

A KING'S COLLEGE LONDON UNDERGRADUATE PSYCHIATRY SOCIETY EVENT TO CHALLENGE THE STIGMA ATTACHED TO PSYCHOLOGICAL PROBLEMS IN HEALTHCARE PROFESSIONALS AND STUDENTS

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SUMMARY

Background: There are higher levels of psychological distress in healthcare professionals and students compared to the general population. Yet, despite the availability of effective treatment, many in this group continue to suffer in silence. Fear of exposure to stigmatization has been identified to be a major barrier to accessing and using mental health services.

King's College London Undergraduate Psychiatry Society (KCL PsychSoc) organized an event entitled, 'What does bipolar disorder even mean? Psychological distress: How can we challenge the stigma?'. Healthcare professionals who themselves recovered from psychological problems and a mental health advocate with first-hand experience of psychological distress were invited to deliver talks followed by an interactive question and answer session.

Design: We conducted a single-arm pre-post comparison study. People who attended the KCL Psych Soc event were recruited to participate. Validated stigma scales on knowledge (Mental Health Knowledge Schedule (MAKS)), attitudes (Community Attitudes towards the Mentally Ill) and behavior (Reported and Intended Behavior Scale (RIBS)) were administered on participants before and immediately after exposure to the event.

Results: 44/44 of the participants recruited completed the study (100% response rate). There were statistically significant changes in the respondents' scores for all 3 stigma scales (p value MAKS <0.0001, p value CAMI <0.0001, p value RIBS=0.0011).

Discussion: As far as the authors are aware, this is the first study to date of an anti-stigma intervention comprised of healthcare professionals with first-hand experience of psychological distress. The KCL PsychSoc event was associated with statistically significant changes in the respondents' scores in all three of the stigma scales. More robust research in this area is needed before scaling up similar anti-stigma initiatives.

Key words: mental health stigma - power of contact - healthcare professionals and students - barriers to seeking care

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The mental health of medical students

There is a growing body of evidence that supports the notion that 'the medical school experience' may have adverse effects on the mental health of students (Dyrbye 2006, Dyrbye 2008, Dyrbye 2010, Dunn 2008, Hankir 2013, Hankir 2014, Hope 2014). 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 2010). 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 at Harvard University on the prevalence of depression, depressive symptoms, and suicidal ideation among medical students

revealed a preponderance of psychological distress 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 2016).

The stress and strain of preparing for assessments, the relatively protracted duration of the course, clinical placements, personal life events and financial difficulty are some of the myriad factors that have been identified to have a negative impact on the psychological wellbeing of medical students (Dyrbye 2016).

The General Medical Council (GMC) in the UK stated that medical schools report that one of the trickiest situations they face is when a medical student is struggling with the course due to mental health issues. (<http://www.medschools.ac.uk/Publications/Documents/Mental-Health-Guidance.pdf>)

Compounding the problem even further is that many medical students with psychological problems feel under supported. (<http://www.bmj.com/company/wp-content/uploads/2014/07/student-bmj-survey.pdf>)

On a personal level, psychological distress can contribute to substance and alcohol abuse, strained relationships and attrition from the course. On a professional level, studies suggest that student distress contributes to cynicism and subsequently may affect students' care of patients (including reductions in empathy (Thomas 2007)), relationship with faculty, and ultimately the culture of the medical profession (Dyrbye 2005).

Developing well-being programs and scaling up initiatives that promote resilience and that encourage care seeking in medical students with psychological problems is therefore of paramount importance.

The mental health of doctors

With regards to the mental health of doctors, several epidemiological studies have revealed that psychological problems in this population have reached epidemic levels (West 2016). Beezhold and colleagues, under the auspices of the European Psychiatry Association (EPA), conducted the largest study on burnout in psychiatry trainees to date. The EPA survey showed that 36.7% of respondents (726/1,980) experienced severe burnout (Jovanović 2016). Mata and colleagues at Harvard University conducted a systematic review and meta-analysis on the mental health of resident physicians. The review revealed that the overall pooled prevalence of depression or depressive symptoms in this group was 28.8% (4,969/17,560 physician participants) - greater than in the general population (Mata 2015).

