



Perception of Caring Behaviors and Associated Factors Among Nurses Working in Harar Hospitals, Eastern Ethiopia

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Abstract

Introduction: Perception of caring behavior is very necessary to enhance human life, and the provision of health care, and is considered a basic key in the provision of healthcare facilities. Even though all nursing interventions are verified through nurse caring behaviors, poor perception of caring behaviors reduces the well-being of the patients.

Objective: The objective of this study was to assess the perception of caring behaviors and associated factors among nurses working in Harar Hospitals, Eastern Ethiopia

Methods: An institutional-based cross-sectional study was conducted among 465 randomly selected nurses. Data were collected by using a pretested and structured self-administered questionnaire. Descriptive statistics including frequency table, mean, standard deviation, and percentage were employed. Binary logistic regression analysis was used to identify factors associated with the good perception of caring behaviors. Variables with a *p*-value of < .05 were considered statistically significant.

Results: This study revealed that the proportion of nurses who had a good perception of caring behaviors was found to be 63.4% (95% CI: 58.5–68.2%). High-level education (AOR = 2.98, 95% CI: 1.28–4.34), low workload (AOR = 1.22, 95% CI: 1.16–3.05), satisfied with a job (AOR = 1.92, 95% CI: 1.42–4.01), good relation with coworkers (AOR = 4.56, 95% CI: 2.15–9.67) were significantly associated with a good perception of caring behaviors.

Conclusions: This study reported that the proportion of nurses who had a good perception of caring behaviors was 63.4%. Educational level, workload, job satisfaction, and joint participation in the decision-making process were factors significantly associated with good perceptions of nurses caring behavior. Therefore, nurses caring behavior is enhanced by increasing educational levels, creating a conducive working environment, and making nursing active in the decision-making process to improve the perception of nurses toward nurses caring behavior.

Keywords

perception of caring behavior, nurse, Eastern Ethiopia

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Introduction

Nurses' perceptions of caring behavior are defined as "nurse perceptions of their activities, behavior, and mannerism that have a great concern to make and preserve a trust relationship with the patient, pay attention to patient and to safeguard the patients in hospital (Bucco, 2015). It includes the veneration of the patients, moods of safety and minimizing anxiety, therapeutic and respectful communication, nurses showing professional knowledge and skills, and giving attention to the patients (Azizi-Fini et al., 2012). Nurses are the chief human resources in

hospitals as long as their performance is a key care quality contributor (Aupia et al., 2018). Nurse caring behavior is very necessary to enhance human life,

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provision of health care, and is considered a basic key in the provision of healthcare facilities (Modic et al., 2014).

Nurses have professional accountability to provide good nursing care for improving patient outcomes (Aupia et al., 2018). Even though all nursing interventions are verified through nurse-caring behaviors, poor nurse-caring behavior reduces the well-being of the patients (Suliman et al., 2009). A recent study showed that nurses' perception of nursing care behaviors affects the quality of nursing care. Nurse care is a way to meet human needs through helpful, compassionate, humble relations within the legal scope of nurses (Burhans & Alligood, 2010).

American Nurses Association (ANA) listed the top challenges nurses were facing in giving good nurse care including inadequate staffing, no mandatory payment for overtime, unavailability of safety materials, and workplace violence (ANA, 2010). However, different studies in Ethiopia and abroad reported different factors that affect the perception of nurses caring behavior including educational background, work experiences, job satisfaction, working environment, satisfaction with nurse management, positive relationship with team workers, and work overload (Ashenafie et al., 2015; Esmail Hajinezhad & Azodi, 2014; Salimi & Azimpour, 2013).

Compassionate and respectful full care is the basic characteristic of high-quality nursing care (Dewar & Nolan, 2013). Ethiopia incorporated compassionate and respectful care in the health sector transformation plan (FDRE, 2017). Ethiopian Federal Ministry of health is running sector-wide reform to improve the quality and accessibility of health services at all levels of the country through implementing hospital reform guidelines; one of the main components of this guideline focuses on improving the quality of nursing care (FMOH, 2010). Despite these measures, the compassionate and respectful full care provided to the patients by the health care professionals was low (Berhe et al., 2017).

Nurses have a long period of interaction with patients and their families; caring behaviors are important when performing diagnostic and therapeutic interventions; however, there is no proper implementation of caring behaviors during hospitalization (Pajnkihar et al., 2017). This in turn creates patient dissatisfaction and poor nurse care delivery, resulting in a poor prognosis (Abdullah et al., 2017). Identifying the elements that influence nurses' caring behavior is crucial to enhancing patient care quality (Kaur et al., 2013). Therefore, this study aimed to assess the perception of caring behaviors and associated factors among nurses working in Harar Hospitals, in Eastern Ethiopia.

Literature Review

Level of Perception of Caring Behaviors

Nurses' behaviors that are related to caring have a most important role and close link with nursing interactions to the patient experience. The important nurse-caring behaviors

reported in the study were treating the patient as a respectful person, knowing how to give injections and other oral medications, knowing how to handle equipment, and giving the medication on time to the patients (Modic et al., 2016).

