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The Prevalence of Physical Violence and its Associated Factors against Nurses Working at Al-Medina Hospitals

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Abstract: The studies about violence are increasingly important in the societies. Data on violence among nurses is scarce. The purpose of this study was to determine the characteristics of practicing nurses in three large Saudi Arabian community hospitals, examine violence prevalence against the nurses and investigate their perceptions of violence. In 2011, this study was conducted in three community hospitals in Saudi Arabia using a convenience sample of 288 nurses. The prevalence of physical violence among the study sample was 26%. Physical violence was studied. The prevalence of physical violence was 26% and more violence was shown in hospital 2.

Key words: Nursing, physical violence, Al-Medina, socities, Saudi Arabia

INTRODUCTION

It has been realized that health care providers have a greater risk of being attacked on the job than police officers and prison guards; nurses, particularly female RNs are the most vulnerable (www.icn.ch/matters_violence.htm). Various organizations and collaborations including World Health Organization (WHO), the international labor office, the international council of nurses and public services international cooperated in 2000 to explore the extent of this problem and its better approaches. It has been found that personnel violence threatens access to primary health care in developed and developing countries that already have major shortages of health care workers. Furthermore, it has also been found that the underreporting of staff violence is widespread, the report noted, perhaps because workers see abuse as an expression of patients' illnesses or it is an acceptable part of the job. Also, many health care workers fear repercussions in terms of job losses or greater threats from the abuser (s). Another reason for the underreporting is that work pressures often do not allow time for staff member to construct a report (Duxbury, 1999; Chang *et al*., 2005).

The US National Institute for Occupational Safety and Health (NIOSH) defines workplace violence as any physical or psychological assault, threatening behavior or verbal abuse occurring in a place of employment. It includes both overt and covert behaviors ranging from psychological aggression to verbal harassment to bullying and murder (Chang *et al*., 2005). In their study, Lee *et al*. (1999) distinguished between aggression and bullying based on intention as a component of the behavior. Aggression implies a single intentional act of doing harm while bullying occurs when an employee is exposed to aggressiveness and negative act (s) frequently and over an extended period of time (Duxbury, 1999). Bullying, also called horizontal violence, refers to acts that occur among similar workers. Nurses, both victims and perpetrators, often do not recognize the situation as interpersonal conflicts may be subtle, long termed and often ingrained in the organizational structure (Sellers *et al*., 2009). One study found that almost 52% of the nurses inflicted intimidating behaviors upon one another (Hader, 2008). Bullying can cause many nurses to leave their employment and/or the profession (Dellasega, 2009).

Gacki-Smith *et al*. (2010) investigated Emergency Department (ED) nurses experiences and perceptions of violence from patients and visitors. They conducted a cross-sectional study of 3465 American registered nurses who were members of the emergency nurses association. Participants completed a 69 items survey. Key findings were that 25% of the respondents had been victims of physical assaults 20 or more times in the previous 3 years and 20% had experienced verbal abuse 200 or more times in the same period. Nurses who reported frequent physical and/or verbal abuse also reported fear of

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retaliation and lack of support from their hospital administration and ED management. These factors served as barriers to solving the problem. Another factor was a lack of policies to address the issue.

In a more recent study, Gates *et al.* (2011) sent a questionnaire to a randomly selected sample of 3000 ED nurses to determine how work violence was related to productivity and the symptoms of Post-Traumatic Stress Disorder (PTSD); 264 surveys were returned. About 94% of the nurse responders had experienced at least one PTSD symptom after a violent event and 37% reported negative productivity scores.

Other studies in the US over the last decade that have validated workplace violence and its negative consequences were conducted with Hispanic nurses (Anderson and Parish, 2003) and critical care nurses (Laposa *et al.*, 2003) as examples. Similar problems were found in countries abroad including Australia (Chapman *et al.*, 2010; Grenyer and Ilkiw-Lavalle, 2003), 10 European countries (Camerino *et al.*, 2008), Italy (Magnavita and Heponiemi, 2011) and the Netherlands (Oostrom and van Mierlo, 2008). In addition, workplace violence was reported for nurses in Middle East including Israel (Natan *et al.*, 2011), Kuwait (Al-Enezi *et al.*, 2009), Iraq (AbuAlRub *et al.*, 2007), Jordan (Abualrub and Al-Asmar, 2011) and Saudi Arabia (Mohamed, 2002).

