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## **Impact of quarantine on stress management, inter-personal, and spiritual growth of quarantined nurses**

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**Abstract.** Due to the outbreak of coronavirus disease, 83% of households experienced a reduction in income, more than 25% of Filipinos reported anxieties, and 66,000 deaths from coronavirus disease 2019 (COVID-19) have been reported. With the pandemic, nurses are an essential part of the healthcare industry. With the notion that nurses now handle a variety of patients, sometimes nurses neglect their health. This study bridges the gap between the nurses' health situation when afflicted with COVID-19, and how they can manage their health in terms of stress management, interpersonal, and spiritual aspects while in quarantine. Thus, using the quantitative design, this study determined the extent of impact of quarantine on the stress management, interpersonal, and spiritual growth of nurses who were infected with COVID-19 and experienced quarantine in Negros Occidental when they were taken as a whole and grouped according to age, sex, civil status, areas of the hospital, and types of quarantine facility. Also, it investigated on the relationship between the demographics and the impact of quarantine on stress management and interpersonal and spiritual growth of nurses. The study determined a very great extent of quarantine impact on the stress management, interpersonal, and spiritual growth of nurses who were infected with COVID-19 and experienced quarantine in Negros Occidental. There was a significant relationship for age and areas of the hospital on the impact of quarantine; while there was no significant relationship for the variables sex, civil status, and types of quarantine facilities on the impact of quarantine. It is essential to recognize that stress is a subjective experience that varies from person to person; it is crucial for policymakers and healthcare providers to recognize the importance of addressing the mental health needs of individuals in quarantine facilities. At the same time, the administrators should recognize and address different challenges encountered by nurses in quarantine to ensure their well-being.

**Keywords.** Health Science, nursing, stress management, impact of quarantine, descriptive-correlational, Philippines

### **1.0 Introduction**

As countries introduce measures to restrict movement to reduce the number of people infected with COVID-19, more people are making considerable changes to their daily routines [1]. Due to the outbreak of the coronavirus disease, 83% of households experienced a reduction in income [2], 25% of Filipinos reported anxieties [3], and 66,000 deaths from coronavirus disease 2019 (COVID-19) have been reported [4]. During the enhanced community quarantine period in 2020 and 2021, almost all Filipinos experienced isolation. Quarantine was applied to determine if they become ill, lower the danger of spreading the disease to others, and separate and restrict the movement of individuals who

may have been exposed to a contagious disease. Although this definition differs from isolation, which keeps those diagnosed with a contagious disease apart from healthy individuals, the two concepts are sometimes used synonymously, particularly in public discourse [5].

In response to the Black Death, the term quarantine was first used with leprosy in Venice, Italy, in 1127. However, it was not until 300 years later that the UK started implementing quarantine as a defense against the plague. In the most recent COVID-19 outbreak, quarantine was implemented [6]. Due to this outbreak, entire Chinese cities have been effectively placed under mass quarantine. The request to isolate oneself at home or in government facilities has been made for thousands of foreign nationals returning from China [7]. In the Philippines, the total number of cases of COVID-19 rose to 3,780,178, with 34,268 active cases and 3,685,173 recovered as of August 1, 2022 [8]. The continuous increase in cases implies that the challenges that this disease brings have not yet ended. These cases alarmed health institutions, as they threatened the givers of care, especially nurses and doctors acting as frontliners. Hence, strict quarantine measures were imposed to limit the movement of people, resulting in a decrease in the number of patients visiting healthcare centers. While this measure is necessary to curb the spread of the virus, it has also affected healthcare centers and industries. In Negros Occidental, new cases were recorded, with 41,654 confirmed cases and a mortality of 1,973 [9]; some were unrecorded, posing a threat again in the health sector. Health professionals, especially frontline nurses and doctors, became positive as cases rose. Quarantine is essential in managing COVID-19; the decreasing number of nurses and doctors affects hospital operations, posing another threat to the healthcare industry [10].

