Cinema in Medical Education – Has it Penetrated the Mainstream?

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Summary

Context: Cinema in medical education is a promising but relatively underused tool. What senior doctors think of it is unknown.

Methods: We surveyed all the consultants at a district general hospital and all the associate deans and foundation program directors from a postgraduate deanery. The survey consisted of four open questions and was emailed to all recipients, the replies collated, organised and then coded.

Results: 119 responses were received: 81 from consultants; 13 from associate deans and 25 from foundation program directors (FPDs). Of these: 96 had no experience of using cinema in medical education. The distribution of exposure was interesting with experience being in the minority for consultants and FPDs but the majority for the associate deans.

A variety of themes emerged including different ways the technique has been implemented, positive and negative aspects as well as some fascinating personal insights. Much of the experience was in primary care and mental health.

Conclusion: Cinema in medical education is experienced by the minority. Those that do have experience have mostly positive ones and tend to be more experienced educators. The wide variety of uses and positive attributes seems to overshadow the negatives, which are mainly technical.

Keywoords: Medical Education, Pedagogy, Survey, Experience.

Introduction

Cinema in medical education is a relatively new tool, though Fritz and Poe published on the role of the cinema seminar in psychiatry education in 1979[1]. Subjectively it would appear a promising tool that is receiving increasing levels of interest. Two books have been published on the topic[2,3] and a dedicated journal, The *Journal of Medicine and Movies*, is available free online in Spanish and English (http://revistamedicinacine.usal.es).

That interest in specialist journals and bespoke books is one thing, whether or not this interest has percolated down to practitioners without a dedicated interest or role in education is another. This study aims to ask this question. Its scope is exploratory, in that it aims to ask, but not necessarily answer in full, this question. The aim is to generate ideas and explore for themes to provide a base for further study.

Methods

Given the aims of the study stated above a survey was drafted[4]. The survey was limited to one side of

an A4 sheet of paper to encourage responses. The questionnaire was purely qualitative to reflect the exploratory aims of the study.

The survey was entitled "Cinema in medical education" and had an introduction as follows "Have you ever used a feature film, either in its entirety or clips, to facilitate teaching health care students or professionals? If 'Yes' please try and complete the questions below. If 'No', thank you for your help, please return the questionnaire". The wording was deliberate as the authors expected many of the participants to have had no experience in this area and a response in the negative would have value.

The use of the words "cinema" and "feature film" in the introduction was deliberate. We hoped it would avoid confusion which could reduce the quality and quantity of responses.

The introduction was followed by four questions:

1. If so what did you do?

2. What aspects were positive?

3. Were there any specific difficulties?

4. Did you receive any feedback from the learners? What did it suggest?

Deliberately open with plenty of space for responses, these questions where designed to allow those with experience to freely express themselves but with a semblance of structure to facilitate analysis.

Distribution was electronically via email. This allowed for quick and easy distribution, saved on costs and, the authors believed, made it easier for participants to respond. The distribution was performed by PB as the authors believed that a far greater response was likely to a request from the Foundation School director and experienced consultant physician than from a foundation doctor new to both the trust and deanery.

The survey was sent to all consultants at a district general hospital (Royal Bolton Hospital) and all the associate deans and foundation program directors from a postgraduate deanery (North West Deanery).

The survey was not anonymous, the authors believed anonymity would not improve the quality or quantity of the responses and that sorting the responses by professional role may provide some insight.

The responses where collated and the demographic details of the responses analysed. The responses where coded by hand by DD for common themes and interesting or revealing responses. The procedures and techniques of grounded theory were used, the data went through open coding to break down the responses, axial coding to make connections between categories and finally selective coding to conceptualize the results[5].

Results

182 surveys where emailed out, 139 to hospital consultants, 15 to post graduate deans and 28 to foundation program directors. In total 119 responses where received: 81 from consultants; 13 from post graduate deans and 25 from foundation program directors. The response rate was 65.4%(58.3%, 87% and 89% respectively). Of these: 96 had no experience of using cinema in medical education.

The distribution of exposure was interesting with experience being in the minority for consultants (8/81, 9.9%) and FPDs (6/25, 24%) but the majority for the associate deans (8/13, 61.5%). Looking at the responses by specialty the majority of experience come from primary care and mental health.

Analysis of the questions revealed several common themes and some interesting statements.

