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Short Communication

Will a Psycho-Social First Aid be Beneficial during the Pandemic? Sharing Insights from an Online Survey

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Novel severe acute respiratory syndrome coronavirus (SARS-Cov-2) was first reported in December, 2019 in Wuhan, China. The World Health Organization (WHO) flagged its highest alarm and declared the outbreak a public health emergency of international concern on 30 January, 2020 [1]. Since then, the disease has spread everywhere pushing healthcare systems to their limits. More than two years after the first case of Coronavirus was detected, the uncertainty and fear each mutation still brings is daunting. The general public as well as the scientific community has been left baffled in tracing the virus's origin, transmissibility and ability to mutate [2]. What is known in full certainty is the long list of ill-effects the virus has on the health of the infected. Ranging from mild flu-like symptoms, such as fever, dry cough, cold and fatigue [2] to more profound respiratory and cardiovascular complications [3], the virus has taken a toll on people's health. This invasion has not been limited to physical health. Loss of income, bereavement, isolation and fear has triggered anxiety, depression and other mental health concerns in people worldwide [4]. This especially holds true for primary caretakers and frontline medical workers who have been exposed to prolonged stressors have experienced emotional disturbances [5], depression [6], stress [7], mood alterations [8], irritability, insomnia, post-traumatic stress symptoms and anger [9].

In order to understand and quantify the impact the pandemic has had on the mental health of the front-line healthcare warriors (FHWs), a multi-disciplinary team at a tertiary healthcare institute conducted a cross-sectional study (Institutional Ethical Clearance was taken before the start of the study survey). The aim of the first phase of this study was to carry out a detailed survey. With an inclusion criterion of all consenting Indian nationality healthcare workers, 234 participants (109 males and 125 females), completed the survey. All participants who left some portion of the survey incomplete or who did not consent to participate were excluded. This was done to address the lacunae of the health care system from a unique neuro-psycho-socio-spiritual perspective.

The results (refer to table 1 and 2), helped determine the prevalence risk and protective factors for stress, depression and anxiety, PTSD, resilience and change in a person post pandemic amongst FHWs frontline healthcare warriors. The questionnaire containing sections on socio-demographic information, degree of exposure to Covid-19, perceived level of distress, behavioural impact of Covid-19 pandemic, psychological needs, as well as scales to measure depression, anxiety, stress (DASS-21), post-traumatic stress (PC-PTSD-5), and resilience (BRCS) was circulated online. The data was analysed statistically as per STATA version 15. Taking inspiration from the findings that revealed the adverse psychological impact of the pandemic on Indian healthcare workers, the team felt the need to develop a holistic psycho-social-cultural mental health intervention to enhance mental health and resilience of healthcare workers. A Psycho-Social First Aid model has, thus been developed to be administered to the FHWs [For details: Refer to Table 1 & 2].

Table 1. Socio-demographic characteristics of participants and exposure to COVID-19 variables	
Characteristic	**Participants, No. (%)**
Overall	234 (100%)
Gender	
Male	109 (46.6)
Female	125 (53.4)
Age	
18-25	27 (11.5)
26-50	173 (73.9)
50+ years	34 (14.5)
Occupation	
Medical health doctor	167 (71.4)
Nurse	37 (15.8)
Others	30 (12.8)
Technical title	
Junior	10 (4.3)
Intermediate	97 (41.5)
Senior	127 (54.3)
Income level	
Below Rs. 50,000	44 (18.8)
Rs. 50,000 - 1.00.000	67 (28.6)
Rs. 1.00.000+	123 (52.6)
Marital status	
Unmarried	78 (33.3)
Married*	156 (66.7)
Living area	
Urban	216 (92.3)
Rural	18 (7.7)