A study conducted in six European countries (Cyprus, Czech Republic, Finland, Greece, Hungary, and Italy) depicted that nurses' perception of caring behaviors was 5.10 ± 0.68 for assurance of human presence, 5.29 ± 0.63 for knowledge and skill, 4.87 ± 0.77 for respectful deference to others, and 4.58 ± 0.80 for positive connectedness (Papastavrou et al., 2012). A study conducted in Beheshti Hospital in Kashan, Iran medical and surgical ward showed that the subscales of caring behaviors, "professional knowledge and skills" had the highest score (4.80 ± 1.07) while the subscale of "respectful deference to others" got the lowest score 4.28 ± 1.09 (Azizi-Fini et al., 2012). The study also pinpointed that perception of nurses towards caring behavior subscale of assurance of the human presence was 4.31 ± 1.18 while positive connectedness was known to be 4.38 ± 1.16 (Azizi-Fini et al., 2012).

Another study carried out in Turkey found that the mean score of caring behavior of nurse perception was 5.32 ± 0.46 for the assurance sub-scale, 5.51 ± 0.44 for the knowledge and skill sub-scale, 5.24 ± 0.54 for the respectful deference to others sub-scale, 5.05 ± 0.62 for the positive connectedness sub-scale, and 5.28 ± 0.45 for the total scale (Kiliç & Öztunç, 2015).

Factors Associated With Perception of Caring Behaviors

A cross-sectional, descriptive, and comparative study design in our Europe countries (Finland, Greece, Sweden, and the United Kingdom) showed that nurses' perceptions of caring behavior are associated with their social status, age, education level, cultural background, and ethnicity (Azizi-Fini et al., 2012). Similarly, a study done in an academic medical center in the southwest region of the United States showed that there is a weak positive association between nurses' age and caring behavior ($r = .21$, $p = .03$) (Burtson PL & JF, 2010). In contrast to this finding, the study in Saud Arabia showed that there is no statistically significant association between the age of nurses and caring behavior ($p = .616$) (Youssef et al., 2013).

According to North West Ethiopia study findings, it was revealed that older age and long years of experience were significantly associated with perceived caring behaviors. Nurses who have had long work experience in their profession were more likely to perceive caring behaviors as compared to lesser working experience. Nurses who had 6–10 years of work experience were 4.68 times more likely to highly perceived caring behaviors than those with less professional work experience and nurses who had more than 10 years of experience were 4.33 times more likely to perceive higher

caring behaviors than those less work experienced nurses (Ashenafie et al., 2015).

A study done in the United States revealed that female nurses perceive high caring behavior than male nurses ($p = .032$) (Vandenhouten et al., 2012). The study conducted in six European countries showed that there were important differences in the nurse demographics between the countries concerning age, experience, experience in the unit, and gender ($p < .001$) while no difference is observed in the type of work (Papastavrou et al., 2012).

Study conducted in academic medical center in the southwest region of the United States showed there is statistically significant, weak positive association between nurse job satisfaction and nurses caring: satisfaction with coworkers ($r = .16, p < .05$), satisfaction with interaction opportunities ($r = .28, p < .01$), satisfaction with praise and recognition ($r = .19, p < .05$; Burtson PL & JF, 2010). A similar study conducted in a medical Centre in northern Taiwan showed that job-related stress could result in loss of compassion for patients and increased incidences of error in practice and therefore was negatively associated with quality of care (Teng et al., 2010).

A study carried out in public Hospitals in Addis Ababa Ethiopia showed that nurses working in a stressful working environment were 0.357 times less likely to implement the nursing process than in an organized working environment (Aseratie et al., 2014). The study conducted in North West Ethiopia revealed that Nurses who had personal satisfaction with their job were four times more likely to highly perceive caring behaviors compare to unsatisfied nurses (Ashenafie et al., 2020).

Materials and Methods

Study Setting, Period, and Design

An institutional-based cross-sectional study design was employed among nurses who worked in six (two public, two private, one policy hospital, and one non-government hospital) hospitals operating in Harar town from January 1–30, 2018. Harar town is the capital city of Harari regional state located 526 km away from the capital city of Ethiopia, Addis Ababa. Harar town has two militaries, two public, two private, and one Non-governmental (Fistula) hospital. There is a total number of 629 staff nurses. The hospitals have the following nurses at different educational levels such as Hiwot Fana specialized university hospital (HFSUH) 251, Jugal Hospital (JH) 160, Federal police Hospital (FDPH) 106, Harar general hospital (HGH) 54, Yimags Hospital (YH) 42, Harar Hmiln Fistula (HHF) 16. They provide health services to the Harari Region state and also to people living in Zones of neighboring Oromia and Somali Regions.

Population and Eligibility

All nurses working in Hospitals found in the Harari region and sampled nurses present during the data collection were

the study population. All nurses working for more than 6 months in the hospitals were included in the study. Nurses who were severally ill and unable to respond to the questionnaire were excluded from the study.

Sampling and Sampling Procedure

The sample size was calculated by using single population proportion formula with the assumption of a 95% confidence interval. Five percent margin of error and the standard deviation of the sample was 0.53 (Papastavrou et al., 2012).

$$n = \frac{z_{\frac{\alpha}{2}}^2 \times s^2}{d^2}$$

$$n = \frac{(1.96)^2 (0.53)^2}{0.05^2} = 432$$

By adding a 10% non-response rate, the final sample size became 475 nurses. A simple random sampling method was used to select the study participants who were involved in this study.

