**Original Research Article**

**Knowledge and attitude towards basics of communication skills amongst resident doctors**

Kalidas D. Chavan¹*, Purushottam A. Giri², Sachin S. Mumbre³, Rajendra S. Bangal⁴

¹Registrar, Maharashtra University of Health Sciences, Nashik, Maharashtra, India
²Department of Community Medicine, IMSR Medical College, Badnapur, Jalna, Maharashtra, India
³Department of Community Medicine, Ashwini Rural Medical College, Solapur, Maharashtra, India
⁴Department of Forensic Medicine and Toxicology, Smt. Kashibai Navale Medical College, Pune, Maharashtra, India

Received: 22 July 2019  
Accepted: 23 July 2019

*Correspondence:  
Dr. Kalidas D. Chavan,  
E-mail: kdchavan17@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

**ABSTRACT**

**Background:** The pillar of doctor patient relationship is the bond of mutual trust. This pillar is strengthened by effective communication between doctor and patient/relatives. It has been widely accepted that a doctor needs to have very good communication skills in addition to clinical knowledge and skills required for effective healthcare. Every doctor duly needs to demonstrate humanity, healthy behaviour, as well as sensible communication with patients which can build the sustainable ‘trust’ in the treatment offered by that doctor. However, the current curriculum of medical courses is enormously focused on providing competent medical knowledge but lacking the focus on inculcating communication skills.

**Methods:** A cross sectional study was carried out amongst 377 resident doctors of first to third year, from randomly selected medical colleges of Maharashtra having postgraduate courses in clinical subjects and affiliated to Maharashtra University of Health Sciences, Nashik, Maharashtra, India during the period of February 2017 to January 2019. Data was entered in MS Excel sheet and analyzed using percentages and proportions wherever appropriate.

**Results:** Highest study respondents were from General Medicine with 13% of total and having 17.4% males and 8% females among respective genders followed by General surgery and Pediatrics residents with 12.5% each specialty.

**Conclusions:** The study has shown that there was varied knowledge about the communication skills among the resident doctors. The residents have shown fair attitudes and behaviours towards mindfulness and basic communication skills.

**Keywords:** Attitude, Communication skills, Knowledge, Resident doctors

**INTRODUCTION**

Medicine is an art whose efficacy and creative ability has long been recognized as residing in the interpersonal aspects of patient-physician relationship.¹ The pillar of doctor patient relationship is the bond of mutual trust. This pillar is strengthened by effective communication between doctor and patient/relatives. It has been widely accepted that a doctor needs to have very good communication skills in addition to clinical knowledge and skills required for effective healthcare. Every doctor duly needs to demonstrate humanity, healthy behavior, as well as sensible communication with patients which can build sustainable ‘trust’ in the treatment offered by that doctor. However, the current curriculum of medical courses is enormously focused on providing competent medical knowledge but lacking the focus on inculcating communication skills. Although medical curriculum did
The relationship began with an imbalance as the doctor being considered an expert and the patient being considered in need. That is the reason why doctors held more power and prestige than the patients and the patients were expected to passively follow doctors. But current scenario has changed drastically. Now patients and relatives expect minute details of the disease and treatment options. Compounded with the availability of information on internet, these expectations can turn into an inquiry. So, doctors need to be very effective in communicating with all stakeholders. However, there is neither formal training nor there is emphasis on communication skills in the present curriculum. There is no study evaluating the knowledge and attitude of resident doctors regarding the basics of communication skills and other related aspects. Hence, this study was conducted to assess the knowledge and attitude of resident doctors in relation to various aspects of basics of communication skills.

METHODS

A cross-sectional study was carried out during the period of two years i.e. February 2017 and January 2019 amongst 377 resident doctors of randomly selected Medical Colleges having postgraduate courses and rendering patient care including diagnostic and treatment facilities in teaching hospitals. The study population consisted of resident doctors of first to third year, from randomly selected medical colleges of Maharashtra having postgraduate courses in clinical subjects i.e. Anesthesiology, Respiratory Medicine, Dermatology, Venerology and Leprosy, Otorhinolaryngology, General Medicine, General Surgery, Obstetrics and Gynecology, Ophthalmology, Orthopaedics, Pediatrics, Psychiatry, Radio-diagnosis as well as Community Medicine and Pathology for more than three years and affiliated to Maharashtra University of Health Sciences, Nashik.