Patient expectation, 'breaking sad news' and regularly witnessing human suffering and distress are some of the 'service user factors' that contribute to mental ill health in physicians. 'Occupational factors' such as an

increasing caseload, feeling undervalued and long working hours are also known to have a negative impact on the mental health of doctors (Brooks 2014).

A recent study showed that many doctors have perfectionist traits that can lead to maladaptive self-criticism when a negative outcome arises. Other 'individual factors' such as self-doubt, feeling an excessive sense of responsibility and experiencing guilt for events outside a clinician's control also contribute and collude to psychological distress in doctors (Firth-Cozens 2006).

Psychological distress can undermine doctors' professional development and compromise patient safety, contributing to a variety of personal and professional consequences such as instigating marital disharmony and arresting career progression respectively (Dyrbye 2016).

Mata outlines three broad approaches to supporting doctors: reactive - having counsellors available if needed; proactive - having events to promote wellbeing; and systemic - attempting to change the prevailing culture (Mata 2015).

Sources of Stigma

Mental health stigma in healthcare professionals and students is a global problem. In the UK, the 2008 Stigma Shout Survey of almost 4,000 people using mental health services and carers revealed that healthcare professionals are a common source of stigma reported by people with mental illness.

(<http://www.time-to-change.org.uk/news/stigma-shout-survey-shows-real-impact-stigma-and-discrimination-peoples-lives>)

Winkler and colleagues administered the Community Attitudes towards the Mentally Ill (CAMI) stigma scale on 1,200 medical doctors in Czechoslovakia which also revealed elevated levels of mental health stigma in this group (Winkler 2016).

In relation to healthcare students and stigma, a cross sectional study conducted on 200 participants matriculated in medical schools in Bangladesh revealed elevated rates of stigmatizing attitudes towards both the mentally ill and psychiatry as a profession (Giasuddin 2016). A study conducted on 760 medical students enrolled in medical schools in the UK also showed that many respondents demonstrated stigmatizing views towards mental health problems (Korszun 2012).

The stigma attached to mental illness in medical students and doctors

Despite the availability of effective treatment, many medical students and doctors with psychological problems continue to suffer in silence. Fear of exposure to stigmatization is a crucial factor to secrecy and symptom concealment (Hankir 2013). A study conducted in the US identified stigma to be a barrier to the use

of mental health services by 30% of medical students with depressive symptoms (Givens 2002). A cross-sectional study on Australian medical students with self-reported psychological problems also revealed that stigma was a major barrier to accessing and using mental services (Ryan 2017).

With regards to healthcare professionals and self-stigma, a qualitative study utilizing in-depth semi-structured interviews on 19 doctors who had been absent from work for over 6 months with physical or mental health problems, drug or alcohol problems, General Medical Council involvement or any combination of these revealed that self-stigmatization represented a major obstacle to returning to work (Henderson 2012).

Challenging mental health stigma

The three main ways to challenge public stigma are through protest, education and contact (Mehta 2015). Corrigan and colleagues conducted a meta-analysis and systematic review on 13 randomized controlled trials challenging public stigma and concluded that the most effective way of reducing public stigma in adults was through social contact (Corrigan 2012). Corrigan argues that service-users are “experts by experience” and should therefore play a leading role in reducing stigma. He adds that healthcare professionals with first-hand experience of mental illness could play a powerful and special role in reducing stigma (Corrigan 2002). However, despite this, there are no studies to date on anti-stigma interventions comprised of healthcare professionals with first-hand experience of psychological distress.

A recent survey conducted on medical students enrolled in medical schools in the UK revealed that 196/219 respondents (90%) agreed or strongly agreed that they would prefer a talk on the mental health of medical students to be delivered by a doctor with first-hand experience of psychological problems than from a lecturer who hasn't had these experiences (Hankir 2014).

Another way of challenging public stigma is through the power of motion picture. Janouskova and colleagues conducted a systematic review on the effectiveness of video interventions at reducing stigmatizing views among young people between 13 and 25 years. The results of the review, which analysed data from 23 studies, revealed that video was found to be more effective than other anti-stigma interventions, such as classical face-to-face educational sessions or simulation of hallucinations. Interestingly, the results of two studies included in the review revealed that social contact delivered via video achieved a similar de-stigmatization effect to that delivered via a live intervention. The authors conclude that their findings suggest that video is a promising de-stigmatization tool among young people; however, more studies in this area are needed (Janouskova 2017).

