



Student feedback on an inaugural medical humanities module at XUSOM, Aruba

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ABSTRACT

Introduction: Medical humanities (MH) are using subjects traditionally known as the humanities in the education of doctors. Xavier University School of Medicine admits students mainly from the United States (US) and Canada to the undergraduate medical (MD) course. In February 2013 a MH module was offered to the first semester (MD1) students using small group, active learning strategies. **Objective:** The present study was conducted to obtain student feedback on the module and suggestions for further improvement. **Method:** Feedback was obtained using a questionnaire during the first week of April 2013. Basic demographic information was noted. Respondents were asked to rate their enjoyment and perceived effectiveness of the module and of different learning activities. Their degree of agreement with a set of fifteen statements was also noted. The median scores were compared among different subgroups of respondents using appropriate tests. **Result:** Twenty-six of the 30 students (86.7%) participated. The median enjoyment and effectiveness scores were 4 (maximum 5). There were no differences according to respondent characteristics. The overall median score was 8 (maximum 10). The module was regarded as fun and engaging, and taught students how to empathize. Students identified most with the session on the medical student. They wanted shorter but more frequent sessions and wanted the facilitator to provide more background about the paintings shown and to mention different solutions/approaches to the problems presented in the role-plays. **Conclusion:** The authors have shown it is possible to have a MH module within the shortened curriculum in a Caribbean school.

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Introduction

Medical humanities are using subjects traditionally known as the humanities to pursue goals in medical education (1). Disciplines like literature, art, creative writing, drama, film, music, ethical decision making, anthropology, sociology and political science have been used in

medical humanities (MH) courses around the world. MH is concerned with specific instances of health, disease, sickness, healthcare and the patient practitioner relationship as an arena for human experience (2). It supports the exploration of the human side of medicine and focuses on the art of medicine.

MH has a number of advantages in the education of future doctors. It provides glimpses of whole person understanding (3), insights into common shared human experiences and underlines the precious individuality of each human being (4). Literature introduces students to unfamiliar and problematic life situations, philosophy teaches the skills of logical thought and argument while drama improves oral communication.

MH programs are common in developed nations like the United States (US), the United Kingdom (UK), Australia and New Zealand (5). The author had started a voluntary module at the Manipal College of Medical Sciences, Pokhara, Nepal (6) and had been conducting a module for first year students at KIST Medical College for the last four years (5). The modules were conducted in small groups and case scenarios,

role-plays, literature excerpts, paintings were among the different learning modalities used.

Xavier University School of Medicine (XUSOM) is a private medical school in the beautiful island of Aruba located just north of Venezuela admitting students mainly from the United States and Canada to the undergraduate medical (MD) course. There are also a few students from other countries. Class sizes are small and usually in between 20 to 25 for most semesters. Students complete the basic sciences in Aruba and then join accredited hospitals in the US for clinical training. Before joining their clinical rotations students have to pass the United States Medical Licensing Exam (USMLE) step 1 which mainly deals with the basic science subjects. The main focus in 'offshore' Caribbean medical schools is on preparing and coaching students to do well in step 1 exams.

Table 1: Description of different sessions during the XUSOM module

Empathy:

We will examine this very important characteristic of a good doctor. We will examine empathy through the arts, explore philosophical perspectives on empathy and through role plays, discussions and activities try to understand how we can be more empathetic doctors.

What it means to be 'sick'?

This is an extension of the previous sessions and we will be looking at various effects of sickness from an individual, family, society and national perspective.

The patient:

The patient is at the centre of our medical profession. We will examine illness through a patient perspective and begin to see patients as human beings rather than as cases. Hutchison's plea written in the book 'Clinical Methods' captures the dehumanization of patients very well. Through the arts and patient narratives of illness we will begin to understand how illness can change the lives of patients.

The family:

Doctors have traditionally concentrated on the patient and have ignored the effect of illness on the family. In many countries, the family is an important source of support during health and sickness. But in many countries with nuclear families the support of the family is decreasing. This session will examine through the arts the effect of illness on the family caregiver. Role plays may also be used to explore this topic. The effect of urbanization and development on the traditional family structure may also be discussed.

The doctor-patient relationship:

This is at the heart of medicine. The nature of the relationship is changing and patient-centred medicine is today in vogue. Through the arts, role plays and occasional 'bytes' of theory we will explore this fascinating subject.

