Effect of Emotion Management on Nurses' Job Performance during COVID-19 Pandemic.

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Abstract

Background: During a pandemic, healthcare professionals encounter various health hazards that affect their personal life and workplace. Emotion Management (EM) has a substantial impact on nurses' performance in the healthcare industry. However, previous research studies reported inconsistent findings regarding how different levels of EM affects nurse performance (NP), particularly during pandemics. The present study contributes to the literature on this contemporary topic by investigating the impact of EM on NP among nurses during COVID-19 crisis. **Methods:** In a convenience sampling, 110 nurses from Tala General Hospital, Menoufyia governorate completed an online survey assessing EM and NP during COVID-19 climax levels in March and May, 2020. Only nurses who had direct contact with patients diagnosed with COVID-19 were eligible. Catherine managing emotion scale was used in a cross-sectional design to determine participants' EM. Empirically, NP was measured by the Nurse Performance scale (NPS). **Results:** The results revealed that highest percentages of study subjects described calmness and peace of mind, happiness, as not felt. Their respective percentages were (81.8%), (90.9%). All of study subjects expressed headache and 90.9% expressed nervous feeling. Two third of them were fatigued, and 90% had restless sleep. 45.5% were moderately suppressing their emotion, while 54.4% were moderately burned out. However the results found that all the participants, 100% had competent job performance. **Conclusion:** The finding revealed that nurses working in quarantine are risk for burn out, depression, frustration, and manifestation of anxiety. However job performance not affected by their way of managing emotion. **Recommendations:** Establishing periodical psycho-educational program for nurses and health team to manage the psychological consequences of working with COVID 19 patients.

Key words: COVID-19, Emotion Management (EM), Nurse Performance (NP).

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Introduction:

Nursing is the most important health care provider of primary and secondary prevention against infectious diseases **(WHO, 2020).** Nurses are considered as the leaders in the development of the best patient care practices during crisis and also in case of infectious disease pandemics (**Mohamed& Nawal, 2020)**.

All the world is facing the biggest challenge of COVID-19 outbreak. Nursing profession is a part of the world and facing this unprecedented challenge. **(Graeme, 2020).** As of the first of March 2020, nurses all over the world had been Province to fight against the spread of COVID-19 infection. The front line nurses were the first line of defense against corona virus pandemic through

the care they provide to affected people. They were committed and compassionate with patient but on the other hand they put themselves in great risk for infection **(Catton et al., 2020).**

Nurses are considered the secured hook that integrates all the inter professional teams and communities through different professions or sectors to ensure the effective communication for mitigating risk as to the latest coronavirus global pandemic (**Mohamed & Nawal, 2020**).

In addition, during sudden natural disasters and infectious diseases, nurses will sacrifice their own needs to participate actively in the ant epidemic work and make selfless contributions out of moral and professional responsibility (**Semple et al.,2020).** Also many nurses may stay at hospital providing patient care and doing their duties for long time without taking any off duty times due to the severe shortage of nurses worldwide. Moreover, a big number of hospitals requested nursing staff who were assigned to care for patients with COVID-19. Also, continue working until most of nurses being infected that was only to cover the shortage of nurses **(Baumgaertner and Karlamangla, 2020).**

Nurses' moral injury increases when they don't reach what is medically necessary for their patients. The matter comes worse when these nurses are part of a team that make painful decisions in the triage or the daily rounds about the patient admission and getting a slot to the ventilator**(Law ,2020).**

All over the world, nurses suffered from the impact of COVID-19 on their life, their families and besides the demands for long hours work and concerns about working environment

safety. Many nurses in frontline COVID-19 collapsed due to lack of sleeping while having bruised for using a tightened face mask and a relentless 10-hours shift. Some nurses complained that they could not go to the toilet or drink for more than six hours **(Sabah, 2020).**

Several studies by **Koh (2020), & Rimmer (2020)** have reported that medical staff suffering from depression and anxiety as they are at high risk of exposure to infection , increasing patient volumes and experience even greater pressure when facing infected patients. **Sabah (2020)** reported about a 34-year old Italian nurse who was working with coronavirus patients at the intensive care unit of a hospital in Lombardy, the worst-affected region of Italy, committed suicide after testing positive for coronavirus. The National Federation of Nurses of Italy said that the known cause is that nurses were spreading the infection to their patients, Colleagues and families involuntary.

Disclosed emergency caused by the COVID-19 is putting the health care system under intense pressure and huge burden specifically nurses in significant ways. When nurses are exposed to working environments with high job demands and low resources, higher job stress and greater physical and psychological stress symptoms may adversely affect health and well-being which reflects negatively on their performance **(Chou et al., 2014; Khamisa, Oldenburg, Peltzer, & Ilic, 2015).**

Mohamed & Nawal (2020) emphasized that, it becomes necessary to enhance the "overall productivity effectiveness of nurses". we need to work on raising their capacity to respond to the demand pressure that usually comes with fierce pandemics with minimal errors or

malpractice. This means the nurses' psychological stress needs to be managed while enhancing their preparedness to different types of outbreaks scenarios and raise their 'resilience capacity'.

