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RESEARCH ARTICLE

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CHALLENGES REGARDING COVID-19 AMONG HEALTHCARE WORKERS DURING ITS PANDEMIC

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ABSTRACT

The Objective of this study is to find Challenges regarding COVID-19 among Healthcare workers during its Pandemic in Hoshiarpur District of Punjab India. Following the convenience sampling method 200 Healthcare workers were questionnaire. According to this study 62.5% Healthcare workers sometimes felt that it was hard to work in the current scenario due to COVID-19 [(p=0.0001) (CI=95%)], 55.5% Healthcare workers did not feel that lockdown due to current scenario added stress on them [(p=0.001) (CI=95%)], 39.5% Healthcare workers might had fear of family members catching infection due to work exposure [(p=0.005) (CI=95%)], 79.5% Healthcare workers welcomed by the community during COVID-19 [(p=0.030) (CI=95%)], 79% Healthcare workers felt that they were supported by their colleagues during COVID-19 scenario [(p=0.003) (CI=95%)]. According to Perceived Stress Scale 47.5% Healthcare workers had never upset because of something that happened unexpectedly [(p=0.025) (CI=95%)], 58% Healthcare workers had very often feel confident about their ability to handle their personal problems [(p=0.041) (CI=95%)].

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INTRODUCTION

The study that is "Challenges regarding COVID-19 among Healthcare workers during its Pandemic" in Hoshiarpur comprises the medical and paramedical staff, Doctors and Healthcare Workers who are responding to a global health crisis, trying to protect individuals, families and communities in adverse situations with stretched resources, shortage of personal protective equipment (PPE) Kits and other equipment have found unexpected target in the fight against COVID-19. There have been several reports or violence against them during this pandemic time in India. The exact number cannot be determined, there are few glaring examples as reported on 8 April 2020, two trainee doctors in New Delhi were allegedly assaulted by a neighbour who accused them of spreading the disease. On 19 April 2020, the burial of a neurosurgeon who had died after contracting COVID-19 in Chennai was disrupted by a mob who attacked the undertakers. A group of Public Health Workers in Indore, a city in Central India, who were trying to 'contact -trace' a person, were descended upon a group of 100 people pelting stones and drove them away.[1] Healthcare workers globally are on the verge of burnout. Therefore, chances are quite high that between 15% -20% of Healthcare workers contract PTSD after the outbreak. [2] Owing to the increased risk of infection, their duty toward patients might hamper

with self-defence and protection of loved ones.[3][4] Increased duty hours and disrupted biological rhythm during the quarantine might lead to insomnia. [5] Inadequate supply of personal protective equipment, problematic media coverage, and stigma might exacerbate stress. [6][7][8] In a recent review of six studies, reported that "HCW are encountering a considerable degree of stress, anxiety, depression, insomnia due to the COVID-19 pandemic." Apart from doctors, people working in healthcare facilities such as nurses, ward staff, cleaning staff, porters, and administrative staff are also variably vulnerable and might face mental health problems.^[10] Various physiological, psychological, social, and emotional factors may contribute to stress. In fact, the items of the PSS(Perceived Stress Scale)-10 were designed to "tap how unpredictable, uncontrollable, and overloaded respondents find their lives." [11] These different aspects of stress might have different predictor variables and might be differently associated with insomnia. Moreover, different components of stress and insomnia might affect different categories of HCW differently. Several Healthcare workers have been asked to vacate their rented accommodation on the presumption that they may carry and spread this disease from their place of work (hospitals) to society.^[12] The long-term effects of the current pandemic need to be assessed later. 52.8% of the Healthcare workers in India were reported to have COVID-19 pandemic related burnout.^[13] A Study from Taiwan showed that 5 percent Healthcare staff members

