

Using Movies to Strengthen Learning of the Humanistic Aspects of Medicine

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ABSTRACT

Introduction: Movie screening and activities have been used during the last two semesters (spring and summer 2015) to strengthen the learning of communication skills, empathy, professionalism, and greater understanding of the process and death and dying at the Xavier University School of Medicine.

Aim: The present manuscript describes the movie screening and activities. Student feedback regarding the sessions is also mentioned.

Settings and Design: The activity was conducted among basic science undergraduate medical students and student feedback was obtained. A cross-sectional study design was used.

Materials and Methods: Feedback was obtained towards the end of June 2015 using a questionnaire designed by the authors. Participants were asked to rate their degree of agreement with the set of statements and provide an overall rating for the sessions. No demographic information was collected.

Statistical Analysis: Cronbach's alpha was calculated as a measure of internal consistency. The normality of distribution of the scores of individual statements and of the overall rating was determined using one sample Kolmogorov-Smirnov test. The average scores were calculated. Free text comments were tabulated.

Results: Forty-nine of the 63 students (77.8%) participated in the study. Cronbach's alpha was 0.868 indicating a high level of internal consistency. The median scores indicating the degree of agreement with most statements ranged from 3 to 5. The mean participant rating of the sessions was 7.10 (maximum possible score 10). A few participants provided free text comments regarding the sessions.

Conclusion: Student feedback about the session was positive. Impact of the session on humanistic issues, professionalism and death and dying should be studied in future.

Keywords: Caribbean, Feedback, Humanities, Medical humanities, Professionalism

INTRODUCTION

Xavier University School of Medicine (XUSOM), an offshore, Caribbean medical school in Aruba, Kingdom of the Netherlands has the objective of creating leaders in primary care medicine. A medical humanities (MH) module has been offered to all first semester students from the spring (January-April) 2013 semester and eight cohorts of first semester undergraduate medical (MD) students have completed the module [1]. The institution admits students to the undergraduate medical course three times a year in January, May and September. Students complete six semesters of basic sciences (with the last semester being devoted to preparing for the licensing examination) along with early clinical exposure in Aruba and complete their clinical rotations in the United States (US) and Canada. Medical ethics is discussed through all five semesters and cultural diversity and social issues to be considered while providing medical care are also introduced. The MH module uses role-plays, case scenarios, paintings and literature excerpts to explore different aspects of the discipline. Students are assessed during the sessions using a structured checklist; they also submit a reflective writing assignment and their interactions with a standardized patient is also assessed [2].

The use of movies in undergraduate medical education has been described in the literature. The authors of a study conducted in a New Zealand medical school concluded the use of commercial movies encouraged both independent and collaborative learning among students, promoted discussion, and integrated subjects [3]. Medical schools have the objective of preparing students for the ethical and moral questions which they may face in their professional life. The academic department of the Brazilian Society of Family Medicine invited students from various medical schools in Sao Paulo state to participate in a project entitled 'Literature and movies for medical students' [4]. Movies have also been used to

improve student attitudes towards psychiatry in a medical school in Germany [5] and to facilitate student learning of professionalism in Thailand [6].

At XUSOM, the academic leadership was in favor of initiating movie screening sessions followed by small group activities and discussion. A faculty group was formed with the objective of working out the logistics and shortlisting movies to be screened during each semester. The present study describes the authors' experience with movie screening and activities and student feedback about the sessions.

MATERIALS AND METHODS

All basic science undergraduate medical (MD) students at XUSOM were included in the sessions. At XUSOM, as with other offshore Caribbean medical schools, students do their clinical rotations in affiliated hospitals in the US and Canada; so we could not include clinical students in the present study. We decided to select students from the most senior semester to serve as student facilitators who would act as team leaders and also assess other group members using a structured rubric. [Table/Fig-1] shows the rubric used to evaluate student participation in the session. Certain statements were modified from the instrument used during in session assessment of problem-based learning (PBL) sessions at the institution (which was modified from the one developed by Elizondo-Montemayor [7]).

The sessions were held in the school auditorium from 1 to 4 pm. Around 60 students participated and there were five faculty facilitators. Students were divided into seven or eight groups (depending on the total number of students). Each group included students from all basic science semesters and provided the senior students an opportunity to mentor their juniors. The movie-related activities were finalized by the faculty group. Thirty minutes was allotted to

Circle the appropriate value using the scale ranging from 1:Not Developed-6: Very well developed						
Interprets (gives meaning) to the information given in the film	1	2	3	4	5	6
Defines learning objectives and defines a concrete action plan to meet them	1	2	3	4	5	6
Works towards achievement of the group's learning goals...	1	2	3	4	5	6
Shows effective interpersonal abilities.	1	2	3	4	5	6
Respects classmates' opinions.	1	2	3	4	5	6
Works as hard as the rest of his team mates.	1	2	3	4	5	6
Attended and arrived on time	1	2	3	4	5	6
Shows responsibility and commitment	1	2	3	4	5	6
Presentation was clear and to the point	1	2	3	4	5	6
His/her appearance and clothing correspond with that of a medical professional.	1	2	3	4	5	6

[Table/Fig-1]: Facilitator assessment of student participation and involvement in group work

the activities. The group presented their findings to other groups and the facilitators using flip charts/power point slides.