Despite the nurse's fear and awareness of the seriousness of COVID-19, it is required at the same time to play a great role in reassurance of the patients and decreasing their uncertainty, misinformation, their magnification about the dangers of the disease during the different phases of the illness **(Gilory , & Ford, 2020).**

Studies show that working continuously for long times, similar to what COVID-19 response nurses gone through, can negatively affect their performance. **Liu et al. (2020)** emphasized that maintaining the mental health (emotion and feeling) of nursing staff is essential to a good job performance and control infectious diseases. **Ayanian (2020)** reported that nurses in the front line shown higher levels of severe mental health symptoms than those in secondary roles. Many nurses were suffering from emotional strain and physical exhaustion when caring for growing numbers of acutely ill COVID-19 patients of all ages who have the potential to deteriorate rapidly. Also he reported that the matter becomes worse when the nurse finds his/her co-worker critically ill and sometimes die from COVID-19 while they are caring for their patients.

At the time of the peak of the first wave of the COVID-19 pandemic, the number of patients that required ventilator support exceeds the available intensive care unit (ICU) beds. In general wards beds were rapidly converted to ICU beds. Even general hospitals were transformed to critical care hospitals. This required a training of many nurses on critical care

medicine, and many nurses were transferred to service in different hospitals to fill the gap as it occurs. This represents a crisis to nursing because of sudden dealing with such cases, and this of course affects the performance of the nurses **(Hopman et al., 2020).**

A study by **Corely et al., (2010)** based on the experience of H1N1 in Australia confirmed that it is very difficult to train the frontline health care workers, specifically nurses, to manage admitted patients in ICU during a future pandemic because of the unexpected nature of the event and the unknown type of the virus. Nurses who are concerned about their ability to perform duties during such huge surge, were the ones that might get liable to risk their own and patients health and safety **(Contreras ,2020).**

Law (2020) reported that providing psychological support to health care team could be a key component in the fight against COVID-19. High workload, fear, anxiety and the evolving knowledge about the COVID-19 pandemic, the nurse capacity for detecting errors before happening and preventing or dealing with them is limited and complicated. **Mohamed & Nawal, (2020**) added that, fatigue and stress are the most important and common factors affecting nurses' performance during the COVID-19.

RCN (2020) sees that the human factor is an essential part of nursing care to prevent avoidable errors and patient harm, and to optimize a response based on a captured error. During a pandemic like the COVID-19, nurses need to do a 'situational awareness' and then need to improve their capacity versus demand, to reduce errors, through raising their 'working memory', managing their feeling and emotions.

Significance of the study:

No qualitative studies have been published on how nurses managing their feeling and emotions, therefore, our study aims to assess experience of nurses participating in nursing COVID-19 patients regarding the subjective feeling and emotional management and it is impaction on their performance through semi-structured interviews.

Aim of the study:

This study aims to investigate the relation between job performance of nurses and their way of managing their emotion during pandemic COVID19 through:

1.Assess how do nurses feel grief and burnout in quarantine hospitals during the COVID-19 pandemic

2.Explore the nurses emotional reaction in quarantine hospitals during the COVID-19 pandemic

3.Determine the extent to which nurses manage their emotion in quarantine hospitals.

4.Investigate the relation between level of nurses' job performance and nurses' grief, emotional reaction, and management of their emotions.

Subjects and Method:

Research design: Cross sectional descriptive design was used in this study.

Research Setting: Data collected from Tala General Hospital which affiliated to Menoufeia Governorate. The hospital containing 160 bed from them 70 for isolation and 5 for ICU.

Sample:

Sample size: The estimation of the sample was based on (Krejcie and Morgan, 1970), who published a table to calculate the sample size from a given population (1500). This table was developed on the basis of a formula established by the National Education Association to determine the sample. The total nurses' number in the hospital was 627. The minimum sample needed for the study was 122 nurses from quarantine part selected randomly who agreed to participate in the study.

$$n= \frac{p(1-p)}{(SE \div t) + [p\,(1-p) \div N]}$$

Tools of data collection:

1- Personal data questionnaire including the age, years of experience, level of education, etc…….

2. Emotional management scale which was adopted from "Nurses and Grief questionnaire", it was established by **Catherine (2005)** to assess a particular kind of loss. It consisted of 2 subscales namely: (1)"personal information" which was divided into 7 items (age, educational qualification, years of experience at work setting, level of satisfaction in the current setting, appropriateness of nursing as a profession, attending a training program to improve their performance, and sharing in staff decisions regarding the patient. and (2) "patient loss experiences" which was used to (a) assess grief of non-kind relationships (positive , negative , and agitated affect), (b) assess emotional reactions (anxiety and depression), (c)assess job burnout (chronic grief), (d) assess management of emotion, were used as dependent variables and indicator of

psychological distress among nurses. Chronic grief items include; I feel drained emotionally from my work. I feel used up at the end of the workday. I dread getting up in the morning and having to face another day on the job. My work really puts a lot of strain on me. I feel burned out from my work. My work puts too much stress on me. I feel energized by my work. I feel I'm working too hard at my job. I have good contribution through my work. Feel that I achieved valued and important things through practicing this profession.