registered acute stress disorder, 20 percent reported feeling stigmatization, and 9 percent Healthcare reported that they were reluctant to work during the outbreak or had considered resignation. [14] In another study exploring, in a 3-year follow-up, results of the bivariate analysis indicate that, among the sociodemographic factors, younger age and being single were associated with higher levels of depressive symptoms in the sample. About 60% of those having high depressive symptom levels were 35 years old or younger, whereas 31% of those with CES-D scores lower than 16 were in this age range. About one third of those with high depressive symptoms were single, whereas only 10% of those with low CES-D score were single. [15] A few Indian researchers have investigated neurological problems, depression, and emotional exhaustion among medical professionals. These studies were restricted mainly to medical students and interns, with few studies concentrating on resident doctors. [16][17][18][19][20] Studies have reported tension on approximately one third of resident physicians.^[19] Studies among medical students showed friction between three-fourths of the respondents^[20] and those with interns showed a stress prevalence of as high as 91.1 percent. [21] Psychological morbidity literature indicates that in more than half of undergraduate medical students, depression (51.3%), anxiety (66.9%), and stress (53%) was present. [16][17][18] The disparities in the approaches used to assess various psychological constructs are due to the large discrepancies among different experiments. Research has also assessed the challenges to clinical assistance and concluded that disgrace, dishonor, clandestine problems, paucity of knowledge and, panic of unwelcome involvement are the main barriers to finding aid with mental health issues.[22]

MATERIALS AND METHODS

The Study is based on Healthcare workers in Hoshiarpur District of Punjab. Among different Health care centers in Hoshiarpur District, The Study was conducted among 200 Healthcare workers. Public Health Facilities of Hoshiarpur District comprises 235 SC(Sub Centre), 85 SHC(Subsidiary Health Centre), 36 PHC(Primary Health Centre), 3 RH(Rural Hospitals), 9 CHC(Community Health Centre), 4 SDH(Sub Divisional Hospital), and 1 DH(District Hospital).

Study Design: The study design was cross-sectional.

Sampling Design: The study was conducted through convenient sampling technique.

View of Hoshiarpur District



Highlighted Hoshiarpur District of Punjab



Sample Size: Sample size is 200 Healthcare workers.

Duration of Study: The duration of study was from May 2021 to August 2021.

Sample Tool: A Pre-tested, pre-designed semi-structured questionnaire study tool was used.

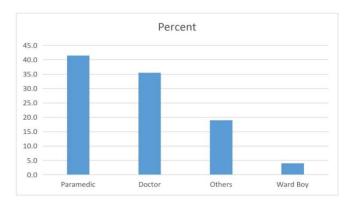
Data Collection: The data was collected online basis via e-mail, by contacting through phone numbers, Link Share, etc. Within 4 Months.

Procedure of Data Collection: Forms had been shared via an online portal named Google Forms.

Statistical Analysis: Data entry was done into Microsoft Excel and analysis was done by SPSS 20. Data is summarized in percentage and proportion, statistical associations was done using the Chi-square test.

RESULTS

200 Healthcare workers (100 males and 100 females) were equally distributed in the study. 83 paramedical staff (41.5%) and 8 ward boy (4%) participated in this study.



Challenges regarding covid-19 among healthcare workers during its pandemic

		Gender		Total	Chi-square	p-value	
		Male	Female	_ Total	Cni-square	p-value	
Q: Do you feel it is hard to work in the current scenario due to COVID-19?	Always	12	25	37	17.952	0.0001*	
		12.0%	25.0%	18.5%			
	Sometimes	58	67	125			
		58.0%	67.0%	62.5%			
	Never	30	8	38	=		
		30.0%	8.0%	19.0%			
Total		100	100	200	i i		
		100.0%	100.0%	100.0%	1		

