# Social and Psychological Stress of Medical Isolation Hospital Workers during the Crisis of COVID-19 Epidemic: A Field Study

### Zakaneaa Khalil (PhD)

Professor of Social Fields, Faculty of Social Work - Helwan University.

### Randa marzouk ali

Researcher at the Department of Social Research at the Ministry of Health Egypt

### Hasnaa Salama Ahmed

Researcher at the Department of Social Research at the Ministry of Health Egypt

## **Aml fawzy Mohamed**

Director General of the General Department of Medical Social Service at the Ministry of Health. Egypt

### Hussien mohammed hussien

Assistant Professor of Social Fields, Faculty of Social Work, Helwan University.

### Shimaa Ali Abu Kamer

Doctor at the Epidemiology and Surveillance Department at the Ministry of Health Egypt

### **Amr Youssef Ali**

Head of the Central Administration for Health Research and Development at the Ministry of Health Egypt

### Abstract:

This study aims to determine the type of social and psychological stress that workers in medical isolation hospitals were exposed to during the novel crisis of the corona virus (COVID-19). Utilizing the social survey method, the study sample consists of 164 workers in some isolation hospitals affiliated with the Ministry of Health in the governorates of Menoufia, Assuit, Fayum and Alexandria. In collecting the required data, the study relied on a questionnaire entitled "social and psychological stress of medical isolation hospitals workers during the emerging crisis of the corona virus (COVID-19)".

The study concluded that the most important social stress faced by workers was the need of 82.40% of the sample to be appreciated by others, 78.42% of them felt that they are neglecting their families, and 76.93% were upset by the inability of their families to meet their needs during their work. The study found that the most important psychological stress faced by workers is 95.001% of the sample felt sad due to the death of some of their co-workers with the corona virus, 89.19% were afraid that their families would be infected through them, 80.74% felt worried about the future of their families, 80.07% were afraid of the ineffectiveness of the vaccine for the novel corona virus, and 79.94% felt helpless when a case they treat dies.

### **Keywords:**

Social stress - psychological stress - workers in isolation hospitals - novel corona virus (COVID-19).

### **Introduction:**

Since the Head of the World Health Organization announced the new corona virus as a global pandemic in March 2020 and the emergence of many infections due to the outbreak of this virus, which has become the most dangerous event in the public health field after SARS virus, that invaded China in 2003. This has required a lot of effort to face and more studies and analyses to overcome this crisis with fewer losses. **Hui (2019)** and **Hassan (2020)** 

According to the World Health Organization, the latest statistics on COVID-19 at the global and Arab levels on 15 September 2021, 219 million confirmed infections were recorded, in addition to a total of 4.55 death cases. Egypt recorded 294000 infected cases and 16.895 deaths. When the virus has out broken and the cases have increased, people have stayed in their homes for fear of infection. On the contrary, health workers have gone to hospitals to help infected people

in their treatment. The health workers who were in contact with COVID-19 patients or who provided them with health care are more vulnerable to being infected than other people. Moreover, about 14% of health workers have suffered from the disease infection that has been reported to the organization. The World Health Organization (2020), Wang et al (2020), Chou et al (2020) and Hatfield et al (2020).

Therefore, health care workers must be taken care of and supported and provided with help since many studies and research have confirmed that these health workers suffer from tension, anxiety, and symptoms of depression, which affected them professionally, psychologically and socially, in addition to a lack of empathy in treating their patients as a result of their unproductivity.

Health care workers in isolation hospitals have many professional, social and psychological stresses during corona virus outbreak, which requires many studies and field research.