Scoring system:

- "Grief" was measured using a 4-point Likert-type scale (1 = did not feel; 4 = felt strongly) with higher scores indicating higher grief intensity.

- Job burnout, "chronic grief", was measured using a 7-point Likert-type scale (1 = never; 7 = almost every day) with a higher score indicating a higher level of job burnout.

-"Depressed mood", was measured using a 4-point Likert-type scale with higher score indicating a higher level of depressed mood. Regarding same scale items (felt hopeful about the future; enjoyed life and felt happy; and felt that you were just as good as other people) were reverse coded, with lower score indicating a lower level of depressed mood.

- "State anxiety", was measured using questionnaire to assess presence or absence of anxiety symptoms.

- " emotion management", the respondents asked how strongly they controlled their reactions and feelings at work, respondents were asked to circle a number from 0 to 4, with 0 = never and 4 = usually.

3. Nurse performance scale, it is consisted of 34 statement distributed in 8 subscales. It is developed by Emin Kahya , Nurten Oral 2018 . The first part is Contextual part consists of 11 items. The second part is professional skills and consists of 4 items. The third part measures clinical skills and consists of 6 items. The fourth item is interpersonal communication and it is formed of 3 items. The fifth part is problem solving consists of 3items. The sixth part professional ethics is consists of 3 items. The 7 items part is team work items consist of 4 items. The last part is leader ship and consists of 4 items. All items are ranged in 5 a likert scale from absolutely not important to very important.

The scale is used to measure nurse performance in a different health organization; its particular strength (overall $\alpha = 0.96$) lies in its ability to measure overall nurse performance in the clinical settings.

Scoring system:

1. Contextual 4.81±1.06

2. Professional skill 6.04 ±0.79

3. Clinical skill 6.14 ±0.85

4. Intercommunication 5.60± 0.90

5. Problem solving 5.42 ±0.98

6. Professional ethics 5.60± 0.91

7. Teamwork 5.60 ±0.95

8. Leadership 4.48 ±1.22

Validity and reliability:

The reliability and validity of the study tools are well established. For the purpose of this study, the tools translated into Arabic language. Five faculty members verified the face and content validity of the translated versions of the instruments. A pilot study with 20 nurses were conducted to ensure internal consistency and reliability of the translated versions of the emotion management and nurse performance tools. The result was 0.86 & 0.97 for both questionnaires.

Ethical Consideration:

Official permissions for collecting data were obtained from the dean of the faculty of nursing Menoufeia university, the director of Tala general hospital before conducting the study. Personal communication was done with nurses to explain the purpose of the study and assure their best possible cooperation. That was done through Zoom Application.

Pilot study: A pilot study was carried out on a 10% of the total sample was drawn from each department to test the instruments and the feasibility of the study. The pilot study done to test the instruments for any inaccuracies. Moreover, to identify any details that need to be addressed before the main data collection goes ahead and enable the researcher to refine the instrument and be assured of the feasibility of the study. A pilot study was excluded from the total number of study sample.

Field of work:

The questionnaire sent through internet and it was filled from them through a period of 3 months, starting from 1 March 2020 to 1 May 2020. The researcher had a meeting on zoom for nurses before starting to collect the data. Through the meeting she explained everything about the objective of the study, its implications for nurses and how to fill the questionnaire on line.

The subjects were chosen after their informed consent was obtained to participate in the study (electronic signature). The researcher reassured the subjects that their privacy would be protected, and that any obtained information would be strictly confidential. The researcher fully informed each nurse that he has the full right to withdraw from the study at any time and each one was given the free opportunity to refuse to participate. These instructions sent on the link of the questionnaire of the study.

Statistical Design:

In this study the emotion management was the predictor factor while the job performance was a criterion variable. Data were analyzed by SPSS statistical software version 20 using descriptive; number, percent, mean and stander deviation as well as inferential statistics (Pearson correlation coefficient and multiple regressions).

Limitation of the study: Difficulty to take official agreement to make any research during this hard time especially in quarantine hospitals.

Shortage of numbers of the nurses participating in the study, as part of the hospital only was for quarantine.

Results:

Table 1 shows socio-demographic characteristics of study subjects. According to this table majority of study subjects (81.8 %) were in the age group 30 - 40 years and their equal percentages (9.1%) of study subjects were in the age group less than 30 years and more than 40 years. Regarding qualifications, the

highest percentage (55.5%) of study subjects were bachelor degree. concerning years of experience majority of study subjects (80%) had years of experience more than five year.

Table 2 illustrates descriptive statistics for the nurse's grief experience. According to this table, there were statistical significant differences among study subjects regarding the intensity of all feelings. Majority of study subjects (62.7%) described sadness as strongly felt. Additionally, highest percentages of study subjects described calmness and peace of mind, happiness, as not felt. Their respective percentages were (81.8%), (90.9%). Moreover, they were moderately annoyed, afraid and aroused with 79.1 and 60.9% respectively.