Variables and Measurements

Dependent variable. The dependent variable was a perception of nurse caring behaviors. It was assessed by the latest revised version of the Caring Behaviors Inventory-24 (CBI-24) (Wu et al., 2006). The CBI-24 tool contained 24 items with four main dimensions: assurance (eight); knowledge and skill (five); respectfulness (six); and connectedness (five) (Wu et al., 2006). Each item was rated on a 6-points Likert-type scale: (1 = never, 2 = almost never, 3 = sometimes, 4 = usually, 5 = often, 6 = always). The internal consistency of the CBI-24 was checked using Cronbach's alpha. The overall perception of nurse caring behaviors was ($\alpha = 0.92$) and the specific values include assurance ($\alpha = 0.91$), knowledge and skill ($\alpha = 0.94$), respectfulness ($\alpha = 0.87$), and connectedness ($\alpha = 0.92$).

Independent variables. Independent variables included sociodemographic factors (age, sex, marital status, ethnicity, religion, educational level, and monthly income) and work-related factors (work experience, institutional type, working unit, workload, job satisfaction, decision-making process, and resignation desire).

Job satisfaction was assessed by 15 items and each item has a 5-point Likert-type scale (very dissatisfied, dissatisfied, neutral, satisfied, and very satisfied) (Warr et al., 1979). The overall job satisfaction score was estimated by taking the average score of all the subscales. The internal consistency of the instrument was checked using Cronbach's alpha ($\alpha = 0.87$).

Operational Definition

Job satisfaction. For this research, health workers whose score was below the mean were considered dissatisfied and those with a mean above were regarded as satisfied.

Perception of nurses caring behaviors. Respondents with scores above or equal to the mean value on the caring behaviors inventory scale were taken as having a good perception of nurse caring behavior and those who responded below the mean value were considered as having a poor perception of caring behavior.

Workload. The nursing workload was defined as “all nurses gave service to more than 35 clients within a day” (FMOH, 2012).

Data Quality Control

Before the actual study, a pretest was conducted among 5% (twenty-four) of the total sample at Bisidimo General Hospital. Training was provided for the supervisors and data collectors before data collection. During pretesting, the questionnaire was checked for its clarity, simplicity, understandability, consistency,

and coherency. During the data collection period, close supervision was done by the supervisor.

Statistical Analysis

The data were entered into Epi-data version 4.6 and exported to SPSS version 26 for analysis. The frequency table, mean, standard deviation, and percentage were generated as descriptive statistical analyses. Variables with a *p*-value of less than 0.25 in the bivariate binary logistic regression analysis were considered for the multivariable regression model. The multi-co-linearity test was carried out to see the correlation between independent variables using variance inflation factor (VIF) and tolerance test; no variables were observed with tolerance test <0.1 and (VIF) of >10. The model fitness was checked by using Hosmer-Lemeshow (*p* = .54). Adjusted odds ratio (AOR) along with a 95% confidence interval was estimated to assess the strength of the association. Variables with a *p*-value < .05 in the multivariable binary logistic regression analysis were considered statistically significant.

Results

Socioeconomic Characteristics of Nurses

Four hundred sixty-four participants participated giving a response rate of 97.9%. The mean age (\pm SD) of the study

Table 1. Socio-Demographic Characteristics of Nurses Working in Harar Hospitals, Eastern Ethiopia, 2018 (*n* = 465).

Variable	Category	Frequency	Percent
Age	<30	237	51.0
	31–40	119	25.6
	>40	109	17.8
Sex	Male	233	50.1
	Female	232	49.9
Marital status	Married	226	48.6
	Single	200	43.0
	Divorced	32	6.9
	Widowed	7	1.5
Ethnicity	Harari	77	16.6
	Oromo	196	42.2
	Amhara	141	30.3
	Guraghe	36	7.7
	Other	15	3.2
Religion	Muslim	109	23.4
	Orthodox	256	55.1
	Protestant	87	18.7
	Other	13	2.8
	Total	465	100.0
Educational level	Certificate	10	2.2
	Diploma	147	31.6
	Degree	302	64.9
Monthly income	masters	6	1.3
	Less than 1501	7	1.5
	1501–3000	84	18.1
	3001–4500	172	37.0
Above 4500	202	43.4	

Table 2. Work-Related Characteristics of Nurses Working in Harar Hospitals, Eastern Ethiopia, 2018 (*n* = 465).

