



# Organizational Characteristics, Individual Characteristics, Work Characteristics, and Technological Factors against Culture-Based Care

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## Abstract

**BACKGROUND:** The quality of nursing services has a direct impact on the level of client satisfaction. The marketing wave of health services has now changed from the era of service excellence to the era of care with character so that caring behavior is the main principle in the quality of nursing services.

**AIM:** We aimed to present Organizational Characteristics, Individual Characteristics, Work characteristics, and technological factors against culture-based care.

**METHODS:** This research is a quantitative research using a cross-sectional approach. This research has been conducted at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Regional General Hospital Banyuwangi. Respondents involved in this study amounted to 180 respondents. The research variables are organizational characteristics, individual characteristics, work characteristics, technological factors, culture-based caring, quality of nursing work life, and quality of nursing services. The data in this study were analyzed using quantitative analysis techniques using SEM PLS.

**RESULTS:** Organizational characteristics enhance culture-based caring. Individual characteristics enhance culture-based caring. Work characteristics enhance culture-based caring. Technological factors increase culture-based caring.

**CONCLUSION:** Organizational characteristics cannot increase QNWL directly, but mediation is needed through culture-based caring to achieve positive QNWL. Individual characteristics can improve QNWL through religious, socio-cultural, economic, motivational, and educational factors. Work characteristics cannot increase QNWL directly, but mediation is needed through culture-based caring to achieve positive QNWL. Technological factors can improve QNWL through the use of technology and the use of social media.

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## Introduction

The quality of nursing services has a direct impact on the level of client satisfaction. The marketing wave of health services has now changed from the era of service excellence to the era of care with character so that caring behavior becomes the main principle in the quality of nursing and health services in general [1]. Caring behavior is the main indicator in the quality of health services [2]. Caring as an evaluation of health services is a trend in the present era [3]. Caring is also the main performance of nurses as an effort to improve service quality [1].

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. Aspects of caring behavior that have been used so far have not been integrated with cultural aspects which include religious, socio-cultural, educational, economic, and motivational factors, so that it has an impact on the quality of nursing work life (QNWL) in providing services. Until now, the influence

of the culture-based caring model on QNWL and the quality of nursing services are unknown [4].

Caring has a big impact on service quality. Based on the data owned by the Regional General Hospital Dr. Iskak Tulungagung and Blambangan Regional General Hospital Banyuwangi starting 2016, 2017, and 2018 stated that the satisfaction rate with the quality of nursing services was still below 80%. In 2018, the client satisfaction rate with the quality of nursing services tends to decrease from 79% in 2017 to 77% in 2018. The emerging issue in the present era states that the decline in satisfaction rates with the quality of nursing services is directly proportional to the decrease in the quality of caring received by clients [3].

Nurses admit that it is difficult to implement caring behavior because of the diverse cultural backgrounds of the clients being treated and the nurses themselves; this has a negative influence on service quality in nursing services. This cultural gap will result in culture shock and culture imposition; of course it will also affect the quality of caring in local hospitals so that the quality of nursing services in the past 3 years is

still below 80%. This figure is still below the government standard of more than 85%.

Ayala and Calvo revealed that there are not many studies in the world that prove the optimal application of caring in countries that are rich in cultural diversity [5]. Meanwhile, research on transcultural care that has been published in Indonesia itself has only been carried out in community nursing, namely, on HIV Stigma [6]. Based on the data obtained from the medical records of the Regional General Hospital Dr. Iskak Tulungagung and Blambangan Regional General Hospital Banyuwangi 2016–2018 found that the clients came from several different cultures. The problem of nurses in caring for culturally diverse clients is a difficult challenge to deal with [7]. Nurses' knowledge and understanding of the client's culture are an important factor in carrying out caring behavior to prevent culture shock and culture imposition. Cultural shock occurs when outsiders (nurses) try to learn or adapt effectively to certain cultural groups (clients) [4].

According to the Gillham *et al.*, research on caring that uses a culturally sensitive approach also needs to be carried out on communities/clients from diverse cultures or cross-culturalities who live side by side in an area and do not focus on those who are culturally sensitive [8]. According to the Purnell (2018), until now in many developing countries, caring is still interpreted in general as a sense of empathy only and without regard to cultural background, therefore, research on cultural-based caring in cross-cultural societies still needs to be developed. This study aims to develop a culture-based caring model by integrating the cultural aspects of the transcultural care theory (maintenance, negotiation, and restructuring) into the caring aspects of Swanson's caring theory, so that nurses are expected to not only interpret caring as mere empathy and have an impact on increasing nursing service quality [9].

