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How nursing staffs deal with burnout syndrome through job satisfaction and self-efficacy: the fight or flight mechanism

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Abstract

Background. During the COVID-19 pandemic, the psyche nursing staff might suffer from burnout syndrome. This subsequently leads to decreased working performance which might compromise the quality of care. Nurses experience depersonalization.

Objective. The study aimed to determine the effect of burnout syndrome on job satisfaction among nurses and how self-efficacy

can solve the problem.

Materials and Methods. Mix method study was conducted among 79 nurses from October 2021 until February 2022. The quantitative data were collected using the Maslach Burnout Inventory questionnaire and Minnesota Satisfaction Questionnaire via proportional random sampling. The qualitative data were collected by thematic analysis to find out nurses' self-efficacy during the pandemic.

Results. The results of the Spearman rank test prove a significant value ($p=0.004$ with coefficient correlation (r)= -0.315). It means that burnout syndrome can affect job satisfaction negatively. Nurses should be skillful at conducting nursing care according to their assigned duties (performance outcome). Improving communication ability, especially the ability to utilize the local language. Mastering international languages might also help to cope with the market's demand in the future (verbal persuasion). Nurses should be careful in perceiving the faced situation (observational learning) and try to think positively (emotional arousal).

Conclusion. The higher the level of job satisfaction, the lower the level of burnout syndrome. Therefore, nurses should improve their self-efficacy as they are the healthcare front liners during the pandemic. With better self-efficacy, the quality of care should improve as well.

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Introduction

The COVID-19 pandemic is yet to end. Currently, several countries worldwide are faced with a significant increase in case numbers, suggesting the emergence of the third wave.¹ In Indonesia, as it has been quite a while since the pandemic started in March 2020, burnout syndrome happens among nursing staff.² Burnout syndrome also leads to decreased working performance among nurses. In the workplace, two phenomena have been proven to affect the quality of patient care, namely, burnout syndrome and job satisfaction.^{3,4} However, previous studies that aim to determine the relationship between burnout syndrome and job satisfaction were still inconsistent. Burnout syndrome is characterized by 3 dimensions of burnout according to the multidimensional theory by Maslach, such as emotional exhaustion, depersonalization, and lack of personal accomplishment.⁵ The depersonalization arises as negative behaviors of workers toward co-workers and others as their cope mechanism for extreme tiredness. Nurses experience depersonalization. Therefore, improved self-efficacy (SE) is necessary as it might significantly benefit the nurses (being a protective factor) despite its possible risks.⁶ If nurses could understand the importance of SE, this might prevent the occurrence of burnout syndrome.

Objective

The study aimed to determine the effect of burnout syndrome on job satisfaction among nurses and how self-efficacy can solve the problem.

Materials and Methods

Desain study

This study is a mixed method study with a cross-sectional design about the effect of burnout syndrome on nursing personnel's job satisfaction during the COVID-19 pandemic in Indonesia (quantitative measurement) and how self-efficacy can solve that problem (qualitative measurement).

Study respondents

The population of this study is nursing personnel who works at 3 major hospitals in Jember Regency, East Java, Indonesia (Dr Soebandi Hospital, Perkebunan Jember Klinik Hospital, Kaliwates Hospital). The study was conducted from October 2021 to February 2022. Slovin's formula calculated this study's sample size. A total of 79 respondents were recruited via a proportional random sampling technique. They should meet the researcher's criteria: i) nursing personnel with an associate and bachelor's degree in nursing; ii) providing health services to COVID-19 patients directly.

Respondents will be excluded from the study if they likely experience depression based on the PHQ-9 questionnaire scoring.

Measurement instrument

Quantitative measurement

Data was collected using 4 standard questionnaires that have been tested for validity and reliability (19-21). The questionnaire used in this study was obtained from previous studies and adapted to the Indonesian language (22-25). It consists of a sociodemographic questionnaire, Maslach Burnout Inventory (MBI), Minnesota Satisfaction Questionnaire-Short form (MSQ-Short form), and Patient Health Questionnaire-9 (PHQ-9).

The sociodemographic questionnaire identifies respondents' sociodemographic data, including name, age, gender, marital status, years of experience, kind of job, working duration, and working unit.

The MBI questionnaire consists of 21 questions (6 items about emotional exhaustion, 6 items about depersonalization, and 7 items about lack of personal accomplishment) to evaluate burnout syndrome perception. Every item was interpreted by 4 points Likert scale, 1 for never, 2 for seldom, 3 for often, and 4 for always perception.

