

Evaluation of clinical communication skills training program for medical interns at a tertiary care teaching hospital, Puducherry

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ABSTRACT

Background: There is a lack of emphasis on formal training and assessment of clinical communication skills in undergraduate medical course in India which is considered to be an essential competency for a primary care physician. **Objectives:** The objective of this study is to evaluate the clinical communication skills training (CST) program for medical interns. **Materials and Methods:** The present mixed methods evaluation was done for clinical CST program where all the medical interns posted in the Department of Community Medicine (53) over the period of 6 months (a batch of twenty interns posted for every 2 months) underwent the training. Quantitative data (self-rating by students and faculty rating on clinical communication skills) and qualitative data (open-ended responses from students and a group interview with faculty on lessons learned and challenges faced) were collected. The quantitative data were entered and analyzed using Epi Info software. Manual content analysis of qualitative data was done. **Results:** The number of students rating themselves as “competent” significantly improved from 17 (32%) before to 44 (83%) after 2 months of the training program ($P < 0.05$). The mean (standard deviation) perceived score for clinical communication skills significantly improved from 2.26 ± 0.8 to 3.4 ± 0.8 ($P < 0.01$). Medical interns felt that the training and assessment had an effect on their knowledge domain and acquired skills such as the ability to communicate with the patients, rapport building, and trust building. The problems faced by the assessing faculty were related to lack of time and space constraints at the training centers. **Conclusion:** Overall, we found that the clinical CST program was well received by the students and supported by the faculty.


KEY WORDS: Health Communication; Internship; Self-assessment; Feedback; Workplace

INTRODUCTION

Good doctor–patient communication is an essential competency for primary care physician. Successful doctor–patient communication improves clinical outcomes and leads to satisfaction for both doctors and patients. Studies have shown that health professional communication skills improve with formal communication skills training (CST).^[1,2]

Clinical communication skills refer to a set of “communication skills” required by a health-care professional to provide patient-centered care. Clinical communication skills at a primary-care level include eliciting a patient history, explaining (e.g., giving information or describing a procedure, test, or risk), exploring (e.g., trying to ascertain what the patient is thinking, feeling, or expecting), discussing informed consent, breaking a news, and negotiating (e.g., working out a management or treatment plan).^[3]

In India, there is no emphasis on teaching and assessment of clinical communication skill for learners like medical interns working in real work situations. Recently, the Medical Council of India has envisioned mainstreaming “attitude and communication competencies” in the curriculum of Indian medical graduate.^[4,5]

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Hence, the purpose of the present study was to develop a structured clinical CST program for medical interns, which included formal training on communication skills and follow-up by its workplace-based assessment and feedback and explore the students' and faculty's reaction to this new program for its further development.

MATERIALS AND METHODS

The present study was done at the Department of Community Medicine (DCM), Sri Manakula Vinayagar Medical College and Hospital. It is a 10-year-old Private Medical College in Puducherry, an union territory located in the Southern part of India. We had a batch of twenty medical interns posted with us for every 2 months. All the sixty medical interns who were posted in the DCM over 6 months from July to December, 2015, were enrolled in the study. Complete data available for 53 interns were analyzed. The reasons for dropout were absenteeism of medical interns, lack of adequate time available for faculty rating, and lack of adequate number clinical cases during the center visits. The study was Kirkpatrick level I evaluation for a newly developed clinical CST program^[6] using a sequential mixed methods research, where quantitative (survey) method was followed by qualitative (printed open-ended responses were distributed to students about what they learned and the challenges faced and group interview with faculty) methods.^[7]

As shown in Figure 1, the communication skill training for medical interns was imparted in batches of twenty students in five steps using STEPS framework.^[8] It was found to be an useful approach to structuring technical skills learning session for novice learners. Written Informed consent was obtained from the medical interns. Ethical principles were followed throughout the study.

Step 1: S-Set the Foundation of Prior Learning

At baseline, medical interns were asked to do the self-assessment of the levels of expertise of medical interns on their clinical communication skills using Dreyfus Brothers five levels of expertise.^[9] It consisted of Level 1: Novice, Level 2: Advanced beginner, Level 3: Competent, Level 4: Proficient, and Level 5: Expert.

It was followed by a day-long interactive workshop on clinical communication skills. The emphasis was given on Greet, Ask, Tell, Help, Explain, and Return (GATHER) approach and microskills in communication.^[10,11] It has been found to be useful in primary care setting.

Step 2 and 3: T-Tutor Demonstration in Real time without Commentary and E-Explanation with Repeat Demonstration

As per norms, medical interns were then posted in the peripheral urban and rural health training centers of the

department. The faculties underwent a 1 day training program conducted by the Head of Department on clinical communication skills using GATHER approach and on how to give feedback to students. The trained faculties gave a demonstration of communication using GATHER approach with a patient in this real work setting for small groups of medical interns (5–10 in number). The cases with the locally prevalent medical condition were chosen for the demonstration purpose. The faculty was advised to follow the steps in clinical communication, and medical interns were asked to observe the process. This process was repeated again with a commentary and explanation by the faculty.

