



Resilience levels based on individual characteristics of correctional nurses: A preliminary study

**Adisty Rose Artistin^{1*}, Megah Andriany², Nur Setiawati Dewi², Fani Kurnia
Pusparini³**

¹Postgraduate Student, Department of Nursing, Faculty of Medicine, Diponegoro
University

²Department of Nursing, Faculty of Medicine, Diponegoro University

³Prison Class IIA Ambarawa

Artikel info

Article history:

Received; 07 Maret 2021

Revised: April 10th, 2021

Accepted: April 20th, 2021

Correspondence author:

Adisty Rose Artistin

E-mail:

adistyra95@gmail.com

DOI:

<http://doi.org/10.35654/ijnhs.v4i2.415>

Abstract. Correctional nurses need resilience to face challenges in the workplace, such as stress from role ambiguity. This study aims to explore the level of resilience based on the individual characteristics of correctional nurses. This study used a cross-sectional method with 24 correctional nurses in Central Java as the participants. This study used a Nicholson McBride Resilience Questionnaire (NMRQ) questionnaire distributed via a google form. Data analysis using the cross-tabulation method. The results showed that nurses had a strong resilience level (45.83%). Based on gender, male nurses have higher resilience. Nurses aged 45-54 years have the most increased resilience. Nurses with undergraduate education have the highest resilience among other levels of education. In general, the correctional nurse resilience is in a Strong category. Based on individual characteristics, male nurses aged 45-54 years with a bachelor's degree have the highest resilience. Further study should be conducted to investigate correctional nurses' resilience process qualitatively, difficulties in work, how they deal with them, and the adaptation process.

Keyword: resilience level, correctional nurse, individual characteristics



This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International License CC BY - 4.0

INTRODUCTION

Nurses, wherever they work, face stress at work, and correctional nurses are no exception (1). A source of stress for correctional nurses can come from the ambiguity of roles between custody and care, which are perceived as opposing because nurses work in highly secure settings (2). Nurses can also experience stress because they are afraid of contracting hepatitis, HIV, or other chronic infectious diseases (3). Stress can also arise from a correctional environment that "fosters isolation, aggression, violence and manipulative behavior" (4).

If not balanced with the ability to survive, nurses' stress conditions can have an adverse impact on nurses. Stress can affect physical health, such as fatigue, making it prone to accidents (5). Hamer et al. (6) found that stress can pose a risk to emotional health, such as; anxiety, depression, and post-traumatic disorders. The work stress experienced by nurses can also affect caring behavior. A high level of work stress affects affectionate behavior to be less good (7).

Nurses need resilience in dealing with work situations filled with stressors (8). Resilience is the ability to adapt by improving and managing oneself to remain steadfast in facing the difficulties or pressures of life that they face every day. Masten (2015) defines resilience as the ability to adapt positively and succeed with challenging circumstances or problems (9). Resilience is needed to deal with everyday difficulties and significant life-changing events, and positive adjustment equals the experienced challenges (10).

Resilience in the nursing context is defined as the ability to build strength in responding to the internal and external environment to survive, grow or develop (11). The term resilience in nursing research is often specifically related to the professional challenges experienced by nurses. It is seen as a personal capacity that enables nurses to cope with workplace demands (12).

A low level of resilience can affect the performance of nurses. Rokhan and Hadiyani argued that the lower the level of resilience, the lower the work attachment to nurses (13). Research by Plummer and Zhang suggests that nurses who have low resilience levels tend to experience burnout (a prolonged response to chronic emotional and interpersonal stressors at work) (14).

Increased nurse resilience can help nurses reduce emotional fatigue, increase work engagement, and improve function when facing workplace challenges (15). Resilient nurses will learn to overcome these difficulties and develop better coping mechanisms for coping with stress through exposure to demanding work situations and environments (16). This can help nurses carry out their role to define strategies for dealing with difficulties and attenuate the effects of job demands (15).

Resilience to nurses can be influenced by two factors, namely personal factors and factors related to work. Individual factors that can affect resilience include gender, age, education, work experience (15). Research by Ren et al. found that female nurses with high education levels had high resilience levels (17). The results of the study by Zheng et al. suggest that nurses over 60 years of age and nurses with work experience of more than 20 years have high resilience (18).

