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Nurse-To-Nurse Horizontal Violence In Hospitals AndThe Protective Role Of Head Nurse's Caring

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Abstract

Background: *Creating healthy and safe work environment for health care providers is a major concern for healthcare employers. Hence, Healthy work environment is imperative for ensuring patient safety, staff satisfaction, retention, and organization's financial viability. Horizontal violence is considered one of the main challenges in nursing profession and all health sector organizations and might hinder them achieving such health work environment. Increasing evidence has showed that leadership and group factors are important in facilitating horizontal violence. Whether the head nurse's caring and group behavior perceived by nurses has protective effects against horizontal violence remains unclear.* ***Aims:*** *This study aimed to investigate the prevalence of nurse-to-nurse horizontal violence in hospitals and examine the effects of head nurse's caring and nurse's group behavior on horizontal violence.* ***Methods:*** *A cross-sectional online-based questionnaire study was performed in seven hospitals in Riyadh, KSA. Data related to the demographic information, horizontal violence, head nurse's caring and group behavior were collected. Descriptive analyses, chi-squared tests and logistic regression were used for data analysis.* ***Results:*** *In total, 1942 valid questionnaires were collected, with a 92.70% effective response rate (1942/2095). Of tho[1]se, 59.1% of respondents had experienced horizontal violence at least once in the previous 6 months. Covert negative behaviors were more frequently reported. Compared with the low level, moderate and high levels of the head nurse's caring showed a lower risk of horizontal violence (odds ratio [OR] = 0.400, p < .001; OR = 0.128, p < .001); moderate and high levels of group behavior also showed a reduced risk (OR = 0.601, p < .001; OR = 0.221, p < .001).* ***Conclusion:*** *Horizontal violence is common among KSA nurses. The head nurse's caring and maintaining a good climate of nurses' group behaviors could serve as protective factors for preventing horizontal violence.* ***Recommendation:*** *This study helps nursing managers identify which specific negative behaviors occur frequently and require special attention. It suggests that*

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nursing managers attach importance to improving their caring ability towards nurses and to creating an amicable climate of group behavior to buffer against horizontal violence.

Keywords: *caring, group behavior, head nurse, horizontal violence, nursing staff, hospital.*

Introduction

Horizontal violence (HV), a kind of interpersonal conflict, is a serious global problem in the nursing profession [1-3]. It affects all areas of nursing: For nurses, HV can result in low self-esteem, depression, self-hatred and feelings of powerlessness and even cause physical health problems; for the health care organizations, HV leads to impaired personal relationships and lack of cooperation, toxic working environments, poor patient outcomes, increased turnover and financial damage. For society, HV reduces the attractiveness of nursing profession and intensifies the shortage of nursing human resources, especially in the context of global aging [4-6]. Therefore, it is worth exploring any solutions to HV.

Nursing scholars, mainly in Western countries, have examined the incidence of HV among nurses based on its definition, prevalence, causes and strategies to combat it [7, 8]. However, there is little known internationally of HV in KSA hospitals. Pervious study conducted by Mahli (2013) [9], using qualitative approach on nurses from different clinical units including: intensive care unit (ICU) and a post anesthetic care unit (PACU), as well as medical, surgical, neonatal, palliative and gerontology unit; in his work , pointed out an important issue that managers and leaders in clinical areas were part of bullying and horizontal violence as that they disregarded and undervalued any horizontal violence case reported to them form nurses under their authority [9].

Another study in the same topic conducted by Leiper (2005) [10] stated that nurse managers were the most common perpetrators of bullying in clinical areas. Furthermore, Bloom (2014) [11] conducted a study to examine the characteristics of horizontal violence experienced by registered nurses in two city hospitals, explore nurses' responses to horizontal violence incidents, and identify factors that helped them to successfully respond to these incidents. Findings of that study revealed that increase in workload/stress, accepted practice on the unit, and manager attitude were the most common factors leading to horizontal violence among nurses. Additionally, the findings of that study showed that horizontal violence can be controlled by manger awareness and support, staff support, and educational programs in the workplace as most effective strategies [11].

Another research issue that is not yet clear but worth exploring is the role of head nurse's caring and nurses' group behaviors on HV. It is well known that the head nurse and nursing colleagues are the long-term colleagues of every staff nurse in the workplace. Wilmot and Hocker (2017) [12] found that intrapersonal perceptions were the foundation for conflicts such as HV. Whether the degree of caring by the head nurse and group behavior of other nurses could serve as the protective factors against HV remains unclear. Clarification of this issue will assist in combating HV and is of great significance.

