A STUDY ON ATTITUDE OF MEDICAL STUDENTS TOWARDS LEARNING OF COMMUNICATION SKILLS
S. P. Venkatesh¹, K. Soundariya², V. Deepika³

HOW TO CITE THIS ARTICLE:
S. P. Venkatesh, K. Soundariya, V. Deepika. "A Study on Attitude of Medical Students towards Learning of Communication Skills". Journal of Evolution of Medical and Dental Sciences 2014; Vol. 3, Issue 27, July 07; Page: 7567-7573, DOI: 10.14260/jemds/2014/2937

ABSTRACT: BACKGROUND: Effective physician – patient communication is very important to positive health outcomes. Assessment of attitude of medical students towards learning communication skills may help medical educators to devise effective plans to orient the students towards learning communication skills. Owing to the scarcity of data in Indian context, the present study aimed to assess the attitude of medical students towards learning communication skills at a private medical college in Pondicherry, India. OBJECTIVES: 1. To assess the attitude of medical students towards learning communication skills. 2. To compare the results of attitude scores among the medical students. MATERIALS AND METHODS: A cross-sectional study involving 300 undergraduate medical students involving both male and female, in the age groups of 18-23 years were selected and were divided into five groups depending on their year of study. Data was collected using communication skills attitude scale (CSAS), which consists of 26 items, 13 indicative of positive attitude and 13 indicative of negative attitude toward learning communication skills. The positive and negative attitude scale scores were calculated and compared among different groups using SPSS software version 22. P < 0.05 was considered to be statistically significant. RESULTS: The mean scores for Positive attitude scale (PAS) and Negative attitude scale (NAS) of the medical students were 51.7±6.92 and 29.8±5.98 respectively. There was no statistically significant gender difference in the PAS and NAS scores. However significant differences were observed between the groups. First year medical students had a significantly lower PAS and high NAS scores compared to the other groups (p < 0.0001). CONCLUSION: Medical students have strong positive attitudes towards learning communication skills; hence communication skill training programs may be incorporated in the undergraduate medical curriculum. However negative attitudes should not be ignored, as they may subdue the importance of such programs. Further difference in experiences of interaction with patients does interfere with the perception of the importance of learning communication skills. KEYWORDS: Attitude, Communication skills, Medical students.

INTRODUCTION: Our ability to exchange ideas with others, understand their perspectives and solve their problems will depend significantly on how effectively we are able to communicate with them. The Medical council of India, at the time of graduation, expects a medical student to be competent enough in communicating adequately, sensitively, effectively and respectfully with patients in a language that the patient understands better and in a manner that will improve patient satisfaction and health care outcomes.¹

The physician’s interpersonal skills, including active listening to the patient’s concerns also largely determine the patient’s satisfaction and compliance and these are some of the qualities desired by the patients.² Unfortunately, in a study by McBride et al.,³ patients rated their own physician’s communication skills to be unsatisfactory. A review of studies on physician-patient
relation, demonstrated a significant correlation between effective physician-patient communication and improved patient health outcomes.\textsuperscript{4} Hence it becomes logical to introduce communication skill training program to the medical undergraduates.

A few studies have shown that communication training programs significantly enabled the medical students to acquire competencies in clinical encounters.\textsuperscript{5, 6} This subject of communication skills training is well established in most medical schools across US and UK. The Medical Council of India has proposed in its document “Vision 2015” the introduction of a “Foundation course” for the first two months in the first year course of MBBS, which includes an orientation towards learning communication skills.\textsuperscript{1}

Effectiveness of a communication skill training program could be improved if we had a greater understanding of the students’ beliefs and attitudes towards doctor – patient communication. Attitude has 3 components – cognitive, emotional and behavioral. Hence attitude strongly influences the behavior of the individual. Communication is a learned skill. Attitude and desire to learn do influence learning. Hence exploring the attitudes of the medical students becomes crucial before implementation of a communication skill training program, because negative attitudes may impede the success of a training program and ways are need to be sought to improve the effectiveness of such programs.

Literature shows a number of studies on the attitude of medical students towards learning communication skills in the western context,\textsuperscript{7, 8} but hardly any in Indian context. Hence the present study aimed to assess the attitude of medical students towards learning of communication skills at a private medical college in Pondicherry, India.

