



Sociodemographic and Behavioral Factors Affecting Patient-Centered Care Competence in Home Care Staff in the Turkish Republic of Northern Cyprus

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Abstract: The main aim of this study was to determine the effect of some sociodemographic characteristics and care behaviours of municipal staff caring for patients at home on patient-centred care competency levels.

The population of this descriptive study consisted of 60 personnel providing health and care services to patients registered to Home Health Services. In the study, 60 nurses who accepted to participate in the study were included in the study. The data of the study were collected by using 'Descriptive Characteristics Form, (BDI-24) and (HMBYÖ)'.

As a result of the study, it was found that the mean age was 28.91 ± 3.61 , 56.7% were female, 93.3% were undergraduate graduates, 68.3% were single, the mean score of the Care Behaviour Scale was 4.31 ± 1.01 , the highest score was 4.38 ± 1.02 from the assurance sub-dimension and the lowest score was 4.21 ± 1.13 from the commitment sub-dimension. The mean score of the Patient-Centred Care Competency Scale was 68.22 ± 14.14 , the highest score was 23.70 ± 5.27 from the sub-dimension of respecting the patients' point of view, and the lowest score was 12.23 ± 2.75 from the sub-dimension of patient advocacy.

As a result of the study, it was determined that although the perceptions of the care staff regarding the quality of care were positive, the competence level of patient-centred care competence was high.

Keywords: Home Care Personnel, Care Behaviors, Patient-Centered Care Competency Level

1. Introduction

The holistic health approach of the 21st century views individuals as biological, psychological, and social beings, emphasizing that they should be evaluated within the context of their own environment. Rising expectations from healthcare services and the demand for high-quality treatment and care have significantly increased the responsibilities of service providers and care teams, particularly with respect to the quality of services offered. Consequently, there is an ongoing need for new perspectives in treatment and care delivery (1).

Advancements in healthcare services and increased life expectancy have contributed to a higher prevalence of chronic diseases, which in turn has led to a rise in the number of disabled and bedridden patients among both young and adult populations (2). Changes in family structures—particularly the transition to nuclear families and increased female workforce participation—have heightened the need for treatment and care for bedridden individuals with chronic illnesses. In this context, home care services have gained importance, as they enable individuals requiring care to live more healthily in their own environments by utilizing human resources and technology beyond family members.

However, significant challenges remain in the delivery of home care services, both in Türkiye and in the Turkish Republic of Northern Cyprus (TRNC). These challenges include insufficient legal regulations, inadequate job security, low salaries, lack of clear job descriptions, communication issues, limited

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equipment, insufficient training, lack of regular inspections, and transportation difficulties (3). Addressing these issues is essential for ensuring the quality and sustainability of home care services.

Supporting home care staff is particularly important, given the intensity of their working conditions and the need to maintain and improve service quality. Studies in both Türkiye and the TRNC have reported that home care personnel often experience difficulties fulfilling their responsibilities, facing challenges related to institutional structure, working environment, patient and family communication, and professional competence (4–6).

In recent years, patient-centered care has emerged as a key component of healthcare delivery. First defined by Michael Balint as understanding patients as unique individuals (7), this approach is recognized as a cornerstone of modern healthcare systems, aimed at increasing patient satisfaction and improving health outcomes (8). According to the literature, patient-centered care is associated with better health conditions, increased organizational commitment, reduced unnecessary healthcare utilization, and improved care quality (9).

In home care services, adopting a patient-centered approach is particularly critical due to the complexity of patients' needs and the high degree of interaction between staff and patients. This model emphasizes mutual respect, shared decision-making, and tailoring care to patients' values, preferences, and needs (10–14). It has also been shown to reduce unnecessary diagnostic procedures, medications, and hospital referrals, while facilitating care delivery in patients' own environments (15,16).

Despite the importance of home care services, studies have reported varying levels of patient satisfaction, with some indicating inadequacies in communication, explanations provided by staff, and the comprehensiveness of care (17). The professional values of home care staff—shaped by factors such as age, gender, marital status, education, experience, and job position—play a determining role in their competence and in the quality of relationships established with patients, team members, and society (18,19).

Previous research in Türkiye has highlighted deficiencies in training, multidisciplinary collaboration, and organizational structure in home care units (20). While the scope of home care services continues to evolve to meet societal needs, the development of staff through structured training, orientation, in-service programs, and certification is essential to ensuring quality and continuity of care (21).

To date, no study has examined this topic in the TRNC. This research therefore aims to fill this gap by investigating the effect of selected sociodemographic characteristics and care behaviors of municipal home care personnel on their levels of competence in delivering patient-centered care.

1.2. Study questions

1. Do some sociodemographic characteristics of caregivers affect their patient-centered care competence level?
2. Do the care behaviors of patients and caregivers affect the level of patient-centered care competence?

2. Method

2.1. Study design

The research, designed as a descriptive and cross-sectional study, was conducted between 27 February and 30 May 2023 in units providing home health care services within the municipalities of Nicosia, Famagusta, Kyrenia, and other district municipalities.