Efforts to answer the above problems need a new model of caring that uses a transcultural care theory approach, so that the caring given by a nurse in carrying out her duties and functions can be fully accepted by the client optimally, with this it is hoped that the client will feel a quality service. The previous studies on cultural caring focused only on different people who are culturally sensitive. This study uses service quality development theory as a frame of mind, because caring is part of performance (work behavior) to improve service quality (Organization Effectiveness). Caring skills in this study use the caring concept of Swanson. Swanson argues that caring is closely related to the philosophical behavior of nurses and the performance of nurses, namely, always providing information, understanding, conveying messages, taking therapeutic actions, and always expecting good end results [10].

## Methods

This research is a quantitative research using a cross-sectional approach. This research has been conducted at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Regional General Hospital Banyuwangi. The research was carried out in July 2020–October 2020. The respondents involved in this study were 180 respondents with the following criteria: a) Inpatient nurses, b) having 2 years of work experience, and c) a minimum education diploma in nursing. The research variables are organizational characteristics, individual characteristics, work characteristics, technological factors, culture-based caring, QNWL, and quality of nursing services. Organizational characteristics questionnaire consists of hospital policy, reward system, and training [11] and organizational culture [12]. The individual characteristics questionnaire consists of religious factors [13], socio-cultural [14], economy [11], motivation [15], and education level. Questionnaire work characteristics consist of work schedule [11], job design [11], and feedback [11]. The technological factor questionnaire consists of the use of technology and the use of social media. The culture-based caring questionnaire consists of upholding trust, compassion, and competence [10], [16]. QNWL questionnaire consists of work life-home life dimension, work design dimension, work context dimension, and work world dimension [11]. The data in this study were analyzed using quantitative analysis techniques using SEM PLS. This research has been approved by the Health Research Ethics Commission of the Regional General Hospital DR. Iskak Tulungagung No: 070/2695/407.206/2020.

## Results

### *Characteristics of respondents*

The results of the study in Table 1 show that the age of the respondents with the largest portion is in the age range of 21–40 years (52.8%), the most of the respondents (62.6%) are female nurses, and the monthly income is more than Rp. 5,000,000.00 (51.7%). Respondents in this study have a fairly good education; almost half of the respondents (48.9%) have undergraduate education. More than half of the respondents (56.7%) have permanent employee status where they work. In terms of years of service, the most of the respondents (59.4%) had more than 3 years of service. Respondents who participated in this study came from several diverse ethnic groups, the largest portion came from the Arek Javanese (25%), followed by the Panaragan (17.2%), Osing (16.1%), Mataraman

(14.4%), Madurese (13.3%), Balinese (3.9%), Sundanese (3.3%), Minang (3.3%), Betawi (1.7%), and the last is the Dayak (1.7%).

**Table 1: Characteristics of respondents**

Characteristics of respondents	f	%
Age		
21–40 years	95	52.8
41–60 years	85	47.2
Total	180	100
Gender		
Male	68	37.8
Female	112	62.2
Total	180	100
Income/month		
≤Rp. 5.000.000	87	48.3
>Rp. 5.000.000	93	51.7
Total	180	100
Education level		
Nursing diploma	92	51.1
Ners	88	48.9
Total	180	100
Employee status		
Employee status	102	56.7
Temporary employees	78	43.3
Total	180	100
Length of working		
2–3 year	73	40.6
>3 years	107	59.4
Total	180	100
Ethnicity		
Panaragan	32	17.2
Jawa Arek	45	25
Osing	29	16.1
Madura	24	13.3
Mataraman	26	14.4
Betawi	3	1.7
Minang	6	3.3
Bali	7	3.9
Sunda	6	3.3
Dayak	3	1.7
Total	180	100

**Organizational characteristic**

Organizational characteristic has four variable indicators, including hospital policy, reward system, organizational culture, and training. Table 2 shows that the hospital policy indicator is still found in the bad category of 20.6%, the most powerful parameter in explaining hospital policy in this study is the organizational structure. The reward system indicator is also still found in the bad category of 22.8%, this reward system can mostly be explained by the reward factor. The organizational culture indicator was found to be 38.9% in the bad category and 25.6% in the training indicator in the bad category.

**Table 2: Description of Organizational Characteristics at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Banyuwangi Regional General Hospital in 2020 (n = 180)**

Organizational characteristic	Classification	f	%
Hospital policy	Poor	37	20.6
	Moderate	71	39.4
	Good	72	40
	Total	180	100
Reward system	Poor	41	22.8
	Moderate	67	37.2
	Good	72	40
	Total	180	100
Organizational culture	Poor	70	38.9
	Moderate	95	52.8
	Good	15	8.3
	Total	180	100
Training	Poor	46	25.6
	Moderate	22	12.2
	Good	112	62.2
	Total	180	100

**Individual characteristics**

Individual characteristic has five variable indicators, including religious, socio-cultural, economic, motivational, and educational factors. Table 3 shows that the indicator of religious factors is still found in the bad category of 21.1%, the strongest parameter in explaining religious factors is belief. Economic indicators are also still found in the economic category of <22.8%, the amount of salary is the most powerful parameter in explaining economic factors. Socio-cultural indicators were found to be 41.7% in the bad category and 47.8% in the motivational indicator in the moderate category. More than half of the respondents still have a diploma 3 educations (51.1%).

