HARNESSING THE POWER OF FILM TO COMBAT MENTAL HEALTH STIGMA. A UNIVERSITY COLLEGE LONDON PSYCHIATRY SOCIETY EVENT

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SUMMARY

Aims: To conduct a pilot study on a motion picture based, anti-stigma programme entitled, "The Wounded Healer film" to measure if it is associated with any changes in stigma variables in healthcare students and if it encouraged care seeking in this group.

Background: The 2008 Stigma Shout Survey of almost 4000 people using mental health services and carers revealed that healthcare professionals are a common source of stigma reported by people with mental illness. Psychological problems are common in medical students and doctors, however, the level of care seeking in this group is low. Fear of exposure to stigmatization is a crucial barrier to accessing and using mental health services. Recent research has revealed that film-based interventions can be used to challenge mental health stigma and encourage care seeking.

Methods: We conducted a single-arm, pre-post comparison study on students who attended the Wounded Healer film at a University College London Psychiatry Society event (n=11). Before and after exposure to the film, students were asked to complete validated stigma scales that measured mental health-related knowledge, attitudes and behaviours. Responses were on a Likert scale and participants also provided free-text comments which were subjected to thematic analyses.

Results: There was a statistically significant difference in the mental health-related knowledge pre-intervention score compared to the post-intervention score (p=0.0322). All participants either strongly agreed or agreed with the post-evaluation statement, "I feel inspired to raise awareness of the importance of mental health and to take action to challenge stigma."

Conclusion: This pilot study provides provisional support that The Wounded Healer film may be associated with reductions in stigma variables in medical students, as assessed by measures of mental health-related knowledge, attitudes and behaviours. More robust research in this area is needed before we can scale up such an initiative.

Key words: stigma - mental illness - medical students - film

Background

"Like man’a get low sometimes, so low sometimes, Airplane mode on my phone sometimes, Sitting in my house with tears in my face, Can’t answer the door to my bro sometimes…”

Stormzy (2017)

These vulnerable lyrics reached the ears of millions of listeners earlier this year when the British grime artist’s debut album topped the music charts across the globe. In a world where disclosure of mental illness is still taboo, Stormzy was heralded as brave for daring to speak out and challenge the stigma surrounding mental illness.

Stigma comes from the Greek word meaning “mark” or “brand.” In ancient Greece, a stigma was a scar on the skin of those society deemed different, deviant or criminal (McLaughlin 2012). Stigma persists today, and its consequences can be as detrimental as the illness itself. In this article, we describe the negative impact of stigma on healthcare professionals and students and discuss the importance of targeting anti-stigma interventions at this group.

We introduce ‘The Wounded Healer Film’, an anti-stigma programme that contains an interview with the protagonist (a Royal College of Psychiatrists award winning doctor with first-hand experience of psychological distress). The Wounded Healer Film also educates audiences about mental health through the power of motion picture. We hypothesise that this intervention will reduce stigma in medical students, as assessed by measures of mental health-related knowledge, attitudes and behaviours. In collaboration with the London College of Communication (LCC), we conducted a pilot study of this intervention on students at University College London (UCL).
Stigma today

“We see a fundamental divide between the psychotic mind and the asthmatic lung, as if those who suffer from psychopathology do so out of their own making and as such do not deserve the same kind of empathy we would ordinarily show to someone with another chronic or long-term illness like cancer but instead they are made to endure the howls of derision that are hurled at them…”

Hankir (2015)

Stigma can be found at the structural level, with discriminatory social structures and policy, through interpersonal interactions, and at the intrapersonal level, with those with mental illness internalising negative stereotypes and beliefs. The impact of stigma on the individual is great: affecting social relationships, employment and finances, physical health, as well as self-esteem and self-efficacy, that is to say, one’s ability to accomplish goals and manage challenging life events (Rüscher 2014). In the 2008 Stigma Shout survey, nearly 9 in 10 people with mental illness reported a negative impact of stigma on their lives, with two-thirds stopping activities because of the fear of stigma and discrimination.

