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RESEARCH ARTICLE

Anxiety, stress, depression and burnout among health care worker during covid wave: a retrospective study

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ABSTRACT

Health workers are central to the COVID-19 pandemic response, balancing additional service delivery needs while preserving access to essential health services and deploying COVID-19 vaccines. They also face higher risks of infection in their efforts to protect the greater community and are exposed to hazards such as psychological distress, fatigue and stigma.

Methodology: A retrospective cross sectional study is carried out among the health care workers residing Gujrat, India. A cross sectional study was carried out among the sample of 600 registered health care workers,(specialist, general physian, nurses, others) who were active during covid pandemics. Online questionnaire (DASS 21 and Maslach burnout inventory) were distributed to the participants to evaluate their stress, anxiety and depression status.

Results: Around 48.1 % participants were suffering from mild-moderate to severe level of depression. Anxiety was found to effect around 60% of health care workers. And almost 68% of health care worker has suffered from stress. The burnout level was also very high among health care worker (table 5). It was found that 52% participants were having low-moderate to high level of burnout.

Conclusion: Stressfulness of work, and practice management were factors in which reality was experienced to be worse than expected. Also, finding a suitable practice was something that appeared more difficult than expected in their early career. Burnout is recognized as a potential problem within a broad range of occupations, and within many different countries.

Keywords: COVID-19, burnout, healthcare workers, mental health, public health.

Introduction

COVID-19, one of the major catastrophes of this century, started as a mere local transmission from the city of Wuhan in China and spread throughout the world. The COVID-19 pandemic is a healthcare crisis, leading to unprecedented impact on healthcare services, notable morbidity and mortality of the public and healthcare workers (HCWs), economic repercussions, and significant psychological effects.

Health workers are central to the COVID-19 pandemic response, balancing additional service delivery needs while preserving access to essential health services and deploying COVID-19 vaccines. They also face higher risks of infection in their efforts to protect the greater community and are exposed to hazards such as psychological distress, fatigue and stigma. The coronavirus disease 2019 (COVID-19) pandemic has affected many individuals both directly and indirectly, disrupting routines and introducing new stressors. Effects also vary by occupational groups as certain jobs expose workers more directly to the disease. Healthcare workers have been directly involved in the management of COVID-19 patients since the beginning of the pandemic. The mental wellbeing of healthcare workers has been particularly affected by the pandemic[1].

Moreover, it affects their work output which, in the pipeline, affects the healthcare delivery to the whole nation[2].

Catastrophic pandemics have been occurring since antiquity and are frequently mentioned in ancient texts. Pandemics are associated with death, destruction, and devastation. Not surprisingly, pandemics are associated with long-term psychological consequences. Despite their periodic occurrence and devastating consequences, surprisingly, pandemics have evoked minimal interest in mental health professionals, though the situation has vastly improved in the past decade. Pandemic-related psychosocial stressors may trigger or exacerbate psychiatric disorders (burnout syndrome), including mood disorders, anxiety disorders, substance use disorders, and posttraumatic stress disorder[3].

Because of increasing patient volumes, medical professionals who are not specialized in infectious disease gathered to support andmay experience even greater pressure when facinginfected patients. Burnout is receiving increasingrecognition as a serious problem among medical professionals[4]. Burnout is a psychological syndrome described as a self-reported state of care- or work- related physical and mental stress that induces emotional exhaustion (EE), depersonalization (DP), and a sense of reduced personal accomplishment (PA). It is an unexpected consequence ofan organizational culture unable to balance the personal identity of the worker with that of the work organization and the social context, and of the consequent continuous mental effort to cope with the perceived friction[5].

