

SELF-CARE AND PSYCHOLOGICAL WELL-BEING OF NURSES CARING FOR COVID-19 PATIENTS IN SELECTED HOSPITALS IN BINH DINH, VIETNAM

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ABSTRACT

Background: COVID-19's emergence put unprecedented strain on Vietnam's healthcare system, posing a variety of problems to the country's nursing profession, potentially impacting nurses' self-care and psychological well-being, and even putting their lives in jeopardy. When caring for many patients, nurses are constantly bombarded with information, producing cognitive overload in terms of safety. This has an influence on their physical and psychological well-being, as well as the risk of mistakes that compromise treatment quality and patient safety. **Objectives:** To assess the self-care, psychological well-being, and relationship between self-care and psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam. **Materials and methods:** A descriptive-correlational method was conducted on 180 nurses caring for COVID-19 patients from October 2022 to December 2022. Anchored on a four-point Likert scale, data were obtained using open-access and validated research instruments adopted from the self-care activities screening scale and psychological well-being assessment tool. SPSS software was used to process the data. **Results:** A total of 180 nurses participated in the study. The 135 participants were female, and 45 participants were male. Self-care was interpreted as "agree" in health consciousness, nutrition, physical activity, and sleep domains, with an overall mean of 3.21, 3.05, and 3.09, respectively. The psychological well-being was interpreted as "agree" in various domains, including autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relations with others, with an overall mean of 2.81, 2.89, 3.09, 3.02, 2.85, and 2.89, respectively. Correlational analysis of the significant relationship on the assessment between self-care and psychological well-being of nurse respondents confirmed that: There was a statistically significant relationship between self-care and psychological well-being (p -value 0.000). **Conclusions:** The assessment of self-care and psychological well-being of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam, confirmed that health consciousness was the strongest component of self-care, while nutrition was the weakest component of self-care; personal growth was the strongest component of psychological well-being, and autonomy was the weakest component of psychological well-being. Moreover, the significant relationships between the self-care and psychological well-being of nurse respondents caring for COVID-19 patients imply that an improvement in self-care would minimally enhance the psychological well-being of nurses.

Keywords: self-care, psychological well-being, nurse, COVID-19.

I. INTRODUCTION

COVID-19's emergence put unprecedented strain on Vietnam's healthcare system, posing a variety of problems to the country's nursing profession, potentially impacting nurses' self-care and psychological well-being, and even putting their lives in jeopardy. When caring for many patients, nurses are constantly bombarded with information, producing cognitive overload in terms of safety. This influences their physical and

psychological well-being, as well as the risk of mistakes that compromise treatment quality and patient safety. Self-care is essential for all healthcare workers, especially during and after a crisis. The beneficial effects of appropriate self-care for nurses include improved physical and psychological well-being [1], as well as being able to provide care for their patients in a more sustainable way with greater compassion, sensitivity, effectiveness, and empathy [2]. Practicing self-care can also help nurses create some structure and predictability amidst chaos and uncertainty and make them able to manage high levels of stress in more constructive ways. Furthermore, exploring the issues that nurses face when caring for patients with COVID-19 will help determine nurses' psychological well-being in response to the pandemic crisis. As a result, the researchers conducted this study with three objectives: (1) to assess the self-care of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam; (2) to assess the psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam; (3) to analyze the relationship between self-care and the psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam.

II. MATERIALS AND METHODS

2.1. Study subjects: The participants were staff nurses involved in direct patient care of COVID-19 patients, currently employed full-time, and spent at least 6 months in the research locale at the onset of the COVID-19 crisis. Staff nurses with administrative functions were excluded from the study.

2.2. Methods

A descriptive-correlational method of research on 180 nurses caring for COVID-19 patients was conducted from October 2022 to December 2022. Self-care and psychological well-being of nurses caring for COVID-19 patients was examined by using the Self-Care Activities Screening Scale and Psychological Well-Being Assessment Tool [3] [4]. The responses for each item were reflected on a 4-point Likert scale from 1.00 - 1.75 (strongly disagree/never experienced), 1.76 - 2.50 (disagree/rarely experienced), 2.51 - 3.25 (agree/sometimes experienced) to 3.26 - 4.00 (strongly agree/very often experienced). Self-care focuses on the domains of health consciousness, nutrition, physical activity, and sleep. Psychological well-being focuses on the components of autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relationships with others. The collected data were analyzed using SPSS 22.0 software. Specifically, descriptive statistics (weighted mean and verbal interpretation) were applied. The results were used to calculate the correlation between self-care and psychological well-being.