King's College London Psychiatry Society

King's College London Psychiatry Society ('KCL PsychSoc') was founded in 2005 and is the oldest university psychiatry society in the UK. KCL Psych Soc was established to promote psychiatry as a career to medical students, to support those students who wished to consider psychiatry as a career, to raise the profile of mental health issues amongst all student health professionals and to break down the stigma attached to mental illness. The Society is supported by the Institute of Psychiatry, Psychology & Neuroscience and there is no membership fee.

KCL Psych Soc works closely with the Department of Undergraduate Psychiatry at South London & Maudsley NHS Trust and IoPPN to improve the quality of the psychiatry attachments for students.

The Society hosts a series of lectures that are lively and controversial, often featuring eminent speakers, including Professors Simon Baron Cohen, Murray, and Sir Simon Wessely. Most events are open to all, particularly students & staff of King's College London, the IoPPN and South London and Maudsley NHS Trust.

King's College London Psychiatry Society 'What does bipolar disorder even mean? Psychological distress: How can we challenge the stigma?' A KCL Psych Soc event

On the 12th April 2017 KCL Psych Soc hosted an event entitled, 'What does bipolar disorder even mean? Psychological distress: How can we challenge the stigma?' The aim of the event was, 'to challenge the stigma and misunderstanding around conditions like bipolar disorder' (see figure 1).

The event comprised of three talks from individuals who each have first-hand experience of bipolar disorder: Professor Jamie Hacker Hughes, former President of the British Psychological Association, Dr Ahmed Hankir, a Core Trainee in Psychiatry at Leeds and York Partnership NHS Foundation Trust and Ms Christine Daniel, mental health advocate. Each speaker spoke honestly, openly and proudly about their experiences with oscillations in mood and this was followed by a panel discussion and a question and answer session with the audience.

METHOD

Study design

This pilot project was a single-arm, pre-post comparison study ($O_1 \times O_2$). 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). We hand distributed paper questionnaires to increase response rates.

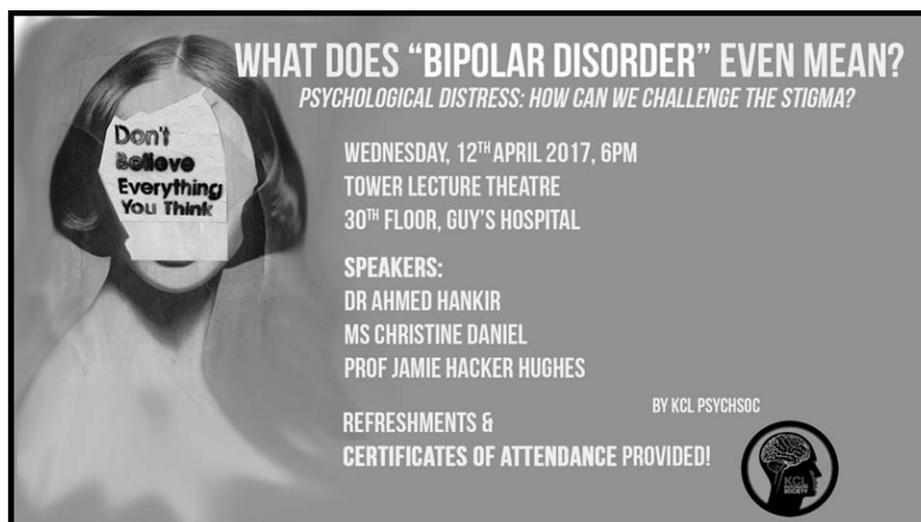


Figure 1. Flyer used as promotional material to publicize event

Participants

People who attended the KCL Psych Soc event were recruited to participate in the study. KCL Psych Soc publicized the event by producing promotional material and posting it on their social media accounts (including Facebook and Twitter). Attending the event, as well as participation in the study, was voluntary. The participants were informed about anonymity, and each participant had a unique personal code that did not reveal any identifying information. No monetary compensation was offered although free refreshments were provided. Verbal informed consent was obtained from participants. Ethical approval for the study was obtained from the Carrick Institute for Graduate Studies, an Institutional Review Board registered with the National Institute of Health that has a track record for global educational, research and clinical trials.

