

Original Research Paper

Participatory Theatre as Teaching-Learning Methodology in Bioethics Education: A Pilot Study with Medical Undergraduates

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ABSTRACT

Background: In the recent past, emphasis has been on training the medical undergraduates at improving their moral judgment when faced with bioethical dilemmas in the ambits of patient care and professional dealing. From a medical educator's perspective, the widely followed lecture-based teachings are ineffective in inculcating moral ethics and teaching handling of bioethical dilemmas necessitating the need to adopt novel pedagogical teaching methods that are effective, time tested, educative and joyous to the participants. This study describes our experience with using street play in Bioethics education for medical undergraduate students.

Methods: The investigators adopted the time-tested street play educative modality used for public health education. The study involved two stages and included the design and performance of street play by the willing student volunteers under the mentoring of a faculty trained by the UNESCO Bioethics. The volunteer students were coached by the faculty and were given a week's time to write the script and dramatize the concept. The faculty in charge guided the concept development, script writing and dramatization in the subsequent supervised meetings. The mentors facilitated the theatrical performance on the topic and followed it with a group discussion among the students. The student's feedback on usefulness and effectiveness of street play in imparting bioethics education was ascertained through a structured questionnaire and from their opinion for open-ended questions.

Results: The results suggest that 96.15 % (150/156) of the responding students agreed that street play useful to teach bioethics. Also, the overall assessment on street play was useful to teach bioethics was observed to be Excellent/Very good by 78.22% of the students. The volunteers also expressed high approval for the question pertaining to the theatrical aspects like depiction, relevance, impact, sensitivity, group dynamics, synchronization, and clarity. The open-ended

questions showed that the learning experience was fun, good and useful by most students.

Conclusion: The results of this pilot study indicates that street play was effective in teaching Bioethics to medical undergraduates and that this may facilitate learning, increase empathy and teamwork communication skills. The other important aspect is that conduct of street play on relevant issues does not need elaborate material equipment's and can be done in realistic setting of classroom and could be a creative alternative for the traditional lecturing teaching techniques being followed. As far as the investigators are aware of this is the first study that attempted at understanding the usefulness of street play in teaching Bioethics to medical undergraduates. It is suggested that medical curriculum should incorporate theater arts to inculcate moral ethics and teaching handling of bioethical dilemmas to students.

Keywords: Street Play, Medical Ethics, Bioethics, Medical Undergraduate Students.

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Introduction

Since time immemorial medical profession has been considered a very noble profession and the physicians to be epitome of righteousness, empathy, ethical practice, and care [1,2]. However, in the recent past observations from the medical fraternity and information published in the social pages indicate that when compared to the bygone times there has been a decrease in the values and in the level of ethical practice in healthcare sector [1,2]. In lieu of these observations, to prepare better professionals, many professional organizations and universities have identified that medical ethics needs to be taught to healthcare students by integrating well-constructed courses into both pre-clinical and clinical courses [1,2]. However, on a practical note, unlike pedagogy of structured medical subjects, teaching of medical ethics has obstacles and there has never been a clarity on how to achieve the best results. Currently, in most of the schools and hospitals where emphasis on medical ethics is being placed and taught, the traditional didactic lectures are used [3]. Teaching medical ethics and to have it a lasting impact and an integral part of clinical practice throughout a doctor's career is a challenge and requires considerable innovativeness and enthusiasm. Under these considerations, doubts persist on what impact the traditional didactic method which is known to be not everlasting will have in teaching of medical ethics.