Nurses are an essential part of the healthcare industry. With the notion that nurses handle a variety of patients, sometimes nurses neglect their health. This study bridges the gap between the nurses' health situation when afflicted with COVID-19 and how they can manage their health in terms of stress management and interpersonal and spiritual aspects while on quarantine. The following studies have conducted the impact of quarantine on patients and the public [11,12,13,14] There were also studies on the impact of quarantine on healthcare workers in general [15,16,17,18]. Also, there were studies on the impact of quarantine specific to medical doctors or physicians [19,14,20]. However, not much literature was found on nurses, especially in highly urbanized cities in the Philippines, regarding stress management and interpersonal and spiritual aspects while in quarantine among nurses. This is the gap which this study would like to fill in.

Thus, this study determined the extent of impact of quarantine on the stress management, interpersonal, and spiritual growth of nurses who were infected with COVID-19 and experienced quarantine in Negros Occidental when they were taken as a whole and grouped according to age, sex, civil status, areas of the hospital, and types of quarantine facility. Also, it investigated on the relationship between the demographics and the impact of quarantine on stress management and interpersonal and spiritual growth of nurses. The findings of this study form the basis for the creation of a health and wellness management program for quarantined nurses.

## **2.0 Framework of the Study**

This study assumed that the age, sex, civil status, hospital area, and type of quarantine facility of nurses infected with COVID-19 and quarantine are related to the extent of the impact of their quarantine in terms of stress management, interpersonal growth, and spiritual growth. This was anchored on the systems theory. Systems theory by Wilkinson [21], is a comprehensive framework that seeks to understand the complex interactions and interdependencies within a system. This theory provides a holistic perspective, emphasizing the interconnectedness of various components and their influence on the overall functioning of the system. One of the key aspects of systems theory is the recognition that a system is more than the sum of its parts. Instead of focusing solely on individual elements, this theory encourages us to examine the relationships and interactions between these elements. This perspective allows us to gain a deeper understanding of how different components within a system influence one another and contribute to the system's overall behavior.

In application, this theorizes that nurses have natural features that allow them to adapt to stressful situations like a positive result and quarantine for the COVID-19 virus. Nurses are humans who interact with constant changes in the environment. Because their work requires constant interaction with patients, they must be resilient despite the challenges that threaten their physical and mental health [22]. Moreover, the study was also anchored on Roy's (1976) Adaptation Model as cited in Gonzalo [23]. This supports the study as the theory believes that an individual has a set of interrelated systems that maintain the person's homeostasis [23]. The nurse as an individual is a set of interrelated factors that react to his or her environment and can maintain homeostasis. As a result, an individual tends to organize the self in order to integrate the self and give meaning to life. The way he thinks and feels creates a human action that makes him or her interdependent with other factors in the environment.

Roy's (1976) theory supports the idea that the nurse as an individual is a set of interrelated factors that try to balance stressful situations as stimuli. The nurses' age, sex, civil status, and the area assigned in the hospital and quarantine facilities are interrelated to maintain homeostasis when nurses experience a stressful situation such as a positive result in COVID-19 and a quarantine experience. To be infected by COVID-19, regardless of one's status, is a challenge; to be quarantined is another big hurdle. When an individual is afflicted with a crisis, the person's response would include his ability to perform his function while experiencing the situation. When COVID-19 infects nurses, they can see how they handle this barrier, which can be attributed to self-efficacy, judgment, and disposition in life. It is shown in how one reacts to and manages his stress, interacts with others, and attributes everything happening to his environment to God.

With the results of the study, it can be surmised that the natural adaptability of nurses is a key factor in their ability to implement the Adaptation Model effectively. By being focused in stressful situations, nurses can provide the support and care their patients need to adapt to changing circumstances. This may involve providing emotional support, administering medication, or implementing other interventions that promote adaptation and healing. The natural adaptability of nurses is closely related to Roy's (1976) Adaptation Model. By emphasizing the importance of adaptation in maintaining health and well-being, the model provides a framework for nurses to provide effective care to their patients. Through their natural ability to adapt to stressful situations, nurses can implement the Adaptation Model in a way that promotes healing and recovery.

### **3.0 Methods**

The study utilized a quantitative research design particularly the descriptive-correlational approach. The descriptive approach assessed the extent of impact of quarantine on the stress management, interpersonal, and spiritual growth of nurses who were infected with COVID-19 and experienced quarantine. Meanwhile, the correlational approach investigated the relationship between the demographics and the extent of impact of quarantine among nurses. The respondents were 65 available registered nurses who were infected with COVID-19 and experienced being quarantined in private and government quarantine facilities in Negros Occidental during the period covered November 2022 to April 2023. They were determined using stratified random sampling and fishbowl technique.