2.2. Population and sample of the study research

The population of the study consisted of 24 nurses working in the Nicosia Municipality Home Health Services Unit, 28 nurses in the Famagusta Municipality Home Health Services Unit, and 8 nurses in the

Kyrenia Municipality Home Health Services Unit, totalling 60 nurses. No sampling was performed; instead, the entire population was targeted, and all personnel who voluntarily agreed to participate were included in the research. Thus, the sample of the study comprised all 60 nurses in the population. The study was conducted with the approval of the Clinical Research Ethics Committee of Cyprus Science University Graduate Education and Research Institute (dated 25.04.2023, decision number 2023/04.008). Prior to data collection, both written and verbal informed consent was obtained from all participants in accordance with ethical principles.

2.3. Data collection tools

Data were collected using the Descriptive Characteristics Form, Care Behavior Scale-24 (BDI-24) and Patient-Centered Care Competency Scale. The descriptive characteristics form (age, gender, marital status, social security, educational status, etc.), which the researchers created by conducting literature research, consists of 13-item questions (5,6,7).

The Caring Behaviors Inventory (CBI) is a measurement tool developed to assess the nursing care process and the quality of care provided to patients (20,21). Originally developed in 1994 by Wolf et al. as the 42-item Caring Behaviors Inventory-42 (CBI-42) to evaluate the caring behaviors of both patients and nurses, the scale was later shortened to a 24-item version, the Caring Behaviors Inventory-24 (CBI-24), by Wu et al. in 2006 (20,21). The validity and reliability study of the CBI-24 in Türkiye was conducted by Kurşun and Kanan (2010), who reported Cronbach's alpha values of 0.97 for patients and 0.96 for nurses. The CBI-24 consists of 24 items grouped under four subdimensions: assurance, knowledge-skills, respect, and commitment. Responses are scored on a 6-point Likert scale. The total score is calculated by summing the item scores and dividing by 24, whereas subdimension scores are obtained by summing the relevant item scores and dividing by the number of items in that subdimension. The scale can be administered to both patients and nurses and demonstrates high internal consistency. Higher scores indicate higher perceived quality of nursing care (22). In the present study, the Cronbach's alpha coefficient for the CBI-24 was calculated as 0.981, indicating excellent internal consistency.

Patient-Centered Care Competency Scale Saygılı, Kar, and Uğurluoğlu (2020) conducted a Turkish validity and reliability study of a scale consisting of 17 statements developed by Hwang (2015) in South Korea. This scale is used to assess patient-centred care competence. The scale consists of three dimensions: Encouraging Patient Participation in Care Processes, Ensuring Patient Comfort and Patient Advocacy. The statements are evaluated using a Likert scale ranging from 'Strongly Disagree' to 'Strongly Agree'. According to the results of the study, the total mean score of the scale was 57.45 out of 70. The mean score of patient-centred care competencies of nurses and midwives was calculated as 4.1 out of 5. The value obtained as a result of Cronbach's Alpha analysis to determine the reliability of the scale is 0.915. This result shows that the scale has sufficient reliability. This study provides important findings on the validity and reliability of a scale that can be used to assess patient-centred care competencies in Turkish-speakin.

The value of 0.915 obtained in this study shows that the scale is reliable. In addition, item-total correlations and Cronbach's Alpha coefficients were calculated for each item of the scale using the item dropping technique (Table 2). Accordingly, considering that the Cronbach's Alpha values of the scale ranged between 0.91-0.92 and the item-total correlations ranged between 0.51-0.72, it is seen that the scale exhibits a consistent structure on an item basis. In general, item-total correlation values of 0.30 and above are desirable (2).

2.4. Data collection method

Data were collected between 27 February and 30 May 2023 from home care personnel working in the municipalities of Nicosia, Famagusta, Kyrenia, and other district municipalities of the Turkish Republic

of Northern Cyprus. The data collection process was conducted in person at the participants' workplaces. The study forms, which included the Sociodemographic Characteristics Form, the Caring Behaviors Inventory-24 (CBI-24), and the Patient-Centered Care Competence Scale, were distributed to the participants by the researcher. Participants completed the forms themselves without any intervention from the researcher. The completion of all forms took approximately 20 minutes per participant. After the forms were filled in, they were collected by the researcher on the same day.

2.5. Evaluation of data

The data were entered in the SPSS (25.0) program and non-parametric techniques were used to evaluate the data. Spearman-Rho correlation coefficient technique, which is the non-parametric equivalent of the Pearson product correlation coefficient technique, was used to compare continuous variables. In addition, the "Mann Whitney U Test" technique was used to compare two groups, and the "Kruskal-Wallis H Test" technique was used to compare three and more groups. When the results of the "Kruskal-Wallis H Test" were significant, the "Mann Whitney U Test" technique was used to test the question of which groups there were significant differences. When there was a significant difference between the two groups, Bonferroni correction was applied.

3. Results

As shown in Table 1, 66.7% of the participating nurses were aged 29 years or younger, with a mean age of 28.91 ± 3.61 years. The majority were female (56.7%) and held a bachelor's degree (93.3%). Most participants were single (68.3%). Regarding professional experience, 43.3% had worked in a home care unit for 3–4 years, with a mean duration of 3.90 ± 1.65 years, while 45.0% had been in the nursing profession for 3–4 years, with a mean of 3.90 ± 1.65 years. All nurses (100%) worked daytime shifts, and 36.7% reported working an additional 11–20 hours per month, with a mean of 21.35 ± 13.24 hours. Furthermore, 81.7% indicated that the workload in home care was very high, 100% stated that workload was higher during day shifts, and 91.7% reported caring for five or more patients per day.