Different researches have shown that the prevalence of nurse to nurse HV varies across different areas. In the United States, the prevalence of nurse to nurse HV ranged from 25.3% to as high as 87.4% [13, 14]. One survey in New Zealand revealed that over 50% of the staff nurses in their first practicing year recognized that they were undervalued by other nurses [15]. Morrison et al. (2017) [16], in Jamaica, found that 96% of registered nurses had been exposed to HV, and three quarters rated the exposure as moderate to severe. Ayakdas and Arslantaş¸ (2018) [17], in Turkey, reported that 47% of nurses had suffered HV. Bambi et al. (2014) [18], in Italy, found that 79.1% of nurses had experienced some form of HV at least once, whereas 22.4% experienced HV at least weekly. A survey performed in Spain showed that 74.2% of nurses had experienced HV at least once in the previous 6 months [19]. However, little is known about nurse to nurse HV in KSA hospitals.

To date, there still is a global lack of systematic and effective prevention and management measures against HV. Exploring effective protective factors to prevent HV may assist in reducing its incidence. According to the Society Ecosystems Theory, human behavior involves multiple systems (i.e., micro, mezzo and macro systems) in the social environment, in which the nurse managers and co-workers form the mezzo system [20, 21]. Increasing evidence has shown that leadership and group factors play important roles in facilitating HV; that is, HV is not just a binary issue between the victim and the perpetrator [19, 22-24]. In Taif City, Saudi Arabia, conducted study on perception of Nurses toward Horizontal Violence in health care settings and revealed horizontal violence has mischievous effects that extend from the nurse victims to the whole health care team and eventually to the patients. Developing educational programs on appropriate professional behaviors and code of nursing ethics and training courses on conflict managements for nursing staff and managers, is so effective in elimination with horizontal violence cases [25].

Based on this evidences, this study hypothesized that the more positively nurses perceived the head nurse's caring and the nurses' group behavior, the less HV would occur. However, as yet, there is no direct evidence to support this hypothesis. Bridging this gap will help nurse managers and policymakers recognize the importance of caring for subordinates and develop more effective approaches at the organizational level to mitigate HV. Therefore, the purpose of this study was to investigate prevalence of nurse to nurse HV in KSA hospitals over a 6-month period and to analyze it in terms of different demographics and to examine the protective role of the head

Methods

A cross-sectional online-based questionnaire study was performed from January to July 2023 in seven hospitals in Riyadh, KSA. The hospitals were selected as target hospitals using a convenience sampling method, with a total of 4500 eligible nursing staff meeting the study criteria. The study was reviewed and approved by the Ethics Committee.

According to previous studies, the rate of HV in general hospitals was 78.2%, p is equal to parameter for sample calculation (78.2%) and d is equal to margin of error (0.03) , α is equal to type I error (0.05), level of confidence (1.96) [26]. Based on statistical analysis, a sample size of 728 anticipated for this study. Considering the 15% dropout rate, the final minimum sample size was 857. The inclusion criteria of the participants were as follows: registered nurses working in a hospital, who agreed to take part in the anonymous survey and who had worked in the clinical nursing unit for at least 6 months. Nurses with leadership positions (such as head nurses and nurse administrators) were excluded from the samples. An informed consent form after explained the study's purpose, risks, benefits. Names and personal identifiers were not used to ensure confidentiality. The participants were informed that they were free to withdraw from the study at any time, without prejudice.

The data were collected using a self-reported questionnaire online via email. Each participant filled in the questionnaire through clicking the survey link. Only one questionnaire was allowed from each IP address. All questions were set as compulsory. If there was any missing item, the respondents would be reminded when he or she submitted their survey. Only when they had completed all the questions could they submit the survey successfully. Their participation was both voluntary and anonymous.

Measures

Demographic characteristics: Data concerning gender, age, years of working experience, marital status, education, contract status, and professional title, type of unit and hospital level were systematically collected.

Horizontal violence: Based on the English version of the Negative Acts Questionnaire-

Revised (Einarsen et al., 2009) [27]. The questionnaire was Arabic-translated. The questionnaire included 19 items, containing 8 items of overt type behaviors and 11 items of covert type behaviors. It was developed to measure the exposure of nurses to HV within the previous 6 months, with the various response alternatives: "1 = never', 2 = very rarely, 3 = almost once a month, 4 = almost once a week and 5 = almost every day'. The respondents were instructed to consider the behaviors of only fellow nurse co-workers and exclude the behavior of their supervisor or non-nursing individuals (such as physicians and patients). The nurse to nurse Negative Acts Questionnaire has been substantiated for validity and reliability, and the internal reliability of Cronbach's alpha coefficient was found to be .95 in the previous study [28, 29]. Cronbach's alpha coefficient was .98 in this study.

