Role of Movie Screen Shots in Medical Education

S Vasantha[1], P Aruna[2], Vada Kala Rani[3], G Sudhakar[4]

[1]Associate Professor, Dept. of Ophthalmology, Government Medical College, Ongole, AP
[2]Associate Professor, Dept. of Biochemistry, Government medical college Anantapur, AP
[3]Associate Professor, Dept. of Hospital Administration, ACSR Government Medical College, Nellore
[4]Professor & Head, Dept. of pathology, Government Medical College, Ongole, AP

Abstract:

Background of the study: Feature films are powerful teaching tools that are increasingly utilized in health sciences education due to their compelling portrayal of medical issues. Despite their potential, few studies have quantified the effectiveness of using feature films as a teaching method, making adequate assessment crucial.

Objective: To assess the perceptions of undergraduate students studying Ophthalmology using of Movie Screenshots.

Materials & Methods: A total of 109 MBBS final year Phase I students participated in the study. An innovative teaching-learning technique was used. A topic in ophthalmology, "glaucoma," was taught using a teaching method that incorporated online movie screenshots. With the help of an analogy from a telugu movie episode (Vinodam, 1996), the characters were compared to Glaucoma, an ocular condition, Glaucoma Patient and an Ophthalmologist, the scene was explained with the help of a movie screenshot. Following the activity, students' feedback was collected using an eight-item closed-ended questionnaire. This questionnaire, which was self-designed, pilot-tested, and validated, offered response options based on a 5-point Likert scale.

Results: 60 out of 109 students responded to the questionnaire about movie screenshot-based teaching methods. 49(81.6%) students disagreed that they get distracted from the topic with the use of movie screenshots. 7(11.6%) students agreed that they get distracted. 4(6.67%) remained neutral. 48(80%) students disagreed that they feel bored. 9(15%) students agreed that they feel bored. 3(5%) remained neutral.

Conclusion: The majority of third year medical students found the movie screenshots used in the class relaxing, understandable, attention-amplifying, satisfying, motivating, interesting and enriching experience in learning, and agreed that they prefer movie screenshot-based discussion.

Keywords: Medical Education, Movie Screen Shot, Student Teaching.

Introduction

The field of medicine is dynamic and constantly evolving, making it a significant responsibility for teachers to train medical students to meet their expected roles. Given the vast amount of medical knowledge that must be conveyed within a limited time frame, it is evident that medical educators should embrace innovations to ensure students continue learning effectively in both classroom and hospital settings [1]. The ideal strategy to enhance teaching and learning is to utilize verbal, visual, and auditory stimuli. This approach targets all types of learners, thereby improving the likelihood of achieving better learning outcomes. [2].

Cinema has consistently demonstrated an exceptional ability to engage audiences worldwide. Some popular medical-themed films can be particularly beneficial for educators, as they introduce medical scenarios and illustrate the pharmacological applications of specific drugs to students. These films can explain concepts that traditional educational methods may find challenging to convey with the same ease and effectiveness. [3]. Using cinema in education can teach students a variety of subjects and skills, including effective communication, a protective doctor-centric approach to medicine, and fostering ethical discussions about palliative care and end-of-life issues. [4].

Using movies in the classroom offers various educational benefits. These include capturing students' attention, enhancing concentration, generating interest, creating a sense of anticipation, energizing students for learning activities, stimulating imagination, enriching content and learning attitudes, strengthening the student-teacher connection, improving memory and understanding,

fostering creativity and deep learning, encouraging the flow of ideas, allowing freedom of expression, inspiring and motivating students, making learning enjoyable, setting a suitable mood for learning, reducing tension and anxiety on challenging topics, and creating memorable visual images.[5] Cinema holds significant promise in education for nurturing compassionate orientations. Evidence indicates that students find this teaching method highly engaging and beneficial (Law et al., 2015). A study conducted at Tehran University of Medical Sciences evaluated the use of 'cine medicine' as a technique for teaching medical students about the psychosocial aspects of medicine. The results showed that cinema is highly effective for this purpose. [7] This study aimed To assess the perceptions of undergraduate students studying Ophthalmology using of Movie Screenshots.

