Evaluating the short-term effects of a communication skills program for preclinical medical students

Young-Mee Lee and Young Hee Lee

Department of Medical Education, Korea University College of Medicine, Seoul, Korea

Purpose: Regardless of the growing importance of communication skills as a core clinical competence, few studies have determined the effects of communication skills courses in undergraduate medical curricula in Asian medical schools. The purpose of this study was to examine the effectiveness of a communication skills program for preclinical medical students.

Methods: A communication skills course was provided to 111 second-year medical students in a medical college in Korea. Students' self-assessed competency of communication skills was evaluated by a questionnaire survey. To examine the improvement in observed communication skills, the students' encounters with standardized patients (SPs) were assessed at the first session and at the final course assessment. A structured checklist, consisting of 25 communication skills items, was used for the assessment.

Results: Students' self-assessed competency of communication skills increased significantly after completion of the course (p<0.001). The observed communication skills scores also improved significantly at the end of the course; the mean scores of the first SPs encounters was 49.6 (standard deviation [SD], 11.1), and those of cases A and B at the final assessment were 61.5 (SD, 8.4) and 69.6 (SD, 7.8), respectively (F_{61}=269.54, p<0.001).

Conclusion: Even a short period of medical communication skills course was beneficial in developing and improving communication skills competency in preclinical medical students. Further studies should be followed to examine whether the acquisition of communication skills during preclinical studies can be sustained into clerkship and actual practice.

Key Words: Communication, Program evaluation, Undergraduate medical education

INTRODUCTION

Teaching communication skills in medical training has been recognized as a core clinical skill. As a result, teaching and assessment of communication skills have been incorporated into undergraduate medical curricula in many countries. Having recognized the importance of improved patient-physician communication, the Korean Council of Deans of Medical College and the Accreditation Board of Medical Education in Korea recommended inclusion of a communication skills program in the undergraduate medical curriculum. In response to these calls, most medical colleges in Korea have attempted to include communication skills education into their curriculum. However, communication skills education remains a novel field in Korea, and many schools feel that it is challenging to integrate communication

skills courses into their existing curriculum. Based on the consensus that an independent mandatory course should be included to emphasize the importance of communication skills in medical practice, the Korea University College of Medicine (KUCM) has implemented a communication skills program as part of the preclinical period since 2006. To the authors' knowledge, it was the first structured communication skills program in Korean medical schools, using experiential learning methods that are based on standardized patient (SP) encounters; video recordings; and reviews by themselves, peers, and faculty tutors.

Previous studies have reported the evidence about the need for and the value of communication skills programs in undergraduate curricula, by the responses from students and faculty [1,2,3], self-assessed competency [4], and attitudinal changes [5]. Despite concerns in the rise and decline in students' communication skills across medical curricula [6,7], several studies have shown positive impacts of communication skills programs [8,9,10,11]. Some groups examined the improvements in observable communication skills through longitudinal studies. Yedidia et al. [8] showed improved third-year medical students' communication competence in objective structured clinical examinations. Another study in the United Kingdom reported an improvement in communication skills in medical students after teaching [9]. Contrary to the ample evidence on communication skills programs and their educational impacts in Western medical schools, studies in Asian countries are less published [12]. In particular, improvements in communication skills in Asian medical schools are limited. Although the authors showed that students' response for the course was positive [13], we would like to confirm whether our program was beneficial in developing and enhancing students' communication skills.

The purpose of this study was to determine whether a communication skills course for second-year medical students can improve their communication competency.

SUBJECTS AND METHODS

1. Contexts and participants

This study was conducted at the KUCM in South Korea. The medical curriculum of the KUCM consists of 2 years preclinical and 2 years of clinical studies. The curriculum in the first 2 years is lecture-based, focusing on biological sciences, without providing clinical exposure to students. As a result, students often meet patients in the hospital room without proper preparation. However, since 2006, the KUCM has provided a medical communication skills course to second-year medical students as a preparative course for clerkship. It was the only course that focuses on developing communication and interpersonal skills across the 4-year undergraduate medical curriculum.