Facing this large scale infectious public event, health care workers (HCWs) are under both physical and psychological pressure. Previous studies showed a significant proportion of HCWs experiencing anxiety, depression, fear and frustration during the outbreak of the severe acute respiratory syndrome (SARS) and A/H1N1)[6]. In the COVID-19 pandemic, more HCWs are facing life-threatening situations,

pathogen exposure, and shift overload and other major changes in work organization. In the current period of global public health crisis due to the COVID-19, healthcare workers are more exposed to physical and mental exhaustion – burnout – for the torment of difficult decisions, the pain of losing patience and colleagues, and the risk of infection, for themselves and their families[7].

The ever-increasing number of confirmed and suspected cases, overwhelming workload, depletion of personal protection equipment, widespread media coverage, lack of specific drugs, and feelings of being inadequately supported may all contribute to the mental burden of these health care workers[8].

From experience, we know that in the face of situations like these, HCWs play a major role and push their limits every day. Being in the frontline, doctors take brunt the most. Due to complete uncertainty, the situation is further complicated. Lack of proper fixed guidelines, unprepared and overburdened infrastructure, as well as the fear, stigma, anxiety, and marginalization toward the disease add to the burden. Overall, doctors have a high prevalence of mental health morbidities, but the topic is very less researched[2].

Although the emergency phase of the COVID-19 pandemic has officially passed, we cannot forget the trauma it inflicted on all parts of society — from deepening economic inequality and sparking historic unemployment to spawning mental health crises and exacerbating chronic health conditions for billions. If we do not learn from the deadly, costly mistakes made during the COVID-19 response, the world could be doomed to repeat them[8]. This study was conducted to aid in available literature about mental health status of health care worker.

Aim

To assess Anxiety, depression and burnout among health care workers during covid-19 wave residing in Gujarat.

Methodology

A retrospective cross sectional study was carried out among the health care workers residing Gujrat, India. A cross sectional study was carried out among the sample of 600 registered health care workers,(specialist, general physian, nurses, others) who were active during covid pandemics. The sample was taken according to simple random sampling and based on inclusion exclusion criteria.

Inclusion criteria:

- Registered/ qualified health care workers, who were active during covid-19 pandemics (were posted in covid wards / direct contact with patients).

Exclusion criteria:

- Health care workers who did not give consent for the study. Health workers with previous history of burnout or psychiatric issues,

Organization and Administration Workout:

1) Ethical clearance: The study proposal was approved by institutional review board of College of dental science, Amargadh.

2) Informed consent: The purpose and details of the study was explained to the study participants and a written consent was then obtained from them.

Pilot study:

A pilot study was done among 40 HCWs to check the feasibility and to validate the

questionnaire. Face validity of the questionnaire was checked by asking experts to scrutinize the questions, while content validity was checked by ensuring that the questions covered all the areas of knowledge mapped out by initial objective.The reliability of the questionnaire was assessed by using Cronbach's α and it was found to be >0.7 (acceptable). Sample Size was obtained after Calculation based on the current pilot study.

STUDY DESIGN AND QUESTIONNAIRE

The questionnaires were distributed to the randomly selected HCWs through online /in person, and were self-completed by them. The total scores of all three sections were done by examiner. The questionnaire was close ended, self assessment instrument, containing demographic details, consent form and maslach burnout inventory. The demographic details were Gender, age, marital status, respondentspresent position, peer andsupervisor support hours worked per week, ,smoking or alcohol, and if satisfied with pay corresponding to work and other work related questions.

The Burnout Syndrome's assessment was performed using the Maslach Burnout Inventory , which is an self-assessment instrument with answers given in Likert-type seven-point scale (0: never to 6: every day). The instrument consists of 22 questions which are divided into three dimensions, Emotional Exhaustion, depersonalization (Cynicism) and Professional achievement (Efficacy). A high score in the first two sections and a low score in the last section may indicate burnout[9]. It was decided to consider the MBI as the 'gold standard' in this study, as previously recommended by Schutte et al.[10]

The Depression Anxiety Stress Scale (DASS) 21 is a self-report tool containing 21 items that assess three constructs: Depression, Anxiety, and Stress (Lovibond and Lovibond, 1995). Each subscale includes 7 statements. Items consist of statements referring to the previous week, respondents are asked to read these statements and rate the frequency of the negative emotions. Ratings are made on a series of 4-point Likerttype scales from 0 (did not apply to me at all/ never) to 3(applied to me very much/ always). Higher scores indicate more severe emotional distress[11].

