

Original Research Article

Non-verbal communication skills among teaching staff and medical students in a medical educational Institution in Khammam, Telangana, India

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ABSTRACT

Background: Non-verbal communication is generally defined as the aspect of communication that is not expressed in words. Through the use of non-verbal communication, teachers can draw student's attention to more understanding and motivate students, and even bring excitement to the boredom students. Effective communication improves patient satisfaction. The objectives were to assess and to compare non-verbal communication skills among medical teaching staff and the students.

Methods: A cross-sectional study was conducted from July 2022 to August 2022 in an educational institution. The data was collected using a questionnaire. The questionnaire was downloaded from Questmeraki website. The questions on non-verbal communication skills were quantified on a five-point Likert scale. The participants scores were categorized and compared.

Results: As per the scores scored for non-verbal communication skills, among the teaching staff, 85.7% scored good score, and 14.3% scored excellent. Among the students, 82.1 scored good score, and 14.5% scored excellent. Though the teaching staff scored better than the students, the difference was not significant ($p=0.068$).

Conclusions: It is necessary for the teaching staff and the students to practice and learn effective communication skills, so that, it helps in successful interaction with the students and the patients, and among themselves.

Keywords: Medical students, Non-verbal communication skills, Questionnaire, Teaching staff

INTRODUCTION

Non-verbal communication is generally defined as the aspect of communication that is not expressed in words.¹ Patterson's (1983) lists different non-verbal involvement behaviours.² Kinesics is the study of how we use body movement and facial expressions. We interpret a great deal of meaning through body movement, facial expressions, and eye contact. Facial expressions are a primary method of sharing emotions and feelings. Haptics is the study of touch. We use touch to share feelings and relational meanings. Personal appearance, objects, and artifacts are also types of non-verbal communications we use to

communicate meaning to others. Proxemics is the study of how our use of space influences the ways we relate with others. Chronemics is the study of how people use time. Paralanguage is the term we use to describe vocal qualities such as pitch, volume, inflection, rate of speech, and rhythm.³

Through the use of non-verbal communication, teachers draw student's attention to more understanding and motivate the students, and even bring excitement to the boredom students.⁴ Nonverbal communications has been claimed to account for up to 93% of the impact of any verbal communication.⁵

Non-verbal communication plays an important role in patient care. The patient will never care how much you know, until they know how much you care. Doctors' effective communication improves patient satisfaction, reduces medical errors, and improves patient compliance to medication and treatment regimens. It helps in enhancing doctor-patient relationship and built trust. It also helps to express empathy towards patient's suffering.⁶ The positive clinical outcomes were relatively consistent across several studies in relation to non-verbal communication skills.⁷

The objectives of the study were to assess and to compare non-verbal communication (NVC) skills among teaching staff and medical students.

METHODS

A cross-sectional study was conducted from August 2022 to September 2022 among 171 teaching staff and 150 medical students in an educational institution in Khammam, Telangana. The information (data) was collected by using a semi-structured questionnaire. The questionnaire was self-administered for 20-25 minutes. All the teaching staff and medical students of Final year part I who were available and willing to participate were included, and who were not available and not willing to participate were excluded from the study.

The questionnaire was downloaded from Questmeraki website. The questions on non-verbal communication skills were quantified on a five-point Likert scale. Scale ranges from 1 to 5 points or responses. Each participant total score was obtained by adding all responses. The participants total scores were divided into (levels) less than 65, 66-130, 131-195 and more than 195. Less than 65 score corresponds to low level of non-verbal skills and needs improvement, 66-130 score corresponds to moderate level of non-verbal skills, 131-195 score corresponds to good level and more than 195 corresponds to excellent level of non-verbal skills.⁸ The questionnaire also includes participants' details like age, gender and designation. Written informed consent was obtained from all the participants. The study obtained ethical approval from the institutional ethics committee.

Statistical analysis

Data was analysed by using IBM statistical package for the social sciences (SPSS) software version 27. The data was represented by frequencies and percentages. The significance of difference between the scores of the groups was analysed by applying Mann-Whitney U test. P value ≤0.05 was considered as significant.

RESULTS

Out of the available 171 teaching staff and 150 medical students, 49 teaching staff members and 117 medical students participated in the study. Convenience sampling

was used. In the teaching staff group, there were 29 (59.2%) male staff members and 20 (40.8%) female staff members; and their mean age was 38.67±8.4 years (Table 1). In the student group, there were 40 (34.2%) male students and 77 (65.8%) female students; and their mean age was 22.2 years (Table 2).

Table 1: Demographic characteristics of the teaching staff.

Teaching staff	Number	Percentage
Mean age (years)	38.67±8.4	
Gender		
Male	29	59.2
Female	20	40.8
Designation		
Tutor/SR	18	36.7
Assistant Professor	12	24.5
Associate Professor	8	16.3
Professor	11	22.5
Total	49	100

Table 2: Demographic characteristics of the final year part I medical students.

Medical students	Number	Percentage
Mean age (years)	22.2	
Gender		
Male	40	34.2
Female	77	65.8
Total	117	100

As per the scores scored for NVC skills, among the teaching staff, 7 (14.3%) scored excellent, 42 (85.7%) scored good, and no one got moderate and low scores. Among the students, 17 (14.5%) scored excellent, 96 (82.1) scored good, 4 (3.4%) scored moderate scores and no one got low score (Figure 1).

