Original Article :

A Multicenter Cross-sectional Study on the Prevalence of Burnout among Health Care Workers during COVID-19 in Saudi Arabia

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Abstract

Background And Aims:
COVID-19 is a major challenge for Health Care Workers (HWCs), who are at risk of contact infection. This can cause psychological issues such as anxiety, fear, and most importantly, burnout. The last-mentioned can decrease effectiveness at work and jeopardize the efficacy of delivering patient care. Our aim is to measure burnout levels among HCWs directly exposed to COVID-19 and assess associated factors.

Methods:
A cross-sectional online questionnaire was distributed through social media to HCWs, from June to October 2020. The questionnaire had two sections. The first section contained questions about sociodemographic data and associated factors. The second, was the Copenhagen Burnout Inventory (CBI).

Results:
A total of 1050 HCWs agreed to participate in the study. 62% were female. 93.4% were Saudi. 38.3% worked with COVID-19 patients, 42.3% had increased work hours, and 58.7% practiced self-isolation. The mean (SD) for personal burnout, 3.47 (0.84), and work-related burnout, 3.41 (0.81), were high, but moderate for patient-related burnout, 3.09 (1.00). Factors associated with burnout levels were gender, age, occupation, marital status, working in isolation hospitals, working with COVID-19 patients, increased work hours, and self-isolation practices.

Conclusion:
HCWs are prone to many mental health problems. Many studies were conducted in Saudi Arabia concerning HCWs burnout after pervious outbreaks, however there were not enough measures taken to avoid high levels of burnout during the COVID-19 pandemic. This study highlights the magnitude of burnout problems among HCWs. Efforts must be undertaken by health institutions to support the mental wellbeing of HCWs.

Keywords:
burnout; COVID-19; HCW; mental health; pandemic.

Introduction:

In the past several decades, four viral infectious diseases have spread globally: Severe Acute Respiratory Syndrome (SARS), Middle East Respiratory Syndrome (MERS), Avian Influenza (A/H1N1), and the most recent Coronavirus disease (COVID-19).[1–4] Unlike past pandemics, COVID-19 has been of a longer duration.[5] During the SARS outbreak, health care workers (HCWs) were at the frontlines, making them most at risk. In fact, HCWs accounted for 21% of all cases worldwide.[6] A study in Hong Kong, conducted during the epidemic of SARS showed that more than half of frontline HCWs had psychological distress.[7] As previous epidemics, the COVID-19 pandemic has also affected the mental health of HCWs.[8,9] Nearly 41% of HCWs had dealt with MERS outbreak previously are more anxious towards COVID-19 than there were with MERS.[10–12] In Saudi Arabia, during the MERS outbreak, HCWs had to endure social stigma as they were presumed to be spreading the virus further in the community, all the while living in the horror of either witnessing the disease killing patients or transmitting it to their families. Moreover, some practiced poor professionalism toward their patients, thus failing to ensure their safety and protection.

The fact that COVID-19 is human-to-human transmissible and causes fear are factors related to HCWs burnout, because they had to deal directly with the patients.[13] Most of the time HCWs feel ashamed when they consider putting their or their families well-being over that of their patients.[14,15] This feeling of self-prioritizing is normal and understood. However, having to face social stigmatization is concerning and can harm the HCWs mental health, as HCWs face unrealistic expectations from the public especially in emergency situations such as pandemics. People forget that HCWs are humans, with physical and mental limits. This, however, does not make their desire to help any less.

Frontline HCWs dealing directly with COVID-19 patients put themselves and their families at risk of contracting the virus and even dying as a result of performing their duty.[16] Researchers believe that the COVID-19 pandemic has revealed mishaps in the health care system regarding support for HCWs mental stability and the prevention of burnout.[17] Until now, around six nurses caring for COVID-19 patients have committed suicide.18 Moreover, a global survey which included 2,707 HCWs from 60 countries during the COVID-19 pandemic found that 51.4% reported burnout.[19]