MATERIALS AND METHODS: This was a cross sectional study conducted in Sri Manakula Vinayagar Medical College and Hospital, Pondicherry. After obtaining permission from the Institutional Ethical Committee, 60 students in the age group of 18-23 years were selected as representatives from each year (from first year to Internship), by simple random sampling, including both male and female medical students, making it to a total of 300. Informed consent was obtained from all the study participants. Students were requested to mention only their age, sex and year of study in the proforma to avoid social desirability bias. Based on their year of study, they were divided into five groups:

- Group I: First year medical students
- Group II: Second year medical students
- Group III: Third year medical students
- Group IV: Final year medical students
- Group V: Interns

The attitude of medical students towards learning communication skills was assessed using “Communication Skill Attitude Scale”, designed by Rees et al.\textsuperscript{9} The communication skill attitude scale is a self-report questionnaire, with 26 items. In this 13 items (items 4,5,7,9,10,12,14,16,18,21,22,23 and 25) represent positive attitudes towards learning communication skills and other 13 items (items 1,2,3,6,8,11,13,15,17,19,20,24 and 26) represent negative attitudes towards communication skills learning. Positive and negative statements are randomly interspersed throughout the instrument. All of the 26 items are accompanied by 5-point Likert scales, ranging from strongly agree (score 5) to strongly disagree (score 1). The positive attitude scale (PAS) score was obtained by
adding the scores of items 4, 5, 7, 9, 10, 12, 14, 16, 18, 21, 23, 25 and the reversed score of item 22. The negative attitude scale (NAS) score was obtained by adding the scores of items 2, 3, 6, 8, 11, 13, 15, 17, 19, 20, 24, 26 and the reversed score of item 1. The score for each scale (Positive or Negative attitude) may range from 13 to 65 where higher scores indicate stronger positive attitudes or stronger negative attitudes towards communication skills learning. The internal consistency of the two subscales as measured by Cronbach’s α were 0.837 (PAS) and 0.710 (NAS).

Data Analysis: Data were analyzed using SPSS version 22 software and P<0.05 was considered statistically significant. Analysis of the data included comparisons of the mean scores of CSAS subscales and reliability analysis of the CSAS subscale. The students’ t-test was used to compare the mean scores of male and female medical students. One way ANOVA was used to compare the means between the various study groups.

RESULTS: Out of the 300 students who completed the questionnaire satisfactorily, 114 (38%) study participants were male medical students and 186 (62%) were female medical students. The mean age of the study participants was 20.77±1.81. The mean scores for Positive attitude scale (PAS) and Negative attitude scale (NAS) of the medical students were 51.7±6.92 and 29.8±5.98 respectively.

Table 1 shows the baseline characteristics of the male and the female medical students.

The mean scores for Positive attitude scale (PAS) and Negative attitude scale (NAS) of the male medical students were 50.9±7.60 and 29.9±6.05 respectively. The mean scores for Positive attitude scale (PAS) and Negative attitude scale (NAS) of the female medical students were 52.1±6.44 and 29.8±5.95 respectively.

| Variables | Male | Female |
|-----------|------|--------|
| n         | 114  | 186    |
| Age       | 20.8 ± 1.79 | 20.74 ± 1.84 |
| PAS       | 50.9 ± 7.60 | 52.1 ± 6.44 |
| NAS       | 29.9 ± 6.05 | 29.8 ± 5.95 |

**TABLE 1: BASELINE CHARACTERISTICS OF THE STUDY PARTICIPANTS**

Data are expressed as Mean ± S.D

PAS – Positive Attitude Scale Score
NAS – Negative Attitude Scale Score

Table 2 shows the gender wise difference in the mean positive and negative attitude scores of the medical students, in various groups. The mean values of the PAS were slightly higher in females, whereas the mean values of the NAS were slightly greater in males, however statistically it was not significant (p > 0.05).

| Groups | Males | Females |
|--------|-------|---------|
|        | n     | PAS     | NAS     | n     | PAS     | NAS     |
| I      | 22    | 39.3±5.25 | 38.4±3.41 | 38    | 45.1±6.40 | 37.9±2.90 |
| II     | 20    | 49.1±2.48 | 32.2±2.50 | 40    | 50.1±2.68 | 31.6±2.38 |
| III    | 26    | 52.6±4.40 | 28.8±3.40 | 34    | 53.1±4.70 | 28.8±4.10 |
| IV     | 24    | 54.9±5.41 | 26.0±4.56 | 36    | 54.9±5.45 | 25.7±4.61 |
| V      | 22    | 57.5±3.26 | 24.86±4.1 | 38    | 57.9±3.78 | 24.7±3.50 |

**TABLE 2: GENDERWISE COMPARISON OF POSITIVE ATTITUDE AND NEGATIVE ATTITUDE SCALE SCORES OF MEDICAL STUDENTS**
Data are expressed as Mean ± S.D.

PAS – Positive Attitude Scale Score.