Materials and methods

Following approval from the institute's ethics committee, written and informed consent was obtained from all participants. The research study was conducted on final MBBS phase - 1 students studying ophthalmology at Government Medical College in Nellore, India. 109 students from Final MBBS Phase I was taught about an Ophthalmology topic i.e.,"Glaucoma" with an online movie screenshot-based teaching method, With the help of an analogy from a telugu movie episode (Vinodam,1996), the characters were compared to Glaucoma, an ocular condition, Glaucoma Patient and Ophthalmologist, the scene was explained with the help of a movie screenshot.

A smart thief who gets trained in a college for thieves, in a movie deceives and tries to steal things on installment basis in a house, in the presence of its owner who was blind folded after a trauma, his wife, his friend and a known police officer, without being recognized as a thief by giving them the impression that he is a relative of the owner, friend or the police officer to each other.

After the activity, students' feedback was obtained using a eight item open-ended questionnaire. Each question had five choices (strongly agree, agree, neutral, disagree, or strongly disagree). Feedback data was collected from the Google form, which was emailed to all the student participants. The participation for the questionnaire was voluntary, and the responses were collected anonymously. The ten-item feedback form was self-designed, pilot tested and checked for face validity, content validity, and reliability.

Results

60 out of 109 students responded to the questionnaire about movie screenshot-based teaching methods. 49(81.6%) students disagreed that they get distracted from the topic with the use of movie screenshots. 7(11.6%) students agreed that they get distracted. 4(6.67%) remained neutral. 48(80%) students disagreed that they feel bored. 9(15%) students agreed that they feel bored. 3(5%) remained neutral. relaxed.13(21.67%) remained neutral. 22(36.6%) students agreed that their mind wandering was less. 24(40%) students agreed that their mind-wandering was less. 14(23.33 %) remained neutral.37(61.6%) students agreed that their understanding was better.

17(28.33%) students disagreed that their understanding was better.7(11.6%) remained neutral.42(70%) students agreed that they paid more attention to the topic. 14(23.33%) students disagreed that they paid more attention to the topic. 4(6.67 %) remained neutral. 41(68.3%) students agreed that they were more satisfied. 13(21.67%) students disagreed that they were more satisfied. 6(10 %) remained neutral.41(68.3%) students agreed that they felt motivated to learn. 10(16.67%) students disagreed that they felt motivated to learn. 9(15%) remained neutral.