The Saudi Arabian study found workplace violent experienced by more than one half (54.3%) of the nurses. Almost 94% had been exposed to insulting language, 32.8% to verbal threats, 28.1% to physical assault threats, 17.4% to sexual harassment and 16.2% to actual physical assaults. Nurses working in the psychiatry or emergency departments had the highest rates (84.3 and 62.1%, respectively) of violence exposure. Reasons for the violence were attributed to a shortage in security personnel (82%), language barrier issues (36.3%) and unrestricted movement of personnel in the hospital (21.5%). The purpose of the following study is to further examine workplace violence among the nurses in Saudi Arabia. Three research questions were asked.

MATERIALS AND METHODS

Research questions:

- What are the demographic characteristics of the nurses in the three largest community hospitals in Saudi Arabia?
- What were the nurses' perceptions of violence and perceived threats and how were they addressed?
- How was the experience of workforce violence related to the participants' characteristics?

Design and setting: A cross sectional study design was used. The study population included nurses in three of the Al-Medina, Saudi Arabia hospitals. There are five hospitals in Al-Medina, four of which were general hospitals and one is for children and maternity. The largest three community hospitals were selected to conduct this study and were given numbers 1-3. All three of the hospitals and the Institutional Review Board at the Jordan University of Science and Technology (JUST) approved the study.

Sample: Convenience sampling was used. Total 133 study questionnaires were distributed at each of the three community hospitals, a total of 399 measures. Inclusion criteria were that participants be: Licensed as registered nurses, employed at one of three community hospitals for at least 1 year, employed at least half time and willing to participate.

Sample characteristics: In response to research question 1, personal and workplace information were collected. They were the first part of the questionnaire described under instruments in Table 1. About 60% of nurses were non-Saudi; more than one half (55%) was 29 years of age or younger and 58% was married. Participants were either senior managers (15%) or staff nurses (85%); most had <5 years of experience on the job; 97% worked full

Table 1: Characteristics of nurse participants

Personal factors	Frequency	Percent (%)
Age		
29 or under	157	55
30-50	109	38
>50	22	7
Nationality		
Saudi	114	40
Non-Saudi	174	60
Gender		
Male	43	15
Female	245	85
Marital status		
Single	121	42
Married	167	58
Present job		
Senior manager	43	15
Nursing staff	245	85
Work experience (years)		
<5	146	51
6-10	74	26
>10	68	23
Main job time		
Full time	279	97
Part time	9	3
Shift work		
Yes	248	86
No	40	14
Number working with you		
1-5 others	173	60
6-10 others	68	24
>10 others	47	16

Table 2: Constructs assessed by the World Health Organization workplace violence in the health sector questionnaire

Questionnaire	Items
Personal and workplace data	16
Violence perception: Threats and reporting	3
Physical workplace violence	3

time. The majority of nurses (86%) work in a shifting system, meaning they rotated working days, evenings and/or nights. All nurses reported working with one or more other nursing personnel.

Instrument: The original survey (World Health Organization's Joint Programme on Workplace Violence in the Health Sector 2002) had 75 multiple-part items and three qualitative questions. Due to limited available time and heavy workloads for the practicing nurses, it was necessary to reduce the number of study items to 46. The modified measure was then pilot tested (with 20 nurses randomly selected) with comparable reliability and validity determined. Two copies of the questionnaire were prepared, one in English and one in Arabic using translation and back-translation psychometric procedures. The survey was then divided into a number of segments and these and their item numbers are presented in Table 2.

Procedure: Researchers visited each department with nurses in each of the three community hospitals and met with the nurse administrator. They provided a brief description of the study and explained the questionnaire. The charge nurse then distributed the questionnaires to all of the nurses in their respective departments. Of the 399 questionnaires distributed, 288 were completed and returned in a sealed envelope, a participation rate of 72%. Completion of the questionnaire constituted informed consent.

Data analysis: The data were analyzed using SPSS 15. All are presented in proportions or percentages and means. Statistical comparisons of values between different groups of nurses on their demographical variables were carried out using cross tabs and Chi-square analyses. In all cases a p-value of 0.05 or less was considered significant.