The medical profession

Mental health stigma is a critical issue in the medical profession. Doctors and other health professionals have higher rates of suicide, depression, alcohol excess and drug misuse compared to the general population (Schenhammer 2004). As many as 1 in 15 doctors are affected by drug and alcohol dependence (Semple 2013). Junior doctors have particularly high rates of depression; in one JAMA study, 28.8% of resident physicians reported depressive symptoms, compared with 7.2% of 26-49 year olds in the general public (Mata 2015). Despite high levels of mental illness, doctors show low levels of help-seeking due to fear of hospitalisation, loss of medical registration and stigma (Semple 2013). A survey of 1351 doctors and charity supporters carried out by the Royal Medical Benevolent Fund, found that 8 in 10 doctors were unlikely to talk about their personal problems due to fear of exposure to stigmatizations or discrimination from their colleagues (Royal Medical Benevolent Fund 2016). The consequences of stigma can be particularly dangerous for doctors, with maladaptive behaviours including continuing to work while unwell and self-prescribing (Baldwin 1997).

Studies of medical students show comparable results. In another JAMA study, 27.2% of medical students, compared to 9.3% of 18-25 year olds, reported depressive symptoms and 11% reported suicidal ideation (Rotenstein 2016). Similarly, the Student BMJ 2015 mental health survey of 1122 medical students found that 30.5% experienced mental health problems, and 15% reported suicidal ideation (Munn 2017). Of the medical students who reported depressive symptoms, only 15.7% sought help from mental health services. One study of first and second-year medical students who experienced depression found that only a fifth accessed mental health services. Reasons given for not seeking help included lack of time (48%), lack of confidentiality (37%), the stigma associated with using mental health services (30%) and fear of documentation on academic record (24%) (Givens 2002).

Therefore, the need to tackle stigma among medical students is two-fold. Firstly, it is important to target anti-stigma interventions at medical students due to the high prevalence of mental illness and mental health-related stigma in this group. Secondly, as future doctors, medical students play a vital role in shaping future practice and the experience of patients with mental illness.

Motion picture as an anti-stigma intervention

Corrigan et al. (2012) describe three methods of reducing stigma: social contact, education and protest. While, social contact with people with mental illness is the most effective method of reducing stigma in adults in the general population, in young people, education and social contact are equally effective. Arguably, this is because young people have less fixed views than their older counterparts and, as a result, can benefit more from educational interventions (Corrigan 2012).

Anti-stigma education has traditionally included talks and lectures, replacing inaccurate, negative stereotypes of mental illness, with more accurate, less-stigmatising information. More recently, motion pictures are increasingly being used as a method of delivering anti-stigma education. In an age where motion picture can be viewed anywhere from cinematic theatres to mobile phones, the immediate benefits of anti-stigma films are clear. In addition to the ability of films to be scaled up to population level, anti-stigma film interventions have the advantage of being less labour intensive than talks or live performances, can include closed captions (for the hearing impaired and translated into other languages), and can be incorporated into other anti-stigma training programmes easily. Moreover, motion picture is a unique medium that provides viewers with a precious qualitative insight into the minds of people with mental illness (Hankir 2015).

Two recent studies showed that the filmed contact reduced mental health-related stigma, an effect which was sustained at one week follow-up (Corrigan 2007, Brown 2010). Likewise, a randomised control trial found that filmed contact was as effective at reducing stigma in student nurses as live social contact, even four months after the intervention (Clement 2012). However, two similar studies of medical students showed that the reduction in stigma attenuated over time (Kerby 2008; Altindag 2006). The authors suggest that other clinical experience may counteract the anti-stigma effects of the film intervention. Where participants were exposed to filmed contact, at two-monthly intervals, repeated film contact reduced stigma more than controls or internet education 12 months after the intervention (Koike 2016), pointing to the benefits of repeated interventions over single interventions.
The Wounded Healer: An anti-stigma intervention

Carl Jung used the term ‘Wounded Healer’ as an archetypal dynamic to describe a phenomenon that may take place in the relationship between analyst and analysand. Jung discovered the Wounded Healer archetype in relation to himself whereby “A good half of every treatment that probes at all deeply consists in the doctor’s examining himself…it is his own hurt that gives a measure of his power to heal.” He drew from the epoch of the ancient Greek myths of Chiron, the wounded centaur, and his student Asclepius, who later became the god of medicine and healing. The ‘Wounded Healer’ archetype, however, can be found across the world’s traditions and belief systems, from shamanism, where it is believed that a healer must first be wounded before they can truly heal another, to the Old Testament Christian messianic prophecies “by his wounds we are healed.”