Variable	Category	Frequency	Percent
Work experience (years)	≤5	218	46.9
	5–10	130	28
	>10	117	25.1
Institution type	Public	392	84.3
	Private	67	14.4
	NGO	6	1.3
Working unit	Medical	85	18.3
	Surgical	89	19.1
	Gynecology	60	12.9
	Pediatrics	48	10.3
	Psychiatrics	26	5.6
	Emergency	65	14.0
Workload	Outpatient	92	19.8
	High	328	70.5
Job satisfaction	Low	137	29.5
	Yes	303	65.2
Profession satisfaction	No	162	34.8
	Yes	365	78.5
Team decision-making process	No	100	21.5
	Yes	359	77.2
Resignation desire	No	106	22.8
	Yes	218	46.9
	No	247	53.1

participants was 29.03 (± 8) years and half of the participants 232 (49.9%) were female. Almost half, 237 (51%) of the nurses were in the age group between 20 and 30 years. The majority of the participants 256 (55.1%) were Orthodox religious followers. Three hundred two (64.9%) of the nurses who participated in the study were degree holders and 202 (43.4%) of the study participants' monthly income was more than 4,500 (Table 1).

Work-Related Characteristics of Nurses

The mean (\pm SD) work experience as a nurse was 5 (3–8) years and 218 (46.9%) of respondents had 5–10 years of working experience. The majority of study participants 389 (84.3%) were from public health facilities. Regarding the current working unit, 92 (19.8%) outpatient departments followed by 89 (19.1%) surgical wards. In the context of job satisfaction, most of the respondents were satisfied with the profession and satisfied with the job (78.5% and 65.2%, respectively). Of the nurses who participated in the study, 218 (46.9%) of the nurses had the intention to leave their job (Table 2).

Perception of Caring Behaviors

Out of 465 respondents, more than half, 295 (63.4%) (95% CI: 58.5–68.2%) of nurses had a good perception of caring behaviors. Among the subscales of caring behaviors, more than half ($n = 352$, 75.7%) of nurses had high “assurance of human presence,” ($n = 377$, 81%) of them had high “knowledge and skill,” ($n = 314$, 67.5%) of nurses had high “respect full deference to others,” and ($n = 216$, 46.5%) of nurses had high “connectedness” caring behaviors (Figure 1).

Factors Associated With the Perception of Caring Behaviors

In the bivariate binary logistic regression analysis, age, marital status, educational level, work experience, monthly income, workload, job satisfaction, joint participation in the decision-making process, and resignation desire were significantly associated with a good perception of caring behaviors at a p -value $< .25$. Multivariable binary logistic regression analysis revealed educational level, workload, job satisfaction, and joint participation in the decision-making process were significantly associated with a good perception of caring behaviors at a p -value $< .05$.

Nurses with BSc and above education were three times more likely to have a good perception of caring behaviors than nurses with diplomas and less education level (AOR = 2.98, 95% CI: 1.28–4.34). Nurses who had a low workload nursing practice environment were three times more likely to have a good perception of caring behaviors than nurses who had a high workload environment in the working area

(AOR = 3.02, 95% CI: 1.56–5.05). Nurses who were satisfied with their job were 1.92 times more likely to have a good perception of caring behaviors than those nurses who were not satisfied with their job (AOR = 1.98, 95% CI: 1.42–4.01). Nurses who had joint participation in the decision-making process were 2.56 times more likely to have a good perception of caring behaviors than nurses who hadn't joint participation in the decision-making process (AOR = 2.56, 95% CI: 1.35–4.67) (Table 3).

Discussion

The study represents the analysis of the perception of caring behaviors and associated factors among nurses working in Harar City Hospitals, Eastern Ethiopia. Accordingly, the result of all dimensions of CBI scales showed that 63.4% (95% CI: 58.5–68.2%) of study participants had a good perception of caring behaviors. A relatively high proportion of nurses had professional knowledge and skills (81%) followed by an assurance of human presence (75.7%), patient respectfulness (67.5), and positive connectedness (46.5), respectively.

This finding is in agreement with the studies done in Jimma university specialized hospital in which 82.9% of nurses had perceived the technical-professional aspects of caring behavior were ranked as the most important by nursing staff (Oluma & Abadiga, 2020). A report that was comparable to the current finding was also demonstrated in the studies done in Vietnam (Aydin & Björk, 2019) and the Hospitals of Shahid Beheshti University of Medical Sciences in Tehran (Naghneh et al., 2017), which states professional knowledge and skills and attention obtained the highest score among the other subscales. These similarities could be owing to nurses' tendencies to focus more on practical care rather than psychological care. On the other hand, this result is in contrast to the study conducted in Japan (Mizuno et al., 2005) and Jordan (Omari et al., 2013), where a high proportion of psychosocial (cognitive) aspects of caring behavior was reported. This could be due to differences in socioeconomic status, level of salaries, study time, and settings.

The findings of the current study revealed that among all the dimensions of perception of caring behaviors “positive connectedness” was the subscale with the lowest score. This finding was consistent with the studies done in Jordan (Omari et al., 2013), which states the lowest scored subscale was “positive connectedness.” This low score of positive connectedness could be related to a lack of time since in Ethiopia nurses are overloaded with work due to an imbalance of patient flow and human resources.

