



# Exploring the psychological impact of the COVID-19 pandemic on PICU clinicians

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## Introduction

The Paediatric Intensive Care Unit (PICU) is a challenging work environment, and staff are at high risk of moral distress, burnout, stress, and fatigue<sup>1-3</sup>. These factors can affect decision-making in the healthcare setting, while also having an impact on both the physical and emotional wellbeing of clinicians. The COVID-19 pandemic has affected how we live and work on a global scale; we postulate this increases the risk of stress-related disorders and poor mental health.

We aimed to explore the impact of the COVID-19 pandemic on the wellbeing of clinicians working in PICU at the Royal Hospital for Children in Glasgow.

## Methods

A single centre, anonymised online survey was conducted. A generic e-mail invitation with link to the survey was sent to a full cohort of 30 clinicians including consultants, trainees and advanced nurse practitioners (ANPs). The survey was active online from 25/05/20 to 28/06/20, with a reminder email sent out halfway through this period. Data pertaining to staff grade and work pattern was collected.

The survey was divided into four sections: burnout, work-related stress, work-related fatigue, and the perceived impact on work-life balance. This included two previously validated wellbeing surveys. Burnout was assessed using an abbreviated Maslach Burnout Index (aMBI)<sup>4</sup>. Work-related stress was assessed using the Effort-Reward Imbalance (ERI) model to calculate an Effort Reward Ratio (ERR)<sup>5</sup> for each respondent.

Two free text questions were also included and recurring domains in responses identified:

*“Please comment on how your work-life balance has changed during the COVID-19 pandemic”*

and

*“Please comment on any potential solutions or preventative measures that you feel could improve your wellbeing.”*

## Results

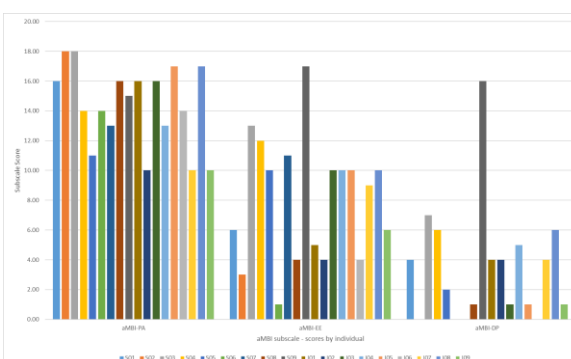
18 clinicians responded to the survey, representing a return rate of 60%. This consisted of 2 ANPs, 9 consultants, and 7 trainees.

**Burnout:** 10/18 (55.6%) respondents returned at least one score suggesting high burnout risk (emotional exhaustion subscale (aMBI-EE)  $\geq 9$ , or depersonalisation subscale (aMBI-DP)  $\geq 6$ ). Personal achievement subscale scores (aMBI-PA) were generally high. Senior tier clinicians, when compared to juniors, had higher mean scores for both emotional exhaustion (8.56 vs 7.56) and depersonalisation (4.00 vs 2.89).

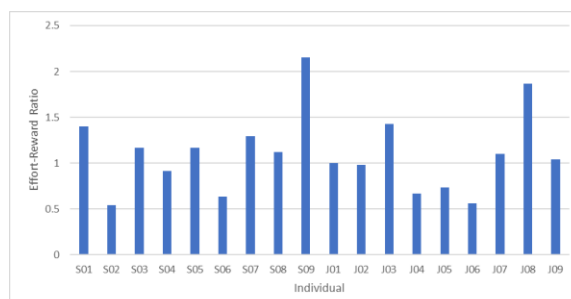
**Stress:** 10 respondents (55.6%) had an ERR greater than 1, implying reduced gains compared to effort. The mean ERR was 1.10. Consultants had a slightly higher ERR than juniors (1.15 compared to 1.04).

**Work-related fatigue and work-life balance:** 82.4% reported experiencing work-related fatigue, and the majority (55.5%) disagreed or strongly disagreed that work life balance had improved due to the COVID-19 pandemic.

Graph 1: Individual aMBI Scores



Graph 2: Individual ERRs



## Results

**Q: “Please comment on how your work-life balance has changed during the COVID-19 pandemic”**

The domains identified were:

- Work content and demands
- Home/personal demands
- Isolation and engagement
- Intrusion and blurred boundaries

*“Work has crept into every room at home, every hour and everyday” J08*

*“difficulty not feeling as part of a team as despite this intrusion you see people less often or in strange circumstances eg zoom” S03*

**Q: “Please comment on any potential solutions or preventative measures that you feel could improve your wellbeing.”**

The domains identified were:

- Social media
- Work-life balance
- Expectations and personal relationships
- Wellbeing service and training opportunities

*“Curfews on work related social media posts.” S07*

*“Friendship and camaraderie with colleagues is a great help, as is having the resources to do the best for one’s patients” S04*

## Conclusions and Implications for Clinical Practice

- High levels of burnout, work-related stress and fatigue were identified amongst both junior and senior grades. The pandemic has also had a negative impact on perceived work-life balance
- Strategies to improve staff wellbeing must be sought from those most affected.
- The findings from this study should be shared with other centres experiencing similar circumstances.

## References

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