‘The Wounded Healer’ anti-stigma intervention is a theatrical autobiographical narrative from Dr Ahmed Hankir, a medical doctor specializing in academic psychiatry in the United Kingdom, who has first-hand experience of oscillations in mood. Of note, the Wounded Healer intervention makes references to film, poetry, literature and other humanities to draw links between profound oscillations in mood and the artistic temperament (Hankir 2014). To date, the Wounded Healer talk has been delivered to more than 50,000 people in 12 countries spanning 5 continents worldwide. In addition to this, the Wounded Healer intervention has been integrated into the medical school curricula of several British universities.

METHOD

Study design

This pilot project was a single-arm, pre-post comparison study (O1 X O2). We administered validated stigma scales before and after the participants were exposed to the intervention. We then measured if there were any statistically significant changes in stigma variables (knowledge, attitudes and behaviour).

The intervention

The Wounded Healer intervention was implemented in May 2017 to students at University College London (UCL). The Wounded Healer is a thirty-minute film made in collaboration with the London College of Communication (LCC). The film incorporates excerpts from the Wounded Healer theatrical intervention, and includes interviews between Dr Hankir and others with experience of an ‘enduring mental illness’, discussing topics related to mental health stigma. The Wounded Healer has been described as an innovative method of pedagogy that blends the performing arts with science. The aims of the Wounded Healer are to engage, enthuse, enthral and to educate to challenge mental health stigma and to encourage care-seeking.

Participants

The inclusion criteria for recruitment into the study was being a student at UCL. The UCL Union Medical Society Psychiatry Section (PsychSoc) advertised the film screening with their members and with the wider UCL student population, through emails, social media (including Facebook and Twitter) and on the UCL Union website (Figure 1). Viewing of the film, as well as participation in the study, was voluntary. The students were informed about anonymity, and each participant had a unique personal code. No monetary compensation was offered although free refreshments were provided. Students were in a state of equipoise and verbal informed consent was obtained. Ethical approval for the study was obtained from the Carrick Institute for Graduate Studies, an Institutional Review Board registered in USA for global educational, research and clinical trials.

Figure 1. An example of the promotional material used to recruit participants for the study

Measures

Three measures of stigma and discrimination were used to measure mental health-related knowledge, attitudes and behaviour.

Mental Illness Knowledge Scale (MAKS)

MAKS has been designed to measure mental health-related knowledge among the general public and evaluate anti-stigma interventions (Evans-Lacko et al. 2010). It comprised six items (1-6) on stigma-related mental health knowledge areas and six items (7-12) on the classification of various conditions as mental illness. Participants were asked to indicate whether they agreed or disagreed with the items on a five-point Likert scale.

Reported and Intended Behaviour Scales (RIBS)

RIBS has been designed to measure mental health-related behavioural discrimination among the general public and document behavioural trends (Evans-Lacko et al. 2011). It comprised four items (1-4) which assess the prevalence of behaviour and four items (5-8) which on intended behaviour in the same contexts. Participants were asked to indicate whether they agreed or disagreed with the items 5-8 on a five-point Likert scale.
Community Attitudes to the Mentally Ill (CAMI).

CAMI has been designed to measure mental health-related attitudes among the general public. The following three items were used:

- One of the main causes of mental illness is a lack of self-discipline and will-power;
- There is something about people with mental illness that makes it easy to tell them from normal people;
- It is frightening to think of people with mental problems living in residential neighbourhoods.

Participants were asked to indicate whether they agreed or disagreed with the three statements on a five-point Likert scale.

In addition to this, participants were asked to complete a short form requesting demographic data, evaluate the intervention using free-text comments and indicate whether they agreed or disagreed with the following statement on a five-point Likert scale “I feel inspired to raise awareness of the importance of mental health and to take action to challenge stigma.”

Statistical analysis

The total scores for the MAKS, RIBS and CAMI were calculated with higher scores represented less stigmatising responses. A paired sample t-test was conducted to compare pre-intervention and post-intervention scores. Results were considered significant at p≤0.05.

