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Comparing nurses' and patients' perceptions of dignity in burn care: a cross-sectional study

Davood Zarei[1], Zahra Khademian[2*], Azita Jaberi[3] and Abdolkhalegh Keshavarzi[4]

Abstract

Background Maintaining patients' dignity is a moral responsibility of nurses. Patients with burn injury experience changes in their body appearance, self-concept and social roles, which may lead to their fear of losing dignity. The aim of this study was to compare nurses' and patients' perceptions of preserving dignity of patients with burn injury.

Methods This cross-sectional study was conducted on 110 nurse-patient dyads at Amir-Al-Moemenin Burn Hospital, Shiraz, Iran between August 2023 to February 2024. Data were collected using patient dignity questionnaire and analyzed using SPSS software version 23.0, utilizing descriptive tests, Mann-Whitney, Kruskal-Wallis, Wilcoxon, and Spearman's correlation coefficient.

Results A significant difference was found between the overall scores of nurses' (143.21 ± 13.29) and patients' (136.70 ± 13.8) perceptions of preserving patients' dignity ($p = 0.002$). Furthermore, a significant difference was observed between their perceptions of two dignity dimensions including communication and privacy ($p < 0.001$). However, no significant difference was found between their perceptions of the two dimensions of autonomy and respect ($p > 0.05$).

Conclusions This study highlights disparities in nurses' and patients' perceptions of preserving burn patients' dignity so that patients' perception of the nurses maintained their dignity was lower than what the nurses themselves believed. Therefore, nurses must pay more attention to maintaining the dignity of patients with burn injuries.

Keywords Burn, Dignity, Nurse, Patient, Perception, Respect

Background

Burn injuries put a significant burden on the healthcare systems, especially in low- and middle-income countries. In 2019, nearly 8.4 million burn injuries occurred worldwide resulted in 111,292 deaths [1]. In Iran, burn injuries represent a significant public health concern, affecting a substantial number of individuals annually and associated with a mortality rate of 6.84% [2].

Patients with burn injuries confront the lasting change in appearance along with unbearable pain, reduced function and changes in self-perception and social roles that may profoundly affect their lives. on others, and the fear of losing one's dignity [3, 4].

*Correspondence:
Zahra Khademian
zahrakhademian@yahoo.com; khademian@sums.ac.ir
[1]Student Research Committee, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran
[2]Department of Nursing, School of Nursing and Midwifery, Shiraz University of Medical Sciences, Shiraz, Iran
[3]Department of Nursing, Community Based Psychiatric Care Research Center, Shiraz University of Medical Sciences, Shiraz, Iran
[4]Shiraz Burn and Wound Healing Research Center, Shiraz University of Medical Sciences, Shiraz, Iran

The concept of dignity is important but complicated when it comes to providing care [5]. In ethical guidelines, the recognition of human dignity is a fundamental right for everyone, and a moral duty for nurses [6]. According to the International Council of Nurses (ICN) guidelines, nurses legally and ethically are obligated to protect patient dignity while providing the best care possible [7]. The dignity of patients is influenced by multiple factors, such as the attitude and behavior of hospital staff, the surrounding environment, culture, and delivering clinical care approach [8]. Preserving dignity is linked to higher levels of patient satisfaction and self-esteem, shorter hospital stays, and improved coping with illness [9]. Furthermore, support for patients' dignity by the health care team can make patients feel calm, confident and self-worth, which allows patients to make informed decisions about their care. On the contrary, failure to respect patients' dignity causes patients' physical and mental health to decline as well as psychological and spiritual suffering and decrease in their resilience [10, 11, 12, 13].

In the complicated subject of burn injuries, where patients face severe psychological and emotional difficulties in addition to physical trauma, maintaining dignity is one of the highest priorities [14, 15, 16]. Therefore, it is essential to examine patient's unique needs and expectations regarding maintaining dignity [17]. Some studies in the field of patient dignity are about special patient groups such as patients with cancer, on hemodialysis or elderly [18, 19, 20]. Other studies have investigated the nurses' understanding of the patient's dignity. However, they have not investigated the patients' understanding in this field [21, 22, 23]. Although some literature has been written about the general topic of dignity in healthcare [8, 24, 25], there is a clear research gap concerning the details of maintaining dignity when dealing with burn injuries, as well as the unique perspectives of both patients and healthcare providers in this particular setting. Furthermore, understanding the perspectives of nurses and patients becomes essential to provide patient-centered care [26]. Nurses and patients may have different perspectives on the provision of dignity-based care [27, 28]. In our searches, we did not find studies that have compared nurses' and burn patients' understanding of maintaining dignity. Therefore, considering the special conditions that may threaten patients' dignity after burn and the research gap in this field, the present study was conducted to compare nurses' and patients' perceptions of preserving dignity of patients with burn injury.