In assessing the study, a validated and reliability tested researcher-made questionnaire was used. This contains three areas namely: stress management, interpersonal, and spiritual growth. It was responded using the scale in ascending order: never, rarely, sometimes, often, and always. In terms of the validity, the instrument was subjected to the validation of 5 Subject Matter Experts (SMEs). It yielded an excellent face validity with a rating of 4.45. regarding reliability, it was pilot tested to 30 non-actual respondents and yielded a reliable Cronbach's alpha score of 0.91.

In analyzing the data, the descriptive and correlational analyses were employed. Mean and standard deviation were used to analyze the extent of impact of quarantine among nurses. The Kolmogorov-Smirnov test was used to determine the normality of the variable. The normality test revealed that the variables stress management [KS=0.225, p=0.000], interpersonal [KS=0.220, p=0.000], and spiritual [KS=0.294, p=0.000] were not normally distributed. Hence, non-parametric statistics were used for inferential questions. On one hand, Rank biserial analyzed the significant relationship between

sex, civil status, type of quarantine facility, and the impact of quarantine on stress management and interpersonal and spiritual growth of nurses. On the other hand, Spearman rank correlation analyzed the significant relationship between age and the impact of quarantine among nurses. Meanwhile, the chi-square test of association analyzed the significant relationship between the area of the hospital and the impact of quarantine among nurses.

Lastly, the researcher addressed the general principles of respect for persons, justice, and beneficence to fully guarantee the ethical soundness of the study in line with the guidelines established by the Philippine Health Research Ethics Board (PHREB). Specifically, it addressed issues regarding the privacy of the participants and the confidentiality of the data gathered.

#### **4.0 Results and Discussion**

##### ***Extent of Impact of Quarantine on the Stress Management, Interpersonal, and Spiritual Growth of Nurses***

Table 1 presents the extent of impact of quarantine on the stress management, interpersonal, and spiritual growth of nurses who were infected with COVID-19 and experienced quarantine in Negros Occidental. The overall impact as a whole ( $M=4.53$ ,  $SD=0.46$ ) was very great. When grouped according to sex, male ( $M=4.65$ ,  $SD=0.48$ ) and female ( $M=4.48$ ,  $SD=0.45$ ) nurses rated very great extent of impact. In terms of age, younger ( $M=4.65$ ,  $SD=0.46$ ) and older ( $M=4.41$ ,  $SD=0.43$ ) nurses rated very great extent of impact. Regarding civil status, married ( $M=4.43$ ,  $SD=0.45$ ) and single ( $M=4.64$ ,  $SD=0.45$ ) nurses rated very great extent of impact. According to area, ER ( $M=4.34$ ,  $SD=0.42$ ), DR ( $M=4.36$ ,  $SD=0.57$ ), OR ( $M=4.82$ ,  $SD=0.3$ ), Medical ( $M=4.25$ ,  $SD=0.39$ ), and Surgical ( $M=4.76$ ,  $SD=0.33$ ) rated very great extent of impact. When grouped according to the type of quarantine facility, nurses quarantined in private ( $M=4.42$ ,  $SD=0.47$ ) and public ( $M=4.61$ ,  $SD=0.44$ ) facilities rated very great extent of impact.

The increased workload and the constant exposure to the virus have further exacerbated the stress levels of Filipino nurses [24]. The lack of social support and the inability to engage in activities that bring joy and relaxation have increased stress levels [25]. These results in quarantine, leading to a profound impact on stress management. This may be due to the disruption of daily routines, social isolation, uncertainty, and negative effects on physical health. Quarantine has had a significant impact on interpersonal relationships due to the lack of physical contact, increased reliance on technology heightened emotional stress, and the erosion of social skills [26,27,28,29]. The absence of physical touch, the limitations of digital communication, the emotional strain, and the decline in social skills have all contributed to the challenges faced by individuals in maintaining healthy and fulfilling relationships during this period.

