Efficacy of a one day- workshop on communication and ethics on communication skills in undergraduate students in a tertiary level hospital in South-India

**KEYWORDS**

Communication skills, medical undergraduates, effect of communication workshop

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**Introduction**

Communication skills are an often under recognised and poorly utilized skill in todays' medical practice. Its role in improving patient care and interaction with other medical colleagues cannot be over-emphasized. It is the key to getting an accurate history and complete clinical examination as well as ensuring compliance with the treatment plan proposed.

In the current Indian medical setting, most medical training is directed toward eliciting history and performing a clinical examination with less importance to the communication skills involved in carrying out the same. Communication skills are not assessed as part of the curriculum and form a major shortfall in training and equipping young trainees for their future work.

Since this shortfall was recognised, we decided to undertake a training program for doctors in a tertiary level hospital in South India to deal with relevant topics to the current medical scenario in this hospital tailored to the work the trainees would have to undertake. Although a three day workshop would have been better to emphasise the need for good communication, the workshop was restricted to a single day owing to time constraints for students. The study was aimed to assess the felt need for communication skills workshops and to assess the degree of improvement in communication skills that the participants who attended the workshop achieved.

**Method**

Clerkship students (pre-final year) MBBS students were requested voluntarily to enrol in the 1 day workshop as part of their undergraduate training. The topics of the workshop that were assessed are represented in figure 1. These were chosen to be relevant to their training for clinical practice. Faculty members who had been part of communication workshops in the past and received informal training for the same were asked to take topics on the various aspects of communication in medical education. All faculty members have been certified in good clinical practice and ethical principles which are now mandatory for faculty members in accordance with the regulations set by the Medical Council of India.

Various methods of education were used to teach communication skills – role plays, educational games, interactive question and answer sessions and focus group discussions.

The participants were administered pre-test questionnaires prior to their training and post-test questionnaires after the workshop. The details of the pre-test and post-test scoring is in figure 2. The change in their scores before and after was evaluated using the statistical methods described below. There were other questions to assess the felt need and efficacy of the workshop. These are represented in figure 3.

A Focus group discussion was also held a month later to get qualitative data on the workshop.

**Statistical Analyses:**

Descriptive statistics was used, such as number and percentage for categorical variables and Mean and SD for the continuous variable. However, Pre and Post test scores difference suggested as non normal, Wilcoxon Signed Ranks test was used to compare Pre-test and Post-test scores. P value at 5% level significance was considered as statistical significance. Analysis was done using SPSS software version 16.0.

**Results**

Of the 100 pre-final year MBBS students, 66 students attended the workshop. Of these 57 completed their pre-test forms and 63 their post-test forms (Figure 4).

18/66 (27.2%) of the students were male and 37/66 (56.2%) were female. There were significant differences detected in the participants' score before and after the workshop in almost all the domains of communication that were covered in the workshop other than the domain of non-verbal communication. This is represented in Figure 5. The comparison between the pre-test and post-test scores of the men as compared with the women is represented in Figure 6. The women showing more differences in their pre-test and post test scores as compared to men.

71.4% (45/63) of participants felt the duration of the workshop was appropriate. 84.1% (53/66) of participants felt the time allotted for each session was appropriate. 92.1% and 93.7% of students felt the goals of the workshop had been covered and topics covered were relevant to them respectively. 77.4% (48/63) of students felt the workshop would impact the way they deal with patients in the future. A group feedback session with the students one month later uncover some qualitative data from the workshop which could not be put into statistics. After reviewing the topics of the workshop the group overall felt that it was a useful exercise. They felt that taking consent, breaking bad news and the importance of non-verbal communication were the more valuable sessions. They enjoyed the interactive nature, role playing activities, theme related games and the vibrant discussions that took place. They found the video sessions and role playing made them more self-aware of the nuances in their own patient interaction. The improvements suggested were that it would be more useful if conducted at the beginning of the clerkship program so there's more time to implement the skills learnt. They mentioned that such skills
will need to be re-affirmed through training. They felt having this workshop in the midst of clerkship is ideal as it carries a real clinical relevance.

Discussion
Effective communication between patients and doctors is vital to good treatment outcomes. Communication between the patient and physician as well as between physicians forms the basic framework of our diagnostic methods and treatment plans. The health team and the way the involved the affected individual affect outcomes to a large degree.

The purpose of our study was to demonstrate that if there was a change in current medical teaching in the Indian medical curriculum to include communication and medical ethics, the students would be better informed about the barriers to communication and how to overcome them in different clinical situations.

A similar study had been done following a four day workshop in another tertiary level hospital in India which tested change in communication skills following a 2 week interval after the communication workshop. The results of this study also showed the focussed training can enhance the skills of the medical students if it is included in their medical curriculum. Yet another workshop done in Japan suggested that short intensive small group seminars have an impact on specific communication skills such as skills for exploring the illness and how it is affecting a person’s life or the ideas/concerns the patient may have concerning a problem.