Multiple studies have confirmed the existence of great concern about the health workers as the loss of psychological balance reduces their ability to adequately take care of their patients. In addition, there is concern that their families may be infected because of them or because they are more vulnerable to infection. Simone et al (2020) show that health care workers suffer from psychological exhaustion which may sometimes lead to medical and professional mistakes and a lack of empathy in treating their patients as well as low productivity. Waines et al (2018) and Samir et al (2020) concluded that stress rates and psychological exhaustion among doctors are caused due to the purchase of protective materials from their personal money and the presence of harassment from the patients' families. Also, Mohamed et al (2021) confirmed the high level of social problems among women working in public and private medical sectors during the corona virus pandemic. Furthermore, Mahmud (2011) agreed that psychological stress and social responsibility are high among ambulance workers. The study by Verona–Vito University Hospital in Italy proved that the most exposed groups to psychological stress and fatigue are medical sector workers in intensive care units. It also showed that nurses are more pressured than doctors. Lasalvia et al (2021)

In addition, **Zhou et al (2020)** found that the front lines of health care workers in isolation hospitals during the corona virus epidemic in Hobey district and Lyawani district in China suffer from a high level

of social and psychological pressure and sleep disorders. This was confirmed by Zhang et al (2020) through a survey of psychological and social stress related to corona virus outbreak This study which was conducted on medical workers found that 36.1% of the sample suffers from a high level of psychological and social stress. This contrasted with Broderick (2020) who concluded that the total response rate was 47.4%, the level of social fatigue was low and similar in different workers, and only 30.1% showed moderate levels of fatigue. Lasalvia et al (2021) aimed to investigate the risk factors and psychological stress of health care workers (HCWS) who were infected with COVID-19. The study found that the total infection rate was 4.8% in HCW, with 10 out of every 25 health care workers confirmed being diagnosed with covid-19 (8-10). Other two health care workers, who were infected by other patients or colleagues, were transferred. The stresses they were exposed to included psychological stresses (58.3%), anxiety (83.3%), depression (58.3 %) and insomnia (58.3 %). One of the most stresses they were exposed to during the corona virus crisis was close contact with patients and insufficient protection from the main risk factors. The study recommended increasing precautionary measures and psychological support for health care workers. Ben ham (2020) confirmed that helping health care workers manage their responses to these traumatic events has paramount importance in decreasing the risk of developing the disorder.

Card (2021) conducted a survey of (31) participants and (27) participants answered the posed question; more than 70% of the participants were stressed. The objective analysis was used to analyze the stress. The main topics included the effects of physical distancing, shifting duties, workload and real potential virus effects. Younes (2020) showed that the most important pressures facing hospital workers are the weakness of incentives and rewards, and the failure to provide recreational activities for workers in relation to personal stresses. Regarding family stresses, the most important of them were the heavy burdens on the family and the lack of understanding of work conditions by family members. As for psychological pressures, the most important of which was the feeling of boredom from repeating the work, followed by the desire to move to work in another field, and then feeling uncomfortable at work.

Egyptian Journal of Social Work (EJSW) ISSN: 2356-9204

http://ejsw.journals.ekb.eg Vol 14, Issue 1, June 2022

**Medical isolation hospital workers:** The public or private organizations' success to provide the necessary service to citizens, whether this service is health, commercial, educational or other, is based on many other successes. The most important of them is the qualified human element, which is one of the main production factors.

Since the new Corona virus entered the world and was considered a pandemic, people stayed in their homes for fear of virus transmission to them, and the opposite is completely true with the medical team, who had to go to clinics and hospitals to expose themselves to the infection risk. Standing on the first line of defense is Egypt's white army to confront the virus and treat its victims. In isolation hospitals, the doctors, nurses, and other medical personnel work like beehives. Many of them may not get enough physical rest. All of that is for saving a patient's life, however, a lot of workers, on the front lines of the health sector become Corona virus victims. In this context, the categories that the study will be applied to have been identified from workers in some of the isolation hospitals such as physicians, nursing, radiology technicians, laboratory technician and workers.

Based on what was presented in theoretical writings and scientific studies that contributed to determining the variables of the current study, the issue of the current study can be formulated in the following questions:

- 1. What are the social stresses faced by workers in medical isolation hospitals during the Corona virus crisis (COVID-19)?
- 2. What are the psychological stresses faced by workers in medical isolation hospitals during the Corona virus crisis (COVID-19)?
- 3. What are the strategies that reduce psychological and social pressures faced by workers in medical isolation hospitals during the Corona virus crisis (COIVD-19)?

