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The Shortcomings of Medical Education Highlighted through Film

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Abstract:
The aims of this report are to highlight the shortcomings in medical education. To use a student made short film as an example of how issues that cause medical student distress can be displayed. To show that the process of film-making is a useful tool in reflection. To display that film is an effective device in raising awareness.

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The art of film-making has never been more accessible. Video cameras now come in all shapes and sizes and have been integrated into phones, laptops and music players. Film editing software is also relatively inexpensive, and, with a large number of free video sharing websites, it has never been easier to communicate a message to a global audience.

In order to convey a message effectively through film, film makers have to understand clearly the message they want to get across, visualise how they intend to do this, and, ultimately, achieve their vision. This is why filmmaking can be effective as a tool for self-reflection in a medical educational setting. Medical students have in the past used film-making to gain a greater understanding of the patient's journey through illness (Penn State Hershey College of Medicine, 2011). The process of filmmaking in this case forces students to consider how they wish to portray the patient and requires them to reflect on their role in a patient's life when they become doctors.

Filmmaking can also allow the medical student to convey a message that may otherwise not be well known. This is what I decided to do in my short film, *Side Effects Include...* (2011). I wanted to highlight the problem of medical student distress via a fictional narrative based on research, personal experience and accounts from colleagues of mine. I felt that this was an important topic to tackle, because, as a medical student, I was convinced that more could be done to make the process of medical school easier for my colleagues and me without compromising the quality of our medical education.

Side Effects Include... (available at http://www.youtube.com/watch?v=Sqt5tJTnSXI) displays what might be going through the mind of a medical student contemplating and ultimately committing suicide, thus exploring the multiple reasons that may cause a medical student to consider such a drastic measure.

For many medical students, obtaining a place at medical school is the culmination of a long-held ambition: an ambition which drove them to work tirelessly for exams, seek work experience and even enrol in special courses. Attending medical school should represent everything they have ever wanted. However, the suicide rate among medical students is significantly higher than in the age matched general population (Schernhammer, 2005). The reasons behind why a medical student would consider suicide are different for each individual. However, two common themes are linked strongly to medical student distress. These are burnout and depression.

> Burnout is a stress-related syndrome characterized by exhaustion, depersonalization, and a diminished sense of accomplishment.
>
> (Texas Medical Association, 2010)

One American study found that approximately 50% of medical students suffer burnout. The study demonstrated an association between burnout and suicidal ideation (Dyrbye et al, 2008).

> Depression refers to a wide range of mental health problems characterised by the absence of a positive affect... low mood and a range of associated emotional, cognitive, physical and behavioural symptoms.
>
> (National Institute for Health and Clinical Excellence, 2010)

A study of over 1,000 medical students found that 21.7% suffered from some form of depression, with 13.6% suffering from major depression (Goebert et al, 2009).

In this report I will highlight some of the common shortcomings in medical education. I will use *Side Effects Include...* to show that the process of filmmaking is a useful reflective tool. Finally, I will show that film is an effective device in raising awareness.

Method

My film sought to draw attention to some of the major features characteristic of suicide among medical students. The most characteristic object associated with suicide is the suicide note. The suicide note is a note commonly left by the suicide victim with their final message to the world. I used the idea of a "final message," but delivered by camera. This allowed me to give a voice to the main character who had otherwise been suffering in silence. My hope is that this device may give permission to medical students who have similar feelings, but have not been able to express them.

The name, *Side Effects Include...*, is a play on the idea that one may not always receive exactly what he or she expects. On a drug packet or in an advertisement, the pharmaceutical companies are quick to highlight the positives of taking their drugs. However, the side effects are normally closed away within the box or in small print. Similarly, medical schools are quick to showcase their successes and the career opportunities they offer, but are not so ready to identify potential hazards or adverse effects that may occur when one pursues a medical education.

The Script

The script allowed me to emphasize a number of different themes that can cause a medical student distress. It is based on research, personal experience and the accounts of colleagues.

The line, "I was an ordinary kid," alludes to the idea that medical students enter medical school with a mental status similar to that of their non-medical peers; however, during medical school their mental status decreases (Rosal et al, 1997).

The character goes on to talk about his parents' pride in his "decision" to study medicine and his feelings of letting them down by not succeeding. This addresses the idea that some medical students experience huge parental pressure to attend, and then succeed in, medical school. He mentions, "It must be in the blood," suggesting that there are doctors in his family, and that there was an expectation that he too would become one. The character is also Asian, affirming a belief that Asian families apply even more pressure on their children to "succeed" (Woo, 2008).