STATISTICAL ANALYSIS

Descriptive and inferential statistical analysis has been carried out in the present study. Results on continuous measurements are presented. And results on categorical measurements are presented as percentages. Level of significance is set at 5%. Chi-square testhas been used to find the significance of study parameters on categorical scale. And pearsons regression has been used to find the significance of study parameters.The Statistical software namely SPSS 15.0 was used for the analysis of the data and Microsoft word and Excel have been used to generate graphs, tables etc.

Result:

The study has reviewed 600 participants' responses. Total 356 male and 244 female participants had taken role in study. Most of the participants were above 25 years and were having experience up to 5 years. The demographic details of the participants with DASS21 scale variables are mentioned in table 1. It was found that women were the more sufferer in covid 19 wave. Depression,

anxiety and stress were more common in women, participants aged below 35 years, nurses and married individual (table 1). The finding were similar when it was examined for burnout (Table 4). Theseverity and distribution of DASS 21 score depicted in table 2. Around 48.1 % participants were suffering from mild-moderate to severe level of depression. Anxiety was found to effect around 60% of health care workers. And almost 68% of health care worker has suffered from stress. The burnout level was also very high among health care worker (table 5). It was found that 52% participants were having low-moderate to high level of burnout. Other than demographic details there few variables added to know further status about their work profile.e.g. work load, peer support, fear of contagious spread, and supply of safetyequipment, lack of knowledge. It was found that there were higher score of burnout, DASS 21 in participant who had higher expectation of salary, lack of peer support and had fear of contagion .(table 1,3).

Table 1. Demographic details and DASS 21 findings

Demographic details	Criteria	Numbers (Total 600)	Depression 347 (57.8%)	Anxiety 360 (60%)	Stress 405 (67.5%)
1. Gender	Male	356 (59.3%)	173 (48.5)	201 (56.4)	235 (66)
	Female	244 (41.6%)	174 (71.3)	159 (65.1)	170 (69.6)
2. Age (years)	>35	209 (34.8%)	162 (77.5)	168 (80.3)	171 (81.1)
	<35	391 (75.2%)	245 (62.6)	251 (64.1)	234 (57.7)
3. Marital status	Yes	408 (68 %)	201 (49.2)	215 (52.6)	243 (60)
	No	192 (32 %)	146 (76)	145 (75.5)	162 (84.3)
4. Experience (in years)	<5	161 (26.8%)	114 (70.8)	119 (73.9)	133 (82.6)
	6-10	183 (30.5%)	112 (59.5)	116 (61.2)	127 (69.3)
	11-15	162 (27 %)	80 (49.3)	83 (51.2)	94 (58)
	>15	94 (15.6%)	41 (43.6)	40 (42.5)	51 (54.2)
5. HCWs	Specialist	88 (14.6%)	39 (44.3)	41 (46.5)	55 (62.5)
	Physian	192 (32 %)	102 (53.1)	109 (56.7)	121 (63)
	Nurses	228 (38 %)	156 (68.4)	160 (70.1)	171 (75)
	Others	92 (15.4%)	50 (54.3)	50 (40.2)	58 (63)
6. Satisfied with pay	Yes	418 (69.6%)	215 (51.4)	219 (52.3)	245 (58.6)
	No	182 (30.4%)	132 (72.5)	141 (77.4)	160 (87.9)
7. Fear of contagion	Yes	513 (85.5%)	303 (59)	314 (61.2)	367 (71.5)
	No	87 (14.5%)	44 (50.5)	46 (52.8)	58 (66.6)
8. Sleep deprived	Yes	445 (74.1%)	278 (62.4)	287 (64.4)	328 (73.7)
	No	155 (25.8%)	69 (44.5)	73 (47)	77 (49.6)