### The importance of the study:

- 1. Determining the type of social stress faced by workers in medical isolation hospitals during the Corona virus crisis.
- 2. Determining the type of psychological stress faced by workers in medical isolation hospitals during the Corona virus crisis.

### **Objectives of the study:**

The current study aims to achieve several purposes, which are as follows:

**The main purpose:** Determining the type of psychological and social stress faced by workers in medical isolation hospitals during the Corona virus crisis.

### Secondary purposes

- 1. Determining the correlation between incentives, rewards, and psychological and social stresses faced by workers in medical isolation hospitals during the Corona virus crisis.
- 2. Identifying the challenges that prevent the workers in medical isolation hospitals from performing their functional tasks during the Corona crisis.
- 3. Defining the strategies and programs that deal with and reduce these stresses.

### **Study hypotheses:**

- 1. There are statistically significant differences due to the demographic characteristics of workers in medical isolation hospitals (social status, age, educational qualification, job, work experience and monthly salary) and between the psychological and social stresses faced by workers in medical isolation hospitals during the Corona virus crisis.
- 2. There are statistically significant differences between incentives, rewards, and psychological and social stresses faced by workers in these hospitals during the Corona virus crisis.

### **Study concepts:**

- 1. Social and psychological stresses.
- A. Social stress means the person's inability to deal with the circumstances surrounding them in the social environment. Severe or persistent stress can lead to psychological and physiological changes, as well as changes in social interactions, where stress affects their relationship with themselves and others as well as their ability to achieve their aim. Elizabeth (2017) and Mette (2015)
  - Dorman & Zapf (2004) add that "Life events are defined as abrupt, severe life changes that require an individual to adapt quickly".
- B. **Psychological stress** is a term derived from the old French word distressed, which refers to the meaning of suffocation, a feeling of distress, pain, injustice, and an undesirable and unpleasant feeling. Psychological stress is a state of intense psychological and nervous tension in an individual that occurs due to factors that put pressure on the individual and create a state of imbalance and behavior disorders. **Saleh et al (2016)** defined social and psychological stress in this study as "the degree to which the respondent obtains on the stress scale in this study."

### C. Levels of stress according to Scott & Elizabeth (2020)

- Acute stress: is a very short-term type of stress that can either be positive or more distressing; this is the type of stress we most often encounter in day-to-day life.
- Chronic stress: is stress that seems never-ending and inescapable, like the stress of a bad marriage or an extremely taxing job; chronic stress can also stem from traumatic experiences and childhood trauma.
- Episodic acute stress is acute stress that seems to run rampant and be a way of life, creating a life of ongoing distress.
- 2. COVID-19: the Ministry of Health & Population states that COVID -19 is a new virus within a large family called corona viruses, which infects the respiratory system. Its severity ranges from the common cold to more serious diseases such as "SARS" and "MERS". Till now, no treatment has been discovered for COVID-19. The Ministry of Health and Population (2020).

Crawford et al (2014) indicate that new viruses which appear and spread in a community cause an epidemic and define it as an "infection [which] occurs in a higher frequency than usual" and may worsen into a "pandemic" if it spreads in several continents at the same time. The different pattern of infectious diseases which spread now depends on several viral factors such as the incubation period and the method of spread, several behavioral factors related to living conditions, travel, as well as the success of any preventive measures.

A study of the **World Health Organization (1997)** indicates that an epidemic is the appearance of a number of cases in a community or region on a larger scale than usual.

### **Methodological Procedures of the Study:**

### 1- Type of the Study:

It belongs to descriptive analytical studies.

### 2- Methodology:

The study used a sample social survey method for workers at an isolation medical hospital.

### **3- Study Tools:**

### To collect the required data the study relied on:

Interviews with officials.

