To Analyze Year One Medical Students' Perceptions Towards Communication Skills at Subbaiah Institute of Medical Sciences

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Abstract

Objectives: The purpose of the current study was to ascertain the knowledge, attitudes, and behaviors of first-year medical students at Subbaiah Institute of Medical Sciences regarding communication abilities.

Methods: The Subbaiah Institute of Medical Sciences' first-year medical students participated in the study. These students study the fundamental scientific courses in an integrated, competency-based curriculum while enrolled in the preclinical part of their program. Recorded were the respondents' age, gender, and occupation as well as the parents' jobs, the school's medium of instruction, their attitude towards communication skills, and their self-evaluation of their communication skills. Appropriate statistical tests (p<0.05) were used to examine the association between the positive and negative attitudes and these variables.

Results: A total of 119 students participated in the study; 27(22.7%) were male, and 92(77.3%) are female. 64(53.8%) were government funded and 55(46.2%) were self-funded. The median positive attitude score was 26±12.4. The mean negative attitude scale score was 35±12.2. A highly significant association was noted with attitude towards communication skills (p<0.000).

Conclusions: Communication skills training should be modified and strengthened. Regular workshops, and training session on communication skills should be part of ongoing professional development for all the medical students.

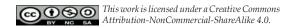*Keywords:* Communication, Knowledge; Attitude; Behavior; Learning; Training.

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INTRODUCTION

Effective communication is fundamental to almost all facets of life and forms the basis of relationships in the personal, intellectual, and professional spheres. People can develop strong relationships, promote understanding, and convey their thoughts clearly when they communicate effectively.

Effective communication skills improve productivity, foster teamwork and help people grow in their careers in the workplace. They promote improved learning and teamwork in

educational environments. Furthermore, effective communication is essential for resolving disputes and strengthening bonds in interpersonal interactions. The ability to communicate effectively across cultures and media becomes even more crucial as the world gets more interconnected, highlighting how important it is to develop these skills everywhere.

Communication between a doctor and patient is a teachable skill was first to assert by Morgan & Engel in 1969. The majority of medical colleges in the UK (Hargie *et al.*, 1998) and the US (Novack *et al.*, 1993) now provide courses on communication and interviewing techniques. Traditionally, it was believed that communication and patient interviewing were basic abilities that didn't require specialized training (Benbassat & Baumal, 2001).

A member of the Rajiv Gandhi University of Health Sciences (RGUHS), the Subbaiah College of Medical Sciences accepts 200 students each year for its MBBS program. Students from all around India are admitted to the college. A key goal of the MBBS program, according to the RGUHS updated curriculum, is developing communication skills. Research has demonstrated that doctors' attitudes have a significant impact on the quality of medical care and are directly related to their communication skills (Batenburg & Smal, 1997). Despite completing undergraduate education programs, some professional clinicians lack the necessary communication skills and have an inappropriate attitude toward their patients (de Monchy, 1992).

An earlier study found that gender was a significant predictor of skill level that students' assessments of their ability to communicate effectively were poor, and that hospital doctors' involvement in teaching and offering thorough feedback could increase the training's benefits (Marteau *et al.*, 1991). Research has indicated that medical students desire more structured courses on communication skills and value receiving instruction in these areas (Walker *et al.*, 1981; Rosenthal & Ogden, 1998). According to a qualitative pilot study, some medical students have favorable attitudes while others have negative attitudes regarding communication skills training (Rees & Garrud, 2001). According to a study that used a trustworthy attitude measure, medical students' attitudes on communication skills training are strongly correlated with a variety of demographic and educational traits (Rees & Sheard, 2002). Educating medical professionals on how to "flex" their communication style to accommodate personality variations between them

and their patients can improve results (Clack *et al.*, 2004). According to one study, students' attitudes improved after taking a communication skills course (Doherty *et al.*, 1992). In other studies, preclinical students accepted a communication skills course and were excited about supervised patient contact (Knox & Bouchier, 1985), while students and tutors evaluated an advanced course favorably (Towle & Hoffman, 2002). Recently, the Amsterdam attitudes and communication measure (de Haes *et al.*, 2001) was created to evaluate the attitudes and communicative behavior of medical students. Ultimately, a review came to the conclusion that communication skills training should be provided to all medical students (Aspegren, 1999). We noticed that medical students' perspectives regarding training in communication skills are deficient.

The purpose of the current investigation is to:

1. Ascertain the respondents' positive and negative attitudes on communication skills training by using modified communication skills attitude scale.

2. To find out if there is any relationship between the respondents' demographic and educational traits and their positive and negative attitude scores.

