Investigating nurses’ coping strategies in their workplace as an indicator of quality of nurses’ life in Indonesia: a preliminary study

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Abstract. This study aims to investigate coping strategies used by Indonesian nurses dealing with their workplace stressors as an indicator of quality of nurses’ life. Nursing is a profession which always exposed to stressful situations in the clinical area. Prolonged stress without effective coping strategies may negatively contribute to the nurses’ quality of life. This study is a descriptive, cross-sectional design. A random sample of 134 nurses working in both public and private hospitals was surveyed in this study using the Brief COPE Questionnaire. The findings indicate that the nurses used religion, positive reframing, instrumental support, and planning as the highest frequent used coping strategies. The results of this study described the picture of the Indonesian nurses’ most frequently used of coping strategies in their workplace. The next stage of this study will aim to examine the influence of such coping strategies toward nurses’ quality of life and well-being.

Keywords: nurse, coping strategy, quality of life

1. Introduction

Nursing has been considered as a physically and emotionally stressful profession [1]. A study reported that nurses had high stress levels in the workload and time pressure [2]. Almost half (46.9%) of Emergency Department (ED) nurses were in the high pressure level of occupational stresses [3]. High levels of stress were also reported by more than half (52.2%) nurses, the main stressful factors are identified as patient death and dying (32.8%), followed by emergency situations (22.8%), and low supportive relationships (18.0%) [4]. Meanwhile, a study found that individual factors, organizational practices and structures affect nurse managers’ stress [5].

Stressful working conditions place some nurses at risk of burnout and stress-related illness[1]. It is found that stress is a better predictor of burnout and general health [6]. Therefore, effective coping in order to deal with such stressors is needed. Studies found that nurses had moderate levels of work-related stress and depression, and performing several coping strategies [7,8]. Laranjeira [4] found that the most frequently used nurses’ coping strategy was self-controlling, followed by planful problem-solving and seeking social support. In addition, it is also found that nurses preferred self-control as a coping strategy.
Active coping was found to be positively related to resource and environmental problems, and passive coping was positively related to workload and time pressure, and to interpersonal relationship and management issues[2]. Moreover, it was found that too much documents work, criticism, instrument equipment shortage, night shift, and rank of professional were the factors contributed to passive coping styles [3].

Positive coping strategies reduce or buffer the negative effects of work stress and negative coping strategies increased the negative effects [9]. Studies found that optimism and proactive coping when dealing with work-related stresses have a positive impact on the quality of life of nurses [10] and they also effective in preventing symptoms of burnout [11]. Yu, Hu, Efird, and McCoy [12] also found that planning and active coping were positively associated with health related quality of life. In addition, social support influenced quality of life [13]. Cultivating social support from family, friends/colleagues and supervisors can help an individual cope with stress and enhance a nurse’s quality of life [14]. Moreover, timely and adequate organizational support is essential to create nurses’ positive coping strategy and to enhance nurses’ well-being [15].

The main purpose of this study was to investigate the coping strategies used by nurses within the Indonesian context. As a preliminary study, next research will examine the relationship between coping strategies and nurses’ quality of life.

2. Method

2.1. Study Design and Participants
A cross-sectional study was conducted in both public and private hospitals in Medan, Indonesia. The sample consisted of 134 nurses who worked in in-patient units of both hospitals. Data were collected by questionnaires given to participants using randomized sampling technique.

2.2. Measures
All participants were encouraged to complete two parts of questionnaires. Part one was the Demographic Data Questionnaire, and part two was the Brief COPE Questionnaire. The Demographic Data Questionnaire was constructed by the researcher. It included information regarding age, gender, religion, ethnicity, marital status, number of people who living with, level of education, years of experience in nursing, and years of experience in the current area of work. The Brief COPE Questionnaire was developed by Carver [16]. The Brief COPE Questionnaire provides questions to identify 14 coping strategies that people use, however, in this study, substance use as a coping strategy was dropped because of Indonesian cultural context. Back translation, cultural applicability validation, and reliability test were performed. The Cronbach’s alpha coefficient for reliability test was 0.86.