Table 1. Descriptive Characteristics of Nurses

Variables	Number (n)	Percentage (%)
Age Groups		
29 Years and Under	40	66.7
30 Years and Over	20	33.3
Age: Ort±Sd=28.91±3.61-Median:28.0 - Min:23,0- Max:50.0		
Gender		
Male	26	43.3
Female	34	56.7
Education Status		
Health Vocational High School	---	---
Associate Degree	---	---
License	56	93.3
Master's	4	6.7
phD	---	---
Marital Status		
Married	19	31.7
single	41	68.3
Working Time in Home Care Unit		
Between 1-2 Years	13	21.7
Between 3-4 Years	26	43.3
5 Years and Over	21	35.0
Home Care Work Duration: Ort±Sd=3.90±1.65 - Median:4.0 - Min:1.0- Max:8.0		
Duration of Employment in the Nursing Profession		
Between 1-2 Years	14	23.3
Between 3-4 Years	27	45.0
5 Years and Over	19	31.7

Table 1 (Continued)

Working Time in Nursing: Mean±Sd=3.90±1.65-Median:4.0-Min:1.0 Max:8.0		
Shift Working Method		
Continuous Day	60	100.0
Continuous Night	---	---
Both of them	---	---
Shift Work Pattern		
Continuous Daytime	18	30.0
Continuous Night	22	36.7
Both	20	33.3
Monthly Working Time: Mean±Sd=21.35±13.24–Median:15.0-Min:5.0-Max: 40.0		
Defining Workload in Home Care		
Continuous Daytime	2	3.3
Continuous Night	9	15.0
Both	49	81.7
How to Define Workload in Different Shifts		
More on Day Shift	60	100.0
More on Night Shift	---	---
More on Weekend Shift	---	---
Equal in Every Shift	---	---
Number of Patients Cared for in Daily Care		
More in Day Shift	---	---
More on Night Shift	---	---
More on Weekend Shift	---	---
Equal on every shift	5	8.3
More in Day Shift	55	91.7

As seen in Table 2, used in the research; It can be said that the internal consistency coefficients of the general and sub-dimensions of the care behavior scale and the patient-centered care competency scale are highly reliable, that is, all the items that make up the measurement tool measure the same feature. More precisely, it is homogeneous in terms of the properties and features measured by both measurement tools used in the research. According to these results, the measurement tools used in the research are reliable measurement tools.

Table 2. Internal Consistency Coefficient Results of the Measurement Tool Used in the Study

Scales and Subscales	Criteria	
	Number of Questions	Cronbach's Alpha
Care Behavior Scale General	24	,981
Dimension 1: Assurance Subdimension	8	,949
Dimension 2: Knowledge-Skills Subdimension	5	,937
Dimension 3: Being Respectful Subdimension	6	,921
Dimension 4: Commitment Subdimension	5	,933
Patient-Centered Care Competency Scale	17	,964
Dimension 1: Respect for Patients' Perspective Subdimension	6	,885
Dimension 2: Promoting Patient Participation in Care Processes Subdimension	5	,894
Dimension 3: Ensuring Patient Comfort Subdimension	3	,882
Dimension 4: Patient Advocacy Subdimension	3	,866

The general and sub-dimension averages of the care behavior scale used in the research are between 4.42±1.01 and 4.21±1.13, and the general and sub-dimension averages of the patient-centered care competency scale are between 68.22±14.14 and 12.23±2. It is between .75. In addition, the internal

consistency coefficients of the general and sub-dimensions of the care behavior scale vary between .984 and .921, and the internal consistency coefficients of the general and sub-dimensions of the patient-centered care competence scale vary between .964 and .882.

Table 3. Patient-Centered Care Competency Scale and Care Behavior Scale Mean Scores

	Min	Max	Ort.	Std. Sap.
Patient-Centered Care Competency Scale	34	85	68.22±14,14	5,61
Care Behavior Scale	3.38	6.00	4.42±1,01	5.40

As shown in Table 4, marital status was found to have a significant effect on the *Ensuring Patient Comfort* sub-dimension scores of the Patient-Centered Care Competency Scale ($U = 257.0$, $p = .031$). Specifically, this indicates that nurses' marital status may influence how they perceive and implement patient comfort in home care settings.

However, no statistically significant differences were observed in the total scale scores or other sub-dimension scores with respect to age, gender, education level, duration of work in the home care unit, years of experience in the nursing profession, monthly overtime hours, workload in home care, or the number of patients cared for daily ($p > .05$). These results suggest that, apart from marital status, the examined sociodemographic and work-related variables did not significantly affect nurses' overall patient-centered care competence or the other sub-dimensions, including Respect for Patients' Perspective, Encouraging Patient Participation in Care Processes, and Patient Advocacy.

