

ORIGINAL RESEARCH

Nursing staff experience of horizontal violence in a military healthcare facility

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ABSTRACT

Background and objective: Horizontal violence (HV) behaviors can lead to negative psychological and physical outcomes for nurses. There is a gap in the literature to support effective interventions to minimize HV in the nursing work environment. The purpose of this study was to explore the experience of HV by nursing staff within a United States military healthcare facility and to determine if HV education changed the experience.

Methods: This prospective descriptive study used a one group before-after design. A survey including items on HV behaviors, personal effects, and perpetrators was conducted at baseline and again at 3 months following the facility-wide offering of a 30-minute educational intervention.

Results: HV behaviors do occur within a US military nursing environment. There are differences in perpetrators across positions and ranks. A significant decrease in HV was reported after the educational intervention.

Conclusions: Although HV did occur within this US military nursing environment, it was to a lesser extent than reported in civilian nursing environments. The 30-minute educational intervention has promise as an effective method to address the experience of HV.

Key Words: Horizontal violence, Bullying, Nursing, Work environment, Military

1. INTRODUCTION

Disruptive behaviors that are perpetuated over time and have a negative effect on the recipient have been referred to as horizontal violence, bullying, lateral violence, aggression, harassment or incivility.^[1-3] The term bullying may include a real or perceived power differential between involved individuals,^[4] however this distinction is not consistent.^[5] For this study, horizontal violence (HV) refers to behaviors that intimidate or demean another individual regardless of the relationship.^[1] HV behaviors can be a) overt or covert and b) physical, verbal or nonverbal. Examples include shoving, threatening, excluding, gossiping, withholding information, scapegoating, eyebrow raising, blocking opportunities, and

using silence. HV involves persistent behaviors that negatively affect the individual, such as feelings of humiliation or degradation, and indicate a lack of respect.

HV has been accepted as a common problem in nursing.^[6] Overall, 70% or more of staff nurses reported experiencing and/or witnessing HV,^[1,7] with the HV perpetrators identified as peers, supervisors, unlicensed assistive personnel, physicians, and other workers.^[1] One-third of nurses acknowledged that they have engaged in HV behavior,^[7] and a positive relationship exists between those who experience HV and those who admit to being perpetrators.^[8]

In nursing, HV has been shown to contribute to decreased

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self-esteem, low morale, decreased job satisfaction, and increased intention to leave.^[9-11] HV has also been associated with psychological consequences and physical symptoms.^[1,9,12] The effects on the nurses have been secondarily associated with poor job performance.^[13] Recommendations have been made to develop policies and provide education to decrease the incidence of HV.^[14,15]

Within United States (US) military healthcare facilities, rank and gender mix may influence the HV experienced. The nursing workforce within traditional fixed US military treatment facilities contains both civilian and military nurses. The military nurses working in direct clinical care have some notable differences from those of the civilian nurses.^[16-18] On average, military registered nurses (RNs) are younger and less experienced than civilian RNs.^[16-19] All of the military RNs have a minimum of a Bachelor's degree, while 30%-56% of the civilian RNs are Associate Degree or Diploma prepared.^[16-18] Males compose approximately 30% of the military RN population versus 10% for the civilian RNs. The RNs are either civilian or hold officer ranks. The practical nurses and non-licensed personnel, such as nursing assistants or medical technicians, are either civilian or hold an enlisted rank. The military culture emphasizes adherence to customs and courtesy when addressing individuals of higher rank. A nurse may hold a higher rank than another health care staff member who holds a position of higher professional authority, such as a physician. These differences may have broader implications for the dynamics that exist in the military nursing work environment, specifically when exploring disruptive behaviors such as horizontal violence.

In one study conducted in a US military health system, 88% of nurse respondents encountered incivility, with nurse peers being the most common perpetrators.^[20] In line with the suggested interventions, military healthcare facilities have policies that state zero tolerance for disruptive behaviors such as HV. Additionally, the military has developed self-learning modules that provide information on overall workplace violence. Scrutiny of the current literature led to the discovery that little evidence existed to support the effectiveness of any of the interventions suggested to decrease HV. Of note, there is beginning evidence of a training technique using cognitive rehearsal that may be effective in teaching nurses how to confront HV.^[3,21]

Grounded on the Social Learning Theory by Bandura, a horizontal violence intervention model has been proposed by Walrafen and colleagues.^[7] In this model, the work environment and the individuals interact in a way that they influence each other. Individuals become aware of behaviors through observation and then modeling the behaviors of others with

whom they identify, thus learning and ultimately modeling the behaviors themselves. The cycle can be broken when an intervention is applied that alters the individual's perception of the observed behaviors. In other words, if HV is occurring, individuals may mimic the behaviors as a way of being accepted in the group. Only through the introduction of new behaviors, or new norms, can the work environment be changed.