Table 3 presents descriptive statistics for the nurses' management of emotion. According to this table there were statistical significant differences between study subjects regarding all items of managing emotions. The most frequent item (54.5%) was usually "How often do you try to control your nonverbal reactions at work after a patient dies? " . However, "How often do you pretend to be more affected by a patient death at work than you actually feel?" was the least frequent. Moreover, the three items how often do you conceal true feelings of grief at work from co-workers?, how often do you try to control what you say at work after a patient dies? and how often do you try to hide your feelings at work so that nobody knows? Had equal percentages (45.5%).

Figure1 illustrates percentage distribution of study subjects regarding presence of external stress while facing patient injury / death. According to the figure the highest percentage of study subjects (72.8%) were having external stress.

Figure 2 Illustrates percentage distribution of study subjects having death of family member while facing patient injury / death. According to the figure majority of study subjects (81.8%) didn't have death of family member while facing patient injury / death.

Table 4(a) illustrates that there is more than one third of the study sample reporting bothered by things that don't usually bother them, feeling with depression, slept restlessly, had crying spells with 36.4% for all.

Table 4 b illustrates descriptive Statistics for the nurses' emotional reaction (Anxiety) when a patient dies. According to this table there were statistical significant differences between study subjects regarding nervousness and restlessness feelings. 100% of study subjects expressed headache and 90.9 % had nervous feeling.

Table 5 revealed that about two thirds of the participant has burn out feeling from their work once a week. Nearly half of them have feeling that their work puts lots of strains on them. One third of them have a feeling that they are working too hard at their job.

Table 6 presents total scores of suppressive emotion management, burnout and anxiety. According to the table, there were statistical significant difference between study subjects concerning the mean scores of suppressive emotion management, burnout and anxiety. Their respective Mean ±SD were 18.18 ± 7.17, 2.43 ±9.32 and 12.36 ± 2.43. Moreover, there were equal percentages (45.5%) of moderate and low levels of suppressive emotion management. Regarding levels of burnout majority of study subjects (54.5%) expressed moderate levels of burnout.

However, 100% of study subjects showed low levels of anxiety.

Table 7 presents mean scores of job performance and its domains as perceived by studied subjects. According to the table there were statistically significant differences among study subjects regarding the mean scores of all domains of job performance and the total score.

Table 8 presents percentage distributions of levels of job performance and its domains as perceived by studied nurses. According to the table there were statistical significant differences between study subjects regarding total scores of job performance and the scores of each domain. Regarding levels of job performance, the highest percentages of studied subjects perceived competent level concerning the total score of job performance and the score of each domain.

Table 9 displays correlation matrix of job burnout, grief, depression, suppressive emotion, and job performance. According to the table there were statistically significant positive correlations between job burnout and depression; job burnout and grief. Meanwhile, statistically significant negative correlations were found between grief and suppressed emotion; suppressed emotion and job Performance.

Table 1: Nurses personal information and organizational work environment (n=110).

Variable	Frequency	%
Age in years	10	9.1
< 30 years	90	81.8
30 – 40	10	9.1
> 40	**32.6±10.4**	
Mean±SD		
Educational qualification		
Secondary nursing education	2	1.82
Bacuulare of Nursing	10	9.09
Master degree in nursing	61	55.45
Doctorate degree in nursing	37	33.64
Years of experience at work setting		
‹ 5 year	22	20
› 5year		
Mean±SD	88	80
	6.1±2.7	
Level of satisfaction in the current setting.		
Satisfied	22	20
Moderately satisfied	66	60
Not satisfied		
	22	20
Appropriateness of nursing as profession	22	20
Appropriate	55	50
Appropriate to some extent	33	30
Not appropriate		
Attending a training program to enhance you performance		
YES	110	100
	0.00	
NO		0.00
Sharing the staff in decision making regarding the patient		
YES	77	70
NO	33	30
Characteristics that make difficulty in dealing COVID-19 patient	30	27.28
Patient age	10	9.09
Cause of death		
Patient family	40	36.36
Kind of care provided to the patient		
	30	27.28
Social support at place of employment after a patient death		
Talking with your co-workers	60	54.54
Talking with your supervisor.	10	9.09
Taking a break to yourself		
Others	20	18.19
	20	18.19

Table 2: Descriptive Statistics for the Nurses Grief Experience (n=110).