Quarantine has a profound effect on spirituality due to the heightened sense of introspection, the disruption of communal practices, the opportunity for self-reflection, and the increased reliance on technology. The isolation and restrictions imposed during quarantine [30] have forced individuals to confront their mortality and seek solace in spirituality [31]. While the challenges posed by quarantine are significant, they also present an opportunity for spiritual growth and self-discovery. The impact of quarantine on nurses is very great. The increased workload, limited resources, and lack of support have significantly affected their mental and physical health [24,32].

Society often expects men to be stoic and self-reliant, making it difficult for them to express their emotions and seek help when needed. Hence, men tend to use more problem-focused coping strategies, such as seeking information or taking action to solve the problem [33]. This explains the research data. Younger nurses may be better equipped to manage the stress of quarantine. Their familiarity with technology, fewer personal responsibilities, resilience, and adaptability, as well as a strong support system, can all contribute to their ability to cope with the challenges of the current crisis. This disagrees with Gómez-Durán et al. [17], who imply that older nurses are better equipped to manage this kind of stress.

Single or non-married nurses have distinct advantages when it comes to managing stress. Their ability to prioritize self-care, control their schedule, and create a supportive network can help them cope

with the demands of their profession. While being single does not guarantee a stress-free life, it does provide single nurses with the freedom and flexibility to take care of themselves and maintain a healthy work-life balance. The results of the study where nurses from the emergency room (ER), delivery room (DR), and medical nurses possess the necessary qualities to handle the stress of quarantine agree with García-Tudela et al. [34], Han et al. [35], and Aksoy et al. [36].

Their extensive training, experience in high-stress situations, and a deep sense of purpose enable them to navigate the challenges of this unprecedented situation. Public nurses have better stress management compared to nurses in other healthcare sectors. Their exposure to diverse healthcare issues, supportive work environments, and emphasis on self-care contribute to their ability to manage stress effectively. Public nurses play a vital role in the healthcare system, and their ability to handle stress is crucial for their well-being and the quality of care they provide to the community [37].

**Table 1.** Extent of Impact of Quarantine on the Stress Management, Interpersonal, and Spiritual Growth of Nurses

Variable	Stress Management			Interpersonal			Spiritual			Impact		
	M	SD	Int	M	SD	Int	M	SD	Int	M	SD	Int
Sex												
Male	4.46	0.75	VGE	4.65	0.56	VGE	4.84	0.24	VGE	4.65	0.48	VGE
Female	4.16	0.68	GE	4.53	0.57	VGE	4.74	0.33	VGE	4.48	0.45	VGE
Age												
Younger	4.49	0.69	VGE	4.63	0.61	VGE	4.83	0.31	VGE	4.65	0.46	VGE
Older	4.02	0.65	GE	4.50	0.52	VGE	4.71	0.30	VGE	4.41	0.43	VGE
Civil Status												
Married	4.02	0.71	GE	4.54	0.51	VGE	4.73	0.32	VGE	4.43	0.45	VGE
Single	4.52	0.61	VGE	4.59	0.64	VGE	4.81	0.29	VGE	4.64	0.45	VGE
Area												
ER	3.97	0.65	GE	4.42	0.59	VGE	4.63	0.34	VGE	4.34	0.42	VGE
DR	3.98	0.87	GE	4.42	0.64	VGE	4.69	0.38	VGE	4.36	0.57	VGE
OR	4.76	0.48	VGE	4.78	0.48	VGE	4.92	0.17	VGE	4.82	0.30	VGE
Medical	3.74	0.33	GE	4.38	0.63	VGE	4.65	0.35	VGE	4.25	0.39	VGE
Surgical	4.60	0.52	VGE	4.75	0.37	VGE	4.92	0.14	VGE	4.76	0.33	VGE
Type of Quarantine Facility												
Private	4.12	0.73	GE	4.43	0.62	VGE	4.72	0.34	VGE	4.42	0.47	VGE
Public	4.36	0.68	VGE	4.67	0.51	VGE	4.81	0.28	VGE	4.61	0.44	VGE
<b>Total</b>	<b>4.25</b>	<b>0.71</b>	<b>VGE</b>	<b>4.56</b>	<b>0.57</b>	<b>VGE</b>	<b>4.77</b>	<b>0.31</b>	<b>VGE</b>	<b>4.53</b>	<b>0.46</b>	<b>VGE</b>

Note: Great Extent (GE), Very Great Extent (VGE)