Based on the HV intervention model, an educational intervention to include HV awareness and new models of behavior was introduced into the military nursing work environment. The purpose of this exploratory study was twofold: a) to explore the perception of HV within a military nursing environment and b) to test an educational intervention to minimize HV within the military nursing environment.

2. METHODS

This exploratory prospective descriptive study used an uncontrolled one group before-after pre-experimental design to describe HV and to explore the effectiveness of an educational intervention within the population encompassing a military nursing work environment. The design was selected based upon the previous studies conducted in this area that used pre- and post-survey designs to measure the differences before and after education involving the use of cognitive rehearsal techniques.^[21] Using a before-after measure is considered stronger than a simple observational design^[22] and allows for temporality,^[23] suggesting that the intervention may have an impact on the outcome. The specific aims included; a) describing the perceived experience of HV by nursing staff within a military healthcare facility and b) determining if HV education changes the perceived experience of HV by the overall nursing staff within a military healthcare facility. Initially, HV data was collected via an anonymous electronic survey for one month open to all nursing staff. After the survey closed, a 30-minute educational intervention to increase HV awareness and to train staff to use cognitive rehearsal techniques was conducted for 2 months. The HV survey was opened again to all nursing staff approximately 5 months after the close of the first survey. Those who completed the HV survey may or may not have attended the educational intervention. The post-assessment was to determine the influence of the provided education on the overall experience of HV by nursing staff as a subpopulation within the facility.

2.1 Sample/Setting

After approval by the Institutional Review Board, the link for the anonymous survey was sent via e-mail to a convenience sample consisting of all of the military and civilian nurs-

ing staff at a US military treatment facility—approximately 500 individuals. Since HV is shown to occur at all levels, the target population of nursing staff included nurse supervisors/managers, registered nurses, licensed practical nurses, nursing assistants and military medics (non-licensed, specialty trained medical personnel) in both inpatient and outpatient settings. This included civilians, officers and enlisted personnel. Nursing staff working at the facility for less than 3 months were excluded from survey participation to minimize responses related to past work environments. A cover letter including the elements of informed consent preceded the actual questions within the anonymous survey. The educational intervention was then offered to all members of the nursing staff. In some cases, other personnel besides nursing staff attended the training as well. The link for the anonymous post-survey was sent to all of the nursing staff again 3 months after the last educational session was offered. The potential sample reached for the pre and post surveys were not identical; e-mail distribution rosters were updated to reflect current staff members at each time. There was no identifying link to match respondents for the pre and post surveys or to associate staff members who attended the educational intervention to survey responses.

2.2 Survey

Dumont and colleagues^[1] created the Horizontal Violence Workplace Inventory (HVWI) to obtain baseline data on nurses' perceptions of HV. Participants responded to questions using a 6-point Likert scale indicating how often they have experienced, witnessed or been personally affected by behaviors as stated in the item ranging from 1 (never) to 6 (daily). Three subscales of overt HV (8 items), covert HV (8 items), and personal effects (8 items) of HV were determined by a focus group. An additional 6 items asked who was observed as perpetrators of the behaviors. A content validity index ($N = 5$, $CVI = .90$) demonstrated agreement of items measuring HV among the team. A pilot study ($N = 507$) demonstrated internal reliability ($N = 28$, Cronbach's $\alpha = 0.96$; C. Dumont, personal communication, January 3, 2013).

The HVWI was modified for the military nursing work environment. The time period was changed from 12 months to 3 months based on feasible expectations of stability of military staffing. Especially during the summer months, a longer time period has the potential to reflect a culture that has changed due to high turnover of staff. Therefore, the stem for the items began with "In the past 3 months". Secondary to the military structure, individuals may be in power positions related to rank that are not associated with their administrative or professional assignments. Therefore 5 additional items

relating to military rank were included within the possible perpetrators of HV behaviors. These items included categorizations of junior enlisted personnel, junior and senior non-commissioned officer personnel, and junior and senior officer personnel that are classifications of rank not present in a civilian health care facility.