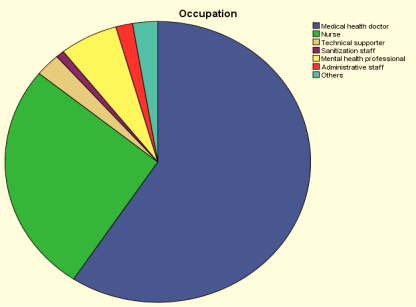
TABLE 3. Associated Factors for Mental Health Outcomes Identified Via Multivariable Logistic Regression			
Variable	**Subgroup**	**Adjusted OR (95% CI)**	**P value***
Depression, DASS-21			
Gender	Female	1 (reference)	NA
	Male	0.46 (0.23 - 0.91)	0.025
Income level	Below Rs. 50,000	1 (reference)	NA
	Rs. 50,000 - 1.00.000	0.33 (0.13 - 0.85)	0.021
	Rs. 1.00.000+	0.27 (0.12 - 0.63)	0.002
Are you a frontline worker	No	1 (reference)	NA
	Yes	2.75 (1.27 - 5.97)	0.010
This pandemic has changed me as a person	Negatively	1 (reference)	NA
	Positively	0.38 (0.21 - 0.72)	0.003
Anxiety, DASS-21			
Are you a frontline worker	No	1 (reference)	NA
	Yes	3.32 (1.50 - 7.35)	0.003
This pandemic has changed me as a person	Negatively – Not applicable	1 (reference)	NA
	Positively	0.36 (0.19 - 0.69)	0.002
Educational qualification	Bachelors and under	1 (reference)	NA
	Masters and above	0.27 (0.12 - 0.59)	0.001
Income level	Below Rs. 50,000	1 (reference)	NA

Stress, DASS-21			
Marital status	Unmarried	1 (reference)	NA
	Married	0.21 (0.13 - 0.51)	0.001
This pandemic has changed me as a person	Negatively – Not applicable	1 (reference)	NA
	Positively	0.28 (0.13 - 0.62)	0.002
I have started engaging in spiritual and religious activities more often than usual	No – Maybe	1 (reference)	NA
	Yes	2.19 (1.24 - 3.86	0.007
Post-traumatic stress, PC-PTSD-5			
Do you work in a high exposure environment	No	1 (reference)	NA
	Yes	3.74 (1.78 - 7.82)	<0.001
Income level	Below Rs. 50,000	1 (reference)	NA
	Rs. 50,000 - 1.00.000	0.32 (0.11 - 0.93)	0.037
	Rs. 1.00.000+	0.72 (0.25 - 2.05)	0.537
This pandemic has changed me as a person	Negatively – Not applicable	1 (reference)	NA
	Positively	0.41 (0.22 - 0.76)	0.004
I have started engaging in spiritual and religious activities more often than usual	No – Maybe	1 (reference)	NA
	Yes	2.23 (1.39 - 3.55)	0.001
I believe that having faith in higher power has given me strength to cope with stress and feeling of uncertainty	No – Maybe	1 (reference)	NA
	Yes	0.57 (0.34 - 0.96)	0.035
Resilience, BRCS			
Do you manage patients diagnosed with COVID-19	No	1 (reference)	NA
	Yes	0.56 (0.29 - 1.06)	0.075
Perceived quality of life			
Post-traumatic stress disorder	Normal	1 (reference)	NA
	Probable PTSD	0.29 (0.13 - 0.64)	0.002
Do you manage patients diagnosed with COVID-19	No	1 (reference)	NA
	Yes	0.46 (0.24 - 0.90)	0.024
This pandemic has changed me as a person	Negatively – Not applicable	1 (reference)	NA
	Positively	4.16 (2.003 - 8.63)	0.000
Educational qualification	Bachelors and under	1 (reference)	NA
	Masters and above	0.43 (0.20 - 0.90)	0.026
TABLE 3 Continued (2)			
I believe that having faith in higher power has given me strength to cope with stress and feeling of uncertainty	No – Maybe	1 (reference)	NA
	Yes	2.21 (1.10 - 4.44)	0.025
Resilience	Low resilient copers	1 (reference)	NA
	Medium – high resilient copers	1.63 (1.08 - 2.45)	0.020

Abbreviations: DASS-21, 21 item Depression, Anxiety, Stress scale; PC-PTSD-5, Primary Care – 5 item Post Traumatic Stress Disorder; BRCS, Brief Resilience Coping Scale; OR, Odds ratio; COVID-19, Coronavirus Disease 2019; NA, Not Available.