The study involved intervention. So, the sample size calculation considered other aspects of the study. Required sample size was calculated using G* power software. Following parameters were considered for calculating the sample size and based on the findings of the pilot study.

Type 1 error (α error)=0.05; Type 2 error (β error)=0.2; Power=1-β=0.8; Effect size=0.15 and Tails=2 (Two tailed).

Considering these above parameters, the required sample size was 377.

In order to meet desired sample level, a multistage sampling was used. The primary sampling unit of the study was Medical colleges and the secondary sampling unit was residents studying in clinical subjects as well as Community Medicine and Pathology.

Inclusion criteria

- Medical colleges affiliated to Maharashtra University of Health Sciences
- Medical colleges having post graduate courses in clinical subjects as well as Community Medicine and Pathology for more than three years
- Resident doctors pursuing post graduate medical education under Maharashtra University of Health Sciences.

Exclusion criteria

- Medical Colleges not willing to take part in the study
- Medical colleges who conducted the training on communication skills before the study
- Resident doctors not willing to undergo the training on communication skills.

A pilot study was conducted involving 106 samples from 2 colleges. The outcome of the pilot study was used to fine-tune the questionnaire. The data collection methodology was also tested in the pilot study. The effective size determined in the pilot study was used to estimate the required sample size for this study. A structured proforma was designed and questionnaire was validated. This tool, used to collect the data, consisted of close ended questions on five point Likert scale to record the impression of respondents.

Selected institutes were visited personally by the investigators to get the required permissions from the local authorities and to finalize the schedule for the study. The finalized schedule was communicated to all resident...
doctors from clinical subjects as well as Community Medicine and Pathology from first year to third year, and then they were appealed to participate in the study.

On the scheduled date, investigators personally conducted the study by following the pre-determined protocol. All the participants were initially briefed about the study. They were explained about possible outcomes, benefits and risks in the study. Data was entered in MS Excel and analyzed using percentages and proportions wherever appropriate.

RESULTS

Present study was conducted across 10 medical colleges in the state of Maharashtra involving 201 male and 176 female students with 53.7% and 46.7% contribution by respective genders. Although it was expected to involve equal study respondents from all the colleges, the number of respondents varied from a minimum of 7 from Institute of Naval Medicine INHS ASHWINI, Colaba, Mumbai, to maximum of 72 from Grant Government Medical College, JJ Hospital, Byculla, Mumbai, Maharashtra, India.

As Table 1 indicates the age and gender wise distribution of resident doctors participated in the study. Total 83.02% residents were from age group 25-30 with 83.5% males and 82.39% females from individual groups. This was followed by 9.28% residents from age group <25 with 5.97% males and 13.07% females. 6.37% residents represented age group 31-35 with 8.46 % males and 6.37% females.

The least representation was from age group >35 with only 1.33% residents. Hence, age group 25-30 in the subsequent results and discussion will represent the major perceptions and impressions from the resident doctors.

Table 1: Age and Gender wise distribution of the study respondents.

| Age group | Males | Females | Total |
|-----------|-------|---------|-------|
| <25 years | 12    | 23      | 35    |
| 25-30 years | 168   | 145     | 313   |
| 31-35 years | 17    | 07      | 24    |
| >35 years | 04    | 01      | 05    |
| Total     | 201   | 176     | 377   |

It was seen from Table 2 that highest study respondents were from General Medicine with 13% of total having 17.4% males and 8% females among respective genders. This was followed by General surgery and Pediatrics residents with 12.5% from each specialty.