NAS – Negative Attitude Scale Score.

p > 0.05 – Not significant.

Table 3 shows the group wise mean positive attitude scores of the medical students. There was a very significant difference in the mean PAS scores, within the groups (p < 0.001); however there was no significant difference in the mean PAS scores between the III year and the Final (IV) year students. Group I (I year students) had a very significant (p < 0.0001) low positive attitude scores compared to the other groups.

| Scores | I n = 60 | II n = 60 | III n = 60 | IV n = 60 | V n = 60 |
|--------|---------|----------|----------|---------|--------|
| PAS    | 43.0 ± 6.59†‡§|| 49.8 ± 2.65‡§|| 52.9 ± 4.58†§|| 54.9 ± 5.38†|| 57.8 ± 3.57†‡§|| |

**TABLE 3: GROUPWISE COMPARISON OF POSITIVE ATTITUDE SCALE SCORES OF MEDICAL STUDENTS**

Data are expressed as Mean ± S.D

PAS – Positive Attitude Scale Score

* between group I and other groups (p < 0.0001)
† between group II and other groups (p < 0.001)
‡ between group III and other groups (p < 0.001)
§ between group IV and other groups (p < 0.001)
|| between group V and other groups (p < 0.001)

Table 4 shows the group wise mean negative attitude scores of the medical students. There was a very significant difference (p < 0.0001) in the mean NAS scores, within the groups, however there was no significant difference in the mean NAS scores between groups IV (Final year students) and V (Interns).

| Scores | I n = 60 | II n = 60 | III n = 60 | IV n = 60 | V n = 60 |
|--------|---------|----------|----------|---------|--------|
| NAS    | 38.1 ± 3.08†‡§|| 31.8 ± 2.41‡§|| 28.8 ± 3.79†¶|| 25.8 ± 4.55†‡|| 24.7 ± 3.74†‡|| |

**TABLE IV: GROUPWISE COMPARISON OF NEGATIVE ATTITUDE SCALE SCORES OF MEDICAL STUDENTS**

Data are expressed as Mean ± S.D

NAS – Negative Attitude Scale Score

* between group I and other groups (p < 0.0001)
† between group II and other groups (p < 0.0001)
‡ between group III and other groups (p < 0.0001)
§ between group IV and other groups (p < 0.0001)
¶ between group V and other groups (p < 0.0001)
DISCUSSION: In the present study, the mean scores for Positive attitude scale (PAS) and Negative attitude scale (NAS) of the medical students were 51.7±6.92 and 29.8±5.98 respectively. The PAS scores are comparable with the other studies, however the NAS scores are very less than the scores of the medical students of Nepal, Sri Lanka and Iran. These results may motivate the implementation of “communication skill training program” to the medical students, as positive attitude reflects caring patient orientation, thus a better health outcome. Though the negative attitude scores are low, it should not be overlooked, because the negative attitudes may trivialize the importance of the learning of communication skills.

In the present study there were no significant gender differences in the positive and negative attitude scores of the medical students. Though these results go contradictory to many previous studies done in UK, Iran, two studies – one on Nepal medical students and other on Sri Lankan medical students observed a similar outcome. These controversial results suggest the need for more studies in the Indian context, in the future, that explores the gender difference in the attitude of medical students towards learning communication skills.

Further, comparison of the PAS and NAS scores between various groups shows that the first year medical students have a significantly low positive attitude scores and high negative attitude scores compared to the other groups. Final year students did not have a significant difference in the PAS scores with the third year students and NAS scores with the Interns. Interns (group V) had higher PAS scores and lower NAS scores compared to the other groups.

These results are consistent with few other studies. These results can be explained by the fact that, in first and second year of MBBS, the students are primarily dealt with class room lectures, whereas third and fourth-year medical student training is much more focused on clinical work, and Interns work in the real clinical environment.

Further first year medical students’ exposure to difficult medical communication situations (such as discussing sensitive issues with patients or breaking bad news) is often limited to textbook descriptions, and this may lead them to be false confident about their abilities to handle them effectively. Thus difference in experiences of interaction with patients does interfere with the perception of the importance of learning communication skills.

CONCLUSION: Overall, in the present study we observed a high positive attitude and a low negative attitude score among medical students, towards the learning of communication skills. The affective domain of learning consists of attitudes, values, motivation, and feelings toward the information a person is learning, and is hierarchical.

The lowest level includes behaviors such as awareness of a phenomena and willingness to pay attention to it and at the top of the affective domain hierarchy, individuals internalize values about what they are learning, and they tend to behave in ways that are consistent with these values. In our study, a good positive attitude score of the medical students towards learning communication skills discloses the medical students’ perception over the importance of communication skills in medical practice.

