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The Legacy of Covid 19: Did working on the front line during the Covid 19 pandemic impact the psychological wellbeing of front-line doctors and nurses?

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Abstract

Background: The recent Covid-19 pandemic was a challenging time with medical staff working against a novel coronavirus with restricted resources and a limited understanding of the pathophysiology of this virus. Medical staff were exposed to unparalleled levels of severely unwell patients and significant mortality for an extended time. This created unprecedented strain upon the NHS and its staff. The demands upon the healthcare system were at an all-time high. This is likely to have greatly impacted doctors' mental health. Before the pandemic there were concerns around the mental wellbeing of doctors with rates of burnout and poor mental health being high. During the pandemic many doctors reported an increase in stress levels and sleep disturbances. This paper explores how Covid-19 has impacted the mental wellbeing of frontline doctors who were working in hospitals during this period and if these effects have persisted four years later.

Methods: This paper utilised a five-point Likert scale questionnaire asking participants to self-report how their mental wellbeing, stress levels, sleep quality and job satisfaction changed before, during and after the Covid-19 Pandemic. Qualitative questions were used to understand the reasoning for participants scores. This produced ordinal data that involved repeated measures. This data was then statistically analysed using the Friedman Test to identify statistical significance and then the Wilcoxon Signed-Rank Test to identify whether there was statistical significance within the mental well-being data before, during and after the pandemic.

Results: The sample (N=17) was comprised of doctors who were recruited using social media. The Friedman test indicated that there was a significant difference between the participants self-reported mental well-being before, during and after the pandemic ($p = .00006293$), stress levels ($p = .0001316$), sleep quality ($p = .001836$) and job satisfaction ($p = .00000279$). The Wilcoxon Signed-Rank Test indicated that there was a significant difference between doctors self-reported mental well-being before and during the pandemic ($p = .0003$), before and after the pandemic ($p = .00424$) and during the pandemic compared to after the pandemic ($p = .00148$). There was a significant difference in stress levels before and during

the pandemic ($p = .0038$) and before compared to after the pandemic ($p = .00512$). There was a significant difference in sleep quality before and during the pandemic ($p < .5$), and during the pandemic compared to after the pandemic ($p < .5$). There was a significant difference in job satisfaction before and during the pandemic ($p = .00044$) before and after the pandemic ($p = .00338$) and during and after the pandemic ($p = .0041$). No participants elected to respond to the qualitative questions. Participants were found to be aware of the support services available to them, however, many participants expressed reservations around accessing these services.

Conclusions: This study shows that mental wellbeing worsened during the pandemic and has still not recovered to pre-pandemic levels. This raises concerns around the long-term implications of the Covid-19 Pandemic upon the mental health of doctors. Further studies are needed to better understand the reasons for this change in mental wellbeing.

Keywords: Covid-19 | Mental Wellbeing | Doctors | Pandemic |

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