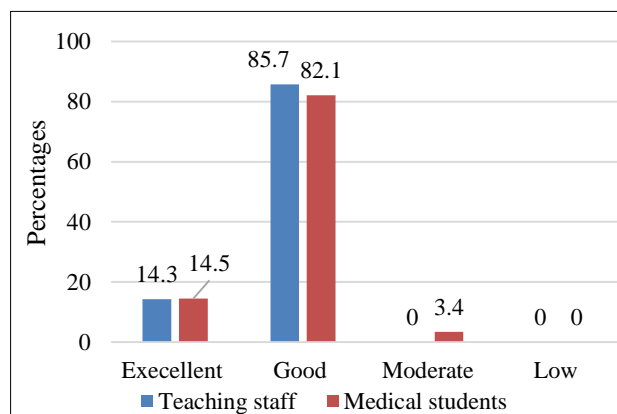


Figure 1: Percentage of teaching staff and medical students scores for various levels of NVC skills.

The calculated mean (NVC) scores of the staff members (177.8±16.6) were greater than the mean scores of the

students (171.6±20.9). There was no significant difference in the mean rank (scores) between the students and the staff members (p=0.068).

DISCUSSION

The staff members had higher age than students and also their mean scores were higher than the students score. According to pediatric dentistry infancy through adolescence book, higher age group children (6-9 years) were able to correctly identify emotions associated with facial expressions depicted in photographs as compare to 3 years old children.⁹

In the study, there is no difference (p=0.482) in the mean scores of the participants according to the gender. In a study conducted in Hamburg, Germany among undergraduate medical students, female students displayed significantly more signs of non-verbal communication, and also non-verbal communication correlated significantly with verbal communication and with empathy as compared to male students.¹⁰

The purpose of communication is to teach and learn new knowledge and skills. Thus, communication is essential for human interaction, between parents and children, among workers, between employers and employees, and even between wife and husband.¹¹ NVC is also culturally determined. It indicates the speaker's emotional state.¹²

CONCLUSION

All acts of behaviours which were performed, were perceived either consciously or subconsciously. NVC is subtler and more effective than verbal communication, and it can convey better meaning than words. For example, a smile can convey feelings better than words.

It is necessary for the students and teaching staff to practice and learn effective communication skills, that helps in interact with their colleagues and the patients, with a large group or small group of persons.

The limitations of the study were, the teaching staff participation was less and we cannot reach all the departments for data collection as the data was collected based on convenience. The questionnaire was not standardized.

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Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

REFERENCES

1. Hess U. Non-verbal Communication. Howard S. Friedman, Charlotte H. Markey, editors.

Encyclopedia of Mental Health. Third edition. Amsterdam, Netherlands: Elsevier Academic Press. 2023.

2. Remland M, Jones TS. The effects of nonverbal involvement and communication apprehension on state anxiety, interpersonal attraction, and speech duration. *Communication Quarterly*. 1989;37(3):170-83.
3. Survey of Communication Study/Chapter 3 - Nonverbal Communication. Wikibooks. 2023. Available at: https://en.wikibooks.org/w/index.php?title=Survey_of_Communication_Study/Chapter_3_-_Nonverbal_Communication&oldid=4240777. Accessed on 08 May 2023.
4. Bambaerero F, Shokrpour N. The impact of the teachers' non-verbal communication on success in teaching. *J Adv Med Educ Prof*. 2017;5(2):51-9.
5. Phillips J. Nonverbal Communication: An Essential Skill in the Workplace. *Aust Med Record J*. 1993;23(4):132-4.
6. Honavar SG. Patient-physician relationship - Communication is the key. *Indian J Ophthalmol*. 2018;66(11):1527-8.
7. Henry SG, Fuhrel-Forbis A, Rogers MAM, Eggly S. Association between Nonverbal Communication during Clinical Interactions and Outcomes: A Systematic Review and Meta-Analysis. *Patient Educ Counseling*. 2012;86(3):297-15.
8. Questmeraki non-verbal communication. 2018. Available at: <http://questmeraki.com/wp-content/uploads/2018/01/Questionnaire-Nonverbal-communication.pdf>. Accessed on 01 July 2022.
9. Nowak Arthur J, Christensen JR, Tad R, Mabry TR, Townsend JA, Martha Wells, editors. *Pediatric Dentistry: Infancy through Adolescence*. Sixth edition. Philadelphia, PA: Elsevier. 2019.
10. Vogel D, Meyer M, Harendza S. Verbal and non-verbal communication skills including empathy during history taking of undergraduate medical students. *BMC Med Educ*. 2018;18(1):157.
11. Ali A, Nasreen S, Wajdi MA. An Observational Study of Verbal and Nonverbal Communication in Female and Male University Students. *Pak J Gender Stud*. 2019;19(1):1-18.
12. Positive Communication Nonverbal Communication Skills: 19 Theories & Finding. 2021. Available at: <https://positivepsychology.com/nonverbal-communication/>. Accessed on 20 October 2023.

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