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demonstrating the behaviour that we hope to see in the nation's future health-care professionals. Therefore, it is of paramount importance that actions such as Executive Order 13950 are met with resistance and a recommitment to evidence-based training.

Leaderships should prioritise diversity and inclusion training at three crucial points: before training, through needs assessment, organisation support, and protected time; during training, by focusing on skills and attitudes, with practice and live instruction through multi-session and multi-modal trainings, and by providing in-training feedback; and after training, by evaluating trainings, setting performance metrics, and providing ongoing opportunities for consultation and reflection.<sup>3-5</sup> Additionally, leadership plays a key role in the success of diversity and inclusion trainings by committing resources and by visibly role-modelling participation.<sup>3-5</sup>

Although we are encouraged that President Biden revoked Executive Order 13950 on his first day in Office,<sup>7</sup> the order did not emerge in a vacuum. It endangered a key component of medical education and represents an undercurrent of resistance to diversity and inclusion. The executive order took an alarmingly strong stance, with an outright ban that had a substantial negative effect and threatened the foundational principles of democracy (eg, freedom of speech). It not only denied academic liberty, but also compelled silence, which ultimately disrupts efforts towards justice and equality for the patients that the medical community serves. In addition to the effective elements of diversity and inclusion training already mentioned, we offer six recommendations spurred by Executive Order 13950 (panel).



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## Pre-pandemic mental illness and risk of death from COVID-19

Although the mental health impact of a COVID-19 diagnosis and societal restrictions has been examined, whether pre-pandemic mental health problems predict susceptibility to COVID-19 has not been widely tested. Taquet and colleagues<sup>1</sup> recently found that a diagnosis of poor mental health was associated with an increased risk of COVID-19. We have previously explored the role of explanatory characteristics such as ethnicity,<sup>2</sup> lifestyle,<sup>3</sup> and vascular risk indices<sup>4</sup> in the relationship between mental health<sup>5</sup> and COVID-19 using data from UK Biobank, a field-based

prospective cohort study of around 0.5 million people. In those analyses, our outcome of interest was hospitalisation with COVID-19. We now use 2020 data on death from the disease.

In UK Biobank (2006-10), self-reported mental health was captured using two indices at baseline. Study members were asked whether they had ever been under the care of a psychiatrist for any mental health problem. Symptoms of psychological distress (a combination of anxiety and depression) were measured using the validated four item version of the Patient Health Questionnaire with a total score from 0 to 12 (higher scores denote greater distress). Socioeconomic status was quantified using self-reported educational qualifications (degree, other qualifications, no qualifications) and the Townsend index of neighbourhood deprivation (higher scores denote greater disadvantage). Ethnicity was categorised as White, Asian, Black, Chinese, Mixed, or other. Baseline vascular or heart problems, diabetes, chronic lung disease, and asthma, were based on a self-reported physician diagnosis. The presence of hypertension was defined as a blood pressure of 140/90 mmHg or higher or self-reported use of antihypertensive medication, or both. C-reactive protein, glycated haemoglobin, and high-density lipoprotein cholesterol concentrations were based on assays of non-fasting venous blood. Height, weight, and forced expiratory volume in 1 s were measured using standard protocols. Cigarette smoking, physical activity, and alcohol consumption were assessed using standard questions. Study members were linked to national mortality records and death from COVID-19, as denoted by the emergency ICD-10 code U07.1 (COVID-19, virus identified).

Of 447 463 individuals (241 883 women), 351 deaths were ascribed to COVID-19 between April 1, 2020, and Sept 23, 2020 (end

	Adjusted for age, sex, ethnicity, and comorbidities*	Adjusted for age, sex, ethnicity, and comorbidities plus socioeconomic status†	Adjusted for age, sex, ethnicity, and comorbidities plus lifestyle factors‡	Adjusted for age, sex, ethnicity, and comorbidities plus biomarkers§
Number of COVID-19 deaths	341	329	331	224
Number at risk of COVID-19	439 513	435 556	434 819	316 009
Psychological distress¶				
Group 1 (score 0)	1.0	1.0	1.0	1.0
Group 2 (score 1–2)	1.38 (1.07–1.78)	1.37 (1.06–1.77)	1.29 (1.00–1.67)	1.54 (1.13–2.09)
Group 3 (score 3–12)	1.76 (1.34–2.32)	1.51 (1.13–2.00)	1.42 (1.07–1.90)	1.76 (1.24–2.50)
p value	<0.0001	0.0030	0.012	0.0007
Per SD (2.11) increase in distress score	1.29 (1.17–1.44)	1.21 (1.10–1.34)	1.19 (1.09–1.31)	1.27 (1.13–1.43)
Number of COVID-19 deaths	386	372	373	253
Number at risk of COVID-19	486 887	481 578	480 810	349 078
Psychiatric consultation				
No	1.0	1.0	1.0	1.0
Yes	1.35 (1.01–1.81)	1.26 (0.94–1.70)	1.22 (0.91–1.65)	1.44 (1.01–2.06)
p value	0.040	0.125	0.183	0.042

Data analysed from UK Biobank, shown as hazard ratios (95% CI), unless stated otherwise. \*Comorbidities were diagnoses of vascular or heart disease, diabetes, chronic bronchitis or emphysema, asthma, and hypertension. †Socioeconomic status was measured by educational attainment and Townsend deprivation index. ‡Lifestyle factors were body-mass index, smoking status, alcohol intake frequency, and number of the types of physical activity in the past 4 weeks. §Biomarkers were forced expiratory volume in the first second, and blood concentrations of C-reactive protein, glycated haemoglobin, and high-density lipoprotein. ¶Based on the Patient Health Questionnaire-4. ||Used as the referent group.

**Table: Pre-pandemic self-reported mental health and COVID-19 mortality**

of follow-up). As the comparator model, hazard ratios (HR) with accompanying 95% CIs were computed using Cox regression and adjusted for age, sex, ethnicity, and comorbidities (table). Relative to the group reporting no symptoms of distress, rates of death from COVID-19 were most elevated in individuals within the high distress category (HR 1.76, 95% CI 1.34–2.32), and a dose–response effect was apparent ( $p < 0.0001$ ). The magnitude of this association was diminished by around a third after adjusting for socioeconomic status (1.51, 1.13–2.00;  $p = 0.0030$ ), and by around a half when lifestyle factors were taken into account (1.42, 1.07–1.90;  $p = 0.012$ ). Biological risk indices had little explanatory power, which was shown after we computed effect estimates in the most basic comparator model for the subsample with full biological data (appendix p 1). Although weaker relationships were seen for self-reported psychiatric consultation, there was a similar pattern of post-adjustment attenuation. Overall, the

magnitude of the association distress and mortality from COVID-19 was higher than for hospitalisations from the disease.<sup>5</sup>

We declare no competing interests.

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## Mental health implications of protests and collective actions in Nigeria: a call for appraisal

Large-scale protests and collective actions against systems of leadership with the aim of achieving specific goals are increasing globally. Protests and collective actions can lead to a definite alteration in the existing system, but can also culminate in the loss of lives and properties. The consequences of these actions have varying effects on the emotional state of individuals, yet the impact on mental health remains largely understudied in sub-Saharan Africa. The earliest documented protest in Nigeria, the so-called Aba women's

See Online for appendix