Methods

Research design, setting and participants

This cross-sectional study was conducted at a burn hospital between August 2023 to February 2024. This hospital is the largest burn care center in the south of Iran, with 75 beds, which provides specialized services in the field of burn care and rehabilitation. 110 nurse-patient dyads (pairs) participated in this study. The sample size was estimated based on the research conducted by Torabizadeh et al. Therefore, considering a significance level of 0.05, a test power of 0.90, d = 0.05, $p = 0.5$, q = 0.5, using the following formula, a sample size of 110 individuals was determined for each group of nurses and patients [29].

$$n = \frac{(nz^2pq)}{(nd^2 + z^2pq)}$$

We selected nurses by census method and the patients using stratified random sampling, based on the number of the unit nurses. In this regard, to determine the sample size of nurse-patient pairs from each ward, the number of nurses of the ward who met the inclusion criteria and were willing to participate were determined. For each nurse, one of his/her patients who met the inclusion criteria was selected and paired accordingly. In the next step, each nurse completed the questionnaire regarding his/her designated patient, and each patient completed the questionnaire about his/her assigned nurse. Patients and nurses were aware of the general goal of the study, but in order to make participants, especially patients, comfortable in answering, none of them were informed that the other would also answer the questionnaire questions about them. The inclusion criteria for patients included age of 18 years or older, willingness to participate in the study, and at least three recent hospitalization days. Furthermore, the selected patients were required to have received care from their paired nurses for a period of at least three days. For nurses, inclusion criteria consisted of a minimum of six months of work experience in the burn units, and having at least Bachelor's degree in nursing. The exclusion criterion for both patients and nurses was failure to complete at least 30% of the questionnaire items. Among all of the eligible nurses, three of the them rejected to participate in the study. However, all the selected patients consented to participate. Finally, 110 nurse-patient pairs participated and data about them were analyzed.

Data collection and research tools

Patients' questionnaire completed through interviews by the researcher and nurses completed the questionnaire themselves. Researcher asked patients to respond to the questionnaire regarding their nurse who was caring for them during the shift, and nurses completed the questionnaire regarding their patient during the shift.

Data were collected using demographic and clinical information form and patient dignity questionnaire. Demographic and clinical information included

questions about patients' age, gender, marital status, education level, having the same gender as the nurse, burn cause, number of hospitalizations for burn or non-burn reasons, the burned body area including sensitive (breast in females, face and genital area in both gender) and non-sensitive (other parts of body) areas, percentage of burn and length of stay. Nurses' demographic information included age, gender, marital status, education level, workplace, having the same gender as the patient and work experience in burn and non-burn units.

Torabizadeh et al. designed the Persian version of patient dignity questionnaire and used it to investigate patients' and nurses' perceptions of patient dignity in their study. It contains 33 items and four dimensions including "privacy," "communication," "respect", and "autonomy". Each item is scored on a 5-point Likert from 1 (never maintained), 2 (rarely maintained), 3 (sometimes maintained), 4 (usually maintained), and 5 (always maintained). The designers confirmed the validity and reliability of the questionnaire among Iranian nurses and patients. They examined the questionnaire's qualitative face validity through interviews with 10 nurses and 10 patients to understand the difficulty, relevance, and ambiguity of the items. To ensure quantitative face validity, they asked 10 experts to rate each item on a Likert scale and retained items with impact scores over 1.5. They confirmed the content validity by content validity ratio (CVR) of 0.62 and content validity index (CVI) of 0.79. Additionally, they determined its reliability by Cronbach's alpha of 0.979 for patients', and 0.949 for nurses' questionnaire [29, 30].

Data analysis

The normality of data was assessed through the Shapiro–Wilks test. Subsequently, the collected data underwent analysis employing descriptive tests, Mann-Whitney, Kruskal-Wallis, Wilcoxon, and Spearman's correlation coefficient. Significance was established for p-values less than 0.05. The data analysis was conducted using SPSS v. 23.0.

Results

In this cross-sectional study, data from 110 nurse-patient dyads from general burn care units, reconstructive surgical wards, emergency and intensive care units (ICUs) were examined. The mean age of the patients was 41.87 ± 14.13 (18–90) years, and their mean length of hospital stay was 7.47 ± 7.81 days. Most of the patients were male, married, and had education levels below diploma. The primary cause of burns in the majority of patients was injuries resulting from thermal burn. In this study, the face, genital area in both gender and breast of female patients considered sensitive areas, while all other body parts except the sensitive areas considered non-sensitive areas. Moreover, findings showed a significant difference between male and female patients' perceptions of privacy dimension ($P = 0.012$). Additionally, significant differences were observed between patients with burn in sensitive and non-sensitive areas and dimensions of respect ($P = 0.019$) and communication ($P = 0.031$). However, no significant differences were found in the patients' perceptions of total dignity score and its dimensions based on their gender, marital status, education level, burn cause, number of hospitalizations, and having the same gender as their nurses (Table 1).

