Long Paper

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination Program

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Abstract

As frontline workers against COVID-19, Healthcare Workers serve as vaccinators of COVID – 19 vaccines among the eligible population. In addition to the stress brought by caring for COVID-19 patients, healthcare workers need to balance themselves to render services as vaccinators. Being exposed to COVID-19 patients, healthcare workers are prone to physical and psychological stressors affecting their mental health. The research answered the queries concerning the stress management practices among healthcare workers during the COVID19 Vaccination program in selected municipalities of Eastern Pangasinan. The study found out that since females dominate the healthcare profession, it is noteworthy that most of the respondents belong to the most dominant gender; young adults who finished their bachelor's degree were employed for 1 – 3 years in the schools and were used as Nurses. Healthcare workers practice stress management techniques and stress coping mechanisms. The stress management practices of healthcare providers in COVID-19 vaccination are moderately affected by the factors presented. The respondents have a perception of stress management practices across their profiles. Therefore, there are no significant differences between the stress management practices among healthcare workers in the COVID-19 vaccination program in selected municipalities of Eastern Pangasinan across their profiles. Hence, the null hypothesis is accepted.

Keywords – COVID-19, stressors, healthcare workers, stress management, vaccination

INTRODUCTION

It is widely accepted that nurses, like many others in the caring professions, have mastered the art of anticipating and attending to the physical and emotional needs of others. Unfortunately, nurses tend to forget how to look after themselves and each other. While there is no doubt that nursing is an outstanding career with many challenges and intensely rewarding experiences, it is also a fact that in their daily work, nurses confront emotional and professional demands that are unimaginable to the broader community.

Let's face it: spending your working life taking responsibility for the quality of people's lives and their deaths is a heavy burden, even for the broadest of shoulders. Nurses have a habit of putting the needs of our patients ahead of our own. The community regards us as harsh, able to cope in all situations, resilient, always caring, loyal to our patients, dedicated, committed, and so on. Society, managers, organizations, and sometimes ourselves put these expectations on us. How do we as nurses react to these demands, what choices do we have, and how do we put ourselves first?

In the same way, as mental health issues have struggled to make it on the broader social plan, they're also struggling to make it on the agenda at work. The profession has made a lot of progress in managing many of the physical risks associated with our work: we use safe lifting techniques; we've adopted universal precautions and many other practices to ensure our physical safety at work. Unfortunately, we haven't made the same level of progress where hazards to our mental health are concerned. One of the most significant risks nurses faces in their work is stress (Jennings, 2020).

Essentially, stress is the emotional and physical response you experience when you perceive an imbalance between demands placed on you and your resources at a time when coping is essential. It means that you experience stress whenever you are faced with an event or situation that you perceive as challenging to your ability to manage. If you see what circumstance or condition as only mildly challenging, you will probably feel only a little stress; however, if you perceive the situation or event as threatening or overwhelming your coping abilities, you will probably feel a lot of stress.

This study will highlight signs and symptoms indicating when stress might be a problem. It aims to offer some skills and strategies to assist in overcoming some of the pressures associated with nursing work. Inevitably nurses find themselves in situations where the source of their stress is challenging to eliminate, like finding that extra nurse to cover the shift, stopping that additional patient from turning up on the ward, or not having enough experienced staff rostered on the shift. Frustrating as it may be, there are some sources of stress that we have limited ability to change, and this can lead to people feeling stressed, anxious, angry, and depressed.

LITERATURE REVIEW

Nurses have roles to perform in the global health emergency. Nurses are ready to provide systematic, humane, ethical, and holistic care that covers biopsychosocial aspects of care. Most theories have been introduced, and their constructs are used and become relevant to the current situation.

According to Dorothea Orem who developed the theory entitled "Theory of self-care deficit," supported/composed by three other theories: self-care theory, self-care deficit theory, and nursing systems theory. They correlate, intending to give a whole meaning to the idea. Self-care is the individual's ability to perform actions for their benefit. When it is not entirely accomplished or when the demands exceed the individual's basic skills concerning the activities, the self-care deficit is characterized by consequent demand for nursing action (Orem, 2001). The Nursing Systems Theory expose nursing actions according to the patient's needs, so there are three possible classifications: Compensatory System, when the patient depends entirely on the nurse's actions; Partially Compensatory System, when the patient is partially dependent, showing a partial ability to develop some activities that provide them with self-care; and Support-Education System, when the patient can carry out self-care, the role of the nurse regarding the guidelines being preeminent.