Stigma scales

Three validated scales were administered 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 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

Descriptive statistics were performed on the data obtained. The total scores for the MAKS, RIBS and CAMI were calculated with higher scores representing less stigmatising responses. A paired sample *t*-test was conducted to compare pre-intervention and post-intervention scores. Results were considered significant at $p \leq 0.05$.

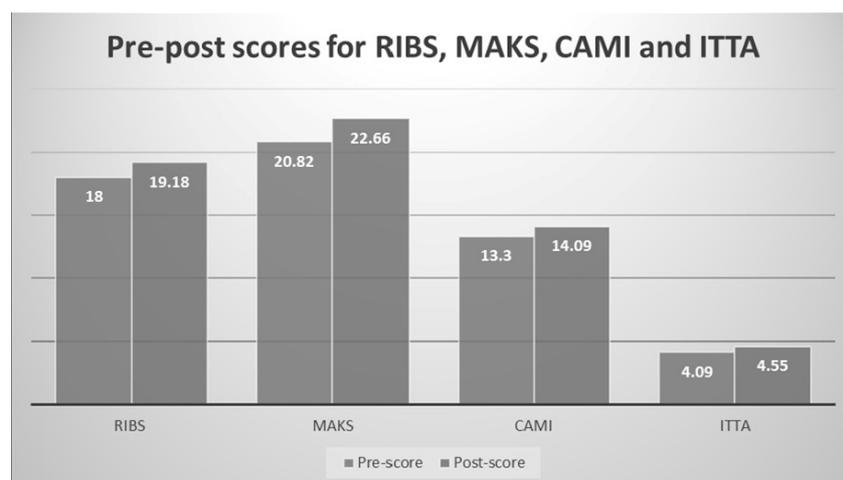


Figure 2. Pre-post scores for RIBS, MAKS, CAMI and ITTA (RIBS- Reported and Intended Behavior Scales, MAKS- Mental Health Knowledge Schedule, CAMI- Community Attitudes to the Mentally Ill, ITTA- Inspired to Take Action to challenge mental health stigma)

RESULTS

Although 111 participants expressed an interest in attending the event on social media, only 44 attended (39%). However, 44/44 (100%) of the participants who attended the event completed the validated stigma scales before and after exposure to the program.

The mean pre-RIBS score was 18 (Std. Dev. 2.55, 95% Conf. Interval 17.22–18.76) and the mean post-RIBS score was 19.18 (Std. Dev. 1.39, 95% Conf. Interval 18.76–19.60). There was a statistically significant difference in the pre-RIBS score compared to the post-RIBS score ($p=0.0011$) (see figure 2).

The mean pre-MAKS score was 20.82 (Std. Dev. 2.86, 95% Conf. Interval 19.95–21.69) and the mean post-MAKS score was 22.66 (Std. Dev. 1.88, 95% Conf. Interval 22.09–23.23). There was a statistically significant difference in the pre-MAKS score compared to the post-MAKS score ($p<0.0001$) (see figure 2).

The mean pre-CAMI score was 13.30 (Std. Dev. 1.56, 95% Conf. Interval 12.82–13.77) and the mean post-CAMI score was 14.09 (Std. Dev. 1.24, 95% Conf. Interval 13.72–14.47). There was a statistically significant difference in the pre-CAMI score compared to the post-CAMI score ($p<0.0001$) (see figure 2).

The mean pre-ITTA score was 4.09 (Std. Dev. 0.83, 95% Conf. Interval 3.84–4.34) and the mean post-ITTA score was 4.55 (Std. Dev. 0.66, 95% Conf. Interval 4.34–4.75). There was a statistically significant difference in the pre-ITTA score compared to the post-ITTA score ($p<0.0001$) (see figure 2).