Demographic details	Criteria	Numbers (Total 600)	Depression 347 (57.8%)	Anxiety 360 (60%)	Stress 405 (67.5%)
9. Have you had Enough knowledge about covid 19?	Yes No	273 (45.5%) 327 (54.5%)	158 (57.8) 189 (57.7)	155 (56.7) 192 (58.7)	158 (57.8) 189 (57.7)
10.Have you had regrets about your choice of profession because of the pandemic and related unexpected experiences?	Yes No	211 (35.1%) 389 (64.8%)	140 (66.3) 207 (53.4)	147 (69.6) 213 (54.7)	170 (80.5) 235 (60.4)
11.Have you been counseled regarding how to maintain your mental health in the current situation?	Yes No	48 (08%) 552 (92%)	39 (81.2) 308 (55.7)	37 (77) 323 (58.5)	44 (91.6) 361 (65.3)
12.Have you faced any other issues faced?					
- Shortage of protective ware		244 (40.6)	143 (58.6)	159 (65.1)	192 (78.6)
- Extra working hours		493 (82.1)	282 (57.2)	293 (59.4)	321 (65.1)
- Lack of support from colleague/ staff/ seniors		157 (26.1)	87 (55.4)	110 (70)	111 (70.7)

Table 2. DASS 21 score of Participants

Score	Depression			Anxiety			Stress		
	Range	N	%	Range	N	%	Range	N	%
Normal	(0-9)	253	42.1	(0-7)	240	40	(0-14)	195	32.5
Mild	(10-13)	177	29.5	(8-9)	236	39.3	(15-18)	242	40.3
Moderate	(14-20)	76	12.6	(10-14)	56	9.3	(19-25)	80	13.31
Severe	(21-27)	59	9.8	(15-19)	52	8.6	(26-34)	61	10.1
Extremely severe	(28+)	35	5.8	(20+)	16	2.6	(35+)	22	3.6

Table 3 demographic and Burnout score details

Demographic details	Criteria	Numbers (Total 600)	Burnout (313) (52.1%)	P value
1. Gender	Male	356 (59.3%)	177 (49.7)	2.102
	Female	244 (41.6%)	136 (55.7)	0.147
2. Age (years)	>35	209 (34.8%)	121 (57.8)	4.217
	<35	391 (75.2%)	192 (49.1)	0.04*
3. Marital status	Yes	408 (68 %)	212 (51.9)	1.798
	No	192 (32 %)	111 (57.8)	0.179
4. Experience 5. (in years)	<5	161 (26.8%)	109 (67.7)	81.536 <0.05*
	6-10	183 (30.5%)	113 (61.7)	
	11-15	162 (27 %)	79 (48.7)	
	>15	94 (15.6%)	12 (12.7)	
6. HCWs	Specialist	88 (14.6%)	41 (46.5)	4.035 0.257
	Physian	192 (32 %)	98 (51)	
	Nurses	228 (38 %)	130 (57)	
	Others	92 (15.4%)	44 (47.8)	
7. Satisfied with pay	Yes	418 (69.6%)	205 (49)	5.388
	No	182 (30.4%)	108 (59.3)	0.02*
8. Fear of contagion	Yes	513 (85.5%)	276 (53.8)	3.787
	No	87 (14.5%)	37 (42.5)	0.051
9. Sleep deprived	Yes	445 (74.1%)	256 (57.5)	19.843
	No	155 (25.8%)	57 (36.7)	<0.05*
10. Have you had Enough knowledge about covid 19?	Yes	273 (45.5%)	137 (50.1)	0.789
	No	327 (54.5%)	176 (56.2)	0.375
11. Have you had regrets about your choice of profession because of the pandemic and related unexpected experiences?	Yes	211 (35.1%)	151 (71.5)	49.073 <0.05*
	No	389 (64.8%)	162 (41.6)	
12. Have you been	Yes	48 (08%)	33 (68.7)	5.751 <0.05*

