ASSESSMENT OF TEACHING BIOETHICS AND COMMUNICATION SKILLS TO FINAL YEAR MEDICAL STUDENTS

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ABSTRACT

Objective:
To assess the effects of a workshop on final year medical students about their perception of bioethics and communication skills.

Place and duration of study:
Foundation University Medical College, Islamabad, Pakistan

Methodology:
A 2-days workshop was designed in September 2013 by a multi-disciplinary team which included various themes like doctor-patient relationship building skills, breaking bad news, dealing with distressed patients and patients with psychosocial issues and conflict resolution along with negotiation skills. At the end of the workshop role playing on these issues was conducted and evaluated by a panel of teachers. Students evaluated themselves on a pre & post workshop survey form to see the impact of training on their communication skills and bioethics understanding moreover grading of students was also done on a performa containing five points ranging from zero meaning very bad performance to 5 having best performance.

Results:
The survey showed a marked increase in improved understanding and awareness of communication skills and bioethics among medical students with P Values <0.001 for all dimensions measured.

Conclusion:
Our study shows that these workshops are not an ivory tower concept and can be conducted successfully by training in-house faculty and with minimum logistics and they enhance the understanding of bioethics and communication skills.

Keywords:
Bioethics, Interactive workshop, Teaching communication skills, Young medical students

INTRODUCTION

Communication skills and bioethics teaching is one of the very important soft skills in professional development of future young medical professionals and deficiencies among medical students in learning doctor-patient communication skills has since long being recognized. Also lacking is realization about common ethical issues among medical teachers, curriculum designers, planners and policy makers. A doctor can be called as “Good Doctor” when apart from having up-to-date knowledge; he should have effective communication skills while dealing with colleagues and with patients as heath care provider. Although it is a fact that some qualities are inborn but effective communication skills can be taught and learned as we know that “professionalism is the basis of medicine's contract with society”. Current medical education and curriculum must be taught in away that there should be an equal importance for gaining knowledge as well as developing good communication skills and attitudes. These
attributes are one of the major skills that students should be competent and sometimes can be more important than knowledge. Effective doctor-patient relationship results in significant benefits to the patients, their families, doctors, paramedical staff and the healthcare system itself as it helps to solve many bioethical dilemmas in clinical practice. In our culture anxiety secondary to environmental factors also result in barrier for learning communication skills and understanding ethical issues which can be relieved by active participation, role playing and by providing feedback in organized training workshops. Based on these principles, a workshop on effective communication skills and bioethics teaching was developed by young faculty of Department of Medical Education, Medicine and Psychiatry at Foundation University Medical College Rawalpindi for final year medical students on 2nd and 3rd Sep 2013.

METHODS

It was a two days workshop conducted for students of final year MBBS addressing issues like confidentiality, informed consent, end of life issues and breaking bad news. Students were given a questionnaire before start of workshop to rate their communication skills and level of understanding on various bioethical issues. Students were divided in small groups (12 students in each batch) with equal number of boys and girls. Total eight batches were made. About 13 faculty members were trained in 2 sessions for conducting the workshop. On Day 1 apart from discussion on the above mentioned topics, there was an introductory lecture for whole class in beginning. An award winning movie “Wit” was also shown to students in afternoon and then students were given eight different scenarios on these issues and asked to write a dialogue on it and to prepare for role play on day 2.

On Day 2 various ethical issues were discussed like physical pharmaceutical interaction, plagiarism and ethical issues in biomedical research and human experimentation. Various movie clips, pictures and case scenarios were used and discussed with students. Accreditation to Center of Bioethics and Culture (CBEC), Sindh Institute of Urology and Transplant (SIUT) Karachi was given for use of their material and cases for the workshop. After that presentations of students were conducted in front whole class and three members from senior faculty as evaluators of performance. Students prepared their role very well and all of viewers and senior

Table 1. Retrospective pre-post evaluation form for the workshop.

<table>
<thead>
<tr>
<th>FOUNDATION UNIVERSITY MEDICAL COLLEGE</th>
<th>COMMUNICATION SKILLS and BIOETHICS WORKSHOP</th>
<th>FINAL YEAR MEDICAL STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thinking back to before you began the Communication skills workshop and now, rate your KNOWLEDGE, SKILLS/COMPETENCE, ATTITUDES:</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LEVEL OF UNDERSTANDING

1 = none or no skill, 2 = vague knowledge, skills or competence
3 = slight knowledge, skills or competence 4 = average among my peers
5 = competent 6= very competent
7 = expert, can teach others

<table>
<thead>
<tr>
<th></th>
<th>Rate your skills, knowledge, attitudes to address the following topics BEFORE workshop</th>
<th>Rate your skills, knowledge, attitudes to address the following topics TODAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand why improving my communication skills and bioethics would increase my ability to work better as a doctor</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I know the steps of how to deliver bad news to a patient and family</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I am able to communicate effectively in a small group</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I understand that while communicating with patients &amp; families, I have to keep in mind principals of confidentiality</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I understand how good communication skills can lead to an informed consent</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>I understand that as part of professional behavior, I have to learn principles of ethics &amp; communication skills</td>
<td>1 2 3 4 5 6 7</td>
<td>1 2 3 4 5 6 7</td>
</tr>
</tbody>
</table>
faculty appreciated their presentations. It was very difficult to decide which group performed the best and all groups scored almost equal marks. After the workshop students have to fill up the same questionnaire given at start of workshop to assess and rate themselves regarding improvement in understanding about communication skills and bioethics as shown in Table 1.

