REDUCING MENTAL HEALTH STIGMA IN MEDICAL STUDENTS AND DOCTORS TOWARDS THEIR PEERS WITH MENTAL HEALTH DIFFICULTIES: A PROTOCOL

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SUMMARY

Mental health problems are over-represented in doctors and medical students. However, stigma and ‘a culture of shame’ are formidable barriers to mental health services and consequently many doctors and medical students with mental health difficulties continue to suffer in silence despite the availability of effective treatment. Indeed, a recent study on over 2100 female physicians who met the diagnostic criteria for a mental disorder revealed that 50% were reluctant to seek professional help due to fear of exposure to stigma. Left untreated or undertreated, mental health problems in doctors can result in impairment of occupational functioning, compromise patient safety and place considerable strain on the economy (by increasing the amount of sick leave taken). Moreover, the consequences of mental health stigma in the medical profession can be fatal. Dr Daksha Emson, a psychiatrist with bipolar affective disorder, tragically killed herself and her baby daughter during a psychotic episode. An independent inquiry into Dr Emson’s death concluded that she was the victim of stigma in the National Health Service. The mental health of medical students and doctors, in all of its aspects, must therefore be addressed with the urgency that it demands. Stephanie Knaak and colleagues conducted a data synthesis of evaluative studies on anti-stigma programmes for healthcare providers and identified six key ingredients one of which was a personal testimony from a trained speaker who has lived experience of mental illness. In this paper we outline a study protocol with the aim of answering the following research question, ‘Does attending an anti-stigma programme comprised of a medic with first-hand experience of a mental health condition cause immediate and sustained reductions in mental health stigma from medical students and doctors towards their peers with mental health difficulties?’

Key words: mental health stigma – innovation – doctors - medical students

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INTRODUCTION

Despite the perception that doctors should be ‘invincible’ (Harvey et al. 2009) mental illness is common in this group. Mata and colleagues at Harvard University conducted a systematic review and meta-analysis on the mental health of resident physicians and revealed that the overall pooled prevalence of depression or depressive symptoms in participants included in their study was 28.8% - greater than in the general population (Mata et al. 2015). A Canadian study on burn out in doctors revealed that 80% of respondents reported emotional exhaustion (Henderson et al. 2012).

Physicians who die by suicide often suffer from untreated or undertreated mental illness including, but not limited to, mood disorders and drug and alcohol dependence syndromes (American Psychiatric Association 2018). Indeed, a systematic review of the literature showed that the physician suicide rate is 28 to 40 per 100,000, more than double that in the general population (American Psychiatric Association 2018).

Mental health problems may develop early on in medical school. A multi-institutional study on over 2,000 medical students in the US showed a high prevalence of emotional exhaustion and burn out in this group (Dyrbye et al. 2016). The results of a recent survey conducted by Student BMJ on more than 1,000 medical students enrolled in UK universities revealed heightened levels of mental health problems with approximately 30% of respondents reporting that they had experienced or received treatment for a mental health condition and 15% reporting that they had contemplated suicide at some point during their studies (http://www.bmj.com/company/wp-content/uploads/2014/07/student-bmj-survey.pdf).

Globally, a systematic review and meta-analysis conducted by Rotenstein and colleagues on the prevalence of depression, depressive symptoms, and suicidal ideation among medical students revealed a preponderance of mental health problems in this group. The review, which analyzed data from over 200 studies in 43 countries, showed that 27.2% of the 122,356 medical student participants reported depressive symptoms...
and approximately 11% reported suicidal ideation (Rotenstein et al. 2016).

Despite the over-representation of mental health problems in doctors and medical students, the levels of help-seeking are low in this group (Semple et al. 2008). Fear of exposure to stigmatization is a crucial factor that contributes to symptom concealment and many medical students and doctors with a mental health condition continue to suffer in silence despite the availability of effective treatment (Givens et al. 2002). Indeed, a survey of over 2100 female physicians who met the diagnostic criteria for a mental disorder revealed that 50% were reluctant to seek professional help because of fear of exposure to stigma (American Psychiatric Association 2018).