Overall, according to the present study, 63.4% of the nurses had a good perception of caring behaviors. This finding is lower than the studies conducted in Jimma (Oluma & Abadiga, 2020) in which 80.3% of the nurses had a good perception of caring behavior. This discrepancy

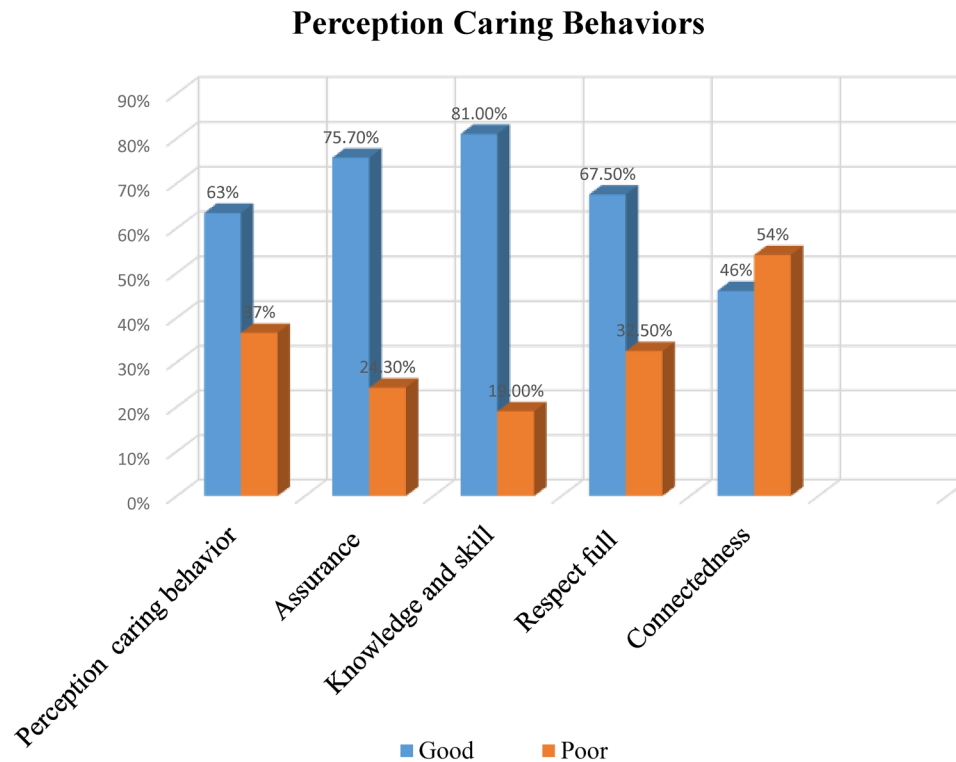


Figure 1. Perception nurses caring behavior among nurses working in Harar Hospitals, Eastern Ethiopia, 2018 ($n = 465$).

might be due to differences in study methodologies, sample size, and differences in the organization's nature.

The result of this study showed that there is a positive relationship between nurses' perceptions of caring behaviors and educational background. Nurses who had completed bachelor's degrees and above were more likely to experience a high perception of caring behaviors compared to their counterparts. This report is comparable with the studies done in Japan (Mizuno et al., 2005), which suggests educational background had a significant impact on nurses' perceptions of important caring behavior. A study done to compare caring behavior between nurses in Ireland and the United States reported that statistical differences were found between the samples on the educational background (Weathers et al., 2015). Educational opportunities should be provided for nurses to increase caring behaviors.

The workload is another important predictor of a nurse's perception of caring behavior. A study done in Indonesia revealed that nursing caring behavior is not fully reflected in any aspect of nursing care because of the increased workload (Fitriani et al., 2019). Similarly, in the current study nurse's workload was significantly associated with nurses' perceptions of caring behavior. This could be explained by the fact workload was strongly related to emotional exhaustion. Emotional exhaustion was found to be negatively associated with nurses' professional efficacy (Greenglass et al., 2001). However, one study reported that there was no significant association between workload and nurse caring

behavior (Rizkianti & Haryani, 2020). This contradictory report could be due to the variations in the sample size, the level of salary, and the level of organizational support.

This study also identified that job satisfaction had a significant association with the perception of caring behaviors. This result is comparable with the studies done in Jimma (Oluma & Abadiga, 2020), the Czech Republic (Plevová et al., 2021), and the Philippines (Santos & Labrague, 2021), which states job satisfaction was influenced by perceptions of nurses caring behavior, particularly in surgical ward and critical care unit. The possible reason could be that nurses were giving high-quality care and working in their patient's best interests when they are satisfied with their job (Santos & Labrague, 2021). In addition, workplace and personal satisfaction have been shown to have a major impact on positive work behavior. It serves as a motivator for employees to increase their productivity (Akinwale & George, 2020).

The finding of this study has revealed a significant correlation between interpersonal relations with a perception of caring behaviors. This report was supported by the studies done in Slovenia (Savič & Pagon, 2007), and Jimma Ethiopia (Oluma & Abadiga, 2020), which state teamwork or joint participation in the decision-making process had the strongest association with nurses caring behavior. A possible explanation for this finding could be good working relationships between nurses and other coworkers like physicians, and supervisors help for making a positive working environment and more autonomy of nurses to express their professional caring for quality of care.

Table 3. Factor Associated Good Perception of Caring Behaviors Among Nurses in Harar Hospitals, Eastern Ethiopia, 2018 (n = 465).

