2 Cannon R. *Guide to support the implementation of the learning and teaching plan year 2000*. Adelaide:ACUE, The University of Adelaide; 2000.
3 Ang RP, Gonzalez MCT, Liwag D, Santos BS, Vistro-Yu CP. *Elements of student-centered learning*. Philippines:Office of Research and Publications, Ateneo de Manila University Loyala School; 2001.
4 Dewey J. *The child and the curriculum and the school and society*. Chicago, IL:University of Chicago Press; 1956.
5 Brandes D, Ginnis P. *A guide to student-centred learning*. Oxford:Basil Blackwell; 1986.
6 Dornan T, Hadfield J, Brown M, Boshuizen H, Scherpbier A. How can medical students learn in a self-directed way in the clinical environment? Design-based research. *Med Educ* 2005;**39:**356–64.
7 Spencer JA, Jordan RK. Learner centred approaches in medical education. *BMJ* 1999;**318:**1280–3.
8 Ludmerer KM. Learner-centered medical education. *N Engl J Med* 2004;**351:** 1163–4.
9 Collins JW, O'Brien NP (eds). The *Greenwood Dictionary of Education*. 3rd ed. Westport, CT:Greenwood Press; 2003.
10 Biggs JB. Teaching: Design for learning. In: Ross B (ed). *Teaching for effective learning*. Sydney:The Higher Education Research and Development Society of Australasia (HERDSA); 1990.
11 Regulations on graduate medical education. New Delhi:Medical Council of India; 2012.
12 Kirkpatrick D. Evaluation. In: Craig RL, Bittel LR (eds). *Training and development handbook. American Society of Training and Development.* New York:Mc-Graw Hill; 1967.
13 Reich S, Simon JF, Ruedinger D, Shortall A, Wichmann M, Frankenberger R. Evaluation of two different teaching concepts in dentistry using computer technology. *Adv Health Sciences Educ Theory Pract* 2007;**12:**321–9.
14 Bhattacharya N, Shankar N, Khaliq F, Rajesh CS, Tandon OP. Introducing problem-based learning in physiology in the conventional Indian medical curriculum. *Natl Med J India* 2005;**18:**92–5.
15 Abraham RR, Vinod P, Kamath MG, Asha K, Ramnarayan K. Learning approaches of undergraduate medical students to physiology in a non-PBL- and partially PBL-oriented curriculum. *Adv Physiol Edu* 2008; **32:**35–7.
16 Setia S, Bobby Z, Ananthanarayanan PH, Radhika MR, Kavitha M, Prashanth T. Case based learning versus problem based learning: A direct comparison from first year medical students perspective, 2011. Available at *https://www.webmedcentral.com/article_view/1976* (accessed on 23 Aug 2013).

Sensitizing undergraduate medical students to consultation skills: A pilot study

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ABSTRACT

Background. *Good consultation skills help physicians to diagnose the problems of the patient more accurately, and foster a therapeutic relationship. We describe a pilot study that used role-play with peers as a method to sensitize first clinical year medical students to consultation skills.*

Methods. *Students were divided into groups of three where one acted as a doctor, the second as a patient and the third as an observer. Students were asked to perform a role-play of a prepared clinical scenario where the patient had a hidden fear of malignancy. Observations were recorded in a simplified Calgary–Cambridge consultation checklist. Students' feedback and their emotions written after the role-play were analysed and discussed. Assessment of their learning was done with an objective structured clinical examination.*

Results. *Students' feedback revealed that they were sensitized to the importance of starting the consultation with an open question, listening to the opening statement, non-verbal communication, exploring patient's perspectives and how to close the consultation. The learning happened in the first (reaction) level of Kirkpatrick's Evaluation Framework for all students and up to the second (learning) level for some students. The students actively participated in the learning process and felt they had a real-life experience of consultation.*

Conclusion. *This pilot study showed that role-play with peers is an effective method of sensitizing first clinical year students to consultation skills and giving them a real-life experience of a consultation. Repeated sessions are needed during each clinical year and internship to reinforce the learning.*

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INTRODUCTION

Consultation is the most commonly performed procedure in medical practice. Each clinician performs between 160 000 to 300 000 consultations during her/his professional career. Health professionals use consultation skills to gather as well as to provide information to patients and to foster good doctor–patient relationship.[1] This in turn enables physicians to make better diagnoses. This also helps to improve patients' compliance with treatment. Physicians who are good communicators deal better with their patients' emotional difficulties that lead to improvement in clinical outcomes.[2,3]

