Research Article

How do medical teachers in Mauritius feel about teaching-learning communication skills? Development of a tool of communication skills teaching-learning perception score

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ABSTRACT

Background: Since communication skills (CS) are essential for medical professionals, many medical institutes have included communication skills as an integral part of medical curriculum. The present study was done to assess the perceptions of medical teachers in a medical college in Mauritius towards teaching and learning communication skills.

Methods: A 14-item questionnaire with modified Likert-like scale was designed and administered to medical teachers at a medical college in Mauritius to assess their perceptions on teaching-learning communication skills. Positive scale scores and negative scale scores were calculated to know the perceptions on positive-sounding and negative-sounding items respectively. Based on these scores, the “Communication skills teaching-learning perception score” (CSTLPS) was calculated.

Results: The medical teachers had an average positive scale score of 21.7 (Range 12-28). Their average negative scale score was 15.7 (Range 10-20). The average CSTLPS was 6.0652 with a range of minus 6 to 17. More than 80 percent teachers agreed on all the positive-sounding items, whereas 50 or more percentage of teachers disagreed on most of the negative-sounding items.

Conclusions: The medical teachers in Mauritius had a positive attitude towards teaching-learning communication skills in medical college. Finding out CSTLPS can serve as a useful tool.

Keywords: Communication skills teaching-learning perception score

INTRODUCTION

In today’s world, communication is considered a keyword to success. At various management institutes, communication skill is taught by scientific and objective methods. Communication gaps between individuals are responsible for many problems in interaction. Therefore the employers in almost all kinds of workplaces appreciate the importance of an effective communication. Medical practice has an important element of doctor-patient relationship, and communication skill forms the basis of trust and confidence in such a relationship.\textsuperscript{1} Empathetic communication has positive impact on diagnosis, patient compliance, and patient satisfaction.\textsuperscript{2} History taking, explaining treatment strategies and medication use, breaking bad news, and follow-up visits of patients involve acquisition and application of communication skills. These in turn affect the diagnosis of the disease, outcome of the treatment, patient
compliance, and patient satisfaction. Accordingly medical college examinations obviously have enormous emphasis on techniques of history taking and physical examination of patients, case presentations, and viva-voce examinations. Lack of good communication has been found to be a major initiating cause in 36 to 40 percent of medical malpractice lawsuits.  

Many universities have done efforts to appraise the perceptions of teachers and students regarding teaching-learning communication skills. Based on these perceptions, the principle of including communication skills as an integral part of medical curricula has been accepted by many institutes.  

Before making a decision to include communication skills in the curriculum of a particular medical school or university, it is relevant and essential to know the opinions and perceptions of the teachers and students regarding this issue. As the initial part of a similar task in a medical college in Mauritius, the present study was undertaken to know what the teachers feel about teaching-learning communication skills in a medical college, and how well prepared are they to undertake this task.

**METHODS**

A pre-validated 14-item “Communication skills teaching-learning perception” (CSTLP) questionnaire was designed to assess the perceptions of medical teachers on teaching-learning communication skills in a medical college. The outcome was assessed by calculating the CSTLPS as described further under the methods. The questionnaire was administered as a print copy to the teachers in a medical college in Mauritius teaching in a graduate MBBS course. The background and the questionnaire details were explained to the participants. The anonymity of the participants was maintained. The participation was voluntary and was based on the consent of the participants. The session lasted 30 minutes out of which the actual filling up and completion of questionnaire was for 15 minutes.

The 14-item questionnaire was based on the original standard instrument of 26-item “Communication Skill Aptitude Scale” (CSAS) questionnaire by Rees, Sheard, and Davis for testing communication skills perception. The questionnaire included equal number of positive-sounding and negative-sounding items placed in a randomized order. The 26-item CSAS questionnaire was modified to a 14-item questionnaire for the following reasons: one, the purpose of study included testing not only attitudes, but also perceptions regarding teaching-learning communication skills. Two, during the validation procedures it was suggested that the questionnaire not be too lengthy. A modified Likert-like, 4-point scale (strongly disagree, somewhat disagree, somewhat agree, strongly agree) of forced-choice response type was used, based on the scales used by the researchers in past. The forced-choice response scale is used when the respondents are familiar with the topic of survey. This would also avoid central tendency bias and social desirability bias.