Demographic details	Criteria	Numbers (Total 600)	Burnout (313) (52.1%)	P value
counseled regarding how to maintain your mental health in the current situation?	No	552 (92%)	280 (50.7)	
13.Have you faced any other issues faced? - Shortage of protective ware - Extra working hour- - Lack of support from colleague/ staff/ seniors		 244 (40.6%) 493 (82.1%) 157 (26.1%)	 87 (35.6) 212 (47) 44 (28)	 44.92 <0.05* 98.49 <0.05* 49.66 <0.05*
14. Did you feel any of these symptoms before /after Covid wave?	Yes No	101 499	57 (57.3) 256 (51.3)	0.886 0.346

Table. 4. burnout level among participants

Burnout Level	Total participant with Burnout 313 (52.1)	Total participants 600
High	71 (22.6)	11.8 %
Moderate	177 (56.5)	29.5 %
Low	65 (20.7)	10.8 %

Table 5.Statisical Analysis Of Dass 21

Demographic details	Criteria	Numbers (Total 600)	Depression 347 (57.8%)	chi-square statistic with Yates correction	Anxiety 360 (60%)	chi-square statistic with Yates correction	Stress 405 (67.5%)	chi-square statistic with Yates correction
1.Gender	Male Female	356 (59.3%) 244 (41.6%)	173 (48.5) 174 (71.3)	29.709 <0.05*	201 (56.4) 159 (65.1)	4.213 0.04*	235 (66) 170 (69.6)	0.725 0.394
2. Age (years)	>35 <35	209 (34.8%) 391 (75.2%)	162 (77.5) 245 (62.6)	13.096 <0.05*	168 (80.3) 251 (64.1)	16.183 <0.05*	171 (81.1) 234 (57.7)	28.974 <0.05*
3. Marital status	Yes No	408 (68 %) 192 (32 %)	201 (49.2) 146 (76)	37.296 <0.05*	215 (52.6) 145 (75.5)	27.297 <0.05*	243 (60) 162 (84.3)	36.651 <0.05*
4. Experience (in years)	<5 6-10 11-15 >15	161 (26.8%) 183 (30.5%) 162 (27 %) 94 (15.6%)	114 (70.8) 112 (59.5) 80 (49.3) 41 (43.6)	24.499 <0.05*	119 (73.9) 116 (61.2) 83 (51.2) 40 (42.5)	30.856 <0.05*	133 (82.6) 127 (69.3) 94 (58) 51 (54.2)	31.200 <0.05*
5. HCWs	Specialist Physian Nurses Others	88 (14.6%) 192 (32 %) 228 (38 %) 92 (15.4%)	39 (44.3) 102 (53.1) 156 (68.4) 50 (54.3)	19.275 <0.05*	41 (46.5) 109 (56.7) 160 (70.1) 50 (40.2)	18.487 <0.05*	55 (62.5) 121 (63) 171 (75) 58 (63)	9.437 0.02*
6. Satisfied with pay	Yes No	418 (69.6%) 182 (30.4%)	215 (51.4) 132 (72.5)	23.130 <0.05*	219 (52.3) 141 (77.4)	33.231 <0.05*	245 (58.6) 160 (87.9)	49.617 <0.05*
7. Fear of contagion	Yes No	513 (85.5%) 87 (14.5%)	303 (59) 44 (50.5)	2.198 0.138	314 (61.2) 46 (52.8)	2.153 0.142	367 (71.5) 58 (66.6)	0.855 0.355
8. Sleep deprived	Yes No	445 (74.1%) 155 (25.8%)	278 (62.4) 69 (44.5)	15.198 <0.05*	287 (64.4) 73 (47)	14.498 <0.05*	328 (73.7) 77 (49.6)	30.260 <0.05*
9. Have you had Enough knowledge about covid 19?	Yes No	273 (45.5%) 327 (54.5%)	158 (57.8) 189 (57.7)	0.0004 0.984	155 (56.7) 192 (58.7)	0.229 0.631	158 (57.8) 189 (57.7)	0.0004 0.984
10. Have you had regrets about your choice of profession because of the pandemic and related unexpected experiences?	Yes No	211 (35.1%) 389 (64.8%)	140 (66.3) 207 (53.4)	9.681 <0.05*	147 (69.6) 213 (54.7)	12.675 <0.05*	170 (80.5) 235 (60.4)	25.335 <0.05*
11. Have you been counseled regarding how to maintain your mental health in the current situation?	Yes No	48 (08%) 552 (92%)	39 (81.2) 308 (55.7)	11.731 <0.05*	37 (77) 323 (58.5)	6.334 <0.05*	44 (91.6) 361 (65.3)	13.889 <0.05*