Based on Nurse Callista Roy's adaptation model, the four meta paradigms common to other nursing theories: the assumptions related to the person, the environment, health, and nursing. As for the person, the theorist states that the person is submitted to a scheme that includes the stimulus, which generates the coping mechanisms and results in the response of the individual, family, or community, which ends up supporting another inspiration (Roy, 2008). Detailing this scheme, Roy observed that triggers could be of three types: focal, contextual, and residual. Therefore, in the context of the Coronavirus pandemic, the correct management of focal stimulus is necessary, covering the signs and symptoms of respiratory infection, such as fever, dry cough, and fatigue, among other symptoms that signal worsening of the case, such as severe dyspnea (Salviano et al., 2020).

In times of pandemic, this acknowledgment is necessary because the population that does not participate in essential services supports measures of control when it fulfills social isolation. In contrast, in the scope of essential services, health professionals, for example, legitimate their functional importance when they perform their duty with technical skills and humanization (Rafael, 2020). The coping mechanism of the interdependence mode brings the affective demands of everyone. In fact, with the proposal of social distancing, it is common to observe anguish in the community, which has a peculiar request to relate to complete well-being.

Therefore, it is through the answers that the nurse can identify the individual's coping mechanisms. Therefore, interventions are designed to obtain adaptive responses. Thus, considering this problematic situation in world health, a nurse who seeks appropriate actions needs to consider the constructs of Dorothea Orem (Systems Theory), Florence Nightingale (Environmental Theory), and Callista Roy (Adaptation Theory). Through these theories, nurses can carry out their sworn duties more effectively.

METHODOLOGY

Research Design

The study used a descriptive survey method. Descriptive survey method involved collecting data to answer the queries concerning the stress management practices among healthcare workers engaged in the COVID-19 vaccination program in selected municipalities of Eastern Pangasinan. According to Polit and Beck (2003), the descriptive method describes the nature of the phenomena under investigation after surveying current trends, practices, and conditions related to the phenomena.

Research Locale, Participants, Population, and Sample Size

The research locale were the healthcare workers in the COVID-19 vaccination program in selected municipalities of Eastern Pangasinan. EPDH – 14, San Nicolas RHU – 23, Tayug RHU – 21, CFERMTC – 24, RHU Rosales 19, Tayug Family Hospital – 5. The total number of vaccinators in the Rosales, Tayug, and San Nicolas municipalities is 107; the researcher has included them all as respondents. The researcher chose these municipalities due to their accessibility.

Research Instrument and Data Gathering Procedure

This study mainly used a survey questionnaire as the primary data-gathering tool. It contained three (3) parts. The first part consists of the profile of the respondents as to age, sex, civil status, position, length of service, and COVID – 19 Vaccination roles. Part II of the questionnaire included stress management practices of COVID-19 vaccinators. Regarding physical, mental, spiritual, and social aspects, Part III of the questionnaire had the factors that affect the stress management practices of the respondents. The survey questionnaire was self-made and was further validated by experts in the field of nursing and research. The distribution of the questionnaire was on a face-to-face basis. The researcher followed all the Inter-Agency Task Force (IATF) health protocols. The data gathered was tabulated and treated with statistical formulas.

Data Analysis

This study employed mean, percentage, and t-test in analyzing the data. Frequency and percentage were used to determine the profile of the age, sex, civil status, position, and length of service, COVID – 19 Vaccination roles. It provides an answer for specific problem which included stress management practices of COVID-19 vaccinators as to physical, mental, spiritual, and social aspects, and the factors that affect the stress management practices of the respondents, the average weighted mean was employed.

RESULTS AND DISCUSSION

Respondents Profile

Age. Most respondents are in the age bracket of 21-39, with a frequency of 87 or 79.8%, and 40-65, with a frequency of 22 or 20.2%. It revealed that the respondents were young adults. According to Erickson, young adulthood is between the ages of approximately 18 to 40. During this stage, the major conflict centers on forming intimate, loving relationships with other people.

