

# **Title: Reported psychological stress and physical health symptoms among medical laboratory professionals following the COVID-19 pandemic - South Africa, 2022**

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## **Abstract:**

### **Introduction**

The COVID-19 pandemic brought about psychological stress among healthcare workers globally and in South Africa. We investigated the prevalence and association between psychological stress and physical health symptoms (somatisation) among medical laboratory professionals in South Africa in 2022.

### **Methods**

We conducted a cross-sectional online survey at the National Health Laboratory Service (NHLS) in 2022. All staff were invited to participate via email. We used data on demographic characteristics, and stress-related and somatisation questions. Multivariable logistic and multiple linear regression models were carried out using Stata Version 18.

### **Results and Discussion**

A total of 420 participants were included in this study. Most participants were female (70.7%) and medical technologists (24.6 %) median age was 43yrs (IQR 25-64). Psychological stress was most commonly reported in females (57.7%) and, medical specialists (67.6%). We found laboratory managers (aOR 2.04, 95%CI:1.05-3.97), non-laboratory management (aOR 2.74, 95%CI:1.05-7.16,) and medical specialist job categories (aOR 3.01, 95%CI:1.37-6.59) were significantly associated with psychological stress along with change in work duties (aOR 1.57, 95% CI: 1.00-2.46) and Chronic disease (aOR 1.94 95%CI 1.21-3.1). Somatisation was increased by 8.22% (95%CI:3.70-12.74,) in women compared to men and 9.84%(95%CI:5.76-13.91) in participants who reported psychological stress compared to those who did not.

### **Conclusion**

Medical laboratory professionals reported high levels of psychological stress particularly in managers and pathologists during the COVID-19 pandemic. Somatisation was significantly associated with reported stress, increasing confidence in the self-reported stress. Providing psychological support and targeted interventions to the affected groups may help this worker population.