Head nurse's caring: was measured using a 36-item of the Caring Assessment Tool-administration, which was originally developed on the basis of the American nursing population by Duffy and adapted and validated by Peng et al. (2020) [30] for use with nurses. There were two items that were deleted from the original English version in the process of cross-cultural adaptation. The scale had three different dimensions: decision making, human respect and non-caring behaviors, which were designed to capture staff nurses' perceptions of their managers, using a 5-point Likert-type response scale (1 = never; 2 = rarely; 3 = occasionally; 4 = frequently; and 5 = always).

The questionnaire was Arabic-translated. The respondents were asked about the degree of caring they had perceived from the head nurses in the workplace. The higher the score, the more the caring was perceived by nurses from head nurses. Cronbach's alpha coefficient was found to be .97 in this study. The extreme group analysis method was used to classify the level of head nurses' caring: The scores equal to and below quartile 1 were classified as 'low' levels, the scores in the range between quartile 1 and quartile 3 were classified as 'moderate' level, and scores equal to and above quartile 3 were classified as 'high' levels.

Nurses' group behavior: An eight-item subscale derived from the Nurse's Organizational Climate Scale was used to measure nurses' group behavior. The total scale was developed by He et al. (2011) [31] based on the theoretical framework of Stone's integrative model of health care working conditions on organizational climate and safety. The respondents indicated their agreement using a 4-point Likert-type response scale: (1 = strongly disagree to 4 = strongly agree). Higher scores indicated a better group behavior in the organization. Cronbach's alpha coefficient of this subscale was .95 for the present study. The level of group behavior was categorized as 'low', 'moderate' and 'high' levels using the same way as the classification of the degree of caring of the head nurse. The questionnaire was Arabic-translated.

The data were analyzed using IBM SPSS Statistics software Version 28.0. According to the previous study by Xie et al., (2019) [26], in the present study treated the dependent variable, HV, as a binary variable (yes and no). If the respondents chose 'never' on all 19 items, that is, the score equaled 19, they were judged to be 'no, they haven't suffered HV'. If the total score was greater than 19, they were judged to be 'yes, they have suffered HV'. The demographic variables, head nurse's caring and group behaviors perceived by the nurses were treated as independent variables.

Descriptive statistics were used to analyze the demographic characteristics of the respondents, as well as the frequency and percentage of HV. A chi-squared test was conducted to test the potential association between nurses with and without HV in the terms of various demographic characteristics. Significant factors of demographic characteristics and the target variables (head nurse's caring and nurses' group behavior) were modeled into the logistic regression analysis to estimate the effect of selected potential factors on

HV. Univariate and multivariate logistic regression analyses were conducted to calculate unadjusted odds ratio (OR) and adjusted OR, respectively, by using enter method. All tests were two sided with a significance level of .05.

Results

Demographic characteristics

Table (1) shows a total of 1942 respondents were included in the analyses. The respondents were aged 20–58 years (Mean = 30.32, SD = 6.30), and their working experience in the nursing profession ranged from 1 to 39 years (Mean = 8.65, SD = 6.71). Also, this table shows the result of the chi-squared test that there was no statistically significant difference in the demographic variables between the group that experienced HV and the group that did not experience HV, except for the different unit types ($\chi^2 = 17.070$, $p = .017$).

Prevalence of nurse-to-nurse HV over the previous 6 months

Table (2) shows a total of 1148 (59.1%) of respondents had experienced some form of nurse to nurse HV at least once during the previous 6 months, and 156 (8.0%) nurses reported being subjected to it at least weekly. The total score of respondents in this study ranged from 19 to 95 (Mean = 25.17, SD = 11.04). Of the 19 items, withholding information, ignoring opinions and spreading of gossip/rumors were the most frequent negative behaviors, and they were all covert behavior. Repeated reminders of one's errors or mistakes were the most frequent overt type of negative behaviors.