Social and psychological stress questionnaire for the workers in isolation hospitals during corona virus crisis including the following elements: primary data, rewards and bonus, psychological pressures and social pressures. (N=1364)

### **Tool Validity:**

The researchers applied content validity to the tool through the review of the literature and theoretical frameworks, followed by analyzing the literature, research, and studies to determine the different dimensions related to the problem.

The researchers also applied face validity to the tool. They presented the tool to five faculty members at the Faculty of Social Work, Helwan University. Consensus reached 80% on the tool validity. The researchers eliminated some statements and reformulated others, then produced the tool in its final form.

### **Tool Reliability:**

Reliability of the tool: Statistical Reliability of the tool was tested in a sample of (10) individuals from workers in isolation hospitals during the corona virus crisis using the Alpha Cronbach coefficient. The reliability coefficient was (0.88).

### 1. Study fields:

### a) Location Field:

- The exploratory sample has been applied in (El Mounira General Hospital El Abassia Chest Hospital).
- The original sample has been applied in (Sars El Lian Hospital at Menofia, El Ameria Hospital at Alexandria, Assuit Fever Hospital at Assuit and El Fayoum Fever Hospital at El Fayoum

### b) The study population:

- The study population determined includes the total number of workers in isolation hospitals, and their number reached (1364).
- The study population is divided into two groups for two periods, exchanged between them every two weeks.
- A deliberate sample was selected for the first group present in the period from 24/32021 to 24/4/2021.
- The study was applied to all members of the first working group who were in the period from 24/32021 to 24/4/2021. The size is single (1364).

### c) The human field:

The society study consists of (N=1364) individuals, divided into:-

- -(N=654) at Sars El Lian Hospital, at Menofia,
- (N=320) at Assuit Fever Hospital at Assuit,
- -(N=245) at El Fayoum Fever Hospital at El Fayoum and
- -(N=145) El Ameria Hospital at Alexandria). .

### (A) Time field:

The field data collection was conducted from 24/3/2021 to 24/4/2021.

### **Results of the Field Study:**

# First Axis: the primary data found in the results of the study sample: study results (primary data).

### The initial data was as follows: -

- 1. In terms of the type of gender, it came as follows: males with a percentage of (18.62 %) of the total sample of the study while most of the study sample were females with a percentage of (81.38 %) of the total study sample.
- 2. In terms of social status, it was as follows: those who are married with a percentage of (40.84%); While those who are divorced with a percentage of (18.48%).
- 3. The age came as follows: people who are under 30 years old form a percentage of (38.12 %).
- 4. Academic qualifications came as follows: those who have got a diploma/an intermediate qualification form a percentage of (56.67%).
- 5. The job came as follows: being a nurse comes at the first rank with a percentage of (62.46 %).
- 6. The job experience came as follows: At the first rank are those with job experience of 10 years or more, with a percentage of (48.90%).
- 7. The monthly salary was as follows: Most of the study sample had a monthly salary from 2000 to less than 4000 pounds, with a percentage of (81.60%).

# Second Study Axes: Table (1) Axes of the study as a whole (N 1364):

N	Phrases	Sum weights	Average weighty	Standard deviation	The ration percentag	Estimate
					e	
1	Incentives and	16994	2.49	.62	83%	High
	rewards (					
2	Psychological	35663	2.18	.67	72.67	Medium
	stresses					
3	Social stresses	21847	2.29	.64	76.33%	Medium
_	All pressure	122716	2.04	.63	68%	Medium

### The axes of the study were detailed as follows: -

From table No. (1), the responses of the study sample from hospital workers that were allocated for isolation by the Ministry of Health in terms of the study axes came as follows: The highest level is for the axes of incentives and rewards stress with a ratio of (83%), followed by the axes of social stresses with a percentage of (76.33 %) followed by the axes of psychological stresses (72.67).