The Family Medicine Department of Christian Medical College, Vellore is involved in teaching consultation skills to undergraduate

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medical students since 2005, using the Calgary–Cambridge model of patient-centred consultation.[4] Since communication skills are rarely taught formally in Indian medical colleges, we describe a pilot study of using role-play with peers as a method to sensitize first clinical year students to consultation skills, with special emphasis on capturing the emotional impact on the individual student. We aimed to provide a classroom setting (role-play) for students to experience various roles in a consultation process and to document their perceptions and performance during the role-play. Our objectives were to teach the students to start a consultation with an 'open question', listen attentively to the patient's opening statement, practice non-verbal communication such as eye contact and appropriate body language, explore the patient's perspectives of the illness (ideas, concerns and expectations of the patient), close the consultation by summarizing, forward planning and safety netting. We also aimed to explore the experiential impact of the role-play on the participants.

METHODS

First clinical year students undergoing the family medicine rotation were scheduled to learn communication skills in the consultation process by role-play. Students were divided into groups of three; in each group one student acted as a doctor, the second as a patient and the third as an observer. Observations were recorded in a simplified Calgary–Cambridge consultation checklist.[5] Fifty-four students (in 18 groups) in 2010 and 47 students (in 15 groups) in 2011 participated in the session so one faculty member led a session and three others facilitated it.

Scenario

In 2010 the participants were given details of the clinical scenario where a 20-year-old college student had come with abdominal pain and diarrhoea and was dissatisfied with an earlier consultation with another doctor. The students, who acted as the patients, were told that the main fear of the patient was a serious illness such as malignancy of the gastrointestinal (GI) tract, based on a recent diagnosis of the same for a well-known neighbour. They were told to give a cue to the doctor about the fear but not to tell the reason for the fear unless he/she was specifically asked about it. Those who acted as 'doctors' were not aware of this fear and were expected to find this 'fear' during the interview. For students in the following year, we used 'headache' as the presenting symptom and the 'fear of brain tumour' as the hidden fear of the consultation.

Observers noted the skills of the doctor according to the simplified Calgary–Cambridge consultation checklist[5] such as greeting the patient, open questioning to initiate the consultation, listening to the patient's opening statement without interruption, non-verbal behaviour, picking-up cues, exploring the patient's ideas, concerns and expectations and closing the consultation. We made the checklist by choosing items relevant to the objectives of the teaching session from the Calgary–Cambridge consultation checklist.

At the end of the role-play, which lasted 10 minutes, the participants were asked to write down their observations along with the feelings and emotions they experienced. These written observations and emotions by the role-players helped the faculty to lead the discussion. The faculty facilitated, guided and summarized the discussion. Each session was 90 minutes long. The students' experiences were grouped into themes using the grounded theory approach.[6] The themes were developed as the statements were studied.

Some important skills were reinforced during the 2-week clinical rotation that followed the session. An assessment was done at the end of the 2-week rotation by an objective structured clinical examination (OSCE) in which students were asked to interview a simulated patient. An observer noted whether the students practised the consultation skills that they were taught in the classroom. Only 60 of the 101 students posted in the urban health centre could participate in this assessment. The remaining 51 students posted in the rural health centre did not have the communication skills station because of lack of simulated patients and trained observers to do the assessment.

RESULTS

A total of 101 students from the first clinical year participated in the study during 2010 and 2011.

Students' feedback

Students expressed their reactions about learning in the classroom immediately after the session. They rated their learning experience as excellent, good, fair and poor (Table I); 91% of students (excellent and good categories) said that they were sensitized about how to start a consultation while 99% were sensitized to listening to the opening statement. A large proportion (82%, 87% and 79%) of students felt they were exposed to the concepts of (i) non-verbal communication, (ii) exploring patient's perspectives and (iii) how to close the consultation, respectively.

The major strengths of learning consultation through role-play (Table II) were that they had a real-life experience of doing a doctor–patient consultation and were able to participate actively in learning. Students suggested that showing videos of ideal consultations after the role-play in the classroom could further enhance learning.