RESULTS

The results will be presented in response to research questions 2nd and 3rd. On survey questions about violence perceptions, threats and reporting 32% of the nurses indicated little or no worries, 35% reported their concerns as neutral (i.e., neither worried or not worried) and 33% indicated being moderately to very worried. Although, there were procedures for reporting workplace violence at all three hospitals, only 50% of the participants were aware of them. Of those aware of the procedure availability, 90% knew how to follow it. Violence reporting was encouraged by 37% of participants. In 84% of the cases, encouragement to report violence was given by management; only 16% of the nurses were encouraged to report workplace violence by their colleagues. Table 3 provides additional information on violence perception and actions.

Table 3: Violence perception: Threats and reporting (n = 288)

Violence perception and action	Frequency	Percent (%)
How worried are you about work place violence?		
Not much worried	55	19
Not worried	38	13
Neither worried nor not worried	100	35
Worried some	55	19
Very worried	40	14
Are there violence reporting procedures available?		
Yes	144	50
No	144	50
Do you know how to use the reporting procedures?		
Yes	129	90
No	15	10
Have you been encouraged to report violence?		
Yes	106	37
No	182	63
If encouraged, who was did it?		
Management	89	84
Colleagues	17	16

Physical violence (Prevalence and related factors): The prevalence of physical violence was 26% among the study participants. More violence was experience in hospital 2 (79%) followed by hospital 1 (20%) and hospital 3 (1%). About 35% of the participants had experienced violent actions by weapons. About 17% of the nurses perceived violence in the workplace as normal. In 76% of the cases, the nurses were attacked by patients/clients. Most (79%) of the violent actions took place inside the health facility. There were several responses of the nurses to the violence; 28% reported they had no reaction, 32% said they pretended it never happened, 17% told the attacker to stop, 5% tried to defend themselves physically, 1% told friends/family, 5% sought counseling, 5% told colleagues and 7% reported it to a senior staff member.

According to 92% of the participants, the violent actions could have been prevented. These actions caused injuries to 63% of the nurses and 53% of the injuries required formal treatment. In response to the violence 48% of nurses took time off.

Table 4: Characteristics of physical violence (n = 75)

Variables	Frequency	Percent (%)
Physical violence		
Yes	75	26
No	213	74
Hospital		
1	15	20
2	59	79
3	1	1
Weapon use		
Yes	26	35
No	49	65
Is violence normal?		
Yes	13	17
No	62	83
Violent actions by		
Patients/clients	57	76
Family member (s)	18	24
Place of violent action		
Inside health facility	59	79
Outside the facility	9	12
Patient's home	7	9
Was violent action preventable?		
Yes	69	92
No	6	8
Did violent action cause injury?		
Yes	47	63
No	28	37
Was formal treatment required?		
Yes	40	53
No	35	47
Took time off due to violence?		
Yes	36	48
No	39	52
Was the incident investigated?		
Yes	16	21
No	4	5
Do not know	55	74
Of those investigated, who investigated?		
Management	9	56
Union	6	38
Association	1	6
Consequence for the attacker		
None	28	37
Verbal warning issued	47	63
Degree of satisfaction		
Very dissatisfied	7	10
Dissatisfied	19	25
Neutral	49	65

Asked if the incident was investigated or not, 70% said yes; 57% of these investigations were carried out by management. The investigations led to no actions being taken in 37% of the cases and verbal warning issued in another 55%. In the violent cases, employers offered counseling to 3% of the nurses and other actions in another 3% of the cases; 94% received no treatments. Among nurses exposed to violence, only 10% were satisfied by the handling of the situation, 10% were very dissatisfied, 25% were dissatisfied and 65% were neutral. In cases where violent actions were not reported, reasons given included it was not important (40%), shame (28%), guilt (13%), fear of negative consequences (11%) and it was useless (7%) (Table 4).

Table 5: Relationships between reported physical violence and the nurse participants' characteristics (n = 288)

	Prevalence of physical violence		
Variables	Yes	No	p-value
Hospital			
1	15	37	0.007
2	59	145	
3	1	31	
Country of origin			
Saudi	21	93	0.020
Non-Saudi	54	120	
Gender			
Male	6	37	0.034
Female	69	176	
Present job			
Senior manager	5	38	0.000
Staff nurse	70	175	
Work experience (years)			
<5	30	116	0.000
6-10	31	43	
>10	14	39	
Main job time			
Full-time	72	207	0.636
Part-time	3	6	
Shifting work			
Yes	67	08	0.439
No	181	32	
Staff no			
<5	37	136	0.011
6-10	17	61	
>10	21	26	
How worried?			
Very worried	16	39	0.130
Worried	5	33	
Neutral	33	67	
Not worried	11	44	
Not very worried	10	33	
Reporting procedures?			
Yes	48	96	0.007
No	27	117	
Reporting encouragement?			
Yes	59	47	0.000
No	16	166	