Perception score assigning and calculation of CSTLPS: “Positive Scale Score” and “Negative Scale Score” for each individual was obtained by assigning the values of 1 or 2 or 3 or 4 in the increasing order of agreement. Individual positive scale scores were added and the mean, mode, median, and standard deviation were calculated in Microsoft Excel. Similarly, the individual negative scale scores were added and the mean, mode, median, and standard deviation were calculated. The CSTLPS was calculated by subtracting the negative scale score from the positive scale score for a respective teacher. Mean, mode, median, and standard deviation were obtained for CSTLPS. The individual CSTLPS were delineated on scatter plots. The individuals were distributed in the range order of 4 scores per range and distribution curve was obtained.

Agreement and disagreement on individual items: “strongly disagree” and “disagree” responses were summed to represent “disagree” responses, and “agree” and “strongly agree” responses were summed to represent “agree” responses, and the percentages were expressed for each item in terms of “agree” and “disagree”.

**RESULTS**

The questionnaire was correctly completed and returned by 46 teachers out of 49. (Response rate 93.9%).

**Positive scale scores**

On the 7 positive-sounding items, the range of score of the medical teachers was 12 to 28. (Mean: 21.7, Mode 24, Median 21.5, SD 3.20). The majority had scores between 17 and 28 (Figure 1).
**Negative scale scores**

On the 7 negative-sounding items, the range of scores of the medical teachers was 10 to 20. (Mean: 15.7, Mode 18, Median 16, SD 0.86). The majority had scores between 13 and 20 (Figure 2).

![Figure 2: Scores of medical teachers on negative-sounding items.](image)

The Communication Skills Teaching-Learning Perception Score (CSTLPS) was calculated by subtracting the negative scale score from the positive scale score for a respective teacher, and the range distribution was obtained. (See Table 1)

<table>
<thead>
<tr>
<th>CSTLPS</th>
<th>No of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than zero</td>
<td>2</td>
</tr>
<tr>
<td>Zero</td>
<td>1</td>
</tr>
<tr>
<td>1-4</td>
<td>19</td>
</tr>
<tr>
<td>5-8</td>
<td>12</td>
</tr>
<tr>
<td>9-12</td>
<td>6</td>
</tr>
<tr>
<td>13-16</td>
<td>5</td>
</tr>
<tr>
<td>17-20</td>
<td>1</td>
</tr>
<tr>
<td>21-24</td>
<td>0</td>
</tr>
<tr>
<td>25-28</td>
<td>0</td>
</tr>
</tbody>
</table>

![Figure 3: Scatter chart showing distribution of individual teachers based on their CSTLPS.](image)

Whereas only one teacher had a zero score and two others had minus (less than zero) scores, the mean CSTLPS was 6.0652 (Range: Minus 6 to 17). (Mode 4, Median 5, SD 4.735). Out of the 46 teachers, 43 had the scores between 1 and 20. The scatter chart shows the distribution of individual teachers based on their CSTLPS (Figure 3).

![Distribution curve (CSTLPS of medical teachers).](image)

By plotting the scatter dots for individual CSTLPS as a distribution curve, a standard bell curve was obtained (Figure 4).

![Figure 4: Distribution curve based on individual CSTLPS.](image)

The responses of the teachers on positive-sounding items showed that majority of teachers had positive perceptions regarding teaching-learning communication skills on all the items presented to them. It was also observed that more than 50% of the teachers had not received any kind of training pertaining to communication skills (Table 2).

<table>
<thead>
<tr>
<th>Table 2: Responses of medical teachers on positive-sounding items about teaching-learning communication skills (CS).</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive-sounding items</strong></td>
</tr>
<tr>
<td>Liking for communication</td>
</tr>
<tr>
<td>Medical students need formal training on CS</td>
</tr>
<tr>
<td>CS essential for medical profession</td>
</tr>
<tr>
<td>Communication gaps exist</td>
</tr>
<tr>
<td>Received CS training</td>
</tr>
<tr>
<td>I do conscious efforts to improve my CS</td>
</tr>
<tr>
<td>Comfortable listening to a good speaker</td>
</tr>
</tbody>
</table>

The responses of the teachers on negative-sounding items revealed that close to 40 percent of the teachers said that they do not emphasize key-points in communication during their teaching and they felt that the students automatically learn these skills during their medical curriculum through various ways, and that there was no need for separate formal training in communication for the students as well as teachers and doctors. Little less percentage of teachers felt that the communication skills were not necessary to pass medical examinations. Half of the medical teachers believed that good communication is an inherent skill and it cannot be learnt. Between 15 to 20
percent teachers also felt to be presuming that too much use of communication skills by a teacher reflects that the teacher may not be knowledgeable, and that the use of communication skills may divert the students from serious learning (Table 3).