DISCUSSION

The King's College London Psychiatry Society event, 'What does bipolar disorder even mean? Psychological distress: How can we challenge the stigma?' was associated with statistically significant changes in the

respondents' scores in all three of the stigma scales (Mental Health Knowledge Schedule, Reported and Intended Behaviour Scale and Community Attitudes towards the Mentally Ill) as well as in the score of the 'Inspired to Take Action' statement. We hypothesize that the range of life experiences that the speakers shared was a crucial factor that contributed to the efficacy of the event. The fact that the speakers were all experts by experience and were enthusiastic about challenging the stigma attached to psychological problems is hypothesized to also be a key factor.

Previous research on anti-stigma training that 'harnessed' the power of contact between 'experts by experience' and medical students also yielded statistically significant changes in stigma variables. However, the positive changes were only short-term and there was little evidence for its persistent effect. The authors of this study suggested that medical students receive 'booster sessions' to facilitate the sustained reduction in stigma (Friedrich 2013).

Studies have revealed that doctors are a source of 'diagnostic overshadowing', a phenomenon whereby a clinician misattributes a patient's physical symptoms for their mental illness (Druss 2000). There are 'bespoke' psychometric stigma scales developed specifically for healthcare students that incorporate the elements of diagnostic overshadowing (Mental Illness: Clinicians' Attitudes (MICA) Scale) (Kassam 2010). Although the main aims of the KCL Psych Soc event were to challenge the stigma attached to psychological problems in healthcare professionals and students and to challenge healthcare professionals and students who might be a source of mental health stigma, we suspected that a sizeable proportion of people who would attend the event would not be from this background. We decided to administer validated stigma scales that have a broader inclusion criterion in anticipation of this. As it turned out, 23% of the respondents in this sample were

from non-healthcare backgrounds. In future studies, participants could be recruited by purposive sampling to explore if anti-stigma events targeted at healthcare professionals and students could challenge the phenomenon of 'diagnostic overshadowing'.

The main limitations of our study were the small sample size and the lack of long-term follow-up. Also, the participants who attended the event were 'self-selecting' i.e. they may already have had an interest in mental health and therefore potentially relatively lower levels of stigma compared to people who didn't attend the event (hence there was a selection bias). A larger sample size, a comparison group and a longitudinal design might help to control for such confounding factors. Due to the limitations of our study, our results are not representative or generalizable but do provide provisional support for future more robust research.

CONCLUSION

Mental illness can have profoundly deleterious effects on the lives of those who suffer from them, their families, friends and those who care for them. Healthcare professionals and students are also vulnerable to developing psychological problems. Mental health stigma is a major barrier to accessing and using mental health services and is an important factor that contributes to the morbidity and mortality associated with mental illness, particularly in healthcare professionals and students.

If we are serious about improving the mental health and psychological well-being of healthcare professionals and students we must develop innovative ways to combat the stigma that is attached to psychological problems in this group. Policy makers must allocate more resources to support and evaluate initiatives that challenge mental health stigma from grassroots level to governmental level.

Acknowledgements:

We would like to thank King's College London Undergraduate Psychiatry Society for organizing the event and for allowing us to conduct this study.

Conflict of interest:

Charlotte Wilson Jones set up King's College London Undergraduate Psychiatry Society.

Contribution of individual authors:

Mao Fong Lim, Isabel Lever, Phillipa Brothwood organized the event and collected the data.

Frederick R. Carrick, Jamie Hacker Hughes and Rashid Zaman supervised Ahmed Hankir, contributed to the study design and obtained ethical approval.

Charlotte Wilson Jones supervised Mao Fong Lim, Isabel Lever, Phillipa Brothwood and revised the manuscript.