Comparisons of reported physical violence and the characteristics of the nursing participants: The following data address research question 4th. As shown in Table 5, physical violence among study participants differed by hospital (p = 0.007), whether the nurses were Saudi or not (p = 0.020), their gender (p = 0.034), present job (p = 0.000), work experience (p = 0.000), staff number (p = 0.001), procedures for reporting incidents (p = 0.00) and encouragement for reporting workplace violence (p = 0.000) (Table 5).

Factors not associated with reporting physical violence were the nurses' main job (p = 0.636) and how worried they were about workplace violence (p = 0.130) (Table 5).

DISCUSSION

Physical violence and its related factors: In the present study, violence against nurses was investigated from the view of workplace violence. Study objectives included: Determining the violence prevalence against nurses in

Al-Medina hospitals and investigating the perception against violence amongst nurses at Al-Medina hospitals. The results of the present study showed that the prevalence of physical violence is 26%. The prevalence of physical violence in the study is higher than that reported by the study of Mohamed (2002) in which physical violence was 16.2%. Another study conducted by Adib *et al*. (2002) in Kuwait showed higher prevalence of physical violence 51%. Other studies conducted in USA showed prevalence of physical violence approximately 25%.

The data of the results showed that physical violence is more prevalent in hospital 2. No known previous published studies are available on these hospitals. It is plausible to explain this phenomenon by taking into consideration the fact that this hospital is closed to Alharam and by thus, heterogeneous groups of people in large numbers visit the hospital. The quality of service may be not convinced and accordingly may lead to motivate the patients or their relatives to exert physical violence against nurses.

The data of the results indicated that nationality is correlated significantly with physical violence ($p = 0.020$) and non Saudi nurses are more exposed to physical violence. The result is consistent with findings reported by Adib *et al*. (2002) in which it was reported that non-Kuwaiti nurses were more exposed to violence. This finding may be explained by different considerations among which are more non-Saudi nurses work in hospitals and accordingly will be more subjected to more violent actions. Another point to explain the data is based on the fact that these hospitals received patients from different nationalities in large numbers which create more chances for violence. Taken together, violence is performed by different people from different nationalities against nurses from different nationalities.

The study data showed that gender is correlated significantly with physical violence ($p = 0.034$) and that female are more subjected to violence compared with males. This result agrees with other studies (Adib *et al*., 2002). Anyhow in most studies of violence against nurses, it is not indicated that a gender is considered a specific risk for assaults (Stockdale and Phillips, 1989; Graydon *et al*., 1994).

Marital status was correlated significantly with physical violence and married nurses were more subjected to physical violence. This result can be explained from a social context of view in which married nurses may have family problems before coming to hospital which is expected to affect the quality of nursing services. To the best knowledge of researcher, no previous studies were identified to explain this phenomenon.

Present job is correlated significantly with physical violence ($p = 0.000$). Staff nurses were more prone to physical violence, since they represent the first line of contact with patients. This finding is in consistent with several studies (Adib *et al*., 2002; Clements *et al*., 2005; Ferns, 2005).

CONCLUSION

Physical violence among nurses was studied in Al-Medina hospitals. Physical violence was studied in hospitals 1-3. The prevalence of physical violence is 26% among study participants in study hospitals. Physical violence was more prevalent in hospital 2. Violence was associated significantly with nationality. Patients from different nationalities made aggressive actions against nurses from different actions. Finally, violence among nurses is an occupational problem and affects the nurse's perception for hospital as a safe place.

RECOMMENDATIONS

- The present study recommends more investigations for variations in hospital related factors in terms of management and setting because hospitals vary in prevalence of violence
- To introduce training courses in terms how to perceive violence and how to report it
- To rearrange the dynamics of nurses at work since non-Saudi nurses are more exposed to violence
- More effective measures have to be taken to decrease the violence among nurses. These measures may be viewed from the hospital as an organization and the individual staff

REFERENCES

AbuAlRub, R.F., M.F. Khalifa and M.B. Habbib, 2007. Workplace violence among Iraqi hospital nurses. J. Nursing Scholarship, 39: 218-288.

