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Original Research Article

Teaching and assessing communication skills as an element of early clinical exposure (ECE) in first year medical students

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ABSTRACT

Introduction: Effective communication skills are essential to improve the doctor-patient relationship and are associated with favourable health outcomes. So, to introduce a training program of communications skills as an element of early clinical exposure in the first founding years of MBBS will help them as to deliver their professional duties as future physicians to the fullest extent.

Materials and Methods: All the 1st year M.B.B.S. students (n=122) were sensitized about the verbal and non-verbal aspects of communication skills followed by their visit to RHTC (Rural health and training centre) where they used their communication skills to create awareness about personal hygiene among the community. Faculty members observed the communication skills and assessed the students by using Kalamazoo Essential Elements Communication Checklist. A Focus Group discussion (FGD) of the faculty regarding their opinion was conducted to take faculty's feedback and valid conclusions drawn using a five-point Likert scale.

Results: The mean age of the participants was 20 ± 1.1 years. 81.1% of the students acquired good to average communication skills based on Kalamazoo essential elements communication checklist within the community. Regarding students' experience in the community, 93.4% replied that the experience was good, 54.1% faced no difficulty, 24.6% said that they gained confidence and 55.7% replied that they learnt to communicate effectively. Most of the faculty thought that learning communication skills is necessary for improving the doctor-patient relationship.

Conclusions: To introduce training for effective communication skills as an element of ECE in the very first year of MBBS will improve the role of students as future physicians. But this needs pre-sensitization of students as well as faculty and more resources including manpower and time.

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1. Introduction

Over the last 30 years, communication skills have received considerable attention in the medical school curriculum.^{1,2} Studies have shown that effective communication skills improve the doctor-patient relationship and are associated with favourable health outcomes in the form of improved compliance, satisfaction with care, and benefits to physical

and psychological health.^{3,4} Currently, NMC has introduced a module for Attitude and Communication (AETCOM) skills training in a phased manner; still, it is essential to design and provide communication skill training for medical students that integrates knowledge and competencies through the early implementation of clinical experiences during their first founding years.^{5,6} This will inculcate in them the habit of communicating effectively with their patients as future physicians.

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It is always observed that doctors who speak effectively in understandable language, listen actively, encourage their patients for clarifications and value the confidentiality and comfort of their patients are always appreciated. In addition, the non-verbal aspects of communication such as body language, eye contact, facial expression, personal touch, gestures, and distance are of extreme importance in building rapport between the doctor and the patient.⁵ Therefore, for communication to be effective doctors have to priorities their ways of communication according to the situation and person. This can only be achieved by prior training.⁷

Early Clinical Exposure (ECE) makes the students more satisfied with their curriculum and reduces the stress of meeting with patients. This also has potential benefits for teachers, healthcare organizations, patients, and populations.⁸ The objective of the study was to teach and assess communication skills as an element of ECE in first year medical students. The study was undertaken as a part of Advanced Course of Medical Education (ACME) project in 2019.

2. Materials and Methods

2.1. Study participants

All the students of MBBS first professional batch 2018-19 who were present and willing to participate were enrolled in the study. Total 122 students participated.

2.2. Study design

Prospective interventional study.

2.3. Study site

Field practice area of Rural Health Training Centre of the tertiary care hospital under Sri Guru Ram Das Institute of Medical Sciences and Research, Amritsar, Punjab.

2.4. Data collection

After obtaining the prior approval of the institutional ethical committee, the fellow faculty who were willing to participate were sensitized about the communication skills assessment. The students were sensitized about the verbal and non-verbal aspects of communication skills in theory lectures with the help of power point presentation, videos and role plays. They were given the option to refer any notes, books or internet to improve their knowledge. The study was conducted in four batches on four different days. Students were taken to the field practice area of RHTC, where they used their communication skills to create awareness about personal hygiene among the community. The students' communication skills were observed by the trained faculty.

A validated feedback proforma including both open and closed ended questions was administered to the students.

The proforma included questions regarding knowledge about the communication skills and their perceptions after visiting and communicating with the community people. Knowledge was graded as poor, average and good according to the likert scale.

The trained faculty members assessed the students by using Kalamazoo Essential Elements Communication Checklist which identifies seven essential sets of communication tasks: (1) build the doctor-patient relationship; (2) open the discussion; (3) gather information; (4) understand the patient's perspective; (5) share information; (6) reach agreement on problems and plans; and (7) provide closure.⁹

How well the learner performs the above tasks varies from: Poor/Fair/Good/V. Good/Excellent. The Score varies from 7-35 and the communication skills were graded as Poor (7-13), Average (14-20), Good (21-27) and Excellent (28-35).