The medical student:

Being a medical student is tough these days. There is so much to learn and so little time in which to do so. Also society in many countries is increasingly demanding and unhappy with doctors and the medical care they receive. Medical students also feel that faculty members and patients do not understand their perspective. This session will look at how you as a medical student can interact more humanely and effectively with patients and how you can contribute to patient care.

Recently XUSOM is in the process of promoting small group and self-directed learning and has introduced problem-based learning sessions. From January 2013 the school switched to an integrated, organ system-based curriculum for the new batch of students. The MH module conducted for the first semester students was mainly based on the ones the first author had previously conducted in Nepal for first year students. The module was modified to suit the requirements of XUSOM. Inputs were obtained from the Chief Academic Officer and other medical education faculty while modifying the module.

The sessions were conducted for two hours every Tuesday from 3 to 5 pm. Seven sessions were conducted and table 1 provides a brief description of the module. The batch of 30 students was divided into four small groups of seven or eight students each. Like in previous modules facilitator presentations, group work, case scenarios, role plays, interpretation of paintings and student presentations were used to explore different aspects of MH. In XUSOM the MD course is conducted in a tight time frame and students are mainly focused towards preparing for the USMLE step 1 exam. Also an MH module had not previously been conducted at XUSOM and small group, active learning strategies have only recently been introduced in the curriculum. There were a number of challenges in starting and continuing the MH module.

We felt it was especially important to obtain feedback to understand the student response to the various 'novel' learning strategies used and obtain feedback and ideas for future modules. Hence the present study was conducted at the conclusion of the inaugural module in the first week of April 2013.

The aims and objectives of the present study were to obtain:

- a. Information about student perceptions of the module and
- b. Suggestions for improvement of future modules.

Method

The study was conducted among first semester undergraduate medical (MD1) students at XUSOM during the first week of April 2013. Student feedback was obtained using a questionnaire shown in the appendix. Participants were explained the aims and objectives of the study and invited to participate. Written informed consent was obtained from all participants. The study was approved by the Institutional Review Board of XUSOM via notification number XUSOM/IRB/2013/03.

Basic demographic information like gender, nationality, religion, place of family residence and occupation of parents were noted. Respondents were asked to provide two overall comments about the module. They were also requested to indicate their degree of enjoyment with the overall module and with learning methods like activities, role plays and interpretation of paintings used during the module. Students were asked about the effectiveness of the learning methods like activities, role plays and paintings used in the module. They were asked with which particular session they identified the most and why. Participants were asked to indicate their degree of agreement with a set of 15 statements using a modified Likert-type scale. They were also asked with which painting and case scenario/role play they could identify with the most along with reasons for their choice.

Two suggestions each to improve the use of role plays, and paintings were obtained. Two suggestions to further improve future modules were also obtained. Respondents were asked whether they were aware of a similar module in other medical schools and were also asked to grade the module on a scale of 1 to 10 with one being the least and 10 being the highest.

The questionnaire used was similar to what we had developed and used to obtain feedback from students in Nepal. The questionnaire was pilot tested among three second semester students for ease of understanding and lack of ambiguity.

The numerical data was entered into SPSS version 20 for windows for further analysis. The free text comments were noted and common ones tabulated. The median enjoyment, effectiveness, and overall score were calculated.

Result

A total of 26 of the 30 students (86.7%) participated in the study. Table 2 shows the demographic characteristics of the respondents. The gender distribution was equal and a large percentage of students were of American (US) nationality and resided in urban areas. Most students did not have parents in the health professions.

Table 2: Demographic characteristics of the respondents

| Characteristic | Number (percentage) |
|---------------------------|---------------------|
| Gender | |
| Male | 13 (50) |
| Female | 13 (50) |
| Nationality | |
| American | 17 (65.4) |
| Canadian | 5 (19.2) |
| Others | 3 (11.5) |
| Religion | |
| Hindu | 3 (11.5) |
| Islam | 8 (30.8) |
| Christianity | 8 (30.8) |
| Others | 1 (3.8) |
| Place of family residence | |
| Urban | 20 (76.9) |
| Rural | 4 (15.4) |
| Occupation of father | |
| Health related | 3 (11.5) |
| Others | 20 (76.9) |
| Occupation of mother | |
| Health related | 5 (19.2) |
| Others | 12 (46.2) |
| Homemaker | 5 (19.2) |

Table 3 shows the median module enjoyment scores, the enjoyment and perceived effectiveness scores of activities, role plays and interpretation of paintings. There were no differences in scores according to demographic characteristics of the students. The median scores were 4 (maximum scores being 5). With regard to the agreement scores with individual statements, scores of individual statements most were 4 or 5 except those of statement seven 'The time allotted to each session was appropriate' which was 3.75, and statement fifteen 'I would

like similar sessions in future' which was 3. The median total score of all fifteen statements was 57 (maximum possible score being 75). The overall median score was 8 and the interquartile range was 5.75.

