

# Emotional intelligence stimulates nurses' decent caring behavior in nursing practice in Bukittinggi City, Indonesia

Dia Resti Dewi Nanda Demur<sup>1</sup>, Def Primal<sup>2</sup>, Yuli Permata Sari<sup>3</sup>

<sup>1</sup>Department of Nursing Management, Faculty of Health Science, Universitas Perintis Indonesia, Indonesia

<sup>2</sup>Department of Anatomy and Physiology, Faculty of Health Science, Universitas Perintis Indonesia, Indonesia

<sup>3</sup>Department of Mental Health Nursing, Faculty of Health and Natural Science, Universitas Muhammadiyah Sumatera Barat, Indonesia

## ABSTRACT

**Introduction:** Qualified nursing services can be manifested through the provision of nursing care based on nurses' caring behavior. Therefore, a nurse's caring behavior can affect patient satisfaction which can contribute to a nurse's attitudes, and the specific baseline is emotional intelligence. As one of the clinical indicators for nursing care quality, it is associated directly with patient's satisfaction towards nurses' caring behavior, because it is conceptualized and measurable. **Objective:** To identify the association of nurses' emotional intelligence and their caring behavior throughout nursing practice hospitalization in Ambun Suri ward Dr. Achmad Mochtar Hospital, Bukittinggi, Indonesia. **Methods:** This is descriptive-analytic research with a cross-sectional approach involving 69 nurses. The instruments for this study were self-report questionnaires of professional caring behavior items. Data were categorized to specific criteria and measured with descriptive statistics. **Results:** The statistical analysis revealed 44.9% of nurses had a deficient caring attitude while high emotional intelligence reached out of 53.7% during nurses' caring behavior. A significant emotional intelligence association with caring behavior was found ( $p=0.001$ ). **Conclusion:** The study findings may be recommended to the hospital ward headship throughout the functions of direction and supervision strive for nurses' emotional intelligence development, including of nurses' touching and listening abilities, explaining and talking intonation, technical and expression amongst therapeutic processes, environmental management, and family involvement. Those should be improved from various nurses' emotional intelligence educational workshops and training for decent caring behavior enhancement.

**Keywords:** emotional intelligence; behavior; patient care planning; nursing care.

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Corresponding author: Def Primal -  
Department of Anatomy and Physiology,  
Faculty of Health Science, Universitas  
Perintis Indonesia - Jl. Adinegoro Padang  
- Indonesia -  
E-mail: [def.primal.anatomy@gmail.com](mailto:def.primal.anatomy@gmail.com)

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## INTRODUCTION

Qualified nursing care can be implemented through the provision of nursing services based on nurses' caring behavior, while these caring proceedings can stimulate patient satisfaction, increased psychological wellbeing, and better health outcomes<sup>1</sup>.

Thereupon, the main clinical indicator of nursing care quality is patients' satisfaction, based on the Directorate of Nursing Services Ministry of Health, the Republic of Indonesia<sup>2</sup>. The increasing level of patient satisfaction is reached when it relates to the advanced patient's needs provided, physically and psychologically<sup>1,2</sup>. Research conducted by Wolf et al.<sup>3</sup> and Agustin<sup>4</sup> showed a significant relationship between nurses' caring behavior with patient satisfaction, in which one of the caring behaviors was created in the therapeutic conversations of spiritual and emotional quality delivered<sup>1,3,5</sup>. Thus, decent nurses' caring behavior experience can increase patient satisfaction and perceptions, and immediately improve the nursing care quality and recovery improvement<sup>6</sup>. According to recent growing theory in Snowden<sup>7</sup> et al. stated that caring, compassion, and the clinical performance had become the useful nursing attributes of emotional intelligence. These caring concepts are explored from some humanistic perspectives and the basis of scientific knowledge combination<sup>7,8</sup>. Since then, Sunaryo's<sup>9</sup> reviewed definition has stated that emotional intelligence is the ability of a person in using or managing self-emotion and, when dealing with other people, use their self-motivation and survive from pressure adequately.