Table 3: Responses of medical teachers on negative-sounding items about teaching-learning communication skills (CS).

<table>
<thead>
<tr>
<th>Negative-sounding items</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too much use of CS-teacher not knowledgeable</td>
<td>21.7</td>
<td>78.3</td>
</tr>
<tr>
<td>Not necessary to pass medical examinations</td>
<td>32.6</td>
<td>67.4</td>
</tr>
<tr>
<td>CS are the inherent skills, they cannot be learnt</td>
<td>50.0</td>
<td>50.0</td>
</tr>
<tr>
<td>No need to train the students on CS</td>
<td>39.1</td>
<td>60.9</td>
</tr>
<tr>
<td>I don’t emphasize CS key-points</td>
<td>41.3</td>
<td>58.7</td>
</tr>
<tr>
<td>Formal training unnecessary for doctors/teachers</td>
<td>39.1</td>
<td>60.9</td>
</tr>
<tr>
<td>Use of CS diverts from serious learning</td>
<td>15.2</td>
<td>84.8</td>
</tr>
</tbody>
</table>

**DISCUSSION**

The 14-item questionnaire was administered to all the teachers in a medical college in Mauritius. The questionnaire was developed with the purpose of assessing the perceptions of medical teachers regarding teaching-learning communication skills in a medical college. This instrument would serve in future as a tool for assessing perceptions of teachers regarding teaching-learning communication skills in medical curriculum as well as in other branches of education with relevant modifications.

Majority of the teachers believed in communication and interaction. Almost 85% of them believed that many problems in the world are due to communication gap between individuals. Majority of the teachers said that they do make positive conscious efforts on improving their own communication skills, and they appreciated that they are more comfortable listening to a speaker who is a good communicator. They felt their students do need formal training in communication and that these skills were essential for a medical professional. All these were favorable findings in terms of building the basic strategy towards implementation of teaching-learning communication skills. Despite all these positive indications, it was a remarkable finding that 56% of the teachers said that they had not received any formal training in communication skills.

The responses to the negative-sounding items were helpful to understand the perceptions of teachers in depth. The most remarkable finding was that half of the teachers were of the opinion that communication skills are inherent and they cannot be taught or learnt. Close to twenty percent of the teachers had a remarkable interpretation that a teacher who makes ample use of communication skills during teaching is less likely to be a knowledgeable teacher. Similarly almost one sixth of the teachers felt that using communication skills is like going away from serious learning. In accordance with these beliefs, close to forty percent of them said that there was no need to train the students as well as doctors on communication skills because the students would automatically learn them, and that these skills are not much useful to pass the examinations and therefore the teachers said they do not emphasize the key-points in communication skills during their teaching.

Limitation of this study is the small sample size; nonetheless, the findings would be helpful during the process of implementing communication skills training for teachers as well as students, because they reflect the beliefs as well as resistance factors in the minds of medical teachers pertaining to teaching-learning communication skills in a medical college.

The overall attitude of the teachers was positive regarding teaching-learning communication skills on the basis of their high average score for positive perceptions. More work needs to be done to educate the medical teachers on the concept that the communications skills is an area of acquisition and this is why systematic training in communication skills has been undertaken throughout the world in various fields including engineering, management, customer sciences, law as well as medicine. Although the majority of them felt that the medical students should be given formal training on communication skills, on a deeper inquisition through negative-sounding items, close to forty percent were of the opinion that the students would learn the communication skills automatically.

The study created awareness, evoked curiosity, and disseminated information amongst the respondents on current status of communication skills training in educational and especially medical institutes. The study also allowed opportunity to the respondents to express themselves on communication skill issues and thus provided opportunity for useful suggestions regarding teaching-learning communication skills. A tool was developed to estimate the CSTLPS based on the perceptions of the medical teachers. This scoring system may serve as a tool for researchers with due modifications.

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**Conflict of interest:** None declared  
**Ethical approval:** The study was approved by the Institutional Ethics Committee

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