Demographic details	Criteria	Numbers (Total 600)	Depression 347 (57.8%)	chi-square statistic with Yates correction	Anxiety 360 (60%)	chi-square statistic with Yates correction	Stress 405 (67.5%)	chi-square statistic with Yates correction
12. Have you faced any other issues faced?								
- Shortage of protective ware	Yes	244 (40.6)	143 (58.6)	14.147 <0.05*	159 (65.1)	31.487 <0.05*	192 (78.6)	46.851 <0.05*
- Extra working hours	Yes	493 (82.1)	282 (57.2)	2.096 <0.147	293 (59.4)	13.719 <0.05*	321 (65.1)	45.682 <0.05*
- Lack of support from colleague/ staff/ seniors	Yes	157 (26.1)	87 (55.4)	15.302 <0.05*	110 (70)	80.079 <0.05*	111 (70.7)	81.482 <0.05*

Chi square statistics was used to evaluate association and significance between compared variables. Majority of the finding found to be significant at the p-value of <0.05(table 3,5). Pearson correlation between the total burnout scale scoreson health workers' exhaustion, mental stress, depression, symptoms, indicated that the overall burnout score was relatedto anxiety and depression (table 6). The result of Pearson correlation shows there is strong positive correlation between burnout and stress, anxiety and depression (>0.9). And this was found to be significance (table 6).

Table>.6. Pearson correlation between variables

	Burnout	P- value
Depression	0.944	<0.05*
Anxiety	0.914	<0.05*
Stress	0.900	<0.05*

Discussion

The World Health Organization (WHO) declared the coronavirus disease 2019 (COVID-19) as a pandemic on March 11, 2020; subsequently, more than 300 million confirmed cases of COVID-19 were reported worldwide by January 1, 2022. With the prolonged nature of the COVID-19 pandemic, across the globe, healthcare workers involved in COVID-19 care have hit their physical and mental limits. A healthcare system's collapse due toa pandemic caused by a novel infectious disease, such as COVID-19, can expose healthcare workers to stress.[12] this retrospective study was conducted to evaluate status of depression, anxiety, stress and burnout in 600 Health care worker who were active as covid warriors.

In the present study, it was found that around 57.7% were suffering from some level of depression, 60% were having anxiety and 67.5% were having stress. This retrospective evaluation shows that some age, sex, education, marital status, working hours has influence on these outcome. In the present study depression (71.3%) found to be more in

female. Stress (69.6%) and anxiety (65.1%) were also high among them (table 1,5). And this data were found to be significant. Although there was not much of difference between male (66.1%) and female (69.6%) stress level. A similar results found in the crossover study by Naldi, A. et al. (2021) involved 797 healthcare workers who were eliminating the effects of the pandemic in Turin. The authors of this study assessed emotional response, the prevalence of anxiety, distress, and burnout, as well as differences between professions. The results have shown that 618 participants(77.5%) were experiencing constant anxiety, and 478 healthcare workers (60%) reported symptoms of distress. A significant number of these healthcare workers suffered from severe symptoms of anxiety (23.3%) and stress (35.9%)[13].