**Table 3: Description of Individual Characteristics at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Banyuwangi Regional General Hospital in 2020 (n = 180)**

Individual characteristics	Classification	f	%
Religious factor	Poor	38	21.1
	Moderate	65	36.1
	Good	77	42.8
	Total	180	100
Socio-cultural	Poor	75	41.7
	Moderate	17	9.4
	Good	88	48.9
	Total	180	100
Economy	Poor	41	22.8
	Moderate	67	37.2
	Good	72	40
	Total	180	100
Motivation	Weak	6	3.3
	Moderate	86	47.8
	Strong	88	48.9
	Total	180	100
Education level	3-year diploma	92	51.1
	Ners	88	48.9
	Total	180	100

**Work characteristic**

Table 4 explains that the work characteristics are perceived as follows; work schedule (23.3%) is in the bad category, the convenience of the official schedule is the strongest parameter in explaining the work schedule. Job design (26.1%) is also still in the bad category; job descriptions have the largest portion in explaining job design. Feedback (36.7%) is still in the bad category; responsibility is the strongest parameter in explaining feedback.

**Table 4: Description of Work Characteristics at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Banyuwangi Regional General Hospital in 2020 (n = 180)**

Work characteristic	Classification	f	%
Work schedule	Poor	42	23.3
	Moderate	11	6.1
	Good	127	70.6
	Total	180	100
Job design	Poor	47	26.1
	Moderate	13	7.2
	Good	120	66.7
	Total	180	100
Feedback	Poor	66	36.7
	Moderate	13	7.2
	Good	101	56.1
	Total	180	100

**Technological factor**

Table 5 describes the technological factors perceived as follows; the use of technology (36.7%) is

in the low category, and the use of social media (30%) is in the low category.

**Table 5: Description of Technological Factors at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Banyuwangi Regional General Hospital in 2020 (n = 180)**

Job factor	Classification	f	%
Technology utilization	Poor	66	36.7
	Moderate	5	2.8
	Good	109	60.6
	Total	180	100
Social media utilization	Poor	54	30
	Moderate	7	3.9
	Good	119	66.1
	Total	180	100

### Culture-based caring

Caring based on culture has three variable indicators, including upholding trust, compassion, and competence. Table 6 shows that the indicator of upholding trust is still found in the bad category of 21.1%, the strongest parameter in explaining upholding trust is maintenance. The compassion indicator was found in the bad category at 32.2%, negotiation being the strongest parameter in explaining compassion. The competency indicator was also found at 31.1% in the bad category; the strongest parameter in explaining competition was restructuring.

**Table 6: Description of Culture-Based Caring at the Regional General Hospital Dr. Iskak Tulungagung and the Blambangan Banyuwangi Regional General Hospital in 2020 (n = 180)**

Culture-based caring	Classification	f	%
Upholding trust	Poor	38	21.1
	Moderate	87	48.3
	Good	55	30.6
	Total	180	100
Compassion	Poor	58	32.2
	Moderate	7	3.9
	Good	115	63.9
	Total	180	100
Competance	Poor	56	31.1
	Moderate	12	6.7
	Good	112	62.2
	Total	180	100

### QNWL

QNWL has four variable indicators, including work life-home life dimensions, work design dimensions, work context dimensions, and work world dimensions. The Table 7 shows that the work life-home life dimensions indicator was found to be in the poor category 37.2%, the work design dimensions indicator was found to be 27.8% in the poor category, the work context dimensions indicator was found to be 49.4% in the poor category, and the work world dimensions indicator found 45.5% in the poor category, the public's view of the nursing profession has the largest portion in explaining work world dimensions.

### Structural equation model analysis

The results of Table 8 explain that organizational characteristics can increase culture-based caring behavior

(T-statistics = 4.368 and p value = 0.000), but cannot increase QNWL (T-statistics = 1.152 and p-value = 0.250). Individual characteristics can increase culture-based caring behavior (T-statistic = 11,132 and p value = 0.000), and can increase QNWL (T-statistic = 3.927 and p-value = 0.000). Work characteristics can increase culture-based caring behavior (T-statistic = 3.827 and p value = 0.000), but cannot increase QNWL (T-statistic = 1.481 and p value = 0.139). Technological factors can increase the behavior of culture-based caring (T-statistics = 2.899 and p value = 0.004), and can increase QNWL (T-statistics = 2.433 and p value = 0.015). Culture-based caring can increase QNWL (T-statistic = 11.972 and p value = 0.000).