2.3. Ethical Consideration
This study was approved by Ethics Committee of Faculty of Nursing, University of Sumatera Utara. Informed consent was obtained from all participants. Each participant had freedom to ask for explanation of the study or to withdraw from the study at any time without consequences.

2.4. Data Analysis
Data were analyzed by using computer’s software program. Descriptive statistics such as frequency, mean value, and standard deviation were used to analyze the demographic data and coping strategies.

3. Result

3.1. Characteristics of the Sample
Almost all of the participants (94.8%) were female and average of age was 31.7 years (SD = 7.7). Half of the participants (52.2%) were Muslim and more than half (67.9%) were Batakese ethnicity. More than half of them were diploma graduates (58.2%) and married (56.0%). The average people who lived...
with participants was 3.5 (SD = 1.7). The average years of working as nurses was 7.9 years (SD = 7.1) and of working in the last unit was 4.8 years (SD = 4.3) as reported in Table 1.

Table 1. Demographics of nurses (n = 134)

| Variable                   | Frequency | Percentage (%) |
|----------------------------|-----------|----------------|
| Gender                     |           |                |
| Male                       | 7         | 5.2            |
| Female                     | 127       | 94.8           |
| Age                        | Mean = 31.7 SD = 7.7 |
| Religion                   |           |                |
| Islam                      | 70        | 52.2           |
| Protestant                 | 61        | 45.5           |
| Catholic                   | 3         | 2.3            |
| Ethnicity                  |           |                |
| Batakinese                 | 91        | 67.9           |
| Javanese                   | 30        | 22.4           |
| Malay                      | 5         | 3.7            |
| Others                     | 8         | 6.0            |
| Level of Education         |           |                |
| Diploma                    | 78        | 58.2           |
| Bachelor                   | 55        | 41.1           |
| Master                     | 1         | 0.7            |
| Marital Status             |           |                |
| Married                    | 75        | 56.0           |
| Single                     | 57        | 42.5           |
| Divorced                   | 2         | 1.5            |
| Number of People Living with |          |                |
| Mean = 3.5 SD = 1.7        |           |                |
| Number of Years Working as Nurses | Mean = 7.9 SD = 7.1 |
| Number of Years Working in Last Unit | Mean = 4.8 SD = 4.3 |

3.2. Coping Strategies
The most frequently used coping strategies were religion (mean ± SD = 6.18 ± 1.79), positive reframing (mean ± SD = 5.71 ± 1.90), instrumental support (mean ± SD = 5.47 ± 1.59), and planning (mean ± SD = 5.45 ± 1.58). Meanwhile, the least used coping strategies were behavioral disengagement (mean ± SD = 3.19 ± 1.28), denial (mean ± SD = 3.48 ± 1.16), self-blame (mean ± SD = 4.04 ± 1.19), and venting (mean ± SD = 4.48 ± 1.46) as reported in Table 2.
Table 2. The most frequently used coping strategies by nurses (n = 134)

| Coping Strategies         | Mean | SD  |
|---------------------------|------|-----|
| Religion                  | 6.18 | 1.79|
| Positive Reframing        | 5.71 | 1.90|
| Instrumental Support      | 5.47 | 1.59|
| Planning                  | 5.45 | 1.58|
| Acceptance                | 5.25 | 1.52|
| Active Coping             | 5.21 | 1.52|
| Humor                     | 4.85 | 1.40|
| Emotional Support         | 4.72 | 1.63|
| Self Distraction          | 4.57 | 1.62|
| Venting                   | 4.48 | 1.46|
| Self-blame                | 4.04 | 1.19|
| Denial                    | 3.48 | 1.16|
| Behavioral Disengagement  | 3.19 | 1.28|

4. Discussion
In this study, religion and positive reframing were the most frequently used coping strategies, followed by instrumental support and planning. Both religion and positive reframing are the emotion-focused coping strategies, meanwhile, both instrumental support and planning are the problem-focused coping strategies. Both emotion and problem-focused coping strategies are effective to deal with stressors. However, the problem-focused coping strategies were considered to be more effective due to seeking problem solving. Abraham et al. [17] found that nurses used different coping strategies, which mostly have a positive effect on the perception and management of stress in their workplace.