References

1. Brooks SK, Del Busso L, Chalder T, Harvey SB, Hatch SL, Hotopf M, Madan I, Henderson M. 'You feel you've been bad, not ill': Sick doctors' experiences of interactions with the General Medical Council. *BMJ Open*. 2014; 4:e005537.
2. Corrigan PW, Watson CA. Understanding the impact of stigma on people with mental illness. *World Psychiatry*. 2002; 1: 16-20.
3. Dunn LB, Iglewicz A, Moutier C. A conceptual model of medical student well-being: promoting resilience and preventing burnout. *Acad Psychiatry*. 2008;32:44-53.
4. Druss BG, Bradford DW, Rosenheck RA, Radford MJ, Krumholz HM. Mental disorders and use of cardiovascular procedures after myocardial infarction. *JAMA* 2000; 283: 506-11
5. Dyrbye LN, Thomas MR, Shanafelt TD. Systematic review of depression, anxiety, and other indicators of psychological distress among U.S. and Canadian medical students. *Acad Med*. 2006 ;81:354-73.
6. Dyrbye L, Shanafelt T. A narrative review on burnout experienced by medical students and residents. *Med Educ*. 2016 ;50:132-49.
7. Firth-Cozens J. A perspective on stress and depression. In: Cox J, King J, Hutchinson A, McAvoy P, eds *Understanding doctors' performance Oxford*. Radcliffe Publishing, 2006.
8. Friedrich B, Evans-Lacko S, London J, Rhydderch D, Henderson C, Thornicroft G. Anti-stigma training for medical students: the Education Not Discrimination project. *Br J Psychiatry Suppl*.;55:s89-94.
9. Givens JL, Tjia J. Depressed medical students' use of mental health services and barriers to use. *Acad Med*. 2002;77:918-921
10. Goffman E. *Stigma: Notes on the management of spoiled identity*. Simon & Schuster Inc, New York 1963.
11. Hankir A, Zaman R. Jung's archetype, 'The Wounded Healer', mental illness in the medical profession and the role of the health humanities in psychiatry. *BMJ Case Rep*. 2013 Jul 12;20
12. Hankir AK, Northall A, Zaman R. Stigma and mental health challenges in medical students. *BMJ Case Rep*. 2014 Sep 2;2014. pii: bcr2014205226.
13. Hugo M. Mental health professionals' attitudes towards people who have experienced a mental health disorder. *J Psychiatr Ment Health Nurs*. 2001;:419-425.
14. Jovanović N, Podlesek A, Volpe U et al. Burnout syndrome among psychiatric trainees in 22 countries: Risk increased by long working hours, lack of supervision, and psychiatry not being first career choice. *Eur Psychiatry* 2016; 32:34-41.
15. Kassam A., Glozier N., Leese M., Henderson C., Thornicroft G. Development and responsiveness of a scale to measure clinicians' attitudes to people with mental illness (medical student version). *Acta Psychiatrica Scandinavica* 2010; 122:153-161.
16. Mata, D.A. et al., Prevalence of Depression and Depressive Symptoms Among Resident Physicians. *JAMA*, 2015; 314.:2373.
17. Marmot M. Social determinants of health inequalities. *Lancet*. 2005; 365:1099-104.

18. Mehta N, Clement S, Marcus E, Stona AC, Bezborodovs N, Evans-Lacko S, Palacios J, Docherty M, Barley E, Rose D, Koschorke M, Shidhaye R, Henderson C, Thornicroft G. Evidence for effective interventions to reduce mental health-related stigma and discrimination in the medium and long term: systematic review. *Br J Psychiatry* 2015; 207:377-84.
19. North East London Strategic Health A. Report of an independent inquiry into the care and treatment of Daksha Emson M.B.B.S, MRCPsych, MSc and her Daughter Freya. London: North East London Strategic Health Authority, 2003
20. Rotenstein LS, Ramos MA, Torre M, et al. Prevalence of depression, depressive symptoms, and suicidal ideation among medical students. *JAMA* 2016; 316:2214-36.
21. Thornicroft G, Rose D, Kassam A, Sartorius N. Stigma: ignorance, prejudice or discrimination? *Br J Psychiatry*. 2007; 190:192-3.
22. Nordt C, Rössler W, Lauber C. Attitudes of mental health professionals toward people with schizophrenia and major depression. *Schizophr Bull*. 2006;32:709-14.
23. Thornicroft G, Rose D, Kassam A. Discrimination in health care against people with mental illness. *Int Rev Psychiatry*. 2007;19:113-22.
1. West CP, Dyrbye LN, Erwin PJ, Shanafelt TD. Interventions to prevent and reduce physician burnout: a systematic review and meta-analysis. *Lancet* 2016; 388:2272-2281.

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