Gender. Most respondents are females, with 74 or 67.9%, Compared to the males, with 35 or 32.1%. It implies that the nursing profession is still female-dominated. The study corroborates with the findings of Barrett and Landau (2020) that nursing has been reported as a feminine discipline ever since the appearance of the Nightingale nursing training style in the mid-nineteenth century, which favored women over men to become nurses. It is noted that both males and females are equal, where women can enter occupations for men and vice versa. With the low gender inequality in other occupations, like medicine, law, and business, nursing is still a female-dominated profession. In 2019, the United States accounted for 12 % of male nurses, while there were 2.7% in 1970.

Civil Status. The majority of the respondents were married, 55 or 50.5%; single, 49 or 45%; separated, 2 or 1.8%; and widower, 3 or 2.8%. The findings correlated with the study of Abrigo and Ortiz (2019) that the proportion of married dentists, optometrists, and opticians increased over the last twenty-five years. It implies that the respondents are in marital relationships and have their own families.

In 1990, 60 percent of dentists and 69 percent of optometrists and opticians were married. The married rates increased to 74- and 78- percent, respectively, in 2015. On the other hand, the proportion of never-married healthcare workers is growing among other cadres. The increase over the last twenty-five years is highest among nurses (+21% points), physiotherapists (+15% points), and pharmacists (+14% points). These observations reflect the age distribution of the different cadres, as well as selective entry and exit into local employment among these professions.

Highest educational attainment. Most respondents were bachelor's degree holders,90 or 82.6%; master units,11 or 10.1%; MA/MS graduates, 6 or 5.5%; and doctoral graduates, 2 or 1.8%. It implies that the respondents did not pursue their continuing professional development by enrolling in the post-graduate program. Leider et al. (2015) found that most employees in governmental public health departments do not have formal training in public health. Most do have college degrees than other government areas. Less than half the workers reported a public health degree. Bachelor's degrees in public health appear to be growing among the population, although data are few because of the rapid evolution of these programs. It may be associated with greater availability of the degree. While doctoral degrees in public health were uncommon in the public health workforce, a master's degree in public health (MPH) was the most common of all master's degrees.

Position. Most respondents were nurses, 84 or 77.1%; nursing attendants, 13 or 11.9%; midwives, 9 or 8.3%; and physicians, 3 or 2.8%. It implies that most respondents were registered nurses. The findings of Abrigo and Ortiz were similar to the present study, where most health workers were professional nurses.

Area of Assignment. Most respondents were government employees, 98 or 89.9%, and in the private sector, 11 or 10.1%. It implies that most respondents are employed with the Department of Health. The National Vaccination Center (2021) is the only government official authorized to procure and administer vaccines. COVID-19 vaccines are free to the public.

Length of Service. Most of the respondents were in the service for 1-5 years; 38 or 34.9%; 6-10 years,30 or 27.5%; below one year,21 or 19.3%; 11-15 years,13 or 11.9%; above 20 years 4 or 3.7%; and 16-20, 3 or 2.8%. The findings correlated to Havighurst's developmental stages and tasks; an early adult is to establish self in a career or occupation, learn to live with a partner, establish a family and belong to a social group. It implies that most respondents were in the service for a few years.

Relevant Training on COVID-19. The majority of respondents had 13 pieces of training, 0-1; 71 or 65.1%; 4-6 activity,18 or 16.5%; 7-9 activity,15 or 13.8%; and ten and above training, 5 or 4.6%. It implies that the nurses had adequate training attended. They need to improve their knowledge and skills in vaccination. Leider et al. (2015) mentioned that only one age group (26-30) had the majority of staff working within the public health sciences with any degree in public health. More generally, the figure shows a striking difference by age, where younger staff have more formal public health training on average than their older counterparts.