The use of effective coping strategy for regulating emotions and supervisor support can protect nurses from the depletion of emotional resources [18]. In this study, religion and positive reframing were examples of coping strategies that regulate nurses’ emotion. In addition, supervisor support is one example of instrumental support coping strategies.

Current studies emphasized the importance of instrumental support coping strategies as an effective coping. Professional support from the senior nurses is needed as a coping source for other nurses [19]. In addition, it was found that social support at work played an important role in nurses’ coping [20]. By cultivating social support from family, friends/colleagues and supervisors, it will help nurses cope with stress and enhance their quality of life [14]. Timely and adequate organizational support is vital to create nurses’ positive coping strategy and to enhance nurses’ well-being[15]. Moreover, it was found that fostering peer support and team spirit as a coping strategy is important to ensure staff co-operation [21]. Therefore, enhancing social support was seen as an important factor in reducing work stress and its related consequences [22].

The least frequently used coping strategies in this study were behavioral disengagement, denial and self-blame. A study found that coping strategies, such as denial, self-distraction, self-blame, and behavioral disengagement were significant predictors of posttraumatic stress disorder (PTSD) symptom severity [23]. Such coping strategies were classified as dysfunctional coping. It was found that dysfunctional coping was significantly associated with emotional exhaustion and depersonalization [24]. Surprisingly, a study found that avoidant coping strategies were favoured by nurses [25].
In order to develop effective coping strategies, education and experience are needed. Thus, nurse managers should organize educational and training program to improve coping skills among nurses as well as provide social support for nurses to reduce psychosocial distress [26]. A study found that effective coping strategies can reduce nurse burnout and should be maintained for one year [27]. Moreover, stress management of nurses may improve their productivity and quality of life [4].

5. Conclusion
Nurses in this study had performed several coping strategies to deal with their workplace stressors. Based on the findings, it is recommended for nurse administrators to implement programmes to improve nurses’ coping skills. It is also important to maintain support from the nurse leaders to their staff by helping them in reducing their work stress.

6. References
[1] Brennan E. Towards resilience and wellbeing in nurses. British Journal of Nursing. 2017;26(1):43-47.
[2] Zhou H, Gong Y. Relationship between occupational stress and coping strategy among operating theatre nurses in China: a questionnaire survey. Journal of Nursing Management. 2013;23(1):96-106.
[3] Lu D, Sun N, Hong S, Fan Y, Kong F, Li Q. Occupational Stress and Coping Strategies Among Emergency Department Nurses of China. Archives of Psychiatric Nursing. 2015;29(4):208-212.
[4] Laranjeira C. The effects of perceived stress and ways of coping in a sample of Portuguese health workers. Journal of Clinical Nursing. 2011;21(11-12):1755-1762.
[5] Udod S, Cummings G, Care W, Jenkins M. Role stressors and coping strategies among nurse managers. Leadership in Health Services. 2017;30(1):29-43.
[6] Khamisa N, Peltzer K, Ilic D, Oldenburg B. Effect of personal and work stress on burnout, job satisfaction and general health of hospital nurses in South Africa. Health SA Gesondheid. 2017;22.
[7] Hasan A, elsayed S, Tumah H. Occupational stress, coping strategies, and psychological-related outcomes of nurses working in psychiatric hospitals. Perspectives in Psychiatric Care. 2018;54(4):514-522.
[8] Hasan A. Work Stress, Coping Strategies and Levels of Depression among Nurses Working in Mental Health Hospital in Port-Said City. International Archives of Nursing and Health Care. 2017;3(2).
[9] Li L, Ai H, Gao L, Zhou H, Liu X, Zhang Z et al. Moderating effects of coping on work stress and job performance for nurses in tertiary hospitals: a cross-sectional survey in China. BMC Health Services Research. 2017;17(1).
[10] Cruz J, Cabrera D, Hufana O, Alquwez N, Almazan J. Optimism, proactive coping and quality of life among nurses: A cross-sectional study. Journal of Clinical Nursing. 2018;27(9-10):2098-2108.
[11] Chang Y, Chan H. Optimism and proactive coping in relation to burnout among nurses. Journal of Nursing Management. 2013;23(3):401-408.
[12] Yu Y, Hu J, Efird J, McCoy T. Social support, coping strategies and health-related quality of life among primary caregivers of stroke survivors in China. Journal of Clinical Nursing. 2013;22(15-16):2160-2171.
[13] Sun N, Lv D, Man J, Wang X, Cheng Q, Fang H et al. The correlation between quality of life and social support in female nurses. Journal of Clinical Nursing. 2017;26(7-8):1005-1010.
[14] Kowitlawkul Y, Yap S, Makabe S, Chan S, Takagai J, Tam W et al. Investigating nurses’ quality of life and work-life balance statuses in Singapore. International Nursing Review. 2018;
[15] Smith Z, Leslie G, Wynaden D. Coping and caring: support resources integral to perioperative nurses during the process of organ procurement surgery. Journal of Clinical Nursing. 2017;26(21-22):3305-3317.

