

An Assessment of Post-COVID Mental Health in ICU Staff

Introduction

The COVID-19 pandemic presented psychological challenges for healthcare workers; the intensive care unit (ICU) was an especially challenging place to work. We surveyed ICU staff at the Countess of Chester Hospital (COCH) with the following objectives:

Aims

1. Assess the prevalence of mental health disorders among staff working in COCH ICU
2. Compare staff's mid-COVID mental health to post-COVID mental health
3. Identify areas to improve ICU mental health support

Methodology

A questionnaire incorporating validated screening tools for **depression (PHQ-9)**[1], **anxiety (GAD-7)**[2], **PTSD (IES-R)**[3] and **functional impairment (WSAS)**[4] were distributed to ICU staff working at COCH between 12/03/24 - 15/04/24. Results were compared to data from COCH during the COVID Pandemic in 2020[5].

ICU Staff Mental Health 2024

Demographics

The survey received 58 responses: 77.6% ICU nurses, 12.1% doctors and 10.3% other allied health professionals. 19% of respondents reported a current mental health diagnosis.

Self-Reported Impact of ICU Work on Mental Health 2024

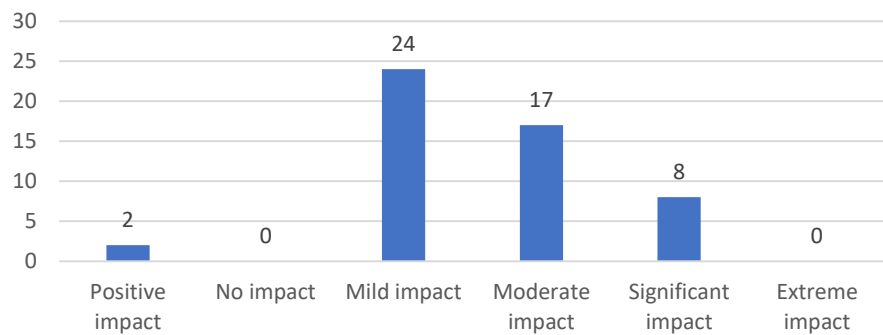


Figure 1: Self-reported impacts of ICU work on mental health

Mental Health Scoring

Mental health diagnoses by diagnostic tools (%)

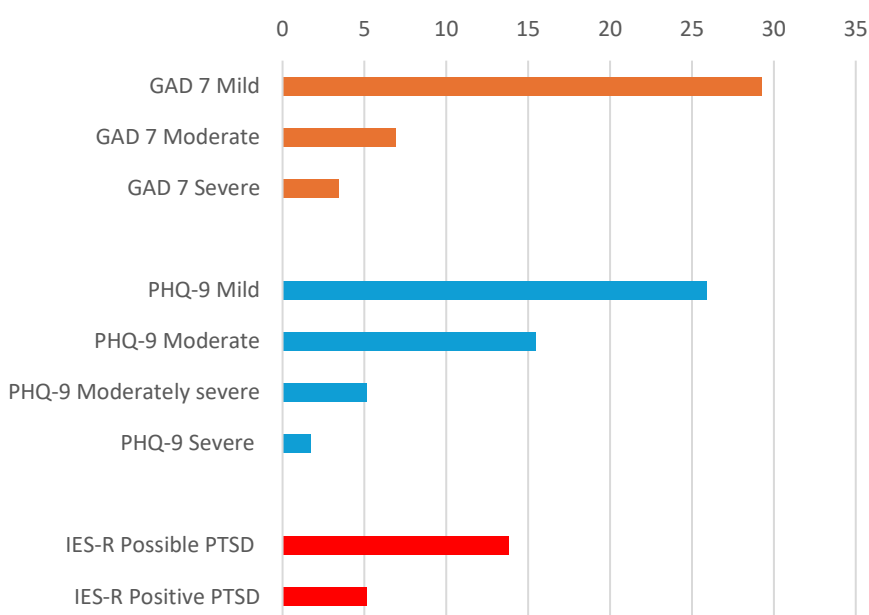


Figure 2: Results of **GAD-7 (anxiety)**, **PHQ-9 (depression)** and **IES-R (PTSD)** scores (%)

Effect of Mental Health on Function 2024

The **Work and Social Adjustment Scale (WSAS)** was used to measure the effect of mental health problems on staff functioning in and out of work.