He goes on to describe his mindset as he self-harms. This is based on the experiences of a student friend of mine who told me he had cut his arms in the past. There are very few studies on self-harm by medical students, however it has been shown that there is an increasing prevalence of self injurious behaviour amongst college and university students as a whole (Whitlock, 2006).

The script next describes the workload with which the character has to struggle. He uses the words, "crippled", "tough" and "drowning" to describe the relentless amount of work. The script mentions that the character cannot sleep or eat because of the workload and stress. This scenario shows the constant level of high stress and anxiety on the character at all times-- overwhelming as he struggles to cope.

The character displays mistrust in the heads of faculty at his medical school whom he describes as the "faceless bastards." This is to address the lack of interaction I believe exists between the head educators who judge students and the students themselves. I wanted to convey the perceptions medical students may have of these individuals as ruthless controllers who take delight in failing students at any opportunity, adding to the mounting pressures medical students face.

The character describes his social isolation at medical school, in contrast to his pre-medical school experiences. Social isolation and a lack of social support are related to an increase in symptoms of depression amongst students (Stecker, 2004). The description he

gives of himself of being the "weird fat Indian one" demonstrates low self esteem and self-worth.

In one scene, the character recounts a day on the wards where he is bullied by a senior doctor. This scene, taken from personal experience, is designed to draw attention to the problems associated with humiliation in a medical setting. A UK study showed that humiliation of medical students by senior doctors, nurses and midwives was prevalent during medical training, with 36 students reporting 29 separate cases (Lempp and Seale, 2004). A study in the US showed that medical students who had suffered abuse and humiliation from teachers also suffered higher rates of psychopathology (Richman et al, 1992). This experience drives the character to consider suicide and manifests the suicidal ideation present in the character before his decision to actually plan and commit suicide. UK studies on suicidal ideation are limited. However, in a study conducted on students at Trinity College, Dublin, it was found that 5.9% of medical and business students had had suicidal ideation in one month (Curran et al, 2009). Figures in a study from the USA suggested suicidal ideation in 11.2% of medical students (Dyrbye et al, 2008).

The character speaks about his inability to access his medical school support and counselling services, as his psychological crisis occurred during the Easter holiday. This complication was based on the personal account of a student at my university who attempted to seek help during a period of depression. It highlights a need for more accessible student support from the medical training institution.

The script ends with a description of the tablets that the character has been taking throughout the film, to show this suicide was planned, researched and not a spur of the moment decision. Not only did his medical education contribute to his desire to commit suicide it was intimately involved in the suicide itself.

At the conclusion of the film, the character collapses and writes on the wall (Fig 1). This scene was inspired by a scene from the Indian film, *3 Idiots* (2009). In this scene an engineering student called Joy is told by the head of the College that he would not pass the year. The head of the College is unsympathetic to the pressure on Joy from his family, and the difficulties Joy faced when his father suffered a stroke during his studies. Joy hangs himself, leaving the message "I QUIT," on the wall. This scene is extremely powerful. I wanted an equally powerful and relatable ending to my film. In *3 Idiots,* "I QUIT" is seen as a defiant final message in which Joy is empowered in an otherwise disempowered situation. I decided to use the phrase, "SORRY, I TRIED," instead, as this gives a feeling of surrender and complete disempowerment rather than defiance.

Fig 1. Screenshot from *Side Effects Include...*

Mise-En-Scène

Mise-en-scène includes the set, costume and lighting. This allows the filmmaker to set the tone of the film and influence how the audience interprets what is on screen.

In *Side Effects Include...*, the set is a bedroom. The theme is black and white, or, rather, the lack of colour is an attempt to reflect the mood of the main character. All the props and furniture are either black or white.

The papers spread all over the floor depict a level of disorder and amount of work that is overwhelming and difficult to sort out for the student. The bed is unmade, again to show disorder. There is a white rose to symbolise beauty and death. It is a reference to the first stanza of the Robert Herrick poem, "To the Virgins, To Make Much of Time":

Gather ye rosebuds while ye may,
Old time is still a-flying:
And this same flower that smiles to-day
To-morrow will be dying.