		Gender	T.	Total	Chi-square	p-value
Or Door it 1	Almere	Male	Female 32	2,500,000		
Q: Does it drain more of your	Aiways	26.0%	32.0%	58 29.0%	14.682	0.001*
CATALOGIC SINCE TAXABLE	Sometimes	45	60	105		
during	100000000000000000000000000000000000000	45.0%	60.0%	52.5%	+	
COVID-19?	Never	29	8	37		
		29.0%	8.0%	18.5%		
Total	h-1	100	100	200		
		100.0%	100.0%	100.0%		
		Gender		Total	Chi-square	p-value
		Male	Female	-	12.700	0.0014
Q: Do you feel lockdown due to	Yes	10	12.0%	22 11.0%	13.708	0.001*
current scenario	No	68	43	111	-	
has added stress		68.0%	43.0%	55.5%	-	
on you?	Maybe	22	45	67		
	1000	22.0%	45.0%	33.5%	_	
Total		100	100	200		
		100.0%	100.0%	100.0%		
		Gender		Total	Chi-square	p-value
		Male	Female			
Q: Do you fear to	Yes	21	26	47	10.376	0.006*
catch COVID-19	21	21.0%	26.0%	23.5%		
infection while	No	42	21	63		
working in the		42.0%	21.0%	31.5%		
current scenario?	Maybe	37	53	90		
		37.0%	53.0%	45.0%		
Total		100	100	200		
		100.0%	100.0%	100.0%		
		Gender		Total	Chi-square	p-value
	10	Male	Female			Processor
Q: Do you have	Yes	27	35	62	10.646	0.005*
fear of family		27.0%	35.0%	31.0%		
members catching	No	40	19	59		
infection because		40.0%	19.0%	29.5%		
of your work	Maybe	33	46	79		
exposure?		33.0%	46.0%	39.5%		
Total		100	100	200		
		100.0%	100.0%	100.0%		
		Gender		Total	Chi-square	p-value
		Male	Female	Total	CIII-square	p-value
28. Have you ever	Yes	5	0	5	6.257	0.044*
been physically		5.0%	0.0%	2.5%		
assaulted during	No	92	99	191		
your duty hours?		92.0%	99.0%	95.5%	7	
	Maybe	3	1	-		
		1.50	1 1	4	7	
	III 50	3.0%	1.0%	2.0%		
Total		3.0%				
Total		0.592000	1.0%	2.0%		
Total	50.50	100	1.0%	2.0% 200 100.0%		
Total	50 50	100	1.0%	2.0%	Chi-square	p-value
(2006-2003)	Yes	100 100.0% Gender	1.0% 100 100.0%	2.0% 200 100.0%	Chi-square	p-value 0.030*
Total Q: Have you ever been welcomed	Yes	100 100.0% Gender Male	1.0% 100 100.0% Female	2.0% 200 100.0% Total		
Q: Have you ever		100 100.0% Gender Male 72	1.0% 100 100.0% Female	2.0% 200 100.0% Total		
Q: Have you ever been welcomed		100 100.0% Gender Male 72 72.0%	1.0% 100 100.0% Female 87 87.0%	2.0% 200 100.0% Total 159 79.5%		
Q: Have you ever been welcomed by the community		100 100.0% Gender Male 72 72.0%	1.0% 100 100.0% Female 87 87.0%	2.0% 200 100.0% Total 159 79.5% 30		
been welcomed by the community because you are a	No	100 100.0% Gender Male 72 72.0% 21 21.0%	1.0% 100 100.0% Female 87 87.0% 9	2.0% 200 100.0% Total 159 79.5% 30 15.0%		
Q: Have you ever been welcomed by the community because you are a health care	No	100 100.0% Gender Male 72 72.0% 21 21.0%	1.0% 100 100.0% Female 87 87.0% 9	2.0% 200 100.0% Total 159 79.5% 30 15.0%		
Q: Have you ever been welcomed by the community because you are a health care worker and	No	100 100.0% Gender Male 72 72.0% 21 21.0%	1.0% 100 100.0% Female 87 87.0% 9 9.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0%		
Q: Have you ever been welcomed by the community because you are a health care worker and working in the	No	100 100.0% Gender Male 72 72.0% 21 21.0%	1.0% 100 100.0% Female 87 87.0% 9 9.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0%		
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario?	No	100 100.0% Gender Male 72 72.0% 21 21.0% 7	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11		
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario?	No	100 100.0% Gender Male 72 72.0% 21 21.0% 7	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0%	7.033	0.030*
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario?	No	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0%	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11		0.030*
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario?	No Maybe	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0%	7.033	0.030* p-value
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total	No Maybe	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% 100 100.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total	7.033 Chi-square	0.030*
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total Q: Do you feel you are being	No Maybe	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male 80	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% 100 100.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total	7.033 Chi-square	0.030* p-value
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total	No Maybe	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male 80 80.0%	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% Female 100 100.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total	7.033 Chi-square	0.030* p-value
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total Q: Do you feel you are being supported by the colleagues during	No Maybe Yes	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male 80 80.0% 13	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% 100 100.0% Female 78 78.0% 3	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total	7.033 Chi-square	0.030* p-value
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total Q: Do you feel you are being supported by the colleagues during the current	No Maybe Yes	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male 80 80.0% 13 13.0% 7	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% 100 100.0% Female 78 78.0% 3 3.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total 158 79.0% 16 8.0% 26	7.033 Chi-square	p-value
Q: Have you ever been welcomed by the community because you are a health care worker and working in the current scenario? Total Q: Do you feel you are being supported by the colleagues during	No Maybe Yes	100 100.0% Gender Male 72 72.0% 21 21.0% 7 7.0% 100 100.0% Gender Male 80 80.0% 13 13.0%	1.0% 100 100.0% Female 87 87.0% 9 9.0% 4 4.0% Female 100 100.0% Female 78 78.0% 3 3.0%	2.0% 200 100.0% Total 159 79.5% 30 15.0% 11 5.5% 200 100.0% Total 158 79.0% 16 8.0%	7.033 Chi-square	0.030* p-value