During the spring 2015 (January-April) the movie 'Wit', a story of a Professor of English Literature dying from ovarian cancer, was screened. Creating a common time slot for the screening and activities for all basic science MD students was challenging but we were able to address this during the integration meetings, which decide on the teaching-learning schedule for the forthcoming three weeks. Informal student feedback obtained at the conclusion of the activity was positive and after discussing with the curriculum committee and the academic leadership we decided to have two sessions during a particular semester, beginning from summer 2015 (May-August). During the summer semester the movies screened were 'The Doctor' and 'People Will Talk'. [Table/Fig-2] provides a list of group activities used during the movies 'Wit' and 'People Will Talk'.

Each student was assessed by the student facilitator and also by the faculty facilitator. Scores obtained account for a certain percentage of the grade of the system: Patient, Doctor and Society (PDS), which is offered during basic science semesters 1 to 5 [8]. The student facilitator is evaluated by the faculty facilitator. Each group presents their report to other groups and faculty using either a flip chart or power point slides. The movie shown is of approximately ninety minutes to two hours duration, around thirty minutes is provided for group work and the presentation and inputs by the facilitators lasts from around thirty to forty-five minutes.

Towards the end of June student feedback was obtained using a questionnaire designed by the authors. The questionnaire was circulated among different faculty members for their opinion regarding readability and ease of comprehension of the statements. Participants were asked to rate their degree of agreement with the set of statements and provide an overall rating of the sessions. No demographic details about the student respondents were collected. Cronbach's alpha was calculated as a measure of internal consistency of the questionnaire. The study was approved by the Institutional Review Board of the institution vide notification XUSOM/IRB/2015/04

RESULTS

Forty-nine of the 63 students (77.8%) participated. Cronbach's alpha value was 0.868. On conducting the one sample Kolmogorov-Smirnov test for normality of distribution it was found that only overall rating of sessions was normally distributed. Hence the median is used as a measure of central tendency for the scores of individual statements and the mean for overall rating of the sessions. The median agreement scores regarding sessions being important to the respondents' future practice was 3.00. The median agreement with the statements that facilitators fulfilled their roles effectively was

Movie 'Wit'
Comment on the process of enrolling a patient in clinical trials depicted in the movie
Comment on the process of obtaining written informed consent
What are your impressions about the visit from the patient's former professor?
How does the movie depict the relationship between researchers and patients, researchers and clinicians and researchers and humanity?
What is your take on the process of breaking bad news depicted in the movie?
Comment on the sudden change in the scenario after the patient is admitted to the hospital. What does admission to the hospital mean to the patient?
How do you think the nurse was dealing with her unconscious patient during the last 10 mins of the movie?
What would be your comments about the patient's encounters with diagnostic technology? How can the experience be improved?
Comment on the patient-nurse relationship during the insomnia episode at night?
What is your take on the physical isolation of the patient depicted in the movie?
What does your group think about the depiction of 'grand rounds'? What are your suggestions to humanize the patient-doctor encounter?
What are your opinions about simplifying medical information and helping patients better understand their illness?
How is the doctor-nurse relationship depicted in the movie? Can you comments on instances where there was friction and how it was dealt with?
How has the director used the hospital gown throughout the movie?
What do you think about the process of intake-output charting depicted throughout the movie?
Movie 'People will talk'
Compare and contrast the patient-doctor relationship depicted in the movie (1951) with the present day scenario.
Comment on the attitude towards and behaviour of the chief protagonist, Dr Praetorius with female colleagues and patients depicted in the movie. Have there been major changes in this area during the last six decades?
Critically analyze the relationship between the doctor and his confidant and man servant, Mr. Shunderson depicted in the movie.
What is your opinion about the witch hunt and investigation launched by a jealous colleague against Dr Praetorius?
Compare and contrast the diagnostic and treatment modalities depicted in the movie with those available in the present day.
What is your opinion about the malpractice suit brought against Dr Praetorius?
The chief protagonist, Dr Praetorius throughout the movie depicts a particular image of a doctor through his speech and mannerisms. Have there been changes to this image in present day medical practice? If yes, what changes have occurred?

[Table/Fig- 2]: Activities used during the movies 'Wit' and 'People will talk' .