Also, a medical student who has internalized positive values associated with communication skills training would likely behave in ways that are consistent with those values, such as listening to patients more, explaining treatments in ways that the patient will understand, and attending to the physical, psychological, and social needs of the patients. However negative attitude scores though
low, in our study, cannot be ignored, as they may belittle the “Communication skill training” component in the undergraduate medical curriculum.

Hence, it is recommended that communication skill training programs may be incorporated in the undergraduate medical curriculum which can improve student's knowledge, change negative attitudes and enable them to acquire specialized competence in communication, thereby favor a better health outcome.

REFERENCES:

1. Medical Council of India. VISION 2015 [Internet]. New Delhi:2011 Mar; Available from: www.mciindia.org
2. Simpson M, Buckman R, Stewart M et al. Doctor - patient communication. The Toronto Consensus statement. BMJ 1991; 303: 1385 -1387.
3. McBride CA, Shugars DA, DiMatteo MR, Lepper HS, O Neil EH, Damush TM. The physician's role. Views of the public and the profession on seven aspects of patient care. Arch Fam Med 1994; 3: 948-53.
4. Stewart MA. Effective Physician – patient communication and health outcomes: A review. CAN MED ASSOC J 1995; 152 (9): 1423 -33.
5. Simmenroth-Nayda A, Weiss C, Fischer T, Himmel W. Do communication training programs improve students’ communication skills? - A follow-up study. BMC Research Notes 2012; 5: 486.
6. Shama ME, Meky FA, Abou El Enein NY, Mahdy MY. The effect of a training program in communication skills on primary health care physician's knowledge, attitudes and self-efficacy. J Egypt Public Health Assoc 2009; 84: 261-283.
7. Rees C, Sheard C. The relationship between medical students’ attitudes towards communication skills learning and their demographic and education-related characteristics. Med Educ 2002; 36 (11): 1017-27.
8. Rees C, Sheard C. Evaluating first-year medical students' attitudes to learning communication skills before and after a communication skills course. Med Teach 2003; 25 (3): 302-7.
9. Rees C, Sheard C, Davies S. The development of a scale to measure medical students’ attitudes towards communication skills learning: the Communication Skills Attitude Scale (CSAS). Med Educ 2002; 36 (2): 141-7.
10. Fazel I, Aghamolaei T. Attitudes toward learning communication skills among medical students of a university in Iran. Acta Med Iran 2011; 49: 625-629.
11. Shankar RP, Dubey AK, Mishra P, Deshpande VY, Chandrasekhar TS, Shivananda PG. Student attitudes towards communication skills training in a medical college in Western Nepal. Educ Health (Abingdon) 2006; 19(1): 71-84.
12. Neupane MS, Neupane HC, Adhikari S, Aryal B. Attitude towards learning communication skills in medical students of Chitwan Medical College, Chitwan, Nepal. IJBPA 2012; 3 (5): 1058-1061.
13. Marambe KN, Edussuriya DH, Dayaratne KMPL. Attitudes of Sri Lankan medical students towards learning communication skills. Educ Health (Abingdon) 2012; 25: 165- 171.
14. Shankar PR, Dubey AK, Balasubramaniam R, Dwivedi NR. Student attitude towards communication skills learning in a Caribbean medical school. AMJ 2013; 6 (9): 466-475.
15. Khashab S S. Attitudes of Alexandria medical students towards communication skills learning. J Egypt Public Health Assoc. 2006; 81: 356-372.
16. Wright KB, Bylund C, Ware J, Parker P, Query JL, Baile W. Medical student attitudes toward communication skills training and knowledge of appropriate provider-patient communication skills: A comparison of first-year and fourth-year medical students. Med Educ Online [serial online] 2006; 11: 18.

AUTHORS:
1. S. P. Venkatesh
2. K. Soundariya
3. V. Deepika

PARTICULARS OF CONTRIBUTORS:
1. Assistant Professor, Department of Surgery, Sri Manakula Vinayagar Medical College and Hospital.
2. Assistant Professor, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital.
3. Assistant Professor, Department of Physiology, Sri Manakula Vinayagar Medical College and Hospital.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:
Dr. S. P. Venkatesh,
Department of Surgery,
Sri Manakula Vinayagar Medical College and Hospital,
Kalitheerthakkuppm,
Pondicherry-605107.
Email: drvenkateshsp@gmail.com

Date of Submission: 21/06/2014.
Date of Peer Review: 23/06/2014.
Date of Acceptance: 30/06/2014.
Date of Publishing: 07/07/2014.