Variables	Category	Good perception (%)	Poor perception (%)	COR (95% CI)	AOR (95% CI)
Age	< 30	182 (76.8)	55 (23.2)	2.09 (1.07–4.80)	1.44 (0.98–3.34)
	30–40	55 (46.2)	64 (53.8)	0.64 (0.26–2.32)	0.32 (0.45–1.34)
	>40	58 (53.2)	51 (46.8)		
Marital status	Married	163 (72.1)	63 (27.9)	1.62 (1.19–4.93)	1.86 (0.98–4.88)
	Single	108 (54)	92 (46)	0.73 (0.20–2.75)	0.46 (0.09–2.64)
	Widowed/ divorced	24 (61.5)	15 (38.5)		
Educational level	Degree & above	231 (75)	77 (25)	4.36 (1.99–7.03)	2.98 (1.28–4.34)
	Diploma & less	64 (40.8)	93 (59.2)		
Monthly income	≥3000	253 (67.6)	121 (32.4)	2.44 (1.37–4.34)	1.67 (0.84–2.73)
	≤3000	42 (46.2)	49 (53.8)		
Experience	≤5	160 (73.4)	58 (26.6)	3.10 (1.84–6.23)	1.72(0.97–3.20)
	5–10	80 (61.5)	50 (38.5)	1.80 (1.18–3.26)	1.14(0.88–3.42)
	≥10	55 (47)	62 (53)		
Workload	High	180 (54.9)	148 (45.1)		
	Low	115 (83.9)	22 (16.1)	4.30 (2.56–6.65)	3.02(1.56–5.05)
Job satisfaction	Yes	220 (72.6)	83 (27.4)	3.07 (1.90–5.53)	1.98 (1.42–4.01)
	No	75 (46.3)	87 (53.7)		
Joint participation in the decision-making process	Yes	252 (70.2)	107 (29.8)	3.45 (2.06–7.7)	2.56(1.35–4.67)
	No	43 (40.6)	63 (59.4)		
Resignation desire	Yes	168 (77)	50 (23)		
	No	127 (86.4)	20 (13.6)	1.89 (1.33–3.32)	1.34 (0.86–3.07)

Strengths and Limitations

The study was a multicenter study that was conducted at six hospitals in Harar, Eastern Ethiopia which should have a better representation of the study participants and the generalizability of the result. The cause-and-effect relationship cannot be confirmed in this study since the research design was cross-sectional.

Implications for Practice

The findings from this study have several implications for improving nursing care in clinical settings. This study revealed the factors that had a significant association with the perception of caring behaviors in clinical settings and, it provides important information for hospital managers and policymakers to improve nursing care for patients. Hospital managers should try to remove organizational barriers such as heavy workloads. Educational opportunities should be provided for nurses to increase caring behaviors. Nurse Managers could play the main role in establishing healthy work environments and making inclusive decision-making processes for developing good perceptions of caring behavior.

Conclusions

This study reported that the proportion of nurses who had a good perception of caring behaviors was 63.4%. Educational level, workload, job satisfaction, and joint participation in the decision-making process were factors significantly associated

with good perceptions of caring behavior. Therefore, nurses caring behavior can be enhanced by increasing educational levels, creating a conducive working environment, and making nursing active in the decision-making process to improve the perception of nurses toward nurses caring behavior.

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Declaration of Conflicting Interests

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Ethical Approval and Consent to Participate

Ethical clearance was obtained from the Institutional Health Research Ethics Review Committee (IHRERC) of Haramaya University College of Health and Medical Sciences. A formal letter of permission and support was provided to all hospitals in which the study was conducted from Haramaya University. Informed, voluntary, written, and signed consent was obtained from the heads of the respective hospitals, and each participant

after explanations about the aims, objectives, benefits, and harms of the study was provided. Confidentiality was maintained at all levels of the study through anonymous data collection. Moreover, there are no invasive procedures in this study and it was conducted following the Declaration of Helsinki.