Item	Strongly felt		Moderately felt		Mildly felt		Not felt		Chi- square	
	No	%	No	%	No	%	No	%	Chi	P
Positive affect										
Calm,Delighted	0.00	0.00	16	14.5	4	3.6	90	81.8	118.33**	0.001
Happy,Pleased,Glad	0.00	0.00	6	5.5	4	3.6	100	90.9	164.15**	0.001
Relaxed	0.00	0.00	5	4.5	25	22.7	80	7.72	82.27**	0.001
At Ease Relieved	0.00	0.00	35	31.8	25	22.7	50	45.5	8.64*	.013
Satisfied	0.00	0.00	5	4.5	25	22.7	80	7.72	82.27**	0.001
Negative affect										
Tense	0.00	0.00	57	51.8	33	30.0	20	18.2	19.22**	0.001
Grief	69	62.7	21	19.1	10	9.1	10	9.1	86.44**	0.001
Anxious	10	9.1	56	50.9	44	40.0	0.00	0.00	31.06**	0.001
Depressed	0.00	0.00	6	5.5	44	40	60	54.5	41.96**	0.001
Miserable	0.00	0.00	6	5.5	4	3.4	90.9	100	164.15**	0.001
Guilty	0.00	0.00	15	13.6	5	4.5	90	81.8	117.73**	0.001
Tired	30	27.3	49	44.5	12	10.9	19	17.3	28.40**	0.001
Agitated affect										
Afraid, Annoyed	0.00	0.00	87	79.1	3	2.7	20	18.2	107.58**	0.001
Excited	0.00	0.00	46	41.8	24	21.8	40	36.4	7.06**	.029
Aroused	0.00	0.00	67	60.9	33	30.0	10	9.1	44.86**	0.001
astonished	0.00	0.00	36	32.7	24	21.8	50	45.5	9.24*	.010
Frustrated	0.00	0.00	6	5.5	24	12.8	80	72.7	81.24**	0.001

** Significant level at p ‹ 0.001   * significant level at p ‹ 0. 05.

Table 3: Descriptive Statistics for the nurses' management of emotions.

Item	Never		Rarely		Sometimes		Usually		Chi- square	
	No	%	No	%	No	%	No	%	Chi	P
How often do you deny, ignore, or cover up feelings of grief at work over a patients' death?	30	27.3	20	18.2	40	36.4	20	18.2	10.00*	.019
How often do you pretend to be more affected by a patients' death at work than you actually feel?	70	63.6	30	27.3	10	9.1	0.00	0.00	50.91**	0.001
How often do you conceal true feelings of grief at work from co-workers?	20	18.2	20	18.2	20	18.2	50	45.5	24.55**	0.001
How often do you pretend to be unaffected by a patients' death while at work?	40	36.4	20	18.2	40	36.4	10	9.1	24.55**	0.001
How often do you try to look sad or upset at work when interacting with a patients' family after a death?	70	63.6	20	18.2	10	9.1	10	9.1	90.00**	0.001
How often do you try to control what you say at work after a patient dies?	0.00	0.00	20	18.2	40	36.4	50	45.5	12.73*	.002
How often do you try to control your nonverbal reactions at work after a patient dies?	10	9.1	20	18.2	20	18.2	60	54.5	53.64*	0.001
How often do you try to control your feelings at work so that nobody knows how you really feel after a patient dies?	20	18.2	20	18.2	30	27.3	40	38.4	10.00*	.019
How often do you try to look sad or upset at work when interacting with your needed co-workers after a death?	40	36.4	50	45.5	10	9.1	10	9.1	46.36**	0.001
How often do you try to hide your feelings at work so that nobody knows?	10	9.1	30	27.3	20	18.2	50	45.5	31.82**	0.001
How often have feelings over the death of a patient made you feel like you needed to change where you worked (i.e. units/clinical settings)?	20	18.2	20	18.2	30	27.3	40	36.4	10.00*	.019
How often have feelings over the death of a patient made you feel like you needed to change your career choice?	20	18.2	30	27.3	40	36.4	20	18.2	10.00*	.019

Figure 1: percentage distribution of study subjects regarding presence of external stress while facing patient injury / death.
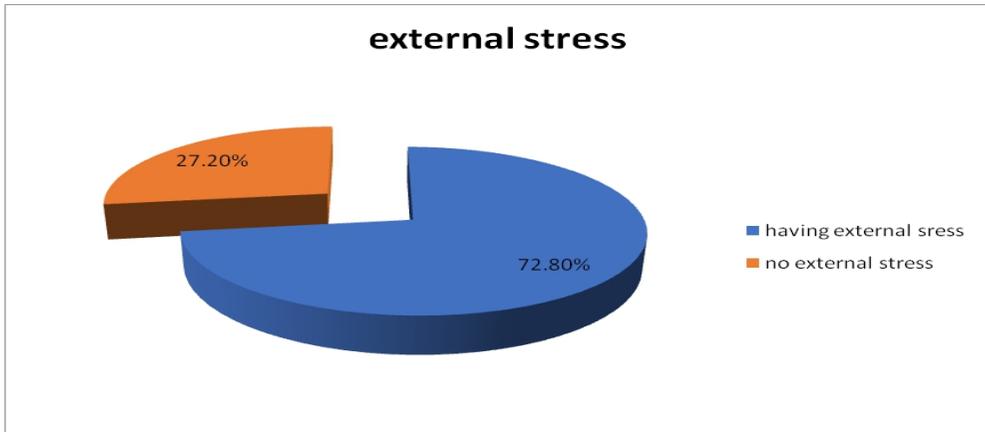