# 1. Incentives and rewards Table (2) Incentives and rewards (N1364)

			response						
N	Phrases	Alway s	Sometim es	neve r	Total weight s	Weigh t averag e	Standar d deviatio n	Percent e h%	arrangeme nt
1	The salary that I get for the work is enough for me.	73	476	815	3470	2.54	0.59	84.80	2
2	The rewards &incentives system is fair and impartial during the pandemic period.	129	487	748	3347	2.45	0.66	81.79	4
3	The performance evaluation system among employees are fair and satisfactory to all	232	644	488	2984	2.19	0.70	72.92	5

			response						
	Phrases	Alway	Sometim	neve	Total	Weigh	Standar	Percent	arrangeme
N		S	es	r	weight s	t averag	d deviatio	e h%	nt
						e	n		
	I get extra								
4	rewards	126	393	845	3447	2.53	0.66	84.24	3
	when I do								
	extra work.								
	I see that the								
5	financial	49	248	106	3746	2.75	0.50	91.54	1
	incentives			7					
	are								
	commensur								
	ate with the								
	risks of the								

# From table (2), the responses of the study sample of workers in isolation hospitals in terms of incentives and rewards came as follows: -

The general average for the axis was (2.49) at a rate of (83%) which is a high level, and the order of the dimension expressions was as follows: at the first rank was the phrase "I see that the financial incentives are not commensurate with the risks of the profession" with a percentage (91.54%)

### 2. Social pressures

### Table (3) Social pressures (N1364)

			response		Total	Weigh	Standar	Percent	
N	Phrases	Alway	Sometim es	neve	weight s	t averag	d deviatio	e h%	arrangeme nt
		S	es	r	J	e	n		110
1	My relationship s with my friends were affected by the nature of my work.	329	692	343	2714	1.99	0.70	66.32	6
2	I have social burdens that I cannot accomplish	403	824	137	2994	2.20	0.60	73.17	5
3	I feel guilty towards my family.	581	683	100	3209	2.35	0.61	78.42	3

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	1						G. 1		
N	Phrases	Alway s	Sometim es	neve r	Total weight s	Weigh t averag e	Standar d deviatio n	Percent e h%	arrangeme nt
4	I need to be appreciated by others for my efforts.	750	508	106	3372	2.47	0.63	82.40	2
5	I disturb that my family cannot meet their needs while I work.	563	658	143	3148	2.31	0.65	76.93	4
6	I find difficult to communica te with other.	176	806	382	2522	1.85	0.62	61.63	7
7	I am saddened by the death of some of my co-worker with the corona virus	1200	124	40	3888	2.85	0.42	95.01	1
	,	Total		1	21847	2.29	0.64	76.33	% Average

From table No. (3), the responses of the study sample of hospital workers that were allocated for isolation by the Ministry of Health in terms of social pressures were as follows:

The general average of the axis (2.29) with a percentage of (76.33%) is an average.

### 3. psychological stress

Table (4) psychological stress (N1364)

			response		Total	Weig	Standar		
N	Phrases	alwa ys	sometim es	neve r	weigh ts	ht avera ge	d deviati on	percenta ge	arrangeme nt
1	I find difficult to sleep without medication.	110	494	760	2078	1.52	0.64	50.78	12
2	I become afraid of death because of the corona pandemic.	330	570	464	2594	1.90	0.75	63.39	10

ISSN: 2356-9204

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			response		Total	Weig	Standar		
N	Phrases	alwa ys	sometim es	neve r	weigh ts	ht avera ge	d deviati on	percenta ge	arrangeme nt
3	I became worried about my family future.	754	432	178	3304	2.42	0.71	80.74	4
4	I got confused.	357	734	273	2812	2.06	0.68	68.72	8
3	I fear for my family from transmitting the infection to them through me.	1026	263	75	3679	2.70	0.56	89.91	1
5	I feel helpless when a case that I treat died.	679	549	136	3271	2.40	0.67	79.94	5
6	I had panic attack.	178	580	606	2300	1.69	0.69	56.21	11
7	I feel tired at work during a pandemic corona	609	627	128	3209	2.35	0.64	78.42	6
3 5	I feel mentally disturbed.	271	745	348	2651	1.94	0.66	64.78	9
8	I am afraid of getting infection with the corona virus during my work.	820	395	149	3399	2.49	0.69	83.06	3
9	I am afraid of the ineffectiven ess of the corona virus vaccine.	850	417	97	3481	2.55	0.62	85.07	2
1 0	I feel disability in face of the corona pandemic.	373	775	216	2885	2.12	0.64	70.50	7
		Total			35663	2.18	0.67	72.67%	Average