Table I. Students feedbacks on consultation role-play (n=101)

S.No.	Teaching session*	Excellent	Good	Fair	Poor
1	Start the consultation with an 'open question'	71	20	8	8
2	Listen attentively to the patient's opening statement	71	29	0	0
3	Practice non-verbal communication like eye contact and appropriate body language	50	32	15	8
4	Explore patient's perspectives of the illness episode (the ideas, concerns and expectations of the patient)	53	34	12	1
5	Close the consultation with summarizing, forward planning and safety netting	57	22	14	4

Table II. Major strengths of teaching consultation through the role-play method (n=101)

Comment	n*
An actual feeling of doctor–patient consultation was experienced	30
There was 'active learning'	27
More practical and interesting	11
There was learning from mistakes	7
It was interactive and prevented sleeping in class	7
It was better than a lecture	9
Importance of allaying anxieties and concerns of the patient was brought out	7

*Some students gave more than one comment. The most common comments are reported here.

TABLE III. Themes of the emotions of the role-players (*n*=34)

Theme group names	Number of comments in each theme group*
Doctor's attitude	22
Perception of doctor's experiences	8
Empathy and patient-centredness	17
Explanation and closing	5
Dissatisfaction	5

*Some students gave more than one comment

Statement of emotions of students

Only 34 of 101 students had written their feelings and emotions immediately after the role-play. The faculty collected these comments by the students and reflected on them during the discussion. The themes (Table III) were as follows:

Doctor's attitude. 'My doctor was very welcoming and smiling' (Patient); 'Doctor was very comfortable to talk to. Good listener…' (Patient); 'The doctor was successful in building a rapport with the patient' (Observer); 'The doctor tried to come to conclusions before the patient finished his story...' (Observer); 'The doctor was more oriented towards reaching the diagnosis. The patient had a lot of worries and concerns, all of which were not addressed' (Observer).

Perception of doctor's experiences. 'Patients address doctors as God; it's very uncomfortable. One feels a lot of burden' (Doctor); 'As a doctor, I felt really responsible for my patient' (Doctor); 'Well, it is difficult when the patient is worried and not wanting to understand or accept what you want to convey' (Doctor).

Empathy and patient-centredness. 'The patient may have concerns beyond the presenting complaints' (Doctor); 'The doctor mocked me when I said that a neighbour had cancer' (Patient); 'I was very happy that my doctor did not laugh at me (when I shared my fear) and told me that I do not have cancer' (Patient).

Explanation and closing. 'The doctor explained everything in simple language. At the end the patient went back reassured' (Observer); 'Though my fears were not eliminated, I was reassured' (Patient).

Dissatisfaction. 'But still I had a fear that the doctor did not do any tests and only told me that I do not have cancer' (Patient); 'But she kept asking the same history over and over again' (Patient); 'I felt inexperienced' (Doctor).

Assessment

The assessment scores showed that 87% of students used 'open question' to begin the consultation with the simulated patient and 65% of them used 'closed questions' appropriately. Only 50% of students were active listeners and 32% of them explored the patient's concerns and real 'fear' for the visit during the assessment (Fig. 1).

DISCUSSION

The student feedback indicates that all students were sensitized to the importance of good communication skills while interviewing patients. Whether this translates into practice when they are interns and later as practitioners will require a follow-up study. In another study,[7] after a similar training programme using role-play by peers, there was a significant increase in the use of communication strategies by final year students.

Students' emotions

Our observations from the students' emotions immediately after the role-play are listed below:

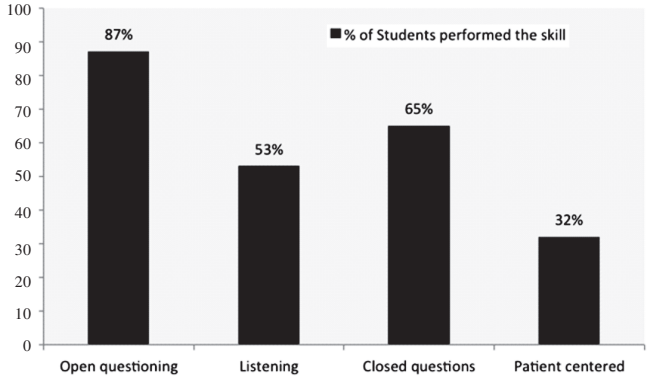

FIG 1. Students' performance of specific skills at consultation station during objective structured clinical examination (OSCE) (*n*=60). The numbers indicate the percentages of students who demonstrated a particular skill in the OSCE station.

Doctor's attitude. The students expected the doctor to be friendly, kind and a good listener. Importance was given to greeting, building a rapport and a 'therapeutic' relationship with the patient. However, importantly, two comments by observers describe that the doctor was not an effective listener, and tried to arrive at conclusions too soon. This is a well-known problem.[8]

Perception of doctor's experiences. Three comments by 'doctors' show that they became aware of their level of responsibility. One student expressed difficulty in communicating with a distressed patient.

