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The Impact Of Clinical Nurses' Perception Of Hospital Ethical Climates On Their Organizational Citizenship Behavior

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Abstract

***Background**: As the main force in the development of healthcare, nurses have the longest contact time with patients in clinical practice, their perception of the hospital ethical climates affecting nurses' attitudes and related ethical issues. Hospital ethical climates have become an essential environmental factor for nurses to make and implement ethical decisions. **This study aims** to investigate the current status of nurses' perception of the hospital ethical climates and the nurses' organizational citizenship behavior, exploring the impact of the nurse's perception of the hospital ethical climates on the nurses' organizational citizenship behavior. **Methods**: A cross-sectional survey adopted, random sampling and cluster sampling were used to select 624 nurses from February to May 2023 at KSA. The hospital ethical climate scale and organizational citizenship behavior scale were used as the questionnaire. The data was analyzed by SPSS 28.0 software. On-the-job clinical nurses who had been employed in the hospital for more than 1 year were eligible. Nurses who were administratively punished by the hospital or health administrative authorities were excluded. **Results**: The average scores of hospital ethical climates were 4.30 (SD 0.44), with organizational citizenship behavior 4.42 (SD 0.42). The correlation coefficient between nurses' perception of hospital ethical climates and organizational citizenship behavior was 0.359 ($P < .01$). Nurses' perception of the relationship between managers, patients and nurses could explain 23.1% of altruistic toward colleagues; Nurses' perception of the relationship between nurses, hospital, doctors could explain 21.2% of organizational identification. Nurses' perception of the relationship between hospital, nurses and doctors could explain 12.3% of conscientiousness; Nurses' perception of the relationship between managers, doctors could explain 7.6% of interpersonal harmony. Nurses' perception of the relationship between managers, nurses and doctors could explain 6.6% of protection company resources. **Conclusion:** There is a correlation between nurses' perceptions of hospital ethical climate and organizational citizenship behavior, nurses' perceptions of hospital ethical climate influencing nurses' organizational citizenship behavior in different ways. Managers should focus on the changes of nurses' perception of hospital ethical climates, to promote the nurse to make more beneficial behavior to the organization.*

***Keywords:** Ethical Climates, Multiple Linear Regression, Nurse, Organizational Citizenship Behavior.*

Introduction

Nurses consider the biggest group of experts in the healthcare delivery system, who communicate broadly with patients. Also, they are the key sector of all the medical systems; also, they are important for the health and wealth of all countries. With the progression of medical technology and medicine therapy, the shortage of medical resources, as well as uncertain and complex clinical problems in medical treatment system, have led to the increase of the ethical problems faced by nurses [(1)]. As the backbone of healthcare development, nurses have the longest contact with patients in clinical practice. They have the most frequent ethical issues with patients, as well as their surrounding colleagues, due to issues such as treatment and clinical diagnosis. For example, because the staffing of nurses is inconsistent with the needs of patients, the nurses, who should provide comprehensive services for patients, can only complete the treatment tasks prescribed by the doctor every day, thus generating ethical problems [(2)].

Moreover, nurses are in the special position of needing to be accountable to both physicians and patients, but sometimes ethical issues arise when patients' find that informed consent is not given and nurses are forced by internal and external constraints to respond to the needs of patients to the appropriate authorities [(3)]. Organizational citizenship behavior (OCB) is a social and psychological activity, which is conducive to maintaining and improving task performance [(4, 5)]. Lower job satisfaction and reduced organizational commitment caused by poor ethical issues are critical factors that could influence the OCB of nurses [(6)]. As the important content of organizational behavior research, OCB plays a significant role in improving employee loyalty, reducing separation rate, and stabilizing the nursing team [(7)].