Perceived Stress Scale

A more precise measure of personal stress can be determined by using a variety of instruments that have been designed to help measure individual stress levels. The first of these is called Perceived Stress Scale.

		Gender				Chi.equere	p-value		
		Male	1	Fem	ale	Total		Chi-square	p-value
Q: How often have you been upset because of something that happened unexpectedly?	Very Often	4	4.0%	2	2.0%	6	3.0%	11.170	0.025*
	Fairly Often	3	3.0%	6	6.0%	9	4.5%		
	Sometimes	29	29.0%	49	49.0%	78	39.0%		
	Almost never	8	8.0%	4	4.0%	12	6.0%		
	Never	56	56.0%	39	39.0%	95	47.5%		
Q: How often have you felt confident about your ability to handle your personal problems?	Very Often	55	55.0%	61	61.0%	116	58.0%	9.987	0.041*
	Fairly Often	12	12.0%	16	16.0%	28	14.0%		
	Sometimes	18	18.0%	20	20.0%	38	19.0%	1	
	Almost never	4	4.0%	2	2.0%	6	3.0%		
	Never	11	11.0%	1	1.0%	12	6.0%	1	
Q: How often have you felt that things were going your way?	Very Often	46	46.0%	48	48.0%	94	47.0%	10.065	0.039*
	Fairly Often	13	13.0%	14	14.0%	27	13.5%		
	Sometimes	23	23.0%	33	33.0%	56	28.0%		
	Almost never	3	3.0%	2	2.0%	5	2.5%	Ī	
	Never	15	15.0%	3	3.0%	18	9.0%	1	
Q: How often have you been angered because of things that happened that were outside of your control?	Very Often	3	3.0%	5	5.0%	8	4.0%	10.554	0.032*
	Fairly Often	5	5.0%	6	6.0%	11	5.5%		
	Sometimes	45	45.0%	63	63.0%	108	54.0%	1	
	Almost never	8	8.0%	7	7.0%	15	7.5%		
	Never	39	39.0%	19	19.0%	58	29.0%	1	