Step 4: P-Practice under supervision with feedback from peer and tutor

A careful blueprinting was done to select the type of scenarios, decide the setting, and select the assessors to link the expected outcome with their assessment.^[12] We decided to select five commonly encountered scenarios in outpatients of RHTC and UHTC for assessing the students' communication skills. These cases were the mother of under-five children with infection, women in the reproductive age group with anemia, adults with diabetes mellitus, adults with hypertension, and elderly (≥ 60 years) with chronic pain. Five trained faculties observed the encounter of an individual medical intern with the patient and rated their performance on 13-item four-point scale. These items were on the "desired behaviors" in GATHER approach. Each intern was rated on 10 different occasions on at least 2 times on each of the above-mentioned scenarios. Observation of 6–10 encounters was considered sufficient to give reliable assessment scores.^[13] The duration of the medical intern-patient encounter was 5–10 min followed by 5 min of feedback by the faculty using the Pendleton's model.^[14]

Step 5: S-Subsequent Deliberate Practice Encouraged

The medical interns were encouraged to practice the steps in communications skills during their remaining posting. At the end of the posting (2 months), end line assessment of the levels of expertise of medical interns (using Dreyfus brothers five levels of expertise) was obtained to assess their perceived level of improvement in their communication skills.

Interns' perception about the clinical CST program was obtained using feedback using open-ended questions and a group interview was done with the assessing faculty.

The quantitative data were entered and analyzed using Epi Info software package version 3.5.3. Frequencies and percentages were calculated. Mean \pm standard deviation (SD) was calculated for continuous variables, the median score for discrete variables. Wilcoxon signed-rank test was applied to find statistical significance between different levels of expertise and covariates. Manual content analysis of qualitative data was done.^[15]

RESULTS

The mean age of medical interns was 22.55 ± 0.97 (SD) years. There were 25 (47.2%) male and 28 (52.8%) female participants.

The number of students rating themselves as “competent” significantly improved from 17 (32%) to 44 (83%), and there was significant decline in perception from “advanced beginner” from 54.7% to 17% and only seven students felt that they were novice at the beginning and no one felt at that stage 2 months after the training program ($P < 0.01$) [Table 1].

The mean perceived score for clinical communication skills significantly improved from 2.26 ± 0.8 SD to 3.4 ± 0.8 SD ($P < 0.01$) [Table 2].

The Cronbach’s alpha value for 13-item scale used by faculty for rating interns’ performance on communication skills was found to be 0.92. As rated by the faculties, the median score for greet, ask, help, and return was 3 and for the rest of the domains, the median score was 2 [Table 3]. The self-rating of a student on their skill was higher than the rating by the assessing faculty. The problems faced by the assessing faculty were related to lack of time and space constraints at the training centers. Some of them found that there were more items to rate and they found sometimes items were not relevant to some case scenarios.

As expressed in Table 4, we developed categories, codes, and statements.^[16] The medical interns felt that the training and assessment had an effect on their knowledge domain and acquired skills such as the ability to communicate with the patients, rapport building, and trust building. They faced some challenges such as less time and non-suitability of guidelines for all types of patients.

DISCUSSION

Overall, there was a significant improvement in clinical communication skills of medical interns as a result of exposure to CST program, which comprised of training, observation at the workplace, and constructive feedback for further development. It was well received by the students as it contributed to their knowledge and skills in communication with their patients.

We found that medical interns tend to rate themselves little higher than the assessing faculty. This behavior is consistent with the previous research.^[17] The self-rating of communication skills done by medical interns was a limitation of the study. Hence, we decided to continue with faculty as assessors. To bring more reliability, other assessors such as peers, nurses, patients, and social workers might be

Table 1: Before and after self-rating for perceived level of competence on clinical communication skills by medical interns ($n=53$)

Levels of expertise	n (%)*	
	Before training	2 months after training
Level 1: Novice	7 (13.2)	--
Level 2: Advanced beginner	29 (54.7)	9 (17)
Level 3: Competent	17 (32)	44 (83)

* $P < 0.05$ (test of significance between two proportions)

Table 2: Perceived score before and after self-rating by interns on their clinical communication skills ($n=53$)

Before and after	Mean \pm SD*	Median
Before training	2.26 \pm 0.788	2
2 months after training	3.40 \pm 0.840	4

* $P < 0.05$ (Wilcoxon signed rank test). SD: Standard deviation

Table 3: Rating on interns’ communication skills by faculties at workplace ($n=53$)

Items on the scale of 1–4	Mean \pm SD	Median
Greet the patient	2.44 \pm 1.004	3
Ask for complaints	2.50 \pm 0.670	3
Tell relevant information	2.54 \pm 1.000	2
Help the patient to take decisions	2.54 \pm 0.776	3
Explain various options	2.55 \pm 0.930	2
Return/follow-up plan	2.53 \pm 0.925	3
Microskills in communication	2.22 \pm 0.543	2
Total score	2.45 \pm 0.567	2

SD: Standard deviation

included as multisource feedback.^[17] Wood *et al.*^[13] have emphasized the importance of positive and supportive culture for such kind of assessment system. Hence, we ensured briefing and encouragement for all assessing faculty. However, to upscale this activity from a pilot project to routine training and assessment of medical intern, more training and support is required for the faculty.

