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# Health-Promoting Hospitals' Standards and Their Correlation with Nurses' Caring Behaviors



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#### ABSTRACT

**Aims** This study aimed to determine the correlation between health-promoting hospitals' standards and nurses' caring behaviors.

**Instrument & Methods** This correlational study was conducted on 228 nurses working in hospitals affiliated with Birjand University of Medical Sciences in 2021 in Birjand, Iran. The research instruments included the demographic characteristics checklist, the Caring Behavior Inventory, and the World Health Organization's Health Promotion Standards Adherence Scale. **Findings** There was a significant positive correlation between the total score of health-promoting hospital standards and the total score of nurses' caring behaviors from the perspective of nurses (p<0.001, r=0.494). Likewise, there was a significant positive correlation between all dimensions

(p<0.001). **Conclusion** Hospitals enhance nurses' caring behavior by following health-promoting hospital standards and fostering a positive work environment with improved inter-professional relationships.

of health-promoting hospitals' standards and all dimensions of nurses' caring behaviors

**Keywords** Hospitals; Health; Nurses

#### CITATION LINKS

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## Introduction

Hospitals are facing new challenges due to global changes, and governments are prioritizing health as a major concern <sup>[1, 2]</sup>. Hospitals need to improve their efficiency in resource utilization amidst increasing demands for treatment and care <sup>[3]</sup>. Therefore, there is a focus on reforming health services, promoting health, and preventing disease.

The World Health Organization (WHO) introduced health-promoting hospitals (HPHs) as an effective strategy for transforming healthcare services [3]. The HPHs movement, initiated in 1986, aims to improve the health of patients, hospital employees, and the community [4]. Hospitals play a crucial role in the healthcare system, and adopting a health promotion approach is essential for their future success [5]. The goal of HPHs is to enhance the quality of healthcare services through health promotion, disease prevention, and treatment [6]. This involves empowering patients, promoting prevention among hospital personnel, and fostering collaboration between hospitals and society [7].

Hospitals must prioritize principles and standards to institutionalize prevention and health promotion <sup>[5]</sup>. The standards for HPHs include organizational commitment, service access, people-centered care, healthy workplaces and settings, and the promotion of health in society <sup>[8]</sup>. Implementing these standards may provide benefits, such as improved patient quality of life, reduced complications and hospitalizations, lower costs, enhanced staff and client health, and increased work quality <sup>[9]</sup>.

Nursing performance can serve as an evaluation indicator for hospitals [10]. In other words, nursing quality is a key factor in assessing medical service quality and reflects the overall quality level of a hospital [11]. Furthermore, one of the prominent characteristics of setting standards in the healthcare system is ensuring the delivery of quality care to patients. Leininger has defined care as a supportive process aimed at correcting or improving human conditions or the way of life for patients with hidden or obvious needs [12]. Care is the essence and foundation of the nursing profession [13]. Quality care is a critical component of healthcare standards, with nurses' caring behaviors playing a vital role [14, 15]. These behaviors, encompassing physical, emotional, and psychological care, are designed to enhance patient well-being and reduce the duration of illness [16]. Caring behaviors exhibited by nurses include targeted practices and attitudes that alleviate patient discomfort, meet their needs, prioritize their comfort safety, and demonstrate professional competence [17, 18]. Nurses in professional roles must exhibit caring behaviors while delivering nursing care. A lack of compassionate caring behaviors can harm patients, nurses, and hospital staff, resulting in a decline in hospital visitors, reduced financial income, and a negative impact on the hospital as it undermines patients' trust [19]. Factors, such as workload, lack of time, and the nursing work environment—including working hours, shifts, and job satisfaction—can influence the performance of caring behaviors [20-22].

Considering the role of caring behaviors in achieving a high-quality health system [23] and the impact of the nursing work environment on these behaviors, adherence to HPH standards may be associated with nurses' caring behaviors.