Left untreated or undertreated, mental health problems in doctors can result in impairment of occupational functioning, compromise patient safety and place a considerable strain on the economy (by increasing the amount of sick leave taken). The mental health of medical students and doctors, in all of its aspects, must therefore be addressed with the urgency that it demands.

As enumerated above, stigma is a formidable barrier to mental health services. Historically, a stigma was a scar on the skin of Greek criminals. Stigma still persists today in the attitudes towards those who have mental health problems (Sartorius et al. 2010). Nowhere is this more apparent than in healthcare professionals. Indeed, the 2008 Stigma Shout Survey of over 4000 people using mental health services and carers revealed that healthcare professionals are a common source of stigma reported by people who have a mental illness (http://www.time-to-change.org.uk/news/stigma-shout-survey-shows-real-impact-stigma-and-discrimination-peoples-lives). A recent study in the United States identified stigma to be a barrier to the use of mental health services by 30% of medical students experiencing depression (Givens et al. 2002).

The consequences of mental health stigma can be fatal. Dr Daksha Emson, a psychiatrist with bipolar affective disorder, tragically killed herself and her baby daughter during a psychotic episode. An independent inquiry into Dr Emson’s death concluded that she was the victim of stigma in the National Health Service (North East London Strategic Health Authority 2003).

Challenging mental health stigma can help to break down the barriers to mental health services for people who urgently need them (Thornicroft et al. 2015). Corrigan and colleagues conducted a meta-analysis on outcome studies challenging public stigma and concluded that social contact with someone who has first-hand experience of a mental health condition is the most effective way of reducing stigma in adults (Corrigan et al. 2008).

Education not Discrimination (END) is a component of the British mental health charity Time to Change programme intended to reduce mental health stigma among healthcare professionals and healthcare students. END includes a session that facilitates contact with a patient with a mental health problem (Friedrich et al. 2013). Researchers from King’s College London aimed to investigate the impact of the END anti-stigma programme on medical students with regard to knowledge, attitudes, behaviour and empathy. A total of 1452 medical students participated in the study (intervention group n=1066, control group n=386). Participants completed questionnaires at baseline and at immediate and 6-month follow-up. Groups were compared for changes in stigma outcomes (Friedrich et al. 2013). All stigma measures improved in both groups at immediate follow-up. The intervention group demonstrated significantly greater improvements in stigma-related knowledge and reductions in stigma related attitudes and intended behaviour relative to the control group. At 6 months’ follow-up, however, only one attitude item remained significantly better (Friedrich et al. 2013). The authors concluded that although the intervention produced short-term advantage, there was little evidence for its persistent effect, suggesting the need to develop innovative interventions to reduce stigma (Friedrich et al. 2013). This chimes with a statement from the Canadian Psychiatry Association: ‘Conventional teaching on mental health will not reduce stigma amongst medical students’ (Abbey et al. 2011).

Knaak and colleagues conducted a data synthesis of evaluative studies on anti-stigma programmes for healthcare providers and revealed 6 key ingredients one of which was a personal testimony from a trained speaker who has lived experience of mental illness (Knaak et al. 2014). AH has a passion for medical education and for challenging the stigma attached to mental health problems in medical students and doctors. AH is an Expert by Personal and Professional Experience (EPPE) (Hankir et al. 2019), a mental health physician who has first-hand experience of a mental health condition. AH pioneered the contact-based, anti-stigma programme, ‘The Wounded Healer’ which is an innovative method of teaching that blends the performing arts with psychiatry. The Wounded Healer has been delivered to more than 75,000 medical students and doctors since it was conceived in 2014 in more than 20 medical schools in the UK and in venues throughout North and South America, the Middle East, Australasia, Europe and Asia (Zaman et al. 2018).

As far as we are aware, there are no intervention studies of an anti-stigma programme comprised of a medic with lived/living experience of mental health difficulties targeting medical students and doctors published in the literature.