Ethical climate denotes the collective views of ethically correct conduct and way of treating ethically deviated actions. Organizational climate is defined as the recurring patterns of behavior and feelings that describe life in the organization that is more linked to atmosphere and values [(4-6)]. According to a number of researches, the nurses' perception of the ethical climates in hospital could affect their attitude and approach to ethical issues [(8)]. Hospital ethical climates have been a key environmental factor for nurses to make ethical decision [(9)]. Huang et al., (2012) found that improved nurses' perception of the hospital ethical climates could enhance their OCB [(10)].

Furthermore, the nurses' perception of the hospital ethical climates has a critical role in promoting job satisfaction and organizational commitment of nurses [(11)]. Moreover, these indicators will have a certain impact on their OCB [(12, 13)]. However, under the medical background, the relationship between the nurses' perception of the ethical climates and their OCB has not been verified by scientific research [(14, 15)]. Therefore, this study aims to investigate the current status of nurses' ethical climates and OCB, exploring the impact of nurses' ethical climates on the OCB, to provide a reference to stimulate the OCB of nurses, decrease the separation rate, and stable nursing team.

Methods

A cross-sectional study was from February to May 2023 in hospitals in Riyadh, KSA. Inclusion criteria: clinical nurses on-the-job and had more than 1 year experience in hospital, with informed consent obtained. Exclusion criteria: Nurses who were administratively punished by the hospital or health administrative authorities for various reasons, such as being notified of criticism, demerit, or retention. The sample size was calculated based on the formula $n = Z^2 (P [1-P])/E^2$, where n was the sample size, Z was the confidence interval, P was the probability value, and E was the error value. The confidence level for this study was 95% (Z = 1.96, E = 4%), with P value being .5 (taking

its maximum sample variation to be 0.5), so the sample size was determined to be 600.

Considering the respondents' noncooperation and invalid questionnaires, the number of respondents was increased by 10% to a total of 660. Based on the department, at least 624 nurses were randomly selected from the department of medicine, surgery, gynecology, pediatrics and Intensive Care Unit in the included hospital using the convenience sampling method. These nurses were required to finish the questionnaires. For the quality of the questionnaire, the premise of sampling was to ensure that all nurses in the department have informed consent.

Tools of study

The General Information Questionnaire: has 8 items including age, gender, department, duration of work, status of marriage, degree of education, and the title of a technical post. **The Hospital Ethical Climate Survey Scale:** This scale modified by researchers includes 25 items and 5 dimensionalities, using the Likert five grades scoring method. The scores of each item are added up to the total score (1 = completely not, 5 = completely yes), the higher the score meaning the better of hospital ethical climates of nurses. The Cronbach's a coefficient of the whole scale is 0.92. Cronbach's a coefficients of each dimension; nurses, patients, managers, hospitals, and doctors are 0.75, 0.72, 0.84, 0.83, and 0.83, respectively, indicating that the Hospital Ethical Climate Survey Scale has good reliability and validity.

The Organizational Citizenship Behavior Scale: This scale has 20 items and 5 dimensionalities including organizational identity (4 items), sense of responsibility (5 items), altruism (4 items), interpersonal harmony (4 items) and protection of organizational resources (3 items). Using Likert's three grades scoring method, from "never" to "often" and "always," 1 to 3 grades were assigned, the higher the score meaning the better the organizational citizenship behavior of nurses. However, the resource entry of the interpersonal harmony protection department is reverse scoring, with the corresponding value from 3 to 1. Cronbach's a coefficient of this scale is 0.85, suggesting good reliability and validity.

After contacting the nursing departments of each hospital in advance and obtaining their informed consent before the data collection. After entering the scene, the researchers explained the purposes and significance of the study to participants, and promised to protect their privacy and ensure the confidentiality of the data collected. Once obtaining informed consent, the researchers could be started. The scale was independently completed by the respondents to ensure the authenticity of the data. The data was inputted and analyzed by SPSS 28.0 software. Mean and standard deviation (SD) were used to describe the general data. Nurses' perception of the hospital ethical climates and OCB score were described by mean and SD. Pearson correlation was used to analyze the correlation between hospital ethical climates and OCB. Multiple linear regressions were used to analyze the impact of nurses' perception of hospital ethics on their OCB. $P < .05$ means that the difference is statistically significant.