Predictive effect of head nurse's caring and nurses' group behavior on HV

Table (3) shows the total scores of the head nurse's caring ranged from 55 to 180 (Mean = 147.25, SD = 25.81), and nurses' group behavior ranged from 8 to 32 (Mean = 27.67, SD = 4.91). Multivariate logistic regression analysis indicated a reduced risk of HV for nurses with higher levels of head nurse's caring and group behavior. Compared with the low level of head nurse's caring, the moderate and high levels showed a low ORs (OR = 0.400 and OR = 0.128, respectively). Compared with the low level of group behavior, the moderate and high levels also showed lower ORs (OR = 0.601 and OR = 0.221, respectively). The findings indicate that head nurse's caring and group behavior had moderate to strong negative association with HV and indeed played a protective role against HV. A significant chi-squared test ($\chi^2 = 533.885$, $p < .001$) and a non-significant Hosmer and Lemeshow test ($\chi^2 = 6.247$, $p = .620$) supported the model as well. Following the Nagelkerke R^2, the model explained 32.4% of the variance in exposure to HV behavior.

Table (1): Demographic characteristics and variations of two groups among different characteristics

Characteristics	n (%)	Group with HV (n = 1148)	Group without HV (n = 794)	χ^2	p
Gender					
Male	70 (3.6)	44	26	0.421	.516
Female	1872 (96.4)	1104	768		
Age (years)					
20–25	447 (23.0)	242	205	7.251	.123
26–30	760 (39.1)	454	306		
31–35	399 (20.5)	247	152		
36–40	203 (10.5)	120	83		
≥41	133 (6.9)	85	48		
Years of experience					

Characteristics	n (%)	Group with HV (n = 1148)	Group without HV (n = 794)	χ^2	p
≤3	419 (21.6)	232	187	3.212	.201
4–10	1006 (51.8)	602	404		
≥11	517 (26.6)	314	203		
Marital status					
Unmarried	687 (35.4)	401	286	0.248	.883
Married	1215 (62.6)	723	492		
Widowed and divorced	40 (2.0)	24	16		
Education					
Secondary or advanced diploma	404 (20.8)	229	175	1.247	.280
Bachelor's degree or above	1538 (79.2)	919	619		
Contract status					
Permanent	761 (39.2)	463	298	1.544	.219
Temporary	1181 (60.8)	685	496		
Professional title					
Nurse	496 (25.5)	273	223	5.442	.066
Nurse practitioner	1031 (53.1)	616	415		
Nurse-in-charge and above	415 (21.4)	259	156		
Type of unit					
Medicine unit	546 (28.1)	310	236	17.070	.017 *
Surgical unit	408 (21.0)	238	170		
Obstetrics/gynecology	128 (6.6)	87	41		
Pediatrics	96 (4.9)	50	46		
Emergency room/outpatient unit	197 (10.2)	132	65		
Intensive care unit	174 (9.0)	108	66		
OR/PACU	146 (7.5)	91	55		
Other	247 (12.7)	132	115		

Abbreviations: HV, horizontal violence; OR, operation room; PACU, post anesthesia care unit.
*p < .05.

Table (2): The specific scores for each item and the frequency ranking of each negative behavior

Rank	No	Type	Items	M±SD	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)
1	1	covert	Other nurse withholding information that affects your	1.53± 0.78	1166 (60.0)	618 (31.8)	88 (4.5)	53 (2.7)	17 (0.9)

Rank	No	Type	Items	M±SD	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)
			performance						
2	13	Covert	Having your opinions ignored	1.45± 0.71	1257 (64.7)	566 (29.1)	69 (3.6)	38 (2.0)	12 (0.6)
3	5	Covert	Spreading of gossip and rumors about you	1.44± 0.75	1299 (66.9)	517 (266)	66 (3.4)	41 (2.1)	19 (1.0)
4	11	Overt	Repeated reminders of your errors or mistakes	1.39± 0.71	1370 (70.5)	458 (23.6)	60 (3.1)	41 (2.1)	13 (0.7)
5	4	Covert	Having key areas of responsibility removed or replaced with more trivial or unpleasant tasks	1.39± 0.73	1383 (71.2)	437 (22.5)	61 (3.1	45 (2.3)	16 (0.8)
6	3	Covert	Being ordered to do work below your levelof competence	1.39± 0.77	1411 (72.7)	400 (20.6)	59 (3.0)	49 (2.5)	23 (1.2)
7	2	Overt	Being humiliated or ridiculed in connectionwith your work	1.28± 0.67	1442 (74.3)	380 (19.6)	62 (3.2)	38 (2.0)	2.0 (1.0)
8	6	Covert	Being ignored or excluded by other nurse	1.34± 0.68	1452 (74.8)	390 (20.1)	53 (2.7)	33 (1.7)	14 (0.7)
9	18	Covert	Given too much responsibility without appropriate supervision	1.32± 0.66	1479 (76.2)	361 (18.6)	61 (3.1)	30 (1.5)	11 (0.6)
10	14	Covert	Practical jokes carried out by other nurseyou do not get along with	1.33± 0.70	1481 (76.5)	346 (17.8)	56 (2.9)	42 (2.2)	13 (0.7)
11	16	Covert	Pressure not to claim something to which by right you are entitled (e.g., sick leave,	1.33± 0.71	1501 (77.3)	313 (16.1)	74 (3.8)	39 (2.0)	15 (0.8)