Spearman test revealed that patients' age was significantly correlated with privacy ($r = 0.232$, $P = 0.015$) and respect ($r = 0.196$, $P = 0.040$) dimensions. Furthermore, percentage of burn was significantly correlated with total dignity score ($r = -0.379$, $P < 0.001$), and privacy ($r = -0.404$, $P < 0.001$), autonomy ($r = -0.307$, $P < 0.001$) and respect ($r = -0.356$, $P < 0.001$), dimensions. However, length of stay was not significantly correlated with total dignity score and its dimensions (Table 2).

The mean age of the nurses was 33.9 ± 7.1 (23–59) years, and their mean work experience in burn units was 6.59 ± 5.03 years. Most of the nurses were female, married, held a bachelor's degree in nursing, and worked in ICUs. The results revealed significant differences between nurses' workplace and overall dignity scores, and privacy and autonomy dimensions. Bonferroni post hoc test indicated significant differences between perceptions of nurses working in general burn and ICUs of overall dignity ($P = 0.018$), privacy ($P = 0.036$) and autonomy ($P = 0.013$) dimensions. However, no significant differences were identified in the perceptions of nurses of total dignity score and its dimensions based on their gender, marital status, education levels, and having the same gender as the patient (Table 3). Furthermore, according to Spearman test, there was a significant positive correlation between work experience in the burn units and autonomy ($r = 0.200$, $P = 0.036$). However, there was no significant correlation between dignity total score and its dimensions with age and work experience in non-burn units (Table 2).

The study's findings revealed significant differences in nurses' and patients' perceptions of the total dignity score ($P = 0.002$), and privacy and communication dimensions ($P \leq 0.001$). However, no statistically significant difference was found in the dimensions of autonomy and respect between the two groups (Table 4).

Discussion

This study compared nurses' and patients' perceptions of dignity preservation in burn injury patients. Results indicated that nurses rated dignity, particularly in privacy and communication, higher than patients did, while

Table 1 Comparison of patients' perceptions of preserving dignity according to their qualitative demographic and clinical variables

Variables		N (%)	Total dignity score	Privacy	Autonomy	Respect	Communication
			Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Gender	Female	33	137.72 ± 16.56	24.45 ± 3.92	25.51 ± 3.31	53.12 ± 5.15	34.63 ± 6.37
	Male	77	136.25 ± 12.53	22.76 ± 3.14	24.44 ± 3.50	53.15 ± 4.10	35.89 ± 4.86
	P-value*		0.352	0.012	0.117	0.573	0.497
Marital Status	Single	28	135.28 ± 13.33	22.53 ± 3.46	24.35 ± 3.29	52.32 ± 4.70	36.07 ± 4.95
	Married	82	137.18 ± 14.00	23.52 ± 3.45	24.90 ± 3.53	53.42 ± 4.31	35.32 ± 5.51
	P-value*		0.414	0.166	0.390	0.251	0.807
Education Level	Elementary	27	137.40 ± 14.15	23.55 ± 3.52	24.40 ± 3.72	54.40 ± 4.50	35.03 ± 6.26
	Middle School	21	136.38 ± 11.53	22.80 ± 3.47	24.47 ± 3.44	53.04 ± 4.42	36.04 ± 4.30
	High School	12	129.00 ± 13.64	22.00 ± 3.38	23.50 ± 3.45	51.83 ± 4.64	31.66 ± 4.77
	Diploma	6	135.34 ± 15.83	22.92 ± 3.90	24.73 ± 3.84	52.26 ± 4.45	35.42 ± 5.59
	Associate's degree	26	136.83 ± 11.39	24.00 ± 2.52	24.66 ± 3.20	53.16 ± 3.60	35.00 ± 2.89
	Bachelor's	13	142.46 ± 11.07	24.46 ± 2.47	26.07 ± 2.36	53.69 ± 3.79	38.23 ± 4.24
	Master's	5	144.60 ± 15.37	24.60 ± 4.33	27.00 ± 0.83	53.00 ± 6.16	39.20 ± 5.01
	P-value**		0.207	0.639	0.178	0.421	0.052
Having the Same Gender as the Nurse	Yes	68	137.16 ± 14.01	23.51 ± 3.53	24.58 ± 3.62	53.55 ± 4.26	35.50 ± 5.79
	No	42	135.95 ± 13.58	22.88 ± 3.35	25.04 ± 3.22	52.47 ± 4.63	35.54 ± 4.66
	P-value*		0.612	0.449	0.592	0.207	0.934
Burn cause	Heat-related	96	137.40 ± 13.50	23.46 ± 3.54	24.94 ± 3.34	52.32 ± 4.42	35.66 ± 5.12
	Chemical	4	141.66 ± 7.02	24.66 ± 2.51	27.00 ± 1.00	53.33 ± 2.88	36.66 ± 4.04
	Electrical	10	131.00 ± 16.54	21.40 ± 2.41	22.50 ± 4.17	52.30 ± 4.85	34.80 ± 7.74
	P-value**		0.377	0.159	0.220	0.347	0.557
Number of Hospitalizations for Burn	Never	104	136.54 ± 13.75	23.32 ± 3.48	24.68 ± 3.50	53.14 ± 4.41	35.39 ± 5.34
	Once	6	139.33 ± 15.80	22.33 ± 3.38	26.16 ± 2.63	53.16 ± 4.87	37.66 ± 5.75
	P-value*		0.485	0.534	0.364	0.900	0.215
Number of Hospitalizations for Non-burn	Never	29	135.20 ± 14.38	22.37 ± 3.69	24.10 ± 4.01	52.58 ± 5.02	36.13 ± 5.25
	Once	51	137.37 ± 13.13	23.47 ± 3.09	24.82 ± 3.26	53.33 ± 3.71	35.74 ± 5.35
	More Than once	30	137.00 ± 14.68	23.80 ± 3.79	25.30 ± 3.24	53.36 ± 4.91	34.53 ± 5.54
	P-value**		0.870	0.292	0.550	0.825	0.407
Burned body area***	Sensitive Areas	58	134.18 ± 13.35	22.56 ± 3.33	24.65 ± 3.13	52.25 ± 4.53	34.70 ± 4.94
	Non-sensitive Areas	52	139.50 ± 13.88	24.05 ± 3.47	24.88 ± 3.83	54.13 ± 4.10	36.42 ± 5.71
	P-value*		0.010	0.015	0.379	0.019	0.031

