Original Research Article

Perception and preferences of teaching and learning methods in community medicine: a cross sectional study

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ABSTRACT

Background: Knowledge of community medicine plays a very important role in proper and effective delivery of health care services to the society. Every teacher has her or his own style of teaching and now teachers are adjusting their approach depending on their students’ learning needs. The aims and objectives of the study were to assess the perception of 3rd year medical students towards teaching and learning methods in community medicine & to know their preferences among various commonly used teaching learning media & methods.

Methods: A cross-sectional descriptive questionnaire-based study was conducted among 3rd year medical students (6th semester) of SVS Medical College, Mahabubnagar, Telangana, India. A pre-designed, pre-tested self-administered questionnaire was used to collect data. Most of the responses were collected as MCQs type & Likert five point scale. The data was analyzed by calculating percentage.

Results: Out of total 140 participants 42 (30%) were boys and 98 (70%) were girls. All were within the age group of 21-24 years. Regarding the preference of teaching aid, PPT was preferred by maximum 37% participants followed by combination of CB & PPT (30%), Chalk & board (29%). Student’s preference about current T-L methods shows that maximum participants preferred SGD (34%), followed by interactive lectures (26%). Around 65% students were satisfied & 20% were strongly satisfied with current learning approaches.

Conclusions: Small group discussion and blended or interactive teaching are the most preferred learning method when compared with traditional teaching methods indicating that students are more interested in active teaching and learning methods.

Keywords: Perceptions, Preferences, T-L AID, T-L Method, SGD, PPT, CB

INTRODUCTION

Medical education system of our country has changed very rapidly in last few decades. Perception of newer generation towards teaching & learning process is also changing accordingly. The goals of the M.B.B.S. training program are to create doctors - with requisite knowledge, skills, attitudes, values and responsiveness, so that they may function appropriately and effectively as a Basic Doctor Basic Doctor, physicians of first contact for the community in the primary care setting both in urban as well as rural areas of our country(MCI Vision 2015).1 Community medicine which is very vital subject is taught right from first year up to final year part I of MBBS curriculum and it plays important in teaching & training of such basic competencies like providing preventive, promotive, curative, palliative and holistic care services to the community, epidemiological investigation & management of epidemics/outbreaks, computing vital statistics of health related events and implementation of national health programs etc.
Effective learning is closely associated with effective teaching. Achieving effective learning requires a student-centered and outcome-focused approach. Number of studies have emphasized that feedback is an effective evaluation tool, it helps the faculty to identify the strengths and weaknesses of their teaching and assessment methods. Students’ perception is a diagnostic feedback technique. Students being at the receiving end of the teaching/learning process usually have perceptions of effective teaching as well as an effective teacher/lecturer.

Traditional didactic lecture is more passive and less effective as a teaching tool compared with active learning methods like problem-based learning. But, a well organized lecture can be one of the most effective ways to integrate and present information from multiple sources on difficult topics. So, assistance is needed to enhance the quality of lecture in the form of audio-visual aid like power point teaching which has now become the most popular package of teaching method.

It is the need of hour to understand and focus on perception of students towards various teaching learning aids & methods & to have an insight to find out the communication gap between teachers and students. The present study was done to assess the perceptions and preferences of these teaching and learning methods among 6th semester medical undergraduates who have been exposed in community medicine subject since first year of MBBS.

**Objectives**

- To explore the students’ preferences regarding the current teaching learning aids and methods applied during teaching process of Community Medicine.
- To assess their perception of the currently used T-L methods.

**METHODS**

A cross sectional study was conducted in department of community medicine SVS Medical College Mahabubnagar, Telangana, India, during March- April 2018 among the 6th semester (Final year part I) Students. Out of total 150 students in class, 140 students participated in study.