### From table No. (4) the responses of the study sample of Hospital workers that were allocated for isolation by the Ministry of Health in terms of social pressures were as follows:

The general average of the axis as a whole (2.18) with a percentage of (72.76%) is an average level, and the order of the dimension expressions came as follows: at the first rank, the phrase "I am afraid of transmitting the infection to my family" with a percentage of (89.91%), where psychological stress is a result of their fear of transmitting the infection to their families, followed by worrying about their families future. **Janiri et al (2020)** 

However, in the middle rank came the phrase "I feel tired at work during the pandemic" with a rate of (78.42 %). In the last rank came the phrase "it is difficult to sleep without medication" with a rate of (50.78).

The relationship between the specific demographic variables of the study sample of workers in hospitals that were allocated for isolation by the Ministry of Health and population and study axes:

Table (5) the relationship between the specific demographic variables of the study sample of hospital workers that were allocated for isolation by the Ministry of health & study axes. (N=1364)

			Study Axes				
N	Demographic variables	Laboratories Used	Incentives and rewards	Psychological stresses	Social stresses		
1	Gender	Ka2	20.736	**78.321	16.084		
			(df=13)	(df=19)	(df=12)		
2	Social status	Gamma	0.019	0.024	0.029-		
3	Age	Gamma	**0.107	**0.104	**0.089-		
4	Qualification	Gama	**0.109-	**0.076-	0.008		
5	Job	Ka2	**154.403	**219.948	**111.858		
			(df=52)	(df=76)	(df=48)		
6	Job experience	Gamma	0.033	*0.060-	0.009-		
7	Monthly Salary	Gamma	*0.105	**0.181	0.082-		

It is also clear from Table (5) that the relationship between the specific demographic variables of the study sample of workers in the hospitals that were allocated for isolation by the Ministry of Health and the axes of the study were as follows:

It is also clear from Table (5) that the relationship between the specific demographic variables of the study sample of workers in

### the hospitals that were allocated for isolation by the Ministry of Health and the axes of the study were as follows:

- There is a relationship between the gender of the study sample of the hospital workers that were allocated for isolation by the Ministry of Health and the psychological stress axis, as the value of Ka2 = (0.78.321 \*\*), which is statistically significant at a significant (0.01).
- There is a relationship between the age of the study sample of the hospital workers that were allocated for isolation by the Ministry of Health and the axis (incentives and rewards, psychological stress, social pressure) of the nature of work, as the gamma value = (0.107\*\*, 0.104\*\*, -0.089\*\*), which is statistically significant at the level of significance (0.01).
- There is a relationship between the gender of the study sample of hospital workers who were allocated for isolation by the Ministry of Health and the axes of incentives and rewards, psychological stress, and social pressure as the value of Ka2 = (154.403 \*\*, 219.948 \*\*, 111,858 \*\*), which is statistically significant at the level of significance (0.01).
- There is an inverse relationship between the job experience of the study sample of hospital workers that were allocated for isolation by the Ministry of Health and the psychological stress axis as the gamma value = (-0.060 \*), which is statistically significant at the level of significance (0.05).
- There is a relationship between the monthly salary of the study sample of hospital workers that were allocated for isolation by the Ministry of Health and the axes of incentives and rewards, psychological stress as the gamma value = (0.105 \*, 0.181\*\*) which is statistically significant at the level of significance (0.05).