* Mann–Whitney U test, ** Kruskal–Wallis test, *** Sensitive Areas mean the face and genital area in both gender and breast of female patients; Non-sensitive Areas: all other body parts except the sensitive areas

Table 2 Relationship between burn patients' and nurses' perceptions of dignity preservation and their quantitative demographic variables

Participants	Quantitative demographic variables	Statistics	Total dignity score	Privacy	Autonomy	Respect	Communication
Patients	Age	Correlation Coefficient	0.171	0.232	0.144	0.196	0.30
		P-value*	0.074	0.015	0.132	0.040	0.758
	Length of Stay	Correlation Coefficient	0.139	0.079	0.087	0.128	0.162
		P-value*	0.149	0.413	0.364	0.182	0.091
	Burn Percentage	Correlation Coefficient	-0.379	-0.404	-0.307	-0.356	-0.148
		P-value*	< 0.001	< 0.001	0.001	< 0.001	0.123
Nurses	Age	Correlation Coefficient	0.089	0.154	0.065	0.004	0.166
		P-value*	0.354	0.109	0.502	0.967	0.83
	Work Experience in Burn Unit	Correlation Coefficient	0.130	0.137	0.200	-0.096	0.075
		P-value*	0.176	0.152	0.036	0.319	0.435
	Work Experience in Non-Burn Unit	Correlation Coefficient	0.060	0.098	-0.015	-0.002	0.059
		P-value*	0.530	0.310	0.877	0.986	0.539

*Spearman test

Table 3 Comparison of nurses' perceptions of preserving dignity according to their qualitative demographic variables

		N (%)	Total dignity score	Privacy	Autonomy	Respect	Communication
			Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Gender	Female	59	144.77 ± 12.37	26.76 ± 2.75	24.55 ± 3.90	53.74 ± 4.82	39.71 ± 4.22
	Male	51	141.41 ± 14.18	26.03 ± 2.85	24.58 ± 3.80	52.23 ± 5.37	38.54 ± 4.63
	P-value*		0.186	0.170	0.971	0.181	0.247
Marital Status	Single	82	140.57 ± 12.44	25.82 ± 3.07	23.60 ± 4.20	52.60 ± 4.89	38.53 ± 4.36
	Married	28	144.12 ± 13.52	26.63 ± 2.70	24.90 ± 3.67	53.19 ± 5.21	39.39 ± 4.46
	P-value*		0.224	0.238	0.150	0.608	0.391
Education Level	Bachelor's	100	142.89 ± 13.44	26.51 ± 2.71	24.35 ± 4.00	52.88 ± 5.22	39.13 ± 4.46
	Master's	10	139.90 ± 10.48	25.00 ± 3.36	24.70 ± 2.26	51.90 ± 4.01	38.30 ± 3.86
	P-value*		0.140	0.243	0.122	0.073	0.400
Workplace	General Burn Care Units	31	148.87 ± 11.63	27.54 ± 2.32	26.16 ± 2.78	54.51 ± 4.73	40.64 ± 3.93
	Reconstructive Surgical Wards	25	142.76 ± 14.35	25.52 ± 3.12	25.12 ± 3.58	53.12 ± 5.48	39.00 ± 4.86
	Intensive Care Units	49	140.87 ± 13.26	26.26 ± 2.85	23.44 ± 4.30	52.51 ± 5.11	38.65 ± 4.51
	Emergency	5	133.40 ± 3.84	25.60 ± 1.51	23.00 ± 2.00	48.80 ± 2.77	36.00 ± 1.00
	P-value**		0.018	0.036	0.013	0.063	0.057
Having the Same Gender as the Patient	Yes	68	145.00 ± 12.93	26.75 ± 2.72	25.26 ± 3.58	53.51 ± 4.80	39.47 ± 4.37
	No	42	140.33 ± 13.51	25.90 ± 2.90	23.45 ± 4.01	52.28 ± 5.56	38.69 ± 4.54
	P-value*		0.136	0.111	0.028	0.316	0.415

* Mann–Whitney U test ** Kruskal–Wallis test

perceptions of respect and autonomy showed no significant difference.