The Salovey and Mayer theory, who coined the first term of emotional intelligence, cited by Nwanzu<sup>10</sup> claimed that emotional intelligence is the key guide to one's thinking and behavior which merged from the capability to observe others and personal emotion and feeling, honoring people's emotions and mood differentiation, and be understanding. It finally relates to emotional perceptions, emotional thought and understanding, and emotion management. Some studies cited in the Nwanzu<sup>10</sup> study also reported that some activities can fluctuate the emotional intelligence and the behavioral problem, which behavioral of caring have a major effect on constructing the first-rate of excellent quality of care. Ebrahimi<sup>11</sup> et al. formulated this emotional intelligence as someone's ability to monitor his own and others' emotions, labeling differences of emotional differences to extract their way of thinking, interpersonal dynamics, and behavior. As has been theorized, emotional intelligence can be defined as a way for someone to reflect and behave to confront himself and others' controlled emotions. These concepts have been stated in the Nightingale<sup>1</sup> study that divided the theory into emotional intelligence ability and trait. The ability of emotional intelligence proposed four abilities about emotional expression and perceptions, the way of thinking influenced by emotions, emotional management, and understanding. On the other hand, the trait of emotional intelligence had four comprehensive well-being, self-control, emotionality, and sociability factors.

Many pieces of literature widely support the idea of emotional intelligence has a parallel impact on nurses' caring ability, and it can be applied as nurses' caring behavior predictive scores<sup>7</sup>. The emotional intelligence of nurses is significantly related to both physical

and emotional caring, however, it could be not relevant to leader nurses or physicians<sup>1</sup>. Based on Kaur's<sup>12</sup> literature review, caring behavior is affected by unidentified reasons. However, the author constructs 4 (four) reasons for caring behavior made up: emotional intelligence (EI), spiritual intelligence (SI), psychological ownership (PO), and burnout (BO). He stated that the physical and effective aspect shown in care referred to caring behavior. Caring behavior related to good emotional intelligence will support the creation of decent nursing services based on patient expectations. Rego et al.<sup>13</sup> and substantiate according to White's<sup>14</sup> findings and Juwariyah et al.<sup>15</sup> theories convey that patients who serviced personal health service with perfect skills but do not show a good emotional attitude, they rated those as an inadequate care service. As a trusted profession be avowed, nurses should transpose the caring behavior in a clinical setting which this emotional intelligence should be exposed to nurse students in their academic years<sup>16</sup>. Nwanzu<sup>10</sup> and Taylan<sup>17</sup> also cited that caring behavior should explore managing emotions and moral sensitivity, such as self-awareness, self-regulation, motivation, empathy, and social skills, which then predispose people to have intensive behavior of caring.

Besides, Kernbach & Schutte<sup>16</sup> mentioned that good emotional intelligence, which was shown by health care providers, was able to increase patients' satisfaction levels dealing with health workers. Therefore, nurses needed to internalize good emotional intelligence in every service provided. This perspective is in line with Nightingale<sup>1</sup>, McQueen<sup>18</sup>, Al-Mailam<sup>19</sup> statements that nurses need to have the ability of emotional intelligence to meet patient's care needs, predict the caring value provided, and conduct cooperative negotiations with other teams. Related to these perspectives, this study performs outright identification of caring behavior based on nurses' characteristics. The characteristics examined are age, sexual status, educational level, working years, and marital status regarding Nwanzu<sup>10</sup>, Kaur<sup>12</sup>, and Taylan<sup>17</sup> findings.

Based on a preliminary study in June 2018, data was shown that nurses had not been able to recognize their own emotions, regulate emotions, motivate themselves, support and understand others' emotions, and build relationships. During hospitalization, it had not elevated hospital efforts to improve the nurses' emotional intelligence. Whereas nurses' emotional intelligence is proven to influence nurses in health care, including caring behavior. In Indonesia, nurses' emotional intelligence is associated with nurses' caring behavior, as far as we can tell, is still rarely studied.

In this regard, we were interested in examining the association between nurse's characteristics (age, gender, educational background, working years, marital status), emotional intelligence, and their caring behavior throughout nursing practice hospitalization in the Ambun Suri ward of Dr. Achmad Mochtar Hospital, Bukittinggi, considering the samples residency (the cities nearby from the hospital), and without undertaking college activities, having a serious health problem, or as a part of hospital management.