MATERIALS AND METHODS

The study was carried out among year one medical students at the Subbaiah Institute of Medical Sciences & Research Center, Shivamogga, Karnataka. These students are in the preclinical part of their course and learn the basic science subjects through an integrated, competency based curriculum. Gender, age of the respondents, occupation of parents, medium of instruction at school, whether the student was government-selected or self-financing, attitude towards communication skills, and self-rating of communication abilities were collected through questionnaire. We wanted to find out whether socioeconomic status and views towards communication skills are related in any way. Modified scale of communication skills attitude of Rees *et al.*, 2002 was used to collect information regarding student attitudes about communication skills training.

Associations of the positive and negative attitudes with demographic and educational characteristics of respondents were collected and these variables were analyzed by using descriptive statistics to assess the positive and negative attitudes in relation to the respondents' demographic and educational

Suresh Rao, Divya Shanthi D'Sa, Anup Rao, *et al*. To Analyze Year One Medical Students' Perceptions
towards Communication Skills at Subbaiah Institute of Medical Sciences

95

qualities. The purpose of this analysis was to determine the personal characteristics of the entire sample. It was established how the independent variables, demographic and educational traits and dependent variables, PAS and NAS scores correlated. For the regularly distributed variables, parametric tests (Student's t-test and ANOVA) were employed, while non-parametric tests (Mann-Whitney's test & Kruskal-Wallis) were utilized for the other parameters by using SPSS V 20.

RESULTS

A total of 119 students, ages 18 to 21, completed the modified communication skills attitude scale. Information about the students' attitudes toward communication skills training was gathered using features related to education and demographics. There were 92 (77.3%) females and 27 (22.7%) males in the ratio. 117 (98.3%) of the respondents had attended schools where english was the primary language of instruction; 2 (1.7%) had studied in another vernacular. Of them, 55 were self-financing, while 64 (53.8%) were chosen by the government. Table 1 displays the respondents' demographic and education related details.

Data collected regarding the respondents perception on communication medium, listening skills, challenges and barriers they face during communications, written communication and impact of technology on communication skills is shown in the Table 2.

Students' Perceptions of Learning Communication Skills 26±12.4 was the median PAS score. Using univariate statistics, the connection between the independent variables and the dependent variable (PAS score) was investigated. It was discovered that there was a substantial correlation between the subjects' attitudes regarding communication skills and their educational background as well as their self-rating of such capabilities. Three factors were included to a stepwise multiple regression model that showed a significant association with the PAS score. It was discovered that there was a substantial correlation between the PAS scores and the characteristics related to communication skills in the first year: knowledge, attitude, and behavior. All things considered, the admission criteria's attitude toward communication abilities was the strongest predictor of positive sentiments (Table 3). The distribution of the NAS scores was 35.18 ± 12.2 was the mean ±SD score. The investigation link between the independent variables and the dependent

variable (NAS score Table 4) shows that there was no statistically significant correlation with any of the selected traits. When NAS and PAS attitudes toward communication abilities were evaluated showed a highly significant (p<0.001) difference of NAS when compared with PAS attitude of communication skills (Table 5).

Table 1: Demographic and educational traits of Year 1 Medical Students involved in studies

Traits	No. of Respondents (119) (%)
Age Group	
>21	4 (3.4)
20-21	29 (24.4)
19-20	44 (37.0)
18-19	42 (35.3)
Gender	
Male	27 (22.7)
Female	92 (77.3)
Parent's Profession	
Doctor	10 (8.4)
Others	109 (91.6)
Medium of instruction in school	
English	117 (98.3)
Vernacular Language	2 (1.7)
Residence	
City	53 (44.5)
Metropolitan	18 (15.1)
Town	35 (29.4)
Village	13 (10.9)
Admission Criteria	
Government Selection	64 (53.8)
Self-Funding	55 (46.2)
As a student, how would you rank yourself	
Average	55 (46.2)
Good	60 (50.4)
Poor	4 (3.4)
I prefer to take classes to improve my communication skills	
Certainly	85 (71.4)
No	34 (28.6)
My communication skills are	
Average	39 (32.8)
Excellent	4 (3.4)
Good	68 (57.1)
Poor	8 (6.7)