Abualrub, R.F. and A.H. Al-Asmar, 2011. Physical violence in the workplace among Jordanian hospital nurses. J. Transcult Nurs., 22: 157-165.

Adib, S.M., A.K Al-Shatti, S. Kamal, N. El-Gerges and M. Al-Raqem, 2002. Violence against nurses in healthcare facilities in Kuwait. Int. J. Nurs. Studies, 39: 469-478.

Al-Enezi, N., R.I. Chowdhury, M.A. Shah and M. Al-Otabi, 2009. Job satisfaction of nurses with multicultural backgrounds: A questionnaire survey in Kuwait. Applied Nurs. Res., 22: 94-100.

Anderson, C. and M. Parish, 2003. Report of workplace violence by Hispanic nurses. J. Transcultural Nursing, 14: 237-243.

Camerino, D., M. Estryn-Behar, P.M. Conway, B.I. van der Heijden and H.M. Hasselhorn, 2008. Work-related factors and violence among nursing staff in the European NEXT study: A longitudinal cohort study. Int. J. Nurs. Stud., 45: 35-50.

Chang, E.M., K.M. Hancock, A. Johnson, J. Daly and D. Jackson, 2005. Role stress in nurses: Review of related factors and strategies for moving forward. Nurs. Health Sci., 7: 57-65.

Chapman, R., I. Styles, L. Perry and S. Combs, 2010. Examining the characteristics of workplace violence in one non-tertiary hospital. J. Clin. Nurs., 19: 479-488.

Clements, P.T., J.T. DeRanieri, K. Clark, M.S. Manno and D.W. Kuhn, 2005. Workplace violence and corporate policy for health care settings. Nurs. Econ., 23: 119-124.

Dellasega, C.A., 2009. Bullying among nurses. Am. J. Nurs., 109: 52-58.

Duxbury, J., 1999. An exploratory account of registered nurses experience of patient aggression in both mental and general nursing settings. J. Psychiatr. Ment Health Nurs., 6: 107-114.

Ferns, T., 2005. Violence in the accident and emergency department: An international perspective. Acci. Emerg. Nurs., 13: 180-185.

Gacki-Smith, J., A.M Juarez, L. Boyett, C. Homeyer, L. Robinson, S.L. MacLean, 2010. Violence against nurses working in US emergency departments. J. Healthc Prot. Manage., 26: 81-99.

Gates, D.M., G.L. Gillespie and P. Sucoop, 2011. Violence against nurses and its impact on stress and productivity. Nurs. Econ., 29: 59-66.

Graydon, J., W. Kasta and P. Khan, 1994. Verbal and physical abuse of nurses. Canadian J. Nurs., 7: 70-89.

Grenyer, B.F.S. and O. Ilkiw-Lavalle, 2003. Differences between patient and staff perceptions of aggression in mental health units. Psychiatr. Serv., 54: 389-393.

Hader, R., 2008. Workplace violence: Survey 2008. Nursing Manage., 39: 13-19.

Laposa, J.M., L.E. Alden and L.M. Fuullerton, 2003. Work stress and posttraumatic stress disorder in ED nurses/personnel. J. Emergency Nursing, 29: 23-28.

Lee, S.S., S.G. Gerberich, L.A. Waller, A. Anderson and P. Mc Govern, 1999. Work-related assault injuries among nurses. Epidemiology, 10: 685-691.

Magnavita, N. and T. Heponiemi, 2011. Workplace violence against nursing students and nurses: An italian experience. J. Nurs. Scholarsh., 43: 203-203.

Mohamed, A.G., 2002. Work-related assaults on nursing staff in Riyadh, Saudi Arabia. J. Family Community Med., 9: 51-56.

Natan, M.B., A. Hanukayev and S. Fares, 2011. Factors affecting Israeli nurses reports of violence perpetrated against them in the workplace: A test of the theory of planned behavior. Int. J. Nursing Pract., 17: 141-150.

Oostrom, J.K. and H. van Mierlo, 2008. An evaluation of an aggression management training program to cope with workplace violence in the healthcare sector. Res. Nurs. Health, 31: 320-328.

Sellers, K., L. Millenbach, N. Kovach and J.K. Yingling, 2009. The prevalence of horizontal violence in New York state registered nurses. J. New York State Nurses Associat., 40: 20-25.

Stockdale, J. and C. Phillips, 1989. Physical attack and threatening behaviour. New survey ?ndings. Occup. Health, 4: 212-216.