## METHODS

We conducted this research at the Dr. Achmad Muchtar National Hospital in Bukittinggi City, Indonesia, to encompass caring behavior and emotional intelligence in nursing care. The research design uses descriptive correlation through a cross-sectional approach. Sixty-nine (10 males and 59 females) nurses are entangled as research samples. We recruited samples based on their nursing educational background (diplomas and bachelors) and nurses were responsible for nursing wards (four wards completed) since they had agreed to sign research informed consent previously.

Data was collected using questionnaire instruments from professional caring behavior items by Kusmiran<sup>20</sup> adaptation, and emotional intelligence self-report items by Umay<sup>21</sup> research instruments. We observe the emotional intelligence to define the ability of ourselves and others on feelings and emotions, appreciating the mood and emotion differences, and understanding of people's way of thinking and behaving as Nwanzu<sup>10</sup> cited. Caring behavior was measured based on positive and negative instrument statements (28 items) where the themes implied in the questionnaires are to develop nurses' touching and listening abilities, explaining and talking intonation, technical and expression amongst therapeutic processes, environmental management, and family involvement, with scoring Likert scale method. We were pointing and marking nurses' decent and deficient caring behavior related to their agreed and disagreed responses. We did a similar measurement method to calculate nurses' emotional intelligence from 39 questions. We adopted both research questionnaires without altering contents and meanings from the original items. Distributing and assessing instruments conducted to research samples by accidental sampling method in their working schedule, and guided them during filling out the items.

We had implicated respondents based on research criteria and further got research approval from The Ethics Committee of STIKES Perintis Padang protocol number 19-03-001 on March 25<sup>th</sup>, 2019. Data were analyzed in the Microsoft Excel program for the master table product and using computerized statistical analysis (SPSS version 16.0) with a chi-square test for both variables.

## RESULTS AND DISCUSSION

Respondents were separated (Table 1) based on ages (62.3% of middle ages), sex (85.5% of women), academic background (66.7% of a diploma of nursing), working years (40.6% of 5 to 10 years period), and marital status (91.3% of marriage status). Based on the data frequency of emotional intelligence (Table 1), 37 of respondents (53.7%) had high status. However, respondents with low emotional intelligence rated little differences from the high one (32 respondents).

**Table1:** Respondents characteristics

Variables	Frequencies	Percentage (%)
Age		
Pre-adult (22-30 years old)	26	37.7
Middle age (31-59 years old)	43	62.3
Sexual status		
Women	59	85.5
Men	10	14.5
Educational background		
Diploma of nursing	46	66.7
Bachelor of nursing	23	33.3
Working years		
<5 years	14	20.3
5-10 years	28	40.6
>10 years	27	39.1
Marital status		
Single	6	8.7
Marriage	63	91.3
Emotional intelligence		
Low	32	46.3
High	37	53.7

The analysis of age correlation towards nurses' caring behavior revealed that 57.7% of pre-adult respondents did a good caring behavior compared to middle-aged ones. However, middle-aged respondents showed a deficient caring attitude (62.8%). It generated no significant association between age and caring behavior of nurses ( $p=0.159$  and  $OR=0.435$ ). Other characteristics, respondents sexual status also obtained no significant correlation toward nurses' caring behavior. Related to education level, respondents with a bachelor's degree in nursing showed defeated caring behavior (56.5%) rather than from the diploma graduates. However, statistical analysis revealed no significant educational background related to nurses' caring behavior. Those analyses also concluded a non-significance on working years and marital status associated with caring behavior performed. It revealed that working duration less than 5 years contributed to better-caring behavior (64.3%), but marriage nurses tend to have deficient caring practice, even without significant association (Table 2).

We revealed based on table 2 that more than three fourth of our respondents with high emotional intelligence did decent caring practice, and it had inverted to those with low emotional intelligence. In statistical conclusion, emotional intelligence has a significant association with nurses' caring behavior. Those rates also show nurses with high emotional intelligence effects 6.8 times to give a good caring practice rather than the other one.