A Focus Group discussion (FGD) of the faculty regarding their opinion was conducted to take faculty's feedback and valid conclusions drawn using a five-point likert scale.

2.5. Statistical analysis

The data was statistically analyzed using SPSS software version 22.0 and Microsoft excel. Items were identified and descriptive analysis was done for qualitative data.

3. Results

One hundred and twenty-two undergraduate first year medical students willingly participated in this study. The mean age of the participants was 20 ± 1.1 years. Among these students, 51% were females while 49% were male participants. When the students were assessed on their knowledge scores, it was observed that 52 (42.6%) had poor knowledge, 45 (36.9%) had average and 25 (20.5%) had good knowledge about communication skills after sensitization.

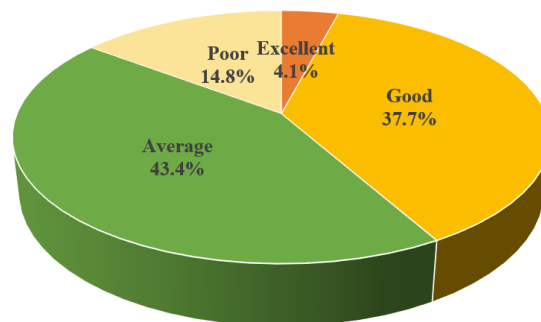


Fig. 1: Distribution of students according to their communication skills (based on Kalamazoo essential elements communication check list)

Table 1: Items identified through content analysis of focus group discussion with students

Factor	Items
Experience of the students in the community settings	<ul style="list-style-type: none"> ● “It was a Good/nice experience”. (93.4%) ● “Knowledge of Punjabi language is must for communicating in the community settings”. (16.4%) ● “It is not so easy to communicate”. (14.7%) ● I learnt a lot many things”. (18%) ● “I had a doctor feeling for the first time”. (22.9%)
Difficulties faced by the students in the community	<ul style="list-style-type: none"> ● “I did not face any difficulty”. (54.1%) ● “I felt hesitant while communicating for the first time”. (27%) ● “I felt lack of knowledge so could not solve their queries” (8.2%) ● “It was Difficult to talk to the opposite sex”. (1.6%)
How communication skills will help you in future?	<ul style="list-style-type: none"> ● “This exercise will help in taking history of the patient”. (13.9%) ● “I learnt how to talk in social environment”. (1.6%) ● “It will help in improving doctor-patient relationship”. (17.2%) ● “This exercise will improve my next communication in the community”. (14.7%) ● “I gained confidence”. (24.6%) ● “It was an encouraging and interesting exercise”. (9.8%)
What did you learn?	<ul style="list-style-type: none"> ● “I learnt how to communicate effectively”. (55.7%) ● “I learnt to listen patiently”. (11.5%) ● “I learnt to sympathise others”. (4.9%) ● “I learnt that we should be polite and respectful while communicating”. (15.6%) ● “I learnt how to speak effectively and make the person comfortable”. (2.4%) ● “Personal touch is very important in good communication”. (1.6%) ● “I learnt that communication skills are more important than knowledge of subject”. (14.7%)

Table 2: Items identified through content analysis of focus group discussion with faculty

Factor	Items
Why learning communication skills are essential for the students?	<ul style="list-style-type: none"> ● “Communication skills are very necessary for improving the doctor patient relationship”. ● “A good clinician should be good communicator”. ● “Develops interest in the students and they learn more”. ● “Good communication skills develop faith in the patient and he gives the required information to the doctor”. ● “Good communication skills can change the health behaviour of the community”
Whether ECE in the community helps the students?	<ul style="list-style-type: none"> ● “They will learn the natural history of the disease in a better way”. ● “As in the community they are dealing with healthy people so they can communicate better and will gain confidence when they will enter their clinicals”. ● “They can learn the social aspects of the disease” ● “They can bring awareness in the community about various aspects of disease occurrence which is beneficial both for the community as well as the students”.
What are the challenges?	<ul style="list-style-type: none"> ● “Resource constraints”. ● “Faculty is limited”. ● “As there is batch of 150 students so it is difficult to allot so many families or patients to them”. ● “Training of the students is must before the exercise as if they land up in some mis-communication they can lose the trust of the people”. ● “Knowledge of vernacular language”.
What did they learn?	<ul style="list-style-type: none"> ● “They learnt how to communicate effectively”. ● “They learnt to listen empathetically”. ● “Gained confidence”.