Burnout is a syndrome consisting of three dimensions: emotional exhaustion, dep-

ersonalization, and low personal accomplishment.[20] It was found to be prevalent among HCWs during the COVID-19 pandemic at higher levels than previously reported and was related to workplace stress, high workload, time pressures, and limited organizational support.[15] Additionally, it can be a result of the need to increase their efforts to perform their work to the fullest during the pandemic. A study in Italy demonstrated a direct relationship between increased workload and burnout.[22] Many physicians, nurses and allied health professionals were brought from other departments, while those who work in ED and ICU had their shifts and work hours increased which had a strong association with high work-related burnout.[23] This is alarming, as increased work hours can disrupt the normal work-life balance and sleep cycle. [24,25] Biological factors can also play a role, female HCWs reported a higher level of emotional exhaustion with Maslach Burnout Inventory (MBI) than their male colleagues in a study conducted in Saudi Arabia. This is supported by many studies worldwide.[13,26–29] Another factor associated with high levels of burnout was being married or having children.[26,30,31] Furthermore, physicians suffering from burnout are more likely to be involved in patient-safety accidents, provide inadequate care, and receive poor satisfaction ratings from their patients, thus leading to suboptimal patient care and professional inadequacy.[21,32] A recent meta-analysis associated physicians burnout with increased rates of medical errors.[32,33]

The aim of the present study was to assess the levels of burnout in HCWs in the cities with the highest COVID-19 infection rate in Saudi Arabia, to help emphasize the importance of mental health support for our brave HCWs.

Methods

The study was reviewed and approved by the research ethics committee (REC) of Hail University, on 27\8\2020. All measures included in the current study comply with ethical standards of the 1964 Helsinki declaration, along with its subsequent modifications. Ethical approval number: 1792\5\1442. This cross-sectional study was conducted on a sample of HCWs across fourteen cities in Saudi Arabia. Participants were recruited by convenience sampling which is a method of collecting samples by taking samples that are conveniently located around a location or Internet service and snowballing, by distributing the electronic questionnaire via various social media platforms (WhatsApp, Telegram and Twitter) through a link that participants were invited to click on in order to take part in the study. This provided an

easy and cost-effective method in reaching HCWs. Participation was voluntary and the survey was anonymous. Confidentiality of all information provided was ensured. The goals and outcomes of the study were outlined at the start of the questionnaire, so participants could comprehend the study objectives and make an informed choice about participation.

Procedure

Participants included both Saudi and non-Saudi HCWs working in Saudi Arabia, aged 18 years or older, and based in one of the following cities: Riyadh, Hail, Al-Qassim, Tabuk, Al-Jouf, Al Hofuf, Dammam, Al-Qatif, Najran, Jazan, Abha, Makkah Al Mukarramah, Al-Madinah Al Munawarah, and Jeddah. The inclusion criteria were physicians, nurses, and allied health professionals (e.g., specialists, administrative staff, receptionists). Dentists were excluded. The sample calculation formula was used to calculate the sample size. According to the last updated Ministry of Health statistical yearbook, the total number of HCWs in all health sectors was 272716, excluding dentists. After allowing for a 5% margin of error and a 95% confidence level, the eligible sample size for the study was therefore 384. We oversampled for more accuracy; therefore the final sample size was 1072. Participants were recruited from June 2020 to October 2020. An online questionnaire was designed. It included two sections. The first section contained questions regarding sociodemographic data and associated factors such as gender, age, marital status, type of hospital, working hours, and self-isolation practices. The second section contained the Copenhagen Burnout Inventory (CBI). The original CBI measures personal, work-related, and patient-related burnout, which were all included in this questionnaire.

Data Analysis

Data was collected using the Google forms service and inputted into SPSS version 23.0 for analysis. The frequencies, percentage, mean, and standard deviation were computed for all items. The difference in the burnout sub-scales was inspected in terms of demographic factors through the following tests:

The independent “t” test was conducted to measure the differences in the subscales in term of demographic variables across both groups.

The one-way ANOVA was conducted to test the differences in the subscales in terms of demographic variables with three groups or more, with consideration of using a post-hoc comparisons test when differences were occurred. A P-value less than .05 was considered statistically significant.

The scales were measured using the 5-points Likert scale. The level of range was calculated using the following formula:
Interval level = (largest number–smallest number)/(number of points)
Interval level = (5-1)/5=0.80
Accordingly, the level was presented in Table 1 from very high to very low.

Table 1 Interval level the of the 5-points Likert scale

Level	Interval level
Very low	1-1.79
Low	1.80-2.59
Moderate	2.60-3.39
High	3.40-4.19
Very high	4.20-5

Results

Socio-demographic information

As shown in Table 2, a total of 1050 HCWs participated in the study. 62% were female; 38% male. Most 93.4% were Saudi. 45% were single; 37.1% were married with children. Participants worked in fourteen Saudi cities. 82.1% worked in a governmental hospital; 79.3% worked in secondary care hospital. Participants were divided by occupation into 35.9% physicians, 33.4% nurses, and 30.7% other allied health care professionals. 38.3% worked in a clinic designated for diagnosis and treatment of COVID-19. 42.3% had increased work hours because of the COVID-19 pandemic. 77.2% worked 6-12 hours. Lastly, 58.7% practiced self-isolation.

