Original Research

Ethnocaring Model in Predicting Patient Satisfaction: How Powerful Is It?

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Article Info	Abstract
	Introduction: Caring is the most important to get patient satisfaction. However, currently caring is only considered as empathy without regard to the patient's cultural background. This study aims to investigate patient satisfaction regarding nursing services in a multicultural area by using the ethnocaring model as a predictor. *Methods:* A cross-sectional study was conducted on patients in a nursing service in Subang District (n = 135 using consecutive sampling). Maintaining beliefs (MB), culture care preservation (CP), knowing (KN), being with (BW), negotiating (NE), doing for (DF), enabling (EN), and restructuring (RE) are used as independent variables, and patient satisfaction (PS) as the dependent variable. The instrument used was developed in accordance with ethnocaring model and PSQ-18. Multiple linear regression was used to analyze the ability of the ethnocaring model as a predictor of patient satisfaction.
	Results: The results showed that patient satisfaction had a mean score of 14.42 (score interval = 0-18). The following are the p-values for each variable: MB (0.021); CP (0.032); KN (0.015); BW (0.038); NE (0.026); DF (0.033); EN (0.043); and RE (0.034); they can all significantly predict PS with R-Square = 0.815. *Conclusion:* The strength of the ethnocaring model in predicting patient satisfaction was 81.5%. The construct of ethnocaring model could help nurses in understanding patient satisfaction.

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INTRODUCTION

The marketing wave of health services has now changed from the era of service excellence to the era of care with character, thus making caring behavior the main principle in the quality of health services [1]. Caring also has a big impact on patient satisfaction [2]. Based on data owned by a hospital in Subang from 2018 to 2020, it states that the satisfaction rate with service quality is still below 87%. In 2020 the patient satisfaction rate with service quality tends to decrease from 86% in 2019 to 85% in 2020. Preliminary studies conducted at Subang Hospital showed that nurses found it difficult to implement caring behavior due to differences in the cultural background of the clients being treated and nurses itself, this has a negative effect on service quality in nursing services. This cultural gap will result in culture shock and culture imposition, of course this will also affect the quality of caring in local hospitals so that the quality of nursing services in the last 3 years is still below 75%. This figure is still below the government standard of more than 85%.

The issue that is developing in the current era states that the decrease in satisfaction with the quality of nursing services is directly proportional to the decrease in the quality of caring received by patients [3]. Several studies have stated that caring behavior cannot be implemented optimally because it is influenced by several aspects, one of which is the cultural aspect [4], [5]. Research on caring that uses a culturally approach really needs to be done in cross-cultural patients/communities who live side by side. There were not many studies in the world that prove the optimal application of caring [6]. Meanwhile, research on transcultural care that has been published in Indonesia itself has only been carried out in the field of Community Nursing, namely on HIV Stigma [7]. Even though cultural-based caring has been shown to have a strong correlation with the performance of nurses in caring for their patients [8], and the performance of nurses themselves is considered to have a strong contribution in increasing patient satisfaction[5]. Until now in many developing countries, caring is still interpreted in general as a sense of empathy only and without paying attention to the patient's cultural background, therefore research on cultural-based caring in cross-cultural (multicultural) societies still needs to be developed. [9].

This research was conducted in a hospital that located in Subang which is geographically close to the border of Central Java and West Java, sociologically the people who live in this area come from diverse cultures and live side by side. This situation certainly risks the occurrence of a cultural gap between nurses and their patients. Based on a preliminary study at this hospital, it was found that 13 out of 15 nurses had difficulty implementing caring behavior due to the diverse cultural backgrounds of patients, this had a negative influence on service quality in nursing services, so that the quality of nursing services at local hospitals in the last 3 years was still below 87%. This figure is still below the government standard, which is more than 90%.