1. If so what did you do?

Many of the responses related to the use of clips to illustrate points in teaching ethics, values and beliefs. One post graduate dean with an involvement in the training of General Practitioners said that they "regularly use clips from *Doctor in the House* (1969–1970) films to illustrate how consultation techniques have
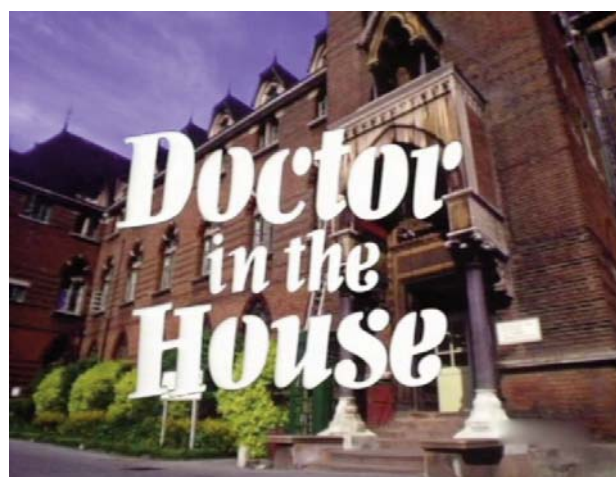
matured from Doctor centred to patient centred". Other examples include using *Inspector Morse* (1987–2000) (UK drama) to illustrate a foot drop and the film *The Negotiator* (1998) to illustrate neuro-linguistic programming. 'Doctor in the House' received lots of attention with relation to professiona-lism and communication skill.

to a dealers house) as an example of transfer of a critical-ly ill patient".

Two respondents had experience of using a full film (as opposed to clips) in which *12 angry men* (1957) by Sidney Lumet was used to generate discussion around leadership.

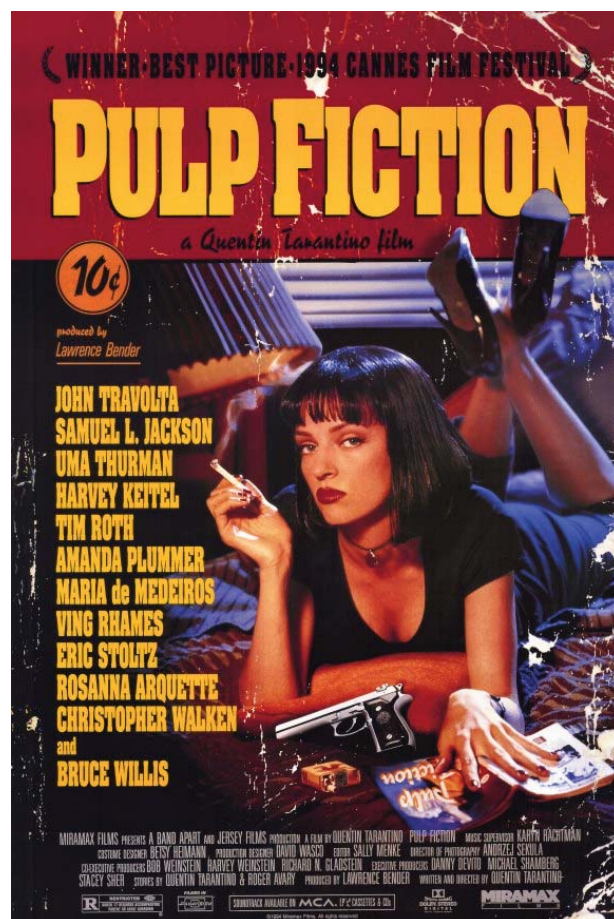*Inspector Morse* (1987–2000)

Experience varied from being a learner or observer through to designing and facilitating sessions using cinema.

Cinema clips seemed to be put to good use demonstrating how not to do something. This ranged from communication skills and bed side manner through to, the often represented on the silver screen, cardiopulmonary resuscitation.

As well as demonstrating specific points many facilitators used clips to generate discussion around ethics, values and beliefs. A clip from *Pulp Fiction* (1994) by Quentin Tarantino was used to generate discussion in a session on advanced life support. "A scene from 'Pulp Fiction' (John Travolta taking a comatose Uma Thurman

2. What aspects were good about it?

By far the main positive mentioned was the ability to generate discussion. "The post-film discussion was fascinating and led us down all sorts of paths by taking aspects of the film and linking with specific patient experiences". "Got them talking and sharing experiences" and on a similar vein "the fun aspect of the clip engages the audience to the topic".

The beneficial effect on the audience's attention was mentioned. "It's a different medium to the usual teaching model and so managed to gain the trainees attention for a while". "Everybody wakes up".

How film "catches the imagination" and that "information structured in narrative is better retained" is emphasised by one respondents statement that "you cannot fail to remember it".

In addition to this it is seen as a useful way to demonstrate the issues mentioned above. "It certainly made the point".

3. Were there any specific difficulties

The majority of responded had not experienced any problems but for those who did four issues where raised.