MSQ-Short form consists of 20 questions to assess job satisfaction perception through 20 factors that are associated with job satisfaction perception, including intrinsic factors (items number 1-4, 7-11, 15-16, dan 20), extrinsic factors (items number 5-6, 12-14, dan 17- 19). Every item was interpreted by 5 points Likert scale, 1 for very dissatisfied, 2 for dissatisfied, 3 for neutral, 4 for satisfied, and 5 for very satisfied perception.

PHQ-9 is a questionnaire used to determine the symptoms of depression based on 9-item questions. Each item was interpreted by 3 points Likert scale, 0 for not at all, 1 for several days, 2 for more than half of the days, and 3 for nearly everyday perception. In this study, PHQ-9 was explicitly used as a tool to exclude the respondent from reducing the study's bias caused by overlapping burnout syndrome and depression. Respondents will be excluded from this study if he gets a total score > 4.

Qualitative measurement:

Qualitative data was collected by using thematic analysis. Self-efficacy domains consist of performance outcome, verbal persuasion, observational learning, and emotional arousal.

Statistical analysis

Sociodemographic characteristics, burnout syndrome perception, and job satisfaction perception were presented by frequency and percentage. At the same time, Spearman Rank Test was used to test the effect of burnout syndrome on job satisfaction with an ordinal data scale. The effect of burnout syndrome on job satisfaction is significant if the significant value $P < 0.05$, while correlation strength is determined by correlation coefficient (r) with some classification, very weak correlation ($r = 0.00-0.199$), weak correlation ($r = 0.20-0.399$), moderate correlation ($r = 0.40-0.599$), strong correlation ($r = 0.60-0.799$), and very strong correlation ($r = 0.80-1.000$). Data were analyzed by Microsoft Excel 2010 and Statistical Package for the Social Sciences version 24 software.

Ethical coincidence

This study has passed the ethical coincidence test by the Ethics Commission of Medical Faculty, Jember University, as certified under ethic No: 1544/H25.1.11/KE/2021. All the study respondents were informed about the study and voluntarily participated.

Result and discussions

Distribution of sociodemographic characteristics

As shown in Table 1, most respondents (55.7%) are around age 31-40 years old. The gender distribution shows that 38 respondents (48.1%) are male, and 41 (51.9%) are female. Among the respondents, 75 were married (94.9%), and 4 others were single. In this study, 24 respondents (30.4 %) from the COVID-19 Treatment unit, 16 respondents (20.3%) from the non-COVID-19 treatment unit, 10 respondents (12.7 %) from the emergency unit, *etc.* During this research, most of the workers had worked for > 10 years (58.2%), and 55 respondents (69.6 %) had a work duration of ≤ 8 /day.

Burnout syndrome's perception

Table 2 shows that the perception of burnout syndrome is dominated by mild levels (83.7%), with no respondents who experience moderately high and high levels of burnout syndrome.

The mild level of burnout syndrome is likely related to the sociodemographic characteristics of the respondents shown in Table 1. The characteristics of the respondents, including age (31-40 years), marital status (married), length of work (>10 years), and duration of daily work (≤ 8 hours/day), were found to associate with a low tendency of burnout syndrome. Young health workers tend to develop burnout syndrome more than older health workers during stressful conditions.⁷ Older health workers were assumed to have more work experience and thus have adequate abilities in managing work stress *ozkul*.^{7,8} The following characteristic, marital status, was also found to be associated with the perception of burnout syndrome in the respondents. Single physician personnel experienced more depersonalization and emotional exhaustion than married physician personnel.⁹ Social support from family helps nursing personnel deal with work stress.¹⁰

The third characteristic is the length of work. It has been reported that health workers with work experience of fewer than ten years are inclined to emotional exhaustion and decreased self-achievement.¹¹ Another study among nurses in Poland stated that fresh graduate nurses experience burnout syndrome more than

experienced nurses while working during the COVID-19 pandemic.¹² The fourth characteristic is the duration of daily work. A daily work duration of more than 8 hours was associated with high emotional exhaustion and depersonalization in health workers in Egypt during the COVID-19 pandemic.¹³

The perception of mild burnout syndrome can also be related to organizational support. The incidence of burnout syndrome can be reduced by improving modifiable risk factors, such as increasing organizational support to meet health workers' physical and emotional needs.¹⁴

The perception of a mild level of burnout syndrome can also be associated with a short research period in this study. The time for collecting data was conducted after the second wave of COVID-19 in Indonesia (July-August 2021), and there has been a lowering in COVID-19 cases in Indonesia.