Statement	Median score
The objectives of the sessions were clearly delineated	4.00
The movies screened were relevant to the session objectives	4.00
The activities and the movies were enjoyable	4.00
The facilitators fulfilled their role effectively	5.00
The sessions will be important to my future practice	3.00
The facilitators succeeded in creating a friendly atmosphere	5.00
The group dynamics during the sessions were to my satisfaction	4.00
I would rate the sessions ----- on a scale of 1 to 10 (1 being the least and 10 being the most. Use whole numbers only). (Mean score 7.10) Any other comments (Please use back of the sheet)	

[Table/Fig-3]: Questionnaire used in the study.
Feedback on movie screening and activities
Please score the session by marking the questions below where 1= Strongly disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly agree

5.00. The median scores for all other statements was 4.00. The mean rating of the movie screening and activities by the participants was 7.10. [Table/Fig-3] shows the questionnaire used and the median scores of different statements.

Among the free text comments were: the sessions should be held in the morning; sessions should only have the movie screening and not have any associated group work; sessions seem pointless and a waste of time; and the sessions should not be held before quizzes and other exams and the best time would be during the medical humanities module. However, for each negative statement there was only one respondent. Majority of the respondents did not mention any free text comments.

DISCUSSION

Student feedback about the activity was positive. It may have been difficult for students during their basic science years to understand about the importance of the issues depicted in the movie and explored during the subsequent activities to their future practice. This may have accounted for the low score with regard to that statement. In XUSOM the primary focus of students during the basic science years is to perform well on the United States Medical Licensing Examination (USMLE) Step 1 and activities not primarily directed toward this goal get less priority and importance.

In New Zealand study the authors commented that careful use of movies can reduce some congestion in the crowded curriculum [3]. The researchers mainly used the activity outside formal teaching hours and have suggested tips for using movies efficiently. They mention that the movies selected should have entertainment value, the movie list should be regularly reviewed and updated, students can suggest additional movies for consideration, and the discussion should be wide ranging and inputs from the facilitator/s should be minimal [3]. At XUSOM the movies were selected by the faculty team. During the group work facilitators only guide the process and provide less input. Each group has students from both junior and senior semesters providing seniors with the opportunity to guide juniors. At a Slovenian medical school, movies were used in an elective fourth year course on professionalism and students recognized the dimensions of communication, empathy, doctors' personal interests and palliative care in the movies shown [9]. The movies provided a safe and controlled environment enabling students to explore their values, beliefs and attitudes towards different aspects of professionalism. These aspects were also addressed in the movies shown at XUSOM and were further explored during the group activities, discussions and plenary sessions.

Movie snippets or short clips from movies have been used by certain educators [5,10]. At Monash University in Australia, one to two minutes movie clips containing a reference to the subject being discussed were incorporated into power point presentations and shown during Pharmacology lectures [10]. The authors mentioned the positive effects were students were able to relate theory to simulated practice, were motivated to attend lectures and the clips provided a sectioning break keeping students engaged throughout the lecture. We showed an entire movie and primarily used the movie to explore issues: of death, dying, mortality, morbidity, empathy and professionalism. Our experience with movie screening and activities provides preliminary evidence that movies could be used to strengthen learning of humanistic issues, enhance understanding of death and dying, and encourage professionalism among medical students in a Caribbean medical school.

We plan to continue the activity during fall 2015 and subsequent semesters. Detailed feedback about the activity will be obtained in future. At present, students are assessed by the faculty facilitators and the student group leader during the group work and presentations; we plan to continue this in the future. We also plan to study the impact of movie screening and activities on student behaviour and professionalism. There may be challenges in this and in studying the long term impact of the initiative. Other medical schools could consider implementing a similar initiative.

LIMITATIONS

We did not measure the impact of the movie screening and activities on medical student attitudes and behaviour. Attitudes, behaviour and professionalism are however, measured using various measures and instruments during both the basic science and clinical years of the course. Measuring long term impact of various medical humanities initiatives is challenging. Movie screenings have only been employed for a short time, future plans are to study their impact once the initiative is well developed and established. However, as mentioned in the literature, behaviour and professionalism are influenced by a number of factors, and only studying the influence of movie screening and activities on behaviour and professionalism will be difficult.

Not all students provided feedback about the sessions. Student feedback was obtained using a simple instrument designed by the authors. The instrument was circulated among faculty members for their comments and suggestions. The instrument was not pretested.

CONCLUSION

The authors were able to conduct movie screening and activities in a Caribbean medical school. Various challenges had to be addressed to ensure that all basic science undergraduate medical students could participate. Student feedback about the sessions was positive. Movie screening and activities though mentioned in the literature are not common in offshore Caribbean medical schools to the best of our knowledge. Students from the senior semesters were used as team leaders, who could mentor and support students from the junior semesters.

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