These findings align with other research, such as an Iranian study that revealed differing perceptions of dignity between nurses and elderly COVID-19 patients, although both groups agreed on the importance of privacy [31]. Additionally, another study found that nurses and adult patients in medical and surgical wards had varying views on maintaining dignity [29]. Similarly, Peyvakht et al. reported that nurses had a more favorable perspective on respecting patient dignity than elderly patients, with higher scores across all dimensions [18]. Some studies focused solely on overall dignity scores without examining specific dimensions [31, 32].

This study stands apart from earlier studies mainly due to the context of burn care units. Because of the specific nature of burn injury and care processes, their needs regarding preserving dignity may differ. It is worth mentioning that both nurses and patients reported relatively high perceptions of dignity preservation thereby implying that patients received care as they expected. However, the fact that nurses scored higher on overall dignity, communication and privacy implies there might be some misunderstanding of what patients expect. With this misunderstanding, patients are at a risk of dignity impairment, especially regarding privacy and communication. Thus, nurses in burn care units must undergo training and education on factors influencing patient dignity, and dimensions of communication and privacy.

The current study found out a significant positive relationship between the level of privacy and respect that patients felt with their age, where older patients seemed to have a greater appreciation of these factors. Considering that the mean age of the nurses participating in the study was lower than the mean age of the patients, there might be some cultural factors which make the nurses to be more sensitive to the respect and privacy of the elderly patients. The study did not find any relationship between general dignity and age of patients but previous works have shown positive [33, 34], negative [35], or no relationships [36] between patients' age and dignity as perceived. Furthermore, female patients assigned a higher score to the privacy dimension as compared to male patients. This finding is in agreement with some studies [37, 38] but not with other studies [39]. It can be concluded that considering cultural and religious factors, it is more common to protect the privacy of female patients than it is to protect the privacy of male patients. Therefore, the higher privacy scores among female patients in the current study may be related to the cultural context of the study.

Moreover, this research found that as the extent of patients' burns increases, the scores on overall dignity, as well as dimensions such as privacy, autonomy, and respect decreases. This implies that patients with major burns might have their dignity and privacy compromised because of increased visibility during care. For this reason, nurses must formulate ways to improve the dignity, privacy, respect, and autonomy of patients with severe burns. It is important to involve the patients in decisions concerning their care and protect their identity, beliefs, and any sensitive information [16]. In addition, patients with increased burns on sensitive areas such as the face