### Age toward caring behavior

Our findings commonly involve middle-aged nurses (aged 31-59 years old) for 62.3% with no correlation of emotional intelligence to caring behavior contradicting Panjaitan<sup>22</sup> and Oluma<sup>23</sup> research findings. They claimed that age and caring

**Table 2:** The association of respondent's characteristics towards nurses caring behavior.

Nurses characteristics	Caring behavior				Total		p value	OR (95% CI)
	Deficient		Decent		N	%		
	n	%	n	%				
<b>Age</b>								
Pre-adult (22-30 years old)	11	42,3	15	57,7	26	37,7	0,159	0,435 (0,161-1,174)
Middle age (31-59 years old)	27	62,8	16	37,2	43	62,3		
<b>Sexual status</b>								
Women	32	54,2	27	45,84	59	85,5	>0.999	0,790 (0,202-3,094)
Men	6	60	4	40	10	14,5		
<b>Educational background</b>								
Diploma of nursing	25	54,3	21	45,7	46	66,7	>0.999	0,916 (0,334-2,509)
Bachelor of nursing	13	56,5	10	43,5	23	33,3		
<b>Working years</b>								
<5 years	5	35,7	9	64,3	14	20,3	0,263	1,491 (0,555-4,001)
5-10 years	17	60,7	11	39,3	28	40,6		
>10 years	16	59,3	11	40,7	27	39,1		
<b>Marital status</b>								
Single	3	50	3	50	6	8,7	>0.999	0,800 (0,150-4,274)
Marriage	35	55,6	28	44,4	63	91,3		
<b>Emotional intelligence</b>								
Low	22	68,8	10	31,2	32	46,3	0,001	6,844 (2,372-19,748)
High	9	24,3	28	75,7	37	53,7		

attitude have a correlation trend. They believe, nurses' age tends to increase their caring attitude and finally create their job satisfaction. It is stated that nurses' job satisfaction has an integral effect on caring behavior<sup>23</sup>. What Panjaitan<sup>22</sup> revealed in contrast to our result and Aupia et al.<sup>24</sup> findings which age is uncorrelated to nurses' caring practice. Nurse age would not correlate to their ability and quality of respect, connectedness, knowledge, and skills<sup>24</sup>. However, their research result has a positive correlation between nurses' attentiveness and assurance towards their age differentiation. We assumed that someone's age should not affect his attitude giving caring practice, especially nursing practice, or having a different cognition in their mind and varied skills. We believe that caring behavior implementation should be embedded in nurses' caring practice at every age. And also, it shows how nurses' understanding and awareness can integrally apply to decent nursing care practice.

Kaur<sup>25</sup> stated that the abilities and advantages possessed by different ages of nurses are balanced on the dimension of emotional intelligence, spiritual intelligence, and caring behaviors in their working environment. Soon, these correlated findings had experienced a positive impact on every two emotional intelligence dimensions related to managing others' emotions and emotion utilization. Furthermore, it also affects nurses' caring behavior dimension regarding their respectful deference to others. We believe this can explain why age does not correlate with nurses' caring behavior. What we believe has analogous with Aupia<sup>24</sup>, Kaur<sup>25</sup>, Rosiek et al.<sup>26</sup> results, states that there is no significant relationship between demographic characteristics, especially age and nurse performance related to caring efficacy. This efficacy of care can be

defined as people's confidence and soon producing their influential performance that affects their daily activities<sup>27</sup>.

### Sexual status towards caring behavior

Aupia<sup>24</sup> research findings coincident with our result on respondents' sex can not be associated with the caring practice. All nurses, both men, and women have the same opportunity to behave caring for patients. We assumed this phenomenon is related to nurses' promises in carrying out their duties equally and can provide working productivity and satisfaction simultaneously. We believe there are no consistent differences in problem-solving skills, analytical skills, competitive motivation, motivation, and learning abilities toward both sexes as Rivai & Mulyadi<sup>28</sup>. Our finding is similar to Panjaitan<sup>22</sup> and Kaur<sup>25</sup> results related to sexual orientation that no differentiation in personal performance between male and female nurses. Both men and women have similar terms of learning ability, memory, reasoning ability, creativity, and intelligence even some researchers still believe there are differences in creativity, reasoning, and ability between men and women<sup>29</sup>.