Table 1. Distribution of the Respondents in terms of their Profile Variables (n=109)

Profile Variables	Frequency	Percentage
Age (in a year)		
21 – 39	87	79.8
40 – 65	22	20.2
Gender		
Male	35	32.1
Female	74	67.9
Civil Status		
Married	55	50.5
Single	49	45.0
Separated	2	1.8
Widowed/er	3	2.8
Highest Educational Attainment		
Bachelor's Degree	90	82.6
With Masteral units	11	10.1
Masteral graduate	6	5.5
Doctoral graduate	2	1.8
Position		
Nursing Attendant	13	11.9
Midwife	9	8.3
Nurse	84	77.1
Physician	3	2.8
Area of Assignment		
Private Institution	11	10.1
Government Institution	98	89.9
Length of Service (in years)		
Below one year	21	19.3
1 – 5	38	34.9
6 – 10	30	27.5
11 – 15	13	11.9
16 – 20	3	2.8
Above 20	4	3.7
Training/Seminars on COVID-19		
1 – 3	71	65.1
4 – 6	18	16.5
7 – 9	15	13.8
Ten and above	5	4.6
COVID-19 Vaccination Role		
Registration	16	14.7
Vital Signs	11	10.1
Screening	10	9.2
Vaccinator	30	27.5
Data Encoder	7	6.4
Post Vaccination Monitor	35	32.1

COVID-19 vaccination role. Most respondents were assigned to the post-vaccination monitoring area, 35 or 32.1%; registration, 16 or 14.7%; vital signs, 11 or 10.1%; screening and vaccination,10 or 9.2%; and data encoder, 7 or 6.4%. It implies that most respondents stayed in the post-vaccine area. This part of vaccination is essential to see or

look for reactions or manifestations of the effect of the vaccine on people vaccinated. The National Vaccination Operation Center (2021) cited that more personnel should be assigned in the post-vaccination area to monitor the effects of vaccines and readily provide healthcare services for side effects.

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Physical Aspect

Table 2 shows the pressure management practices among healthcare workers involved in the COVID-19 Vaccination Along the physical aspects. It revealed that the highest indicators are items numbers 1 and 7," Drinking enough water (8-10 glasses) to remain hydrated," and "Deep breathing exercises for relaxation & stress relief," with a weighted mean of 4.30 and 4.16 or "Practiced." It implies that the respondents resorted to drinking water and deep breathing exercises to relieve stress at the vaccination area. These are the most straightforward practices for the relief of their stress.

Table 2. Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Physical Aspect (n=109)

Indicators	Weighted Mean	Transmuted Rating
I manage my stress through …		
1. Deep breathing exercises for relaxation & stress relief	4.16	P
2. starting physical activities like exercise and stretching to reduce e feelings of anxiety	3.59	P
3. sleeping on time and having adequate rest	3.81	P
4. Having healthy food choices like fruits and vegetables	3.73	P
5. Reducing sugars and fats in the diet	3.52	P
6. Getting out sunlight in the morning	3.85	P
7. Drinking enough water (8-10 glasses) to remain hydrated	4.30	P
8. Practicing a progressive muscle relaxation technique	3.30	MP
9. performing aroma therapy	3.00	MP
10. Limiting exposure to media to minimize focusing on adverse events.	3.22	MP
Average Weighted Mean	3.65	P

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Practiced (HP)
3.50 – 4.49	Often	Practiced (P)
2.50 – 3.49	Sometimes	Moderately Practiced (MP)
1.50 – 2.49	Seldom	Slightly Practiced (SP)
1.00 – 1.49	Never	Not Practiced (NP)

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Mental Aspect

Table 3 shows the stress management practices among healthcare workers regarding the COVID-19 vaccination and mental aspects. It revealed that the highest indicators are items numbers 1, 3, and 7," Keeping a positive attitude," "Accepting that there are events that I cannot control," and "Doing activities that promote distraction from negative thinking," with a weighted mean of 4.41, 3.97 and 3.96 or "Practiced." It implies that the respondents accept that they must attend to the activities as healthcare workers. Table 4 presents the stress management practices among healthcare workers involved in the COVID-19 vaccination and spiritual aspects.