Table 2: Specialty wise distribution of study respondents.

| Specialty                             | Males |     | Females |     | Total |     |
|---------------------------------------|-------|-----|---------|-----|-------|-----|
| General medicine                      | 35    | 17.4| 14      | 8.0 | 49    | 13  |
| Paediatrics                           | 20    | 10.0| 27      | 15.3| 47    | 12.5|
| General surgery                       | 39    | 19.4| 08      | 4.6 | 47    | 12.5|
| Orthopaedics                          | 31    | 15.4| 02      | 1.1 | 33    | 8.8 |
| Ophthalmology                         | 12    | 6.0 | 20      | 11.4| 32    | 8.5 |
| Obstetrics and gynaecology            | 04    | 2.0 | 25      | 14.2| 29    | 7.7 |
| Radiology                             | 17    | 8.5 | 7       | 4.0 | 24    | 6.4 |
| Otorhinolaryngology                   | 11    | 5.5 | 12      | 6.8 | 23    | 6.1 |
| Dermatology, venerology and leprosy   | 07    | 3.5 | 13      | 7.4 | 20    | 5.3 |
| Anaesthesiology                       | 06    | 3.0 | 14      | 8.0 | 20    | 5.3 |
| Pathology                             | 04    | 2.0 | 16      | 9.1 | 20    | 5.3 |
| Psychiatry                            | 07    | 3.5 | 08      | 4.6 | 15    | 4.0 |
| Respiratory medicine                  | 06    | 3.0 | 07      | 4.0 | 13    | 3.4 |
| Community medicine                    | 02    | 1.0 | 03      | 1.7 | 05    | 1.3 |
| Total                                 | 201   | 100 | 176     | 100 | 377   | 100 |

It was seen from Table 3 that around 89.9% resident doctors felt that emotional intelligence is an important factor, out of that around 44% strongly agreed to this fact. The study also revealed that about 60% residents agreed that doctor has the duty to completely cure the patient. Out of this, 16.4% strongly agreed to it. Also, 89.2% residents could identify the physical and mental spectrum...
of the health; out of which 40.1% residents strongly agreed to the statement that health is the complete physical and mental well-being of the patient. The present study also revealed that around 86.2% residents agreed to the fact that mindfulness can help to prevent burnout in doctors. Out of which 34.7% residents strongly agreed to it.

Table 3: Knowledge and attitude of the resident doctors on Likert scale.

| Questions on knowledge and attitude                                                                 | Likert scale         | No. | %     |
|-----------------------------------------------------------------------------------------------------|----------------------|-----|-------|
| Doctor has a duty to provide reasonable care to a patient only when a patient pays the fee           | Strongly disagree    | 184 | 48.8  |
|                                                                                                     | Disagree             | 130 | 34.5  |
|                                                                                                     | Uncertain            | 23  | 6.1   |
|                                                                                                     | Agree                | 22  | 5.8   |
|                                                                                                     | Strongly agree       | 18  | 4.8   |
| Emotional intelligence has an important role in team building                                      | Strongly disagree    | 08  | 2.1   |
|                                                                                                     | Disagree             | 06  | 1.6   |
|                                                                                                     | Uncertain            | 25  | 6.6   |
|                                                                                                     | Agree                | 172 | 45.6  |
|                                                                                                     | Strongly agree       | 166 | 44.0  |
| A Doctor has a duty to completely cure the patient                                                  | Strongly disagree    | 19  | 5.0   |
|                                                                                                     | Disagree             | 88  | 23.3  |
|                                                                                                     | Uncertain            | 73  | 19.4  |
|                                                                                                     | Agree                | 136 | 36.1  |
|                                                                                                     | Strongly agree       | 61  | 16.2  |
| Health is defined as complete physical and mental well-being of the patient                        | Strongly disagree    | 11  | 2.9   |
|                                                                                                     | Disagree             | 19  | 5.0   |
|                                                                                                     | Uncertain            | 11  | 2.9   |
|                                                                                                     | Agree                | 185 | 49.1  |
|                                                                                                     | Strongly agree       | 151 | 40.1  |
| Mindfulness can help to prevent burnout in the doctor                                               | Strongly disagree    | 06  | 1.6   |
|                                                                                                     | Disagree             | 07  | 1.9   |
|                                                                                                     | Uncertain            | 39  | 10.3  |
|                                                                                                     | Agree                | 194 | 51.5  |
|                                                                                                     | Strongly agree       | 131 | 34.7  |