Table 3: Median enjoyment and perceived effectiveness scores

| Characteristic | Median scores (IQR)* |
|---------------------------------------|----------------------|
| Enjoyment of the module | 4 (1.5) |
| Enjoyment of activities | 4 (1.125) |
| Enjoyment of role-plays | 4 (3) |
| Enjoyment of paintings | 4 (1.25) |
| Perceived effectiveness of activities | 4 (2) |
| Perceived effectiveness of role-plays | 4 (3) |
| Perceived effectiveness of paintings | 4 (1.625) |

*Maximum score was 5; IQR = Inter-quartile range

Among the overall comments about the module were: Fun and engaging (7 respondents (26.9%)), reduce the total duration of the session (6 respondents (23.1%)), enjoyed the role-plays (4 respondents (15.38%)), helped us learn how to empathize (3 respondents (11.54%)), wasted valuable study time (3 respondents (11.54%)), helped me think about future practice (2 respondents (7.7%)), and enjoyed the paintings (2 respondents (7.7%)). Ten students (38.5%) identified most with the session on the medical student. Among the reasons for the same were the session concentrated on the perspective of the student, they were students at the present time, and were able to discuss different issues connected with the subject. With regard to the question about which painting they could identify with the most, six students (23.1%) mentioned 'The death of Socrates' while four (15.38%) mentioned 'The anatomy lesson of Nicolaes Tulp' and 'The doctor' respectively. Among the reasons mentioned for identifying with 'The death of Socrates' were the painting depicted mixed emotions, Socrates is looking at death calmly and without fear. The anatomy lesson shows an activity (dissection) which students frequently carry out and they could easily relate to the same.

Among the role-plays mentioned were those of a lady whose mother is suffering from Alzheimer's disease and of a medical student who is interested in music but whose parents want him

to concentrate on his studies setting aside his other interests. Among reasons mentioned were many students had a similar situation (old grandmother) in their family, and some of the respondents felt they also have interests outside medicine. Among suggestions provided to further improve the use of role-plays during the module were to provide possible solutions and/or approaches to the problem presented (4 respondents), provide more time for the activity (2 respondents), more detailed scenarios and provide the scenarios beforehand (2 respondents each). An interesting suggestion was to ask students to first create the situation themselves and then explore it using a role-play. Among suggestions to further improve the use of paintings were provide more contemporary scenarios (4 respondents), use more abstract paintings (2 respondents) and spend more time explaining the painting (2 respondents).

Among suggestions to improve future modules were to decrease the overall duration of each session and have more frequent sessions (8 respondents). A respondent stated that most students were from a privileged background and did not understand about life's troubles. Fifteen students (57.7%) were not aware of similar modules elsewhere. Four students were aware and mentioned about sessions in Nepal, Canada, the United States and one taken by a friend in a pharmacy course. Among other suggestions and comments were to provide students freedom to explore their creativity during open space, the course was very long and very boring, 'I feel this course is on its way to great success at XUSOM' and 'I don't think you can teach a person to become 'humane'. It comes from within'.

Discussion

Overall student feedback about the module was positive. Students felt the module offered a contrasting perspective of the arts in a curriculum dominated by science. Students had contrasting opinions about the use of role plays with some students enjoying the learning modality while others were uncomfortable. A small group of three students were not in favour of a MH module and felt it was not directly

related to their preparations for USMLE Step 1 exams.