This course comprises ten 3-hour sessions (total 30 hours) during the second semester, which is immediately before students enter a clerkship rotation. Although this course does not provide actual patient encounters for students, the authors have been trying to provide more experiential learning opportunities to students. Therefore, SP encounters, video recordings of SP encounters, write-ups about self-reflection using the videos of SP encounters, peer and faculty feedback of student performance, and faculty-facilitated small group discussions were implemented. Encounters with SPs were executed four times (10 minutes for each case); in two sessions, individual students interacted with an SP, and the other two sessions were undertaken as a small group, using the "time-in time-out" technique [14]. One-to-one student-SP encounters were recorded, and students reviewed

Table 1. Organization of a Communication Skills Course for 10 Weeks

	Topics	Instructional methods	Homework
Week 1	The importance of patient-physician communication	Lecture	None
Week 2	Listen to patient	1:1 SP encounter[a]	Reflective write-up on the video-recorded performance
Week 3	Elaboration of and reflection on SP encounter	Small group discussion facilitated by tutors	Reflective write-up on the small group activity
Week 4	Expressing empathy and building relationship	1:1 SP encounter[a]	Reflective write-up on the video-recorded performance
Week 5	Talking with mother or father of a pediatric patient	10 Students: 1 SP encounter using "time-in time-out" technique[b]	None
Week 6	Delivering bad news	10 Students: 1 SP encounter using "time-in time-out" technique[b]	Reflective write-up on the small group activity
Week 7	How to say "sorry" and deal with medical errors	Lecture, role play Large group discussion	None
Week 8	Building teamwork skills	Lecture Large group discussion	None
Week 9	Informed consent	Lecture	None
Week 10	Performance assessment with two cases using SP encounter (7 minutes for each) = Case A: low back pain and Case B: thyroid cancer (bad news delivery) = All students' performance was video-recorded.		

SP: Standardized patient.
[a]Each student met a standardized patient, and the encounter was video-recorded, [b]After a group of 10 students worked with a standardized patient for a certain period of time, the tutor or the student can call a "time-out" for discussion. When the tutor says "time in," the group can continue with the patient as if nothing happened in between time-out and time-in.

these encounters, analyzed their communication behaviors, and received feedback from peer students. At the end of the course, two 7-minute interviews with SPs were conducted to assess the students' communication skills performance in low back pain (case A) and thyroid cancer (case B) (Table 1).

A list of effective communication skills that students should learn and demonstrate in a SP encounter was developed by the authors and was provided to students as a learning guide. This list was based on the Kalamazoo Consensus Statement [15], while the individual communication skills lists were tailored to meet the health care settings and educational contexts in the author's medical school. The list comprised 36 individual skills under seven sets of communication tasks: opening the session; building relationship; gathering information;

understanding the patient's perspective; sharing information; reaching agreement; and providing closure. The development of the list is described elsewhere [16].

Following ethical approval, the entire second-year medical students who were enrolled in the 2008 fall semester (n=111, 66.7% males) were invited to participate in the study. This study was approved by the Korea University Research Ethics Review Board (approval number: KU-IRB-07-11-P2).

2. Students' self-assessed competency in communication skills

The participants were 111 second-year medical students who were enrolled in the second semester of the 2008 academic year. To examine the perceived differences in communication skills before and after the course,

the students were asked to participate in a questionnaire at the beginning and end of the course. Participation in the survey was voluntary and based on informed consent.

The questionnaire was based on the communication skills teaching model that was developed in a previous study [16] and modified to the level of the students' tasks. A second-year medical student is not expected to devise a therapeutic plan, discuss it, and reach an agreement. Thus, after excluding communication skills that were related to explaining a therapeutic plan and reaching an agreement, a 25-item form including five domains (build relationship; initiating the session; gather information; understand the patient's perspective; provide closure) was constructed. The participants were asked to rate each item on two distinct 5-point response scales: perceived level of importance (not important, ···, very important) and competence (I'm very poor at this, ···, I'm very good at this). Students completed the same questionnaire before and after the course. The internal consistency using Cronbach's α was 0.92 for the preintervention questionnaire and 0.93 for the postintervention questionnaire.

3. Assessment of the students' communication skills performance by faculty

1) Subjects

Faculty raters evaluated the students' communication skills by reviewing videotaped students' SP encounters at the first encounter and final assessment. Although all encounters were video-recorded at the beginning and end of the course, 61 students were selected for data analysis for the following reasons. Eleven students were excluded due to incomplete data or poor quality of recording; 18 students' data were excluded due to their disparate level of exposure to a communication skills-related course; 11 students were the re-takers of the communication skills course because they had to repeat the entire semester due to low academic achievement in the pervious the year. In

the authors' medical college, if a student fails more than one course/subject in a semester, he or she must retake the entire semester of the following year. Seven students had not taken the prerequisite communication skills course during their premedical courses due to the recent curriculum change. After randomized selection of the final participants (n=82), data for 61 students, 36 males (59%) and 25 females (41%), were analyzed after considering for the gender composition.