ENGAGING WITH DOCTORS AND MEDICAL STUDENTS FROM BLACK, ASIAN AND MINORITY (BAME) ETHNIC COMMUNITIES

Experiences of mental health problems reflect different cultural and socio-economic contexts. Individuals (including doctors and medical students) from Black,
Asian and Minority Ethnic (BAME) communities are statistically more likely to be diagnosed with a mental health problem; more likely to be admitted to hospital (https://www.mentalhealth.org.uk/a-to-z/b/black-asian-and-minority-ethnic-bame-communities); more likely to be detained under section of the mental health act and more likely to access mental health services through the criminal justice system (https://www.london.gov.uk/about-us/london-assembly/london-assembly-publications/offender-mental-health). Studies also show that they are more likely to experience poor outcomes and more likely to disengage from mainstream services (https://www.mentalhealth.org.uk/a-to-z/b/black-asian-and-minority-ethnic-bame-communities).

Colourful Minds is a non-profit organisation founded by Dr Julia Ogunmuyiwa, a General Adult Psychiatrist in London. The aim of the organisation is to improve public understanding of mental health and mental illness through education in BAME communities. The purpose of the organisation is to reduce stigma surrounding mental illness as well as prejudice and discrimination against people with mental health difficulties which can be prevalent in ethnic and religious communities.

Colourful Mind’s mission is to engage people from a variety of ethnic minorities and religious communities in addressing rejection of mental health services while bridging disconnects that can lead to missed opportunities for treatment. Health promotion and psychoeducation are important and effective primary prevention strategies. The organisation aims to promote positive attitudes and engagement with mental health services as well as identify and address specific needs related to mental health within different ethnic minorities.

The organisation has identified densely populated inner-city areas with high levels of social deprivation and high numbers of immigrants are particularly in need of psychoeducation. Clinicians from the team have observed from their own clinical interactions that individuals from these communities were more receptive to health care professionals that can identify with their culture and experience of urban life. The organisation is therefore made up of a mixture of ethnic minorities and professional backgrounds and is led by psychiatrists and psychologists.

Colourful Minds achieves their objectives by providing outreach and education to the public including BAME members of the medical profession about mental health by running workshops to debunk myths about mental illness in local ethnic and religious communities. Workshops and psychoeducation are the main interventions offered by the organisation. In addition, Colourful minds delivers presentations about common mental illnesses at churches, mosques, other religious community organisations, tailored to suit the needs of ethnic and religious demographic of the members. These are aimed at addressing concerns about mental health services and medication held within various communities that are a barrier to engagement.

**RESEARCH QUESTION AND HYPOTHESIS**

**Research Question:** Does attending an anti-stigma programme comprised of a medic with first-hand experience of a mental health condition cause immediate and sustained reductions in mental health stigma from medical students and doctors towards their peers with mental health difficulties?

We hypothesize that such a programme delivered by a doctor who has first-hand experience of a mental health condition can cause both immediate and sustained reductions in stigma variables in medical students and doctors.

By designing and evaluating such an innovative anti-stigma programme we will be making an important contribution to the literature on ways we can reduce mental health stigma amongst medical students and doctors towards their peers with mental health difficulties.

**SPECIFIC AIMS**

**Action Statement 1:** Our proposed programme will reduce mental health stigma from medical students and doctors directed towards their peers with mental health problems.

**Action Statement 2:** Our proposed programme will break down the barriers to mental health services for those who urgently need them.

**Action Statement 3:** Our proposed programme will encourage medical students and doctors with mental health difficulties to seek help for their own mental health problems.