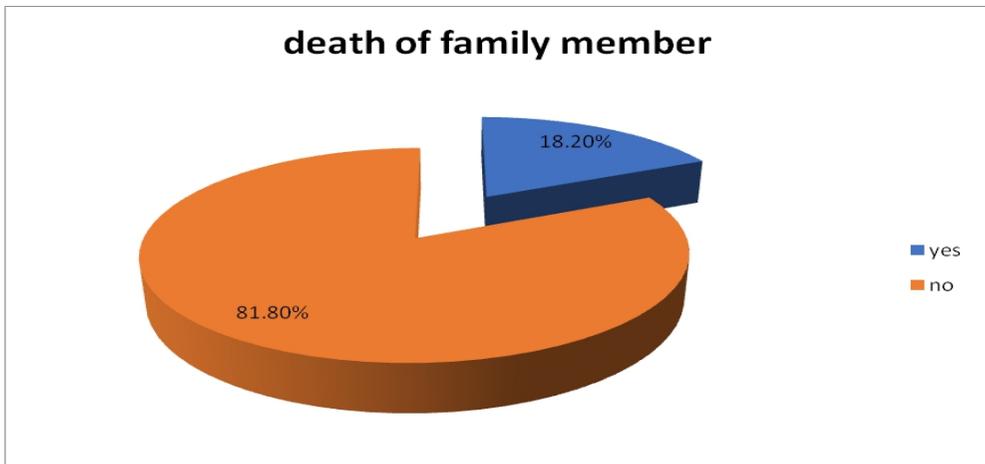**Figure 2.** percentage distribution of study subjects having death of family member while facing patient injury / death

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Table 4: Descriptive Statistics for the nurses' emotional reaction when a patient dies.

A.   **Depression**

Item	Never		rarely		Sometimes		Usually		Chi- square	
	No	%	No	%	No	%	No	%	Chi	P
Depression Become bothered by things that don't usually bother you.	0.00	0.00	60	54.5	40	36.4	10	9.1	34.5**	.001
Not felt like eating or you had a poor appetite	60	54.5	30	27.3	20	18.2	0.00	0.00	23.6**	.001
Had trouble keeping your mind on what you were doing?	0.00	0.00	80	72.7	30	27.3	0.00	0.00	22.7**	.001
Felt depressed?	30	27.3	40	36.4	40	36.4	0.00	0.00	1.8	.403
Felt that everything you did was an effort	0.00	0.00	70	63.6	40	36.4	0.00	0.00	8.1	.004
Slept restlessly?	20	18.2	50	45.5	40	36.4	0.00	0.00	12.7	.002
Felt that people were unfriendly	20	18.2	60	54.5	10	9.1	20	18.2	8.1	.004
Had crying spells?	20	18.2	30	27.3	40	36.4	20	18.2	12.7	.002
Felt sad?	10	9.1	70	63.6	20	18.2	10	9.1	53.6**	.001
Felt that people disliked you?	40	36.4	50	45.5	10	9.1	10	9.1	50.9**	.001
Not seemed to be able to "get going"?	30	27.3	50	45.5	20	18.2	10	9.1	10.0	.019
Felt that you could not shake the blues even with help from family and friends?	50	45.5	30	27.3	20	18.2	10	9.1	90.0**	.001
Thought your life had been a failure?	50	45.5	40	36.4	20	18.2	0.00	0.00	46.3**	.001

Table 4: Descriptive Statistics for the nurses' emotional reaction when a patient dies.

B. **Anxiety.**

Feelings	Frequency Yes		No		Chi- square	
	No	%	No	%	Chi	P
I suddenly felt intense panic / fear for no reason	40	36.4	70	63.6	8.18	.004
I felt scared	50	45.5	60	54.5	.91	.340
I felt dizzy or faint	50	45.5	60	54.5	.91	.340
I felt nervous	100	90.9	10	9.1	73.64**	.001
I felt my heart beat fast	70	63.6	40	36.4	8.18	.004
I felt shaky	40	36.4	70	63.6	8.18	.004
7-I felt irritable	70	63.6	40	36.4	8.18	.004
I felt Headache	110	100.0	0.00	0.00		
I felt restless, I couldn't sit still for a while	90	81.8	20	18.2	44.55**	.001

Table 5: Descriptive Statistics for the job burnout.

Item	Never		less one time/month		one time/Month		Sometimes /month		one time/Week		Sometimes /week		Everyday	
	No	%	No	%	No	%	No	%	No	%	No	%	No	%
Item 1	0.00	0.00	20	18.2	30	27.3	0.00	0.00	40	36.4	10	9.1	10	9.1
Item 2	0.00	0.00	40	36.4	0.00	0.00	0.00	0.00	40	36.4	0.00	0.00	30	27.3
Item 3	0.00	0.00	20	18.2	0.00	0.00	0.00	0.00	40	36.4	20	18.2	30	27.3
Item 4	10	9.1	0.00	0.00	10	9.1	0.00	0.00	50	45.5	30	27.3	10	9.1
Item 5	10	9.1	0.00	0.00	20	18.2	0.00	0.00	70	63.6	10	9.1	0.00	0.00
Item 6	0.00	0.00	20	18.2	20	18.2	0.00	0.00	30	27.3	40	36.4	0.00	0.00
Item 7	10	9.1	30	27.3	30	27.3	0.00	0.00	20	18.2	10	9.1	10	9.1
Item 8	40	36.4	0.00	0.00	20	18.2	0.00	0.00	20	18.2	30	27.3	0.00	0.00
Item 9	0.00	0.00	20	18.2	10	9.1	0.00	0.00	50	45.5	10	9.1	20	18.2
Item 10	0.00	0.00	10	9.1	0.00	0.00	0.00	0.00	60	54.5	40	36.4	0.00	0.00