Table (6) The relationship between the axes of the study according to the responses of the study sample of workers in hospitals that were allocated for isolation by the Ministry of Health (N=1364)

N	Phrases	Incentives and rewards	Psychological stresses	Social stresses
1	Incentives and rewards	1	-	-
2	Psychological stresses	**0.187-	1	-
3	Social stresses	**0.204-	**0.596	1

<sup>\*\*</sup> Significant at (0.01)

<sup>\*</sup> significant at (0.05)

Table (6) clarifies the relationship between the study axes according to the responses of the study sample of workers in hospitals that were allocated for isolation by the Ministry of Health came as follows:

- There is an inverse relationship between psychological stress and incentives and rewards. The correlation coefficient value is (-0.187\*\*), which is statistically significant at (0.01).
- There is an inverse relationship between social pressures and incentives and rewards. The correlation coefficient value is (-0.204\*\*), which is statistically significant at (0.01).
- There is a positive relationship between social stress and psychological stress. The correlation coefficient value is (0.596\*\*), which is statistically significant at (0.01).

### **Discussion of Results:**

This study was implemented in 4 isolation hospitals in 4 different governorates. By discussing psychological pressure, it was found that the fear of transmitting the infection to their families came in the first rank, followed by concern about their families' future with a rate of 38% of the participants were less than 30 years old.

The nursing category represented 62%, while the doctors were 19.5%.

It was found through the results that the most psychological pressure experienced by the sample was "the fear of spreading the infection to their families through them as well as the fear for the future of their families". This is consistent with a previous study conducted by Italy, which concluded that the medical team is more vulnerable to infection with symptoms of depression. **Moccia et al** (2020).

This was confirmed by another study conducted by the State of China to prove that the rate of infection of the medical team with disturbance and psychological stress is greater during the phase of COVID -19. Qiu et al (2020)

It was also shown through the results that there is a relationship between psychological stress and each of the job academic qualifications, which was confirmed by a health survey conducted by China on workers on the front line in the health sector. After conducting the survey, it was found that those with lower educational levels felt insomnia and difficulty sleeping without medication more than others with a higher level of education. **Zhang et al (2020)** 

By examining the results of psychological stress, about 78% of the participants in this study have felt tired at work while about 69% stated that they have become confused in thinking, and 64% have felt psychologically disturbed. This was confirmed by another Egyptian study conducted by **Samir (2020)** that discussed the prevalence, accompanying factors and results of fatigue during the COVID-19 pandemic. Note that the study was among doctors only, and its results revealed that about 40% of the participants had fatigue at work and most of them had low personal achievement, and lower rates of respondents recorded high degrees of depersonalization and psychological exhaustion.

This study reveals that among the psychological disorders is that health care workers are afraid of transmitting the infection to their families and concerned for the future of their families. This contrasted with Chaan & Huak (2003) from Singapore who found that unmarried people have a higher risk of stress and psychological disorder than unmarried people during the face of the SARS outbreak.

Moreover, other psychological pressures traced are as follows: 51% had difficulty sleeping which is almost equal to the results of a study in Turkey which showed 50.4% symptoms of insomnia and 60.2% symptoms of anxiety while 77.6 % symptoms of depression. **Kursat et al (2020)** 

A longitudinal study showed that during the outbreak of SARS, health workers were unable to sleep normally during the outbreak and then gradually improved, indicating that their insomnia was related to the infection and stress caused by the outbreak. It is clear that the main source of tension among the medical staff in **Zhang et al's (2020)** study was coronavirus with health care staff at risk of mental health problems due to the massive clinical work during the pandemic and fear of infection.

The results of an online questionnaire in the early stage of the outbreak of COVID-19 at the end of January 2020 in Whan, where the spread of depression, anxiety and insomnia, and symptoms were 5.4%, 4.6%, 71.5% respectively, among the front lines of health workers. In our current study, social pressures occupied the first place where they needed moral appreciation from others towards their efforts to combat the spread of COVID-19 while 76% expressed the inconvenience of their families' inability to meet their needs during the work period. In China, vinegar was used to reduce pressure and

treat the psychological burden of frontline workers in the health sector, Zhou et al (2020).