Table 3: Perceptions of faculty regarding introduction of communication skills as an element of ECE

S. No.	Context	Strongly Agree N (%)	Agree N (%)	Uncertain N (%)	Disagree N (%)	Strongly Disagree N (%)
1.	Learning communication skills is essential for the students.		5 (100)			
2.	Students come to know about the social problems in the community	1 (20)	3 (60)	1 (20)		
3.	They gain confidence.		3 (60)	2 (40)		
4.	This will help students in their clinicals afterwards.	2 (40)	2 (40)	1 (20)		
5.	Resource constraints may occur	1 (20)	2 (40)	1 (20)	1 (20)	

Figure 1 depicts that 81.1% of the students acquired good to average communication skills based on Kalamazoo essential elements communication checklist within the community. 14.8% had poor skills and only 4.1% had excellent communication skills.

Table 1 shows the items identified after the discussion with the students regarding their experience in the community, the difficulties they faced, how the exercise will help them in future and what did they learn. The subsequent figures show that 93.4% replied that the experience was good, 54.1% faced no difficulty, 24.6% said that they gained confidence and 55.7% replied that they learnt to communicate effectively.

Table 2 reveals the results of the focus group discussion with the faculty. Most of the faculty thought that learning communication skills is necessary for improving the doctor-patient relationship.

Perusal of Table 3 showed that all the faculty members agreed that learning communication skills are essential for the students and 60% agreed that students learnt about the social problems in the community, gained confidence and learnt to empathise. 60% agreed that resource constraints may occur.

4. Discussion

The acquisition of communication skills is recognized and documented as a core competency for physician training in many countries.^{10,11} In India, though it is included as a requirement in the 1997 Graduate Medical Education (GME) regulations of the Medical Council of India (MCI), not enough concerted efforts have been made to teach or assess them in most medical schools.¹²

The Vision 2015 document of the MCI reaffirms the need to schedule dedicated time for training in communication skills for Indian medical graduates. They are expected to communicate appropriately with patients, families, colleagues and community, and behave as leaders and members of the health care team and system.¹³

It is evident from the present study that 57.4% of the total students acquired average to good knowledge about communication skills and 85.2% acquired average to excellent communication skills when assessed by

Kalamazoo essential elements communication checklist after sensitization. Most of the students appreciated the ECE experience as they found it to be very interesting and motivating. Some of the students contacted after completion of the task and showed their interest in communicating again with the community. Some admitted that they had a doctor feeling for the first time. They said that they learnt to communicate effectively and empathetically. They could see the social factors affecting health in the community settings. Almost similar results were found by Govindrajan S. et al¹⁴ in their study in Coimbatore. Another study by Sathish Kumar S et al¹⁵ also observed that students' interest in the subject increased after ECE and it also increased their sensitivity toward patient problems and their needs. Dr Surekha et al¹⁶ in their study demonstrated that students enjoyed the experience of early clinical exposure and it motivated the learning process. Riskin A et al¹⁷ reported that early experience in the community helped students acquire basic communication skills and enabled students to improve their affective skills, such as empathy, increased their self-awareness, helped them feel more confident with their choice to practise medicine and decreased their anxiety associated with meeting patients. Dornan T et al¹⁸ and Sheshgiri C et al¹⁹ also stated that early experience helps medical students socialize to their chosen profession. It helps them acquire a range of subject matter and makes their learning more real and relevant. It can influence career choices and helps in maintaining and boosting up one's enthusiasm to become a doctor respectively.

When feedback was collected from the faculty, almost 100% agreed that learning communication skills is essential for the students and it should be a part of ECE from the very first year. Similar findings on students' and faculty feedback were observed by Petek Šter M²⁰ in Ljubljana. Approximately 40% of the faculty members talked about the challenges in the form of lack of resources, time, faculty and requirement of prior training. Tayade M C et al²¹ in their study also noted that faculties believed that ECE consumes more manpower, infrastructure, time and requires extra efforts on their part. All faculty agreed that some level of training may be required.

5. Conclusions

Learning effective communication skills as an element of early clinical exposure will improve their role as future physicians. They learn how to start communication with the patients, give respect to others, role of empathy, how to listen patiently and importance of vernacular language. But this needs pre-sensitization of students as well as faculty and more resources including manpower and time.