### ***Relationship between Age and the Impact of Quarantine on Stress Management, Interpersonal, and Spiritual Growth of Nurses***

Table 2 presents the relationship between the age and the impact of quarantine in the areas of stress management, interpersonal, and spiritual growth of nurses. There was a significant relationship between age and the impact [ $r(63)=-0.389$ ,  $p=0.001$ ] of quarantine and on the areas of stress management [ $r(63)=-0.434$ ,  $p=0.000$ ], interpersonal [ $r(63)=-0.328$ ,  $p=0.008$ ], and spiritual [ $r(63)=-0.426$ ,  $p=0.000$ ] growth of nurses. Hence, the null hypothesis is rejected.

As age goes up, there is a low likeliness of stress going down. This low and negative correlation between age and the impact of quarantine can be attributed to the physical and psychological resilience of younger individuals, the differences in lifestyle and social interactions, and the availability of support systems all contribute to this correlation [38]. Generally, younger people tend to have stronger immune systems and are less susceptible to severe illness caused by infectious diseases [39]. This resilience allows them to recover more quickly from any symptoms they experience during quarantine. Older individuals, especially those in higher age brackets, may have more preexisting health conditions that make them more vulnerable to the effects of quarantine [39].

As age goes up, there is a low likeliness of interpersonal growth going down. This low and negative correlation between age and interpersonal relationships can be attributed to life experiences, personality traits, and societal changes, which all contribute to the weakening of this relationship [40]. As age goes up, there is a low likeliness of spirituality going down. The low and negative correlation between age and spirituality can be attributed to the changing social and cultural landscape, the influence of science and rationality, and the decline in religious affiliation among younger generations [41]. As age goes up, there is a low likeliness of the impact of quarantine going down. Since the previous findings show the same low and negative relationship between the constructs of the impact of quarantine and age, it is understandable how this one is also established as significantly such.

**Table 2.** *Relationship between Age and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses*

Variables	$r_s$	Df	p
Stress Management	-0.434*	63	0.000
Interpersonal	-0.328*	63	0.008
Spiritual	-0.426*	63	0.000
Impact	-0.389*	63	0.001

Note: \*relationship is significant when  $p \leq 0.05$

### ***Relationship between Sex and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses***

Table 3 presents the relationship between the sex and the impact of quarantine in the areas of stress management, interpersonal, and spiritual growth of nurses. There was no significant relationship between sex and the impact [ $r_s(63)=-0.217$ ,  $p=0.082$ ] of quarantine and on the areas of stress management [ $r_s(63)=-0.193$ ,  $p=0.122$ ], interpersonal [ $r_s(63)=-0.128$ ,  $p=0.310$ ], and [ $r_s(63)=-0.145$ ,  $p=0.248$ ] spiritual growth of nurses. Hence, the null hypothesis is accepted.

There is no significant correlation between sex and the impact of quarantine. The impact of quarantine is influenced by a multitude of factors, such as individual circumstances, mental health, access to resources, and coping mechanisms [42]. It is crucial to understand that the impact of quarantine is not determined by one's sex but rather by a multitude of factors such as individual circumstances, living conditions, and mental health. Quarantine affects individuals differently based on their unique situations, regardless of sex. There is no correlation between sex and the stress experienced during quarantine, as stress levels are influenced by various factors, such as individual coping mechanisms, personal circumstances, and societal factors [43]. It is evident that there is no direct correlation between sex and interpersonal relationships, as sex can be a part of a healthy relationship; it is not the sole determining factor in its success or failure [44]. Emotional connection, communication, and shared values are essential elements that contribute to the strength and longevity of a partnership. There is no inherent correlation between sex and spirituality as people operate on different planes of human experience and are often based on subjective beliefs rather than objective evidence [45].