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References

- Abdullah, S., Kousar, R., Azhar, M., Waqas, A., & Gilani, S. (2017). Nurses' and patients' perception regarding nurse caring behaviors and patients satisfaction in Sir Ganga Ram Hospital, Lahore, Pakistan. *The International Annals of Medicine, 1*(5), 6–7. <https://doi.org/10.24087/IAM.2017.1.5.145>.
- Akinwale, O. E., & George, O. J. (2020). Work environment and job satisfaction among nurses in government tertiary hospitals in Nigeria. *Rajagiri Management Journal, 14*(1), 80–85.
- ANA. (2010). American Nurses Association (ANA) five issues Nurses Face in Their Career.
- Aseratie, M., Murugan, R., & Molla, M. (2014). Assessment of factors affecting implementation of nursing process among nurses in selected governmental hospitals, Addis Ababa, Ethiopia; cross sectional study. *The Journal of Nursing Care, 3*(3), 1–8. <http://doi.org/10.4172/2167-1168.1000170>
- Ashenafie, T. D., Tebeje, N. B., Gardew, D. G., & Gebrie, M. H. (2015). Perception of Caring Behaviors And Associated Factors Among Nurses Working In Gondar University And Felege-Hiwot Referral Hospitals, Northwest Ethiopia: A Cross-Sectional Study.
- Ashenafie, T. D., Tebeje, N. B., Gardew, D. G., & Gebrie, M. H. (2020). Perception of Caring Behaviours and Associated Factors Among Nurses Working in Gondar University and Felege-Hiwot Referral Hospitals, Northwest Ethiopia: a Cross-Sectional Study.
- Aupia, A., Lee, T.-T., Liu, C.-Y., Wu, S.-F. V., & Mills, M. E. (2018). Caring behavior perceived by nurses, patients and nursing students in Indonesia. *Journal of Professional Nursing, 34*(4), 314–319. <https://doi.org/10.1016/j.profnurs.2017.11.013>
- Aydin, S., & Björk, E. (2019). Nurses' perceptions of caring behaviors in clinical practice: A questionnaire study with nurses in Vietnam.
- Azizi-Fini, I., Mousavi, M.-S., Mazroui-Sabdani, A., & Adib-Hajbaghery, M. (2012). Correlation between nurses' caring behaviors and patients' satisfaction. *Nursing and Midwifery Studies, 1*(1), 36–40. <https://doi.org/10.5812/nms.7901>
- Berhe, H., Berhe, H., Bayray, A., Godifay, H., & Beedemariam, G. (2017). Status of caring, respectful and compassionate health care practice in Tigray regional state: Patients' perspective. *Int J Caring Sci, 10*(3), 1119 http://www.internationaljournalofcaringsciences.org/docs/2_berhe_original_10_3.pdf.
- Bucco, T. (2015). *The relationships between patients' perceptions of nurse caring behaviors, nurses' perceptions of nurse caring behaviors and patient satisfaction in the emergency department*. Seton Hall University.
- Burhans, L. M., & Alligood, M. R. (2010). Quality nursing care in the words of nurses. *Journal of Advanced Nursing, 66*(8), 1689–1697. <https://doi.org/10.1111/j.1365-2648.2010.05344.x>
- Burtson, PL, & S, JF. (2010). Nursing work environment and nurse caring: Relationship among motivational factors. *Journal of Advanced Nursing, 66*(8):1819–1831. <https://doi.org/10.1111/j.1365-2648.2010.05336.x>
- Dewar, B., & Nolan, M. (2013). Caring about caring: Developing a model to implement compassionate relationship centred care in an older people care setting. *International Journal of Nursing Studies, 50*(9), 1247–1258. <https://doi.org/10.1016/j.ijnurstu.2013.01.008>
- Esmael Hajinezhad, M., & Azodi, P. (2014). Nurse caring behaviors from patients' and nurses' perspective: A comparative study. *European Online Journal of Natural and Social Sciences, 3*(4), 1010–1017. <https://europeanscience.com/eojnss/article/view/1300/pdf>
- FDRE. (2017). Federal Democratic Republic of Ethiopia. Compassionate, Respectful and Caring (CRC) Health Workforce (2017).
- Fitriani, R., Yetti, K., & Kuntarti, K. (2019). Analysis of workload and occupational commitment: Their relationship to the caring behaviors of nurses in a hospital. *Enfermería Clínica, 29*(Supplement 2), 634–639. <https://doi.org/10.1016/j.enfcli.2019.04.097>
- FMOH. (2010). Federal ministry of health (FMOH), health mo. Ethiopia hospital reform implementation guideline, vol. 1; 2010.
- FMOH. (2012). Federal Ministry of Health (FMOH): The Ethiopian reform implementation guideline. 2012.
- Greenglass, E. R., Burke, R. J., & Fiksenbaum, L. (2001). Workload and burnout in nurses. *Journal of Community & Applied Social Psychology, 11*(3), 211–215. <https://doi.org/10.1002/casp.614>
- Kaur, D., Sambasivan, M., & Kumar, N. (2013). Effect of spiritual intelligence, emotional intelligence, psychological ownership and burnout on caring behaviour of nurses: A cross-sectional study. *Journal of Clinical Nursing, 22*(21–22), 3192–3202. <https://doi.org/10.1111/jocn.12386>
- Kiliç, M., & Öztunç, G. (2015). Comparison of nursing care perceptions patients who had surgical operation and nurses who provided care to those patients. *International Journal of Caring Sciences, 8*(3), 625. https://www.researchgate.net/profile/Meryem-Kilic/publication/352282275_Comparison_of_Nursing_Care_Perceptions_between_Patients_who_had_Surgical_Operation_and_Nurses_who_Provided_Care_to_those_Patients/links/60c1af65a6fdcc2e612c26c9/Comparison-of-Nursing-Care-Perceptions-between-Patients-who-had-Surgical-Operation-and-Nurses-who-Provided-Care-to-those-Patients.pdf
- Mizuno, M., Ozawa, M., Evans, D., Okada, A., & Takeo, K. (2005). Caring behaviors perceived by nurses in a Japanese hospital. *J Nurs Studies, 4*(1), 13–19. <https://www.ncn.ac.jp/academic/020/2005/2005jns-ncnj05.pdf>
- Modic, M. B., Siedlecki, S. L., Griffin, M. T. Q., & Fitzpatrick, C. J. J. (2014). Caring behaviors: Perceptions of acute care nurses and hospitalized patients with diabetes. *Journal of Patient Experience, 1*(1), 26–30. <https://doi.org/10.1177/237437431400100107>
- Modic, M. B., Siedlecki, S. L., Griffin, M. T. Q., & Fitzpatrick, J. J. (2016). Caring behaviors: Perceptions of acute-care nurses and hospitalized patients with diabetes. *International Journal of Human Caring, 20*(3), 160–164. <https://doi.org/10.20467/1091-5710-20.3.160>