Based on this description, the authors have developed an ethnocaring model as a guide for nurses working in multicultural areas [8]. This ethnocaring model was developed with the aim of preventing the occurrence of culture shock and culture imposition between nurses and patients, so that the services provided by nurses are of higher quality and patients can feel optimal satisfaction. So that it can provide input to hospitals in formulating policies regarding the duties and functions of nurses. The ethnocaring model was developed by combining the theories of caring, namely Theory of Caring and Transcultural Nursing Theory. However, the model's ability to predict patient satisfaction in multicultural areas still needs to be investigated further. Because even though this model is considered strong in building caring quality, this model has never been applied in multicultural areas such as in the Subang area which is the border of Javanese and Sundanese ethnicities. The ability of this model to predict patient satisfaction in multicultural areas really needs to be investigated considering that Indonesia is a country with the highest ethnic diversity in the world. Therefore, this study aims to investigate patient satisfaction regarding nursing services in a multicultural area by using the ethnocaring model as a predictor.

METHODS

A cross-sectional study was conducted on 150 patients in a hospital located in Subang, but in the end only 135 respondents gave a complete response, fifteen of them did not complete the questionnaire completely so the data could not be analyzed. This study was conducted in July – September 2022. The sample was recruited using consecutive sampling. All construct variables in the ethnocaring model are used as independent variables in this study, namely MB, CP, KN, BW, NE, DF, EN, and RE, and PS as the dependent variable. Prospective respondents were screened to ensure that they really met the specified criteria, and at the same time written consent was asked for their willingness to participate in this study. Before the respondent confirms his/her willingness, the mother first explains a few things about the research goal, research time, and respondents right.

Respondents in this study were confirmed to be Indonesian citizens and aged 20 years and over. The recruitment of respondents in this study was limited by several criteria, namely people who live in Subang, people who speak Indonesian as their mother tongue, have been hospitalized for more than 3 days, and confirm their willingness to become respondents. Respondents who withdrew while the study was in progress and/or did not provide complete demographic data were excluded. Respondents were given the opportunity to refuse to participate in this research, even respondents also freely withdrew during the research. Respondents who are willing to participate must confirm their consent before data collection begins. Ethics approval was obtained from the Indonesian Commission of Health Research Ethics Institut Ilmu Kesehatan Strada Indonesia.

Participants who indicated their willingness to participate were asked to complete a series of questionnaires that had

previously been tested to ensure that the instrument was valid and reliable. Three nursing experts have reviewed the content of this questionnaire using the Content Validity Index (CVI) formula. As a result, the CVI value of each questionnaire item is more than 0.8. Questionnaires were then given to a pilot sample of 40 people to assess their reliability, the results of the analysis with the help of SPSS 26 software showed that Cronbach's alpha values for all questionnaire domains (MB, CP, KN, BW, NE, DF, EN, RE, and PS), all of which scored more than 0.7. Thus, the questionnaire used in this study is guaranteed to be reliable and suitable to be used to collect data.

Data collection was carried out by researchers assisted by 10 assistants who had been trained and shared their perceptions on how to fill out the questionnaire. After the questionnaires have been collected, the researcher and the team have verified and checked the completed questionnaires to ensure that all questions on the questionnaire have been completely filled out. The collected data were checked and tabulated by the authors before being analyzed. Microsoft Excel and SPSS 26 software were used to assist the data analysis process. The statistical test used was multiple linear regression with a significance level of 0.05.

RESULTS

From 150 respondents, there were 135 people who completed all the questionnaires well and the data was declared eligible for analysis (response-rate = 90%). The mean age of the respondents was 41.8 years

(SD=12.11). More than half (53.9%) are female. The majority have high school education (57.1%). Most (69.1%) work as self-employees. All characteristics of the respondents studied in this study did not affect their satisfaction with nursing services. With this, it can be said that the characteristics of the respondents in this study are not at risk of becoming confounding variables. The detailed analysis of patient satisfaction based on demographics is contained in Table 1.

The mean score of PS domain in this study was 14.42 (SD = 11.02) (interval = 0-18). Based on the results of the questionnaire analysis, more than half of the respondents (57.2%) chose the answer "The nursing service I received was almost perfect", but most (65.1%) of the respondents also chose the answer "Nurses sometimes ignore what I want", and 49.2% of respondents chose the answer "I found it difficult to make an appointment with a nurse".