Table 2 Socio-demographic information (n=1050)

Factor		N	%
Gender	Female	651	62.0
	Male	399	38.0
Age	20-29	593	56.5
	30-39	348	33.1
	40-49	86	8.2
	and over 50	23	2.2
Marital statue	Single	473	45.0
	Married without children	153	14.6
	Married with children	390	37.1
	Divorced	23	2.2
	Widower	11	1.0
Nationality	Saudi	981	93.4
	Non Saudi	69	6.6
City	RIYADH	222	21.1
	HAIL	111	10.6
	AL-QASSIM	61	5.8

Factor		N	%
	TABUK	70	6.7
	AL-JOUF	109	10.4
	AL-HOFUF	54	5.1
	DAMMAM	109	10.4
	ALQATIF	66	6.3
	NAJRAN	35	3.3
	JAZAN	29	2.8
	ABHA	33	3.1
	MAKKAH	45	4.3
	AL-MADINAH	80	7.6
	JEDDAH	26	2.5
Occupation	Physician	377	35.9
	Nurse	351	33.4
	Other staff (e.g. Administration, technician, (…specialist, reception	322	30.7
Type of hospital	Government sector hospital	862	82.1
	Private sector hospital	129	12.3
	University clinics	59	5.6
Work area	Secondary care hospital	833	79.3
	(Tertiary care hospital (isolation hospital	217	20.7
Do you work in a clinic designated for diag-?nosis and treatment of COVID-19 Patients	Yes	402	38.3
	No	648	61.7
Have your work hours changed after COV-?ID-19 pandemic	Increased	444	42.3
	Decreased	206	19.6
	Did not change	400	38.1
Working hour	Less than 6	100	9.5
	6-12	811	77.2
	More than 12	139	13.2
Self-isolation practice	Yes	616	58.7
	No	434	41.3

Descriptive analysis of the burnout subscales

Personal burnout

As shown in Table 3, personal burnout was measured by 5 items and achieved a perfect Cronbach alpha (α=0.85). The overall was 3.47 (0.84) (i.e. high level). Item 1, achieved the highest mean 3.84 (0.96) (high level). It can thus be concluded that personal burnout had a high level (see Figure 1).

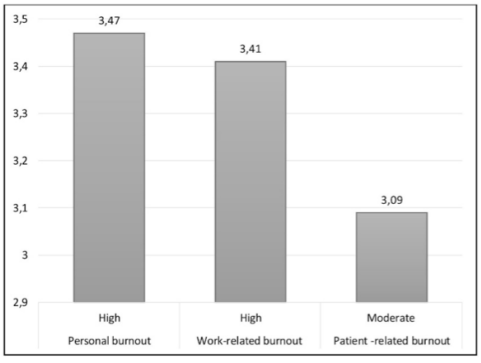


Figure 1 Mean scores and levels across subscales

Work-related burnout

As shown in Table 3, work-related burnout was measured by 7 items and achieved a perfect Cronbach alpha (α=0.84). The overall was 3.41 (0.81) (high level). Item 4, achieved the highest mean 3.88 (0.99) (high level). It can thus be concluded that work-related burnout had a high level (see Figure 1).

Table 3 Descriptive information of the burnout scale (N=1050)