Table 4. Comparison Results of Some Descriptive Characteristics of Nurses and Patient-Centered Care Competency Scale Scores

Variables	n	HMBYÖ* Overall Score			HBSG* Sub Dimension			BSHKTE* Sub Dimension			HKS* Sub Dimension			HS* Sub Dimension		
		Mean ± SD	Min Max	Sıra Ort.	Mean ± SD	Min Max	Sıra Ort.	Mean ±SD	Min Max	Sıra Ort.	Mean ±SD	Min Max	Sıra Ort.	Mean ±SD	Min Max	Sıra Ort.
Age²																
29 Years and Under	40	69,43±11,95	32,00-81,0	31,24	24,20±4,53	10,00-29,0	31,36	20,40±3,76	7,00-24,0	31,48	12,35±2,01	7,00-15,00	28,99	12,48±2,45	5,00-15,0	31,68
30 Years and Over	20	65,80±17,84	17,00-82,0	29,03	22,70±6,51	6,00-29,00	28,78	19,30±5,21	5,00-24,0	28,55	12,05±3,58	3,00-15,00	33,53	11,75±3,29	3,00-15,0	28,15
Statistical Analysis		U= 370,5 p= ,643			U= 365,5 p= ,586			U= 361,0 p= ,535			U= 339,5 p= ,332			U= 353,0 p= ,454		
Gender t²																
Male	26	71,19±9,94	38,00-82,0	34,50	24,88±3,73	14,00-29,0	33,79	21,04±2,78	12,0-24,0	33,83	12,69±2,04	7,00-15,00	32,52	12,58±2,37	5,00-15,0	32,42
Female	34	65,94±16,43	17,00-81,0	27,44	22,79±6,09	6,00-29,00	27,99	19,26±5,06	5,00-24,0	27,96	11,91±2,96	3,00-15,00	28,96	11,97±3,02	3,00-15,0	29,03
Statistical Analysis		U= 338,0 p= ,120			U= 356,5 p= ,200			U= 355,5 p= ,191			U= 389,5 p= ,424			U= 392,0 p= ,448		
Education Status ²																
License	56	68,91±13,58	17,0-82,0	31,54	23,98±5,10	6,00-29,00	31,54	20,21±4,10	5,00-24,0	31,16	12,32±2,54	3,00-15,00	30,93	12,39±2,65	3,00-15,0	31,54
Master's	4	58,50±20,34	29,0-72,00	16,00	19,75±6,85	10,00-29,0	15,88	17,50±6,61	8,00-24,0	21,25	11,25±3,77	6,00-15,00	24,50	10,00±3,56	5,00-15,0	15,88
Statistical Analysis		U=54,00 p= ,085			U= 53,5 p= ,081			U= 75,0 p= ,266			U= 88,0 p= ,467			U= 53,5 p= ,078		
Marital Status																
Married	19	68,05±14,86	29,00-82,0	30,71	23,47±5,50	10,00-29,0	30,18	19,84±4,35	8,00-24,0	29,50	12,58±3,13	6,00-15,00	37,47	12,16±2,61	5,00-15,0	29,29
Single	41	68,29±13,98	17,00-81,0	30,40	23,80±5,22	6,00-29,00	30,65	20,12±4,31	5,00-24,0	30,96	12,10±2,35	3,00-15,00	27,27	12,27±2,85	3,00-15,0	31,06
Statistical Analysis		U= 385,5 p= ,949			U= 383,5 p= ,924			U= 370,5 p= ,759			U= 257,0 p= ,031			U= 366,5 p= ,710		
Working Time in Home Care Unit																
Between 1-2 Years	13	68,85±11,92	40,00-81,0	30,77	24,69±4,63	13,00-29,0	34,46	20,15±3,44	12,0-24,0	29,19	11,92±2,25	7,00-15,00	26,19	12,08±2,29	8,00-15,0	27,19
Between 3-4 Years	26	68,88±12,57	32,00-80,0	30,08	23,62±4,97	10,00-29,0	29,33	20,27±3,99	7,00-24,0	30,67	12,42±2,04	6,00-15,00	29,42	12,58±2,45	6,00-15,0	32,65
5 Years and Over	21	67,00±17,44	17,00-82,0	30,86	23,19±6,10	6,00-29,00	29,50	19,67±5,20	5,00-24,0	31,10	12,24±3,42	3,00-15,00	34,50	11,90±3,37	3,00-15,0	29,88
Statistical Analysis		X ² : ,027 p: ,986/---			X ² : ,865 p: ,649/---			X ² : ,103 p: ,950/---			X ² : 2,07 p: ,354/--			X ² : ,917 p: ,632/---		
Duration of Employment in the Nursing Profession																
Between 1-2 Years	14	69,86±11,87	40,00-81,0	33,46	24,79±4,48	13,00-29,0	34,57	20,57±3,39	12,0-24,0	31,96	12,21±2,36	7,00-15,00	29,54	12,29±2,33	8,00-15,0	29,21
Between 3-4 Years	27	69,26±12,13	32,00-79,0	29,87	23,78±4,77	10,00-29,0	29,33	20,22±3,90	7,00-24,0	29,93	12,56±2,06	6,00-15,00	30,87	12,70±2,32	6,00-15,0	33,44
5 Years and Over	19	65,53±18,14	17,00-82,0	29,21	22,79±6,47	6,00-29,00	29,16	19,37±5,41	5,00-24,0	30,24	11,84±3,44	3,00-15,00	30,68	11,53±3,50	3,00-15,0	27,26
Statistical Analysis		X ² : ,542 p: ,761/---			X ² : 1,00 p: ,605/---			X ² : ,136 p: ,934/---			X ² : ,059 p: ,971/---			X ² : 1,54 p: ,462/---		
Monthly Overtime																
10 Hours and Under	18	69,28±17,56	17,00-78,0	36,94	24,39±6,26	6,00-29,00	35,94	20,28±5,40	5,00-24,0	35,69	12,28±3,18	3,00-15,00	33,14	12,33±3,33	3,00-15,0	33,17
Between 11-20 Hours	22	70,95±4,77	60,00-78,0	25,98	24,36±2,74	17,00-29,0	28,14	21,00±1,77	17,0-24,0	29,43	12,68±1,52	8,00-15,00	30,02	12,91±1,15	10,0-15,0	31,50
21 Hours and Over	20	64,25±17,12	32,00-82,0	29,68	22,35±6,32	10,00-29,0	28,20	18,75±4,96	7,00-23,0	27,00	11,75±3,01	6,00-15,00	28,65	11,40±3,30	5,00-15,0	27,00
Statistical Analysis		X ² :3,99 p: ,136/---			X ² : 2,52 p: ,282/---			X ² : 2,55 p: ,279/---			X ² : ,680 p: ,712/---			X ² : 1,33 p: ,512/---		
Defining Workload in Home Care ¹																
Normal	2	44,00±38,18	17,0-71,0	11,00	15,00±12,73	6,00-24,00	11,25	13,50±12,0	5,00-22,0	18,00	8,00±7,07	3,00-13,00	15,50	7,50±6,36	3,00-12,0	10,00
More	9	63,67±17,52	29,0-81,0	27,89	22,56±6,50	10,0-29,0	28,72	18,33±5,05	8,00-23,0	24,11	11,33±2,69	6,00-14,00	22,17	11,44±3,50	5,00-15,0	27,44
Too Much	49	70,04±11,50	32,0-82,0	31,78	24,27±4,47	10,0-29,0	31,61	20,61±3,56	7,00-24,0	32,18	12,59±2,25	6,00-15,00	32,64	12,57±2,29	5,00-15,0	31,90
Statistical Analysis		X ² : 2,97 p: ,226/---			X ² : 2,75 p: ,252/---			X ² : 2,76 p: ,251/---			X ² : 4,44 p: ,108/---			X ² : 3,45 p: ,178/---		
Number of Patients Cared for in Day Care																
Four Patient	5	67,60±7,33	59,0-75,0	22,40	23,60±2,97	19,0-27,0	24,10	19,80±2,77	16,0-23,0	24,00	12,00±2,00	9,00-14,00	25,40	12,20±1,30	10,0-13,0	24,80
Five Patients and Over	55	68,27±14,64	17,0-82,0	31,24	23,71±5,45	6,0-29,0	31,08	20,05±4,42	5,00-24,0	31,09	12,27±2,67	3,00-15,00	30,96	12,24±2,85	3,00-15,0	31,02
Statistical Analysis		U= 97,00 p= ,277			U= 105,5 p= ,389			U= 105,0 p= ,378			U= 112,0 p= ,486			U= 109,0 p= ,439		