6. Conflict of Interest

Nil.


7. Source of Funding

Nil.

References

- Cegala DJ, Broz SL. Physician communication skills training: a review of the theoretical backgrounds, objectives and skills. *Med Educ.* 2002;36(11):1004–16.
- Humphris GM, Kaney S. Assessing the development of communication skills in undergraduate medical students. *Med Educ.* 2001;35(3):225–31.
- Kaplan SH, Greenfield S, Ware JE. Impact of the doctor-patient relationship on the outcomes of chronic disease. In: Stewart M, Roter D, editors. *Communicating with medical patients.* New Bury Park: Sage; 1989. p. 228–45.
- Stewart MA. Effective physician-patient communication and health outcomes: A review. *CMAJ.* 1995;152(9):1423–33.
- Modi JN, Anshu, Chhatwal J, Gupta P, Singh T. Teaching and Assessing Communication Skills in Medical Undergraduate Training. *Indian Pediatr.* 2016;53(6):497–504.
- Hausberg MC, Hergert A, Kröger C, Bullinger M, Rose M, Andreas S. Enhancing medical students' communication skills: development and evaluation of an undergraduate training program. *BMC Med Educ.* 2012;12:16. doi:10.1186/1472-6920-12-16.
- Ramasamy R, Murugaiyan SB, Shalini R, Vengadapathy KV, Gopal N. Communication skills for medical students: An overview. *J Contemp Med Edu.* 2014;2(2):134–40.
- Bas O, Yaphe J, Spiegel W, Wilm S, Carelli F, Metsemakers JFM, et al. Early clinical exposure in medical curricula across Europe: an overview. *Eur J Gen Pract.* 2009;15(1):4–10.
- and GM. Essential elements of communication in medical encounters: The Kalamazoo Consensus Statement. *Acad Med.* 2001;76(4):390–3.
- ACGME Competencies. Accessed June 3, 2021. Available from: <http://um.edu/professionals/gme/competencies>.
- Frank JR. The Can MEDS 2005 Physician Competency Framework. Ottawa, Canada: Royal College of Physicians and Surgeons of Canada; 2005. Accessed July 1, 2021.
- Regulations on Graduate Medical Education 1997. Medical Council of India. Available from: <https://www.nmc.org.in/rules-regulations/graduate-medical-education-regulations-1997/>.
- Modi JN, Chhatwal AJ, Gupta P, Singh T. Teaching and Assessing Communication Skills in Medical Undergraduate Training. *Indian Pediatrics.* 2016;53:497–504.
- Govindarajan S, Vasanth G, Kumar PA, Priyadarshini C, Radhakrishnan SS, Kanagaraj V, et al. Impact of a Comprehensive Early Clinical Exposure Program for Preclinical Year Medical Students. *Health Prof Educ.* 2018;4(2):133–8.
- Sathishkumar S, Thomas N, Tharion E, Neelakantan N, Vyas R. Attitude of medical students towards Early Clinical Exposure in learning endocrine physiology. *BMC Med Educ.* 2007;7:30.
- Surekha MW, Gajbe U. To Study The Perceptions of First Year MBBS Students Towards Early Clinical Exposure (ECE) In Anatomy. *IOSR J Dent Med Sci.* 2018;17(2):32–5.
- Riskin A, Kerem NC, Van-Raalte R, Kaffman M, Yakov G, Aizenbud D, et al. Becoming a Physician'-medical students get acquainted with disadvantaged populations, and practise sensitive and effective communication. *Perspect Med Educ.* 2015;4(6):339–43.
- Dornan T, Littlewood S, Margolis SA, Scherpbier A, Spencer J, Ypinazar V. How can experience in clinical and community settings contribute to early medical education? A BEME systematic review. *Med Teach.* 2006;28(1):3–18.
- Sheshgiri C, Komala N, Ashwini C. Early Clinical Exposure in Anatomy. *Natl J Integr Res Med.* 2017;8(5):53–6.
- Šter M. Teaching communication at the Medical School in Ljubljana. *Acta Med Acad.* 2012;41(11):38–46.
- Tayade MC, Bhimani N, Kulkarni NB, Dandekar KN. The impact of Early Clinical Exposure on First M.B.B.S. Students. *Int J Health Biomed Res.* 2014;2(4):176–81.

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