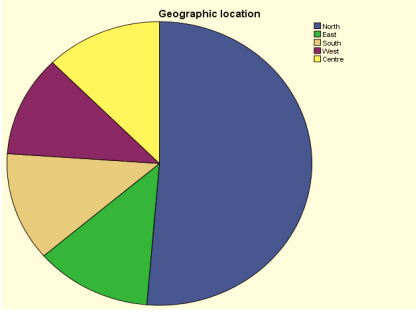
Table 1: *Table showing results of the online survey on the mental health status and needs of front-line medical, para-medical healthcare professionals.*

Pie Chart 1: Occupation



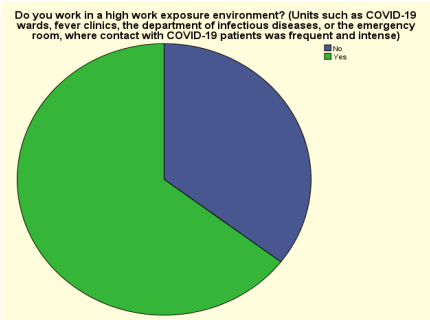
Graphical representation of health professionals who participated in the survey

Pie Chart 2: Geographic Location



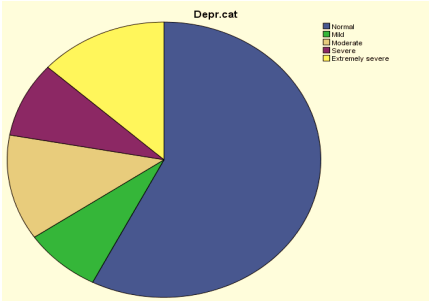
Graphical representation of health professionals who participated in the survey.

Pie Chart 3: High Work Exposure Environment



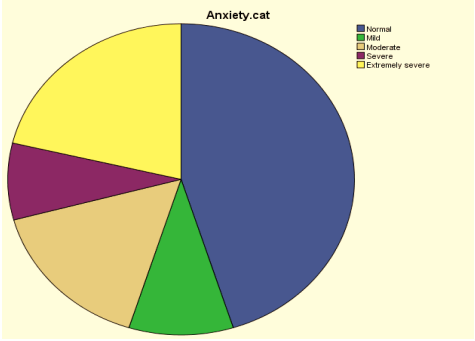
This graph represents the proportion of healthcare professionals who felt that they were working in a high work exposure environment.

Pie Chart 4: Prevalence of Depression



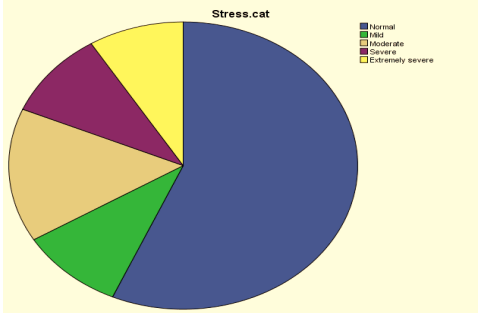
This graph demonstrates that while majority of the healthcare frontliners were not depressed, a significant proportion of them experienced mild to extremely severe depression. This highlights the need of psychological first aid during these pandemic times.

Pie Chart 5: Prevalence of Anxiety



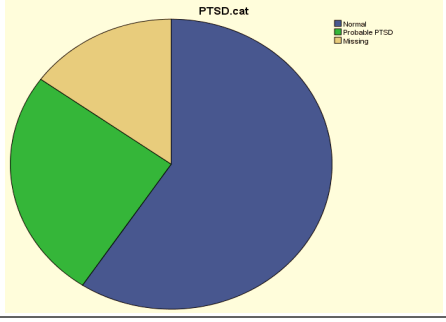
This graph demonstrates that while majority of the healthcare frontliners were not anxious, a significant proportion of them experienced mild to extremely severe anxiety. This highlights the need of psychological first aid during these pandemic times.

Pie Chart 6: Prevalence of stress

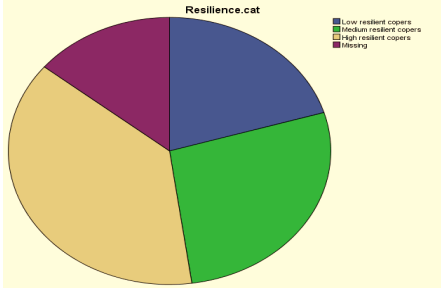


This graph demonstrates that while majority of the healthcare frontliners were not stressed, although a significant proportion of them experienced mild to extremely severe stress. This highlights the need of psychological first aid during these pandemic times.