41(68.3%) students agreed that they prefer the movie screenshot method. 17(28.33%) students disagreed that they prefer the movie screenshot method. 2(3.33%) remained neutral.36(60%) students agreed that their learning experience was enriching.10(16.67%) students disagreed that their learning experience was enriching. 14(23.33 %) remained neutral.
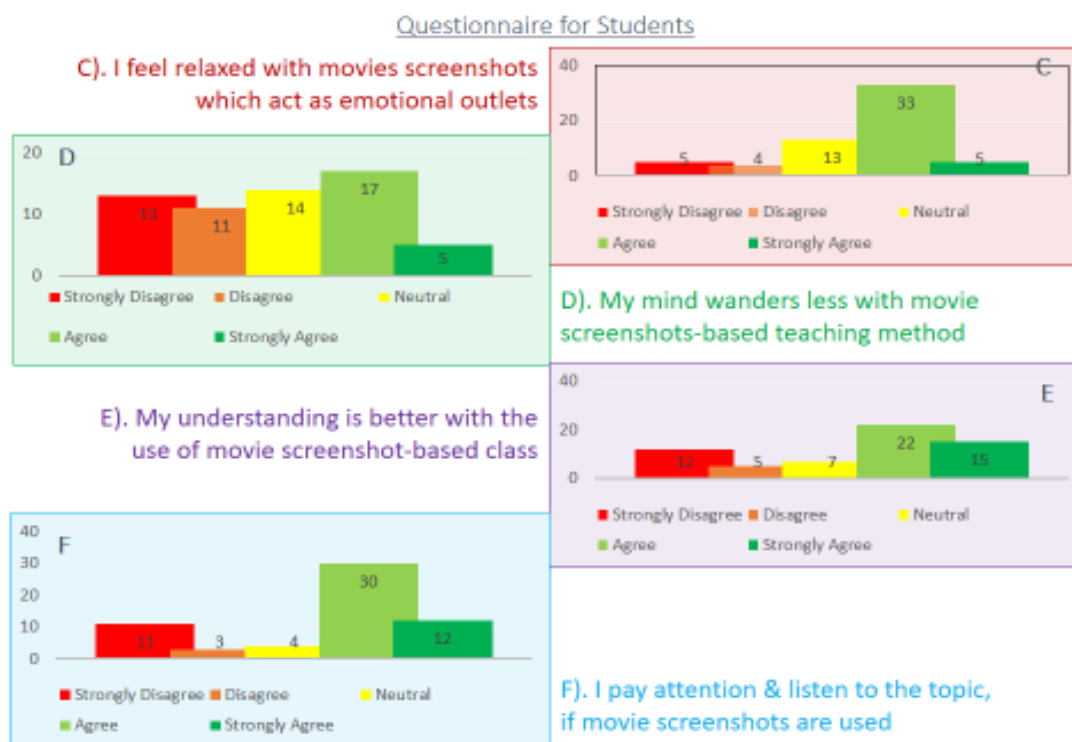
Figure 1:

Discussion

Research suggests a wealth of experience using cinema in healthcare education, but this might just be the tip of the iceberg, with even more educators likely employing this method.

Movies have been used as teaching and learning tools in different branches such as microbiology, clinical pharmacology, family medicine, internal medicine, medical ethics, doctor–patient relationship, clinical research, psychiatry and professionalism and so on. Movies involve the affective domain, promote reflection, and link learning to experiences.

For students of the 21st century, such as Generation Z or those who are digitally connected, digital technology has introduced new methods of teaching and learning. [8].

Amid the COVID-19 pandemic, digitally supported teaching and learning, whether synchronous or asynchronous, have greatly benefited the global learner community. Additionally, feature films have previously demonstrated their effectiveness as potent teaching tools. [3].

Incorporating film clips into teaching is an effective, valuable, innovative, and relatively straightforward strategy. It enhances enjoyment for the learner and adds a human touch to the content. [9].

The accessibility of digital platforms and the abundance of information available through movies and web series make it easy for students to utilize them to enhance their learning of various subjects. Regarding the study results, Alis and Nazan [10] showed that 88% of films used by them in medical education were rated as good by the students. Our students appreciated the class and found it enjoyable and useful for their future endeavours. Our study shows that movie screenshot-based teaching may help in associative learning.

The present study's results concur with the study by Levy [11], who reported on the teacher's use of film clips for classroom teaching for an undergraduate Business Law course. Levy [11] recorded that 96.0% strongly agreed that using film clips makes the class more engaging, 73.9% said it helped them learn, and only 1.4% disagreed.

Overall, students have shown high acceptability for the use of online videos as a supplementary teaching tool [12]. Lim and colleagues (2006) evaluated students' feedback on the video included in a PowerPoint presentation and concluded that it helped them to sustain interest in the lecture; 97.7% agreed that the videos helped them to better visualize concepts, 81.0% felt that videos would help them better remember facts and 97.2% believed that the videos helped in their understanding of the lecture.

Conclusion

From the results of this study, it can be concluded that the majority of third year medical students found the movie screenshots used in the class relax-

ing, understandable, attention-amplifying, satisfying, motivating, interesting and enriching experience in learning, and agreed that they prefer movie screenshot-based discussion. Medical students felt that movies enhanced their learning related to the topic and could motivate the applicability of medical education concepts in practice.

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