After the selection process, a total of 183 recorded videos were reviewed: 61 from the first SP encounter at the beginning of the course and 122 videos (61 from case A and B, respectively) at the final assessment of the students' performance. The case for the first session and case A portrayed a routine medical visit with a common medical problem, and case B was structured to assess the delivery of bad news.

2) Instrument

Students' communication skills performance was measured by a structured observation form developed by the authors. To assess students' communication skills in the first encounters and in case A of the final assessment, the same items asking students' perceived competency in communication skills were used. For case B of the final assessment, a 21-item form was generated to assess bad news delivery skills, based on the SPIKES model [17]. Each item on the forms was measured using a two-point scale (yes or no), or three-point scale (good, acceptable, not acceptable). The maximum possible score for the first session and case A was 54 points and 44 points for case B. However, each total score was converted to 100 to compare mean scores.

3) Securing inter-rater reliability

Four faculty raters, who were the tutors for the class, participated in the video analysis to assess students' communication skills performance. In order to ensure inter-rater reliability, the four raters held an iterative discussion to reach acceptable inter-evaluator reliability

using 24 students' videos (72 videos in total). The consensus for the checklist items among the four raters was evaluated using Kendall's coefficient of concordance [18], which was calculated using an SAS/macro program. The medians (first and third quartiles) of the coefficients between the items were 0.887 (0.828 to 1.0) for the first session, 0.878 (0.786 to 1.0) for case A, and 1.0 (0.906 to 1.0) for case B. After reaching a consensus, data for the remaining 37 students (111 videos) were distributed to the four raters and independently assessed.

4. Data analysis

To analyze the differences between mean scores of the students' self-assessed competency and the faculty-assessed performance scores before and after the course, paired t-test was performed. Repeated-measures analysis of variance was conducted to compare the scores for the first SP session and cases A and B. All statistical analyses were performed using the SPSS Win 12.0 package (SPSS Inc., Chicago, USA). A $p < 0.05$ was considered statistically significant.

RESULTS

Of the 111 students, 98 (88.2% response rate) completed the questionnaire at the beginning and after the course. At the beginning of the course, the mean score of students' self-assessed competency for communication was 3.58 and 3.99 at the end (T_{98}=8.1, $p < 0.001$). The increase in self-assessed competency score was significant in all five sets of communication tasks: opening the session, building relationship, gathering information, understanding the patient's perspective, and closing the session (Table 2). No significant gender difference was found in the self-assessed competency scores.

Table 2. Changes in Students' Self-Assessed Confidence in Communication Skills (n = 98)

	Pre[a]	Post[b]	t-value	p-value
Overall (25 items)	3.58 (0.47)	3.99 (0.41)	8.144	<0.001
Initiating the session (6 items)	3.99 (0.51)	4.40 (0.41)	7.151	<0.001
Building relationship (4 items)	3.65 (0.59)	4.01 (0.53)	5.674	<0.001
Gathering information (9 items)	3.30 (0.59)	3.67 (0.55)	5.294	<0.001
Understanding patient's perspective (4 items)	3.30 (0.74)	3.77 (0.68)	5.303	<0.001
Closing the session (2 items)	3.50 (0.71)	4.00 (0.57)	5.950	<0.001

Data are presented as mean (standard deviation). Ratings were from 1 (I'm very poor at this) to 5 (I'm very good at this).
[a]The preintervention questionnaire survey was conducted at the beginning of the course (week 1), [b]The postintervention questionnaire survey was conducted at the end of the assessment (week 10).