RESULTS

A total of 102 undergraduate medical students participated in the workshop. A mixed method sequential design was employed to capture the best of both quantitative and qualitative approaches to understand the relationship among the various variables (curricular content e.g. communication skills, instructional strategy, and outcome) and to have further insight in the competence of communication skills. Data was generated by the survey questionnaires. Statistical Package for Social Sciences (SPSS) version 17 Computer Software Programme was used for quantitative data analysis to calculate frequencies and percentages. Qualitative data was analyzed with content analysis after identifying themes (breaking bad news, informed consent, confidentiality and end of life care) and trends from the data.

Eighty nine percent of students attending the workshop filled the Retrospective Pre-Post Form. They were requested to rate their communication skills and understanding of bioethics before and after the workshop by asking standard questions. There were two open ended questions regarding their feedback and suggestions for improvements. This survey showed a marked increase in understanding of effective communication skills and bioethics. Results of the paired T-Test revealed an increased awareness of the importance of communication skills and ethics among the students with P Values <0.001 for all dimensions measured (as shown in Table 2). Majority of the students (81%) rated the workshop as useful and beneficial and scored themselves better after attending the workshop (as shown in figure 1). The workshop succeeded in creating awareness among participants of their difficulties in communication skills, identifying common ethical issues and the need to improve as seen in their written feedbacks:

“It was a very good experience, which helped build my communication skills”

“It made me crazy and I want to find out more about some of the topics on ethics we discussed”

“I will now make a conscientious effort to learn to communicate effectively with peers and patients”

“I can change my attitude now as I liked to avoid discussion and prefer to be alone as I am not sure how to get along with others.”

“......I realized the need to improve my communication skills and bioethics as I had been so casual in dealing with patients......”

The role play of students on various topics was excellent and was assessed by three senior faculty members independently on a specified format. After finalizing the results of presentations the batch with minimum score was 42 out of 63 and

![Change in Student Perception before & after Session](image-url)

Figure 1: Changes in student's perception of their communication skills and understanding of Bioethics pre and post workshop
In general, the workshop was well accepted by the students and teaching faculty. It was also realized that these activities should be continuously incorporated into the students learning to enrich and strengthen their communication skills. The facilitators also enjoyed the workshop as they had an opportunity to put their knowledge into practice and critically re-evaluate their roles as effective facilitators.

**DISCUSSION**

This study has highlighted the fact that it can be expected that improved training of communication skills will enhance patients and their attendants satisfaction. Future physicians and scientists must learn the principles of medicine and research in the broadening context of a biological, psychological, and social perspective at an earlier stage.

In contrast to our study, students rated themselves a little lower after finishing their communication skills course in a study done at Nottingham UK in 2003. This was because they realized that they were overconfident in their level of communication skills before the workshop and after learning so much detail rated them lower and showed a need to learn more about demographic characteristics: gender, language and ethnicity and ethical issues to improve their communication skills.

In another study done in a medical school of Saudi Arabia, five recommendations were made to integrate ethics teaching in medical education. They advised assessment of students integrity and character on admission, teaching bioethics in clinical settings, inclusion of Islamic code of medical ethics in medical schools in Islamic world, evaluation of young graduates performance in ethics at the bedside by peers, nurses and patients and evidence-based assessment and continuous quality improvement. In another study done in Turkey, it was found that there is great need in of revision in undergraduate medical education, physician’s working conditions and their mode of selection for residency training, and learning environment for a better professional values of today’s physicians.

Similarly another study done in USA or surgical residents showed an improvement in patient care after gaining knowledge of communication skills and bioethical issues. We used a small booklet containing 5 articles about various themes of common bioethical topics as it has been well established that provision of reading material during these workshops makes great impact on understanding and learning bioethics.

This study has limited value due to small sample and response bias and its results can’t be generalizable to medical students in other geographical regions. Students who responded to this survey may differ in attitudes from those who did not and the possibility of "social desirability"

**Table 2. Pre-post evaluation workshop results and significance**

<table>
<thead>
<tr>
<th>Item</th>
<th>Pre-workshop score</th>
<th>Post-workshop score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1</td>
<td>3.9</td>
<td>5.7</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Question 2</td>
<td>3.0</td>
<td>5.7</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Question 3</td>
<td>3.9</td>
<td>5.7</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Question 4</td>
<td>3.8</td>
<td>5.9</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Question 5</td>
<td>3.3</td>
<td>5.6</td>
<td>&lt; 0.05</td>
</tr>
<tr>
<td>Question 6</td>
<td>3.3</td>
<td>6.1</td>
<td>&lt; 0.05</td>
</tr>
</tbody>
</table>
bias in responses cannot be ruled out. Another limitation was the broad range of some of comments given on the survey by students in addition to quantitative data which helped to provide the student's views but does not uncover underlying factors that may have influenced their responses. Future studies are needed to assess other variables may influenced the process and outcome of bioethics education in curriculum.

CONCLUSION
Communication skills teaching can be implemented in the undergraduate pre-clinical teaching particularly to teach about patient handling, discussing informed consent, problem solving discussion among colleagues and delivering bad news. It just needs structured case-based sessions which can result in an improvement in the self-assessed skills of medical students. Our study shows that communication skills workshops are effective method for teaching bioethics and communication skills and they change the perceptions of students.

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