The domain of patient satisfaction in this study was quite high. The highest mean value of the ethnocarings' construct was knowing domain, this domain is the nurse's ability to tried exploring the patient's needs. while the lowest mean value was negotiation domain, in other words the ability of nurses in negotiating habit changes that support health was relatively low. The details are reported in Table 2.

Multiple linear regression analysis showed that MB, CP, KN, BW, NE, DF, EN, and RE were simultaneously significantly able to predict PS (p=0.002) (R-Square = 0.815). However, if the significance is seen separately, each variable shows various significance

values, negotiation domain was the highest portion in predicting patient satisfaction, in detail reported in Table 3.

Table 1

Characteristics of Respondents

Variable	(%)	Mean	SD	Sig.
Age		41.8	12.11	.062
Gender				.231
Male	46.1			
Female	53.9			
Education level				.077
Primary school	11.5			
High school	57.1			
Bachelor	31.4			
Occupation				.084
PNS	10.1			
Self-employee	69.1			
TNI / POLRI	5.2			
Not working	15.6			

Table 2

Distribution of the Mean Value of All Variables

Variable	Mean	SD	Range of Possible Score
Patient satisfaction	14.42	11.02	0 – 18
Maintaining beliefs	11.53	12.74	0 – 15
Culture care preservation	11.62	11.72	0 – 15
Knowing	13.72	12.31	0 – 15
Being with	11.83	12.74	0 – 15
Negotiation	10.46	11.82	0 – 15
Doing for	11.54	12.18	0 – 15
Enabling	12.54	11.92	0 – 15
Restructuring	11.28	12.18	0 – 15

Table 3

Multiple Linear Regression Test

Variable	R-Square	β	Sig.
MB, CP, KN, BW, NE, DF, EN, and RE together predict PS	0.815		0.002
Maintaining beliefs (MB)		0.074	0.021
Culture care preservation (CP)		0.129	0.032
Knowing (KN)		0.087	0.015
Being with (BW)		0.093	0.038
Negotiation (NE)		0.161	0.003
Doing for (DF)		0.098	0.033
Enabling (EN)		0.091	0.043
Restructuring (RE)		0.082	0.034

DISCUSSION

Based on multiple linear regression analysis, all construct variables in this model affect patient satisfaction with p-value <0.05. Maintaining beliefs (0.021), culture care preservation (0.032), knowing (0.015), being with (0.038), negotiation (0.003), doing for (0.033), enabling (0.043), and restructuring (0.034) significantly affect patient satisfaction with nursing services. Another study conducted in East Java, Indonesia, also shown that culture-based caring could predict patient satisfaction well [8], but in that study the most influential variable was restructuring, in contrast to this current study, the negotiation variable had the strongest effect. This difference may be due to the fact that the ethnicity of the respondents used is very different, namely Javanese and Sundanese. Nursing experts agree that the negotiation variable in this case is the behavior of a nurse who is present to help clients and manage client feelings by paying attention to cultural phenomena, for example reflecting on ways to adapt, or negotiating or considering the health conditions and lifestyle of individuals or clients, while restructuring variable is a principle in reconstructing or changing designs to help improve the client's health condition and lifestyle in a better direction [2].

The results showed that patient satisfaction had a mean score of 14.42 (score interval = 0-18). Because this concerns patient satisfaction, which is the main goal of health services, then the number 14.42 from the interval 0-18 cannot be said to be good. Moreover, many experts agree that patient satisfaction is the key to a hospital's continued existence [10], other study found that patient satisfaction is the core component for the establishment of health providers [11]. This study found that the majority of respondents were quite satisfied with the caring they received, but also many of them confirm that sometimes nurses ignored the clinical implementation they wanted, and even almost half of them confirmed that they still find it difficult to make appointments with nurses. This could be due to the low motivation of nurses as an impact of their very

high workload, so that the care to their patients tends to decrease. there are at least four studies that found that motivation and workload greatly determine the good or bad caring given by nurses to their patients [12]–[15].

