Comment

Mixed signals about the mental health of the NHS workforce

In the past few months, media headlines regarding the mental health of the UK National Health Service (NHS) workforce during the COVID-19 pandemic have reported or predicted large-scale problems ahead eg, "Coronavirus is whipping up a mental health storm for NHS workers", and forecasting a "tsunami" of mental health problems having "catastrophic consequences". A 2020 systematic review of the mental health of healthcare workers during previous pandemics also suggests an increase in distress and post-traumatic stress.¹

Anyone working in the health service at present has likely noticed another tsunami—a proliferation of surveys on health-care workers. If the generated evidence led to improved conditions and support for staff, multiple studies might be acceptable; however, concerns about the quality of some of these surveys mean that survey fatigue seems a more likely outcome.

Many studies lack explicit sample frames and appear to have very low response rates, making the representativeness of their results questionable—eg, a survey of health-care workers done in May, 2020, had a response rate of around 0.06% (868 responses from approximately 1.5 million NHS staff). Many surveys are cross-sectional, which, while potentially useful as snapshots, offer little to identify which factors might be predictive of mental health problems, and hence few possible foci for interventions. Also, we must remember that mental health questionnaires are not diagnostic. They overestimate rates of disorders when compared with gold standard structured psychiatric interviews, especially when completed by non-representative participants recruited through convenience sampling.

Studying health-care workers in isolation prevents us from understanding whether the effect of the pandemic on their mental health is different to other key workers or the general population. This understanding requires large-scale population studies containing sufficient numbers of health-care workers, and, ideally, other key workers (eg, transport and utility workers). For example, analysis of the UK population Understanding Society study (with prepandemic and postpandemic groups) found no increase in mental distress among health-care workers due to COVID-19 compared with the general population.² Similarly, an April, 2020, cohort study of wellbeing during the COVID-19 pandemic found no association between key-worker status and anxiety or depression,³ and a study using the Avon Longitudinal Study of Parents and Children database found no increased risk of anxiety or depression in key workers or health-care workers.⁴ However, another UK population study found significantly higher prevalence of depression, anxiety, and post-traumatic stress disorder in frontline workers (including health-care workers) compared with the general population.⁵

So, although substantial increases have been seen in mental health problems for the population in the UK as a whole in April, 2020, compared with 2017–19,⁶ whether this increase is a greater problem for healthcare workers than for the rest of the population is uncertain. Somewhat surprisingly, some evidence exists of a significant association between being a key worker and reduced stress.³

Several possible explanations exist as to why many surveys of health-care workers alone report high rates of mental distress. First, study participation might be disproportionate among unwell staff. Second, increased distress might be temporary, especially around the height of the pandemic. Third, high symptom reporting might represent non-pathological distress, which should be normalised and supported via peer support, Schwartz rounds, and active monitoring, rather than formal psychiatric interventions, which ought to be provided if disorders are present. Fourth, survey or response bias might be present. If occupation-specific surveys (eq, teachers, police officers, health-care workers) are compared with general population studies, we consistently see increased rates of mental ill-health in the occupation-specific surveys.7 This finding might have a complex explanation, but we should be cautious when interpreting results from mental health surveys targeting single occupation groups. Finally, specific increases in symptom reporting by health-care workers could also be magnified by demographic differences in the NHS workforce, such as gender and ethnicity.8 Given the heightened risks of both COVID-19 and mental health problems in specific demographic groups, investigation of differences and possible confounding is needed.

Additionally, aggregate surveys are likely to hide more nuanced differences. A single prevalence of mental





Published Online September 3, 2020 https://doi.org/10.1016/ S2215-0366(20)30379-5

Lancet Psychiatry 2020

For The Guardian article "Coronavirus is whipping up a mental health storm for NHS workers" see https://www. theguardian.com/ commentisfree/2020/may/28/ coronavirus-mental-healthstorm-nhs-workers

For Royal College of Psychiatrists press release forecasting 'tsunamis' of mental illness see www.rcpsych. ac.uk https://www.rcpsych.ac.uk/ news-and-features/latest-news/ detail/2020/05/15/psychiatristssee-alarming-rise-in-patientsneeding-urgent-and-emergencycare

For Institute for Public Policy Research newsletters 'Care fit for carers' see https://www.ippr. org/files/2020-04/1587632465_ care-fit-for-carers-april20.pdf health problems could obscure different reactions—from those with worse mental health because of the increased pressures COVID-19 has placed on the NHS, while some will have thrived due to the positive challenges, team working, and life-saving experiences.