The implementation of health promotion activities is essential for hospitals; however, the current provision of these services in Iranian hospitals remains unclear [3]. Thus, it is necessary to assess the level of adherence to HPH standards by administrators [24]. Furthermore, understanding the relationship between adherence to these standards and nurses' caring behaviors can offer valuable insights for researchers and healthcare managers. Nonetheless, there is a lack of studies investigating this relationship. Therefore, the purpose of this study was to examine the relationship between adherence to the standards of HPHs and nurses' caring behaviors.

## **Instrument and Methods**

## Study design, Setting, and sample

This descriptive correlational study was conducted in 2021 in Birjand, located in the southeast of Iran. The study population included all nurses working in hospitals affiliated with Birjand University of Medical Sciences. Nurses were selected using convenience sampling. In the absence of similar studies, the sample size was calculated to be 228 individuals using Cochran's formula (small population mode) with a 95% confidence interval, a precision level of 0.05, an estimated proportion of 0.5, and a 10% attrition rate.

## Inclusion and exclusion criteria

The inclusion criteria were having at least a bachelor's degree in nursing, at least one year of clinical work experience, and willingness to participate in the study. Nurses who did not fully complete the questionnaires were excluded from the study.

## Measurements/tools

The research tools comprised a demographic characteristics checklist (age, sex, level of education, marital status, etc.), the Caring Behavior Inventory (CBI-42), and the WHO's Health Promotion Standards Adherence Scale.

Caring behavior was measured using the CBI-42, designed by Wolf et al. [25]. The CBI-42 consists of 42 items divided into five main dimensions, including respectful deference to others (12 items), assurance of human presence (12 items), positive connectedness (nine items), professional knowledge and skill (five items), and attentiveness to the other's experience (four items). Each item is rated on a six-

point Likert scale, ranging from "never" (one) to "always" (six). The minimum possible score for this questionnaire is 42, and the maximum is 252, with higher scores indicating more significant caring behaviors from the nurses' perspective. The questionnaire does not include reverse scoring. The reliability ( $\alpha$ =0.85) and validity (face and content) of the CBI-42 were evaluated and confirmed in the study by Rafiei *et al.* [<sup>26</sup>]. In this study, the reliability of the inventory was assessed using the internal consistency method, and Cronbach's alpha was calculated to be 0.97.

To assess adherence to HPH standards, the WHO's Health Promotion Standards Adherence Scale was utilized. This scale consists of 68 questions covering five key dimensions of HPHs, including management policy (17 items), patient evaluation (nine items), patient information and interventions (seven items), creating a healthy work environment (16 items), and continuity and cooperation (19 items). Each item is rated on a four-point Likert scale ranging from "No" (zero) to "Yes" (three). The minimum possible score on the questionnaire is zero, and the maximum is 201, with higher scores indicating better compliance with health promotion standards. The validity and reliability of the tool were tested by Groene et al. in 38 hospitals across eight member countries of the International Network of HPHs. The tool was validated, and Cronbach's α coefficient was reported to range from 0.77 to 0.88 [27]. In this study, we assessed the reliability of the scale using the internal consistency method and obtained a Cronbach's alpha value exceeding 0.80.

#### Data collection

Data collection was carried out through direct visits to the selected hospitals during three work shifts. Paper questionnaires were completed by nurses who met the inclusion criteria and were willing to participate.

### Data analysis

Data analysis was performed using SPSS 26. Frequency distribution tables were used for qualitative variables, while numerical measures, such as minimum, maximum, mean, and standard deviation were calculated for quantitative variables, including caring behavior. Spearman's correlation coefficient was employed to assess the potential correlation between caring behavior and adherence to the HPH standards. A p-value of less than 0.05 was considered statistically significant.

## **Findings**

Three hospitals with 228 nurses were evaluated in this study (Table 1). The majority of the nurses were women (53.1%) and married (71.1%). In terms of education, 217 participants (95.2%) held a bachelor's degree, while 11 participants (4.8%) had a master's degree. Most nurses (36.4%) were employed temporarily. The average work experience of the

nurses was 8.17±6.15 years (range: 1-25 years), and their average age was 31.15±6.65 years (range: 20-52 years) (Table 2).

