

Depression, Anxiety, and Stress in Frontline Doctors during the COVID-19 Pandemic in Public Sector Hospitals, Tshwane, South Africa

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INTRODUCTION



Doctors working on the frontlines during the COVID-19 pandemic have endured highly stressful circumstances.



Outbreaks of infectious diseases are notorious for their psychological strain on frontline HCWs



During the SARS, MERS, and Ebola outbreaks, studies showed that frontline workers experienced significant stress levels, concerns about the health of their families and themselves, as well as extreme fear, anxiety, societal stigma and prejudice.

OBJECTIVES

To determine the prevalence and severity of depression, anxiety, and stress in frontline doctors in public sector hospitals, Tshwane, SA during the COVID-19 pandemic.

METHODS



Observational, cross sectional



Respondents included frontline doctors working in Emergency Medicine, Family Medicine, and Internal Medicine during the COVID-19 pandemic in nine public sector hospitals in Tshwane.



Ethical approval: Research Ethics Committee, Faculty of Health Sciences, University of Pretoria.



Anonymous, voluntary, informed consent



Validated instrument used was the Depression, Anxiety, Stress Scale-21 (DASS-21)

RESULTS

Our sample showed moderate to extremely severe levels of the following psychological symptoms:

Stress in 90 (55.1%),

Anxiety in 71 (43.6%), and

Depression in 36 (22.1%) participants

Stress	n	%
Normal	45	27.6
Mild	28	17.2
Moderate	54	33.1*
Severe	18	11.0*
Extremely Severe	18	11.0*

Anxiety	n	%
Normal	79	48.5
Mild	13	8.0
Moderate	38	23.3*
Severe	19	11.7*
Extremely Severe	14	8.6*

Depression	n	%
Normal	108	66.3
Mild	19	11.7
Moderate	16	9.8*
Severe	12	7.4*
Extremely Severe	8	4.9*

*Moderate to extremely severe symptoms

DISCUSSION

Moderate to severe stress, anxiety and depression was present in 55.1%, 43.6%, and 22.1% of participants, respectively.

Considering the fact that the lifetime prevalence of depression and anxiety has been documented as 9.8% and 15.8% respectively in the general population of SA, these findings are worrisome.

DISCUSSION

We compared our findings to several studies conducted in SA on depression, and anxiety in public sector doctors

Regarding moderate to severe depression, our findings were similar to that of Naidoo et al. which investigated burnout and depression in medical doctors in KZN public sector hospitals (they found depression in 21% of doctors)

A study by Hain et al., which was also conducted during the COVID-19 pandemic, found higher levels of depression in 35.6% of doctors working in rural KZN than our study.

Similarly, Rossouw et al. found higher levels of depression in 30% of doctors working in WC community healthcare clinics and district hospitals.

Our study, however, found much higher levels of anxiety than both Hain et al. and Naidoo et al. (approximately double prevalence of anxiety- 23.3% and 20% respectively).

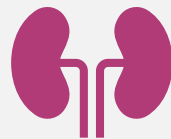
DISCUSSION



Findings from this study were compared to several systematic reviews on pandemic related anxiety and depression in HCWs.



Pappa et al. reported a similar prevalence of depression in 22.8%, but a much lower prevalence of anxiety in 23.2% of HCWs compared to our study.



Elevated stress amongst frontline doctors in our study was comparable to Busch et al. but higher than Salazar et al. who reported a prevalence of 56.8% and 37.8% respectively.

CONCLUSION



This study highlights the calamitous psychological consequences of the COVID-19 pandemic on frontline doctors in SA



We found the prevalence of stress and anxiety were higher than reported in the national and international literature.



In the event of future pandemics, more measures should be taken to protect the mental health and well-being of our doctors.

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We declare no competing interests.

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