Two subject matter experts in horizontal violence or survey methodology (civilian and military) reviewed the HVWI, including the 5 additional rank items for content validity. Two additional items were constructed as overt behaviors to cover concepts identified in the literature not previously addressed in the HVWI. Three nursing staff members including registered nurses, licensed practical nurses and unlicensed assistive personnel reviewed the revised HVWI for face validity, with no additional changes being made. The final survey included the modified HVWI items and 12 demographic items.

2.3 Educational intervention

The research team developed and presented standardized content using adult learning theory. A length of 30 minutes, divided between HV awareness and cognitive rehearsal techniques, was selected based on succinctness of topic/materials, attention span, and allotment of available training time. The lesson plan integrated a variety of techniques such as a video example, slides, discussion and attendee participation. The training was offered as stand-alone classes as well as added to agendas of established training venues such as Nursing Grand Rounds, in-services, and unit meetings. The intention was to provide the education to as many members of the population as possible to determine if this mass education approach would have an effect on the overall perceptions of HV by the same population.

The interactive cognitive rehearsal training was designed based on the previously successful intervention.^[3] Cognitive rehearsal techniques require an individual to hold in their mind information they have just received prior to reacting. This interactive material was taught using scenarios developed from the 10 most common areas of HV identified by Griffin 3 and a TeamSTEPPS® communication tool.^[24] Attendees were asked to (D) describe the behavior, (E) express the effect of the behavior, (S) suggest alternatives, and (C) to state possible consequences if the behavior continues—the DESC tool.

2.4 Data analysis

Data analysis included a) descriptive statistics to describe the perceived experience of HV (covert, overt, personal effects, and perpetrators), and b) independent samples *t*-tests to determine differences in HV before and after the intervention.

3. RESULTS

The pre-survey had a higher response rate (n = 145; 31%) than the post-survey (n = 89; 17%). The 30-minute training was provided to 320 hospital staff members (primarily nursing). There were no significant differences in the demographic data pre versus post survey (see Table 1). With approximately 60% of the respondents in the military, the average age was in the mid-30's (pre = 37 ± 10; post = 37 ± 11) and 25%-33% of the respondents were male. Over 65% of the respondents reported to be registered nurses and approximately one-third worked in the outpatient setting. These data reflect the typical make-up of military facility nursing staff with a lower average age and higher percentage of male staff. Unexpectedly, since many of the military nurses are considered novice with less than 5 years of experience, over 50% of the respondents reported to have more than 5 years in their current position.

3.1 Experience of HV

Respondents reported experiencing or witnessing overt and covert HV behaviors between a few times to monthly (see Figures 1 & 2). Approximately 5% of the respondents at both time periods denied any experience or witness of the HV behaviors. The report of being personally affected had an average of a few times, with 20% (pre-survey) to 30% (post-survey) of the respondents denying any personal effects. Of the respondents who were personally affected (see Figure 3), a minimal number of respondents experienced the effects weekly or more frequently (Pre = 5%; Post = 2%).

The Cronbach's alpha remained high for all 3 subscales with overt at 0.94, covert at 0.92, and personal effects at 0.92.

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The most common reported perpetrators both pre and post survey were nurses at a frequency of monthly. See Figure 4 for other perpetrator information.

3.3 Pre/Post comparison

There was a statistically significant decrease in reported overt ($t = 2.462; p = .015$), covert ($t = 3.1; p = .002$), and personal effects ($t = 2.185; p = .03$) subscale averages. The perpetrators with a significant decrease were supervisors ($t = 4.543; p < .001$), senior non-commissioned officers ($t = 2.197; p = .029$), and senior officers ($t = 3.268; p = .001$). Although the reported frequency of nurses as perpetrators did decrease, it was not significant ($t = 1.939; p = .054$).