Table 1. The examined hospitals

Number of nurses						
Hospitals	Intensive care	Surgical	Internal	Total		
	department	department	department			
A	44	17	14	75		
В	40	12	20	72		
C	50	18	13	81		
Total	134	47	47	228		

**Table 2.** Frequency of sociodemographic characteristics of nurses

Parameter	Category	Values	
Gender	Female	121(53.1)	
Gender	Male	107(46.9)	
Level of education	BSc	217(95.2)	
Level of education	MSc	11(4.8)	
Marital status	Single	66(28.9)	
Mai itai status	Married	162(71.1)	
	Permanent	28.5(65)	
Employment status	Temporary	36.4(83)	
	Secondment	35.1(80)	
	Morning	17(7.5)	
Shift status	Evening	4(1.8)	
Silit status	Night	29(12.6)	
	Circulation	178(78.1)	
	Internal ward	21.1(48)	
Working unit	Surgical ward	22.4(51)	
	Intensive care unit	56.6(129)	

From the nurses' perspective, the average total adherence score to the standards of HPH was 130.74±25.68. Regarding the level of compliance with the standards of HPH, continuity and cooperation had the highest average score (36.96±8.16), while patient information and interventions had the lowest average score (14.04±2.90). In terms of the dimensions of nurses' caring behaviors, assurance of human presence had the highest average score (62.03±9.04), while attention to others' experiences had the lowest average score (20.69±3.44). Additionally, the overall caring behavior score from the nurses' perspective was 215.52±29.25 (Table 3).

**Table 3.** Mean adherence level to the standards of health-promoting hospitals and the quality of caring behaviors from the nurses' perspective

Parameter	Subscales	Values	
	Management policy	34.43±7.66	
	Patient evaluation	15.53±3.77	
Health-	Patient information and	14.04±2.90	
promoting	interventions	, .	
hospitals' standards	Creating a healthy work environment	29.75±7.50	
	Continuity and cooperation	36.96±8.16	
	Total	130.73±25.67	
	Respectful deference to others	61.50±8.26	
	Assurance of human presence	62.03±9.04	
Caring	Positive connectedness	45.54±6.93	
Behavior	Professional knowledge and skill	25.74±4.19	
Inventory	Attentiveness to the other's experience	20.69±3.44	
	Total	215.52±29.25	

Table 4. Bivariate correlations between health-promoting hospitals' standards and Caring Behavior Inventory (CBI) subscales

CBI subscales	Attentiveness to the other's experience	Professional knowledge and skill	Positive connectedness	Assurance of human presence	Respectful deference to others	Total
Management policy	0.252***	0.307***	0.430***	0.490***	0.459***	0.460***
Patient evaluation	0.230***	0.305***	0.382***	0.432***	0.412***	0.427***
Patient information and interventions	0.174**	0.221**	0.351***	0.382***	0.266***	0.338***
Creating a healthy work environment	0.151*	0.270***	0.386***	0.375***	0.352***	0.371***
Continuity, and cooperation	0.326***	0.468***	0.412***	0.362***	0.433***	0.477***
Total	0.266***	0.375***	0.465***	0.473***	0.471***	0.494***

<sup>\*</sup>p<0.05, \*\*p<0.01, \*\*\*p<0.001.

The results of Spearman's correlation coefficient revealed a significant positive relationship between the total score of HPH standards and the total score of caring behaviors from the nurses' perspective (p<0.001, r=0.49). Similarly, a significant positive relationship was observed between all dimensions of HPH standards and all dimensions of caring behaviors from the nurses' point of view (p<0.001; Table 4).