Table 2: Students knowledge, attitude and behavior towards communication skills

Variables	N=119 (%)
Which communication medium do you prefer among the ones listed below?	
Emails	1 (0.8)
Face to Face	100 (84)
Phone Calls	6 (5)
Text Messaging	12 (10)
What do you think is the most important aspect of effective communication	
Absence of fear	15 (13)
Being clear and complete in expression	41 (35)
Confidence	61 (51)
Sound knowledge	2 (2)
Which of the following listening skills do you think are important?	
Active listening	72 (61)
Active listening, Empathetic listening	5 (4)
Active listening, empathetic listening, reflective listening	4 (3)
Active listening, empathetic listening, reflective listening, selective listening	1 (1)
Active listening, reflective listening	5 (4)
Active listening, reflective listening, selective listening	1 (1)
Active listening, selective listening	4 (3)
Empathetic listening	3 (3)
Selective listening	1 (1)
Reflective listening	12 (10)
Selective listening	11 (9)
What challenges do you face in communication with others?	
Clarity	31 (26)
Fear	28 (24)
Listening	37 (31)
Perception barriers	33 (28)
Which nonverbal cues do you pay attention to during communication?	
Body language	21 (18)
Eye contact	28 (24)
Facial expressions	37 (31)
Tone of voice	33 (28)
Which communication barriers do you encounter most frequently?	
Cultural differences	3 (3)
Emotional barriers	14 (12)
Lack of clarity	49 (41)
Lack of clarity, Emotional barriers	8 (7)
Language barriers	32 (27)
Language barriers, Cultural differences	1 (1)
Language barriers, Cultural differences, Lack of clarity	2 (2)
Language barriers, Cultural differences, Lack of clarity, Emotional barriers	1 (1)
Language barriers, Emotional barriers	8 (7)
Language barriers, Lack of clarity	1 (1)
What do you think is the impact of technology on communication skills?	
Difficult to convey emotions	35 (26)
Made communication faster and clear	30 (25)
No face to face contact	46 (39)
Time saving	12 (10)
How effectively do you structure your written communication?	
Adequately	34 (29)
Effectively	69 (58)
Poorly	4 (3)
Very effectively	12 (10)

Table 3: The relationship between communication skills of Positive Attitude Scale (PAS) score and demographic and educational traits of Year 1 Medical Students involved in studies

Traits	No. of Respondents (119) (%)	Mean PAS Score (±SD)	P-Value
Age Group			
>21	4 (3.4)	36 (4.8)	
20-21	29 (24.4)	27 (12.8)	0.428
19-20	44 (37.0)	26 (12.6)	
18-19	42 (35.3)	25 (12.4)	
Gender			
Male	27 (22.7)	27 (12.4)	0.615
Female	92 (77.3)	26 (12.5)	
Parent's Profession			
Doctor	10 (8.4)	28 (12.1)	0.662
Others	109 (91.6)	26 (12.5)	
Medium of instruction in school			
English	117 (98.3)	26 (12.5)	0.677
Vernacular Language	2 (1.7)	30 (14.1)	
Residence			
City	53 (44.5)	26 (12.1)	
Metropolitan	18 (15.1)	27 (12.8)	0.955
Town	35 (29.4)	26 (12.1)	
Village	13 (10.9)	28 (12.2)	
Admission Criteria			
Government Selection	64 (53.8)	24 (12.6)	0.052
Self-Funding	55 (46.2)	28 (11.9)	

Table Cont...   *Table Cont...*

As a student, how would you rank yourself

Average	55 (46.2)	24 (12.5)	
Good	60 (50.4)	28 (12.2)	0.213
Poor	4 (3.4)	28 (12.3)	

I prefer to take classes to improve my communication skills

Certainly	85 (71.4)	27 (12.8)	
No	34 (28.6)	24 (11.5)	0.285

My communication skills are

Average	39 (32.8)	24 (13.2)	
Excellent	4 (3.4)	25 (12.9)	
Good	68 (57.1)	27 (12.2)	0.774
Poor	8 (6.7)	28 (11.3)	

Table 4: The relationship between communication skills of Negative Attitude Scale (NAS) score and demographic and educational traits of Year 1 Medical Students involved in studies

Traits	No. of Respondents (119) (%)	Mean NAS Score (±SD)	P-Value
Age Group			
>21	4 (3.4)	46 (12.5)	
20-21	29 (24.4)	32 (12.9)	
19-20	44 (37.0)	35 (12.5)	0.168
18-19	42 (35.3)	36 (10.8)	
Gender			
Male	27 (22.7)	39(13.2)	
Female	92 (77.3)	34 (11.7)	0.073
Parent's Profession			
Doctor	10 (8.4)	38 (10.0)	
Others	109 (91.6)	35 (12.8)	0.536
Medium of instruction in school			
English	117 (98.3)	38 (10.0)	
Vernacular Language	2 (1.7)	35 (12.8)	0.536
Residence			
City	53 (44.5)	35 (12.3)	
Metropolitan	18 (15.1)	34 (12.6)	
Town	35 (29.4)	36 (12.6)	0.869
Village	13 (10.9)	36 (10.4)	
Admission Criteria			
Government Selection	64 (53.8)	36 (11.8)	
Self-Funding	55 (46.2)	36 (12.6)	0.781
As a student, how would you rank yourself			
Average	55 (46.2)	34 (11.5)	
Good	60 (50.4)	36(12.6)	0.539
Poor	4 (3.4)	38 (15.5)	

Table Cont...

