



A Study on Assessment of Communication Skills and Perceived Barriers among Medical Students

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ABSTRACT

Introduction: Good communication skills are a core competency for all health professionals. Any formal training on communication is not given to students in the present curriculum. Hence the study was conducted to assess existing level of communication skills and student perceived communication barriers among third year medical students.

Methodology: A cross sectional study was conducted in the field practice area of a medical college for 2 months among a convenient sample of 40 medical students. The existing levels of communication skills of students were assessed using Kalamazoo Essential elements check list and communication barriers as perceived the student were obtained using a pretested questionnaire.

Results: The communication skills were very good in 50% of students, 20% excellent and 30% were having poor to average skills. Majority of the students reported lack of familiarity with place and person as a barrier [78.3% males, 58.8% females] followed by perceived interpersonal barriers like age difference, socioeconomic class difference.

Conclusion: The present study revealed that most of the students have very good level of communication skills, but still 30% were falling in poor to average levels. All students perceived one or the other barriers for communication but more so with familiarity with place and person. Formal training of students on communication skills in curriculum is necessary to overcome various barriers and enable them to communicate effectively.

Key Words: Communication skills; Barriers; Medical students; Health Education

INTRODUCTION

The term "health communication" is often used synonymously with health education, which itself suggests outward and downward communication of knowledge.¹ Communication is one among the core clinical skills which may be intricate as it comprises of interaction between individuals in unequal positions and may be associated with personal and intimate issues of vital importance, sometimes could be emotionally laden too.^{2,3} Health education is the foundation of a preventive health care system which is indispensable in achieving individual and community health. How-

ever to achieve community health communication skills form an important dimension of any health education activity.⁴

Good communication is a core competency for all health professionals as ability to influence others depends on one's communication skills. As per Medical Council of India regulations on Graduate Medical Education, at the end of undergraduate program, the medical student should be able to work as a leading partner in health care teams and acquire proficiency in communication skill⁵.

Communication is not devoid of barriers. Such

barriers of communication among physicians may lead to misdiagnosis of disease and thus creating chaos for patient further leading to ineffective treatment. Accordingly establishing good communication among health care providers is essential for provision of quality health care in diagnosis and treatment of patient.⁶

Communication barriers among medical students are diverse. Factors like socio cultural background, gender differences, language differences play key role in their perception of various issues in medical education⁷. As any medical college is cradle for nurturing the professional capabilities of medical students, creating student friendly environment, so is our M R Medical college where Students of diverse cultural, social ethnic backgrounds get enrolled. Students develop communication skills by observing their seniors, teachers and mentors and then practice⁸. However no formal training is given in the present curriculum to improve the communication skills among the students.

Several studies suggest that medicos have poor communication skills and many patients are unhappy with the amount of information given to them and the manner of delivery.^{2,3,9,10}

Good communication skill has been considered extremely important for medical practitioners in the western world since decades. Its significance is now being acknowledged in our country and some authors have expressed the view that it is “the need of the hour” to train medical professionals in this important yet ignored aspect in clinical medicine^{11, 12} In this context, the present study is planned to assess the existing level of communication skills of the medicos and perceived barriers of communication by the student.

MATERIALS AND METHODS

A cross sectional study was conducted in an urban field practice area of M.R. Medical college Kalaburagi. After obtaining the institutional ethical clearance and informed consent from study participants, study was carried out over a period of 2 months (01/05/2018 – 30/06/2018). A purposive convenient sample consisting of a batch of 40 medical students in third phase, posted in the department of community medicine were included.

The data on existing levels of communication skills of each student was obtained using Kalamazoo Essential elements check list (KEEC)¹³ to suit the current scenario/needs. This KEEC is a 7-item rating scale with each item corresponding to 1 of the 7 essential elements of communication (1) build the doctor-patient relationship; (2) open the discussion; (3) gather information; (4) understand the pa-

tient’s perspective; (5) share information; (6) reach agreement on problems and plans; and (7) provide closure. Each element was rated on a 5-point Likert scale (1= poor, 2 = fair, 3 = good, 4 = very good, and 5 = excellent). Cumulative scores for responses for all 7 elements were calculated and graded to assess level of communication skill.

To assess the communication skill of all the students, they were allotted topics on health education of their interest. The topics on health education of public health importance like diarrhea control measures, mosquito control measures, antenatal nutrition etc were allotted beforehand. They prepared the allotted topic on their own prior to health education session. Each health education session was conducted by a student on a healthy subject separately which was observed and assessed by the investigator personally. The data on barriers of communication as perceived by each student was obtained using a pretested questionnaire. Data was analyzed using IBM SPSS version 20 software. Communication skills and barriers were analyzed in terms of proportions, mean scores, standard deviations and Chi square test.

RESULTS

Out of 40 students who took part in the study, 17 (42.5%) were males and 23 (57.5%) were females. The mean age of the students was found to be 21.18±2.3 years for males and 20.57±0.6 for females.