Note: Bonferroni Correction applied-1: Kruskal Wallis H Test - 2: Mann Whitney U * PCCS: Patient-Centered Care Competency Scale, HBSG: Respect for Patients' Perspective, PBSCTE: Encouraging Patient Participation in Care Processes, HKS: Ensuring Patient Comfort, HS: Patient Advocacy

As shown in Table 5, the total scores of the Caring Behaviors Scale were significantly and moderately positively correlated with the overall scores of the Patient-Centered Care Competency Scale ($r = .585$, $p < .001$) and its sub-dimensions, including respect for patients' perspectives ($r = .520$, $p < .001$), encouraging patient participation in care processes ($r = .515$, $p < .001$), ensuring patient comfort ($r = .460$, $p < .001$), and patient advocacy ($r = .371$, $p < .001$). These results indicate that nurses demonstrating higher overall caring behaviors are more likely to exhibit stronger patient-centered care competencies across multiple dimensions.

When examining the sub-dimensions of the Caring Behaviors Scale, the assurance sub-dimension scores showed significant moderate positive correlations with the overall Patient-Centered Care Competency Scale scores ($r = .582$, $p < .001$) and all its sub-dimensions, while the knowledge-skill sub-dimension was positively correlated with the overall scale ($r = .494$, $p < .001$) and all sub-dimensions except patient advocacy, where no significant relationship was found. Similarly, the respectful sub-dimension demonstrated moderate positive correlations with all patient-centered care competencies (ranging from $r = .382$ to $r = .555$, $p < .001$), highlighting that specific aspects of caring behaviors are linked to improved patient-centered care practices.

Finally, the commitment sub-dimension of the Caring Behaviors Scale was significantly and moderately positively associated with the overall Patient-Centered Care Competency Scale scores ($r = .534$, $p < .001$) and all sub-dimensions, including respect for patients' perspectives, encouraging patient participation, ensuring patient comfort, and patient advocacy. Collectively, these findings emphasize that higher levels of nurses' caring behaviors, across multiple dimensions, are closely related to enhanced patient-centered care competencies. The comparisons between these scales and selected personal variables from the participants' information form are presented sequentially in the tables, providing further context for interpreting these relationships.