Therefore, the most important social and psychological pressures of workers in isolation hospitals are presented in the following form:

# The strategies to face social and psychological pressures for workers in medical isolation hospitals:

The ability of health care workers to deal appropriately with stress is important and necessary for themselves, their families, and their patients. Moreover, service providers differ in their levels of psychological resilience and the ability to adapt positively to adversity to protect themselves from psychological stress. (**Dowde et al, 2018**).

Among the proposed strategies and programs to confront the social and psychological pressures for workers in medical isolation hospitals are:

- 1. Taking the distance or walking away: the individual would stop thinking about the stressful situation and do other activities.
- 2. Self-control: by controlling the emotions resulting from the situation.
- 3. Positive reform: By changing the meaning of the stressful situation and giving it another more positive interpretation, which leads the individual to turn threats into challenges.
- 4. Accepting responsibility: that is the individual's acceptance of a stressful situation.
- 5. Avoidance / Escape: such as escaping from a stressful situation or avoiding the distress resulting from the situation.
- 6. Resistance by confrontation: by identifying the problem and searching for alternative solutions, then choosing the appropriate strategy and implementing it.
- 7. Searching for social support: by asking for advice and assistance from others in dealing with a stressful situation
- 8. Planning to solve the problem: planning and problem-solving.
- 9. Attentive handling strategy: by searching for information related to the problem, social bond, social scheme, searching for other means
- 10. Re-evaluating the problem: It is a cognitive strategy that aims to reduce the perceived difference between threats and perceived resources, and thus make the situation bearable.

### **Study recommendations:**

### **Central level recommendations:**

- 1. Establishing a psychosocial support unit in medical isolation hospitals for the medical team to provide psychosocial support to the team.
- 2. Providing the necessary training for the medical team to deal with the Corona pandemic, holding virtual workshops to exchange experiences considering the epidemic, and training on dealing with professional pressures.
- 3. Providing psychological and social support to the medical team through social networking applications in coordination with the Ministry of Communications.
- 4. Making supportive visits from leaders and community symbols to isolation hospitals, honoring them from the ministry and expressing gratitude for the additional burden imposed on them.
- 5. Raising the level of psychological well-being among workers in medical isolation hospitals.
- 6. Training for social and psychological specialists and developing their skills to provide psychological and social support in isolation hospitals.

### Recommendations at the local level:

- 1. Providing a psychologically safe work environment for the medical team to discuss weakness, tension, fatigue, and other obstacles that prevent their safety inside isolation hospitals.
- 2. Providing a fair system for evaluating the announced performance within hospitals.
- 3. Providing psychological first aid and direct psychological support to health care workers who suffer from clinical events.
- 4. The Social Service Department in isolation hospitals performs the following:
  - Forming a volunteer team from the local community to support the medical team inside the hospitals and a team of volunteers to help care for children or the elderly in families that need this from the medical team, especially nursing.
  - Communicating with community leaders, civil society institutions and the private sector to support hospitals and provide them with the necessary medical supplies.
  - Preparing and coordinating campaigns to provide support to the medical team, using social media.

Egyptian Journal of Social Work (EJSW) ISSN: 2356-9204 http://ejsw.journals.ekb.eg Vol 14, Issue 1, June 2022

• Educating citizens about the need to adhere to all the precautionary measures taken to prevent the virus, maintain their safety and reduce the burden on the medical team in isolation hospitals

### **Challenges**:

- 1. Due to the relative recentness of this crisis, there are no published studies available with data about needed interventions to improve mental health and reduce the moral burden, in general, for health care workers facing challenges duringCOVID-19. Suggestions have been presented to reduce the burden on health service providers by researchers for both COVID-19 and other crises. However, there are no studies measuring the same sample before and after COVID-19 to trace mental health or stress in the same individuals.
- 2. As a result of the rapid transmission of infection, the data collection team found many difficulties during data collection.
- 3. The medical staff is preoccupied with cases, especially intensive care cases.
- 4. There is a difference in the official statistics on the number of workers and the actual number when collecting data due to work conditions during the epidemic.
- 5. The respondents were not convinced of the importance of research studies and their benefit.

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