**STUDY DESIGN AND SUBJECTS**

We propose to conduct a prospective, observational cohort study. The study will be comprised of two groups: an intervention group and a control group. The intervention group will be exposed to a manualized anti-stigma programme delivered by a medic with lived experience of a mental health condition. The inclusion criteria for recruiting participants for each group will be as follows: 1) Enrolled in a UK medical school and 2) Actively practicing physician in the UK. In order to publicise the event and recruit participants we will work closely with medical school psychiatry societies or ‘PsychSocs’. The research team are in direct communication with the committee of PsychSocs throughout the UK (n=24). We will send each PsychSoc an email with information about the contact-based, anti-stigma intervention, ‘The Wounded Healer’ and design flyers, posters and other promotional material. We will
also take advantage of social media (i.e. Facebook) and create an event page on each PsychSoc website and invite members to attend. Attendance will be voluntary. From previous experience approximately 100 participants attended the event and the Wounded Healer ‘UK tour’ or lecture circuit includes 20 universities and hospitals (Hankir et al. 2014). This will provide us with between 1,500-3,000 participants to recruit for our study for the intervention group. PsychSocs will also recruit participants for the control group. The control group will be exposed to a conventional lecture as part of their medical school education or post-graduate training (i.e. a cardiology lecture, management of Diabetic Keto-acidosis etc.). We will refer to the model used by Evans-Lacko et al. in their paper that investigated the impact that the anti-stigma program END had on medical students in order to calculate the sample size of the intervention and control groups (intervention group n=1066, control group n=386) (Friedrich et al. 2013).

Ethical approval will be obtained from the Institute of Psychiatry, Psychology and Neuroscience Ethics Committee and informed consent obtained from people agreeing to participate in the study.

Paper questionnaires will be hand distributed on the day of the event in order to increase response rates. Each questionnaire will contain questions about a participant’s demographic profile (age, gender, ethnicity), year of study (if at medical school), name of medical school, grade of doctor, name of hospital and other relevant questions such as any prior experience/exposure of psychiatry, personal experience of a mental health problem and/or a family or friend who has experienced a mental health problem and a question asking participants if they would be more willing to seek help if they had any concerns about their own mental health. Validated psychometric stigma scales will be included with the questionnaire and will be as follows:

- Mental health-related knowledge will be measured with the Mental Health Knowledge Schedule (MAKS).
- Mental health-related attitudes will be measured using three items from the Community Attitudes towards the Mentally Ill (CAMI) scale and
- Mental health-related behaviour will be measured by the Reported and Intended Behaviour Scale (RIBS).

These scales will be administered at baseline immediately following the intervention (exposure to the conventional lecture for the control group and ‘the Wounded Healer’ for the intervention group) and then at 6 months’ follow-up. Participants will be asked to provide their email addresses in order to facilitate follow-up.

The primary end-points for the study will be the scores on the stigma scales (MAKS, CAMI and RIBS) and the two groups will be compared using a paired t-test immediately after exposure to the intervention and at 6-month follow-up.

**CONCLUSION**

We will conclude this paper with a list of strengths and weaknesses of the protocol.

**Strength 1:** AH is a medic who recovered from a mental health condition and has substantial experience delivering talks on mental health stigma in the medical profession and medical schools nationally and internationally. AH would play a leading role in the design, development and delivery of an anti-stigma programme comprised of a medic with lived experience of a mental health condition.

**Strength 2:** The Institute of Psychiatry, Psychology and Neuroscience are regarded as world leaders in mental health stigma. There are multiple principal investigators on the IoPPN faculty who would contribute their expertise in the design, development and delivery.

**Weakness 1:** The main weakness we anticipate is a low response rate and high attrition rates at 6 months follow up. We have previously demonstrated a good response rate by hand distributing paper questionnaires in the previous pilot study.

**Weakness 2:** We envisage recruiting medics with lived experience to deliver the anti-stigma will be challenging.

**Acknowledgements:**

We would like to thank the non-governmental organization Colourful Minds for contributing to the formulation of this protocol.

**Conflict of interest:** None to declare.

**Contribution of individual authors:**

Ahmed Hankir conceived the idea and design of the study and was heavily involved in the literature review and synthesis of the manuscript.

Jessica Fletcher-Rogers & Julia Ogumnuyiwa contributed to the literature review on the mental health outcomes of people from BAME communities and provided the description of the Colourful Minds programme.

Frederick R. Carrick & Rashid Zaman are senior academics who provided expert advice on study design. They also contributed to the literature review and edited the manuscript.

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doi:10.1016/S0140-6736(15)00298-6