Pie Chart 7: Prevalence of PTSD



Pie Chart 8: Resilience



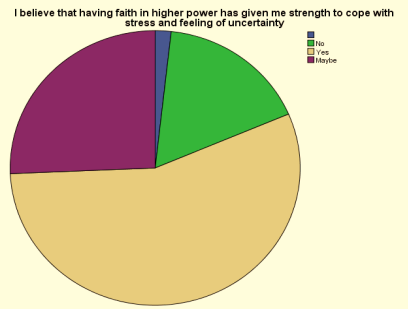
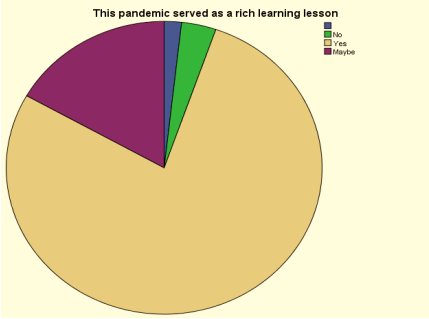
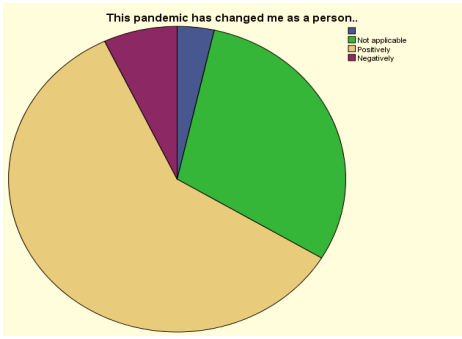
Missing = did not attempt the questions	The increased level of resilience is a probable factor in majority of the responders have normal scores in stress, depression, PTSD, anxiety assessment.
Pie Chart 9: Faith in Higher Power, Given Strength to Cope	**Pie Chart 10: Pandemic Served as a Rich Learning**
	
Q: I believe that having faith in higher power has given me strength to cope with stress and feeling of uncertainty. Additional factors like having faith in higher power may also have influenced the low prevalence of previously mentioned negative factors associated with covid.	Q This pandemic served as a rich learning lesson Furthermore, factors like – having a positive cognitive appraisal towards covid may have also contributed towards being protective factors for the healthcare frontliners. Majority responded that the pandemic served as a rich learning experience for them.
Pie Chart 11: Pandemic Changed Me as a Person	
	
Q This pandemic has changed me as a person Lastly, Majority of the healthcare workers stated that the pandemic changed them positively as an individual. This positive change in attitude may be due to their positive cognitive reappraisal and thus probably instrumental in decreasing the negative impact of Covid-19.	

Table 2: *Results in pie charts of the online survey on the mental health status and needs of the front-line healthcare warriors (FHWs).*

Typically, a Psycho-Social first Aid may be understood as the immediate assistance and support required when a person has experienced something traumatic, to stabilise the situation or prevent further degradation of mental health. With long and recurring patterns of isolation, the pandemic brings about the need for something similar. Built on the concept of resilience, psychological first aid aims at reducing the occurrence of post-traumatic stress disorder (PTSD) and facilitates optimal everyday functioning. It may be considered a sub-set of Psychological Crisis Intervention.

It helps survivors/victims to meet immediate needs, such as contacts of resource persons and strategies of maintaining hope; it promotes flexible coping and encourages adjustment to post-Covid traumatic emotional disturbances. It is called "first aid" because it is the first thing that helpers/volunteers might think to offer in a disaster like situation to those affected (Australian Red Cross and Australian Psychological Society, 2010). It may be administered as a preventive measure, before one gets affected by the disease or within a few days or weeks of the occurrence of a wave.

Utilising principles of psychological and social constructs, mainly resilience, coping, emotional expression, safety and stabilisation, administration of Psycho-Social first Aid provides immediate emotional and psychological safety to the Covid-19 patients and their families and encourages a sense of resilience. It makes the vulnerable population aware of the help and resources available. This inculcates a calm state of mind and works towards reduction of negative thoughts and feelings [10].

It may be noted here, that Psychological first aid differs from professional therapy and trauma-based interventions such as de-briefing. It is a faster, more cost effective and efficient method of providing relief. This non-intrusive, practical and need based approach can be administered by trained psychologists, healthcare workers, social workers as well as trained volunteers (WHO, Psychological First Aid, 2013). It also does not require a person to re-live difficult situations by narrating or recalling them. It is also suggested that this Psycho-Social first aid be provided not only to those directly affected by the disease, but also to those who are in a constant state of fear of catching it.

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