Table 1. Selected demographic data for pre and post horizontal violence survey

Demographic	Pre-Survey (n = 144)	Post-Survey (n = 88)	Significance
	N (valid %)*	N (valid %)*	Yes/No
Gender			
Male	47 (33%)	22 (25%)	No
Female	95 (67%)	66 (75%)	
Work Area			
Outpatient	43 (31%)	34 (39%)	No
Inpatient	97 (69%)	53 (61%)	
Service Component			
Civilian	52 (36%)	32 (36%)	No
Military	88 (61%)	56 (64%)	
Current Position			
RN	93 (66%)	61 (69%)	No
LVN	14 (10%)	8 (9%)	
Medic/Nursing Assistant	27 (20%)	18 (21%)	
Other	7 (5%)	1 (1%)	
Time in Position			
< 12 months	6 (4%)	11 (12%)	No
> 1 to 3 years	28 (20%)	19 (22%)	
> 3 to 5 years	20 (14%)	9 (10%)	
> 5 years	89 (62%)	49 (56%)	

* Any values not equaling 100% represent missing data/non-response to item

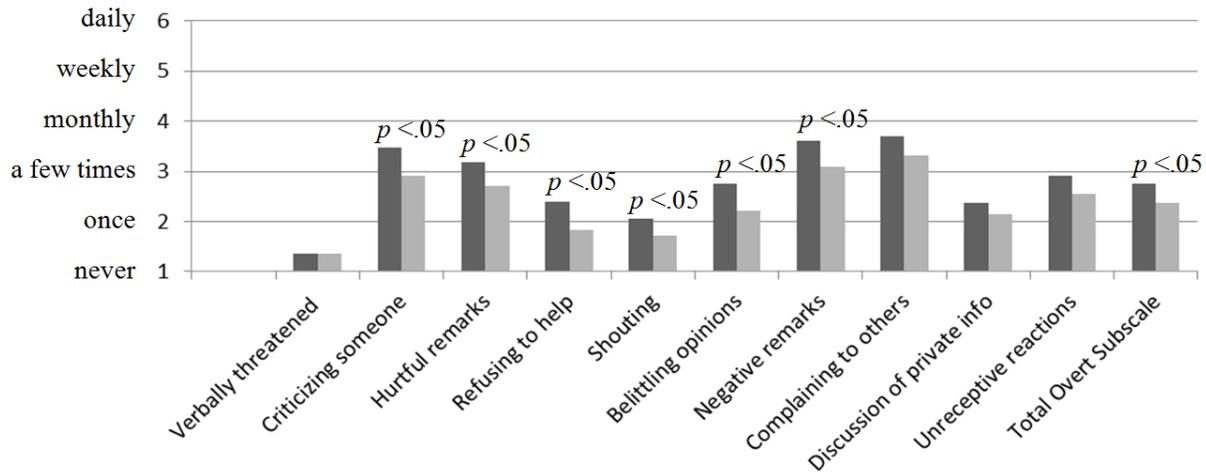


Figure 1. Reported average frequency of experienced or witnessed overt horizontal violence behaviors in the past three months for the pre-survey (1st column) and post-survey (2nd column)