The present study revealed that the level of communication skills was very good on KEEC in 50% of students, followed by excellent and good skills in 20% students each, remaining 10% were having poor to average skills. [Table 1]

Table 1: Distribution of level of communication skills among students

Level of communication skills	Students (%) (n=40)
Excellent	8 (20)
Very good	20 (50)
Good	8 (20)
Average	2 (5)
Poor	2 (5)

Table 2: Distribution of mean scores of elements of KEEC

Elements of KEEC for communication skills	Score (Mean ± SD)
Builds a Relationship	3.45±1.2
Opens the Discussion	3.2±1.0
Gathers Information	3.38±0.9
Understands Patient’s Perspective	3.03±1.4
Shares Information	3.23±1.1
Reaches Agreement	3.45±1.2
Provides Closure	3.5±1.3

Table 3: Gender wise distribution of levels of communication skills among students

Elements of Kalamazoo checklist	Communication skill level										P value
	Poor		Average		Good		Very good		Excellent		
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	
Builds a Relationship	1(11.8)	1(4.3)	4(23.5)	2(8.7)	7(41.2)	2(8.7)	3(17.6)	11(47.8)	1(5.9)	7(30)	* 0.01
Opens the Discussion	1(5.9)	1(4.3)	5(29.4)	3(13)	6(35.3)	8(34.8)	4(23.5)	8(34.8)	1(5.9)	3(13)	0.68
Gathers Information	1(5.9)	1(4.3)	0(0)	3(13)	8(47.1)	8(34.8)	8(47.1)	8(34.8)	0(0)	3(13)	0.26
Understands Patient's Perspective	5(29.4)	6(26.1)	1(5.9)	1(3)	3(17.6)	3(13)	7(41.2)	10(43.5)	1(5.9)	3(13)	0.94
Shares Information	1(5.9)	3(13)	4(23.5)	1(3)	3(17.6)	8(34.8)	9(52.9)	9(39.1)	0(0)	2(8.7)	0.17
Reaches Agreement	1(5.9)	3(13)	4(23.5)	0(0)	5(29.4)	8(34.8)	3(17.6)	5(21.7)	4(23.5)	7(30)	0.18
Provides Closure	2(11.8)	3(13)	2(11.8)	0(0)	6(35.3)	6(26.1)	3(17.6)	7(30.4)	4(23.5)	7(30)	0.43

Table 4: Gender wise distribution of perceived barriers among students

Type of Barrier	Perceived as barrier		p-value
	Male (%)	Female (%)	
Physical barriers	2 (11.8)	5 (21.7)	0.412
Perceptual	4 (23.5)	10 (43.5)	0.191
Cultural	3 (17.6)	4 (17.4)	0.983
Interpersonal	12 (70.5)	16 (69.6)	0.944
Lack of source credibility/ familiarity	10 (58.8)	18 (78.3)	0.185
Language / semantic barrier	7 (41.1)	14 (60.9)	0.218
Gender difference	10 (58.8)	1 (4.3)	0.000*

The mean scores for elements of KEEC among students were highest for "provide closure" element (3.5±1.3) followed by for "building relationship" and "reaches agreement" elements (3.45±1.2). [Table 2]

The present study revealed more number of females had good (47.8%) to excellent (30%) levels of building relationship skills on KEEC compared to males and statistically significant difference was noticed only with "building relationship" element. (p=0.01). [Table 3]

Majority of the students reported lack of familiarity with place and person as a barrier [78.3% males and 58.8% females] followed by perceived interpersonal barriers [69.9 % males and 70.5% females] like age difference, socioeconomic class difference and lack of training in communication skills. Statistically very highly significant difference among male (58.8%) and female (4.3%) students was noticed only with "gender difference" barrier (p=0.000). [Table 3]

DISCUSSION

The medical student to patient and/or community relationship is very much essential when it comes to the concern of health care delivery. To build and maintain such a relation needs good communication skills. Considering this background the present study reported majority of the medical students (50%) were having "very good" level of communication skills. The study conducted by Jeevithan S et al¹⁴ reported that majority of interns (69.1%) were having poor level of communication. Similarly the study done by Barati et al¹⁵ showed

that the Communication skill in students in all levels were not in desirable level.

In our study, the data on components of Kalamazoo scale (KEEC) revealed that all the students scored highest for "provide closure" element (3.5±1.3) followed by for "building relationship" and "reaches agreement" elements (3.45±1.2) however, there was statistically significant difference noticed only with "building relationship" element (p=0.01) among males and females. However, the study conducted by Ibrahim A et al¹⁶ reported that there was no statistically significant difference noticed in communication skills between male and female residents (p > 0.05). Formally the students would be taught regarding art of interviewing an individual in the first academic year itself and also history taking in the first clinical year, still the gap persists in communication skills of medicos which may be due to time constraints and prioritising the subjects with respective academic year.¹⁴

Although the study reported good communication skills among students it was not devoid of barriers in communication. Majority of our students reported lack of familiarity with place and person as barrier followed by interpersonal factors. But, statistically significant difference was noticed only with "gender difference" barrier (p=0.000). The study conducted by Mahwish Gul et al⁷ also reported similar findings as our study, that gender is a barrier in communicating with their patients among 37.2% of male students in 3rd year and also language difference also has a great role in student-patient interaction.¹⁷ Akkad A et al. also reported gender difference among students and patients and its impact on student-patient is consistent with results of our study.¹⁸

The present study had the limitations like small sample of students; hence, to generalize the findings of the study would have been involved more number of participants, time constraints in conducting study needs to be addressed. Not many physicians are naturally blessed to have good communication skills and attitude. Communication among medical students needs to be more stressed in the curriculum as there is no formal communication skill training program during the medical course. The continued medical educations, communication skill workshop, simulation, role play and other training programs in undergraduate medical education are the need of hour to further improve upon the existing situation.

CONCLUSION

The present study revealed that more than 50% of the students have very good and 20% have excellent communication skills, but still 30% were falling in poor to average levels. All students perceived one or the other barriers for communication but more so with familiarity with place and person. A formal training of students on communication skills in curriculum is necessary to overcome various barriers. This will enable them to communicate effectively to achieve a desire level of individual and community health through health education activities.

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