Table 3. Stress Management Practices Among Healthcare Workers in COVID-19 Vaccination along Mental Aspect (n=109)

Indicators	Weighted Mean	Transmuted Rating
I manage my stress through ...		
1. I am keeping a positive attitude.	4.41	P
2. Practicing Meditation Techniques	3.26	MP
3. Accepting that there are events that I cannot control.	3.97	P
4. Doing activities that promote distraction from negative thinking	3.96	P
5. practicing emotional disclosure	3.66	P
6. understanding the stress reactions of the body	3.84	P
7. practicing guided imagery	3.40	MP
8. Learning stress signals and managing them right away	3.63	P
9. Doing cognitive restructuring	3.59	P
10. seeking treatment with a psychologist or other mental health professional trained in stress management	1.90	SP
Average Weighted Mean	3.56	P

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Practiced (HP)
3.50 – 4.49	Often	Practiced (P)
2.50 – 3.49	Sometimes	Moderately Practiced (MP)
1.50 – 2.49	Seldom	Slightly Practiced (SP)
1.00 – 1.49	Never	Not Practiced (NP)

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Spiritual Aspects

Table 4 shows the stress management practices among healthcare workers involved in the COVID-19 vaccination and spiritual aspects. The highest indicator is item

1," Praying for the Lord's guidance," with a weighted mean of 4.77 or "Highly Practiced." It implies that the respondents' resort to our God to relieve stress. It is a fact that our savior, God, guides and protects his children. A similar study by Barnes et al. (2004) shows that meditation has many proven benefits, and spiritual meditation creates a significant decrease in anxiety and better tolerance to pain. Prayer is one of the simplest forms of spiritual reflection. It is often done, and more than half of Americans pray daily. 20% of people, who are not affiliated with any religion, report that they pray daily. They know that praying and meditating reduce their anxieties and find it necessary in life. The lowest indicators are items numbers 3 and 9, "Going on a spiritual excursion" and " Practice Yoga and spiritual meditation," with a weighted mean of 3.00 and 3.26, or "Moderately Practiced." It revealed that the respondents seldom resort to this stress management technique. Going out for spiritual excursion was not a priority during the COVID-19 pandemic, especially among healthcare workers.

Table 4. Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Spiritual Aspects (n=109)

Indicators	Weighted Mean	Transmuted Rating
I manage my stress through …		
1. Praying for the Lord's guidance	4.77	HP
2. Attending church or religious services every week	4.03	P
3. Ongoing on a spiritual excursion	3.26	MP
4. Reading inspirational stories or essays teaches how to lead a fulfilling spiritual life.	3.98	P
5. Listening to religious and gospel music	4.15	P
6. Setting time to enhance connectedness with the Lord	4.24	P
7. Sharing my spiritual journey with loved ones	3.92	P
8. Reading the bible and other religious books	3.73	P
9. Practice Yoga and spiritual meditation	3.00	MP
10. Striving to see the good in other people and me.	And18	P
Average Weighted Mean	3.93	P

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Practiced (HP)
3.50 – 4.49	Often	Practiced (P)
2.50 – 3.49	Sometimes	Moderately Practiced (MP)
1.50 – 2.49	Seldom	Slightly Practiced (SP)
1.00 – 1.49	Never	Not Practiced (NP)

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Social Aspect

Table 5 shows the stress management practices among healthcare workers regarding the COVID-19 vaccination and social aspects. It revealed that the highest indicators 2, 6, 10, "Learning to manage my time more effectively," "Seeking out social support and spending enough time with my loved ones," and "Establishing open communication with others," with a weighted mean of 4.17 and 4.13 or "Practiced." It implies that the respondents make their time more productive with open communication with others and having time with their loved ones. The result is directly related to the study of Carvello (2019) states that the most common self-care strategy employed to cope with emotional stress appears to be conversing with colleagues in the workplace. Support from colleagues is necessary, and they can verbalize their feelings. Some subjects mentioned crying to cope with their emotions.