Table 3. Comparison of the Total Performance Scores in Communication Skills between Precourse and Postcourse (n = 61)

	Pre[a]	Post[b]		F-value	p-value
		Case A	Case B		
Male	49.4 (11.1)	61.6 (9.1)	70.3 (8.5)	193.97	<0.001
Female	49.8 (11.2)	61.5 (7.3)	68.5 (6.5)	81.13	<0.001
Total	49.6 (11.1)	61.5 (8.4)	69.6 (7.8)	269.54	<0.001

Data are presented as mean (standard deviation). The clinical presentation of case A was low back pain, and case B was delivering bad news of the diagnosis of thyroid cancer. The possible maximum scores for pre and case A were 54 and 44 points for case B. However, to compare the difference in mean performance scores for each case, each total score was converted to 100.
[a]The first standardized patient (SP) encounter at the beginning of the course (week 2), [b]The SP encounter at the final assessment of the course (week 10).

The faculty-rated students' communication skills performance scores at the final assessment were significantly different compared to the scores of the first SP encounters. After converting the total score to 100 for each encounter, the mean score for the first SP encounters was 49.6 (standard deviation [SD], 11.1) vs., the mean scores of scenario A and B at the final assessment were 61.5 (SD, 8.4) and 69.6 (SD, 7.8),

Table 4. Comparison of the Scores of Communication Skills Items between the First and Case A at the Final Assessment (n=61)

Items	Scale		Pre[a]	Post A[b]	t-value
	Min	Max	Mean (SD)		
Initiating the session***	0	6	4.67 (0.78)	5.65 (0.50)	9.379
Greet patient	0	1	1.00 (0.00)	1.00 (0.00)	-
Ask and confirm patient's name*	0	1	0.89 (0.32)	0.98 (0.13)	2.186
Introduce self	0	1	0.95 (0.22)	0.97 (0.18)	0.440
Explain role***	0	1	0.42 (0.49)	0.98 (0.13)	9.028
Show interest/respect***	0	1	0.43 (0.50)	0.72 (0.44)	3.862
Identify problem/issues using open question	0	1	0.99 (0.10)	0.99 (0.06)	0.275
Building relationship***	0	18	12.36 (2.89)	15.20 (1.54)	8.205
Demonstrate appropriate nonverbal behaviors[c]					
Paralanguage (speed, pronounciation)*	0	2	1.71 (0.49)	1.86 (0.34)	2.529
Eye contact***	0	2	1.57 (0.61)	1.98 (0.14)	5.314
Posture/distance between patients***	0	2	1.60 (0.61)	1.91 (0.29)	3.884
Inappropriate habit**	0	2	1.73 (0.54)	1.95 (0.22)	3.254
Facial expression***	0	2	1.48 (0.68)	1.89 (0.32)	5.142
Tone of voice***	0	2	1.55 (0.56)	1.91 (0.28)	5.148
Attentively listen patients' statement without interruption*	0	2	1.93 (0.25)	2.00 (0.00)	2.172
Express empathy using verbal statement**	0	2	0.48 (0.65)	0.82 (0.68)	3.013
Use an appropriate appellation using patients' full name***	0	2	0.32 (0.71)	0.92 (0.95)	4.393
Gathering information***	0	18	8.14 (2.47)	9.64 (2.49)	5.548
Use open/closed questions effectively**	0	2	1.12 (0.54)	1.21 (0.41)	2.735
Use facilitating skills (echoing, paraphrasing)***	0	2	1.58 (0.52)	1.89 (0.30)	4.543
Clarify patient's statement	0	2	1.10 (0.60)	1.16 (0.49)	1.000
Summarize patient's statement	0	2	0.45 (0.62)	0.45 (0.66)	0.000
Allow patients to add information*	0	2	0.87 (0.69)	0.57 (0.62)	2.460
Discuss psycho-social issues***	0	2	0.49 (0.60)	1.10 (0.50)	6.693
Use transitional statements***	0	2	0.09 (0.28)	0.38 (0.59)	3.907
Use plain language	0	2	1.20 (0.44)	0.10 (0.44)	0.275
Interview in logical sequence***	0	2	1.25 (0.65)	1.68 (0.46)	4.762
Understanding patient's perspective***	0	8	0.79 (0.98)	1.72 (1.26)	5.210
Elicit patient's views of health problem (ideas, concerns)***	0	2	0.18 (0.47)	0.80 (0.63)	6.432
Explore influence of patient's problem/disease on his/her life***	0	2	0.13 (0.43)	0.40 (0.58)	3.880
How acceptance or acknowledgement patient's idea or emotion	0	2	0.46 (0.61)	0.43 (0.60)	0.322
Explore patient's expectation or preference*	0	2	0.02 (0.13)	0.09 (0.28)	2.255
Closing the session	0	4	0.81 (1.03)	1.02 (0.81)	1.359
Closes interview by summarizing briefly	0	2	0.54 (0.72)	0.57 (0.64)	0.275
Encourages patient to discuss any additional points, further questions	0	2	0.27 (0.54)	0.45 (0.60)	1.600
Total scores***	0	54	26.80 (5.90)	33.20 (4.50)	10.370