Moreover, it has been found that the less experience is inversely related to the higher level of stress, anxiety and depression. The DASS21 and burnout score were found to be less in the health care worker above experience of 10-15 years.

Other major finding noted in the study was that nurses has higher level of DASS21, followed by general physian and others. DASS 21 score was found to be less in specialist than others. Further more, 35.1 % of participants feel that they regret about their choice of profession. The stress (80.5%), depression (66.3%) and anxiety (69.6%) were high in this group of participants.

Almost half of the participants (45.5%) felt that they had lack of knowledge about covid 19 condition. 85.5% participants were feared about they might get infected by Covid 19. DASS21 score and burnout score were high in this group.

The similar findings were noted for burnout status. Around 59.3% participants were found to have high – low level of burnout. Burnout level was high among female (55.7%) participants. But these value were statistically non-significant. Burnout syndrome can be identified in 11 symptoms, including fatigue and losing energy accompanied by exhaustion. In this case, running from reality is a tool to deny the suffering experienced, boredom, and cynicism, such as feeling no longer interested in the activities they do and even feeling bored and pessimistic about the field of work. It is emotional because, so far, the individual who can do work experiences quickly decreases the ability to do the job soon. The individual who also feels confident in his abilities then experiences feelings of unappreciated, disorientated, psychosomatic problems, suspicion for no apparent reason, depression, and denial of the reality of his situation. Moreover, burnout syndrome has very negative consequences, and burnout can affect a person's physical or mental health, causing psychosomatic disorders, such as mucosal changes, cardiorespiratory conditions, headaches, and others. Psychopathological disorders include anxiety, obsessive-compulsive behavior, depression, and addiction. In addition, the impacts felt by burnout syndrome sufferers encompass physical, psychological, and behavioral[14]. According to the most common description at present, burnout syndrome is characterized by exhaustion, depersonalization and reduced satisfaction in performance. Because of its aetiopathogenesis, burnout is today mainly regarded as the result of chronic stress which has not been

successfully dealt with. The results were in accordance with the study done by Hwang S in South Korea, more than 80% of burnout was found in health care worker.

Age-wise comparison shows higher burnout level in participants below 35 years of age. And these finding were found to be statistically significant. Experience had played important role in covid 19 pandemic. The participants with less experience had more burnout symptoms. And burnout level was decreasing as experience advances significantly. These finding were in accordance with the study done by Oliinyk O. et al. (2019) in Ukraine, 84% of doctors having working experience above 20 years. These groups showed a high level of emotional burnout according to the Maslachscale. Doctors with work experience ranging from 5 to 20 years showed a moderate level of emotional burnout[13].

The other finding showed that sleep deprivation, lack of knowledge and support from peer/senior staffs, extra working hour, less pay, regret in choice of profession and shortage of equipment lead to higher level burnout. These variables were significantly associated with burnout.(table 3). In the United States, about 54.4% of physicians have shown at least one symptom of burnout in the form of emotional exhaustion, depersonalization, or reduced senses of accomplishment. A similar pattern at varying degrees is found in the residents and fellows. The phenomena of physician burnout are adequately studied and have a direct negative impact on fatigue, stress, anxiety, depression, mood disorders, substance abuse, suicides, poor patient quality care, early retirements, and unexpected resignations. In addition to the known physician burnout contributors such as work factors (excessive workloads and work hours), personal characteristics (work-life imbalance, inadequate support, sleep deprivation), and organization factors (workload expectations, insufficient rewards, and interpersonal communication, negative leadership). Other factors identified in addition to usual contributors to burnout are lack of control over procedures, infection control measures, the false notion of safety precautions, poor communication and directives, lack of preparedness and emotional support, inadequate personal protective equipment (PPE), and perceived fatality[15,16,17].