Rank	No	Type	Items	M±SD	1 n (%)	2 n (%)	3 n (%)	4 n (%)	5 n (%)
			holiday entitlement and travelexpenses)						
12	8	Overt	Being shouted at or being the target of spontaneous anger	1.30± 0.67	1510 (77.8)	330 (17.0)	58 (3.0)	30 (1.5)	14 (0.7)
13	12	Overt	Persistent criticism of your errors or mistakes	1.28± 0.66	1552 (79.9)	292 (15.0)	51 (2.6)	37 (1.9)	10 (0.5)
14	7	Overt	Having insulting or offensive remarks made about your person, attitudes or your private life	1.28± 0.67	1563 (80.5)	280 (14.4)	49 (2.5)	36 (1.9)	14 (0.7)
15	15	Covert	Excessive monitoring of your work	1.27± 0.67	1570 (80.8)	271 (14.0)	54 (2.8)	33 (1.7)	14 (0.7)
16	17	Overt	Being the subject of excessive teasing and sarcasm	1.27± 0.65	1572 (80.9)	279 (14.4)	46 (2.4)	34 (1.8)	11 (0.6)
17	10	Covert	Hints or signals from other nurses that you should quit your job	1.20± 0.59	1683 (86.7)	178 (9.2)	45 (2.3)	26 (1.3)	10 (0.5)
18	19	Overt	Threats of violence or physical abuse or actual abuse such as pushing or spitting on you	1.16± 0.55	1747 (90.0)	123 (6.3)	38 (2.0)	25 (1.3)	9 (0.5)
19	9	Overt	Being intimidated by other nurses	1.16± 0.56	1749 (90.1	120 (6.2)	34 (1.8)	31 (1.6)	8 (0.4)

Note: 1 = never; 2 = very rarely; 3 = almost once a month; 4 = almost once a week; and 5 = almost every day.Abbreviation: M, mean SD, standard deviation.

[a] The rank was calculated on the basis of the sum of the frequency of Options 2–5. The higher the sum of the frequency, the higher the negative behavioritem was ranked.

Table (3): Logistic regression analysis with the potential factors (N = 1942)

Uni-variate logistic regression				**Multivariate logistic regression**		
Potential factors	**Unadjusted odds ratio**	**95% CI**	**p**	**Adjusted odds ratio**	**95% CI**	**p**
Type of unit (reference: medicine unit)						
Surgical unit	1.066	[0.822, 1.382]	.630	1.209	[0.894, 1.637]	.218
Obstetrics/gynecology	1.615	[1.074, 2.429]	.021*	1.249	[0.777, 2.007]	.359
Pediatrics	0.827	[0.536, 1.278]	.393	0.856	[0.522, 1.404]	.539
Emergency room/outpatient unit	1.546	[1.098, 2.176]	.012*	1.065	[0.729, 1.569]	.751
Intensive care unit	1.246	[0.878, 1.768]	.218	1.124	[0.749, 1.686]	.573
OR/PACU	1.260	[0.866, 1.833]	.228	1.137	[0.738, 1.752]	.560
Other	0.874	[0.646, 1.182]	.381	1.001	[0.704, 1.424]	.995
Head nurse's caring (reference: low level ≤129)						
129 < moderate level < 172	0.240	[0.179, 0.321]	.000***	0.400	[0.290, 0.553]	.000***
High level ≥172	0.050	[0.036, 0.069]	.000***	0.128	[0.087, 0.187]	.000***
Group behaviour (reference: low level ≤24)						
24 < moderate level < 32	0.368	[0.280, 0.484]	.000***	0.601	[0.444, 0.814]	.001**
High level ≥32	0.087	[0.066, 0.114]	.000***	0.221	[0.160, 0.306]	.000***