Empathy and patient-centredness. These expressions convey a realization that empathy and a lack of it are important factors in communication.

Explanation and closing. The statements reveal that students expected the doctor to use simple language and reassure the patient appropriately.

Dissatisfaction. These statements reveal that students have become aware of dissatisfactions that both patients and doctors can experience at the end of a consultation. This insight may motivate students to improve their communication skills.

The students who noted their experiences in the various roles demonstrate their awareness of what can go wrong or right in a consultation. We cannot draw too many conclusions from the students' emotions as only one-third of them wrote about their feelings. However, they were sensitized to these emotions during the discussions. It is crucial that the moderator emphasizes and highlights these points, so that all students realize the emotional impact of the verbal and non-verbal aspects of the consultation.

During the assessment most students introduced themselves to the simulated patient and asked open questions. Only 53% of the students did active listening, even though 99% of them felt they learnt 'listening' as a skill. The students' learning has occurred at the reaction and learning levels of Kirkpatrick's evaluation framework.[9] This learning at the cognitive level has not led to a complete change in behaviour in the OSCE. To practise listening as a skill, the students need more sessions during each clinical year as well as during internship. Active listening to the patient's opening statement is a difficult but important skill as pointed out by Beckman and Frankel in 1984, who found that only in 23% of consultations by physicians, patients were provided an opportunity to complete their opening statement.[8]

It is difficult to assess non-verbal communication by direct observation at an OSCE station. It is possible to do it by video-taping the consultation and assessing it later.[10]

Limitations

We used a focused clinical scenario with fear of malignancy as the hidden 'agenda' of the patient. The findings could change if we use a different scenario. Hence, we need more studies using different scenarios to decide on the generalizability of these results.

We assessed the students' immediate reaction to learning by the student feedback. It would be ideal to assess how much of these consultation skills were practised by the students in their day-to-day interactions with patients during internship and later as practitioners. Our study is limited by our assessment of their immediate reactions, and not their long-term use of the acquired skills. This is an important limitation.

Only 60% of the students participated in the assessment that was done at the end of the 2-week rotation. The results of the assessment may be different if the whole group had participated in the assessment.

Conclusion

Role-play with peers with faculty guidance provides students with knowledge of the steps of the consultation process. Participation in the role-play helps them to understand the importance of listening to the patient, and taking time to explore the real fear of the patient. This may improve their interviewing skills with special emphasis on understanding the dynamics of feelings and emotions in a doctor–patient consultation. Repeated sessions are needed in each clinical year and during the internship for a better and more sustained outcome.

REFERENCES

1 George R (ed). *Communication skills in clinical medicine.* 1st ed. Vellore:Medical Education Cell, Christian Medical College: 2008:5.
2 Roter DL, Hall JA, Kern DE, Barker LR, Cole KA, Roca RP. Improving physicians' interviewing skills and reducing patients' emotional distress. *Arch Intern Med* 1995;**155:**1877–-84.
3 Stewart MA. Effective physician–patient communication and health outcomes: A review. *CMAJ* 1995;**152:**1423–33.
4 Cheek B. *Calgary Cambridge guide to the medical interview—communication process: gp-training.net* (Internet) (updated Feb 2011). Available at *http://www.gp-training.net/training/communication_skills/calgary/calgary.pdf* (accessed on 1 Aug 2011).
5 Hawkrigg N, Cheek B. Consultation skills teaching log, using Calgary–Cambridge guide (Internet) (updated 2006). Available at *http://www.gp-training.net/training/communication_skills/calgary/index.htm* (accessed on 1 Aug 2011).
6 Tavakol M, Torabi S, Zeinaloo AA. Grounded theory in medical education research. *Med Educ Online* [serial online] 2006;**11:**30. Available at *med-ed-online.net/index.php/meo/article/download/4607/4786* (accessed on 1 Apr 2013).
7 Chhatwal J. Creating a demand for communication skills training in India. *Med Educ* 2009;**43:**478.
8 Beckman HB, Frankel RM. The effect of physician behaviour on the collection of data. *Ann Intern Med* 1984;**101:**692–6.
9 Rouse D. Employing Kirkpatrick's evaluation framework to determine the effectiveness of health information management courses and programs. *Perspect Health Inf Manag* 2011;**8:**1c. Available at *http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3070232/* (accessed on 1 Jun 2013).
10 Larsen KM, Smith CK. Assessment of nonverbal communication in the patient–physician interview. *J Fam Pract* 1981;**12:**481–8.