Table 5. Correlation Results of the Scales Used in the Study

Criteria	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. General Care Behavior Scale	1									
2. Assurance Sub-Dimension	---	1								
3. Knowledge-Skill Sub-Dimension	---	---	1							
4. Respectfulness Sub-Dimension	---	---	---	1						
5. Commitment Sub-Dimension	---	---	---	---	1					
6. Patient-Centered Care Competency Scale	,585**	,582**	,494**	,555**	,534**	1				
7. Respecting Patients' Perspectives Sub-Dimension	,520**	,517**	,468**	,492**	,445**	---	1			
8. Sub-Dimension of Encouraging Patient Participation in Care Processes	,515**	,573**	,444**	,475**	,487**	---	---	1		
9. Ensuring Patient Comfort Sub-Dimension	,460**	,467**	,428**	,450**	,489**	---	---	---	1	
10. Patient Advocacy Sub-Dimension	,371**	,339**	0,241	,382**	,388**	---	---	---	---	1

**:.001

4. Discussion

Nurses' caring behaviors and patient-centered care are fundamental components of high-quality care and play a critical role in ensuring patient safety. In this study, the findings highlight that nurses' care behaviors and their competency in patient-centered care directly reflect the level of care provided. These results align with previous research, which emphasizes that both care behaviors and patient-centered approaches are essential indicators of the quality of nursing practice (23). By demonstrating this relationship, the study contributes to the understanding of how nurses' professional behaviors impact patient outcomes, filling a gap in the literature regarding municipal home care settings.

Nurses' care behaviors and patient-centered care levels are essential for delivering high-quality healthcare, particularly in home care settings. In this study, nurses' mean HMBRQ score was 68.22 ± 14.14 , indicating a high level of patient-centered care competency, while their mean BDI score was 4.42 ± 1.01 , reflecting a moderate level of caring behaviors. These findings demonstrate that while nurses generally possess strong patient-centered care competencies, there is room to enhance their practical caring behaviors, which aligns with the study's aim of evaluating both constructs in the context of municipal home care services. Furthermore, a significant correlation was observed between the knowledge-skill sub-dimension of the Caring Behaviors Inventory and the overall and sub-dimension scores of the Patient-Centered Care Competency Scale, emphasizing that nurses who demonstrate higher clinical knowledge and skills are more likely to engage in patient-centered practices. This correlation highlights the interaction between competence and behavior, confirming that improving nurses' professional skills may directly enhance patient-centered care. Comparisons with prior studies support these findings: previous research reported moderate patient-centered care competency among healthcare providers, indicating that socio-demographic and professional factors, such as age, experience, and voluntary choice of unit, play a role in shaping care behaviors (25,26). The present study fills a gap in the literature by examining these relationships specifically among municipal home care nurses, providing evidence that targeted interventions to develop both knowledge and caring behaviors can improve patient outcomes and align care practices with patient-centered principles.

In the current study, the socio-demographic and professional characteristics of the nurses were carefully examined to understand their potential impact on patient-centered care and caring behaviors. The mean age of the nurses was 28.91 ± 3.61 years, 56.7% were female, 93.3% held a bachelor's degree, 68.3% were single, and 43.3% had been working in the home care unit for 3 to 4 years (mean duration 3.90 ± 1.65). All participants worked continuously during the day, 81.7% reported a very high workload in home care, 100% experienced higher workload during the day shift, and 91.7% cared for five or more patients per day. These findings suggest that workload and professional experience may play a critical role in shaping nurses' care behaviors and patient-centered care competency, highlighting the need to consider these factors in developing targeted interventions. Similar patterns were reported in previous studies: Kossiori et al. (2021) found that nurses in surgical and internal medicine departments in Greece were predominantly young, single, and faced high workloads, while another study with 203 nurses reported that over half of the participants were female, mostly had undergraduate degrees, and experienced excessive workloads (27,28). The alignment between the current findings and prior research underscores that socio-demographic characteristics and work conditions consistently influence nurses' ability to deliver high-quality, patient-centered care. By contextualizing these variables, the study contributes to the literature by emphasizing the importance of supporting nurses in high-demand environments to optimize care outcomes.

In this study, nurses with five or more years of professional experience in home care were found to have statistically significantly higher patient-centered care competency scores compared to those with less experience. This finding highlights the influence of professional tenure on the development of care behaviors and competency levels. Moreover, a significant and moderately positive correlation was

observed between the knowledge-skill sub-dimension of the care behavior scale and both the overall and sub-dimension scores of the patient-centered care competency scale, suggesting that nurses' theoretical knowledge and practical skills are closely linked to their ability to provide patient-centered care. These results are consistent with previous studies: Huang et al. (2018) reported that hospital nurses who worked overtime experienced higher levels of emotional exhaustion, depersonalization, and lower personal accomplishment, indicating the impact of work conditions on care quality (29). Similarly, Karlou et al. (2018) found a moderate positive relationship between nurses' care behaviors and patient-centered care sub-dimensions among nurses caring for patients undergoing chemotherapy in Greece (30). By demonstrating these associations, the current study contributes to the literature by emphasizing that both professional experience and skill development are key determinants of effective patient-centered care, highlighting the need for structured support and ongoing professional development programs for nurses.