Table 6: Total scores of suppressive emotion management, burnout and anxiety.

Variable	High		Moderate		Low		T	P
	No	%	No	%	No	%		
Suppressive Emotion Management	10	9.1	50	45.5	50	45.5		
Mean ±SD	18.18 ± 7.17						26.61**	0.001
Burnout	0	0	60	54.5	50	45.5		
Mean ±SD	2.43 ±9.32						38.84**	0.001
Depression	0	0	0	0	110	100		
Mean ±SD	12.36 ± 2.43						53.32**	0.001

Table7: Mean scores of job performance and its domains as perceived by studied subjects.

Job performance	Mean	± SD	T	P
1. Work context	46.18	4.55	106.46**	.001
2. Professional skills	18.27	2.31	82.95**	.001
3. Clinical skills	27.36	4.27	67.24**	.001
4. Communication	12.91	2.51	53.85**	.001
5. Problem solving	14.09	1.32	112.21**	.001
6. Professional ethics	13.91	1.94	75.30**	.001
7. Team work	16.91	3.60	49.32**	.001
8. Leadership	17.36	3.07	59.37**	.001
Total job performance score	167.00	19.27	90.89**	.001

Table 8: levels of job performance domains as perceived by studied nurses.

Domains of job performance	Levels of job performance						Chi-square	P
	Competent ≥ 75%		Good 60%- 75%		Bad < 60%			
	No.	%	No.	%	No.	%		
Work context	90	81.8	30	27.3	0.00	.00	49.09**	.001
Professional skills	100	90.9	10	9.1	0.00	.00	49.09**	.001
Clinical skills	90	81.8	20	18.2	0.00	.00	49.09**	.001
Communication	80	72.7	20	18.2	10	9.1	53.64**	.001
Problem solving	100	90.9	10	9.1	0.00	.00	60.91**	.001
Professional ethics	100	90.9	10	9.1	0.00	.00	78.18**	.001
Team work	80	72.7	10	9.1	20	18.2	21.8**	.001
Leadership	80	72.7	30	27.3	0.00	.00	23.64**	.001
Total job performance scores	100	90.9	10	9.1	0.00	.00	28.18**	.001

Table 9: Correlation matrix of Job burnout, grief, depression, suppressive emotion, and job performance.

Items		Job burnout	Depression	Grief	Suppressed emotion	Job performance
Job burnout	R		.427**	.356**	-.005	-.012
	p-value		.001	.001	.957	.898
Depression	R	.427**		.172	.122	.164
	p-value	.001		.072	.204	.086
Grief	R	.356**	.172		-.370**	.110
	p-value	.000	.072		.000	.251
Suppressed emotion	R	-.005	.122	-.370**		-.581**
	p-value	.957*	.204	.000		.000
Job performance	R	-.012	.164	.110	-.581**	
	p-value	.898	.086	.251	.000	

Discussion:

The primary objective of this study was to explore the EM among nurses who had direct contact with inpatients diagnosed with novel COVID-19. The secondary objective was to explore the effects of EM on NP when dealing with such a crisis.

In current study most of participant ages are from 30-40 years old and majority of them having bachelor degree.

Nearly above two thirds of them are moderately satisfied about nursing profession. The findings dis agree with a study made by **Leodoro etal., (2020)** revealed that nurses in front lines of a COVID-19 pandemic had lower job satisfaction. This could be related to their cultural and religious factors which look at the non-satisfaction as a lack of faith, as said in holy Quran zone 59 surah **AlTawba**. "if only they had been satisfied with what Allah and his Messenger gave them and said" sufficient for us is Allah ; Allah will give us of his bounty" . More over the satisfaction could be related to personal resilience (**Bloom et al., 2017**).

In relation to intensity of emotion of grief. Most of the negative emotion related to the grief (fear, stress, anger, anxiety and fatigue) are moderate with P=0.0001. For the positive emotion (happiness, easiness, and calmness) are not felt representing nearly all, and nearly three quadrants respectively. This result agrees with (**Maben 2020**), as frontline nurses are directly contacting with patient, their risk of contracting COVID–19 is higher than the general population. This could increase their negative feelings of fear, anxiety and anger of being infected or unknowingly infecting others, including their family members or friends. Further, pandemic-related concerns such as increased patient numbers and patient load, provision of coronavirus-related precautions, social distancing and community quarantine can intensify fatigue among nurses, which has an impact on their psychological and emotional well-being and their work performance.