Factors originating from work that affect nurse resilience include work stress, income, and shift work (15). Job stress determines nurse resilience. The high level of stress can reduce the level of nurse resilience (17,19,20). Guo et al. found that nurses with low income also have low resilience (14). Nurses who do not work night shifts have high resilience. Shift work affects resilience because it can cause circadian rhythms and disrupted family and social life (17).

Job stress on nurses can create adverse conditions for nurses and the workplace. For this reason, nurses need resilience to deal with work stress and survive on the job as a nurse.

Apart from external factors, resilience is also influenced by internal factors, which are the characteristics of individual nurses.

OBJECTIVE

This study aims to explore the level of resilience based on the individual characteristics of correctional nurses.

METHOD

This study used a cross-sectional survey method. Correctional nurses working in detention centers and correctional facilities were recruited to participate in the study. The sampling technique used purposive sampling with the criteria of correctional nurses who have at least one year of work experience, have an available position as practitioner nurse, and are willing to be research respondents. Resilience questionnaires and demographic data questionnaires are distributed to correctional nurses in Central Java via a google form. According to the sample selection criteria, the google form link was distributed by one of the correctional nurses in Central Java to respondents. The form can be filled in anytime and anywhere, making it easier for participants to complete the questionnaire questions. The data collection took place in March 2020. The data obtained from the questionnaire are only used for research purposes and not for dissemination.

The demographic data questionnaire contains questions about gender, age, latest education, work experience. The study's resilience questionnaire used the Nicholson McBride Resilience Questionnaire (NMRQ), which included twelve question items. For each question, participants were asked to rate themselves on a scale of 1 to 5. The scale was 1 strongly disagrees, and 5 strongly agrees. Participants were asked to be honest in filling out each question. The total number of scores of the questions in the questionnaire is 12 to 60. The assessment criteria are divided into four levels, namely the level of "developing" resilience with a score of 0-37; level of resilience "Formed" with a score of 38-43; level of resilience "Strong" with a score of 44-48; and an "exceptional" level of resilience with a score of 49-60. Previous research reported Cronbach's Alpha coefficient .76 (21). In this study, the internal consistency reliability was .771 (Cronbach's Alpha).

Data were analyzed using Microsoft Excel with descriptive methods and cross-tabulation. Descriptive analysis in the study was carried out on data on the characteristics of individual participants. Cross-tabulation analysis was carried out on the variables of individual participant characteristics and the level of participant resilience.

RESULTS

Table 1 shows the personal characteristics of correctional nurses, namely gender, age, and last education. The total number of participants in this study was 24 correctional nurses; 13 were women, and the rest were men. Most of the participants (54%) were aged 35-44 years. The number of participants with the last diploma education was the same as the participants with the medical profession's latest education (11 people). The number of participants with the previous degree was the same as participants with the last high school education, namely one person.

Table 1. Individual characteristics of participants and level of resilience based on participant characteristics (n = 24)

Individual Characteristic of Correctional Nursing	N (%)	Resilience Level							
		Developing		Formed		Strong		Exceptional	
		f	%	f	%	f	%	f	%
Gender									
Female	13 (54)	0	0	6	46.15	5	38.46	2	15.38
Male	11 (45)	0	0	1	9.09	6	54.55	4	36.36
Age									
25-34	10 (42)	0	0	4	40	5	50	1	10
35-44	13 (54)	0	0	3	23.08	6	46.15	4	30.77
45-54	1 (4)	0	0		0		0	1	100
Education Level									
Senior high school	1 (4)	0	0	0	0	1	100	0	0
Diploma in nursing	11 (45)	0	0	1	9.09	6	54.55	4	36.36
Bachelor degree	1 (4)	0	0	0	0	0	0	1	100
Nurse profession	11 (45)	0	0	6	54.55	4	36.36	1	9.09

DISCUSSION

Resilience Level based on gender

The level of resilience between male and female participants did not significantly differ, but in terms of scores, male nurses with intense and extraordinary levels of resilience were more than women. Zheng also stated the same thing, the average resilience score of male nurses was higher than that of women (18). Resilience is needed to balance the physical and emotional stress of nurses. It is inversely proportional to Ren et al. (17), where male nurses have a lower level of resilience than female nurses. This may be because male nurses are included as minority nurses in China, so they experience low social recognition, which results in a heavy psychological burden. Research has shown that men and women achieve resilience differently. Women get more social support and rarely express anger that is less predictive of depressive symptoms, which is a protective factor. The association between social support and depressive symptoms was stronger in women than in men (22).