In the recent past the role of visual arts like subject based movies, dramatic plays, poetry, narrative essays, music, skit, mime, and street plays have been shown to have profound impact in teaching and education [4]. To substantiate these reports have also shown that, when compared to reading educational information from book emotional components are easily recollected when learnt through visual arts [5-6]. In guidelines published as "Road Map for Arts Education" after the World Conference on Arts Education, Lisbon, Portugal 2006, suggests exploring the role of Arts Education in meeting the need for creativity and cultural awareness in the 21st Century, and to place emphasis on the strategies required to introduce or promote Arts Education in the learning environment [7]. Additionally, scientific reports indicate that using visual arts in medical education [8-12] and improves observational and diagnostic skills [12-13]. The investigators observed that when compared to the students who underwent standard didactic training, the cohorts trained through visual arts were more likely to describe clinical photographs of patients accurately and fully with medical conditions, had better observational skills and awareness of emotion and empathy [12-13]. A well-planned visual art is effective in exposing the viewers to worlds outside their own experience, present influential facts, and engaging emotions in the viewers. A well scripted and acted play can also help the audience actualize other condition and assists in inculcation of compassion, understand paradoxical divergent views, and consider multiple points of view [14]. This is especially very useful in teaching of medical ethics where ethical dilemmas are galore and multiple (and at times divergent) viewpoints are to be understood, accepted, and appreciated. For the first time an attempt is made to understand the usefulness of street play in imparting medical education to the undergraduate students.

Methodology

This was a multicentre study and was conducted under the aegis of the UNESCO Bioethics, India unit after obtaining the permission from the Institutional Ethics Committees of the participating

units. The topic consisted topics on autonomy & consent, concept of vulnerability, dignity on disability, disability ethics, disability ethics & blindness, disability is only in attitude, discrimination, disabled population, disabled population vulnerability, disability - problem understanding & awareness, environmental ethics, equality, justice & equity, equal rights to disabled, female child, gender discrimination, gender disparity, human dignity & human rights, help under privileged, need for changing thought process, non-discrimination, non-stigmatization, organ donation, privacy & confidentiality, protect girl child, respecting disability, respect for differently abled (disability), respect the people, respecting the specially abled, stop discrimination against under-privileged, stop discrimination of disadvantaged, vulnerable population-gender disparity & protection and use of ethics in helping disabled.

The study population consisted of medical undergraduates who had registered for the Bioethics program. The investigators approached the participating medical graduates and briefed them about the purpose of the study. Written consent was obtained on a separate sheet from all the participants before the administration of the questionnaire. The study involved two stages and included: The design and performance of street play by the willing students. The street play topic and dramatization were guided by a faculty at each institute. Controversial and antisocial aspects were avoided and only those topics of relevance to the medical curriculum and ethics were chosen. The detail methodology is enlisted in Table 1.

The appraisal of effectiveness of the performed street plays were done by student's naïve to the concepts and principles in Bioethics. The study questionnaire was designed by the investigators and was developed by a panel of experts in bioethics, medical education, and researcher. Special attention was given for clarity and the questions were open ended. Emphasis was placed on the opinion for the comprehension and understanding of the meaning of each question. The final instrument underwent only minor grammatical changes. The student's opinion was assessed by quantitative and qualitative methods. In the quantitative methodology by using a 1-5 Likert scale questionnaire with, 1 = not useful; 2 = could be better; 3 = good; 4 = very good and 5 = excellent, while the ascertain opinion (qualitative) and semi-structured open-ended questions were distributed to the students in the audience (the audience students) and the performing students separately.

Statistical analysis

The quantitative data was entered in Microsoft excel and answers on the questions were subjected to analysis using frequency and percentage using the SPSS software program version 22 from IBM. The effectiveness of the lesson was assessed by comparing rates of answers to multiple-choice questions in the final exam following the course

Results

The results of the study are enlisted in Table 1 to 2. As observed in the study, the students expressed their high appreciation to the overall assessment (Table 1; Figure 1). With respect to the sub sections of depiction, relevance, impact, sensitivity, group dynamics, synchronization, and clarity, the resulted indicated that majority of the students (> 85%) expressed their opinion as excellent or very good (Table 2).