XUSOM like other medical schools in the Caribbean mainly admits students from the US and Canada to the MD course. Caribbean medical schools are making an important contribution to reducing the gap in the number of primary care physicians in the US and more than half the Caribbean medical school graduates are practicing as primary care physicians (7). In the US widespread adoption of the Flexner recommendations resulted in medical education becoming more expensive and students and their families exploring cheaper options especially in Caribbean medical schools (8). These schools may have less stringent admission requirements and many have three intakes a year. Based on the objective of saving costs the curriculum is compressed and each semester is only of about 16 weeks duration in most Caribbean schools. The primary focus of the institutions, faculty and students continues to be to obtain good scores in the step 1 USMLE exam and complete their clinical training in affiliated hospitals in the US.

In XUSOM the majority of students were from a good socioeconomic background. Private schools in the Caribbean charge an amount anywhere between US \$10000 to 20000 as tuition fees every semester. The number of women students was the same as the number of males. The number of women medical students has been increasing all over the world and in a study conducted in Nepal, women students accounted for nearly 50% of the student body (9).

The number of students in each semester is low at XUSOM and there were 30 students in the first semester. The number of students in different subgroups divided according to gender, nationality, religion and place of residence were low. In XUSOM many students are of South Asian origin with their parents having migrated to the US and Canada. The median scores were high (4 out of a maximum of 5) but there was substantial variation in scores among the respondents. The problem was finding time for MH in a tight and overcrowded curriculum. The time slot allotted was the one provided to

'Introduction to study of medicine' (ISM) from 3 pm to 5 pm on Tuesday afternoons. This created its own set of problems. Students were tired after attending classes from 8 am and the module period was sometimes used by certain students to prepare for the health fair and complete immigration and administrative formalities at Aruba. Students wanted the session to be of shorter duration but have more frequent sessions.

The overall comments about the module were similar to those mentioned by students in Nepal (6). Students identified most with the session on the medical student as it was directly related to their present situation and experiences. In Nepal, a developing country in South Asia, small groups, paintings, role-plays, debates and flip boards and flip charts were among the strengths of the MH module (10). Among the things which did not work were the online group, literature excerpts, creating interest among other faculty members in the institution and linkages with persons outside the traditional field of medicine. In XUSOM literature excerpts were not used and despite an invitation to join a pre-existing online MH group no student joined the group. A few faculty members attended the initial sessions but later due to teaching and other commitments interest decreased. I (PRS) used debate as a learning modality only during the last session on the medical student and this generated a lot of interest. I plan to use more debates in future modules.

With respect to the various paintings used students identified most with 'The death of Socrates' and 'The anatomy lesson of Nicolaes Tulp' and 'The doctor'. This was quite different from that noted in a Nepalese medical school where 'The city hospital' and 'The old guitarist' were the paintings with which students identified the most (11). The choice is obviously influenced by the educational and social background of the students. All paintings were from a western context and obtained from the Literature, art and medicine database (<http://litmed.med.nyu.edu/Main?action=new>).

The students were able to identify more closely with these paintings in contrast to the Nepalese students.

Role-plays have been used for a variety of purposes in medical education. Among these were to teach the skill of breaking bad news (12), learning communication skills in primary care medicine (13) and taking a sexual history and discussing sexual health issues (14). Students identified with the old lady suffering from Alzheimer's disease whose family were divided about whether to care for her at home or admit her in an institution and with the medical student who is keenly interested in music the most. Table 4 shows these two case scenarios. The scenarios were modified from those used in previous modules and were adapted to the North American scenario. In a previous study students identified most with a lady who had stepped on a land mine and whose leg had to be amputated, and with a lady trafficked for sale to a brothel (15). Again this may have been influenced by the socioeconomic and educational background of the students. The suggestions for further improvement were similar to those mentioned previously. The scenarios were shared with the students through e-mail about three days before the session so that they could come better prepared but it was not clear whether students checked their e-mails regularly and most did not come prepared to the sessions.

Table 4: A selection of role plays used during the XUSOM Medical Humanities module

XXX is a 35 year old working woman in New York. Her old widowed mother is staying with her. She is suffering from Alzheimer's disease and is unable to carry out the activities of daily living and has to be helped by the family. Anita wants to hire a professional nurse to look after her mother. However, the husband feels that the old lady should be escorted to an old age home outside the city. Explore the scenario from a family perspective using a role play.

XXX is a medical student at XUSOM, Aruba. He is a talented musician and has won a number of prizes during his school days. He wants to participate in an international medical student festival. However, his parents are concerned about his poor academic performance. They have invested a lot of money in the education of their son. They want him to concentrate on his studies and forget about playing the guitar. Explore the situation using a role play.