In this study, nurses who reported enjoying their profession had statistically significantly higher patient-centered care competency scores compared to those who did not. This finding underscores the impact of job satisfaction on the quality of care behaviors and the ability to provide patient-centered care. Consistent with this, Janerka, Leslie, and Gill (2023) found a positive relationship between individualized care and nurses' overall job satisfaction, emotional exhaustion, and personal achievement in acute hospital settings. Their study demonstrated that higher job satisfaction and a sense of personal accomplishment positively influenced the level of care provided by nurses (31). These results reinforce the importance of fostering professional satisfaction and motivation among nurses as a means to enhance patient-centered care, highlighting the potential benefit of organizational strategies that support nurses' engagement and well-being.

Examining the literature, it has been emphasized that nurses' care competency levels and care behaviors are critical for ensuring patient safety and maintaining the quality of healthcare systems (31). High levels of theoretical knowledge, practical skills, and quality of care among nurses have been shown to significantly influence patient and elderly morbidity and mortality rates (32). In the current study, nurses who voluntarily chose to work in their respective fields had statistically significantly higher patient-centered care competency scores compared to those who did not work voluntarily. This finding aligns with the study by Adam et al. (2017), which reported that nurses who voluntarily selected their units achieved higher scores in the quality of care perceived by cancer patients than those who did not voluntarily work in their assigned units (33). These results highlight the importance of voluntary engagement and professional motivation in enhancing nurses' care competencies and ultimately improving patient outcomes.

The results of the study suggest that institutional adoption of approaches such as patient-centered care competence and care behaviors—both considered quality fields in their own right—will contribute to patient and family satisfaction by incorporating a shared decision-making process. This, in turn, is expected to provide the organization with a continuously evolving competitive advantage and contribute to the overall development of healthcare.

5. Conclusion and Recommendations

In our study, it was determined that nurses' patient-centered care competence was at a high level and their care behaviors were high. Additionally, it was determined that there was a statistically strong positive relationship between nurses' patient-centered care competence and care behaviors.

In line with these results;

- In this regard, studies should be carried out on a more comprehensive sample group,
- Conducting studies evaluating the effects of different variables affecting the care of elderly individuals receiving home health services will make significant contributions to the literature,

- Institutions providing home health services should establish preventive/therapeutic service policies that include quality, effective and comprehensive nursing care as well as patient-centered care competence,
- Individuals other than health professionals should not take part in the home health care unit,
- It is recommended that nurses providing home health services be given comprehensive in-service training on patient-centered care competence and care behaviors in a planned manner.

Limitations

This study is limited to nurses providing Home Health Care Services in the district municipalities of the Turkish Republic of Northern Cyprus. The results cannot be generalised to other personnel.

References

1. Yan M, Zhi M, Xu Y, Hu L, Liu Y. Inpatient satisfaction with nursing care and its impact factors in Chinese tertiary hospitals: A cross-sectional study. *Int J Environ Res Public Health*. 2022;19(24):16523.
2. Saygılı M, Kar A, Uğurluoğlu Ö. Hasta merkezli bakım yetkinlik ölçeği: Türkçe geçerlilik ve güvenilirlik çalışması. *Suleyman Demirel Univ Sağlık Bilim Derg*. 2020;11(4):416-426.
3. Arslanoğlu A, Kırılmaz H. Hasta merkezli bakım yetkinliği (HMBY) ölçeğinin Türkçe'ye uyarlanması. *Sağlık Akademisyenleri Derg*. 2019;6(2):158-166.
4. Bakır N, Demir C. Hemşirelerin hasta merkezli bakım yetkinliği ve bütüncül hemşirelik yeterliliği. *Cumhuriyet Univ Sağlık Bilimleri Enstitüsü Derg*. 2020;5(3):109-117.
5. Yılmaz MC, Uysal N, Pirhan H. Does attitude towards evidence-based nursing affect holistic nursing competence? *Int J Caring Sci*. 2022;15(1):371-380.
6. Seo K, Jang T, Kim T. Validity and reliability of the Korean version of the holistic nursing competence scale. *Int J Environ Res Public Health*. 2022;19(12):7244.
7. Balint M. The doctor, his patient, and the illness. *Lancet*. 1955;265(6866):683-688.
8. Narayan MC, Mallinson RK. Home health nurses' journey toward culture-sensitive/patient-centered skills: A grounded theory study. *Home Health Care Manag Pract*. 2022;34(1):24-34.
9. Özakar Akça S, Gülnar E, Özveren H. Spiritual care competence of nurses. *J Contin Educ Nurs*. 2022;53(5):225-231.
10. Karahan A, Kav S. Hemşirelikte mesleki yetkinlik. *Hacettepe Univ Hemşirelik Fak Derg*. 2018;5(2):160-168.
11. Sezer A, Demirbaş H, Kadioğlu H, Evde bakım hemşireliği: Mesleki yetkinlikler ve eğitim standartları. *İÜ FN Hem. Derg*. 2015;23(2):160-165.
12. Çolak MB, Cana HÖ, Ebelikte yeterlilik, yetkinlik ve teknoloji kullanımı. *Türkiye Klinikleri J Health Sci*. 2021;6(2):340-9.
13. Yıldız T, Cerrahi hasta eğitiminde kullanılan güncel yöntemler: Hastalık merkezli değil, hasta merkezli eğitim. *Clinical and Experimental Health Sciences*. 2015;5(2):129-133.
14. Engelman D, Yoshizumi J, Hay RJ, Osti M, Micali G, Norton S, Fuller LC, The 2020 international alliance for the control of scabies consensus criteria for the diagnosis of scabies. *British Journal of Dermatology*. 2020;183(5):808-820.
15. Narayan MC, What Constitutes Patient-Centered Care in Home Care? A Descriptive Study of Home Health Nurses' Attitudes, Knowledge, and Skills. *Home Healthcare Now*. 2022;40(6):317-329.
16. Kwame A, Petrucka PM, A literature-based study of patient-centered care and communication in nurse-patient interactions: Barriers, facilitators, and the way forward. *BMC Nursing*. 2021;20(1):1-10.
17. Karaman D, Kara D, Atar NY, Evde sağlık hizmeti verilen bireylerin hastalık durumlarının ve bakım ihtiyaçlarının değerlendirilmesi: Zonguldak örneği. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*. 2015;4(3):347-359.
18. Scott Barss K. Spiritual care in holistic nursing education: A spirituality and health elective rooted in TRUST and contemplative education. *Journal of Holistic Nursing*. 2020;38(1):122-130.