**Table 3.** *Relationship between Sex and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses*

Variables	$r_s$	df	p
Stress Management	-0.193	63	0.122
Interpersonal	-0.128	63	0.310
Spiritual	-0.145	63	0.248
Impact	-0.217	63	0.082

Note: relationship is significant when  $p \leq 0.05$

***Relationship between Civil Status and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses***

Table 4 presents the relationship between the civil status and the impact of quarantine in the areas of stress management, interpersonal, and spiritual growth of nurses. There was no significant relationship between civil status and the impact [ $r_s(63)=0.239$ ,  $p=0.055$ ] of quarantine and on the areas of interpersonal [ $r_s(63)=0.111$ ,  $p=0.380$ ] and spiritual [ $r_s(63)=0.168$ ,  $p=0.181$ ] growth of nurses. However, there is a significant relationship between civil status and the impact of quarantine on the area of stress management [ $r_s(63)=0.355$ ,  $p=0.004$ ] of nurses. Hence, the null hypothesis is accepted.

Having a spouse means having a constant source of emotional support. During times of uncertainty and fear, it is crucial to have someone to lean on and share our worries with. A spouse can provide a listening ear, offer words of encouragement, and provide reassurance during moments of distress. This emotional support can help individuals cope with stress more effectively and reduce feelings of isolation and loneliness. The effects of quarantine are highly individualized and depend on various factors such as coping mechanisms, the quality of relationships, and external circumstances. The impact of quarantine is influenced by external factors such as living arrangements and access to resources [46]. Individuals who live alone may face feelings of loneliness and isolation. The idea that being married or single directly correlates with the quality of interpersonal relationships is a misconception, as found in the results of this study. The strength and depth of interpersonal connections are influenced by various factors such as personality traits, communication skills, and emotional intelligence [44], which are not exclusive to any marital status. There is no correlation between being married or single and spirituality during quarantine.

**Table 4.** *Relationship between Civil Status and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses*

Variables	$r_s$	df	p
Stress Management	0.355*	63	0.004
Interpersonal	0.111	63	0.380
Spiritual	0.168	63	0.181
Impact	0.239	63	0.055

Note: \*relationship is significant when  $p \leq 0.05$

***Relationship between Type of Quarantine Facility and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses***

Table 5 presents the relationship between the type of quarantine facility and the impact of quarantine in the areas of stress management, interpersonal, and spiritual growth of nurses. There was no significant relationship between the type of quarantine facility and the impact [ $r_s(63)=0.234$ ,  $p=0.061$ ] of quarantine and on the areas of stress management [ $r_s(63)=0.197$ ,  $p=0.115$ ] and spiritual growth [ $r_s(63)=0.155$ ,  $p=0.217$ ] of nurses. Hence, the null hypothesis is accepted. However, there was a significant relationship between the type of facility and the impact of quarantine on the area of interpersonal [ $r_s(63)=0.262$ ,  $p=0.035$ ] growth of nurses. Hence, the null hypothesis is rejected.

There is no correlation between being in a public or private quarantine facility and the impact of quarantine, as the effectiveness of quarantine lies in the individual's adherence to guidelines and protocols, the overall management and organization of the facility, and the collective efforts of the government and health authorities [47]. The low correlation between being in a public or private quarantine facility and interpersonal relationships can be attributed to the limits of public health and safety measures, which limit social interactions. The temporary nature of quarantine and the psychological impact of isolation also contribute to the difficulty in forming interpersonal relationships [48]. There is no correlation between being in a public or private quarantine facility and spirituality during quarantine, as spirituality is an internal journey that is not dependent on external factors [49].

Whether an individual is in a public or private facility, his or her spirituality is shaped by his or her inner thoughts, beliefs, and experiences.

**Table 5.** *Relationship between Type of Quarantine Facility and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses*

Variables	rs	df	p
Stress Management	0.197	63	0.115
Interpersonal	0.262*	63	0.035
Spiritual	0.155	63	0.217
Impact	0.234	63	0.061

Note: \*relationship is significant when  $p \leq 0.05$

***Relationship between Areas of the Hospital and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses***

Table 6 presents the relationship between the areas of the hospital and the impact of quarantine in the areas of stress management, interpersonal, and spiritual growth of nurses. There was a significant relationship between areas of the hospital and the impact [ $\chi^2(4)=10.933, p=0.027$ ] of quarantine and on the area of stress management [ $\chi^2(8)=30.584, p=0.000$ ]. hence, the null hypothesis is rejected. However, there was no significant relationship between areas of the hospital and the impact of quarantine in the area of interpersonal [ $\chi^2(8)=7.584, p=0.475$ ] and [ $\chi^2(4)=3.503, p=0.477$ ] spiritual growth of nurses. Hence, the null hypothesis is rejected.