This study also found that all characteristics of the respondents in this study was not affect their satisfaction with nursing services. In other words, that the characteristics of the respondents in this study are not at risk of becoming confounding variables. Although on the other hand, there was study reported that the social situation of each individual can affect their level of satisfaction [16]. In an effort to increase patient satisfaction, it is imperative for hospital management to create caring standards that are in accordance with the local culture situations [17].

This study aims to investigate the factors that can predict patient satisfaction based on ethnocaring model. Research findings shown that all constructs of ethnocaring model can explain more than 81 % variance of the patient satisfaction variable. Maintaining beliefs, culture care preservation, knowing, being with, negotiations, doing for, enabling, and restructuring could explain how good or poor patient satisfaction with nursing services. Previous studies also found that maintaining beliefs, doing for, and enabling can predict nurses' skills in caring [18]. Another study also reported that the Transcultural Nursing Theory can predict the skills of nurses in caring [8]. Other studies regarding telenursing also showed that the most needed thing in nursing services is to maintaining beliefs [19]

This study reported that the NE variable was the strongest predictor, which was 16.1%. Negotiation is carried out if the patient's culture is detrimental to their health status, nurse tried to negotiate to help rearrange the respondents' lifestyle from obesity to ideal body. The lifestyle chosen must be more useful and in accordance with the beliefs held by the patient. Caring skills of nurses in negotiating cultural or habits changes of patients are considered the most influential factor on patient satisfaction in this study, that poor caring skills in negotiating culture will only make patients irritated and tend to be disappointed. It is known that changing one's beliefs or culture is a difficult thing and required a belief approach to avoiding culture-shock.

Nurse caring behavior closely related to patient satisfaction [20]. These findings were in line with the results of other studies which reported that nurse caring behavior is always directly proportional to patient satisfaction. (Hogg et al., 2018). Ethnocaring model in this study can predict patient satisfaction strongly; it should be that nursing practitioners used this model as an approach in order to increase patient satisfaction.

CONCLUSION

This study found that PS was not good enough even though the mean of satisfaction score was 14.42 (0-18), because patient satisfaction is considered very important for the continuity of nursing service providers. Socio-demographic factors were not associated with PS, it means that respondents' characteristics was not at risk of becoming confounding

variables. This study also found that constructs of ethnocaring model could explain high or low patient satisfaction. Findings of this study helps nurses in understanding PS. Nursing practitioner need culturally based caring model to develop their practices.

CONFLICT OF INTEREST

There was no conflict of interest.

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REFERENCES

[1] T. Sacco and L. Copel, "Compassion satisfaction : A concept analysis in nursing," *Nurs. Forum an Indep. voice Nurs.*, pp. 1–8, 2017, doi: 10.1111/nuf.12213.

[2] Nursalam, E. Yunitasari, and A. D. Ellina, *Caring Berbasis Budaya (N. M. Adiutama (ed.)*, 1st ed. Klaten: Penerbit Lakeisha, 2022.

[3] R. Hogg, J. Hanley, and P. Smith, "Learning lessons from the analysis of patient complaints relating to staff attitudes, behaviour and communication, using the concept of emotional labour," *J. Clin. Nurs.*, vol. 27, no. 5–6, pp. 1004–1012, 2018, doi: 10.1111/ijlh.12426.

[4] R. C. Enestvedt and K. M. Clark, "Caring in the Margins," *ANS Adv Nurs Sci.*, vol. 41, no. 3, pp. 230–242, 2018.

[5] A. D. Ellina, N. Nursalam, E. Yunitasari, and N. M. Adiutama, "Evaluation of Quality of Nursing Work-Life: Based on Swanson's Theory of Caring," *Open Access Maced. J. Med. Sci.*, vol. 9, no. T5, pp. 185–189, 2022, doi: 10.3889/oamjms.2021.7844.

[6] J. Landry and P. Kensler, "Providing Culturally Sensitive Care to Are Gender Nonconforming," *Nurs. Womens. Health*, no. March, pp. 1–9, 2019, doi: 10.1016/j.nwh.2019.01.007.