Moreover, the results revealed that nearly three quadrant of nurses have external stress related to infected and died cases of COVID–19. This could be related to nature of aggression of COVID–19 as till now no treatment,

method of infection are numerous, controlling spread of infection has complicated steps and this increases stress upon them. Hence, for grief feeling, about three quadrants of the nurses have no feeling with calmness and peace of mind, and nearly all of them have no happiness. This agree with **pouralizadeh etal., 2020** who stated that working in COVID19 designated hospitals were risk factors for anxiety, feeling with distress and unhappiness.

For suppressing emotion the results revealed that nearly more than three quadrants of nurses have mild and moderate suppressing emotion. For example, control what you say at work after a patient dies and hiding their emotion after death of one patient. This result agree with a study made by **Gross, 2002** which revealed that nurses are feeling negative emotions while performing their nursing practice, they may make sure to not express these emotions and pretend that they are not bothered by them.

In relation to nurses' depressed emotion when patient dies, two third of the study sample had depression, specifically about two thirds of them had feeling of sadness. Nearly half of them slept restlessly and more than half of the nurses became bothered by things they did not bother by themselves before. About two thirds of them had feeling with fatigue. These results agree with a study made by (**Pouralizadeh et al., 2020**) which revealed that female gender nurses , being suspected of having a COVID-19 infection, and not having access to adequate personal protective equipment were the factors associated with depression and anxiety. Also, in the current study about three quadrants of them faces external stress. These stressors **Zhu et al., 2020** revealed them as during the Coronavirus outbreak, causes of stress

and anxiety among health care providers were related to a higher prevalence of the virus, the transmission from human to human, as well as the high fatality of the virus (**Dai Y, 2019**). In addition, the increasing numbers of suspected and actual cases of COVID-19 and shortages of supplies leads to the double pressures and concerns of health care providers. Studies have also shown that nurses are afraid of spreading the infection to their families, colleagues, and friends (**Du Toit, 2020**).

In addition to depressed mood of nurses, more than two thirds of them have feeling of burn out one time a week. Burnout is perceived as increasing recognition as a serious problem among medical professionals (**WHO, 2020**). At the same time, nurses would be in a state of physical and mental stress and feel isolated and helpless in the face of health threats and pressure from the high-intensity work caused by such public health emergencies (**Kang et al., 2020**). However about many times per week two third of nurses enjoyed their life and felt happy some times. This could be related to what stated by half of them as (I feel that I achieved valued and important things through practicing this profession). Based on the previous the nurses job performance was high with p= 0.001.

In relation to anxiety, there was highly significant increase in anxiety symptoms among studied nurses. It represented in complaining of headache (all the study sample), irritability and restlessness with p=0.004& 0.000 respectively. This result agrees with Alwani et al., 2020 who stated that among health care workers, nurses were reported to experience the highest anxiety levels and the highest prevalence of anxiety, ranging from one fifth to more than four fifth. The main source of anxiety among nurses during the COVID-19 pandemic

was fear of infection or unknowingly infecting others (**Mo et al., 2020**). Shanafelt, Ripp, and **Trockel, 2020** determined other sources of anxiety in nurses, including lack of personal protective equipment (PPE), fear of harboring the novel coronavirus at work, lack of access to COVID-19 testing, fear of transmitting the virus at work, doubt that their institution would support them if they became infected, lack of access to childcare facilities during lockdown, fear of being deployed in an unfamiliar ward or unit and lack of accurate information on the disease.

The study also revealed that the highest percentages of studied subjects perceived competent level concerning the total score of job performance and the score of each domain with p=0.001. Hence no studies have shown the job performance of nurses during COVID-19, we could regard increase and competent level of job performance of nurses in this study to their high job satisfaction previously mentioned. Nearly above two thirds of them are moderately satisfied about nursing profession. That result agrees with a study made by **Okab ,2017** who stated that level of job performance could be attributed to the effect between job satisfaction and quality of job performance.

The result revealed that there is statistically significant negative relation between suppressed emotion and job performance. This result agree with a study made by **Yeung, D. et al., 2012** who stated that the use of suppression may help the individual to decrease the behavior manifestation of negative emotion but not reducing them and high level of stress is found. They added that this suppression results in negative job performance and impair personal relation as they consuming ones power **Gross, 2003**.

Conclusion:

The finding revealed that nurses working in quarantine are risk for burn out, depression, frustration, and manifestation of anxiety. However job performance not affected by their way of managing emotions. Meanwhile, statistically significant negative correlations were found between grief and suppressed emotion and job Performance.

Recommendations:

➢ Another study needed to be done for assessing job performance and emotional intelligence among nurses during pandemic COVID 19.

➢ Establishing periodical psycho-educational programs for nurses and health team to manage the psychological consequences of working with COVID 19 patients.

➢ Assessing the psychological resilience of the nurses before selecting in working in isolating hospital.

Conflict of interest:

There is no conflict of interest and no fund from any institution.

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