Students like in previous modules wanted more detailed and specific information and instructions regarding the activities, paintings and role-plays

while we desired the students to work with less information and more uncertainty like in their future practice and wanted them to develop the skills of analysis and judgment. In future modules we are considering whether to provide more information on the background of the paintings and the various options which students can explore through their role-plays.

Students were not much aware about MH sessions carried out elsewhere but as they were mainly from the US and Canada the amount of awareness was greater compared to Nepal. XUSOM as mentioned is putting greater emphasis on self-directed learning and active small group learning and over the next year a gradual change in focus is being planned. However at present didactic lectures continue to be the major learning strategy. The first semester students are the first batch learning under an integrated curriculum and a greater number of small group sessions have been conducted for them.

During the current (summer 2013) semester the module has been modified considering our experience with the inaugural module and the student feedback. Sessions are held on alternate weeks, the duration of each session is 90 minutes and a faculty member with a liberal arts background is a cofacilitator. Facilitators assess student participation during sessions and their involvement in group work during each session. Towards the end of the first semester students' ability to make patients comfortable and show empathy and other skills will be assessed using an objective structured clinical examination.

MH is new in many areas and medical educators may have to work together to develop a curriculum and consider the must know areas in the subject. As previously stated we are not in favour of a uniform module for different medical schools but feel the core competencies to be achieved should guide faculty in different institutions to develop their individual modules (5).

The study had limitations. Student feedback was obtained using a questionnaire developed by the

authors. The information obtained was not triangulated with that from other sources. The high response rate was strength of the study but the overall number of respondents was small.

Conclusion

Student feedback about the module was positive. The authors have shown that it is possible to conduct a MH module for first semester students within the framework of the shortened curriculum followed in most Caribbean medical schools. Certain problems were noted and suggestions for improvement obtained. These will be considered during the module for the new first semester students which would be conducted during the summer 2013 semester. We aim to obtain enough experience and evidence eventually to support the introduction of MH in XUSOM

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Appendix: The questionnaire used in the study

Student feedback about the XUSOM module

Gender: M/F

Nationality:

Religion:

Pace of family residence: Urban/Rural

Occupation of parents:

Father:

Mother:

Give TWO overall comments about the XUSOM module:

Rate your overall enjoyment of the module on a scale of 1 to 5 with 1 being least and 5 being most enjoyable.

Rate your enjoyment of different learning methodologies used in the module on a scale of 1 to 5 with 1 being least and 5 being most enjoyable.

Activities

Role plays

Interpretation of paintings

Rate your perceived effectiveness of different learning methodologies used in the module on a scale of 1 to 5 with 1 being least and 5 being most effective.

Activities

Role plays

Interpretation of paintings

With which particular session could you identify with the most? Why?

For the following statements indicate your degree of agreement with the statement as per the following scale: 1 = totally disagree, 2 = agree, 3 = neutral, 4 = agree and 5 = totally agree with the statement

1. I enjoyed the medical humanities module.
2. The facilitator succeeded in creating a relaxed and creative atmosphere.
3. The organization of the module was to my satisfaction.
4. The scenarios used in the module reflect contemporary medical practice.
5. The module has introduced me to issues which would be important in my future medical practice.
6. The team dynamics during the module was to my satisfaction.
7. The time allotted to each session was appropriate.
8. The module will help me become a more humane doctor.
9. The case scenarios served to introduce me to unfamiliar and problematic life situations.
10. I understood the importance of 'feelings' after completing the module.
11. The role-plays were effective in helping me to put myself in the position of the characters depicted.
12. The general arrangements of the room where the sessions were conducted were to my satisfaction.
13. The activities, paintings and case scenarios selected were appropriate to the module.
14. The learning objectives of the session and of the overall module were clearly delineated.
15. I would like similar sessions in future.

With which painting could you identify the most? Why?

With which case scenario could you identify with the most? Why?

Kindly provide TWO suggestions to further improve the use of role-plays in the module:

Kindly provide TWO suggestions to further improve the use of paintings in the module:

Kindly provide TWO suggestions to further improve future modules:

How would you grade the module on a scale of 1 to 10 with one being the least and 10 being the most effective?
Are you aware of a similar module in other medical schools? If yes, where?

Any other suggestions:

Thank you for completing the questionnaire. It is very much appreciated!