DISCUSSION

Our Study shows that 62.5% Healthcare workers sometimes felt it was hard to work in the current scenario due to COVID-19. Study from West India shows that 35.3% Healthcare workers sometimes felt that it was hard to work in the current scenario due to COVID-19.[13] 55.5% Healthcare workers did not feel that lockdown due to current scenario added stress on them. Study from West India shows 38% Healthcare workers sometimes felt lockdown due to current scenario added stress on them. [13] 39.5% Healthcare workers might had fear of family members catching infection because of their work exposure. Study from West India shows 42.8% Healthcare workers always feared of family members catching infection because of their work exposure. [13] 76% Healthcare workers did not feel that any one of their patients were not taking treatment which they prescribed. There was no comparable Study found. 95.5% Healthcare workers were not physically assaulted during duty hours. Study from South Delhi, India shows 91.4% Healthcare workers having age group 20-25 were never physically assaulted during duty. [23] 77% Healthcare workers did not feel shortage of PPE Kits, N-95 Masks, and Oxygen cylinders during COVID-19. There was no comparable study found. 79.5% Healthcare workers welcomed by the community because they were Healthcare workers and working in the current scenario of COVID-19. Study from West India shows 37.1% Healthcare workers sometimes welcomed by the community because they were Healthcare workers and working in the current scenario. [13] 79% Healthcare workers supported by their colleagues during the current scenario. Study from West India shows 30.9% Healthcare workers sometimes supported by their colleagues during the current scenario. $^{[13]}$

Perceived Stress Scale to measure the personal stress regarding COVID-19 among Healthcare workers: Our Study shows 47.5% Healthcare workers were never upset because of something happened unexpectedly. Study from Southern Ethiopia shows 29% Healthcare workers were sometimes upset because of something happened unexpectedly. [24] 58% Healthcare workers were very often confident about their ability to handle their personal problems. Study from Southern Ethiopia shows 30% Healthcare workers were sometimes confident about their ability to handle their personal problems. [24] 47%

Healthcare workers very often felt that the things were going their way. Study from Southern Ethiopia shows 31% Healthcare workers sometimes and 31% fairly often felt that the things were going their way. [24] 54% Healthcare workers were sometimes angry because of the things that happened were outside of their control. Study from Southern Ethiopia shows 29% Healthcare workers were sometimes angry because of the things that happened were outside of their control. [24]

CONCLUSION

This Study concludes that 62.5% Healthcare workers sometimes felt that it was hard to work in the current scenario due to COVID-19, 52.5% Healthcare workers sometimes felt the drainage of energy during COVID-19, 55.5% Healthcare workers did not feel lockdown due to current scenario added stress on them, 45% Healthcare workers might had fear to catch COVID-19 infection, 39.5% Healthcare workers might had fear of family members catching COVID-19 infection because of their work exposure, 95.5% Healthcare workers were never physically assaulted during their duty hours, 79.5% Healthcare workers were welcomed by the community, majority of 79% Healthcare workers felt that they were being supported by the colleagues during the current scenario of COVID-19. 53% Healthcare workers spent time with family to reduce stress, but it was statistically not significant. Perceived Stress Scale shows that 47.5% Healthcare workers were never upset that something had happened unexpectedly, 58% Healthcare workers very often felt confident about their ability to handle their personal problems, 47% Healthcare workers very often felt that things were going their way, 54% Healthcare workers were sometimes angry because of things that happened were outside of their control.

Financial support and sponsorship: Nil.

Conflict of Interest: No conflict of interest has been reported in this study.

Limitations: As the study design was cross-sectional, it was difficult to establish a temporal relationship. Due to the nationwide containment of COVID-19, the sample size of the study was constricted. Data was collected only through google forms.

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