Results

Table (1) shows the general demographic information of participants, a total of 621 nurses were female (99.5%), most of whom were under 35 years-old (91.2%), with most of education attainment being junior college or bachelor degree (98.1%). Besides, all of them had worked for more than 1 year in departments of Medicine, Surgery, Gynecology

or Pediatrics, mainly as nurse or nurse practitioner (89.1%).

Table (2) shows the scores of hospital ethical climate in various dimensions scale from 624 nurses, the nurses' perception of the relationship with the doctor was the lowest (3.98 ± 0.57), while relationship with the manager was the highest (4.53 ±0.46), with a total score 4.30 (SD: 0.44).

Table (3) shows the scores of nurses' OCB scale, the scores of organizational identification dimension were the lowest (4.18 ± 0.65). In comparison, the protection department resources had the highest score (4.60 ± 0.86), with a total average score 4.42(SD: 0.42).

Table (4) shows that correlation analysis of nurses' perception of hospital ethical climates and OCB. Using demographic indicators such as age and gender as control variables, the partial correlation coefficients of hospital ethical climates and its dimensions with OCB and its dimensions were obtained. The correlation coefficient of hospital ethical climates and OCB was 0.364 ($P < .05$), the correlation coefficient of each dimension being from 0.100 to 0.447 ($P < .05$) (Table 4).

Multiple linear regression analysis of factors influencing nurses' organizational citizenship behavior:

Table (5) shows the predictive effect of nurses' perception of hospital ethical atmosphere on nurses' altruistic behavior. Using hospital ethical climates as independent variables, the regression of altruistic behavior showed that nurses' perception of their relationship with managers, patients and nurses accounted for 23.1% of the variation in altruistic behavior.

Table (6) shows the predictive effect of nurses' perceptions of hospital ethical climate on organizational commitment. Regression analysis of organizational identity was conducted using the dimensions of hospital ethical atmosphere as independent variables. The results showed that nurses' perception of their relationship with nurses, hospitals and doctors accounted for 21.2% of the variation in organizational commitment.

Table (7) shows the predictive effect of nurses' perceptions of hospital ethical climate on responsibility. Regression analysis of responsibility with the dimensions of hospital ethical atmosphere as independent variables showed that nurses' perception of the relationship with hospitals, nurses and doctors could explain 12.3% of the variation of responsibility.

Table (8) shows the predictive effect of nurses' perceptions of hospital ethical climate on interpersonal concordance. Regression analysis of interpersonal harmony with the dimensions of hospital ethical atmosphere as independent variables showed that nurses' perception of their relationship with managers and doctors could account for 7.6% of the variation of interpersonal concordance.

Table (9) shows the predictive effect of nurses' perceptions of hospital ethical climate on protection of department resource. Taking each dimension of hospital ethical atmosphere as independent variables, regression analysis was performed on the resources of conservation department. In the separate study of the relationship between hospital ethical atmosphere and OCB, the relationship between nurses and nurses, nurses and managers was not related to the protection of department resources. Nevertheless, due to the influence of other dimensions in the regression, the association between them became statistically significant and then entered the regression results. Nurses' perception of relationships with managers, nurses, and physicians accounted for 6.6% of the variation

in conservation department resources.

Table (1): General demographic information of participants (n= 624).