Discussion

The results of the study indicate that the street play evolution has transformed the participants and substantiates the germ idea for evolving this as a teaching learning methodology. The most important observation is that this methodology virtually brings a metamorphosis preemptorily and without scaring the mind or the accepted beliefs. Here with a small group of students 10 to 12 underwent a mini kaleidoscope of experiences, which is natural and brought out a lasting change as expected outcome when this learning methodology was planned. In lieu of the observations accrued from this pilot study we recommend that small group learning with 10 to 12 students for a large class will bring about an effective learning of the ethical issues. This we feel will be very important as studies and our own observations have shown not to happen in the conventional teacher lecture pedagogy. Also, this method of purposive experiential learning will be readily

acceptable and have a long-lasting impact on the individual than hours of teaching or preaching. Therefore, this novel method of teaching would be the answer to teaching domain in the affective areas like professionalism, ethics and worth adopting by the fraternity.

Recent reports are suggestive to the fact that street plays are having a profound influence in delivering message to the public on complex issues and in conveying socially relevant messages in public health [15-17]. As a matter of fact, visual arts, and theatre (including drama, skits) are known to have an important role in inculcating knowledge and awareness on various controversial and lesser-known medical subjects [15]. In fact, a meta-analysis of various studies in the use of theatre in medical education by Lake and coworkers [16] have substantiated the fact that "arts can provide medical educators with a penetrating and dynamic set of tools for rethinking medical education and medical practice". They have also suggested that "arts must be permitted to take their legitimate place in medical education and to have their effectiveness judged by appropriate criteria and methods" [16].

In the current study for the first time an attempt is made at studying the effectiveness of street play in the teaching of bioethics to the medical undergraduates. The students selected for the study were the ones who did not have any exposure to the teaching of bioethics and medical ethics. The results of the study indicated that majority of the students (> 85%) expressed their opinion as excellent or very good (Table 1).

As observed in the study, the students who were audience to the street play on aspects addressing various bioethical issues expressed their high appreciation to the overall assessment (Table 1; Figure 1). With respect to the sub sections of depiction, relevance, impact, sensitivity, group dynamics, synchronization, and clarity, the resulted indicated that majority of the students (> 85%) expressed their opinion as excellent or very good (Table 1). In addition to this the sub analysis into the various facets of the street play like depiction, relevance, impact, sensitivity, group dynamics, synchronization and clarity also indicated high appreciation from the students (Table 2). When considered in total the observations from both quantitative and qualitative observations substantiate the fact that street play is indeed an effective modality in inculcating principles of bioethics in the undergraduate students.

From the perspective of medical education, unlike with the teaching of core subject related topics, inculcating/teaching ethical values is ideally not a classical class-based mentor-student teaching. For teaching of bioethics to be effective, an attitudinal change and inculcation of righteousness needs to be insidiously done through constant prodding via information and reinforcement by case scenarios analysis. In this regard the street play is important because it has an impact on the viewers and helps ingrain various sensitive issues in their minds. The other advantage of street play is that it encourages people to empathize themselves with an enacted character and this feature is of immense educational value [15, 17].

From a student development perspective such exercises are very beneficial and aid the all-round ability. In the study heterogeneous students varying from culture language, customs, traditions, personal experience religion, family outlook local societal propriety causes a group of students to be different as to cause learning. The study indicated that when students interact to implement the task of performing a street play, they must first contend with their beliefs and come to a socially acceptable consensus after process of debate, friction of values that transforms the student's perspective and in a short time learns attitude behaviours that would never otherwise be learnt.

In the study various topics on ethics like on autonomy and consent, concept of vulnerability, dignity on disability, disability ethics, disability ethics and blindness, disability is only in attitude, discrimination, disabled population, disabled population vulnerability, disability - problem understanding and awareness, environmental ethics, equality, justice & equity, equal rights to disabled, female child, gender discrimination, gender disparity, human dignity and human rights, help under privileged, need for changing thought process, non-discrimination, non-stigmatization, organ donation, privacy and confidentiality, protect girl child, respecting disability, respect for differently abled (disability), respect the people, respecting specially abled, stop discrimination against under-privileged, stop discrimination of disadvantaged, vulnerable population-gender disparity and protection and use of ethics in helping disabled were addressed and the opinion of the students on the effectiveness of street play as a medium of teaching was collected. A literature

study indicated there are no studies conducted on this aspect and that this is possibly the first in the fraternity.