[a]The first standardized patient (SP) encounter at the beginning of the course (week 2), [b]The SP encounter at the final assessment of the course (week 10), [c]The items measuring 'demonstrate appropriate nonverbal behaviors' was consisted of 6 sub-items. While describing the results section, the authors mentioned as it a single item as 'demonstrate appropriate nonverbal behaviors.'
*p<0.05, **p<0.01, ***p<0.001.

respectively (F_{61}=269.54, p<0.001). This performance enhancement was significant in both genders (Table 3).

Between the first SP encounter and case A at the final assessment, scores were significantly enhanced for 15 of the 25 communication skills items. At the final course assessment, students performed better in the following five sets of communication tasks than in the first SP encounter: opening the session, building relationship, gathering information, and understanding the patient's perspective. No significant change was observed in the items on closing the session (Table 4).

DISCUSSION

Despite strong evidence that communication skills programs can develop and improve medical students' interview skills and patient-physician communication skills, few such studies have been published by Asian institutions and health care systems. Although there is commonality in communication skills between cultures and languages, some medical educators insist that curriculum models from other countries should be deliberately reviewed by those in different educational and cultural contexts to develop suitable models for them. We, the authors, would like to share our experience of adapting the communication skills teaching tool that has been proposed by Western medical educators to medical education in Korea and examined whether a communication skills course can improve students' communication skills.

Our data showed that a new communication skills course, introduced in the preclinical years, enhanced communication competence in self-assessment and observed performance behaviors. In all five sets of communication skills tasks, comprising 25 items, students showed increased confidence in using the skills and

performed better in four sets of 15 skills items. Although our study was not a longitudinal cohort study and was confined to preclinical education, our results are consistent with the reported positive effects of communication skills education as a part of medical curriculum [8,9,10,11,12]. Yedidia et al. [8] noted improved communication in third-year medical students in objective structured clinical examinations. Humphris and Kaney [9] also observed an enhancement in communication skills in medical students after communication skills training.

In Korea, the duration of each patient-doctor encounter is notoriously short, usually less than 3 minutes for revisiting patients. Although establishing a rapport between the patient and doctor has always been emphasized, in reality, a medical encounter consists primarily of gathering of biomedical data and explaining management plans. In addition, the importance of understanding the patient's concern and ideas about his or her illness and accepting patient's perspectives has not been well recognized in Korea. However, the increasing needs of the public for patient-centeredness in medical care have prompted doctors to change their attitudes in practice to develop more efficient and supportive communication skills. Therefore, educating medical students on patient-centeredness interview skills as part of the undergraduate medical curriculum is critical.

In this study, we are encouraged by the increased student awareness and significant changes in performance in understanding the patient's perspectives. After completion of the course, the students used communication strategies more frequently to elicit the patient's views on his health problems, examine the influence of the illness on his life and expectations, and acknowledge the patient's ideas and feelings. This result is consistent with a previous study in a Japanese medical school. Mukohara et al. [19] reported that a short, intensive

small group seminar for third-year medical students significantly improved specific communication skills with regard to the patient's perspectives. These results support the hypothesis that attitudes and behaviors toward patient-centeredness can be taught during medical studies.

The positive response from students and faculty in our previous study and our experience over the past 6 years suggest that communication skills consensus statements and teaching tools that are used in medical schools in North America and Europe are applicable to teaching communication skills to undergraduate medical students in Korea. This speculation might not be true for other medical colleges in Korea and throughout Asia, because our communication skills course is not a longitudinal curriculum and was confined to one medical school's experience. However, findings in other Asian countries, such as Malaysia [20] and India [12], support that communication skills education and practice are constant across cultures and medical contexts.