RESULTS

Although 66 students expressed interest in the event, as assessed through responses on social media, only 11 (17%) attended the event and took part in the study. The participants’ ages ranged from 19 to 31 years of age (Mean =24, Mode =23). The group was ethnically diverse. 5 were born in the UK, and 5 were born outside the UK, and 1 did not submit place of birth data. Of the 11 participants, 1 identified as white British, 1 as white other, 2 as Black African/Caribbean and 5 as Asian, and 2 participants did not submit ethnicity data (Figure 2). Of the 11 participants, 6 were medical students and 4 participants studied other subjects (anthropology, psychology and language sciences, speech therapy and public health). 1 participant did not submit subject data.

There was a significant difference in the MAKS pre-intervention (M= 48.2, SD=4.75) and post-intervention scores (M=50.1, SD=4.87); t(10)=−2.08, p(T<0.05) one-tail =0.0322. Figure 3 demonstrates the mean differences between the pre-intervention and post-intervention scores. The greatest increases in scores were seen in the following four items:

1) Most people with mental health problems want to have paid employment;
2) If a friend had a mental health problem I know what advice to give them to get professional help;
3) People with severe mental health problems can fully recover; and
4) Stress [is a mental illness].

Figure 2. Ethnic backgrounds of the participants, n=11

Figure 3. Mean change in MAKS score by item

There was no significant difference in the RIBS pre-intervention and post-intervention scores. There was no significant difference in the CAMI pre-intervention and post-intervention scores. Participants had high pre-intervention RIBS and CAMI scores, indicating a high baseline for favourable mental health-related attitude and behaviours as shown in table 1 and table 2. Of note, all (100%) participants answered ‘yes’ to item 4 “Do you currently have, or have you ever had, a close friend with a mental health problem?”

There was no significant difference in the pre-intervention compared the post-intervention scores of medical students and non-medical students for MAKS, RIBS or CAMI (Figure 4). There was a small, but non-significant difference in the pre-intervention compared to the post-intervention scores between ethnic groups for MAKS, RIBS and CAMI (Figure 5).

All participants strongly agreed or agreed with the post-evaluation statement “I feel inspired to raise awareness of the importance of mental health and to take action to challenge stigma.”
Table 1. Summary of pre-intervention RIBS responses by item, n=11

<table>
<thead>
<tr>
<th></th>
<th>Yes n (%)</th>
<th>No n (%)</th>
<th>Don’t Know n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Are you currently living with, or have you ever lived with, someone with a mental health problem?</td>
<td>8 (73%)</td>
<td>2 (18%)</td>
<td>1 (9%)</td>
</tr>
<tr>
<td>Are you currently working with, or have you ever worked with, someone with a mental health problem?</td>
<td>7 (64%)</td>
<td>3 (27%)</td>
<td>1 (9%)</td>
</tr>
<tr>
<td>Do you currently have, or have you ever had, a neighbour with a mental health problem?</td>
<td>2 (18%)</td>
<td>4 (36%)</td>
<td>5 (45%)</td>
</tr>
<tr>
<td>Do you currently have, or have you ever had, a close friend with a mental health problem?</td>
<td>11 (100%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree n (%)</th>
<th>Agree n (%)</th>
<th>Neither disagree nor agree n (%)</th>
<th>Disagree n (%)</th>
<th>Strongly disagree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the future, I would be willing to live with someone with a mental health problem</td>
<td>8 (73%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>2 (18%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>In the future, I would be willing to work with someone with a mental health problem</td>
<td>9 (82%)</td>
<td>1 (9%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>In the future, I would be willing to live nearby to someone with a mental health problem</td>
<td>9 (82%)</td>
<td>2 (18%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>In the future, I would be willing to continue a relationship with a friend who developed a mental health problem</td>
<td>10 (91%)</td>
<td>0 (0%)</td>
<td>1 (9%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

Table 2. Summary of pre-intervention CAMI responses by item, n=10

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree n (%)</th>
<th>Agree n (%)</th>
<th>Neither disagree nor agree n (%)</th>
<th>Disagree n (%)</th>
<th>Strongly disagree n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the main causes of mental illness is a lack of self-discipline and will-power.</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (20%)</td>
<td>1 (10%)</td>
<td>7 (70%)</td>
</tr>
<tr>
<td>There is something about people with mental illness that makes it easy to tell them from normal people</td>
<td>1 (10%)</td>
<td>0 (0%)</td>
<td>1 (10%)</td>
<td>3 (30%)</td>
<td>5 (50%)</td>
</tr>
<tr>
<td>It is frightening to think of people with mental problems living in residential neighbourhoods</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (20%)</td>
<td>1 (10%)</td>
<td>7 (70%)</td>
</tr>
</tbody>
</table>

Figure 4. Mean total MAKS pre-intervention and post-intervention score by subject

**DISCUSSION**

Overall, the pilot study demonstrated the feasibility of an anti-stigma intervention using motion picture, and highlighted areas for improvement. The post-evaluation responses were positive, with participants calling the intervention as “fascinating,” praising the “hope and inspiration it gives to people suffering in silence,” and recognising its importance in “an area of sociopsychology, that as you say, needs a lot more research and evidence made available.”

