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PREVALENCE AND PREDICTORS OF COVID 19 RELATED BURNOUT AMONG HEALTHCARE WORKERS; FINDINGS FROM BRUCEE LI STUDY

Poster Contributions Sunday, May 16, 2021, 9:45 a.m.-10:30 a.m.

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Authors: <u>Mohit Dayal Gupta</u>, Manish Jha, M. P. Girish, Ankit Bansal, Prattay G. Sarkar, Jamal Yusuf, Suresh Kumar, Satish Kumar, Ajeet Jain, Sanjeev Kathuria, Rajni Saijpaul, Rakesh Yadav, Ramakrishnan S, Rajeev Malhotra, Vishal Batra, Saibal Mukhopadhyay, Anubha Gupta, Manu Shetty, Anurag Mishra, Vikas Malhotra, Sandeep Garg, GB Pant Institute of Post Graduate Medical Education and Research, New Delhi, India, Icahn School of Medicine at Mount SInai, New York, NY, USA

Background: There is sparse data on the impact of COVID-19 on healthcare workers (HCW) in India. This report evaluated the prevalence of burnout among HCW and factors associated with higher likelihood of burnout.

Methods: In a multicentric study between July-October 2020, we evaluated 1319 HCWs, 541 (frontline-direct care providers), 410 (second line -indirect care providers) and 368 (non covid workers). Besides sociodemographic and clinical information, MINI-Z questionnaire was used to assess burnout (Score \geq 3 on MINI-Z burnout item), feeling stressed (Score >3 on MINI-Z high stress item), being unsatisfied with current job (Score \leq 3 on satisfaction item), and the effect of COVID-19 on mental wellbeing. Variables having p<0.20 in univariable analysis were included in the multivariable logistic regression analyses with presence of burnout as the outcome.

Results: The prevalence of burnout was 15% [95% CI: 13.1-17.1]. Burnout was significantly higher in second-line workers (20%, 82/410), compared to frontline (12.9%, 70/541) and non-COVID (12.5%, 46/368) workers. Significantly associated factors on multivariable analysis include feeling stressed, significant effect of COVID on mental wellbeing, busy work environment, being a non-physician and being unsatisfied with job.

Conclusion: One in seven HCWs reported burnout, second line workers had higher burnout than frontline workers. Being Physician and job satisfaction in HCWs may have promoted resilience against burnout.

Variable	Referenc	Univariable analysis		Multivariable analysis*	
	e	Odds ratio[95%	P-value	Odds ratio	P-
	Category	CI]	1	[95% CI]	value
Age (yrs) : 30-44	19-29	1.49[1.00-2.22]	0.048	1.21[0.75-1.95]	0.435
: 45+	19-29	1.37[0.89-2.09]	0.153	1.62[0.92-2.87]	0.096
Gender-Female	Male	1.48[1.09-2.00]	0.011	1.05[0.69-1.59]	0.822
Family type- Nuclear	Joint	1.51[1.11-2.05]	0.008	1.06[0.72-1.56]	0.783
	family				
Marital status-Married	Single	1.04[0.73-1.48]	0.820		
HCWs -Front line	Second	0.59[0.42-0.84]	0.003	0.68[0.44-1.05]	0.082
	line				
- non-covid	Second	0.57[0.39-0.85]	0.005	0.88[0.53-1.47]	0.624
	line				
Duty Hours - 42-48	<=42 hrs	0.69[0.50-0.95]	0.024	1.00[0.52-1.95]	0.980
hours					
>48	<=42 hrs	0.96[0.50-1.65]	0.962	1.08[0.57-2.06]	0.817
hours					
Diabetes -Present	Absent	1.35[0.78-2.34]	0.288		
Hypertension-present	Absent	1.52[0.98-2.35]	0.063	0.81[0.45-1.43]	0.463
Stress-High	Low	20.45[13.25-	< 0.001	5.53[3.15-9.69]	<0.00
		31.57]			1
Profession- Physician	Non-	1.49[1.03-2.17]	0.037	0.56[0.33-0.96]	0.034
	Physician				
Covid mental wellbeing	No effect	2.07[1.44-2.96]	< 0.001	1.51[0.94-2.42]	0.086
-Some effect					
 significant effect 	No effect	4.98[3.29-7.54]	< 0.001	2.01[1.16-3.48]	0.013
Chaotic - Hectic	Calm	1.77[1.16-2.73]	0.009	1.22[0.72-2.06]	0.453
Busy but reasonable	Calm	6.07[3.42-10.79]	< 0.001	2.63[1.27-5.47]	0.010
Satisfaction -	Satisfied	21.99[13.85-	< 0.001	6.76[3.63-	<0.00
unsatisfied		34.93]		12.61]	1

*Total N=1319; Burnout=198; Overall classification 85.4% with specificity=95.3% and sensitivity=29.8%; Hosmer-Lenshow =0.065; p<0.05; Nagelkerke=0.427. ROC= 88.3[95% CI:86.2-90 3