Discussion

The current study measured the prevalence of HV over a 6-month period among staff nurses at the seven hospitals in Riyadh, KSA, involving a large sampling survey of 1942 respondents, and thus makes a significant contribution to the ever-increasing global information on HV in nursing profession. The study also examined the predictive effects of head nurse's caring and nurse's group behavior on HV from the perspective of HV victims. In this study, 59.1% of nurses reported HV experience at least once, which is lower than the 74.2% who reported being subjected to HV in Spain, the 79.1% in Italy and the 87.4% in New Jersey, but higher than the 47% in Turkey and the 34% in New Zealand [13, 15, 17-19].

In this study the percentage of nurses experienced HV at least once a week was significantly lower than the finding of 22.4% among Italian nurses [18]. A possible explanation for this might be that different countries and organizations have different cultures in terms of power distance, collectivism, and performance orientation [7]. However, it also values harmony with others, and organizations in this culture have a lower power

distance, which may reduce the occurrence of HV. The interplay of these impacting factors results in a moderate level of HV experienced by nurses compared with other countries. Another possible reason for this variation may be attributed to the presence of different psychological tools and threshold standards to measure HV [18]. To date, there is no uniform definition of the term HV, which leads to some differences in measurement. Further research is needed to standardize a clear operational definition and develop a unified measuring tool for HV assessment.

In the current study found that there are no significant differences in terms of gender, age, seniority, marital status, education, contract status or professional title between the group with HV and the group without HV in our sample. Obstetrics/gynecology and emergency room/outpatient units had higher risks of HV compared with the medicine unit. This finding is partially consistent with the review of Bambi et al. (2018) [18] who showed that gender, age, seniority and nursing education are not related to nurse to nurse HV, but differs from that of Xie et al. (2019) [26] who found that gender, marital status, professional title and seniority were associated with HV among nurses. The result further confirms that nurse to nurse HV has different characteristics in different organizations and regions.

This study reveals that covert type of HV behaviors was more common than overt types among nurses, which is consistent with the data reported in other similar studies [15, 18, and 26]. This may be related to the female dominated nature of the nursing profession. Females are generally thought to be good at using indirectly aggressive strategies because successful indirect aggression can be very effective and it is difficult to identify the perpetrator, which could help the perpetrator to effectively avoid counterattacks [32]. Another possible explanation is that nurses are reluctant to have face-to-face interpersonal conflicts with their colleagues.

Moreover, the findings of this study indicated that head nurse's caring and a good climate of nurse's group behavior was indeed two negative predictors of HV, which supported the hypotheses tested. These relationships may partly be explained by the cultural value that nurses believe in reciprocity. That is, when nurses perceive that their efforts and gains are balanced in interpersonal relationships, benign interpersonal interactions will continue, thereby reducing the likelihood of HV. Although nursing managers may not be directly involved in the HV incidents, they set the tone and expectations in the work environment, which was found to be associated with HV [33].

If head nurses show a caring attitude towards their subordinates, they will set a good example for the staff nurses to care for each other, which may create a healthy environment and act as a buffer to HV [34]. The findings of this study are promising because they highlight the importance of nurse managers' caring ability for subordinates, which is in accordance with the core concept of nursing profession and provide new insights to solve the problem of HV among nurses. Further work is encouraged to confirm the results in other cultural contexts.

Conclusion

The findings from this study make several contributions to the current literature. First, compared with other countries, the prevalence of HV over a 6-month period among nurses in KSA hospitals was found to be moderate, with general demographic variables such as gender, age and working experience not found to affect HV in the present cultural contexts, which indicate that future research among KSA nurses needs to pay attention to additional variables. Second, a high level of caring from head nurses and group behavior from coworkers were found to be protective factors to against nurse to nurse HV. These two factors may serve as effective methods for nursing managers and policymakers to prevent HV in the future.

This study may help nursing managers worldwide to learn about the status quo of nurse to nurse HV in hospitals and have a better understanding of the cultural differences related to HV. Another implication of the present study is that it helps the nursing managers identify which specific negative behaviors have a high prevalence and require special attention. Moreover, this study recommends that nursing managers might mitigate the occurrence of HV through significantly improving their caring ability towards nurses and creating an friendly climate of group behavior. Last but not least, it suggests that hospital managers and policymakers should recognize the importance of the head nurses' caring ability for subordinates and include it as an indicator in their performance appraisals.

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