(Herrick, 1648)

The final two lines of this stanza are the most poignant for the film, in which the "flower that smiles to-day" would be the character before medical school, in stark contrast to the "dying" man shown.

The costume--black t-shirt, black hooded sweatshirt, black shoes and grey shorts--also reflects the theme. The character is bearded to suggest that he no longer cares about his personal appearance. Make-up is used to enhance the effect of fatigue by darkening the area below the eyes; it is also used to simulate scars on the arms.

Filming was done at night to ensure a lack of brightness. Two dim lamps were used for lighting to create a dark, dull atmosphere.

Sound

Incorporating music also allows the film-maker to set the mood of the film and influence how the film is understood. The song "Suicide Lullaby", written and performed by student, Suety Kwan. is playing throughout *Side Effects Include...* The song was written specifically for this film. I wanted music that would capture the sad and somber mood.

I think I will go to sleep now,
And sink into the silence,
Wake me up before you leave and kiss me one more time,
I think I will go to sleep now.

(Kwan, 2011)

The lyrics match the idea of the character finally being at rest. The simple melody gives added vulnerability to the character and infuses an additional sense of sadness. The quality of the music undermines the character whenever he says something that may seem angry or defiant and ensures he is always perceived to have given up.

The Filming and Editing Process

The use of different filming and editing techniques enables the filmmaker to convey a message in different ways.

In *Side Effects Include...*, the recording of the main character when he delivers his message was carried out by using a webcam, with the character looking directly into it (Fig 2). This makes the experience of watching the film personal and uncomfortable. It is

comparable to videos that are released by suicide bombers after an attack where they explain their actions, usually citing disillusionment with Western society. Similarly, the character in my film is disillusioned with life as a medical student.

Fig 2. Screenshot from *Side Effects Include...*

Secondary shots from above used a camera attached to the wall, and angled downwards, designed to give the viewer a "behind-the-scenes" view of the character as he delivers his message (Fig 3). The viewer is able to see that, although many of the things the character says may be interpreted as defiant, his body language suggests that he has given up, and it is this capitulation that led to his actions. This perspective is also designed to be disempowering for the character. The shot mirrors the idea alluded to by the character that he is being watched by the "powers-that-be" in medical school. This places the viewer in the position of causative agency, and contributes to making the viewer's experience still more uncomfortable.

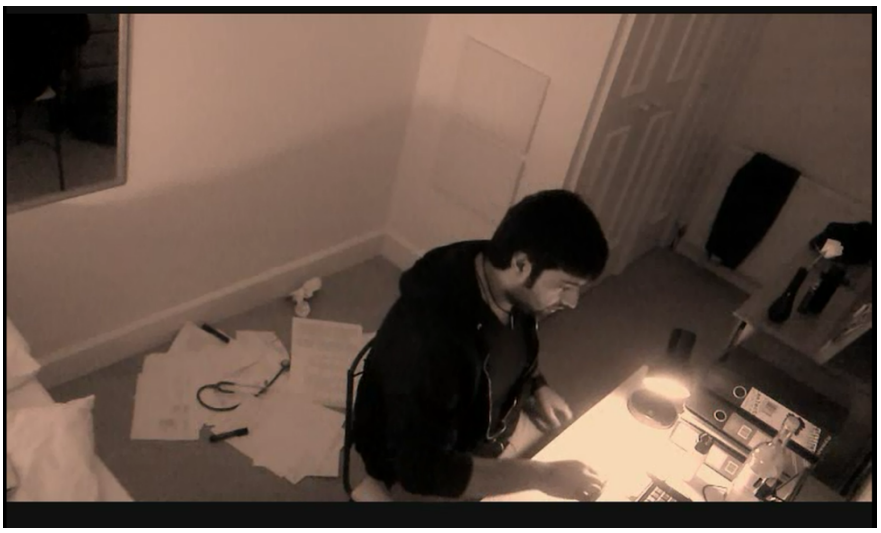

Fig 3. Screenshot from *Side Effects Include...*

The secondary shots are in black and white to fit with the monochrome color scheme and are similar to CCTV or surveillance shots. "Fade-in" and "fade-out" transitions are used

between shots to indicate a transition in time between each shot, underscoring that the character agonised all night over his final message

Discussion

Side Effects Include... has been uploaded on video-sharing sites, social networking sites and screened at a medical humanities exhibition in a public gallery in London. The feedback I received was very encouraging, and I felt it justified my decision to use film as a means of highlighting the problem of medical student despair and suicide.