Demographic information		**N**	**(%)**
Gender	Male	3	.5
	Female	621	99.5
Age(yr)	<26	196	31.4
	26~	200	32.1
	30~	173	27.7
	35~	31	5.0
	≥40	24	3.8
Education degree	Secondary specialized student	8	1.3
	Junior college student	184	29.5
	Bachelor	428	68.6
	Postgraduate and above	4	0.6
Marital statues	Single	278	44.6
	Married	346	55.4
The title of job	Nurse	251	40.2
	Nurse practitioner	305	48.9
	Supervisor nurse	61	9.8
	Head of nurse	7	1.1
Departments	Medicine	151	24.2
	Surgery	261	41.8
	Gynecology	99	15.9
	Pediatric	74	11.9
	ICU	39	6.3
Experience in work	≥ 1	313	50.1
	≤ 5	177	28.4
	≤ 10	134	21.5

Table (2): Score of ethical atmosphere in hospital (n=624)

Items	**Scores (Mean ±SD)**
Relationship with nurses	4.51 ± 0.47
Relationship with patients	4.35 ± 0.48
Relationship with doctors	3.98 ± 0.57
Relationship with mangers	4.53 ± 0.46
Relationship with hospital	4.17 ± 0.58

Items	Scores (Mean ±SD)
Hospital ethical climates	4.50 ± 0.44

SD = Standard Deviation.

Table (3): Organizational citizenship behavior score of nurses (n=624).

Dimension	Scores (Mean ±SD)
Altruistic behavior	4.54±0.51
Organizational commitment	4.18±0.65
Responsibility	4.29±0.56
Interpersonal concordance	4.57±0.86
Protection of department resources	4.60±0.86
Organizational citizenship behavior (total scores mean)	4.42±0.42

SD = Standard Deviation.

Table (4): Correlation analysis of nurses' perception of hospital ethical atmosphere and organizational citizenship behavior (r)

Variables	Altruistic behavior	Organizational commitment	Responsibility	Interpersonal concordance	Protection of department resources	Organizational citizenship behavior
Relationship with nurses	0.433**	0.362**	0.303**	0.100**	0.078	0.380**
Relationship with patients	0.434**	0.382**	0.309**	0.012	0.000	0.329**
Relationship with doctors Relationship with mangers	0.320** 0.441**	0.389** 0.344**	0.301** 0.284**	—0.139**	-0.150** 0.065	0.195** 0.376**
Relationship with hospital	0.357**	0.447**	0.324**	—0.032 0.298**	—0.065	
Hospital ethical	0.460**	0.461**	0.360**	0.004 0.364**	—0.030	

Variables	**Altruistic behavior**	**Organizational commitment**	**Responsibility**	**Interpersonal concordance**	**Protection of department resources**	**Organizational citizenship behavior**
climates						

Note:**, represents P <.01.

Table (5): Regression analysis of altruistic behavior in various dimensions of hospital ethical atmosphere

Items	Partial regression coefficient	Standard error	Standard partial regression coefficient	T value	P value
(Constant)	1.873	0.194		9.643	
Relationship with managers	0.201	0.06	0.183	3.356	.001
Relationship with patients	0.207	0.051	0.194	4.054	
Relationship with nurses	0.189	0.059	0.173	3.224	.001

F = 63.388, P < .001, R^2 = 0.231.

Table (6): Regression analysis of various dimensions of hospital ethical atmosphere on organizational commitment

Items	**Partial regression coefficient**	**Standard error**	**Standard partial regression coefficient**	**T value**	**P value**
(Constant)	1.594	0.229		6.964	
Relationship with hospital	0.308	0.064	0.276	4.801	
Relationship with doctors	0.144	0.059	0.128	2.469	.014
Relationship with nurses	0.162	0.066	0.117	2.466	.014
F = 56.829, P < .001, R^2 = 0.212.					

Table (7): Regression analysis of various dimensions of hospital ethical atmosphere on responsibility

Items	**Partial regression coefficient**	**Standard error**	**Standard partial regression coefficient**	**T value**	**P value**
(Constant)	2.456	0.208		11.818	
Relationship with hospital	0.12	0.058	0.125	2.054	.04
Relationship	0.183	0.06	0.153	3.068	.002

Items	Partial regression coefficient	Standard error	Standard partial regression coefficient	T value	P value
with nurses					
Relationship with doctors	0.129	0.053	0.133	2.428	.015
F = 30.152, P < .001, R^2 = 0.123.					