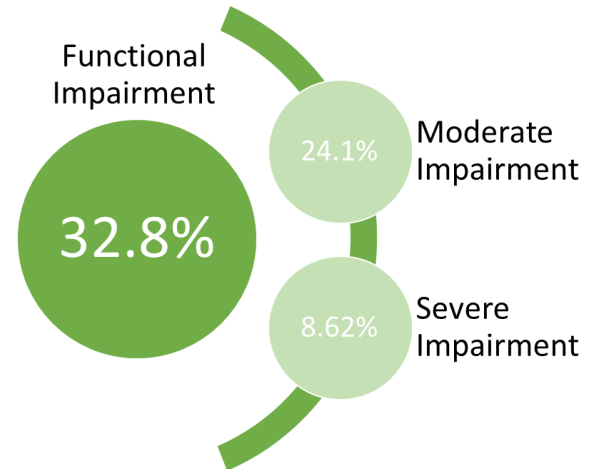


Figure 3: Outcomes of work and social adjustment scale

Mental Health Diagnoses 2020 vs 2024 vs Global Prevalence(%)

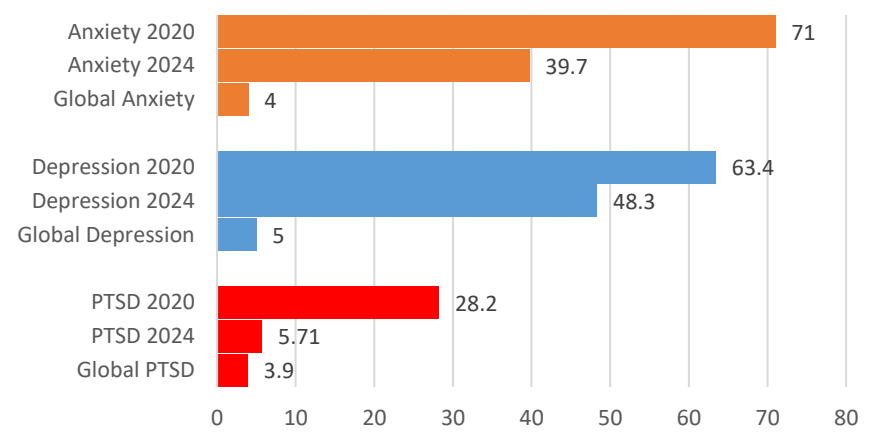


Figure 4: Comparison of 2024 data to data from 131 COCH ICU staff in 2020[5] and World Health Organisation (WHO) estimates of global prevalence[6] (%)

Staff Suggestions for Improvement

We received 53 staff suggestions on how to improve mental health in ICU, these could be broadly categorised into:

- Debrief opportunities i.e. Shwartz rounds.
- Fewer or more predictable nurse redeployments.
- Kind and positive team dynamics.
- More recognition for good work i.e. GREATIX use.

Conclusions

- ICU staff mental health at COCH has improved since the COVID pandemic.
- Mental health burden remains well above the general population, causing functional impairment in 32.8% of staff.
- Positive management interventions could improve the mental health and work of ICU colleagues. These could include:
 - Shwartz rounds.
 - GREATIX use.
 - Civility handbooks and teambuilding.
 - Raising awareness of existing mental health support.

References

1. Spitzer RL, Kroenke K, Williams JBW, Löwe B. A brief measure for assessing generalized anxiety disorder: the GAD-7. Arch Intern Med . 2006 May;166(10):1092-7
2. Kroenke K, Spitzer RL, Williams JBW. The PHQ-9: validity of a brief depression severity measure. J Gen Intern Med . 2001;16(9):606-13.
3. Weiss DS. The Impact of Event Scale: Revised. Cross-Cultural Assessment of Psychological Trauma and PTSD. 2007 Jul 17;219-38.
4. Mundt JC, Marks IM, Shear MK, Greist JH. The Work and Social Adjustment Scale: a simple measure of impairment in functioning. Br J Psychiatry, 2002;180(MAY):461-4.
5. Dykes N, Johnson O, Bamford P. Assessing the psychological impact of COVID-19 on intensive care workers: A single-centre cross-sectional UK-based study. J Intensive Care Soc, 2022 May 1;23(2):132
6. World Health Organization (WHO) [Internet]. Available from: <https://www.who.int/>