

https://dspace.org/

# The relationship between mental health and work stress in healthcare workers during COVID-19 in Gauteng, South Africa (2020)

**Butao, Themba Archiford**

**2024**
https://hdl.handle.net/10539/37628

Downloaded from a DSpace repository. https://dspace.org/

**Background**: Research into the 2003 severe acute respiratory syndrome (SARS) outbreak in Toronto, by Maunder et al (2006), revealed that health care workers (HCWs) experienced high "levels of burnout ($p=0.019$), psychological distress ($p<0.001$) and posttraumatic stress ($p<0.001$)" compared to HCWs that were working in Hamilton at hospitals that were not treating SARS infected patients. In June 2012, the Middle East Respiratory syndrome (MERS) had high nosocomial transmissions, and this led to increased distress among HCWs. Coronavirus Disease 2019 (COVID-19) is the most recent global pandemic, and it is has led to a negative impact on the healthcare sector and its employees. The impact of pandemics such as COVID-19 on the mental health of HCWs in low-middle income countries like South Africa is not fully known. Previous studies have shown that low-middle income countries, such as South Africa experience higher stress and burnout levels due to their limited resources such as access to personal protective equipment. High stress during patient care in high income countries has resulted in HCWs experiencing fear, exhaustion and stress in the past.

**Aim**: To investigate the relationship between work stress and mental health in HCWs working in public hospitals and CHCs during COVID-19 in Gauteng in 2020.

**Methods**: The study was a cross-sectional study using secondary data from a longitudinal study that was conducted in Gauteng, South Africa in 2020. The primary study was conducted by sending a questionnaire to HCWs working in large hospitals and some clinics in Gauteng, South Africa in 2020. The questionnaire consisted of the General Health Questionnaire-12 (GHQ-12), Job-Related Tension Index (JRTI) and COVID-19 related questions. A sample size of 223 was required for the study and was analysed using STATA® 16 software. Regression analysis was conducted to analyse the different relationships and odds ratios were obtained at the end of the study.

**Results:** A total of 336 HCWs participated from 6 facilities. Of the occupations that could be identified, Professional nurses made up the highest percentage of HCWs (19.11%). A majority 55.22% and 54.33% of HCWs experienced mental distress and work stress respectively. The prevalence of both mental health disorders and work stress in HCWs in Gauteng during the COVID-19 pandemic was 39.10%. The odds of developing mental health disorders among HCWs who were experiencing work-stress in Gauteng, 2020, were 7.51 times the odds of developing mental health disorders among HCWs not experiencing work-stress in Gauteng, 2020 ($p <.001$, CI: 2.99, 18.85). The study also showed that a unit increase

in the JRTI score was associated with a 19% increase in the GHQ-12 score ($p < .001$, CI: 0.14, 0.25).

**Discussion and conclusion:** Work-stress significantly affected mental health among HCWs working in public hospitals and community health centres (CHCs) in Gauteng during the early COVID-19 pandemic. The study also shows that pandemics such as the COVID-19 pandemic can lead to a high proportion of work-stress as well as mental health disorders in HCWs. Negative perceptions of risk during COVID-19 also played a significant role in the work stress and the mental wellbeing of HCWs.

**Recommendations:** Decision makers at the district and provincial level should aim to provide constant counselling services even during periods of less work-stress. Sufficient outbreak response training should be provided as part of HCWs Continual Professional Development (CPD) courses so that there is better readiness for future pandemics. There should permanent policy changes that reduce the number of hours worked by HCWs, and more effort staff retention in the public sector as this is what majority of the country uses for seeking healthcare services. Smaller healthcare facilities should also be better equipped with not just only professional HCWs but equipment, including training and storage of such equipment, and regularly checked as preparation for future outbreaks.