Resilience Level by Age

Nurses aged 45-54 years have the highest resilience compared to other age categories. The lowest level of resilience is owned by participants aged 25-34 years. This is consistent with Ang et al., where nurses aged over 40 years were reported to have higher resilience than nurses under 27 years of age (23). A possible explanation is that these nurses are still looking for ways to fit into professional roles, especially for recent graduates at the diploma level. Alexander (24) argues similarly that older age is associated with a high resilience level, while middle age and younger have relatively low resilience. The high degree of resilience at an older age may be due to the high impact of life demands usually associated with this age. Age is an essential factor that allows individuals to successfully adapt and develop the capacity to bounce back from adversity (25). As you get older, the experience of dealing with difficulties in life such as difficulties at work will increase. Ang et al. added that the level of resilience is

related to nurses' length of work experience. Nurses who have more experience in work will find it easier to deal with work difficulties. As in Zheng's research (18), nurses with 60 years of age and 20 years of work experience have the highest resilience and job satisfaction.

Resilience Level based on education

The research results on the level of participant resilience based on education show that participants with the latest undergraduate education are known to have the highest level of resilience. This result contrasts with Guo et al. (26), which states that nurses with master's education have the most increased resilience. The story of nurses' education is a representation of the level of knowledge related to job development and service quality. High levels of education can positively affect nurses' attitudes and work involvement (27). Frankenberg added that better-educated individuals are better equipped to face new challenges and opportunities (28).

CONCLUSION

Based on the research results, nurses have a strong level of resilience. The individual characteristics of the nurses studied were gender, age, and education. Based on gender, male nurses have higher resilience. Nurses aged 45-54 years have the most increased resilience. Nurses with undergraduate education have the highest resilience among other levels of education. Male nurses aged 45-54 years and with a bachelor's degree have the most increased resilience.

The research results can be used to understand nurses' resilience and personal characteristics and influence policymakers to take operational actions to increase resilience. Providing skills training for nurses can provide additional education and experience to nurses so that they are expected to increase correctional nurses' resilience.

Further study should be conducted to investigate correctional nurses' resilience process qualitatively, difficulties in work, how they deal with them, and the adaptation process.

LIMITATION

This study only discusses the level of correctional nurse resilience in Central Java with a limited number of nurses and the different conditions in each correctional facility. The resilience of correctional nurses in other areas may be different. The personal characteristics of correctional nurses in research are still limited. Other characteristics may be explored, such as length of employment, marital status, income, etc.

Funding support

The author would like to thank the Faculty of Medicine, Diponegoro University, for supporting this research.

REFERENCES

- (1) Flanagan NA, Flanagan TJ. Correctional nurses' perception of their role, training requirements, and prisoner health care needs. *J Correct Heal Care*. 2001;8(1):67–85.
- (2) Jacob JD. The rhetoric of therapy forensic psychiatric nursing. *J Forensic Nurs*. 2012;8(4):178–87.
- (3) World Health Organization. Health in prisons: A WHO guide to the essentials in prison health [Internet]. Copenhagen, Denmark: WHO Regional Office for Europe; 2007. p. 159. Available from: <http://www.euro.who.int/pubrequest>
- (4) Lamarre M. Nursing role and practice in correctional facilities [Internet]. Second Edi.