Table 4 shows the response of resident doctors in the study group on knowledge and attitude on basics of communication skills. 70% residents agreed to the statement “Doctor needs to talk in layman’s language with all patients coming to him”. Out of which 23.3% residents strongly agreed with the statement. Results disclosed that 94.2% residents agreed with the statement, ‘The doctor should inform the patient of all treatment choices available, their pros and cons and arrive at shared decision with the patient’, out of which 58.1% residents strongly agreed to the statement. 55.2% residents agreed to the statement “Empathy gets reduced during the period of medical training”. Out of this, 9.8% residents strongly agreed with the statement. Around 23.9% residents strongly disagreed to the fact that listening is same as hearing the spoken words. This was followed by 37.9% residents who disagreed, and 13.5% residents were uncertain about the fact. It is revealed from perception of residents that, 44.8% residents agreed to the fact that medical knowledge without emotional intelligence is useless.

DISCUSSION

Emotional intelligence is important to control and express one’s emotions, and to handle interpersonal relationships judiciously and empathetically. With this reference, an attempt was made to understand the perception of resident doctors on the role of emotional intelligence in team building. Around 89.9% residents agreed that, emotional intelligence is important in team building. All patients approaching to a doctor expect medical treatment with all the knowledge and skill that the doctor possesses to bring relief to his medical illness.
Table 4: Knowledge and attitude of the resident doctors on various parameters of basics of communication skills.

| Parameter | Likert scale | No. | %  |
|-----------|--------------|-----|----|
| A doctor needs to talk in layman’s language with all patients coming to him | Strongly disagree | 17 | 4.5 |
| | Disagree | 47 | 12.5 |
| | Uncertain | 49 | 13.0 |
| | Agree | 176 | 46.7 |
| | Strongly agree | 88 | 23.3 |

| Parameter | Likert scale | No. | %  |
|-----------|--------------|-----|----|
| A doctor should inform patient of all treatment choices available, their pros and cons and arrive at a shared decision with the patient | Strongly disagree | 08 | 2.1 |
| | Disagree | 03 | 0.8 |
| | Uncertain | 11 | 2.9 |
| | Agree | 136 | 36.1 |
| | Strongly agree | 219 | 58.1 |

| Empathy gets reduced during the period of medical training | Strongly disagree | 22 | 5.8 |
| Disagree | 67 | 17.8 |
| Uncertain | 80 | 21.2 |
| Agree | 171 | 45.4 |
| Strongly agree | 37 | 9.8 |

| Listening is the same as hearing the spoken words | Strongly disagree | 90 | 23.9 |
| Disagree | 143 | 37.9 |
| Uncertain | 51 | 13.5 |
| Agree | 61 | 16.2 |
| Strongly agree | 32 | 8.5 |

| Medical knowledge without emotional intelligence is useless | Strongly disagree | 14 | 3.7 |
| Disagree | 42 | 11.1 |
| Uncertain | 66 | 17.5 |
| Agree | 169 | 44.8 |
| Strongly agree | 86 | 22.8 |

Therefore, an attempt was made to understand the perception of resident doctors regarding their duty to completely cure their patients. 60% residents agreed that doctor has the duty to completely cure the patient. To know the perception regarding health, all residents were asked how much they agree or disagree with the statement ‘Health is defined as complete physical and mental well-being of the patient’. 89.2% residents agreed that health is the complete physical and mental well-being of the patient. Out of which 40.1% residents strongly agreed to the statement.

Mindfulness is a simple form of meditation that allows people to really live in the moment, to be aware and attentive during everyday activities. Studies suggest that this can help physicians provide better care for their patients and help them to avoid burnout. In the stressful incidences mindfulness always help in maintaining the doctor patient relationship. Hence, the study also focused on understanding the awareness of resident doctors about mindfulness. The impression of resident doctors was recorded against a statement of ‘Mindfulness can help to prevent burnout in the doctor’.