Table 4 Comparison of nurses' and patients' perception of patient dignity

Items and dimensions	Nurse	Patient	*P*-value*
	Mean ± SD	Mean ± SD	
1. Obtaining patient consent before interventions	4.6 ± 0.57	4.38 ± 0.92	0.037
2. Knocking before entering patient rooms	3.63 ± 1.08	2.64 ± 1.12	< 0.001
3.Maintaining patient privacy before procedures	4.52 ± 0.67	4.30 ± 0.96	0.049
4. Not sharing patient information without consent	4.59 ± 0.70	4.46 ± 0.71	0.178
5. Ensuring privacy during patient discussions	4.55 ± 0.62	4.20 ± 0.76	< 0.001
6. Covering unnecessary body parts during procedures	4.51 ± 0.76	3.28 ± 1.44	< 0.001
Total privacy dimension	**26.42 ± 2.81**	**23.27 ± 3.46**	**< 0.001**
7. Providing information to facilitate patient decisions	4.17 ± 0.79	4.40 ± 1.00	0.040
8. Giving patients decision-making rights	4.20 ± 0.81	4.24 ± 0.95	0.634
9. Involving patients in care activities	3.97 ± 0.98	3.35 ± 1.09	< 0.001
10. Allowing patient independence in daily activities	4.26 ± 0.75	4.10 ± 0.97	0.160
11. Respecting patient opinions and preferences	3.90 ± 0.96	4.15 ± 0.79	0.020
12. Supporting patient self-care independence	4.05 ± 0.89	4.50 ± 0.83	< 0.001
Total autonomy dimension	**24.57 ± 3.83**	**24.76 ± 3.46**	**0.715**
13. Speaking politely and respectfully to patients	4.61 ± 0.54	4.76 ± 0.46	0.036
14. Providing individualized patient care	4.32 ± 0.69	4.46 ± 0.67	0.178
15. Referring to patients by last name during team discussions	4.33 ± 0.76	4.70 ± 0.73	< 0.001
16. Promptly assisting patients when needed	4.54 ± 0.69	4.52 ± 0.84	0.751
17. Providing a quiet environment for rest	4.26 ± 0.83	4.30 ± 1.01	0.719
18. Ensuring access to proper sanitary facilities	4.33 ± 0.66	4.52 ± 0.73	0.047
19. Respecting patient's background and beliefs	4.65 ± 0.56	4.90 ± 0.31	< 0.001
20. Treating patients respectfully regardless of status	4.72 ± 0.52	4.89 ± 0.36	0.006
21. Providing suitable clothing for hospitalized patients	4.58 ± 0.59	4.46 ± 0.83	0.297
22. Establishing coordination to prevent patient delays	4.29 ± 0.64	4.23 ± 0.72	0.596
23. Providing facilities for patient companion comfort	4.03 ± 0.90	2.90 ± 1.21	< 0.001
24. Attending to patient requests where possible	4.32 ± 0.70	4.46 ± 0.72	0.194
Total respect dimension	**53.04 ± 5.11**	**53.14 ± 4.42**	**0.927**
25. Introducing self to patients upon first meeting	4.44 ± 0.69	3.15 ± 1.44	< 0.001
26. Orienting patients to ward personnel and environment	4.32 ± 0.73	3.19 ± 1.29	< 0.001
27. Communicating based on individual patient personality	4.29 ± 0.73	3.76 ± 0.95	< 0.001
28. Interacting cheerfully and kindly with patients	4.49 ± 0.64	4.67 ± 0.62	0.042
29. Listening patiently to patient concerns	4.38 ± 0.66	4.48 ± 0.72	0.254
30. Providing clear and transparent answers	4.33 ± 0.73	4.48 ± 0.75	0.111
31. Providing necessary patient education	4.33 ± 0.69	4.13 ± 0.93	0.073
32. Explaining care procedures beforehand	4.46 ± 0.68	3.28 ± 0.84	< 0.001
33. Establishing appropriate communication with patient companions	4.10 ± 0.86	4.35 ± 0.88	0.027
Total communication dimension	**39.17 ± 4.43**	**35.51 ± 5.36**	**< 0.001**
Total dignity score	**143.21 ± 13.29**	**136.70 ± 13.8**	**0.002**

* Wilcoxon test

and genitals tended to score low on respect, privacy, and communication compared to patients with burns on non-sensitive areas. This might be due to the changes in their physical appearance, body image, and self-perception [40]. Therefore, this implies that more emphasis on privacy and dignity is critical to patients who sustain burns in sensitive parts of the body together with the need to ensure respectful communication. We found no previous studies that analyzed dignity scores according to the burned body area and the percentage of burn.

Present findings on the perception of nurses about patient dignity revealed that nurses working in general burn units compared to ICU nurses assigned higher scores to preserve patient dignity, as well as the privacy and autonomy dimensions. Such differences may be due to a higher workload, poorer patient condition, and time constraints in ICUs, where patients often have more severe burns and less independence [41]. One study found that patients in an ICU reported positive experiences of dignity. This is despite the busy environment [42], but this did not compare the perceptions of ICU nurses compared to nurses in other units. Thus, it is not comparable with current findings. The current study suggests that supportive work environments and clear

guidelines on maintaining patient dignity in ICUs should be promoted. The positive correlation of work experience in the burn units with the perception of patients' autonomy needs in the current study is in line with the results of previous studies [18, 43] that suggested more experienced nurses understand and respond better to these needs. One study found no such correlation [29], which may be due to differences in patient needs and unit types. Therefore, targeted training and mentorship for less experienced nurses may help to improve patient dignity preservation.

Conclusion

This study found different perceptions among the nurses and patients with burn in regard to total dignity, and privacy and communication dimensions. There was a discrepancy so that patients reported lower levels than what was perceived by nurses. While both groups agreed on the matter of autonomy and respect of patients, areas where difference was noted suggested that nurses need to be more cognizant of the peculiar needs of patients with privacy and communication. Some groups of patients that were specifically identified in need of more attention include male patients (for greater attention to privacy), younger patients (who need more respect), patients with burns in sensitive areas (for greater communication and respect), and those having higher percentages of burns (who need more attention to dignity across parameters). In addition, ICU nurses and less experienced burn nurses should receive training to understand the principles of patient dignity, privacy, and autonomy. In addition, there must be improvement in the working conditions of nurses to be able to provide better patient care in these areas. Finally, the recommendations are that health care managers and policymakers utilize these findings to address programs directed toward enhancing hospital-level patient dignity and enhancing training for nurses working in burn care.

Limitation

The limitation of this study is that it was conducted in only one center, which may affect its generalizability.