Job satisfaction perception

Table 3 shows that 43 respondents (54.4%) had a high level of job satisfaction, 36 respondents (45.6 %) had moderate job satisfaction, and no low level was found.

Job satisfaction is a perception resulting from workers' evaluation of their work. Well-being at work is one of the critical aspects that can be used to make sure that the workers are safe, healthy, and engaged at their work.¹⁵ A high level dominated the respondent's perception of job satisfaction according to the respondent's response to the 20-item Minnesota Satisfaction Questionnaire-Short form statement, which was dominated by a neutral and satisfying response. Most respondents were satisfied with how the leadership handles employees, the supervisor's competence, how company policies are implemented, communication between co-workers, and the working conditions. Furthermore, the response to the perception of the amount of salary was balanced between neutral

and satisfied. In line with a previous study conducted in Aisyiyah General Hospital Ponorogo, Indonesia, several factors such as salary, work environment, the opportunity to grow, and leadership correlate with nursing personnel's job satisfaction during the COVID-19 pandemic.¹⁶ Organizational and social support received by nursing personnel affects job satisfaction during the COVID-19 pandemic.^{17,18} Perceptions of well-being in the workplace arise from evaluating all aspects, including the work environment quality and the support of the workplace organization.

Responses to the MSQ-Short form also showed that most respondents felt satisfied with the opportunity to develop their work and the praise they received. Respondents have been given training on health protocols to minimize the transmission of COVID-19 and handling patients with COVID-19 during the pandemic. Following the Two Factor theory by Herzberg, the satisfiers (motivational) group, which includes job advancement, personal growth, and job recognition, affects job satisfaction by influencing work motivation in individuals. Promotions and job acknowledgments from superiors and co-workers fulfill the respondent's self-actualization needs to provide work motivation and influence perceptions of job satisfaction.^{15,19}

The effect of burnout syndrome on job satisfaction

Table 4 shows that the result of the Spearman rank test proves a weak negative effect of burnout syndrome on job satisfaction with a significance value of $P=0.004$ and coefficient correlation (r)= -0.321 . This study's results align with the research results by Andarini and Mijakoski, which concluded that burnout syndrome negatively affects job satisfaction.^{20,21}

The effect of burnout syndrome on job satisfaction was based on stressful conditions at work. Stress at work occurs when job demands are not matched with individual abilities and resources to

Table 1. Sociodemographic characteristics.

Sociodemographic characteristics	Frequency (n)	Percentage (%)
Age in years		
21-30	15	19.0
31-40	44	55.7
41-50	15	19.0
>50	5	6.3
Gender		
Male	38	48.1
Female	41	51.9
Marital status		
Married	75	94.9
Single	4	5.1
Years of experience		
<1 year	3	3.8
1-2 year	9	11.4
3-4 year	0	0
5-10 year	21	26.6
>10 year	46	58.2
Working duration/day		
≤8 hours	55	69.6
>8 hours	24	30.4
Working unit		
COVID-19 Treatment Unit	24	30.4
Non- COVID-19 Treatment Unit	16	20.3
Emergency Unit	10	12.7
Surgical Unit	13	16.5
Outpatient Unit	4	5.1
Intensive Care Unit	6	7.6
Haemodialysis Unit	6	7.6

cope with their job demands.⁶ Workers who are required to work beyond their capacity tend to experience emotional exhaustion, characterized by the emergence of negative affect such as feeling emotionally tired and losing energy in carrying out their duties.²² Additionally, workers who continuously experience fatigue tend to experience depersonalization as their coping mechanism to workplace stress.^{2,50} Depersonalization arises as negative behaviors toward work and others, such as cynicism, irritability, ignorance of their duties, and ignorance of the work environment. Thus, it may create a bad organizational atmosphere. The perception of the workforce in the organizational atmosphere affects the evaluation of their welfare in the workplace.²³

Despite it, the effect of burnout syndrome on job satisfaction in this study was weak, (r) -0.315. A survey of social workers concluded that social support at work positively correlates with job satisfaction and mediates the negative correlation between burnout and job satisfaction.²⁴ Besides that, compensation and a safe work environment reduced the adverse effects of emotional exhaustion on job satisfaction.²⁵ Workers who receive proper compensation for the work that they have done will feel satisfied with their work even though they are emotionally tired.²⁶ In this study, respondents felt good perceptions of organizational support and social support from co-workers. It was marked by respondents' responses which were dominated by satisfying responses on how the leader handled employees, communication methods between co-workers, job praise received, salary received, and organizational support in creating a safe work environment.