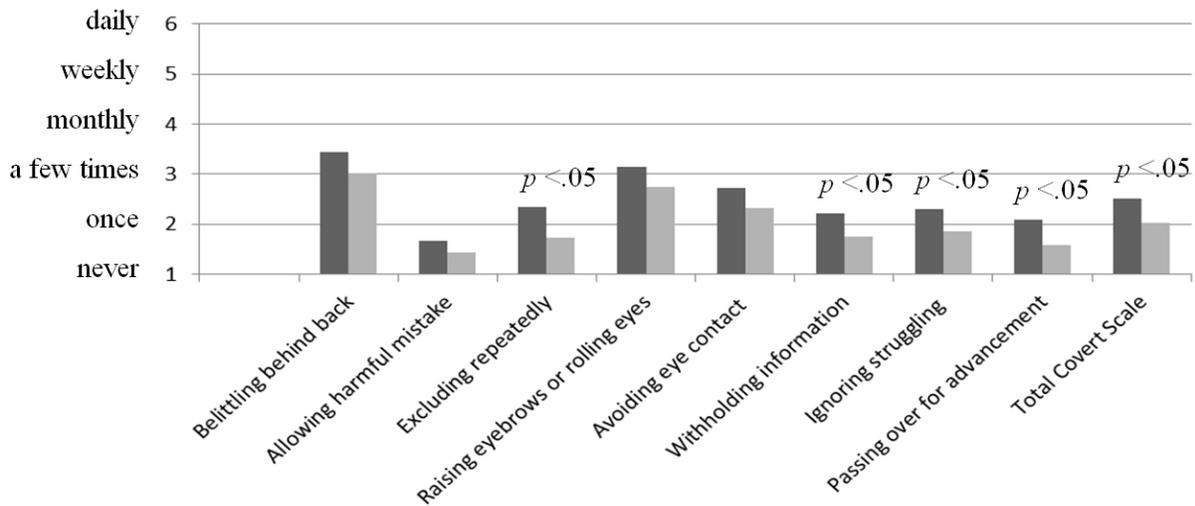


Figure 2. Reported average frequency of experienced or witnessed covert horizontal violence behaviors in the past three months for the pre-survey (1st column) and post-survey (2nd column)

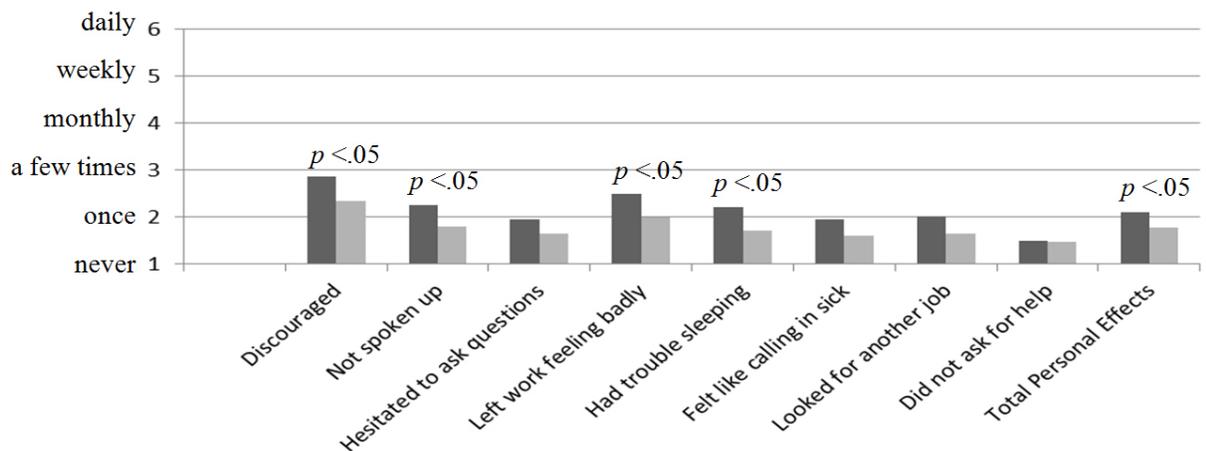


Figure 3. Reported average frequency of experienced personal effects from horizontal violence behaviors in the past three months for the pre-survey (1st column) and post-survey (2nd column)