Statement	N/%	To a very high degree or always	To a high degree or often	Somewhat or sometimes	To a low degree or seldom	To a very low degree or never/ almost never	M	SD
							Level	
How Often do you feel tired?	N	23	57	276	407	287	3.84	0.96
	%	2.2	5.4	26.3	38.8	27.3		
How Often are you physically exhausted?	N	23	85	273	440	229	3.73	0.96
	%	2.2	8.1	26.0	41.9	21.8		
How Often are you emotionally exhausted?	N	39	145	349	296	221	3.49	1.08
	%	3.7	13.8	33.2	28.2	21.0		
How Often do you think:" I can't take it anymore"?	N	62	266	307	260	155	3.17	1.14
	%	5.9	25.3	29.2	24.8	14.8		
How Often do you feel weak and susceptible to illness?	N	97	223	335	247	148	3.12	1.17
	%	9.2	21.2	31.9	23.5	14.1		
		Personal burnout (average) (α=0.85) High					3.47	0.84
Is your work emotionally exhausting?	N	59	103	304	347	237	3.57	1.11
	%	5.6	9.8	29.0	33.0	22.6		
Do you feel burnt out because of your work?	N	84	102	320	347	197	3.45	1.14
	%	8.0	9.7	30.5	33.0	18.8		
Does your work frustrate you?	N	125	168	360	226	171	3.14	1.22
	%	11.9	16.0	34.3	21.5	16.3		
Do you feel worn out at the end of the working day?	N	19	68	260	372	331	3.88	0.99
	%	1.8	6.5	24.8	35.4	31.5		
Are you exhausted in the morning at the thought of another day at work?	N	68	138	335	315	194	3.41	1.12
	%	6.5	13.1	31.9	30.0	18.5		
Do you feel that every working hour is tiring for you?	N	67	207	324	291	161	3.26	1.13
	%	6.4	19.7	30.9	27.7	15.3		
Do you have enough energy for family and friends during leisure time?	N	93	194	358	258	147	3.16	1.15
	%	8.9	18.5	34.1	24.6	14.0		
		Work-related burnout (average) (α=0.84) High					3.41	0.81
Do you find it hard to work with clients?	N	116	202	395	209	128	3.03	1.15
	%	11.0	19.2	37.6	19.9	12.2		

Statement	N/%	To a very high degree or always	To a high degree or often	Somewhat or sometimes	To a low degree or seldom	To a very low degree or never/ almost never	M	SD
							Level	
Do you find it frustrating to work with clients?	N	176	213	361	222	78	2.82	1.16
	%	16.8	20.3	34.4	21.1	7.4		
Does it drain your energy to work with clients?	N	105	170	379	267	129	3.14	1.14
	%	10.0	16.2	36.1	25.4	12.3		
Do you feel that you give more than you get back when you work with clients?	N	87	145	306	299	213	3.39	1.19
	%	8.3	13.8	29.1	28.5	20.3		
Are you tired of working with clients?	N	171	199	281	243	156	3.01	1.29
	%	16.3	19.0	26.8	23.1	14.9		
Do you Sometimes wonder how long you will be able to continue working with clients?	N	125	193	305	259	168	3.14	1.24
	%	11.9	18.4	29.0	24.7	16.0		
		Patient-related burnout (average) (α=0.92) Moderate					3.09	1.00

Patient-related burnout

As shown in Table 3, patient-related burnout was measured by 6 items and achieved a perfect Cronbach alpha (α=0.92). The overall was 3.09 (1.00) (moderate level). Item 4, achieved the highest mean 3.39 (1.19) (moderate level). It can thus be concluded that patient-related burnout had a moderate level (see Figure 1).

The distribution of the burnout dimensions in terms of socio-demographic factors

As shown in Table 4, the independent t-test and one-way ANOVA test were conducted to measure the differences in the subscales in terms of socio-demographic variables. Post-hoc comparison tests were used when differences occurred for variables with three groups or more.

Females exceeded males in personal burnout (P<.001) and work-related burnout (P<.05) with a small effect size. Participants more than 50 years old reported high burnout for all subscales: Personal and patient-related burnout (P<.001) and work-related burnout (P<.05). Abha city workers reported higher burnout for all subscales (P<.001). The post-hoc comparison test indicated that they statistically differ from other cities, especially from Hail, which had the lowest mean score, with a small effect size. Physicians and nurses reported higher burnout for all subscales (P<.001). Staff who worked in a tertiary care hospital (isolation hospital) reported higher levels of personal burnout (P<.001) and work-related burnout (P<.01), with a small effect size. Workers who had increased work hours because of COVID-19 pandemic had higher levels of burnout for all subscales (P<.001), with a small effect size. Workers who practice self-isolation

and/or work in a clinic designated for diagnosis and treatment of COVID-19 patients had higher burnout scores for all subscales (P<.001).