The qualitative results of the interview with Oswen (pseudonym), a 33-year-old nursing staff working in the intensive care unit, revealed that burnout syndrome was an actual threat to the nursing staff's mental well-being. Oswen had worked as a permanent employee in a type A COVID-19 referral hospital for eight years. Ever since the pandemic struck, Oswen had been one of the front-liners caring for patients in the COVID-19 isolation ward, then transferred to the COVID-19 intensive care unit four months ago. On the first month of working in the COVID-19 isolation ward, he intended to transfer as he perceived the situation significantly made him feel physically and mentally burdened. During the peak of the pandemic's second wave, his feeling of suffocation and exhaustion seemed to be even more unbearable. Fortunately, the situation did not last long. He witnessed the fellow nurses who seemed to feel the same. As he found people to share his burden with, he gradually learned to be at peace with the situation. Frequent sharing and cheering on each other with fellow nurses seemed to help ease the perceived workload.

Having proper self-efficacy leads nurses to improved control of burnout syndrome.²⁷ Therefore, nurses should be aware of SE as a protective instead of a risk factor during the pandemic. SE might adversely become a risk factor when it makes nurses too confident

and leads to forgetting their regular tasks and functions, along with their limitations. Hence, the positive context of the SE should be evaluated according to the place and the actual condition. Excessive SE might inadvertently become a threat to nurses during the pandemic state. Therefore, nurses should be able to properly utilize their SE, and recognize when and how to utilize the domains inherent in SE. SE domains consist of the performance outcome, verbal persuasion, observational learning, and emotional arousal.

Performance outcome

Nurses should be skillful at conducting nursing care according to their assigned duties. Their competence would support their patient caring performance, both the non-emergency and emergency COVID-19 patients. Wearing proper personal protective equipment could also increase their confidence when dealing with infectious and dangerous patients with COVID-19.²⁸

Verbal persuasion (improve community skills)

Improving communication ability, especially the ability to utilize the local language. Mastering international languages might also help to cope with the market's demand in the future. Be able to master English, Chinese, or other international languages. This would lead to better relatedness between the nurses and the patients and patient's families, which might reduce misunderstandings that could possibly lead to malpractices.^{29,30}

Observational learning

Nurses should be careful in perceiving the faced situation. Emergency nursing-related sciences should be applied when faced with patients with COVID-19. One should be mindful of oneself

Table 2. Burnout syndrome perception.

Burnout syndrome level	Frequency (n)	Percentage (%)
Mild	67	84.8
Moderate	12	15.2
Moderately High	0	0
High	0	0

Table 3. Job satisfaction's perception.

Job Satisfactions Level	Frequency (n)	Percentage (%)
Low	0	0
Moderate	36	45.6
High	43	54.4

Table 4. The results of the spearman rank test.

			Correlations	
			Burnout syndrome	Work satisfaction
Spearman's rho	Burnout syndrome	Correlation coefficient	1,000	-.321*
		Sig. (2-tailed)		0,004
		N	79	79
	Work satisfaction	Correlation coefficient	-.321*	1,000
		Sig. (2-tailed)	0,004	
		N	79	79

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

and be aware of when to act or quit when it's no longer possible to do anything. Manage the situation as possible.

Emotional arousal

Make efforts to think positively. Don't add the burden of irrational thoughts and prejudices. This pandemic state is inevitably physically and mentally draining. Caring for patients with a poor condition and even the death that frequently happens might lead to negative memories. One should attempt to put upfront empathy as a health care worker instead of practicing the type of empathy that might adversely affect one's wellbeing.²⁸

Figure 1 demonstrated the priority order of SE domain problem solving from ones that are not important nor require immediate action to the ones that need immediate action due to its impending adverse consequences if nothing is done.

Conclusions

This current study found that burnout syndrome negatively affects job satisfaction among nursing personnel at 3 major hospitals in Jember Regency, Indonesia. The respondents experience mild burnout syndrome and a high level of job satisfaction. Having proper self-efficacy leads nurses to improved control of burnout syndrome by minimalizing depersonalization.

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Figure 1. Urgency seriousness growth in elaborating self-efficacy.

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