19. Powers SC, Morris MH, Flynn H, Perry J. Faculty-led role-play simulation: Going live to teach patient-centered care to nursing students. *J Nurs Educ*. 2019;58(11):665-668.
20. Çatak B, Kılınç A, Badıllıoğlu O, Sütü S, Sofuoğlu AE, Aslan D, Burdur'da evde sağlık hizmeti alan yaşlı hastaların profili ve evde verilen sağlık hizmetleri. *Turkish Journal of Public Health*. 2012;10(1):13-21.
21. Yurtsever N, Yılmaz M, Evde bakım alanında çalışan hemşirelerin çalışma koşulları, yaşadıkları güçlükler ve eğitim gereksinimlerinin belirlenmesi. *İzmir Kâtip Çelebi Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*. 2016;1(1):19-25.
22. Wolf, Zane Robinson, et al. Dimensions of nurse caring. *Image: The Journal of Nursing Scholarship*. 1994;26(2):107-112.
23. Wu Ying, Larrabee June H, Putman, Heidi P. Caring behaviors inventory: A reduction of the 42-item instrument. *Nursing Research*. 2006; 55(1):18-25.
24. Kurşun Ş, Kanan N. Bakım davranışları ölçeği-24'ün Türkçe formunun geçerlik ve güvenirlik çalışması. *Anadolu Hemşirelik Sağlık Bilim Derg*. 2012;15:4.
25. Flagg AJ. The role of patient-centered care in nursing. *Nursing Clinics*. 2015;50(1):75-86.
26. Cheraghi MA, Esmaili M, Salsali M, Seeking humanizing care in patient-centered care process. *Holistic Nursing Practice*. 2017;31(6):359-368.
27. Park E, Choi J. Attributes associated with person-centered care competence among undergraduate nursing students. *Research in Nursing & Health*. 2020;43(5):511-519.
28. Singh S, Evans NT, Williams M, Sezginis N, Baryeh NAK. Influences of socio-demographic factors and health utilization factors on patient-centered provider communication. *Health Commun*. 2018;33(7):917-923.
29. Kossiori I, Konstantinidis T, Tsiou C, Kalogianni A, Tsatsou I, Kavga A, Govia O. Investigation of views and care behaviors among patients and nurses in surgical and internal medicine departments in greece. *Hellenic Journal of Nursing*. 2021;60(4):457-466.
30. Bayraktar D. Hemşirelerin bakım odaklı hemşire-hasta etkileşimine yönelik tutum ve davranışları. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi*. 2017;20(3):188-194.
31. Huang CY, Weng RH, Wu TC, Lin TE, Hsu CT, Hung CH, Tsai YC. Developing and testing the patient-centred innovation questionnaire for hospital nurses. *Journal of Nursing Management*. 2018;26(2):227-237.
32. Karlou C, Papadopoulou C, Papathanassoglou E, Lemonidou C, Vouzavali F, Zafiropoulou-Koutroubas A, Patiraki E. Nurses' caring behaviors toward patients undergoing chemotherapy in greece: A mixed-methods study. *Cancer nursing*. 2018;41(5):399-408.
33. Janerka C, Leslie GD, Gill FJ. Development of patient-centred care in acute hospital settings: A meta-narrative review. *Int J Nurs Stud*. 2023;140:104465.
34. Alikari V, Gerogianni G, Fradelos EC, Kelesi M, Kaba E, Zyga S, Perceptions of caring behaviors among patients and nurses. *Int J Environ Res Public Health*. 2022;20(1):396.
35. Adam C, Patiraki E, Lemonidou C, Radwin LE, Charalambous A, Charalambous M, Suhonen RA. Quality of nursing care as perceived by cancer patients: A cross-sectional survey in four European countries. *J BU ON*. 2017;2(1):311.

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