"Only technical – the speakers on my laptop were not very good, but we got by with some portable speakers". "Mainly around I.T. and audio", with streaming video across the internet a concern. Two respondents raised the issue of copyright statements such as "never checked if they had permission to show clip to audience" demonstrating concern. See table 1 for brief description of the law in the UK.

Table 1. Copyright Law in the UK.

A pre-recorded CD, video or DVD recording or film may be shown, for the purposes of instruction at an educational establishment before an audience consisting of teachers and pupils and other persons directly connected with the activities of the establishment. See copyright, designs and patents act, clause 34[6].

"Some academics may think this is frivolous". This statement demonstrates the concern with the perception of non-traditional teaching methods. "I think the group were initially quite sceptical that a film (and a non-psychiatric film at that) could be used in this way, but the post-film discussion was fascinating and led us down all sorts of paths by taking aspects of the film and linking with specific patient experiences".

"If not pertinent and carefully selected it causes distractions from the themes at hand". A "perceived lack of relevance unless well-presented and discussion facilitated". These two statements get to the crux of the planning issue: Using the right clip for the right audience to make the right point. Some respondents were concerned that if this is not the case then film may lead to less learner engagement.

4. Did you receive any feedback from the learners? What did it suggest?

While none of the respondents had access to formal feedback related to their experience of cinema in education, their observations and discussions yielded some interesting statements.

In the main the responses were positive. "In my experience they have always loved it and felt it enlivened their learning". "The feedback was generally very good". Learners "said they found the topic more memorable" and that because they can "relate to the teacher they found the tutor/learner generation gap less daunting".

The feedback "suggested that the use of film in this way can be used as a creative catalyst for teaching" and that it "demonstrated the issues by action and not just set of text based slides".

That it "adds interest to what can be a bit dry" and was a "light hearted break from a rather boring lecturer" can be taken as both a positive and negative criticism again emphasising the point about using the tool appropriately.

That learners "enjoyed multimedia approach", with reference to early clinical medical students perhaps exemplifies the changing trends of learning styles and methods. In the context of asking learners to "think outside the box" one respondent found that "mature learners see the point", perhaps not a reference to age.

5. Free Text Comments

Respondents also included comments not directly related to the questions above but that certainly merit inclusion here.

One consultant discussed their experience provided by a pharmaceutical company, "films that explored how patients see their doctors, how do they approach sensitive issues, how do they respond to shocking information and so on. The film was discussed and the answered analysed".

Another respondent, who had read "Cinemeducation" by Alexander, Lenahan and Pavlov[4] thought that "it may be more useful at undergraduate level". Two other respondents had accessed the above titled book.

The use of *House M.D.* (2004-), *ER* (1994–2009) and other such TV programs to achieve similar goals was expressed by two authors, one stating that "House especially is useful in terms of differential diagnoses and history taking along with bedside manner examples which is taught so poorly these days".

Discussion

This survey suggests that there is limited experience of using film in medical education, but that the experience is positive and has generated some considerable enthusiasm for this tool. The information gathered herein reflects in some ways the available literature, though it is to the authors' knowledge, the first to look at perceptions of the learning tool.

The doctor- patient relationship was one topic that respondents had either observed or used cinema as facilitating learning. This has been written about with Baños describing the use of popular movies along with literature for teaching the doctor-patient relationship[7]. Wong et al describe the use of television shows to teach this and other communication skills to Canadian residents in internal medicine[8], their subjective assessment indicated that this was successful.

The breadth of topics that have been proposed as suitable to be taught using cinema as an adjunct in medical education is huge. In addition to those mentioned the literature contains numerous examples. The aforementioned book "Cinemeducation"[3] contains dozens of examples that educators can use. In addition to