I prefer to take classes to improve my communication skills

Certainly	85 (71.4)	36 (12.0)	
No	34 (28.6)	34 (12.5)	0.484

My communication skills are

Average	39 (32.8)	35 (10.9)	
Excellent	4 (3.4)	40 (10.8)	
Good	68 (57.1)	35 (12.3)	0.836
Poor	8 (6.7)	33 (17.9)	

Table 5: Comparison of PAS & NAS of communication skills score by using paired sample t-test:

	Mean	N	Std. Deviation	P-value	Correlation	Mean±SD
PAS	26	119	12.4	0.000	0.388	26±12.4
NAS	35	119	12.2	—	—	35±12.2

DISCUSSION

Indian medical education traditionally focuses on clinical and technical knowledge. However, there is a growing emphasis on integrating communication skills into the curriculum. Medical schools are increasingly incorporating modules on doctor-patient communication, empathy, and counseling. A previous qualitative study showed that students held both positive and negative attitudes towards different aspects of communication skills training; a few students reported being socialized into developing negative attitudes held by senior students and doctors (Rees *et al.*, 2002b).

The median NAS score of 35 noted in the present study was comparable to that observed in a previous study, (Rees & Sheard, 2002). There are no formal training sessions in communication skills in year one. These may be partly responsible for the higher NAS score. Unlike the previous study (Rees & Sheard, 2002), no significant relationship was observed between age and the PAS scores. The median age of students and of the students studied in the English medium was comparable but the range was less. A previous study suggested that older, mature students have more positive attitudes towards communication skills training (Rees & Garrud, 2001). The lesser number of matured students in this study may have been partly responsible for the lack of a significant relationship. There was no difference in the PAS scores of male and female respondents. Previous studies support that female students have higher PAS scores and lower NAS scores (Rees & Sheard, 2002; Wiskin *et*

al., 2004). The present findings were not conclusive and further studies are required. The students who were in favor of communication skills courses training had a higher PAS score. In a previous study, students who felt that their communication skills needed improving had more positive attitudes (Rees & Sheard, 2002). Students with doctor parents had a lower PAS score. The reasons for this are not clear and can be explored in a future study. The students who rated themselves as excellent communicators had higher PAS scores than good, average, or poor communicators. However, the poor communicators had a higher PAS score than good or average communicators. The results from the literature are contradictory. Studies suggest that students with poorer communication skills more highly valued the opportunities offered by communication skills training courses (Aspegren, 1999; Rees & Sheard, 2002) while another study has demonstrated the opposite (Rees & Garrud, 2001). However, there was no significant differences in the PAS score between Government selection and self-funded students.

The data obtained from the present study regarding, knowledge, attitude and the behavior towards the communication skills showed that most of the students prefer face to face communication medium 100 (84%), confidence 61 (51%) was important aspect of effective communication, active listening skills 72 (61%) and the communication barrier was lacking clarity 49 (41%). There was no comparable literatures available on these data.

There was a lack of statistical association between the majority of the demographic factors and the PAS/NAS scores. It may be that with increasing development, prosperity, and globalization, the groups are becoming more homogeneous. A uniform communication skills training methodology may be considered if these preliminary findings are corroborated by larger studies.

The present study had many limitations. Cultural and socioeconomic differences, small sample size (N=119) may have influenced the results. There was student diversity with respect to many demographic characteristics and this could have had an interrelated influence on the outcomes. This may be one of the reasons for the low alpha coefficient for the negative attitudes. While Indian medical graduates are well-versed in clinical skills, there is growing recognition of the need for strong communication skills. Addressing this need involves enhancing medical curricula, providing continuous training, and fostering a culture that values patient-centered communication in the healthcare system.

CONCLUSION

Considering the high NAS scores, communication skills training at Subbaiah Institute of Medical Sciences can be modified and strengthened. Regular workshops, and training session on communication skills should be part of ongoing professional development for all the medical students. Senior doctors and mentors can play a crucial role in modeling effective communication techniques and guiding medical students in developing these skills.

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