What is needed now in research is quality, not quantity. Standardised psychiatric interviews, longitudinal designs, well defined sample frames, and assessment of response rates and bias. If we do not take these steps, we risk unnecessarily pathologising ordinary responses to extraordinary situations, and overlooking those most at risk. Rigorous research will provide evidence that can be used to improve the support offered to health-care workers. Even if some surveys did show that health-care workers have higher rates of mental health problems than before the pandemic, but no worse than confirmed increases in the general population, clear increases in the prevalence of mental health problems have been seen overall, and previous long-term research of doctors' wellbeing showed general distress rates of 30-50%.9 This research found that meal breaks and sleep affect mental wellbeing more than the number of hours worked.9 This findings was echoed in 2020, in Wuhan, China, where health-care workers reported a need for adequate rest and personal protective equipment rather than mental health interventions.¹⁰ If confronted with a second wave of the COVID-19 pandemic, we should not be surprised that health-care workers' first priorities continue to be for simple things-equipment, training, meals, and sleep-which, if compromised, can affect their mental health.

For the NHS People Plan for 2020/2021 see https://www. england.nhs.uk/ournhspeople/ So, while the NHS is working on its mental health offer to its staff, some caution is needed. Not all surveys are created equal, and the true picture of wellbeing among health-care workers is likely to be more complex than as portrayed in the headlines. NG reports personal fees from March on Stress outside of the submitted work. NG is the Royal College of Psychiatrists Lead for Trauma and the Military and have provided advice to the Royal College of Psychiatrists during the COVID-19 pandemic and acted as a media spokesperson. NG has also been part of the National Health Service People's health and wellbeing team. All other authors declare no competing interests. The views expressed in this Comment are those of the authors and not necessarily those of the NHS, the National Institute for Health Research, or the Department of Health and Social Care.

*Danielle Lamb, Neil Greenberg, Sharon A M Stevelink, Simon Wessely

d.lamb@ucl.ac.uk

NIHR ARC North Thames, Department of Applied Health Research, University College London, London, WC1E 7HB, UK (DL); Health Protection Research Unit (NG) and Department of Psychological Medicine (SW), Weston Education Centre and Department of Psychological Medicine, Institute of Psychiatry, Psychology and Neuroscience (SAMS), King's College London, London, UK (NG)

- Kisely S, Warren N, McMahon L, Dalais C, Henry I, Siskind D. Occurrence, prevention, and management of the psychological effects of emerging virus outbreaks on healthcare workers: rapid review and meta-analysis. BMJ 2020; 369: m1642.
- Pierce M, Hope H, Ford T, et al. Mental health before and during the COVID-19 pandemic: a longitudinal probability sample survey of the UK population. *Lancet Psychiatry* 2020; published online July 21. https://doi.org/10.1016/S2215-0366(20)30308-4.
- Jia R, Ayling K, Chalder T, et al. Mental health in the UK during the COVID-19 pandemic: early observations. *medRxiv* 2020; published online May 19. https://doi.org/10.1101/2020.05.14.20102012 (preprint).
- 4 Kwong ASF, Pearson RM, Adams MJ, et al. Mental health during the COVID-19 pandemic in two longitudinal UK population cohorts. *medRxiv* 2020; published online June 18. https://doi.org/10.1101/ 2020.06.16.20133116 (preprint).
- 5 Murphy J, Spikol E, McBride O, et al. The psychological wellbeing of frontline workers in the United Kingdom during the COVID-19 pandemic: first and second wave findings from the COVID-19 Psychological Research Consortium (C19PRC) Study. PsyArXic Preprints, June 17, 2020 https://psyarxiv.com/dcynw/ (accessed Aug 14, 2020; preprint).
- Daly M, Sutin A, Robinson E. Longitudinal changes in mental health and the COVID-19 pandemic: evidence from the UK Household Longitudinal Study. PsyArXic Preprints, June 12, 2020. https://osf.io/qd5z7 (accessed AUg 14, 2020; preprint).
- 7 Goodwin L, Ben-Zion I, Fear NT, Hotopf M, Stansfeld SA, Wessely S. Are reports of psychological stress higher in occupational studies? A systematic review across occupational and population based studies. PLoS One 2013; 8: e78693.
- 8 Nguyen LH, Drew DA, Graham MS, et al. Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study. *Lancet Public Health* 2020; published online July 31. https://doi.org/10.1016/S2468-2667(20)30164-X.
- Firth-Cozens J. What I learnt from studying doctors' mental health over 20 years-an essay by Jenny Firth-Cozens. BMJ 2020; 369: m1374.
- 10 Chen Q, Liang M, Li Y, et al. Mental health care for medical staff in China during the COVID-19 outbreak. *Lancet Psychiatry* 2020; 7: e15–16.