Study revealed that around 86.2% residents agreed to the fact that mindfulness can help to prevent burnout in doctors. Out of which 34.7% residents strongly agreed to it. Even if it is a best medical advice in the world, it won’t do patients much good if they cannot understand it. Proceeding with a procedure requires the full understanding of risks and benefits.

There is no better way for a doctor to communicate with his patient other than direct communication. Even if a mediator/ translator is used; there are chances of miscommunication while conveying/ translating the message. With regard to this, an attempt was made to assess the impressions of the respondents on language of communication between doctor and patient. The study has showed that 70% of the residents realized the importance of communicating with patients in the language they understand. Shared decision making with patient’s participation in the medical practice always results in increased patient knowledge, adherence, and improved outcomes. If patients are aware of all options available, they can play active role in decisions related to their health care. This is being increasingly thought of as the model of choice for complex medical decisions involving more than 1 rational treatment option.

Keeping in view the importance of shared decision making with the patient, it is perceived that doctors
should inculcate the impression as that of experts. Hence, to assess the knowledge and attitude of the resident doctors towards the patient’s choices and their right to information they were asked whether ‘The doctor should inform the patient of all the treatment choices available, their pros and cons and arrive at a shared decision with the patient’. In this study, there were 94.2% residents agreed with the statement, in which 58.1% residents strongly agreed to it. Altruistic feeling among the medical students is one of the most important factors that promote communication skill; it is basically doing the non-selfish activities in order to benefit others. Empathy with patients is one of the obvious indexes of altruism among physicians and medical staff. Empathy is very much important in the physician-patient relationship. It is general impression that, a student’s empathy gets declined during medical school education. Hence, residents were asked about their opinion towards decrease in empathy during the period of medical training. More than half 55.2% residents agreed to the statement. Out of this, 9.8% residents strongly agreed with it.

A holistic approach involving considerations beyond treating a disease is what is required in the process of curing patients. It seeks several skills in a doctor along with technical expertise. Attention to the verbal and non-verbal components of the communication including patient listening is frequently neglected but equally important component of doctor patient relationship. The perception of resident doctors regarding listening as one of the important communication skills than mere hearing the spoken words, was recorded. Around 23.9% residents strongly disagreed to the fact that listening is same as hearing the spoken words. This was followed by 37.9% residents who disagreed, and 13.5% residents were uncertain about the fact.

**CONCLUSION**

The pretest study has shown that the knowledge about communication skills among the resident doctors varied. Residents have shown fair attitudes and behaviors towards mindfulness and basic communication skills. The study has highlighted the need of focussing on communication skills in the curriculum of post graduate studies.

**Funding:** No funding sources  
**Conflict of interest:** None declared  
**Ethical approval:** The study was approved by the Institutional Ethics Committee

**REFERENCES**

1. Hall JA, Roter DL, Rand CS. Communication of affect between patient and physician. J Health Soc Behav. 1981;22(1):18-30.  
2. Shukla AJ, Yadav VS, Kastury N. Doctor-Patient Communication: An Important But Often Ignored Aspect in Clinical Medicine. J Indian Acad Clin Med. 2010;2(3):208-11.  
3. Paul S. The Social Transformation of American Medicine: The Rise of a Sovereign Profession and the Making of a Vast Industry. New York: Basic Books, Inc; 1982:727-732.  
4. Talcott P. The Social System. Routledge and Kegan Paul Ltd; 1951:132-137.  
5. Faul F, Erdfelder E, Lang AG, Buchner A. G Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. Behav Res Methods. 2007;39(2):175-91.  
6. Faul F, Erdfelder E, Buchner A, Lang AG. Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. Behav Res Methods. 2009;41(4):1149-60.  
7. Rensis L. A technique for the measurement of attitudes. Arch Psychol. 1972;140:11-5.

**Cite this article as:** Chavan KD, Giri PA, Mumbre SS, Bangal RS. Knowledge and attitude towards basics of communication skills amongst resident doctors. Int J Res Med Sci 2019;7:xxx-xx.