Table 5. Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination along Social Aspect (n=109)

Indicators	Weighted Mean	Transmuted Rating
I manage my stress through…		
1. Being assertive instead of aggressive. Asserting my feelings, opinions, or beliefs instead of becoming angry, defensive, or passive.	3.94	P
2. Learning to manage my time more effectively.	4.13	P
3. Setting limits appropriately and saying no to requests would stress my life.	3.90	P
4. Making time for hobbies and interests.	3.90	P
5. Not relying on alcohol, drugs, or compulsive behaviors to reduce stress.	3.94	P
6. Seeking out social support and spending enough time with my loved ones	4.17	P
7. Talking my stress out with my friends and significant others	4.10	P
8. Boosting workplace morale by creating opportunities for social interactions	4.05	P
9. Seeking out the opinions of others in managing their stress	3.94	P
10. Establishing open communication with others	4.17	P
Average Weighted Mean	4.02	P

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Practiced (HP)
3.50 – 4.49	Often	Practiced (P)
2.50 – 3.49	Sometimes	Moderately Practiced (MP)
1.50 – 2.49	Seldom	Slightly Practiced (SP)
1.00 – 1.49	Never	Not Practiced (NP)

Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination

Table 6 shows the general stress management practices among healthcare workers during the COVID-19 vaccination. It revealed that the respondents relieve their stress in different ways. All the variables got an overall transmuted rating of "Practiced," the highest is along social aspect, 4.02; spiritual aspect, 3.93; physical aspect, 3.65; and mental aspect, 3.65 or "Practiced." The lowest variable is on the mental aspect, with a weighted mean of 3.56 or "Practiced." It implies that this aspect is the weakest since it is more difficult to relieve stress when we think of it with fear and anxiety. Nursing is a high-stress occupation – emotionally taxing and physically draining, with a high incidence of burnout. In addition to the effects of stress on nurses' health and well-being, stress is also a significant factor in attrition and widespread understaffing in the nursing profession. There are many stress management techniques; the best and most effective begin with simple recognition, validation, and visible and committed efforts by the nurse manager.

Table 6. Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination (n=109)

Aspect	Weighted Mean	Transmuted Rating
Physical	3.65	P
Mental	3.56	P
Spiritual	3.93	P
Social	4.02	P
Overall Weighted Mean	3.79	P

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Practiced (HP)
3.50 – 4.49	Often	Practiced (P)
2.50 – 3.49	Sometimes	Moderately Practiced (MP)
1.50 – 2.49	Seldom	Slightly Practiced (SP)
1.00 – 1.49	Never	Not Practiced (NP)

Factors that Affect Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination Program

Table 7 shows the factors that affect stress management practices among healthcare workers in the COVID-19 vaccination program. It revealed that the highest indicators are "Unpredictable, or uncontrollable situation," "Schedules of training and seminars," and "Overload at work," with a weighted mean of 2.93, 2.84, and 2.80 or "Moderately Affects." The lowest indicators are "Poor nutritional status," "Poor working environment," and "Poor relationship with colleagues or superiors," with a weighted mean of 2.55 and 2.57, or "moderately Affects." It revealed that the respondents were

also concerned by the environment and their relationships with their colleagues. It implies that their stress was due to the unpredictability of seminars or training and their workload. Their workload affected their relationships with colleagues or other personnel since they were focused on their work due to the UX of patients undergoing vaccination.

Table 7. Factors that Affect Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination Program (n=109)

Indicators	Weighted Mean	Transmuted Rating
1. Poor nutritional status	2.55	MA
2. Unclear roles in the workplace	2.62	MA
3. Poor working environment	2.57	MA
4. unpredictable or uncontrollable situation	2.93	MA
5. Poor relationship with colleagues or superiors	2.55	MA
6. Overcrowded vaccination site	2.72	MA
7. Lack of vaccine supply	2.67	MA
8. Schedule training and seminars	2.84	MA
9. Long commuting journeys	2.62	MA
10. Overload at work	2.80	MA
Average Weighted Mean	2.69	MA

Legend:

Statistical Range	Descriptive Equivalent (DE)	Transmuted Rating
4.50 – 5.00	Always	Highly Affects (HA)
3.50 – 4.49	Often	Affects (A)
2.50 – 3.49	Sometimes	Moderately Affects (MA)
1.50 – 2.49	Seldom	Slightly Affects (SA)
1.00 – 1.49	Never	Does not Affect (DNA)

t-Test Results on the difference in the Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination across Age

Table 8 shows the difference in the stress management practices among healthcare workers in the COVID-19 vaccination across ages. The computed t-values along physical, mental, spiritual, and social aspects generated significance values which are all higher than the set .05 level. Insignificant results imply that the health workers aged 21-39 and 40-65 years old have comparable stress management practices. The study's findings were similar to the study of Ali et al. (2020) mentioned that professional experience plays a significant role in how nurses perceive pressures during a pandemic.