### Educational background towards caring behavior

Based on our epidemiological scope, about two-thirds of respondents are certified from a diploma background. Over 55% of respondents disclosed deficient caring practice even from bachelor or diploma level. However, this education level is not related to nurses' caring behavior. We have similar findings on Aupia's result, nurses' caring behavior is nothing meaningful correlation between education taken towards their caring performance<sup>24</sup>.

On the other hand, Taylan<sup>17</sup> and Pangewa<sup>30</sup> stated that educational factors and levels affect working behavior whereas higher education levels positively affect people's working behavior. Taylan<sup>17</sup> and Siagian<sup>31</sup> also assert that the level of nurse education influences the performance they practiced and becomes one of the predictors of high caring behavior besides working shifts and a high score on the emotional appraisal. Nurses with higher education will perform better attitudes toward caring processes which they have broader knowledge and insight compared to nurses with less years of education. On Ebrahimi<sup>11</sup> et.al samples treatment of emotional intelligence exercise, the academic skills (writing, the vocabulary of language learning) had improved significantly to the student's emotional value.

Caring is the science of humans not only as behavior but as a way so that something becomes meaningful and gives the motivation to act. This theory was developed by Watson<sup>8</sup>, who also said the words of Caring science, which means caring cannot be passed down from one generation to the next genetically but through professional culture. Professional culture can be achieved by cultivating a caring spirit among nurses through a rigorous selection process, continuous socialization, management, cooperation, symbols, and rituals or habits<sup>8</sup>. We assumed these contrary findings are related to a slight number of our research samples in which the nurses with bachelor's degrees have a fewer amount in this research process (33.3%). Considering more samples that would be involved equally in this study, significant findings would be measured from the different educational backgrounds.

### Working years towards caring behavior

Almost 80 percent of our respondent's length of working experience is over 5 years and had decent caring behavior. The odds ratio, OR, we formulated covering two affected correlations of working years that are less than 5 years and over those years. Hereinafter, the statistical analysis stated that there is no significant association of working years to nurses' caring behavior. Nevertheless, we believe that the possibility of decent caring behavior is initiated from experienced working years that are more than 5 years related to motivation and integrity. What we stated is parallel to Robin's<sup>32</sup> theory that working experience does not necessarily guarantee decent working performance, it is dependent on the productivity and motivation of the employees themselves<sup>26</sup>. It is also supported by Riani<sup>33</sup> theory explanations that the length of the working period does not guarantee working productivity even for nurses. Otherwise, Lukmanulhakim<sup>27</sup> confirmed that the presence of nurses' caring behavior is affected by the working period they are experienced. It revealed that after approximately 7 years of giving caring services, nurses tend to recognize their patients' background deeper, and then can increase their caring behavior quality<sup>26,27</sup>. Nevertheless, we assume that when a nurse experiences longer working years and sufficient working

skills, it depends on supported facilities, working atmosphere, and motivation enhanced. This phenomenon has a similarity to Nwanzu's<sup>10</sup> findings that nurses' working experience and workload have a negative correlation to caring behavior even having an association with their emotional intelligence. The emotional intelligence of nurses is significantly associated with physical and emotional caring behavior. It is specifically influenced by how much a nurse's understanding and awareness of their physical and psychological health status<sup>1</sup>. To preserve their health physical status, it should be supported by physical resistances without some alteration of body tissue or systemic function after having a hard and exhausting busy day<sup>34</sup>. Furthermore, the inadequate physical condition can stimulate stress response which continues to psychological problems. Those statements are similar to our previous research result that deficient caring behavior engaged to nurses strenuous working capacity in health care center<sup>35,36</sup>. Kaur<sup>12</sup> research also declared that psychological ownership mediates the correlation of spiritual intelligence, emotional intelligence, and nurses' caring behavior.

### Marital status towards caring behavior

Over 90% of our respondents have married and leave a limited number of single nurses. However, we can not state their deficient caring practice related to their marital status, no correlation was obtained. We have contradictory results to the Umberson<sup>37</sup> study which states that marital status is related to spouse and employee performance on health care. It states that marriage is an attempt to control someone's effort of health and behavior. Besides, some research results that were reviewed by Nightingale et al.<sup>1</sup> revealed that 86% of nurses married women had a higher emotional intelligence that contributed to their service quality including empathy and job satisfaction. Accordingly, we assume the caring behavior of nurses should equal those who are married or single status. With the lack amount of samples for one side (nurses with single status), it may reveal no significant correlations. Indeed, other studies with equal percentages of both sides may uncover the significant value.