- Naghneh, M. H. K., Tafreshi, M. Z., Naderi, M., Shakeri, N., Bolourchifard, F., & Goyaghaj, N. S. (2017). The relationship between organizational commitment and nursing care behavior. *Electronic Physician*, 9(7), 4835–4840. <https://doi.org/10.19082/4835>
- Oluma, A., & Abadiga, M. (2020). Caring behavior and associated factors among nurses working in Jimma University specialized hospital, Oromia, Southwest Ethiopia, 2019. *BMC Nursing*, 19(1), 19. <https://doi.org/10.1186/s12912-020-0407-2>
- Omari, F. H., AbuAlRub, R., & Ayasreh, I. R. A. (2013). Perceptions of patients and nurses towards nurse caring behaviors in coronary care units in J ordan. *Journal of Clinical Nursing*, 22(21-22), 3183–3191. <https://doi.org/10.1111/jocn.12458>
- Pajnkihar, M., & Štiglic, G., & D Vrbnjak. (2017). The concept of Watson's carative factors in nursing and their (dis) harmony with patient satisfaction. *PeerJ*, 5, e2940. <https://doi.org/10.7717/peerj.2940>
- Papastavrou, E., Efstathiou, G., Tsangari, H., Suhonen, R., Leino-Kilpi, H., & Patiraki, E., M Tomietto. (2012). Patients' and nurses' perceptions of respect and human presence through caring behaviours: A comparative study. *Nursing Ethics*, 19(3), 369–379. <https://doi.org/10.1177/0969733011436027>
- Plevová, I., Zeleníková, R., Jarošová, D., & Janíková, E. (2021). The relationship between nurse's job satisfaction and missed nursing care. *Medycyna Pracy*, 72(3), 231–237. <https://doi.org/10.13075/mp.5893.01035>
- Rizkianti, I., & Haryani, A. (2020). The relationship between workload and work stress with caring behavior of nurses in inpatient rooms. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 5(2), 159–166. <https://doi.org/10.30604/jika.v5i2.338>
- Salimi, S., & Azimpour, A. (2013). Determinants of nurses' caring behaviors (DNCB): Preliminary validation of a scale. *Journal of Caring Sciences*, 2(4), 269. <https://doi.org/10.5681%2Fjcs.2013.032>
- Santos, J. A. A. D. L., & Labrague, L. J. (2021). *Job engagement and satisfaction are associated with nurse caring behaviours: A cross-sectional study*. WILEY.
- Savič, B. S., & Pagon, M. (2007). The model of factors influencing successful change implementation in Slovene hospitals. *Organizacija*, 40(4), 5-7. <https://organizacija.fov.um.si/index.php/organizacija/article/view/184>
- Suliman, W. A., Welmann, E., Omer, T., & Thomas, L. (2009). Applying Watson's nursing theory to assess patient perceptions of being cared for in a multicultural environment. *Journal of Nursing Research*, 17(4), 293–300. <https://doi.org/10.1097/JNR.0b013e3181c122a3>
- Teng, C., Hsiao, F., & Chou, T. (2010). Nurse-perceived time pressure and patient-perceived care quality. *Journal of Nursing Management*, 18(3), 275–284. <https://doi.org/10.1111/j.1365-2834.2010.01073.x>
- Vandenhouten, C., Kubsch, S., Peterson, M., Murdock, J., & Lehrer, L. (2012). Watson's theory of transpersonal caring: Factors impacting nurses professional caring. *Holistic Nursing Practice*, 26(6), 326–334. <https://doi.org/10.1097/HNP.0b013e31826ed0e8>
- Warr, P., Cook, J., & Wall, T. (1979). Scales for measurement of some work attitudes and aspects of psychological well being. *Journal of Occupational Psychology* 61(3), 129–148. <https://doi.org/10.1111/j.2044-8325.1979.tb00448.x>
- Weathers, E., McCarthy, G., Landers, M., Porter, C., Cortese, M. A., & Fitzpatrick, J. J. (2015). Nurses' caring behaviors in Ireland and the United States. *International Journal of Human Caring*, 19(3), 30–35. <https://doi.org/10.20467/1091-5710.19.3.30>
- Wu, Y., Larrabee, J. H., & Putman, H. P. (2006). Caring behaviors inventory: A reduction of the 42-item instrument. *Nursing Research*, 55(1), 18–25. <https://doi.org/10.1097/00006199-200601000-00003>
- Youssef, H., Mansour, M., Ayasreh, I., & Al-Mawajdeh, N. (2013). A medical-surgical nurse's perceptions of caring behaviors among hospitals in Taif city. *Life Science Journal*, 10(4), 720–730. http://www.lifesciencesite.com/ljsj/life1004/091_21193life1004_720_730.pdf