This study has also tried to evaluate correlation between DASS21 variable and burnout. And it show strong positive correlation between depression, anxiety, stress with burnout. The value were greater than 0.9, and statistically significant. This finding were in accordance with previous studies. Based on the research of past outbreaks of the severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS), influenza, and H1N1, it is well established that physicians, residents, fellows, and the healthcare workers experience a varying degree of burnout. Anxiety and stress developed in the physicians during the outbreaks found to have a positive correlation with Maslach burnout inventory scores[15]. Similar study done in South Korea found same result about correlation of burnout and mental status.

In the light of social change and a transformation in the work situation, interest in the problem of burnout has grown since pandemic. Health workers who experience burnout will feel demotivated and hopeless,

while health workers who experience stress tend to act emotionally excessively. However, prolonged stress can trigger burnout syndrome, while burnout syndrome conditions experienced by health workers are not necessarily caused by stress. In the present study stress was one of the factor, the rest can be sleep deprivation, lack of support, less pay and extra working hour and continuous fear of cross infection. Moreover, burnout syndrome is a process of negative behavior change that occurs in response to stress and work pressure for a long time. Burnout syndrome has also become a psychological phenomenon that counters improving one's performance, effectiveness, and organizational output[14].

Healthcare professionals specially nurses and junior physian at the front line of care (family medicine, emergency medicine, general internal medicine, and critical care) report the highest rates of BOS; in excess of 40%. Working in an Intensive Care Unit (ICU) can be especially stressful due to high patient morbidity and mortality, challenging daily work routines, and routine encounters with traumatic and ethical issues. This level of nearly continuous stress can rapidly accelerate when caregivers perceive that there is insufficient time or limited resources to properly care for patients[18].

Stressfulness of work, and practice management were factors in which reality was experienced to be worse than expected. Also, finding a suitable practice was something that appeared more difficult than expected in their early career. Burnout is recognized as a potential problem within a broad range of occupations, and within many different countries. Burnout does not appear abruptly, but is the final stage of a process, leading to symptoms related to the syndrome dimensions[19]. Doctors appear to suffer from depression more than the general population and other professional groups. Recent meta-analyses of global studies estimate an overall prevalence of 27% in medical students, 29% in registrars and up to 60% in practicing doctors. These figures differ widely between countries and specialties[20]. And in this study also it found to be in accordance with it. BOS in critical care healthcare professionals may result in post-traumatic stress disorder (PTSD), alcohol abuse, and even suicidal ideation. PTSD is manifest by intrusion, avoidance, negative alterations in cognition and mood, and marked alterations in arousal and reactivity. PTSD can occur in response to one catastrophic event or after chronic or repetitive exposure to traumatic episodes. The development of BOS may result in healthcare professionals leaving their profession. Excessive turnover rates increase healthcare costs, decrease productivity, diminish staff morale, and reduce the overall quality of care as experienced professionals who leave the ICU must be replaced. It essential to identify and remediate outbreak specific issues to avoid the unwanted social, psychological, and economic burden.

Conclusion:

Several research contributions have depicted the impact of the pandemic environment on healthcare and social care personnel. Even though the high prevalence of burnout depression and anxiety in healthcare settings before COVID-19 has been well documented in the research, the recent increase in psychological distress and mental health

issues in healthcare and mental health workers should be attributed to the effect of the COVID-19 pandemic. Burnout is depicted as the strongest determinant of mental health symptoms for mental health workers. In turn, the main workplace determinants of burnout are the perception of a lack of support from the organization and the fear of contracting COVID-19 at work. Findings also provide insights for designing interventions to promote and protect mental health workers in the context of the pandemic. In conclusion, it is necessary to monitor burnout and carefully analyze elements of organizational culture, in addition to offering clinical and psychological care for those in need.

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