numerous papers on using cinema in mental health education[9,10,11] diverse and less obvious topics have been addressed. In the journal *Clinical Pharmacology and Therapeutics* Gideon Koren describes using the movie *Awakenings* to teach clinical pharmacology principles to medical students[12]. The topics of medical microbiology[13], death and dying[14] and scientific research methodology[15] have also been written about. This list is far from exhaustive but merely hopes to demonstrate the breadth of topics that may be suitable.
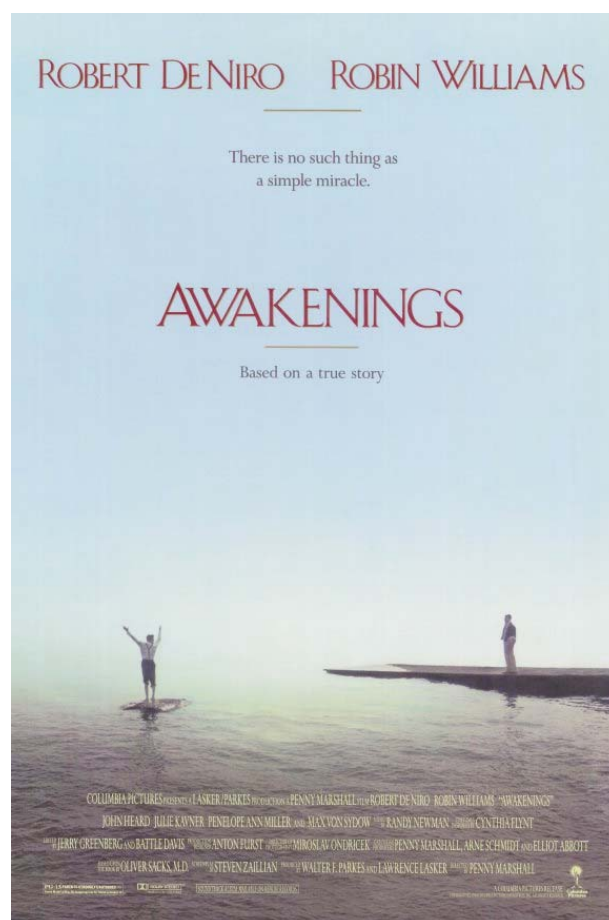
Whether to use clips or entire features depends on the aims of the session and the available resources. That the vast majority of respondents had only experienced the use of clips is of no surprise given the time constraints most clinicians face. This is perhaps reflected on the focus of using clips in the book "Cinemeducation"[3]. However a book with a more narrow focus "Movies and Mental Illness: Using Films to Understand Psychopathology" contains many examples of both techniques[2].

Lumlertgul et al from Chulalongkom University in Thailand describe a pilot student project using movies to help students learn professionalism[16], like the respon-

dents in this study they felt that cinema was able to "stimulate open discussion". Some authors have echoed what is said here with regard to cinema stating that it "captures their attention"[8].

In common with much of medical education, no strong, long term study as to the impact this educational technique has on retention of information or its ability to change behaviour. Anecdotally much of the published literature agrees that "although more rigorous study of the effectiveness of the method has yet to be completed, observations by faculty members support the residents' contention that it has been an effective means of teaching this particular skill"[10].

Technical considerations are nothing new, indeed "Cinemeducation"[3] contains a chapter so entitled which covers most of the points brought up by the respondents here.

Several authors have expressed concern regarding copyright. Christopher J. Welsh describes the situation in the U.S. in his article relating to teaching intoxication and withdrawal syndromes[17]. In the U.K. most educational institutions will have policies relating to using copyrighted material. In most situations as long as a fee is not being charged and an educational benefit can be justified the film can be shown. The intellectual property office in the UK has a website containing much useful information[18] and a summary from Imperial College London's library is shown in table 1.

Choosing topics carefully and planning sessions intelligently is a given, but it does not guarantee success. All involved in teaching will have encountered instances where their ideas have not worked. This should not stop teachers from trying ideas but serve as great feedback and an excellent opportunity to improve.

From the literature this author was able to find one example of feedback received not supporting the use of cinema in medical education[19]. Most is positive but again mainly based on anecdote, however some examples of formal feedback are to be found. A study of ten psychiatry residents showed positive feedback[8], a seminar on psychotherapeutic techniques for medical students was evaluated with pre and post knowledge and attitude questionnaires[20]. A Spanish study on teaching clinical microbiology analysed questionnaire results from 114 students[21].

An interesting aspect of the survey was the topics that didn't materialise. End-of-life, breaking bad news and chronic illness are all represented in the literature. Also the existence of the Journal of Medicine and the Movies was not mentioned. It could be that the respondents had not exposure to these or that they did not include them in their responses.

The study methodology, using questionnaires sent via email, was chosen because it was thought to be able to meet the studies aims within limited resources.

Weaknesses of the study can be divided into two key areas: the questionnaire format and the study population. Questionnaires do not allow for great depth of questioning or for follow up questions in a way a focus group or one-to-one interview might. They are easy to ignore and there is little incentive to complete them. This could lead to a bias in that interested parties are more likely to respond, this is a well-recognised feature of surveys[4].

The geographically focused nature of the study limits generalisation, though the exploratory nature makes this less important. A far greater number of one group was surveyed than the other two. This situation would have been increased had a plan been made to survey all hospital consultants in the deanery, this may have produced a volume of responses to great to deal with. These could bias the results and conclusions. This is limited by the exploratory nature of the study.

Conclusion

This study shows how the use of cinema in medical education has reached, to a lesser extent, the mainstream. Several consultants surveyed had experience of the educational technique. The responses received were, on the main, positive.

Many of the issues raised could warrant further study, especially if the tool is to generate more interest and penetrate further into the consciousness of practitioners.

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