

## Introduction

Intensive care units (ICU) health care professionals work under a challenging environment during the Covid 19 pandemic<sup>1</sup>. Expansion of ICU provision, working long shifts with limited resources with precarious infrastructure expose them to more stressful environments and potentially affect their mental health<sup>2</sup>.

The fear of autoinoculation and concerns about the possibility of spreading the virus to family and friends, leads them to isolate themselves from family, friends and to change their routine<sup>3,4</sup>. This exerts more psychological pressure on the health care professionals. In addition, some of the physicians and nurses were not trained to work in ICUs and not exposed to intensive care unit environments including the setup, machines and invasive monitoring devices and end of life decisions. This causes an additional stress on the professionals.

## Objective

To identify the prevalence of psychological impact (anxiety, depression and posttraumatic stress disorder) and assess the associated factors among ICU health care professionals (doctors and nurses) in five Sri Lankan hospitals during July to August 2021.

## Methods and Materials

It's a cross sectional, hospital base multicentre study carried out in five hospitals in Sri Lanka caring for critically ill covid 19 patients. Data was collected anonymously and voluntarily using web based (Google form) and printed standardized questionnaires examining anxiety symptoms (Generalized Anxiety Disorder-7 (GAD-7)), depression (Patient Health Questionnaire (PHQ-9)) and symptoms of post traumatic stress disorder (PTSD) (PTSD Checklist-Civilian Version (PCL-6)).

Table 1. Demographics of the respondents (n = 381)

Characteristic	No (%)
<b>Overall</b>	<b>381 (100)</b>
<b>Sex</b>	
Male	55 (14.4)
Female	326 (85.6)
<b>Age</b>	
<30 years	251 (65.8)
30-40 years	95 (24.9)
40-50 years	27 (7.1)
50-60 years	6 (1.6)
<b>Designation</b>	
Doctors	62 (16.3)
Nurses	319 (83.7)
<b>Years of experience</b>	
<5 years	289 (75.8)
5-10 years	40 (10.5)
10-15 years	28 (7.3)
>15 years	24 (6.3)

Table 2. Associated risk factors.

	Anxiety n(%)	Depression n(%)	Post-traumatic Stress Disorder n(%)
<b>Overall</b>	<b>162 (42.5)</b>	<b>186 (48.8)</b>	<b>140 (36.6)</b>
<b>Designation</b>	<b>(p&lt;0.05)</b>	<b>(p&lt;0.05)</b>	<b>(p&lt;0.05)</b>
Doctors*	18 (29.0)	17 (27.4)	13 (20.9)
Nurses*	144 (45.1)	169 (52.3)	127 (39.8)
<b>Age</b>	<b>(p&lt;0.05)</b>	<b>(p&lt;0.05)</b>	
<30 years	107 (66)	126 (67.7)	100 (71.4)
30-40 years	41 (25.3)	45 (24.2)	29 (20.7)
40-50 years	13 (8.0)	14 (7.5)	10 (7.1)
50-60 years	1 (0.6)	1 (0.5)	1 (0.7)
<b>Years of experience</b>	<b>(p&lt;0.05)</b>	<b>(p&lt;0.05)</b>	
<5 years	130 (80.2)	149 (80.1)	115 (82.1)
5-10 years	11 (6.8)	14 (7.5)	11 (7.8)
10-15 years	12 (7.4)	13 (7.0)	5 (3.6)
>15 years	9 (5.5)	10 (5.4)	9 (6.4)

\*Percentage calculated for total number of doctors and nurses respectively.

## Results

Overall 381 health care professionals participated, comprising 62 (16.3%) doctors and 319 (83.7%) nurses. Prevalence of moderate to severe anxiety, depression and PTSD was 42.5%, 48.8% and 36.6% respectively. Sub-group analysis showed the risk of developing PTSD was more among nurses than doctors ( $p < 0.05$ ). Among doctors, prevalence of moderate to severe anxiety was high (29%), while depression and PTSD was 27.4% and 20.9% respectively. In nurses, moderate to severe depression, anxiety and PTSD was 52.3%, 45.1% and 39.8% respectively. Designation had significant association in all the psychological impact ( $p < 0.05$ ). Age (<30 years) and years of experience (<5 years) in patient care are significant risk factor for anxiety and depression.

## Conclusions

A high prevalence of psychological impact observed in the health care professionals in ICU during the covid 19 pandemic. Majority of the healthcare staff who cared for the critically ill ICU patients were younger in age and had very less experience. Efforts should be made to implement interventions for the mental wellbeing of the staff.

## References

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