**Data collection procedures**

A pre-tested and validated semi structured questionnaire was administered to obtain information about students’ perception & preference towards current T-L approach. The study was conducted after obtaining the permission from the institutional ethical committee. Objectives and procedure of the study was explained to all the participants. The inclusion of the participants was anonymous and voluntary. All participants were included after an informed consent only. A feedback questionnaire covering various aspects of teaching and learning methods was distributed among the participants. MCQs were administered to assess the preferences of current teaching learning methods. To evaluate the student’s perception towards the T-L methods we administered a qualitative questionnaire with 5 point Likert scale consisting of ten questions.

**Statistical analysis**

Statistical results were tabulated and calculated in Microsoft excel and the perception & preference of teaching and learning methods were expressed in numbers and percentages.

**RESULTS**

Out of total 140 participants 42 (30%) were boys and 98 (70%) were girls. All were within the age group of 21-24years. Regarding the preference of teaching aid, Power point presentation (PPT) was preferred by maximum 37% participants followed by combination of CB & PPT (30%), Chalk & board (29%) & OHP (4%) (Figure 1).

![Figure 1: Pie diagram showing the students preferences of the current T-L AID.](image1)

![Figure 2: Pie diagram showing the students preferences current T-L method.](image2)
In present study the preference of teaching aid, power point presentation (PPT) was preferred by maximum 37% participants followed by combination of CB and PPT (30%), chalk and board (29%), quite similar finding were observed in a study by Sharma et al.10 Power point presentations were preferred more because of better visual clarity with colorful illustrations are able to captivate audience attention for some longer period. Study explore that active participation and long term retention capacity is more in blended learning (88.57%) followed by SGDs (85.71%) and field visits (Figure 1).

Students perception regarding various qualities/parameters explored that all the current T-L methods were perceived by participants as informative with maximum in interactive/blended learning (94.29%) followed by SGDs (91.43%). Understanding of topic was best observed in SGDs followed by blended learning. Good student teacher interaction was observed in SGD (96.43%) followed by blended/interactive learning (94.29%). It was observed that SGDs (95.71%) followed by blended learning and field visits are able hold attention and interest among students. They perceived that active participation and long term retention capacity is more in blended learning (88.57%) followed by SGDs (85.71%) and field visits (Table 1).

**DISCUSSION**

Community medicine is the branch of medicine concerned with the health of populations. It strives to protect and promote the health and well-being of the community through primary health care approach. The mission of community medicine teaching is to contribute to the development of a well-rounded (holistic) medical professional.8 The students’ view can be a useful basis for improving the quality of the educational service and improving students’ performance as well.9

In present study the preference of teaching aid, power point presentation (PPT) was preferred by maximum 37% participants followed by combination of CB and PPT (30%), chalk and board (29%), quite similar finding were observed in a study by Sharma et al.10 Power point presentations were preferred more because of better visual clarity with colorful illustrations are able to captivate audience attention for some longer period. Study explore that student’s preference about current T-L methods shows that maximum participants preferred small group discussion (34%), followed by interactive lectures (26%), tutorials (15%), demonstration/field visit(10%), self study (7%), didactic lecture (4%) (Figure 2).

The student’s perception regarding satisfaction with current teaching –learning approaches shows that around 65% students were satisfied and 20% were strongly satisfied, around 8.5% students were unsatisfied, and 3.5% were strongly unsatisfied. Around 2% were having neutral opinion (Figure 3).

Students perception regarding various qualities/parameters explored that all the current T-L methods were perceived by participants as informative with maximum in interactive/blended learning (94.29%) followed by SGDs (91.43%). Understanding of topic was best observed in SGDs followed by blended learning. Good student teacher interaction was observed in SGD (96.43%) followed by blended/interactive learning (94.29%). It was observed that SGDs (95.71%) followed by blended learning and field visits are able hold attention and interest among students. They perceived that active participation and long term retention capacity is more in blended learning (88.57%) followed by SGDs (85.71%) and field visits (Table 1).