Abbreviations

ICN	International Council of Nurses
SPSS	Statistical Package for the Social Sciences
CVR	Content validity Ratio
CVI	Content Validity Index
ICU	Intensive Care Unit

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Author contributions

DZ, ZKh, AJ and AK significantly contributed to the study's design. DZ gathered the data. DZ, ZKh and AJ conducted the data analysis and interpretation. DZ and ZKh were involved in writing the manuscript draft. ZKh and DZ critically revised the manuscript. All authors reviewed and approved the final manuscript.

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Data availability

Data resource and statistical analysis outputs are available from the corresponding author for reasonable request.

Declarations

Ethical approval

The study was approved by the Ethics Committee of Shiraz University of Medical Science (ethics code: IR.SUMS.NUMING.REC.1402.056). We adopted all procedures according to the Declaration of Helsinki and relevant guidelines and regulations. In this regard, we obtained signed informed consent from all patients after explaining the research aim and methods. We also explained to them that their participation was voluntary and that they could withdraw at any time without any consequences. Moreover, we maintained confidentiality of all participant data.

Consent to participate

We received written consent from the participants.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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References

1. Yakupu A, Zhang J, Dong W, Song F, Dong J, Lu S. The epidemiological characteristic and trends of burns globally. BMC Public Health. 2022;22(1):1596.
2. Sarbazi E, Yousefi M, Khami B,Ettekal-Nafs R, Babazadeh T, Gaffari-Fam S. Epidemiology and the survival rate of burn-related injuries in Iran: a registry-based study. Ann Burns Fire Disasters. 2019:32(1):3–9.
3. Van Loey NE. Psychological impact of living with scars following burn injury. Textbook on Scar Management: State of the Art Management and Emerging Technologies. 2020:429–34.
4. Zamanzadeh V, Valizadeh L, Lotfi M, Salehi F. Preserving self-concept in the burn survivors: a qualitative study. Indian J Palliat Care. 2015;21(2):182.
5. Hicks D, Dignity. Its essential role in resolving conflict. Yale University Press; 2021.
6. Parandeh A, Khaghanizade M, Mohammadi E, Mokhtari-Nouri J. Nurses' human dignity in education and practice: an integrated literature review. Iran J Nurs Midwifery Res. 2016;21(1):1.
7. Federation M. International Council of Nurses Code of Ethics for Nurses. 2015.
8. Gallagher A, Li S, Wainwright P, Jones IR, Lee D. Dignity in the care of older people–a review of the theoretical and empirical literature. BMC Nurs. 2008;7(1):1–12.
9. Hosseini FA, Momennasab M, Yektatalab S, Zareiyan A. Patients' perception of dignity in Iranian general hospital settings. Nurs Ethics. 2019;26(6):1777–90.
10. Kadivar M, Mardani-Hamooleh M, Kouhnavard M. Concept analysis of human dignity in patient care: Rodgers' evolutionary approach. J Med Ethics History Med. 2018;11.
11. Johnston B, Papadopoulou C, Östlund U, Hunter K, Andrew J, Buchanan D. What's dignity got to do with it? Patient experience of the dignity