### Emotional intelligence related to nurses' caring behavior

Nurse's emotional intelligence in Ambun Suri ward Dr. Achmad Mochtar hospital was high for 53.7% of respondents. The further analysis appears to show a significant association on nurses' emotional intelligence towards caring behavior ( $p=0.001$ ). Nurses who indicated decent caring behavior experienced a higher emotional intelligence for 28 respondents out of 37. Odds ratio analysis shows higher emotional intelligence nurses giving 6.844 times to obtain decent caring behavior. Our finding is supported by Nightingale<sup>1</sup> and Sarifuddin<sup>38</sup> which elaborates that nurses with higher emotional intelligence directly have a high sense of

empathy for client's needs and finally develop caring behavior. We approve of what Kaur<sup>12</sup> cited from two research theories that when nurses have good caring behavior, it contributes to patients' satisfaction, well-being, and the performance of the health care organization subsequently.

We are convinced that nurses who utilized their attitudes as caring behavior to gain satisfaction are believed to correlate with decent emotional intelligence. Godkin & Godkin<sup>4</sup>, Rego<sup>13</sup>, and McQueen<sup>18</sup> also said that patients who receive perfect nursing skills but with deficient emotional skills will be concluded as inadequate health care providers. Besides, Kernbach & Schutte<sup>16</sup> alleged that decent emotional intelligence, especially from the nurse's caring practice, was able to increase patient satisfaction<sup>13</sup>.

Dwidiyanti<sup>39</sup> explains caring described as an emotion, feeling of compassion, or empathy that encourages nurses to behave decently. Therefore, she interpreted emotional intelligence as an ability to recognize someone's emotions, manage emotions, self-motivation, empathy, fostering social relationships, are strongly influence nurses to behave in caring practice. This assumption is similar to Goleman<sup>40</sup> who claimed that nursing practice highly implicates high emotional hardness. It is a necessity interpersonal between patients, family, friends, nurses, doctors, and other health teams. When nurses use empathy during practicing, they can recognize self-emotion and to others to build up mutual trust and assistance with those interpersonal mentioned. Caring traits such as patience, honesty, humility, caring attitude, and respect will lead to building personal attention and learning skills about a person's preferences and how he thinks acts and feels. It is not easy to obtain these characteristics, consequently, high emotional intelligence for caring traits is needed<sup>39</sup>. Finally, Sunaryo's<sup>9</sup> conclusion related to what we believe that a quantitative understanding of emotional intelligence could make a significant effect in understanding the caring behavior of nurses delivered. And we agreed that caring behavior is fundamental in the healthcare setting as Nwanzu<sup>10</sup> declared.

## Conclusion

Based on the nurses' characteristics practicing in Ambun Suri ward Dr. Achmad Mochtar Hospital in Bukittinggi, the ages, educational background, and working years do not correlate with the caring behavior progress. Furthermore, even the association table showed no correlation between sexual and nurse's marital status, it probably correlates to a large number of samples, and it would have a different meaning when we have an equal number of samples of each characteristic. It would be better than more samples involved, the result would have a different meaning and interpretation. Emotional intelligence from practiced nurses analyzed has a higher percentage level to affect caring behavior. Increasing the emotional intelligence value, be following decent behavior of nurses. Eventually, it reveals a significant association between nurses' emotional intelligence towards their nursing care practice behavior.

Hospital management should develop a nurse's self-awareness program related to emotional intelligence improvement collaborated with psychologists through training to emphasize nurses' ability to explore their self-empathy and actualization, hear and learn from others, and convey aspects (self emotions). The head of the nursing ward should strive for nurses' emotional intelligence ability to develop their touching and listening abilities, explaining and talking intonation, technical and expression amongst therapeutic processes, environmental management, and family involvement. Completing by doing various training or additional caring education. Related to our sample limitation, we suggest further research that can spread to a wider research area, i.e. a whole public hospital in the city, to reveal accurately every criteria and variable analyzed.

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