- Clinical Practice in Correctional Medicine. Elsevier Inc.; 2005. 417–425 p. Available from <http://dx.doi.org/10.1016/B978-0-323-03265-0.50033-6>
- (5) Coetzee SK, Klopper HC. Compassion fatigue within nursing practice: A concept analysis. *Nurs Heal Sci* [Internet]. 2010;12(2):235–243. Available from: <https://doi.org/10.1111/j.1442-2018.2010.00526.x>
 - (6) Hamer M, Endrighi R, Venuraju SM, Lahiri A, Steptoe A. Cortisol responses to mental stress and the progression of coronary artery calcification in healthy men and women. *PLoS One*. 2012;7(2):1–6.
 - (7) Riza D. Tingkat stres kerja perawat dengan perawat caring perawat. *Ilmu Keperawatan* [Internet]. 2015;4(1):43–55. Available from: <http://ejournal.umm.ac.id>
 - (8) Benad P, Petronella M. Exploring Resilience in Nurses Caring for Older Persons. *Heal SA Gesundheit*. 2017;2(2):138–49.
 - (9) Masten AS. Pathways to integrated resilience science. *Psychol Inq*. 2015;26(2):187–96.
 - (10) Fletcher D, Sarkar M. Psychological resilience: A review and critique of definitions, concepts, and theory. *Eur Psychol*. 2013;18(1):12–23.
 - (11) Ledesma J. Conceptual frameworks and research models on resilience in leadership. *SAGE Open*. 2014;4(3).
 - (12) Hart PL, Brannan JD, de Chesnay M. Resilience in nurses: An integrative review. *J Nurs Manag*. 2014;22(6):720–34.
 - (13) Rokhan SM, Hadiani S. Pengaruh resiliensi terhadap keterikatan kerja pada perawat Gerontik di Panti Werdha. Universitas Sumatera Utara; 2018.
 - (14) Guo Y, Luo Y, Cross W, Plummer V, Zhang J. Burnout and its association with resilience in nurses: a cross-sectional study Nurse burnout and resilience. *J Clin Nurs*. 2017;27(1–2):19.
 - (15) Yu AF, Raphael D, Mackay L, King A. Personal and work-related factors associated with nurse resilience: A systematic review. *Int J Nurs Stud* [Internet]. 2019; Available from <https://doi.org/10.1016/j.ijnurstu.2019.02.014>
 - (16) Yılmaz EB. Resilience as a strategy for struggling against challenges related to the nursing profession. *Chinese Nurs Res*. 2017;4(1):9–13.
 - (17) Ren Y, Zhou Y, Wang S, Luo T, Huang M. Exploratory study on resilience and its influencing factors among hospital nurses in Guangzhou, China. *Int J Nurs Sci* [Internet]. 2018;5(1):57–62. Available from: <https://doi.org/10.1016/j.ijnss.2017.11.001>
 - (18) Zheng Z, Gangaram P, Xie H, Chua S, Cheng SB. Job satisfaction and resilience in psychiatric nurses : A study at the Institute of Mental Health, Singapore. *Int J Ment Health Nurs*. 2017;26:612–9.
 - (19) Zander M, Hutton A, King L. Coping and resilience factors in pediatric oncology nurses. *J Pediatr Oncol Nurs*. 2010;27(2):94–108.
 - (20) Mealer M, Jones J, Newman J, McFann KK, Rothbaum B, Moss M. The presence of resilience is associated with a healthier psychological profile in an intensive care unit (ICU) nurses: Results of a national survey. *Int J Nurs Stud* [Internet]. 2012;49(3):292–9. Available from: <http://dx.doi.org/10.1016/j.ijnurstu.2011.09.015>
 - (21) Murphy Y. The role of job satisfaction, resilience, optimism, and emotional intelligence in the prediction of burnout. Table of contents. Dublin Business School; 2014.
 - (22) Bezek E. Gender differences in resilience in the emerging adulthood population [Internet]. Theses. 2010. Available from: <https://scholarworks.rit.edu/theses/9333>
 - (23) Ang SY, Uthaman T, Ayre TC, Mordiffi SZ, Ang E, Lopez V. Association between demographics and resilience – a cross-sectional study among nurses in Singapore. *Int Nurs Rev*. 2018;65(3):459–66.

- (24) Alexandra, L. T., Ivan RM, Dawn ME, Dagmar A, Charles HB, Amanda ES, et al. Resilience, age and perceived symptoms with long term physical disabilities. *J Health Psychol.* 2014;
- (25) J. Sambu L, Mhongo S. Age and gender in relation to resilience after the experience of trauma among internally displaced persons (IDPS) in Kiambaa Village, Eldoret East Sub-County, Kenya. *J Psychol Behav Sci.* 2019;7(1):31–40.
- (26) Guo YF, Cross W, Plummer V, Lam L, Luo YH, Zhang JP. Exploring resilience in Chinese nurses: a cross-sectional study. *J Nurs Manag.* 2017;25(3):223–30.
- (27) Lawrence LA. Work engagement, moral distress, education level, and critical reflective practice in intensive care nurses. *Nurs Forum.* 2011;46(4):256–68.
- (28) Frankenberg E, Sikoki B, Sumantri C, Suriastini W, Thomas D. Education, vulnerability, and resilience after a natural disaster. *Ecol Soc.* 2013;18(2).