Several studies to date have demonstrated that female students have a more positive approach toward building partnership and gathering information than male students. In this workshop as well the male students demonstrated less change in their post-test scoring as compared to their female counterparts. This data is limited by the fact that there were much fewer male students as compared to female students.

There are a few limitations to the study in that the assessment method could have been more objective with the use of standardised tests. Trained physicians were used to demonstrate communication skills but actual patients may have provided more use hands-on practice for students to improve their skills.

Communication training is still in a rudimentary state in the Indian medical curriculum. The current workshop covered a conglomerate of skills that would be required to practice medicine in this community and structure. Hence not having a standardized western proforma for assessment, provided leeway to adapt to the needs of the local community while providing communication skills training. This was one of the strengths of the workshop.

Conclusion
A one day workshop in communication training during medical training improved various domains of communication among pre-final year medical students. More such workshops are required to improve the quality of medical training in the current Indian medical curriculum.

Figure 1: Consort diagram of students participation in the study.

Figure 2: Programme schedule of the one day communication workshop

<table>
<thead>
<tr>
<th>Topic covered</th>
<th>Tools used to cover the topic</th>
<th>Timing of the session</th>
</tr>
</thead>
<tbody>
<tr>
<td>What you don’t say? Non-verbal communication</td>
<td>Role play by simulators, lecture and video</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Breaking bad news</td>
<td>Role play by simulators, group discussion, tasks for students to complete a communication exercise</td>
<td>60 minutes</td>
</tr>
<tr>
<td>The angry patient – effectively communicating with an angry patient</td>
<td>Role play by simulators, group discussion, tasks for students to complete a communication exercise</td>
<td>60 min</td>
</tr>
<tr>
<td>Taking consent for procedures</td>
<td>Role play by simulators, lecture, tasks for students</td>
<td>45 minutes</td>
</tr>
<tr>
<td>Concept of a medical team- communication with team members and working together</td>
<td>Group activity, group discussion, video</td>
<td>65 minutes</td>
</tr>
<tr>
<td>Lost in transit- Barriers to effective communication</td>
<td>Role play by students and simulators, tasks for students, group discussion</td>
<td>45 minutes</td>
</tr>
<tr>
<td>End of Life issues and ethical principles</td>
<td>Lecture and group discussion</td>
<td>45 minutes</td>
</tr>
</tbody>
</table>

Figure 3: questionnaire of the pre-test and post-test

Questions used for comparison of pre-test and post-test skills change

All answers to be marked from 1-5 with 5 being the best response and 1 being the worst response. (1-very poor, 2-poor, 3-good, 4-very good, 5-excellent response)

1. How would you rate your communication skill before the workshop on a scale of 1 to 5 with 5 being the best
2. How well would you be able to handle conveying bad news to a patient.
3. How confident are you to deal with an angry/aggressive patient.
4. How much do you think your body language conveys to the patient? (5-most of the information, 1–least information)
5. How effectively do you think you could convey medical information to the patient in your medical ward in a manner that would ensure their understanding and compliance with your instructions
6. How important is the junior nurses’ opinion/views in the medical management of a patient
7. How would you rate your ability to get consent from a patient to participate in your clinics or consent to examination/procedure that you would like to do for the first time
8. How comfortable do you feel to counsel a family to taking a do not resuscitate order for a terminally ill patient.

Questions used to assess felt need and efficacy of the workshop in the post-test that were not used for comparison of pre-test and post-test.
1. Was the duration of the workshop appropriate
2. Was the time allotted for each session appropriate
3. Were the goals of the workshop achieved
4. Were the topics relevant
5. Did the workshop impact your clinical practice and the way you deal with patients?