I noticed that students at my university were more willing to talk about the aspects of the film to which they could relate. For a period of time, some of the stigma attached to burn-out, depression, and suicide among medical students was diminished. Awareness of the problems increased, with many medical students, lecturers and doctors asking me about the authenticity of parts of the film. Some senior doctors who have watched the film have told me that it made them more aware of how their interactions with a medical student in a clinical setting can have a disproportionate impact on that student. The best thing about making this film is that it has evoked debate about what needs to be done for medical students to decrease their distress. Though these findings are anecdotal, they seem to indicate that film and filmmaking can raise awareness in an educational setting.

The making of this film has been a learning experience for me as well. It has forced me to evaluate and reflect on my own medical experience. The increased awareness I now have of the potential pitfalls of studying medicine has made me more prepared for the future. My experience accords with that of students in the Medical Humanities Department of Penn State Hershey College of Medicine, who are making short documentaries about patients. Their experiences allow them to gain a "deeper understanding of the patient experience" (Penn State Hershey College of Medicine, 2011). This is an example of the use of filmmaking to help medical students improve their skills in a unique and creative manner and suggest that it can be beneficial to encourage medical students to make short films about their experiences in medical education.

Quantitative and qualitative research into medical student well being is extremely important. However, raising awareness through the arts is also vital. Narratives, poetry and music are all used to highlight medical student experiences and are key reflective learning tools. With the need for deep thought during the filmmaking process and the ability to reach a global audience with the click of a mouse, film and filmmaking are also effective and powerful tools in reflection, raising awareness and invoking debate.

Conclusion

A filmmaker must have a clear idea of the issues he or she wants to highlight and the conclusions he or she wishes to be drawn.

In *Side Effects Include...*, I attempted to highlight the problems of burnout and depression, perpetuated by pressure, isolation, stress, humiliation and a lack of support in medical education. The conclusion to drawn from the film is that change is necessary to better identify and support students at risk.

The workload is an unavoidable part of studying medicine. There is a great volume of information to internalise. However, it is important that the learning environment for students is nurturing and as much support as possible is available to them from faculty members. Identifying and offering extra help to struggling students is also important to help them cope.

Increasing contact between the heads of the faculty and the students would help students gain confidence in their head educators and work to dispel rumours and scare-stories.

This would also allow students to feel comfortable in discussing any problems they may be suffering that affect their medical school experience.

Most medical schools have 'buddy' schemes and a wide range of societies to help combat isolation, yet studying medicine can still seem exceedingly lonely. A change in attitudes in medical training so that learning is collaborative, rather than competitive, would help this situation. It would also breed generations of doctors that are able and willing to work in teams.

A large part of the film speaks about humiliation, which is very common in medicine. An encouraging, supportive teacher can make all the difference to a student and his or her motivation and mood. It is essential that teachers who have not adapted their methods from the draconian techniques of the past be identified and addressed. It is unacceptable that medical students should be expected to thrive in an environment where they are being bullied by grown adults.

I hope the audience recognises that institutional counselling services and trained support individuals should be readily available, even over week-ends and holidays.

Medical students should be made aware of the side effects of studying medicine. More should be done to ensure that that they are taught about how to cope with the workload, stress and tension.

It is impossible to fully understand why someone would commit suicide. Stress, burnout, and depression are all side effects of the medical degree and can cause medical students to contemplate such a fate. However, through *Side Effects Include...*, I wanted to show that many of the causes behind these side effects are avoidable or can be minimised. Medical schools pride themselves on using the latest technology and modern educational tools; nevertheless, many of the attitudes toward the treatment and care of students remain archaic and would be unacceptable in most other segments of society. Medical schools are entrusted with the well-being of ambitious and young, but potentially vulnerable, individuals. It is extremely important that they do everything in their power to take care of their students by recognising, understanding and minimising the issues that can perpetuate psychological burdens.

Filmography

3 Idiots (2009, Dir: Rajkumar Hirani, India)
Side Effects Include... (2011, Dir: Pranav Mahajan, UK)

Music

Suety Kwan, (2011) Suicide Lullaby

Poetry

Herrick, R. (1648) To the Virgins, to Make Much of Time. Published in Herrick, R. (eds) (1648) *Hesperides: or, the works both humane & divine of Robert Herrick Esq*. London: Printed for John Williams and Francis Eglesfield

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