There are some limitations of this study. To examine the educational effect of the course, we used self-assessment and objective measures of performance in the precourse and postcourse assessments without a control group. The before-after design was the only feasible approach for this study, because our program was a mandatory course for all second-year students. In addition, it is possible that the students in this study took the posttest more seriously, because the final clinical assessment constituted 40% of the course grade. However, there were also negative influences on student performance, such as increased anxiety in the postcourse examination. Further, because the results of this study were from preclinical students, we cannot determine whether the improvement in performance will be maintained and whether it can be transferred to actual patient encounters during their clerkship. These ques-

tions need further research.

In conclusion, a medical communication skills course for second-year medical students was beneficial in fostering their communication skills for medical encounters. These results contribute to supporting evidence on the educational impact of undergraduate communication skills programs. Further studies should be undertaken to examine whether the acquisition of communication skills during preclinical studies can be applied to clinical encounters during clerkship.

REFERENCES

1. Wagner PJ, Lentz L, Heslop SD. Teaching communication skills: a skills-based approach. Acad Med 2002; 77: 1164.

2. Losh DP, Mauksch LB, Arnold RW, Maresca TM, Storck MG, Maestas RR, Goldstein E. Teaching inpatient communication skills to medical students: an innovative strategy. Acad Med 2005; 80: 118-124.

3. Winefield HR, Chur-Hansen A. Evaluating the outcome of communication skill teaching for entry-level medical students: does knowledge of empathy increase? Med Educ 2000; 34: 90-94.

4. Tiuraniemi J, Läärä R, Kyrö T, Lindeman S. Medical and psychology students' self-assessed communication skills: a pilot study. Patient Educ Couns 2011; 83: 152-157.

5. Harlak H, Gemalmaz A, Gurel FS, Dereboy C, Ertekin K. Communication skills training: effects on attitudes

toward communication skills and empathic tendency. Educ Health (Abingdon) 2008; 21: 62.

6. Pfeiffer C, Madray H, Ardolino A, Willms J. The rise and fall of students' skill in obtaining a medical history. Med Educ 1998; 32: 283-288.

7. Prislin MD, Giglio M, Lewis EM, Ahearn S, Radecki S. Assessing the acquisition of core clinical skills through the use of serial standardized patient assessments. Acad Med 2000; 75: 480-483.

8. Yedidia MJ, Gillespie CC, Kachur E, Schwartz MD, Ockene J, Chepaitis AE, Snyder CW, Lazare A, Lipkin M Jr. Effect of communications training on medical student performance. JAMA 2003; 290: 1157-1165.

9. Humphris GM, Kaney S. Assessing the development of communication skills in undergraduate medical students. Med Educ 2001; 35: 225-231.

10. Noble LM, Kubacki A, Martin J, Lloyd M. The effect of professional skills training on patient-centredness and confidence in communicating with patients. Med Educ 2007; 41: 432-440.

11. Hook KM, Pfeiffer CA. Impact of a new curriculum on medical students' interpersonal and interviewing skills. Med Educ 2007; 41: 154-159.

12. Chhatwal J. Creating a demand for communication skills training in India. Med Educ 2009; 43: 478.

13. Lee YM, Oh YJ, Ahn DS, Yoon SM. Implementing a communication skills course for undergraduate medical students. Korean J Med Educ 2007; 19: 171-175.

14. Barrows HS. An overview of the uses of standardized patients for teaching and evaluating clinical skills. AAMC. Acad Med 1993; 68: 443-451.

15. Makoul G. Essential elements of communication in medical encounters: the Kalamazoo consensus statement. Acad Med 2001; 76: 390-393.

16. Lee YH, Lee YM. Development of a patient-doctor communication skills model for medical students. Korean J Med Educ 2010; 22: 185-195.

17. Baile WF, Buckman R, Lenzi R, Glober G, Beale EA, Kudelka AP. SPIKES-A six-step protocol for delivering bad news: application to the patient with cancer. Oncologist 2000; 5: 302-311.

18. Kendall MG. Rank correlation methods. London, UK: Griffin; 1948.

19. Mukohara K, Kitamura K, Wakabayashi H, Abe K, Sato J, Ban N. Evaluation of a communication skills seminar for students in a Japanese medical school: a non-randomized controlled study. BMC Med Educ 2004; 4: 24.

20. Lukman H, Beevi Z, Yeap R. Training future doctors to be patient-centred: efficacy of a communication skills training (CST) programme in a Malaysian medical institution. Med J Malaysia 2009; 64: 51-55.