The most interesting aspect about this methodology of teaching is that it thrusts the students into a vortex of conflicting ideologies, which culminates in triggering/learning of moral sensitivity, receptivity, courage, and critical thinking. The other best aspect of such exercise is that the student comes out unscathed from vitriolic discussions, learns to compromise unconsciously and achieve the necessary common aim. Together all these aspects will help in their personal growth and inculcate the right methods of speaking/negotiating, the necessary soft skills, accept others' views and cultures, to empathize with the afflicted and understand the situation. All these aspects are very important and help take forth the all-round development of the students and in accordance to the tenets of medical ethics, education and service

Conclusions

Participatory theatre involves all those actors to formulate and derive, an acceptable concern of the dialogue and direction of storyline. This requires each of the actors to come out of their comfort zones and take us stance that brings them to debate and advocate their opinions, which have been formed, over the years, by their experiences, indoctrination, and religious and traditional culture. The confluence of opposing beliefs gets a thrashing by reasoning and practicality. Varied behaviours and thought process often take a U- turn. This itself is a process of exposure, renationalization, relativism, and prioritization. The unexpected situation that the volunteering individual took up brought him to an experience of discriminatory situation which he would have been exposed only in a rare event.

When the volunteers agreed to participate in this programme, little did they know, that they would be having are visitation of they are beliefs. Two or three such teaching modules would allow for the sensitization of individuals in a phased and appropriate manner. The actors experience vastly different emotions than the observers in this situation. This allows the medical teacher to enhance the learning and tackle oft seen ethical dilemmas leading to empowerment of the students to handle such real time situation in an ethical manner. The actors have had the best experience and their opinions are now, rational. The actors who gave completed the qualitative survey form is, as easily, sucked into the vortex of cauldron of ethical issue in India. While the observer group were complacent and just took the essentials from the message of the street play, there was no lasting attitudinal change in them (as they have not' lived' this experience). The most forthcoming opinions and experience was from the actors having the focal group discussion. It was only the astute few actors who penned down their feeling in the reflective writing. The observers only took on the most superficial message that was evident in the play, by comparison. This methodology of teaching bioethics would truly influence the students in getting a better perspective of the learning objective. Five to ten, such learning objective (article 11, non-discrimination and non-stigmatization); could fast forward the students in to understanding the sensitivity and impact of various crux problem.

Table 1: Opinion expressed by the students on the overall assessment and on street play as a useful modality to teach bioethics

| | Choice | Frequency | % |
|--|-----------------|-----------|-------|
| Overall assessment on street play useful to teach bioethics | Excellent | 61 | 39.11 |
| | Very good | 61 | 39.11 |
| | Good | 26 | 16.67 |
| | Could be better | 3 | 1.92 |
| | No answer | 2 | 1.28 |
| Is street play useful to teach bioethics | Yes | 150 | 96.15 |
| | Perhaps | 1 | 0.64 |
| | No answer | 5 | 3.21 |