Table (8): Regression analysis of various dimensions of hospital ethical atmosphere on interpersonal concordance

Items	Partial regression coefficient	Standard error	Standard partial regression coefficient	T value	P value
(Constant)	3.965	0.332		11.932	
Relationship with doctors	-0.444	0.068	-0.297	-6.545	
Relationship with managers	0.525	0.084	0.283	6.24	
F = 26, P.794 < .001, R^2 = 0.076.					

Table (9): Regression analysis of various dimensions of hospital ethical atmosphere on interpersonal concordance

Items	Partial regression coefficient	Standard error	Standard partial regression coefficient	T value	P value
(Constant)	4.144	0.351		11.816	
Relationship with doctors	—0.462	0.071	—0.31	—6.547	
Relationship with nurses	0.272	0.108	0.148	2.523	.012
Relationship with managers	0.235	0.108	0.127	2.188	.029
F = 15.649, P < .001, R^2 = 0.066.					

Discussion

This study explored the relationship between nurses' perception of the hospital ethical climates and OCB of nurses. The results showed that the nurse's perception of the hospital ethical climates was above the medium level. The highest score among all the dimensions was the relationship with the manager and the lowest was the relationship with the doctors. The present study consistent with the research results of Hwang et al., (2014) [16] and Suhonen et al., (2015) [17] the highest score in relationship with managers indicates that the nurses could fully trust and respect their leaders, and they could get support and help from leaders in their work. Inversely, the lowest score in the relationship with doctors might be due to the long-term dominance subordinate relationship and seniority ranking system affecting the medical care cooperation relationship.

This prompts managers to use all resources, information, and equipment to

establish better medical care cooperation, as well as use of "interdisciplinary simulation training" and other training methods to improve communication and cooperation between medical and nursing. However, the total score in our study is significantly higher than the findings of Chen et al., (2013) [18] and Hojat et al., (2003) [19] which may be related to the location of the city and the degree of education. The nurses were in provincial capitals, with the degree of education mainly undergraduate and above level, while the nurses were in prefecture level cities, with the degree of education mainly junior college or below level. Researches showed that the addition of interdisciplinary courses could strengthen the role of medical workers for each other, shorten the gap between medical workers and promote mutual respect between medical workers. Therefore, nurses with high education could feel better hospital ethical climates. The total score of nurses' OCB was above the middle level, which was consistent with the research by Ji et al., (2017) [20] However, in this study, the sense of responsibility score was higher than the latter, which resulted from the differences in the degree of education of the surveyed objects. The higher education, and benefits, the nurses were more motivated to give back to the organization, shown more sense of ownership, as well as the higher the sense of responsibility.

The lowest organizational identification score was consistent with the research results of Liu et al., (2016) [21] found that kind of situation may due to the hospital condition, types of the leaders, and the traditional social cognition and prejudice, which make the nurses obtain low social recognition and unwilling to take more actions actively to maintain the hospital operation. The higher personal sense of identity with the organization, the more they will hold a view that is beneficial to the organization and take actions that are beneficial to the organizations. This prompts the managers to give targeted measures based on the survey results to improve the organizational citizenship behavior of the nurses, such as giving nurses with low academic qualifications more opportunities to learn, encouraging them to upgrade their degree of education, improving salaries and benefits, as well as strengthening organizational culture construction to improve nurses' emotional attachment and organizational recognition to the hospital.

This study showed that nurses' perception of ethical climates was positively correlated with altruistic behavior, sense of responsibility, and organizational identity. Further regression analysis found that nurses' perception of the relationship between managers, patients, and nurses were facilitating factors for nurses' altruistic behavior. When nurses get more support and respect from their peers and leaders in clinical practice; nurses become more actively help colleagues and establish a more harmonious mutual assistance relationship with them. Moreover, the better relationship with hospitals, doctors, and nurses realize, the higher organizational identification of nurses will occur. This prompts managers to establish a good relationship between nurses, as well as with doctors and hospitals could enhance nurses' sense of organizational identity. For example, hospital policy formulation can help nurses solve difficult nursing problems as much as possible. Moreover, the hospital concept has a cohesive effect, enhancing the sense of ownership of employees through influence and education, which can take the initiative to maintain the hospital reputation and propose behaviors that are conducive to the development of the hospital [21, 22].