Figure 4: Comparison of pre-test and post-test scores for the relevant question

<table>
<thead>
<tr>
<th>Variable assessed</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate your communication skills</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Poor</td>
<td>9</td>
<td>15.8</td>
<td>11</td>
</tr>
<tr>
<td>Intermediate</td>
<td>28</td>
<td>49.1</td>
<td>21</td>
</tr>
<tr>
<td>Good</td>
<td>20</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Very good</td>
<td>3</td>
<td>5.2</td>
<td>5</td>
</tr>
<tr>
<td>How well would you be able to handle breaking bad news?</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Very Poor</td>
<td>16</td>
<td>28.1</td>
<td>3</td>
</tr>
<tr>
<td>Poor</td>
<td>28</td>
<td>49.1</td>
<td>15</td>
</tr>
<tr>
<td>Intermediate</td>
<td>7</td>
<td>12.3</td>
<td>6</td>
</tr>
<tr>
<td>Good</td>
<td>1</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>Very good</td>
<td>6</td>
<td>10.3</td>
<td>5</td>
</tr>
<tr>
<td>How confident are you to be able to deal with an angry patient?</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Very Poor</td>
<td>29</td>
<td>50.9</td>
<td>2</td>
</tr>
<tr>
<td>Poor</td>
<td>16</td>
<td>28.1</td>
<td>4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>7</td>
<td>12.3</td>
<td>5</td>
</tr>
<tr>
<td>Good</td>
<td>1</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>Very good</td>
<td>5</td>
<td>8.4</td>
<td>5</td>
</tr>
<tr>
<td>How much do you think your body language conveys to the patient?</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Poor</td>
<td>14</td>
<td>24.6</td>
<td>9</td>
</tr>
<tr>
<td>Intermediate</td>
<td>28</td>
<td>49.1</td>
<td>17</td>
</tr>
<tr>
<td>Good</td>
<td>1</td>
<td>1.8</td>
<td>8</td>
</tr>
<tr>
<td>Very good</td>
<td>4</td>
<td>6.8</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 5: Comparison of the pre-test and post-test score according to sex.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>Post-Pre test Mean difference (Min, Max)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate your communication skills</td>
<td>37</td>
<td>0.444 (-2.2)</td>
<td>0.097</td>
</tr>
<tr>
<td>Male</td>
<td>28</td>
<td>0.838 (-1.3)</td>
<td>0.000</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>-0.056 (-1.2)</td>
<td>0.782</td>
</tr>
<tr>
<td>How well would you be able to handle breaking bad news?</td>
<td>37</td>
<td>3.378 (0, 3)</td>
<td>0.000</td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>0.000 (-3, 2)</td>
<td>0.056</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>0.000 (-1, 2)</td>
<td>0.000</td>
</tr>
<tr>
<td>How important is the junior nurses’ views in managing the patient?</td>
<td>37</td>
<td>0.667 (-1, 2)</td>
<td>0.026</td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>0.729 (-1, 3)</td>
<td>0.000</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>0.639 (-1, 3)</td>
<td>0.001</td>
</tr>
<tr>
<td>How well would you be able to convey medical information in a way the patient would understand</td>
<td>37</td>
<td>1.14 (-1, 3)</td>
<td>0.000</td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>1.14 (-1, 3)</td>
<td>0.000</td>
</tr>
<tr>
<td>Female</td>
<td>37</td>
<td>1.14 (-1, 3)</td>
<td>0.000</td>
</tr>
<tr>
<td>How would you rate your ability to get consent from a patient for a procedure</td>
<td>n</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>16.4</td>
<td>11</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>41.8</td>
<td>11</td>
</tr>
<tr>
<td>Intermediate</td>
<td>37</td>
<td>49.1</td>
<td>17</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>8.4</td>
<td>8</td>
</tr>
<tr>
<td>Very good</td>
<td>5</td>
<td>8.4</td>
<td>3</td>
</tr>
<tr>
<td>How comfortable are you with counselling a patient for a do not resuscitate order</td>
<td>n</td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Yes</td>
<td>9</td>
<td>16.4</td>
<td>11</td>
</tr>
<tr>
<td>No</td>
<td>23</td>
<td>41.8</td>
<td>11</td>
</tr>
<tr>
<td>Intermediate</td>
<td>37</td>
<td>49.1</td>
<td>17</td>
</tr>
<tr>
<td>Good</td>
<td>5</td>
<td>8.4</td>
<td>8</td>
</tr>
<tr>
<td>Very good</td>
<td>5</td>
<td>8.4</td>
<td>3</td>
</tr>
</tbody>
</table>

Figure 6: Questions to assess the quality of the workshop subjectively and improve future workshops.

<table>
<thead>
<tr>
<th>Variable assessed</th>
<th>N = 63</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the duration of the workshop appropriate?</td>
<td>7</td>
<td>11.1</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
</tr>
<tr>
<td>Was the time allotted for each session appropriate?</td>
<td>53</td>
<td>84.1</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
</tr>
<tr>
<td>Were the goals of the workshop achieved?</td>
<td>58</td>
<td>92.1</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
</tr>
<tr>
<td>Were the topics relevant</td>
<td>59</td>
<td>93.7</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
</tr>
<tr>
<td>Did the workshop impact your clinical practice and the way you deal with patients?</td>
<td>48</td>
<td>77.4</td>
</tr>
<tr>
<td>No</td>
<td>45</td>
<td>71.4</td>
</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
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</tr>
<tr>
<td>Intermediate</td>
<td>11</td>
<td>17.5</td>
</tr>
</tbody>
</table>
4. Cleland J, Foster K, Moffat M. Undergraduate students’ attitudes to communication skills learning differ depending on year of study and gender. Med Teach. 2005;27:246–51