This was the first time the Wounded Healer film intervention had been shown to a student population. The results of this study suggest an increase in mental health-related knowledge following the intervention but no change in participants’ mental health-related attitudes.
or intended behaviours following the intervention. This mirrors the results of a similar study on the impact of anti-stigma documentary films on mental health-related stigma, which found that the film intervention improved mental health-related knowledge but not attitudes nor behaviour (Penn 2003). The authors suggest that educational strategies alone are unlikely to affect all aspects of psychiatric stigma, namely attitudes and behaviour, and that other strategies, including social contact, may be required.

However, the non-significant results may also be explained by the small sample size (N=11) making the study vulnerable to type II errors. While there was great interest in the programme, attendance at the event was low. This is in no small part due to the timing of the screening in May, when most undergraduate students were sitting end-of-year examinations. To improve the validity of our results, we would need N≥30.

In addition to the small sample size, a ceiling effect is seen. Most participants had favourable baseline mental health-related knowledge, attitudes and behaviours, indicated by high pre-intervention scores compared to the general population (Evans-Lacko 2011; Evans-Lacko 2010). As such, they may benefit less from anti-stigma interventions than participants with lower pre-intervention scores. Similar observations have been made in other anti-stigma interventions where the most benefit was seen in participants with lower baselines (Friedrich 2013; Galletly 2011). Similarly, Holmes et al. found that those with prior knowledge or contact with those with significant mental illness are unlikely to benefit from further anti-stigma education (Holmes 1999). This explanation is more likely due to the selection bias inherent in the design, with participants responding to advertisements of a film screening on mental health.

An alternative explanation for the high pre-intervention scores is social desirability bias, the tendency of participants to over-report positive and under-report negative knowledge, attitudes and behaviours. Finally, priming, the very act of being asked questions may have resulted in positive attitude shift in the participants which may not continue in the long term. To assess this, participants would need to be followed up several months to years after the intervention. Similar filmed contact interventions which followed-up participants showed sustained reductions in stigma months after the intervention (Koike 2016; Clement 2012).

There was no significant difference between the pre-intervention and post-intervention scores of medical students when compared with the scores of students studying other subjects. There was also a small but non-significant ethnic difference in scores, with the mean scores for white participants higher than that of Black and Minority Ethnic (BME) participants. This would be in keeping with previous research which has shown higher mental health-related stigma in BME communities (2013).

Strengths and limitations

The main limitations of this study are the small sample size, making the results vulnerable to type II error, and the absence of a control group means that we cannot exclude the possibility that another factor, other than the intervention, influenced the difference between pre-intervention and post-intervention scores. The strengths of the study include the use of self-report questionnaires to minimise scorer bias. The pre-intervention post-intervention design made the study easy to replicate.

CONCLUSIONS

This pilot study demonstrated the feasibility of an anti-stigma programme using motion picture. The results provide provisional support for the efficacy of Wounded Healer film intervention to reduce mental health-related stigma. A larger confirmatory study, with a control group, should be conducted with stigma measured at baseline, immediately after and several months after the intervention, to assess whether motion picture can be used to cause a long-term reduction in mental health-related stigma among medical students.

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Contribution of individual authors:
Samara Linton conducted literature review, data collection, statistical analysis and composed the article. Ahmed Hankir conceived the idea for the study, contributed to the literature review on stigma and the mental health of medical students and doctors, revised the manuscripts and supervised Samara Linton. Sal Anderson contributed to the conception of the study and its design and contributed to the section on film and psychiatry. Frederick R. Carrick revised the manuscript and verified the veracity of the statistical analyses. Rashid Zaman supervised the principal investigators and designed the format of the manuscript.

Filmography

References


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