Students felt that the guidelines were not suitable for other clinical scenarios. Faculty requested for fewer items in the formative assessment tool to save time at a busy workplace like outpatient section. Although the present tool with 13 items was found to be internally consistent, the number of items needs to be reduced to make it simple, time-saving, and fit for the purpose. Since such kind of formative assessment was new to our work culture, it was a challenge to motivate the faculty for the assessment and retain their interest over the time. The course content and items in the assessment tool were in alignment with the existing literature and expected communication competencies for Indian medical graduates. The present pilot study has given us a curriculum for communication training, a tool for workplace based

Table 4: Content analysis of the qualitative data obtained from the medical interns

Categories	Codes	Statements
Effect on knowledge	Importance	I understood the importance of good communication skills with patients and their families' good communication skills will help me to become a successful doctor
	Self- evaluation	It helped me to evaluate my own communication skills and correct my mistakes and also helped me to perform better in areas that I thought I was good at
Effect on behavior	Decision-making	I learnt how to help patients make their own decision I started explaining the condition to the patient, made them understand the disease condition and necessary treatment patients became compliant to my advice as a result of practicing good communication skills
	Confidence	I can deal with patients easily and in a relaxed manner Created confidence to talk to patients without fear. I learnt to communicate without any hesitations fluently
	Appropriate treatment	I learnt that good communication with patient helps me to make the right diagnosis and provide appropriate treatment
Skills acquired (perceived)	Systematic approach	I learnt to approach the patient systematically in a step by step manner It helped me to have a good flow of communication with the patient Learned to ask them to summarize to know how much they understood
	Trust building	I learnt that good communication relieves the fear and anxiety of the patients The patients now trust me more and started following my instructions
	Rapport building	I learnt to assess the patients' knowledge about the disease and educate them accordingly I am able to interact and explain the condition to the patient and the family members clearly Helped me to understand the problems of the patients better I learnt to see the disease condition in a holistic manner
	Teaching	I am planning to teach this communication skills to others I will apply these skills in addressing a gathering/presenting a seminar
Challenges	Time	Since patients attending the OPD are more, there is less time to communicate elaborately
	Feasibility	I am not sure whether it is feasible to apply in practice The guidelines are not suitable for all types of patients and in all situations

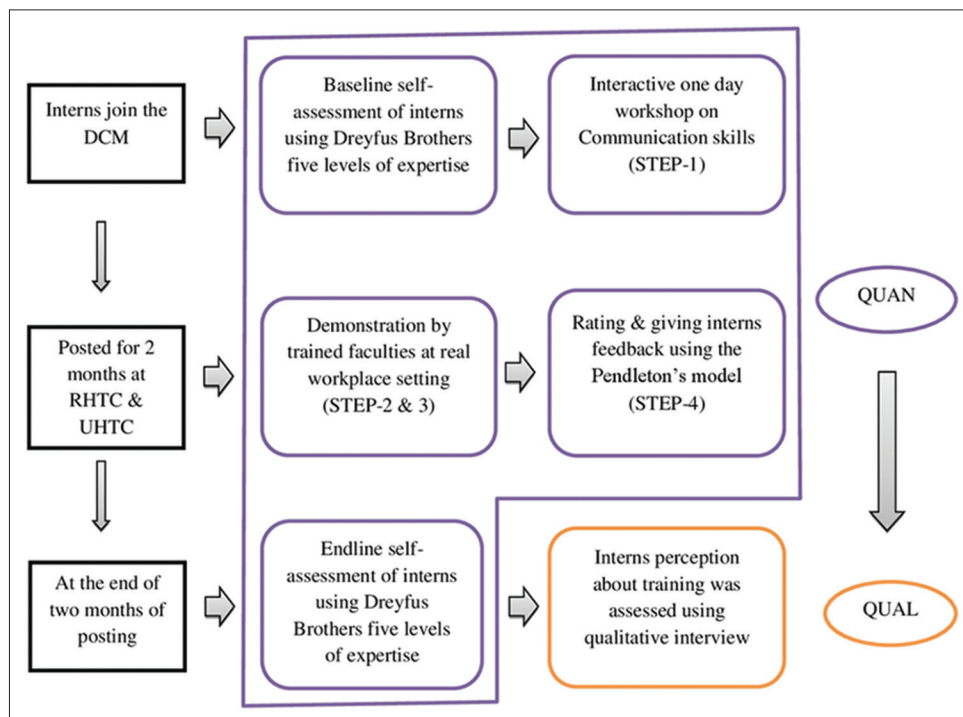


Figure 1: Visual diagram of the study design explaining the STEPS framework and the timeline

assessment, and feedback for further journey in refinement and development. In the future, more work is required to establish its concurrent validity of this formative assessment

with the scores from other assessment methods such as Objective Structured Clinical Examination and its predictive validity.

CONCLUSION

Overall, the clinical CST program was well received by the students and supported by the faculty. However, more research is required to develop a simple assessment tool and to explore the context-specific solutions to operational problems.

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