

Personal and occupational experiences of COVID-19 and their effects on South African health workers' wellbeing

To the Editor: COVID-19-related psychological stressors and health risks among health workers are increasingly reported, particularly among those who are hospital based and are directly responsible for caring for patients with COVID-19.^[1-4] We report findings from an online survey conducted between September and November 2020 in the Amajuba District of KwaZulu-Natal, reflecting experiences of the first COVID-19 wave. It investigated risk factors for severe COVID-19, experience of COVID-19-related problems, causes of anxiety, and effects on psychological wellbeing. The survey was completed as part of an intervention intended to support primary care workers in managing COVID-19 in the context of a high tuberculosis burden, and to address their psychological wellbeing.

All Department of Health employees in Amajuba were invited to participate. Of 450 who responded, 53% were clinically practising nurses or nursing assistants, 12% operational managers or co-ordinators, 19% non-clinical support staff and 15% in other job categories; 83% worked in primary care, 14% in hospitals and 3% in the district office.

Eleven percent of respondents were aged >55 years, 6% reported having diabetes, and 9% reported obesity; 22% of all respondents, including 45% of managers, reported having one or more of these risk factors for severe COVID-19.

Twenty-two percent of respondents reported having tested positive for COVID-19, 2% had been hospitalised for COVID-19, 20% had quarantined because they had close contact with someone who tested positive, 35% had a relative or friend who tested positive, 9% had a relative or friend who was hospitalised for COVID-19, and 14% had

a relative or friend who died due to COVID-19; 74% reported at least one of these experiences.

Personal experiences of COVID-19 were associated with worse mental health, measured with the General Health Questionnaire 12 (GHQ12).^[5,6] The GHQ score was calculated from responses, on a Likert scale, to 12 questions about concentration, lost sleep, feeling useful, ability to make decisions, strain, difficulties, enjoyment, ability to face problems, losing confidence, feeling worthless, unhappiness and happiness. In a linear regression model, higher GHQ12 scores, indicating worse mental health, were statistically significant ($p < 0.05$) and independently associated with reporting testing positive for COVID-19, having quarantined as a close contact of someone who tested positive, a relative or friend testing positive, a relative or friend dying due to COVID-19, and being a manager, but not with age or gender.

Anxiety about COVID-19 was assessed using 15 statements we developed, informed by our work on health workers' concerns about COVID-19 (Table 1). The most common worries were about infection at work (78%) and infecting household members (84%), and most respondents worried about the effects of COVID-19 on their own and their families' health, and the stresses of managing COVID-19 clinically.

This study highlights adverse effects of COVID-19 on health workers' wellbeing in a diverse, mostly primary care-based workforce. Worries and personal experiences of COVID-19 were common and associated with worse mental health. Managers were most at risk of severe COVID-19 and had worse GHQ12 scores; non-clinical support staff were also affected. With the active roll-out of the COVID-19 vaccine for health workers currently underway,^[7] it is

Table 1. Most common causes of anxiety, ranked by % agreement (N=350)

Cause of anxiety	Strongly disagree, %	Disagree, %	Neither, %	Agree, %	Strongly agree, %	Agree or strongly agree, %
I am worried about taking COVID-19 home to one of my household members	7	5	5	30	54	84
I am worried about getting COVID-19 at work	7	5	9	30	48	78
I am worried about what will happen to my family if I need to quarantine or isolate	8	15	8	38	30	68
I am worried that if I get COVID-19 I will need to be admitted to hospital	7	13	14	32	34	66
I am worried that I will not cope with the increased stress from increased work demands as a result of COVID-19	6	18	13	41	23	64
I am worried that if I get COVID-19 I will die	11	14	23	25	28	53
I am worried about having to help someone who is likely to die from COVID-19	12	23	14	34	17	51
I am worried that I will not have access to enough PPE	14	22	15	34	15	49
I don't feel sufficiently capacitated to provide care for someone with COVID-19	13	31	18	28	10	38
I am worried that my community won't want to come near me because I am a health worker	27	18	15	27	10	37
I feel alone and have no one to talk to about my fears related to COVID-19	19	40	10	20	12	32
I am worried that I won't be able to get healthcare if I get COVID-19	24	44	12	16	5	21
I don't know what PPE I should be wearing	35	36	12	12	4	16
I am worried that I won't be able to get a COVID-19 test	26	50	11	10	2	12
I don't know how to use PPE	43	42	7	6	3	9

PPE = personal protective equipment.

hoped that health workers' anxieties regarding the risk of infection at work and passing it to loved ones will be mitigated. However, the effects of sustained work pressure and anxiety on the mental wellbeing of health workers remain. These findings reinforce the urgent need for psychosocial support for all healthcare workers, including managers and clinical and non-clinical staff. Support for managers is particularly emphasised given the role that containing leadership plays in reducing anxiety in times of crisis.^[8]

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