care intervention: a qualitative evaluation study. SAGE Open Nurs. 2017;3:2377960817699839.
12. Xiao J, Ng MS, Yan T, Chow KM, Chan CW. How patients with cancer experience dignity: an integrative review. Psycho-oncology. 2021;30(8):1220–31.
13. Hall S, Goddard C, Speck PW, Martin P, Higginson IJ. It makes you feel that somebody is out there caring: a qualitative study of intervention and control participants' perceptions of the benefits of taking part in an evaluation of dignity therapy for people with advanced cancer. J Pain Symptom Manag. 2013;45(4):712–25.
14. Gerrek M, Behmer Hansen R, Khandelwal A. 440 Ethics in burn care: a review. J Burn Care Res. 2018;39(suppl1):S192–3.
15. Gunasekar A. Opening dialogue on current ethical issues in burn care. AMA J Ethics. 2018;20(6):527–30.
16. Tehranineshat B, Rakhshan M, Torabizadeh C, Fararouei M, Gillespie M. The dignity of burn patients: a qualitative descriptive study of nurses, family caregivers, and patients. BMC Nurs. 2021;20:1–13.
17. Bagheri H, Yaghmaei F, Ashktorab T, Zayeri F. Relationship between illness-related worries and social dignity in patients with heart failure. Nurs Ethics. 2018;25(5):618–27.
18. Peyvakht A, Sanagoo A, Behnampour N, Roshandel G, Jouybari L. Perspectives of nurses and the elderly hospitalized patients eegard respecting the human dignity of elderly patients in educational and medical centers of Golestan university of medical sciences in 2019. J Nurs Educ. 2020;9(3):79–87.
19. Wang L, Wei Y, Xue L, Guo Q, Liu W. Dignity and its influencing factors in patients with cancer in North China: a cross-sectional study. Curr Oncol. 2019;26(2):188–93.
20. Sardoo AM, Abbaszade A, Rafiei H, Sardoo HM, Borhani F. Effect of dignity therapy model on stress, anxiety and depression of haemodialysis patients. Int J Healthc. 2015;1(1):28.
21. Mohammadi F, Tabatabaei HS, Mozafari F, Gillespie M. Caregivers' perception of women's dignity in the delivery room: a qualitative study. Nurs Ethics. 2020;27(1):116–26.
22. Mohammadi F, Oshvandi K, Khodaveisi M, Cheraghi F, Tehrani TH, Khalili A, Kyle H. Caregivers' perception of teenagers' dignity in end of life stages: a phenomenological study. Nurs Ethics. 2023;30(1):121–32.
23. Mohammadi F, Oshvandi K. Male nursing students' perception of dignity in neonatal intensive care units. Nurs Ethics. 2020;27(2):381–9.
24. Jones DA. Human dignity in healthcare: a virtue ethics approach. New Bioeth. 2015;21(1):87–97.
25. Bovero A, Tosi C, Botto R, Pidinchedda A, Gottardo F, Asta G, Torta R. A qualitative study to explore healthcare providers' perspectives on end-of-life patients' dignity. How can dignity be defined, and which strategies exist to maintain dignity? J Cancer Educ. 2020:1–8.
26. 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 Nurs. 2021;20(1):158.
27. Šaňáková Š, Čáp J. Dignity from the nurses' and older patients' perspective: a qualitative literature review. Nurs Ethics. 2019;26(5):1292–309.
28. Torabizadeh C, Ebrahimi H, Mohammadi E, Valizadeh S. Incongruent perceptions among nurses and patients: a qualitative study of patient's dignity in Iran. Ethics Behav. 2013;23(6):489–500.
29. Torabizadeh C, Jafari S, Momennasab M. Patient's dignity: viewpoints of patients and nurses in hospitals. Hosp Top. 2021;99(4):187–97.
30. Jafari S. The comparison of hospitalized patients' and nurses' perceptions of patient dignity in the selected hospitals of Shiraz University of Medical Sciences, MSc thesis, Fatemeh (PBUH) School of Nursing and Midwifery, Shiraz University of Medical Sciences; 2017.
31. Hoseinian M, Bidgoli AM, Sadat Z, Ajorpaz NM. Investigating the level of respect for human dignity and its related factors in providing care for the elderly with COVID-19 in Shahid Beheshti Hospital, Kashan, 2021. J Educ Health Promotion. 2023;12(1):280.
32. Ferri P, Muzzalupo J, Di Lorenzo R. Patients' perception of dignity in an Italian general hospital: a cross-sectional analysis. BMC Health Serv Res. 2015;15(1):1–8.
33. Li Y-C, Feng Y-H, Ma S-C, Wang H-H. Dignity and related factors in patients with cancer: a cross-sectional study. Asian Nurs Res. 2023;17(1):8–14.
34. Hadler R, Goldshore M, Rosa W, Nelson J. What do I need to know about you? The patient dignity question, age, and proximity to death among patients with cancer. Support Care Cancer. 2022;30(6):5175–86.
35. Liu X, Liu Z, Cheng Q, Xu N, Liu H, Ying W. Effects of meaning in life and individual characteristics on dignity in patients with advanced cancer in China: a cross-sectional study. Support Care Cancer. 2021;29:2319–26.
36. Hosseini A, Rezaei M, Bahrami M, Abbasi M, Hariri H. The relationship between dignity status and quality of life in Iranian terminally ill patients with cancer. Iran J Nurs Midwifery Res. 2017;22(3):178.
37. Valizadeh F, Ghasemi SF. Human privacy respect from viewpoint of hospitalized patients. Eur J Transl Myol. 2020;30(1).
38. Kim K, Han Y, Kim J-s. Nurses' and patients' perceptions of privacy protection behaviours and information provision. Nurs Ethics. 2017;24(5):598–611.
39. Klůzová Kráčmarová L, Tomanová J, Černíková KA, Tavel P, Langová K, Greaves PJ, Kisvetrová H. Perception of dignity in older men and women in the early stages of dementia: a cross-sectional study. BMC Geriatr. 2022;22(1):1–13.
40. Shokre ES, Mohammed SEM, Elhapashy HMM, Elsharkawy NB, Ramadan OME, Abdelaziz EM. The effectiveness of the psychosocial empowerment program in early adjustment among adult burn survivors. BMC Nurs. 2024;23(1):45.
41. Bidabadi FS, Yazdannik A, Zargham-Boroujeni A. Patient's dignity in intensive care unit: a critical ethnography. Nurs Ethics. 2019;26(3):738–52.
42. Moen EK, Nåden D. Intensive care patients' perceptions of how their dignity is maintained: a phenomenological study. Intensive Crit Care Nurs. 2015;31(5):285–93.
43. Karimi H, Ajorpaz NM, Aghajani M. Older adults' and nurses perception of dignity in the setting of Iranian hospitals: a cross-sectional study. Cent Eur J Nurs Midwifery. 2019;10(4):1134–42.

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