[7] Sismulyanto, S. Supriyanto, and Nursalam, "Model to Reduce HIV Related Stigma among Indonesian Nurses," vol. 4, no. 3, pp. 184–191, 2015.

[8] A. D. Ellina, Nursalam, E. Yunitasari, M. M. Putra, and N. M. Adiutama, "Culturally based caring model in nursing services," *Kontakt*, vol. 24, no. 3, pp. 212–218, 2022, doi: 10.32725/kont.2022.027.

[9] L. Purnell, "Update : The Purnell Theory and Model for Culturally Competent Health Care," *J. Transcult. Nurs.*, vol. 30, no. 2, pp. 98–105, 2018, doi: 10.1177/1043659618817587.

[10] S. M. D. Leuzzi *et al.*, "Latissimus Dorsi Breast Reconstruction With Or Without Implants: A Comparison Between Outcome And Patient Satisfaction," *J. Plast. Reconstr. Aesthetic Surg.*, vol. 73, no. 3, pp. 381–393, 2018, doi: 10.1016/j.bjps.2018.10.003.

[11] M. H. Khan, R. Hassan, S. Anwar, T. S. Babar, and K. S. Babar, "Patient Satisfaction With Nursing Care," *JONA J.*

Nurs. Adm., vol. 45, no. 11, pp. 563–568, 2015, doi: 10.1097/NNA.0000000000000264.

[12] A. D. Ellina, Kusnanto, N. M. Adiutama, Sismulyanto, and Rusmawati, "Evaluation of patient satisfaction and nurse caring behaviour: Based on swanson's theory," *Indian J. Public Heal. Res. Dev.*, vol. 10, no. 8, pp. 2698–2702, 2019, doi: 10.5958/0976-5506.2019.02277.0.

[13] J. D. Fisher and W. A. Fisher, "The information-motivation-behavioral skills model of AIDS risk behavior change: Empirical support and application," *Underst. Prev. HIV risk Behav. safer sex drug use*, vol. 3, no. 2, pp. 100–127, 2016.

[14] D. H. Cornman, S. J. Schmiege, A. Bryan, T. Joseph, and J. D. Fisher, "An information-motivation-behavioral skills (IMB) model-based HIV prevention intervention for truck drivers in India," *Soc. Sci. Med.*, vol. 64, no. 8, pp. 1572–1584, 2017, doi: 10.1016/j.socscimed.2006.11.011.

[15] H. Wei, C. I. Roscigno, and K. M. Swanson, "Healthcare providers' caring: Nothing is too small for parents and children hospitalized for heart surgery," *Hear.*

[16] N. Al-Hadi, S. Chegini, M. E. Klontzas, J. Mckenny, and M. H. Patient, "Patient expectations and satisfaction following orthognathic surgery," *Int. J. Oral Maxillofac. Surg.*, vol. 48, no. 2, 2018, doi: 10.1016/j.ijom.2018.07.013.

[17] Sismulyanto and N. M. Adiutama, *The Butterfly System of Nursing Community*, 1st ed. Malang: Ahlimedia Press, 2021.

[18] K. M. Högberg, L. Sandman, M. Nyström, D. Stockelberg, and A. Broström, "A Qualitative Evaluation of a Nursing Intervention to Create Holistic Well-Being Among Patients With Hematological Disease," *J. Holist. Nurs.*, vol. XX, pp. 1–10, 2016.

[19] I. M. R. Mahardika, L. G. N. S. Wahyuningsih, and P. A. Lestarini, "Telenursing in Health Services in the Era of the COVID-19 Pandemic: Literature Review," *Babali Nurs. Res.*, vol. 3, no. 2, pp. 56–62, 2022, doi: 10.37363/bnr.2022.3275.

[20] L. N. Roney and M. C. Acri, "The Cost of Caring," *J. Pediatr. Nurs.*, vol. 40, pp. 74–80, 2018, doi: 10.1016/j.pedn.2018.01.016.