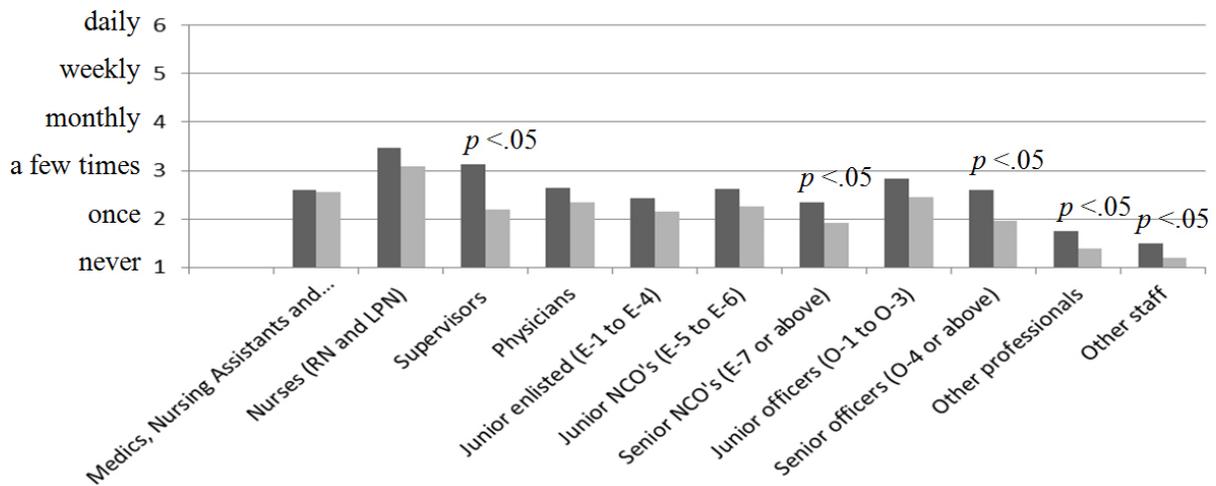


Figure 4. Reported average frequency of perpetrators of experienced or witnessed horizontal violence behaviors in the past three months for the pre-survey (1st column) and post-survey (2nd column)

4. DISCUSSION

4.1 Experience of HV

Although the responses to the survey indicate that nursing staff experience HV in the military nursing work environment, it does not occur to all individuals or on a daily basis. In this study, approximately 95% of the respondents indicated witnessing or experiencing at least one HV behavior within the past three months—higher than the previously reported 88%.^[20] For both the pre and post surveys in this study, HV behaviors were reported to occur an average of a few times to almost monthly (2-2.5) on a scale of never (1) to daily (6), or more than once during the past 3 months. This is less than in a survey of 955 nurses that reported an overall HV mean of more than monthly (4.5).^[1] Simons found that over a six month period, 31% of nurse respondents experienced at least two HV behaviors from another nurse.^[25] In the current study, approximately 62% of the nurses reported either experiencing or witnessing two or more HV behaviors during a three month period from any individual within the work environment. Dumont and colleagues^[1] found that males experienced HV more than females, whereas in this study there was not a statistical difference between genders in the report of experiencing or witnessing HV behaviors. This may be a reflection of the larger percentage and integration of males in the military nursing workforce.

4.2 Perpetrators of HV

Similar to previous research, the perpetrators of HV came from a variety of professions with nurses reported most often. In the current survey, the majority of the respondents were staff nurses. In a sample composed of 53% staff nurses, nurse peers followed by nursing supervisors were the most frequent perpetrators reported.^[1] In another study, HV in

the workplace negatively influenced staff nurse peer relationships, with peers less supportive when HV increased.^[26] The findings of peers reported as the most common perpetrator brings into question the directionality of the influence of HV. Further research could assist in clarifying the relationship between HV and peer relationships, as it is not evident if the unsupportive relationships are a result of HV occurring or vice versa.

An aspect not previously measured, the respondents reported perpetrators of all ranks, with officers overall having a higher average than non-commissioned officers. Junior officers were the highest average perpetrator group by rank. The junior officers often receive military tasks outside of patient care that require extra time and effort. It is possible they may not feel empowered to let senior officers and supervisors know their level of stress and frustration, thus taking out their emotions on peers and others within the health care team.

Those perpetrators in power positions such as supervisors, senior officers and senior non-commissioned officers had a significant decrease after the HV education. In previous research that investigated bullying as part of a power relationship, supervisors and managers were more apt to be identified as primary perpetrators.^[27] The education intervention included a discussion of being held accountable versus being a victim of HV. The reported decrease could have been due to either a behavior change on the part of the senior individuals or a change in the perception of the behaviors by the nursing staff.

4.3 Experience level

It has previously been found that over half of new nurses reported experiencing HV behaviors within their first year

of practice.^[28] The less experienced nursing staff made up less than 20% of the respondents to this survey. In this study, there was no significant difference in the amount of HV experienced or witnessed between the less and the more experienced nursing staff. Applicable to the less experienced nurses traditionally within military treatment facilities, nurses with less than 5 years of practice have been reported to experience the most HV.^[29] Once again, the findings from this study did not show a significant difference between those with < 5 years versus those with over 5 years of experience in their occupation. This may be because a disproportionate number of respondents came from the more experienced versus the novice nursing staff.

4.4 Personal effects

This study included personal effects as outcomes of HV behaviors, including both psychological and physiological effects. The personal effect items reported to occur the most—feeling discouraged, leaving work feeling badly, not speaking up, and having trouble sleeping—also had significant decreases after the intervention. Not speaking up, or hesitating to ask questions, can adversely affect patient care. Additionally, poor sleeping could affect cognition and decisions related to patient care.