Table 2: Opinion expressed by the students on the various domains pertinent to the street play on aspects in Bioethics:

| The domains on the street play | Opinion of the participants regarding various aspects pertaining to street play | | | | |
|--------------------------------|---|--------------------------|---------------|--------------------|--------------------|
| | No answer N (%) | Could be better N (%) | Good N (%) | Very good N (%) | Excellent N (%) |
| Depiction | 0(0) | 3(1.92) | 16(10.26) | 65(41.67) | 72(46.15) |
| Relevance | 0(0) | 1(0.64) | 17(10.9) | 52(33.33) | 84(53.85) |
| Impact | 1(0.64) | 1(0.64) | 21(13.46) | 57(36.54) | 74(47.44) |
| Sensitivity | 1(0.64) | 3(1.92) | 27(17.31) | 45(28.85) | 77(49.36) |
| Group dynamics | 0(0) | 2(1.28) | 22(14.1) | 61(39.1) | 70(44.87) |
| Synchronization | 0(0) | 2(1.28) | 16(10.26) | 74(47.44) | 64(41.03) |
| Clarity | 0(0) | 3(1.92) | 19(12.18) | 49(31.41) | 84(53.85) |

| Open end Question | Expressed Answers |
|--|---|
| What is your opinion on the topic? | <p>This is essential to promote equality. Every person should have equal rights Rights should be given to disabled It is very important ant topic four our society to discuss and accept the people. I agree with the topic as this topic needs awareness. It's a very touching and a social topic Topic chosen is an overlooked topic most of the time. We came to know about the actual problems faced by disables. It is pathetic that such people are ignored in society which should stop.</p> |
| Do you like to be with your group in this? | <p>It will be very creative and wonderful experience. Promotes socialism and various interactive ideas It was an awesome experience as working with my group I learnt new things. People were funny enthusiastic creative and innovative. I really like to be in the group because it helps to take part in a noble deed and moreover it helps to spread awareness among common people.</p> |
| Do you think this is worthwhile? | <p>Very educational This topic is of major concern and will hold strength to be discussed openly This topic is of major concern Yes, doing something for a noble cause is worthwhile. It will not only spread awareness among the people also help participants learn more things. It gives us an opportunity to bring such topics to everyone in an interesting way and we were also able to shed light on some problems people face.</p> |
| Do you think it is better to include the people from same class (socioeconomic status/ same religion/ same caste/same scholastic caliber/ same age) why? | <p>Discrimination should not be there. It should be a heterogeneous mixture of all people. Different people bring in a variety of ideas which help us to expand our knowledge further. I think having diversity in a group helps in better interaction and also helps in bringing out a really good message for the audience.</p> |

| | |
|--|--|
| <p>Do you think that all being from the same culture is better?</p> | <p>Everyone should be included I think people from different cultures should be included so that we can have diversity in ideas. Different cultures present different viewpoints. Also, one learns to convey to different cultures. By different cultural background we get to know each other and to learn from each other. Different people from different cultures bring different experiences and ideas.</p> |
|--|--|

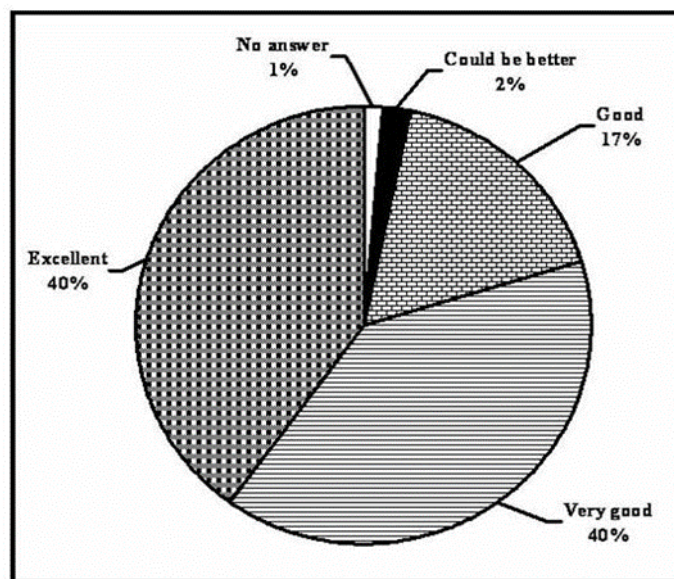


Fig 1: Opinion of the student audience on the overall assessment of street play as an effective medium in teaching of bioethics

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