III. RESULTS

A total of 180 nurses participated in the study. The 135 participants were female, and 45 participants were male.

3.1. The assessment of the self-care of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

Table 1. The assessment of the self-care of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

Variables	Overall mean	Verbal interpretation
Health consciousness	3.21	Agree/ Sometimes experienced
Nutrition	3.05	Agree/ Sometimes experienced
Physical activity and sleep	3.09	Agree/ Sometimes experienced

Self-care was interpreted as "Agree/Sometimes experienced" in health consciousness, nutrition, physical activity, and sleep domains, with an overall mean of 3.21, 3.05, and 3.09, respectively.

3.2. The assessment of the psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

Table 2. The assessment of the psychological well-being of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

Variables	Overall mean	Verbal interpretation
Autonomy	2.81	Agree/ Sometimes experienced
Environmental mastery	2.89	Agree/ Sometimes experienced
Personal growth	3.09	Agree/ Sometimes experienced
Purpose in life	3.02	Agree/ Sometimes experienced
Self-acceptance	2.85	Agree/ Sometimes experienced
Relations with others	2.89	Agree/ Sometimes experienced

The psychological well-being was interpreted as "Agree/Sometimes experienced" in various domains, including autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relations with others, with an overall mean of 2.81, 2.89, 3.09, 3.02, 2.85, and 2.89, respectively.

3.3. The assessment relationship between self-care and psychological well-being of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

Table 3. Correlation analysis between self-care and psychological well-being of nurses caring for COVID-19 patients

Variables	Computed r	Degree of relationship	p-value
Self-Care and Psychological Well-Being on Autonomy			
Health Consciousness	0.033	Negligible positive correlation	0.658
Nutrition	0.276**	Negligible positive correlation	0.000
Physical Activity and Sleep	-0.035	Negligible negative correlation	0.645
Self-Care and Psychological Well-Being on Environmental Mastery			
Health Consciousness	0.262**	Negligible positive correlation	0.000
Nutrition	0.116	Negligible positive correlation	0.122
Physical Activity and Sleep	0.127	Negligible positive correlation	0.088
Self-Care and Psychological Well-Being on Personal Growth			
Health Consciousness	0.266**	Negligible positive correlation	0.000
Nutrition	0.170*	Negligible positive correlation	0.022
Physical Activity and Sleep	0.165*	Negligible positive correlation	0.027
Self-Care and Psychological Well-Being on Purpose in Life			
Health Consciousness	0.201**	Negligible positive correlation	0.007
Nutrition	0.243**	Negligible positive correlation	0.001
Physical Activity and Sleep	0.130	Negligible positive correlation	0.081
Self-Care and Psychological Well-Being on Self-Acceptance			
Health Consciousness	0.425**	Low positive correlation	0.000
Nutrition	0.334**	Low positive correlation	0.000
Physical Activity and Sleep	0.214**	Negligible positive correlation	0.004
Self-Care and Psychological Well-Being on Relations with Others			
Health Consciousness	0.324**	Low positive correlation	0.000
Nutrition	0.273**	Negligible positive correlation	0.000
Physical Activity and Sleep	0.109	Negligible positive correlation	0.144

*. The correlation is significant at the 0.05 level (2-tailed).

**.. The correlation is significant at the 0.01 level (2-tailed).

In correlating the impact of self-care on psychological well-being and autonomy, the dimension of nutrition (p-value 0.000) showed a statistically significant correlation. Also, in correlating the impact of self-care to psychological well-being on environmental mastery, the dimension of health consciousness (p-value 0.000) showed a statistically significant correlation. Moreover, in correlating the impact of self-care to psychological well-being on personal growth, all dimensions, including health consciousness (p-value 0.000), nutrition (p-value 0.022), and physical activity and sleep (p-value 0.027), showed a statistically significant correlation.

Similarly, in correlating the impact of self-care to psychological well-being on purpose in life, except for physical activity and sleep, two dimensions, including health consciousness (p-value 0.007), and nutrition (p-value 0.001), showed a statistically significant correlation. Furthermore, in correlating the impact of self-care to psychological well-being on self-acceptance, all dimensions, including health consciousness (p-value 0.000), nutrition (p-value 0.000), and physical activity and sleep (p-value 0.004), showed a statistically significant correlation. Meanwhile, in correlating the impact of self-care to psychological well-being on relations with others, except for the dimension of physical activity and sleep, two dimensions, including health consciousness (p-value 0.000), and nutrition (p-value 0.000), showed a statistically significant correlation.