Although a small percentage of the respondents, some of the individuals felt personally affected by the HV behaviors at least weekly. Being discouraged and feeling badly about self can lead to poor attitudes at work that degrade the team atmosphere. This is most concerning if the individual is in a position that provides patient care on a regular basis or influences many other staff.

4.5 Effectiveness of the educational intervention

The research team had a concern that more HV behaviors would be reported after the educational intervention due to heightened awareness of the phenomenon. However, this was not the case. The respondents reported a significant decrease in experienced or perceived HV behaviors. The staff may have already had awareness of the behaviors from required computer based training modules on workplace violence completed as part of facility orientation. Additionally, the staff had also already received information on the cognitive rehearsal techniques used in the DESC script during required TeamSTEPPS® training. This study's educational intervention combined awareness of HV with the recommended communication tool, using concrete examples and interaction with the attendees. Perhaps learning as a group about the specific HV behaviors as well as practicing how to apply the cognitive rehearsal techniques assisted in diminishing reported HV.

Furthermore, a few moments of discussion focused on differentiating between HV behaviors and being held accountable for personal workplace responsibility. Initially an informal response to attendee comments and discussion, the difference became a brief part of the intervention to ensure understanding. This could also have influenced perception of HV. Still in the early stages of development, the results from this study provide evidence that the 30 minute face-to-face educational intervention may be effective in decreasing perceptions of HV.

4.6 Limitations

The results from the pre-survey to the post-survey in an uncontrolled before and after study design should be interpreted with caution due to the inherent biases present due to lack of control. Although the design is superior to an observational study and can provide strength of temporality, it is difficult to attribute the observed change to the intervention.^[28,29] The results of this study must be taken in the context of the other events occurring at the same time. The pre-survey went out during sequestration of civilian employees. At the time, the uncertainty in job status and payment of civilian employees caused elevated levels of anxiety and frustration. This overall angst may have contributed to actual behaviors perceived as horizontal violence by individuals under stress. The post-survey went out well after the end of the sequestration and during the summer when movement of staff was occurring. The alleviation of a known stressor as well as anticipation of changes in personnel, especially if the moves included those who may have had behaviors perceived as horizontal violence, may have affected responses to the survey. The survey excluded respondents who worked at the facility for less than 3 months, however, this probably did not fully control for movement in other staff that could have contributed to a decrease in the reported HV behaviors.

The survey items used for this study asked broadly about experiencing or witnessing the HV behaviors. Experiencing HV directly is different than witnessing the behaviors. Both acts, however, can influence how an individual feels about their work and their work environment.

During the time period of the pre-survey, one of the research team members was anecdotally told by nursing staff that they had falsified demographic data. The staff stated that they mistrusted the confidentiality of the survey responses.

4.7 Implications

The results of this study provide evidence that HV behaviors do occur in military treatment facilities and that differences in perpetrators occur across positions and ranks. The reported level of HV in this military treatment facility was to a lesser

extent overall than the level reported in civilian settings.^[1] Although policies and training suggested by national organizations are in place,^[14] there is limited research to support the effectiveness of proposed interventions.^[21] The significant decreases from the pre to post survey indicate that the 30-minute educational intervention for the nursing staff may be effective in reducing perceptions of HV behaviors and personal effects.

Based on the results from this study, face-to-face training using cognitive rehearsal techniques is recommended as an intervention to assist in minimizing HV. The awareness portion of the education included a definition, behaviors, occurrence, and outcomes of HV. To enhance relevance to the nursing staff, the cognitive rehearsal scripts used for this study were created based on a communication tool already in use within the facility and included common scenarios anecdotally discussed or witnessed prior to the actual study. Another potential area of focus may be on fostering support-

ive peer relationships amongst the staff nurses.^[26]

Future research is needed to validate the effectiveness of the 30-minute educational intervention. Additionally, research is needed to explore the extent to which HV occurs with other health care personnel.

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CONFLICTS OF INTEREST DISCLOSURE

The views expressed in this manuscript are those of the author(s) and do not reflect the official policy or position of the Department of the Army, Department of Defense, or the US Government.

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