## Discussion

The purpose of this study was to examine the relationship between adherence to HPH standards and nurses' caring behaviors. While the compliance level appeared relatively favorable in this study, a comparison on a larger scale revealed that it falls short of the goals set by the HPH standards. For example, a review by Hamidi et al. demonstrated that adherence to the HPH standards in Iranian hospitals is weak [28]. Other studies conducted in different countries show higher levels of compliance with these standards [29]. Currently, only seven health centers in Iran have joined HPH programs [30]. These weaknesses and discrepancies may result from the treatment-oriented management policies of hospitals in Iran, where promoting a healthy lifestyle is not prioritized.

In our study, nurses rated continuity in treatment and cooperation as the highest-scoring areas. A similar study by Javan Biparva et al. also found that nurses perceive high compliance with HPH standards, with continuity in treatment and cooperation receiving the highest score [31]. However, Pezeshki et al. reported that patient information and therapeutic interventions have the highest score while promoting a healthy work environment receives the lowest score [32]. Similarly, Seif Rabiei *et al.* found that patient information and therapeutic interventions score the highest while promoting a healthy work environment score the lowest [33]. These variations may be attributed to differences in the planning and management policies of hospitals regarding the implementation of health promotion programs across different geographical areas in Iran.

In this research, nurses perceived their caring behavior as high, with a score of 215 out of 252. This finding aligns with other studies showing that nurses have a positive perception of their caring behaviors [34,35]. Studies conducted in other countries, including China, also support the idea that nurses prioritize and

excel in providing quality care [36]. This global focus on caring behavior highlights its significance in the field of nursing.

In our study, nurses demonstrated higher levels of caring behavior in terms of respecting others and ensuring human presence. This emphasizes the importance of humanistic practice in nursing [37] and reinforces the value of altruism for effective patient care [38]. Surprisingly, the dimensions of professional knowledge and skill, as well as attention to other experiences, received lower average scores from the nurses' perspectives. This suggests a potential neglect of the clinical competence aspect of caring behavior [39]. Similar findings were observed in other studies, where the highest scores are found in the "assurance of human presence" subscale, and the lowest scores are found in the "knowledge and skill" subscale [40-42]. The differences in the mean scores for the components of nursing behavior could be attributed to variations in methodologies, nurse characteristics, research environments, or the tools and scales used. Despite the favorable behavior observed in the nurses in this study, it remains essential for nurses to pay more attention to patients' emotional needs during the caring process and to focus more on behaviors that are more objective and observable by patients.

According to the results, there was a positive and meaningful correlation between all the different dimensions of the HPH standards and the dimensions of caring behavior from the nurses' perspective. Similarly, Naderi et al. demonstrated that the implementation of health promotion standards in the hospital they studied is able to improve many important care indicators [1]. Cho & Han found that a positive and supportive work environment is associated with better health-promoting behaviors and higher nursing performance quality [43]. Putra et al. identified a positive correlation between job satisfaction and the caring behaviors of nurses, particularly in areas, such as supervision, potential rewards, colleagues, and the nature of work [22]. Azizi-Fini et al. also report a positive and significant correlation between nurses' caring behaviors and patient satisfaction, suggesting that these behaviors can enhance the quality of patient care [44].

In terms of the limitations of the research, the current study is based on correlation analysis; therefore, interpreting the results as cause-and-effect relationships would not be entirely realistic.

Additionally, this research was conducted among nurses, so caution should be exercised when generalizing the findings to other populations. Self-report questionnaires were used to collect data in this study, which introduces certain limitations. In this type of questionnaire, there is a possibility that respondents may answer in a way that aligns with what they believe is expected, rather than how they actually behave. Furthermore, the large number of questions can lead to errors in self-reporting, which may affect the research results.

#### Conclusion

Hospitals enhance nurses' caring behavior by adhering to HPH standards and fostering a positive work environment with improved inter-professional relationships.

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**Ethical Permissions:** This study was approved by the Ethics Committee of Birjand University of Medical Sciences under the code BUMS.REC.1400.176. To protect the participants' identities, the names of the hospitals were replaced with the English letters A, B, and C. Furthermore, participation in this study was voluntary, and the questionnaires were completed at the participants' discretion, with their informed written consent.

**Conflicts of Interests:** The authors declared no conflicts of interests.

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