Table 8. t-Test Results on the difference in the Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination across Age

Aspect	Age	n	Mean	Mean Difference	Standard Error Difference	df	t-value	Sig	Remarks
Physical	21 – 39	87	3.61	-0.195	0.154	107	-1.265	0.209	Not Significant
	40 – 65	22	3.80						
Mental	21 – 39	87	3.61	0.244	0.143	107	1.711	0.090	Not Significant
	40 – 65	22	3.37						
Spiritual	21 – 39	87	3.98	0.254	0.184	107	1.379	0.171	Not Significant
	40 – 65	22	3.72						
Social	21 – 39	87	4.05	0.159	0.138	107	1.153	0.251	Not Significant
	40 – 65	22	3.90						
Overall	21 – 39	87	3.82	0.116	0.125	107	0.930	0.355	Not Significant
	40 – 65	22	3.70						

t-Test Results on the difference in the Stress Management Practices Among Healthcare Workers in the COVID-19 Vaccination across Sex

Table 9 shows the test results of the difference in the stress management practices among healthcare workers in the COVID-19 vaccination across sex. The statistical values indicate insignificant results, as shown in the computed t-values with significance values which are all higher than the set .05 level of significance.

The results suggest that male and female health workers have similar practices on stress management with physical, mental, social, and spiritual aspects. LaTorre et al. (2020) mentioned that females assigned to high-demand job experiences more physical problems compared to males.

CONCLUSIONS

From the salient findings, the following are the conclusions drawn. Most respondents are young adults aged 21 – 25 years old, females, married, have earned a bachelor's degree, employed as a Nurse for 1 – 3 years, and have attended 1 – 3 training. Healthcare workers practice stress management techniques and coping mechanisms to mitigate the impact of work-related stress. The stress management practices of

healthcare providers involved in the COVID-19 vaccination are moderately affected by the factors shown. There is a relationship between the stress management practices among healthcare workers involved in the COVID-19 Vaccination program in selected municipalities of Eastern Pangasinan across their profile variables. Hence, the hypothesis is not accepted. There is no significant difference between the stress management practices among healthcare workers engaged in the COVID-19 vaccination program in selected municipalities of Eastern Pangasinan across their profile variables. Hence, the null hypothesis is accepted.

The proposed intervention measures are adopted to improve the stress management practices among healthcare workers in the COVID-19 vaccination program in selected municipalities of Eastern Pangasinan.

RECOMMENDATIONS

Based on this study, it is recommended that Healthcare institutions prepare a monitoring and evaluation tool to determine the stress management practices of healthcare workers. Information Education Campaign materials are prepared to increase awareness of stress management practices. Techniques must be adapted for implementation in the workplace to reduce work-related stress and other factors identified in the study. Healthcare institutions must implement activities that will not only develop the skills and knowledge of employees but will hone the professional, personal, and emotional aspects of all employees. Higher authorities must endorse the proposed intervention measures presented in Table 10 (Appendix A) for implementation. Future researchers can conduct a related study focusing on a broader array of respondents.

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DECLARATION

Conflict of Interest

No conflicts of interest exist between the authors that might be deemed significant to the article's content.

Informed Consent
Informed consent was obtained from all respondents involved in the study.

Ethics Approval

Approval to conduct the study was obtained.

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PROPOSED STRATEGIC PLAN TO MINIMIZE THE STRESS AMONG HEALTHCARE WORKERS

General Objectives: These interventions are developed to address the factors that affect the stress management practices of healthcare workers in the vaccination area, thereby mitigating the impact of stress and burnout.

