$) and perspectives toward self-confidence of tutoring skills (before 4.20 vs. after 4.82, $p<0.05$) were found significant. Only one exception that showed no improvement was noted: self-confidence on questioning skill after workshop decreased than before.

## IV. Discussion

An integrated interactive curriculum design consists of lecture, audio-visual learning, reflective feedback and small group discussion. Such a curriculum is easy to implement in other teaching hospital because the design concept is based on utilization of resources that already existed.

Medical teachers' self-confidence on questioning skill decreased after the workshop is a very interested finding. It is probably because that more teachers became awareness of incompetent with questioning skill after the integrated continuing education curriculum. And that enhancing the self-awareness of incompetence is the key concept to design a continuing education curriculum.

Several limitations were inherent to this study. First, the study was conducted without a control. Second, although this continuing education improved the medical teachers' perspectives of importance and self-confidence of tutoring skills, due to the short-term curriculum design that the evaluation method was limited. And the maturation effect should also have been considered. Lastly, teaching behavior changes and teaching outcomes required longer time to observe. Long-term impact of the continuing education such as medical student learning outcome should be assessed for a longer period of time. Therefore, further continuing education, observation and evaluation of patient-physician communication teaching skill for medical doctors are necessary.

TABLE I

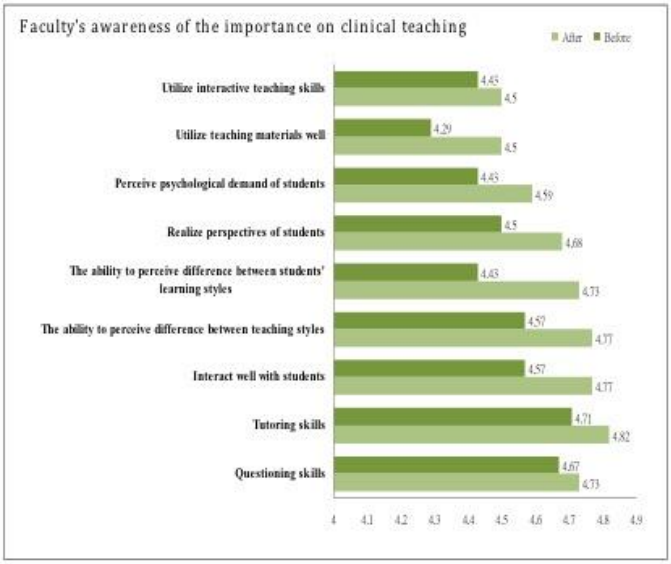
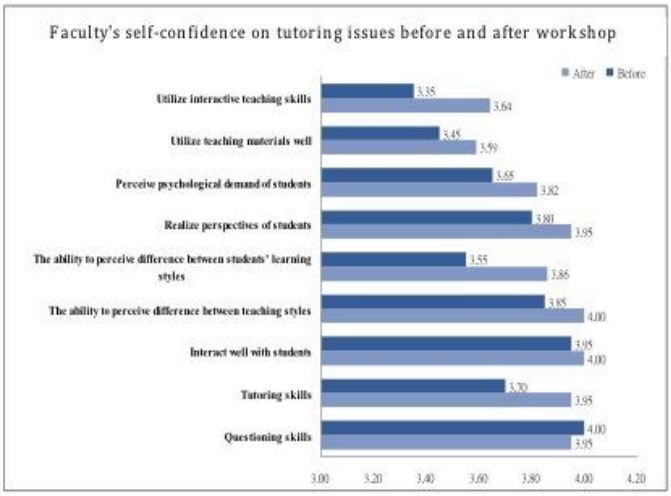



TABLE II

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