[16] Carver C. You want to measure coping but your protocol’ too long: Consider the brief cope. International Journal of Behavioral Medicine. 1997;4(1):92-100.

[17] Abraham L, Thom O, Greenslade J, Wallis M, Johnston A, Carlström E et al. Morale, stress and coping strategies of staff working in the emergency department: A comparison of two different-sized departments. Emergency Medicine Australasia. 2018;30(3):375-381.

[18] Goussinsky R, Livne Y. Coping with interpersonal mistreatment: the role of emotion regulation strategies and supervisor support. Journal of Nursing Management. 2016;24(8):1109-1118.

[19] Bayuo J, Agbenorku P. Coping strategies among nurses in the Burn Intensive Care Unit: A qualitative study. Burns Open. 2018;2(1):47-52.

[20] Gifkins J, Loudoun R, Johnston A. Coping strategies and social support needs of experienced and inexperienced nurses performing shiftwork. Journal of Advanced Nursing. 2017;73(12):3079-3089.

[21] Salminen-Tuomaala M, Ala-Hynnilä L, Hämäläinen K, Ruohomäki H. Challenges and factors likely to promote coping as anticipated by nurses preparing for a merger of intensive and intermediate care units. Intensive and Critical Care Nursing. 2017;43:68-74.

[22] Labrague L, McEnroe-Petitte D, Leocadio M, Van Bogaert P, Cummings G. Stress and ways of coping among nurse managers: An integrative review. Journal of Clinical Nursing. 2018;27(7-8):1346-1359.

[23] McMeekin D, Hickman R, Douglas S, Kelley C. Stress and Coping of Critical Care Nurses After Unsuccessful Cardiopulmonary Resuscitation. American Journal of Critical Care. 2017;26(2):128-135.

[24] Bamonti P, Conti E, Cavanagh C, Gerolimatos L, Gregg J, Goulet C et al. Coping, Cognitive Emotion Regulation, and Burnout in Long-Term Care Nursing Staff: A Preliminary Study. Journal of Applied Gerontology. 2017;073346481771697.

[25] McTierman K, McDonald N. Occupational stressors, burnout and coping strategies between hospital and community psychiatric nurses in a Dublin region. Journal of Psychiatric and Mental Health Nursing. 2014;22(3):208-218.

[26] Zhou H, Peng J, Wang D, Kou L, Chen F, Ye M et al. Mediating effect of coping styles on the association between psychological capital and psychological distress among Chinese nurses: a cross-sectional study. Journal of Psychiatric and Mental Health Nursing. 2017;24(2-3):114-122.

[27] Lee H, Kuo C, Chien T, Wang Y. A Meta-Analysis of the Effects of Coping Strategies on Reducing Nurse Burnout. Applied Nursing Research. 2016;31:100-110.

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