**Table 7: Description of QNWL in Regional General Hospital Dr. Iskak Tulungagung and Blambangan Hospital Banyuwangi in 2020 (n = 180)**

QNWL	Classification	f	%
Work life-home life dimensions	Poor	67	37.2
	Moderate	98	54.5
	Good	15	8.3
	Total	180	100
Work design dimensions	Poor	50	27.8
	Moderate	118	65.5
	Good	12	6.7
	Total	180	100
Work context dimensions	Poor	89	49.4
	Moderate	85	47.3
	Good	6	3.3
	Total	180	100
Work world dimensions	Poor	82	45.5
	Moderate	91	50.6
	Good	7	3.9
	Total	180	100

QNWL: Quality of nursing work life.

## Discussion

The results of statistical tests showed that individual characteristics significantly affected culture-based caring and QNWL directly. This study is in line with the opinion of Enestvedt and Clark which says that the individual characteristics of nurses will greatly determine the quality of caring given to their patients. The results also show that individual characteristics are formed by several indicators, namely, religious, socio-cultural, economic, motivational, and educational factors [4]. The results of this study are also in line with the opinion of Kopelman which says that motivation and values/norms can characterize a particular individual in performing services, so this will also greatly determine how much quality of service is provided [17].

The results of statistical tests showed that work characteristics significantly affected culture-based caring but could not directly affect QNWL. This study is in line with the opinion of Robbins and Coulter which says that the work characteristics and workload of nurses will greatly determine the quality of caring given to their patients. The results of the study also showed that the work characteristic of nurses was formed by several indicators, namely, the duty schedule, clarity of main tasks and functions (job design), and feedback provided by leaders and institutions [18].



**Table 8: Path coefficients – Bootstrap**

Influence between variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T-statistics	p-values	Significance
Organizational Characteristics -> Culture-Based Caring	0.719	0.734	0.165	4.368	0.000	Significant
Organizational Characteristics -> QNWL	0.135	0.148	0.017	1.152	0.250	Not Significant
Individual Characteristics -> Culture-Based Caring	0.906	0.904	0.160	11.132	0.000	Significant
Individual Characteristics -> QNWL	0.954	0.933	0.188	3.927	0.000	Significant
Work Characteristics -> Culture-Based Caring	0.480	0.489	0.125	3.827	0.000	Significant
Work Characteristics -> QNWL	0.119	0.132	0.080	1.481	0.139	Not Significant
Technological Factors -> Culture-Based Caring	0.282	0.290	0.197	2.899	0.004	Significant
Tech Factor -> QNWL	0.150	0.154	0.162	2.433	0.015	Significant
Culture Based Caring -> QNWL	0.160	0.185	0.181	11.972*	0.000	Significant

T-statistic value  $\geq 1.96$ ,  $p = \leq 0.05$

Statistical test results show that technology factors can significantly influence culture-based caring and QNWL directly. This study is in line with the opinion of Enestvedt and Clark which says that the ability of nurses to utilize appropriate technology will greatly determine the quality of caring given to their patients. The results also show that the technological factor is formed by two indicators, namely, the use of technology and the use of social media [4].

Statistical test results show that culture-based caring in this study can significantly affect QNWL. Culture-based caring can be influenced by several factors, namely, organizational characteristics, individual characteristics, job characteristics, and technological factors. The results also show that culture-based caring can be formed by three indicators, namely, upholding trust, compassion, and competence. The results of this study are in line with the research of Sacco and Copel which explains that caring is the main performance of nurses as an effort to improve the quality of service and the quality of nurses' work life [1]. Caring behavior is the main indicator in the quality of health services [2]. Several studies state that caring behavior cannot be implemented optimally because it is influenced by several aspects, one of which is the cultural aspect [4]. Ayala and Calvo revealed that there are not many studies in the world that prove the optimal application of caring in countries that are rich in cultural diversity [5]. Markey *et al.* say that the problem of nurses in caring for culturally diverse clients is a difficult challenge to face [7]. Kalfoss and Owe Cand say that the wave of marketing health services has now changed from the era of service excellence to the era of care with character so that caring behavior is the main principle in the quality of nursing and health services in general [19]. Transcultural nursing is a major direction in nursing that focuses on the comparative study and analysis of different cultures and sub-cultures in the world that value caring behaviors, nursing services, values, beliefs about health and illness, and behavioral patterns aimed at developing scientific and humanistic body of knowledge to place nursing practice in a particular culture and universal culture [16].

## Conclusion

Organizational characteristics cannot increase QNWL directly, but mediation is needed through

culture-based caring to achieve positive QNWL. Individual characteristics can improve QNWL through religious, socio-cultural, economic, motivational, and educational factors. Work characteristics cannot increase QNWL directly, but mediation is needed through culture-based caring to achieve positive QNWL. Technological factors can improve QNWL through the use of technology and the use of social media.

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