**Table 1: The students’ perception regarding quality of T-L methods.***

<table>
<thead>
<tr>
<th>Quality/parameter</th>
<th>Chalk &amp; board (%)</th>
<th>Lecture by PPT (%)</th>
<th>Field visits (%)</th>
<th>Small group discussions (%)</th>
<th>Blended /interactive learning (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informatively content</td>
<td>126 (90.00)</td>
<td>129 (92.14)</td>
<td>56 (40.00)</td>
<td>128 (91.43)</td>
<td>132 (94.29)</td>
</tr>
<tr>
<td>Easy to understand</td>
<td>121 (86.43)</td>
<td>128 (91.43)</td>
<td>88 (62.86)</td>
<td>133 (95.00)</td>
<td>128 (91.43)</td>
</tr>
<tr>
<td>Well organized</td>
<td>100 (71.43)</td>
<td>101 (72.14)</td>
<td>110 (74.28)</td>
<td>124 (88.57)</td>
<td>122 (87.14)</td>
</tr>
<tr>
<td>Good audio/visual quality</td>
<td>76 (54.28)</td>
<td>122 (87.14)</td>
<td>78 (55.71)</td>
<td>98 (70.00)</td>
<td>101 (72.14)</td>
</tr>
<tr>
<td>Good student-teacher interaction</td>
<td>111 (79.29)</td>
<td>98 (70.00)</td>
<td>120 (85.71)</td>
<td>135 (96.43)</td>
<td>132 (94.29)</td>
</tr>
<tr>
<td>Active participation of students</td>
<td>65 (46.43)</td>
<td>101 (72.14)</td>
<td>125 (89.29)</td>
<td>132 (94.29)</td>
<td>129 (92.14)</td>
</tr>
<tr>
<td>Able to hold attention &amp; interest</td>
<td>56 (40.00)</td>
<td>98 (70.00)</td>
<td>96 (68.57)</td>
<td>134 (95.71)</td>
<td>127 (90.71)</td>
</tr>
<tr>
<td>Delivered effectively</td>
<td>102 (72.85)</td>
<td>124 (88.57)</td>
<td>114 (81.42)</td>
<td>129 (92.14)</td>
<td>124 (88.57)</td>
</tr>
<tr>
<td>Motivated for self directed learning</td>
<td>82 (58.57)</td>
<td>104 (74.28)</td>
<td>124 (88.57)</td>
<td>132 (94.29)</td>
<td>125 (89.29)</td>
</tr>
<tr>
<td>Impact on long term memory</td>
<td>78 (55.71)</td>
<td>102 (72.86)</td>
<td>112 (80.00)</td>
<td>120 (85.71)</td>
<td>124 (88.57)</td>
</tr>
</tbody>
</table>

*(More than one quality/parameter perceived per T-L method per student).
In present study students perception regarding various qualities/parameters explored that all the current T-L methods were perceived by participants as informative with maximum in interactive/blended learning (94.29%) followed by SGDs (91.43%). Understanding of topic was best observed in SGDs followed by blended learning. It was observed that SGDs (95.71%) followed by blended learning (90.71%) and PPT (70.00%) are able hold attention and interest among students. They perceived that active participation & long term retention capacity is more in blended learning (88.57%) followed by SGDs (85.71%) and field visits. Relatively more or less quite similar findings were observed by Sharma et al.\textsuperscript{10} Study conducted by Basu et al have also advocated that interactive/blended teaching as effective tool for better understanding of subject and improvement in learning and documented students’ preference for it.\textsuperscript{12}

CONCLUSION

Present study clearly indicates that students are changing their perception and preference from passive learning to active learning which is student centered & makes learning more interesting, pleasant and interactive. Study also explores that students are more interested in active teaching and learning. Most of the students preferred small group discussions (SDGs) and field visits. PPT can be made more effective by combining its other teaching aids. Whatever teaching aid or method is applied by teacher ultimately students wants that lecture should informative and effective.

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