Table 10. Proposed Strategic Plan

Factor	Activities/Strategies	Objectives	Person involved	Resources needed	Expected Output
1. Poor nutritional status	❖ Conduct a series of nutrition classes among healthcare workers. ❖ Provide sample meal plan to healthcare workers. ❖ Launch campaign that advocates proper nutrition, like weight management contest and food preparation contest ❖ Self-awareness seminar/workshop conducted by stress management advocates. ❖ Regular conduct of the behavioral evaluation.	❖ To develop an appropriate nutritional improvement plan for healthcare workers.	❖ All healthcare workers ❖ Nutrition Council (institutionalized/third-party/group ❖ HRMDO	❖ Funds for accommodation and speakers/lecturers and prizes	❖ An appropriate nutritional improvement plan is available ❖ Mitigated effects of stress-related malnutrition in the workplace are achieved
2. Unclear roles in the workplace	❖ Conduct discussion of	❖ To establish open	❖ All healthcare workers	❖ Funds for accommodation and	❖ Well-established,

				speakers/lecturers	straightforward two-way communication process.
	problems in an open platform where everyone has the liberty to express their views and opinions to release stress. ❖ Provide a clear job description for all health workers ❖ Advocate division of labor among health workers	communication between employer and employee as an avenue to release sentiments, thereby mitigating the effects of stress on employees' mental health.	❖ HRMDO		
3. Poor working environment	❖ Values formation and reorientation ❖ Ensure proper use of rewards and merit system. ❖ Conduct team-building activities ❖ Implement the merit and reward system in the search for the best employee.	❖ Create a positive outlook on all employees regarding their workplace behavior.	❖ All healthcare workers ❖ HRMDO	❖ Funds for accommodation and speakers/lecturers	❖ All employees express positive workplace behavior.
4. Poor relationship with colleagues or superiors	❖ Seminar/training on Social support, Jurisprudence, and Professional advancement ❖ Encourage continuing professional education among the staff through scholarship	❖ Strengthen the Social Support among healthcare workers	❖ All healthcare workers ❖ HRMDO	❖ Funds for accommodation and speakers/lecturers ❖ Scholarship grants	❖ All healthcare workers have a solid social support system, and a high sense of professionalism and self–esteem is achieved.

	grants. ❖ Making time for hobbies and interests Review the promotion system and post to the bulletin board all vacancies				
5. Overcrowded vaccination site	❖ Create scheduling of vaccine recipients ❖ Create a waiting area outside the vaccination center Formulate crowd control team	❖ Create a conducive and spacious vaccinatio n center/site	❖ All healthcare workers Crowd Control team	❖ Funds for the creation of a spacious and conducive vaccination center	❖ Presence of a spacious and conducive vaccinatio n center/site
6. Lack of vaccine supply	❖ Coordinate with officials on the proper allocation of vaccines ❖ Implement the first–in, the first-out principle in the vaccination site to prevent spoilage/spillag e of vaccines ❖ Determine the number of the target vaccine recipient	❖ Provide a sufficient supply of vaccines	❖ All healthcare workers Vaccine focal person of DOH	❖ Funds for the allocation of proper allocation of vaccine	❖ Enough vaccines are evident
7. Schedules of training and seminars	❖ Provide a Gantt chart to schedule training and seminars appropriately ❖ Determine target participants for	❖ Proper scheduling of training and seminars	❖ All healthcare workers ❖ Top management of healthcare institution	❖ Funds for training/sem inars	❖ An appropriat e schedule is provided for training and seminars

	❖ training/seminars ❖ Determine the available time to conduct training/seminars				
8. Long commuting journeys	❖ Coordinate with top management or stakeholders to provide free commuting programs, e.g., libreng sakay ❖ Provide dormitory/temporary shelter for employees residing in far-flung areas Strategically relocate the vaccination center	❖ Limit commuting journeys of healthcare workers	❖ All healthcare workers ❖ Top management of healthcare institution	❖ Funds for the provision of free transportation/shelter for healthcare workers	❖ Healthcare workers have easy access to vaccine centers and transportation
9. Overload at work	❖ Conduct inventory of workload among healthcare workers ❖ Advocate division of labor ❖ Fix time constraints for reports ❖ Reduce workload ❖ Increase the number of healthcare workers involved in vaccination	❖ Reduce the workload of healthcare workers	❖ All healthcare workers ❖ Top management of healthcare institution	❖ Funds for hiring additional workforce	❖ 80% reduction in the workload of healthcare workers