Table 4 The distribution of the burnout dimensions according to the Socio-demographic factors

Socio-demographic factor		Personal burnout				Work-related burnout				Patient-related burnout			
		M	SD	Statistic (F/t)/P	Eta^2	M	SD	Statistic (F/t)/P	Eta^2	M	SD	Statistic (F/t)/P	Eta^2
Gender	Female	3.58	0.84	5.65***/<.001	0.03	3.47	0.83	8.06*/.01	0.001	3.13	1.02	1.64/.10	0.003
	Male	3.28	0.82			3.32	0.78			3.02	0.97		
Age	20-29	3.51	0.86	8.06***/<.001	0.15	3.42	0.83	3.38*/.02	0.10	3.11	0.99	8.06***/<.001	0.16
	30-39	3.50	0.80			3.44	0.77			3.15	0.99		
	40-49	3.05	0.83			3.16	0.81			2.59	0.98		
	50 and over	3.63	0.85			3.63	0.82			3.43	1.17		
Marital status	Single	3.52	0.85	2.74*/.03	0.10	3.47	0.83	2.45*/.04	0.009	3.19	0.99	3.03*/.02	0.01
	Married without children	3.5	0.88			3.42	0.82			3.1	0.99		
	Married with children	3.43	0.78			3.36	0.76			2.98	0.99		
	Divorced	3.26	1.24			3.22	1.09			2.81	1.34		
	Widower	2.82	0.79			2.92	0.77			2.85	1.07		
Nationality	Saudi	3.49	0.83	2.88**/.004	0.008	3.43	0.81	2.35*/.02	0.001	3.09	1.01	-0.19/.85	0.000
	Non-Saudi	3.19	0.99			3.19	0.85			3.11	0.93		
City	RIYADH	3.36	0.96	3.57***/<.001	0.04	3.28	0.91	3.23***/<.001	0.04	3.10	1.08	4.09***/<.001	0.05
	HAIL	3.26	0.95			3.25	0.90			2.86	0.99		
	AL-QASSIM	3.30	0.71			3.29	0.68			2.69	0.88		
	TABUK	3.21	0.90			3.31	0.83			2.89	1.05		
	AL-JOUF	3.51	0.84			3.49	0.80			3.27	0.93		
	AL-HOFUF	3.56	0.70			3.52	0.70			3.36	0.96		
	DAMMAM	3.57	0.76			3.45	0.82			3.09	1.05		
	ALQATIF	3.66	0.60			3.42	0.65			3.08	0.83		
	NAJRAN	3.55	0.76			3.47	0.72			3.27	0.80		
	JAZAN	3.37	0.76			3.40	0.59			3.33	0.74		
	ABHA	3.96	0.72			4.01	0.73			3.83	0.90		
	MAKKAH	3.56	0.65			3.33	0.64			2.79	0.92		
	AL-MADINAH	3.70	0.71			3.64	0.82			3.15	1.01		
	JEDDAH	3.65	0.96			3.60	0.75			3.12	1.02		
Occupation	Physician	3.60	0.80	23.15***/<.001	0.04	3.55	0.75	19.98***/<.001	0.04	3.22	0.97	12.89***/<.001	0.02
	Nurse	3.57	0.80			3.47	0.78			3.15	0.94		
	Other staff (e.g. Administration, technician, specialist, reception…)	3.21	0.87			3.18	0.88			2.86	1.06		
Type of hospital	Government sector hospital	3.49	0.83	3.09*/.046	0.006	3.43	0.81	1.52/.22	0.003	3.10	1.01	1.07/.35	0.002
	Private sector hospital	3.30	0.89			3.30	0.82			2.97	0.95		
	University clinics	3.51	0.90			3.37	0.81			3.16	0.99		
Work area	Secondary care hospital	3.42	0.85	-3.42***/<.001	0.01	3.37	0.83	-3.42**/<.002	0.009	3.07	1.00	-1.17/.24	0.001