The nature of the work in the operating room (OR) and Surgical Department provides nurses with a more controlled and structured environment [50], which contributes to better stress management. In these departments, nurses are part of a well-coordinated team that follows a set routine and protocol. Additionally, the OR and Surgical Department often have a lower patient acuity level than the ER, DR, and Medical Department, meaning the patients are generally in stable conditions. This stability allows nurses to focus on tasks without the added pressure of managing critical situations, leading to improved stress management [34]. ER, DR, and Medical Department nurses often have lower stress management than their OR and Surgical counterparts due to the unpredictable nature of their work, the high patient turnover rate, and the lack of a controlled and structured environment. Operating room (OR) nurses face a higher impact of quarantine compared to nurses in the Medical Department due to their close contact with COVID-19-positive patients, the high-pressure environment they work in, and the specialized skills they possess [51]. In emergencies, there is little room for error, and surgeries must be performed promptly to save lives. This urgency can lead to a higher likelihood of exposure to COVID-19-positive patients, as there may not be enough time to conduct thorough screenings or implement stringent infection control measures.

While hospital departments provide a supportive environment for nurses, they do not determine the quality of interpersonal growth. Interpersonal growth is a personal and professional development process that involves continuous learning, self-reflection, and the acquisition of new skills and knowledge [44]. It is influenced by the individual nurse's motivation, the organizational culture within the healthcare institution, and the relationships and interactions nurses have with others. The quality of spirituality of nurses cannot be determined solely by the hospital department they work in. Spirituality is a deeply personal and individual aspect of a person's life that goes beyond the boundaries of a specific department or job role. It is influenced by personal experiences, cultural background, and individual beliefs [45]. The quality of spirituality is not solely dependent on the environment or setting in which a nurse works, as it can be integrated into all aspects of nursing practice.

**Table 6.** Relationship between Areas of the Hospital and the Impact of Quarantine on Stress Management and Interpersonal and Spiritual Growth of Nurses

Variables	$\chi^2$	df	p
Stress Management	30.584*	8	0.000
Interpersonal	7.584	8	0.475
Spiritual	3.503	4	0.477
Impact	10.933*	4	0.027

Note: \*relationship is significant when  $p \leq 0.05$

## 5.0 Conclusion

It is essential to recognize that stress is a subjective experience that varies from person to person. It is crucial for policymakers and healthcare providers to recognize the importance of addressing the mental health needs of individuals in quarantine facilities. At the same time, the administrators should recognize and address different challenges encountered by nurses in quarantine to ensure their well-being. This study recognizes that the sample size and locality are limitations to the generalizability of this study. The questionnaire is only limited to three areas and does not include other areas, such as the financial and professional growth of the nurses.

The type of research design of this study also limits its ability to have an in-depth explanation of the results. The results of this study may be used to create a mental well-being program for nurses in quarantine. Regardless of the demographics presented in this study, the well-being program should be individualized among the nurses affected. It must meet the necessary desires of how comfortable the quarantined nurses want their isolation to be. Since the study shows a very great extent of affectation in their stress management, spiritual growth, and interpersonal growth, the program should be able to target these. To improve the sample size, more hospitals and localities should be involved. The questionnaire can include other areas, such as the financial and professional growth of the nurses. The type of research design may be improved to a mixed method to improve the analysis of results.

## 6.0 Limitations of the Findings

This study recognizes that the sample size and locality are limitations to the generalizability of this study. The questionnaire is only limited to three areas and does not include other areas, such as the financial and professional growth of the nurses. The type of research design of this study also limits its ability to have an in-depth explanation of the results.

## 7.0 Practical Value of the Paper

The results of this study may be used to create a mental well-being program for nurses in quarantine. Regardless of the demographics presented in this study, the well-being program should be individualized among the nurses affected. It must meet the necessary desires of how comfortable the quarantined nurses want their isolation to be. Since the study shows a very great extent of affectation in their stress management, spiritual growth, and interpersonal growth, the program should be able to target these.

## 8.0 Directions for Future Research

To improve the sample size, more hospitals and localities should be involved. The questionnaire can include other areas, such as the financial and professional growth of the nurses. The type of research design may be improved to a mixed method to improve the analysis of results.

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