The nurses' perception of the relationship between doctors and nurses has a positive predictive effect on nurses' sense of responsibility ($P < .05$), which can explain 12.3% of nurses' responsibility. Responsibility is the subjective consciousness of the subject about responsibility, the subjective reflection of responsibility in the human mind, and the mental state of consciously subjectively doing all beneficial things inside and

outside. When nurses have a high sense of responsibility, they will consciously abide by the rules and regulations of the hospital, with error rate at work reduced, striving to improve their professional standards. From the overall analysis, the nurse's perception of the hospital ethical climates was hardly related to the nurse's interpersonal harmony and the protection of department resources. The regression analysis found that nurses' perception of the relationship with managers is positively related to interpersonal harmony. However, nurses' perception of the relationship with doctors is negatively related to interpersonal harmony.

This prompts managers to provide nurses with more support and establish a trust relationship, so that nurses can truly feel that they are part of the department. Nurses would put the interests of hospitals and others above their personal interests, the interpersonal harmony becoming better. When the relationship between doctors and nurses is better, the nurses will be in a more relaxed environment. Also, encourages managers to strengthen the supervision of nurses' behavior while strengthening the medical and nursing relationship. However, the nurse's perception of the relationship with doctors has a reverse prediction effect on the protection of department resources. The better the relationship between nurses and doctors is, the lower the nurse's behavior of protecting department resources will occur, which may be due to a large population, a large number of patients, and close medical and nursing relations.

On the other hand, the demographic characteristics of nurses also have a certain influence on hospital ethical climates. Goldman et al., (2010) [23] found that a trend of difference in the influence of male and female nurses on both self-interested and caring ethical climates, which may be related to male nurses preferring both hospital ethical climate. The education level of nurses is potentially influential on the ethical climate of the hospital. Registered nurses prefer a caring line and rule based hospital ethical climate more than nurses with a bachelor's degree. Furthermore, the longer nurses work, the more they prefer a self-interested and rule-based ethical climate than nurses who have worked for a short period of time [23-25]. Bahcecik et al., (2003) [26] reported that age and department could influence the ethical climate in hospitals, with nurses aged 18 to 22 years perceiving a more positive hospital ethical climate than nurses aged 23 years and older, and pediatric nurses perceiving a more positive hospital ethical climate than nurses in other units.

Therefore, the following findings can be drawn: Nurses' perceptions of the ethical climate of the hospital and nurses' OCB are generally moderately high. Nurses' perceptions of relationships with managers, patients, and nurses are positive predictors of altruistic behaviors. Nurses' perceptions of relationships with hospitals, doctors, and nurses are positive predictors of nurses' organizational identity and responsibility. Nurses' perceptions of relationships with managers' relationship have a positive predictive effect on nurses' interpersonal harmony. Nurses' perception of relationship with managers and nurses has a positive predictive effect on the protection of departmental resources; nurses' perception of relationship with physicians had a negative predictive effect on interpersonal harmony and protection of departmental resources.

Conclusion

The present study concluded that nurses' perceptions of hospital ethical climate are related to OCB, affecting nurses' organizational citizenship behavior in different ways. The findings of our study are of great clinical significance. Managers should take corresponding nursing measures to build a good relationship between nurses and nurses, patients, hospital, doctors and managers to promote the nurse to make more beneficial behavior to the organization. Considering the limitations of this study, nurses' perception of hospital ethical climates, as well as the impact of other variables, such as the impact on nurses' organizational commitment, nursing errors, and nurses' job satisfaction

indicators, should be explored in the future.

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