Socio-demographic factor		Personal burnout				Work-related burnout				Patient-related burnout			
		M	SD	Statistic (F/t)/P	Eta^2	M	SD	Statistic (F/t)/P	Eta^2	M	SD	Statistic (F/t)/P	Eta^2
	Tertiary care hospital (isolation hospital)	3.66	0.77			3.57	0.73			3.16	0.99		
Do you work in a clinic designated for diagnosis and treatment of COVID-19 Patients?	Yes	3.70	0.74	7.18***/<.001	0.05	3.63	0.71	7.00***/<.001	0.05	3.32	0.95	6.07***/<.001	0.03
	No	3.33	0.87			3.28	0.85			2.94	1.01		
Have your work hours changed after COVID-19 pandemic?	Increased	3.64	0.81	22.12***/<.001	0.041	3.58	0.75	22.09***/<.001	0.040	3.24	0.99	15.11***/<.001	0.028
	Decreased	3.50	0.77			3.41	0.75			3.18	0.94		
	Did not change	3.26	0.87			3.22	0.88			2.88	1.01		
Working hours	Less than 6	3.42	0.89	7.14**/.001	0.01	3.32	0.78	2.79/.06	0.005	3.05	1.02	0.66/.52	0.001
	6-12	3.43	0.81			3.40	0.82			3.08	1.00		
	More than 12	3.72	0.93			3.55	0.82			3.18	0.97		
Self-isolation practice	Yes	3.59	0.79	5.51***/<.001	0.03	3.48	0.78	5.51**/.001	0.01	3.19	0.97	3.83***/<.001	0.01
	No	3.30	0.88			3.31	0.86			2.95	1.03		

*** P<.001, ** P<.01, * P<.05

Discussion:

In this study, the patient-related burnout level is moderate. However, HCWs engaged in diagnosis and treatment of COVID-19 patients had higher levels. Furthermore, physicians and nurses who have direct contact with patients more than other allied HCWs face elevated levels of job stress. Many studies have shown that physicians and nurses have the highest burnout level, more than other medical staff. [22–25] Work-related burnout was at a high level among HCWs. This result was consistent with a previous study in Portugal.[31] The item with the highest mean was "feeling worn out at the end of the working day". This is probably due to the increased workload. Personal burnout was the highest among HCWs in comparison with work-related and patient-related subscales. This is in accordance to other studies.[30,33] Concerning the associated factors related to burnout, this study highlighted several factors, including that females exceeded males in burnout levels. The reason for this could be explained by biological factors and/or societal position, as risk factors for depression include variation in the hormones levels during menstrual cycle and a women's role in the household.[38,39] Another factor our data revealed was that HCWs who were more than 50 years of age had the highest burnout levels in comparison with other age groups. Likewise, a study conducted on physicians showed a similar result.40 However, HCWs aged 20-29 also had a considerate high level of burnout. Furthermore, single participants had higher burnout levels compared with other marital statuses. A similar study conducted in Saudi Arabia using MBI found emotional exhaustion was higher in single

HCWs.[41] This may be due to the fact that single HCWs may not receive the same emotional support as others, since being surrounded by a supportive environment was found to be a contributing factor in decreasing psychological outcomes.[42,43] Another factor was working in Abha city. HCWs in Abha had the highest burnout levels compared with the other thirteen cities. One study using MBI, explored different burnout levels across Saudi Arabia and found the Eastern region to have the highest score for emotional exhaustion and depersonalization.[41] Another study found the Mecca region had the highest work-related burnout.[23] Although Mecca city had a stable curve in comparison with others,[44] it makes more sense that the Eastern region had the highest score as it was the first to be "hit" by COVID-19 and undertake mass quarantine. However, as this study is cross-sectional, it is difficult to determine any causes. This issue therefore requires further investigation.

Burnout affect HCWs mentally and to some extent physically and eventually lead to poor delivery of care and lower patient satisfaction. This is a serious issue that needs to be addressed before consequences occur, in accordance with the motto that "prevention is better than cure. The World Health Organization has provided helpful recommendations on dealing with mental health during the COVID-19 pandemic.[45] Meta-analysis shows that clear communication and accurate updates about COVID-19 on a regular basis contribute to decreased risk of developing psychological issues. Providing adequate training and protective measures and equipment for all HCWs, coupled with support from team leaders, managers and health authorities, is a key factor in lowering possible mental health problems.[42]

This study was conducted using a non-probability method for survey sample selection as this was the preferred method to collect the data due to insufficient time and because of the need for social distancing during the COVID-19 crisis, which can be considered a limitation. Additionally, not assessing the pre-existing mental health issues among HCWs. Another possible limitation is selection bias, as some HCWs may not have had the time to participate or felt too overwhelmed with pre-existing mental health issues. Further investigation is needed.

Conclusion:

In Saudi Arabia, burnout remains a major problem that challenges our HCWs, many studies were conducted in Saudi Arabia concerning HCWs burnout after pervious outbreaks, however, measures were not taken to avoid future burnouts and HCWs

remained unprotected during COVID-19 pandemic. This study highlights the magnitude of burnout problems among HCWs. Efforts must be commenced by health institutions to support the mental wellbeing of HCWs and stop further damage.

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