Table 4. Correlational analysis on the significant relationship in the assessment between self-care and psychological well-being of nurses caring for COVID-19 patients

Variables	Computedr	Degree of Relationship	p Value	Interpretation
Self-Care TO Psychological Well-Being	0.387**	low positive correlation	0.000	with significant correlation

** The correlation is significant at the 0.01 level (2-tailed).

Table 4 presents the summary of the correlational analysis of the significant relationship in the assessment between the self-care and psychological well-being of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam. It shows that there is a statistically significant relationship between self-care and psychological well-being (p-value 0.000).

IV. DISCUSSION

4.1. The assessment of the self-care of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

The values of the mean and verbal interpretation on the assessment of self-care of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam, showed the strongest component of self-care, in which the majority of the nurse respondents agree pertains to the health consciousness domain ($\bar{x} = 3.21$). Meanwhile, the weakest component of self-care in which the majority of the nurse respondents agree refers to the nutrition domain ($\bar{x} = 3.05$).

Most studies reported a high prevalence of anxiety and depressive symptoms [5], and according to Braquehais et al. (2020), nurses with higher clinical responsibilities were at a higher risk for psychological distress, as were those living in regions with a higher rate of COVID-19 infection [6]. Consequently, nurses' habitual lifestyles, including food consumption, eating behavior, water intake, and stimulant substance consumption, such as caffeine, underwent important changes due to stress factors at work, impacting nutritional status, immunity response, sleep, and psychological well-being [7]. In the general population, unhealthy food choices with consequent inadequate nutrient intake, water

restriction with consequent dehydration, as well as caffeine, energy drinks, and alcohol consumption with consequent sleep disturbances, have been observed worldwide [8]. In addition, Zhang et al. (2020) reported an unbalanced diet, specifically among COVID-19 nurses with high consumption of salt and oil in China [9].

4.2. The assessment of the psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

The values of the mean and verbal interpretation on the assessment of self-care of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam showed the strongest component of psychological well-being, which the majority of the nurse respondents agree pertains to the personal growth domain ($\bar{x} = 3.09$). Meanwhile, the weakest component of psychological well-being, on which the majority of the nurse respondents agree, refers to the autonomy domain ($\bar{x} = 2.81$). Studies have indicated that nurses who provide direct COVID-19 patient care are more anxious, overworked, psychologically disturbed, and dissatisfied with their jobs than nurses who work in other areas [10]. To mitigate possible physical and psychological well-being damage to the nurses, health facilities advocated autonomy in practice as psychological first aid and morale boosters [11]. This implies that attention should be provided to strengthening autonomy, particularly to health and psychological well-being interventions [12].

4.3. The assessment relationship between self-care and the psychological well-being of nurses caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam

The correlational analysis of the significant relationship in the assessment between the self-care and the psychological well-being of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam, showed there was a statistically significant relationship between self-care and psychological well-being (p-value 0.000), which means that an improvement in self-care would minimally enhance psychological well-being.

Stressors of the pandemic crisis and inadequate psychological well-being preparation can be difficult for nurses. Exhausting episodes can also cause both physical and psychological well-being problems, such as fatigue, irritability, lack of concentration, unhappiness, depressive sensations, depersonalization, and emotional exhaustion. Despite all of these challenges, self-care enables nurses to cope with the pandemic crisis and to maintain healthy and stable psychological well-being. Current evidence suggests that enhancing nurses' cognitive-behavioral and self-care abilities for example, the development and enhancement of self-awareness, adequate nutrition, reasonable physical activity, and adequate sleep may be key resilience-building strategies that can positively contribute to nurses' positive adaptation and psychological well-being while reducing the negative effects of mental distress [13].

V. CONCLUSIONS

The assessment of the self-care of nurse respondents caring for COVID-19 patients in selected hospitals in Binh Dinh, Vietnam, confirmed that health consciousness was the strongest component of self-care, while nutrition was the weakest component of self-care. In addition, the assessment of the psychological well-being of nurse respondents caring for COVID-19 patients confirmed that personal growth was the strongest component of psychological well-being, while autonomy was the weakest component of psychological well-being.

Moreover, there is a significant relationship in the assessment of nurse respondents caring for COVID-19 patients between their self-care and psychological well-being in terms of autonomy, environmental mastery, personal growth, purpose in life, self-acceptance, and relations with others. In addition, there is a significant relationship between the assessment of nurse respondents caring for COVID-19 patients and their self-care and psychological well-being, which implies that an improvement in self-care would minimally enhance psychological well-being. Therefore, building a psychological support framework for nurses caring for COVID-19 patients is a matter of concern.

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