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VIOLENCE AND AGGRESSION TOWARD HEALTH CARE PROFESSIONALS IN EMERGENCY DEPARTMENTS IN TABUK, SAUDI ARABIA, 2015

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ABSTRACT

Background: Workplace violence is a concerning issue. Healthcare workers represent a significant portion of the victims, especially those who work in the emergency department. **Objectives:** To estimate the prevalence, identify the types, sources and reasons of violence that occur in public hospitals emergency room (ER) departments of Tabuk as well as to investigate its impacts on providing good health care services. **Subjects and methods:** A cross-sectional study was carried out between June and October 2015 among health care professionals (physicians, nurses and paramedics) of all three public hospital ER departments of Tabuk city, Saudi Arabia (two belonging to Ministry of health and one belonging to military division). A predesigned Arabic validated self-administered questionnaire was utilized. **Results:** The study included 129 health care professionals. Their age ranged between 21 and 62 years with a mean±SD of 31.1±8.3 years. Almost two-thirds were males (64.3%) and married (66.7%). Nearly half of them were physicians (48.8%) whereas 34.1% were nurses. History of violence during working hours in ER was reported among the majority of health care professionals (90.7%). Workplace violence was more significantly reported among older healthcare professionals (>35years) (p=0.027), those working in Ministry of Health ED departments (p=0.044), physicians (96.8%) followed by nurses (90.9%) (p=0.004), those having longer experience in ER departments (p=0.015) and in KSA (p=0.015). More than half of violent insults (58.9%) took place during night shifts. In most of the cases (79%), violence was committed by hands or fists whereas, in 17.3% of the case, weapons or instruments were used. Insults were reported in only 38.5% of cases. The commonest reason of non-reporting as mentioned by healthcare professionals was the previous experience of reporting violence with no action was taken (65.3%). According to healthcare professionals` perspectives, the commonest reported reason for violence in the ER departments agreed upon by them were the absence of punishment (90.6%), followed by the shortage in the number of staffs (88.4%), overcrowding (87.6%) and lack of security (86.7%). The best solutions agreed upon by health care professionals to reduce ER workplace violence were encouragement and establishment of a system to report violent events (91.5%) and an establishment of punishment policy that is clear for both health workers and patient and their companions (91.5%). **Conclusion**: workplace violence is a significant problem facing a considerable proportion of healthcare professionals in emergency departments, Tabuk, Saudi Arabia.

KEY WORDS: victims, especially those who work in the emergency department.

INTRODUCTION

Compared to other occupational groups, health care professionals are ranked as one of the most vulnerable groups experiencing violence and aggressive behavior.[1,2] In 2002, the international Labor Office or stated that "while workplace violence affects practically all sectors and all categories of workers, the health sector is at major risk".[3]

One of the most difficult situations that health care providers face is being physically harmed or even threatened by patients or their or colleagues.[4] The problem of 'violence' against health professionals have been investigated in a number of countries and it seems that its prevalence depends on its definition and the populations investigated. However, studies indicated that as much as 90% of health professionals have experienced violent incidents at work, with percentages ranging from 70-80% for nurses and doctors.[5] However, the actual prevalence of violence against health professionals is unknown because there is no "standard definition" on what constitutes a violent incident in health care situations.[6]

Workplace violence can be physical, sexual or psychological in nature and can be actual or threatened.[7-9] It has several bad outcomes as it may lead to termination of employment, lost work days, loss of

consciousness, shortage of health care workers, and suboptimal quality of health services delivered to patients.[10]

Violence is more prevalent in the health sector than any other sectors, with more than half of insults taking place in the hospital due to some situations such as long procedures in service delivery and lack of needed materials in the facility.[11, 12] Patients or their relatives themselves may have behavioral issues such as alcoholism and drug abuse while some hospital members of staff may have poor attitude and approach in relating with patients.[12] Furthermore, patients are usually under stress and in pain or are financially handicapped and so they transfer their aggression to health workers.[13] Aggression may be more serious at the emergency unist.[14] Policy and procedure addressing workplace violence in the healthcare settings has been reported in many developed countries[14] but is almost not exist in developing countries. Many violence against the health professionals goes often unreported officially.[15, 16]

Despite the high frequency of violence towards medical professionals working at hospital ER departments, there remains a lack of adequate research evidence about the issue.

Because of a lack of reporting mechanisms for violence in primary healthcare settings, data are scarce, this study was carried out to determine the magnitude of violent events that occur in public hospitals ER departments of Tabuk, identify the types and sources of violence and reasons for violence as well as to identify the consequences and impacts of violence on providing a good health care services in order to propose possible solutions to prevent violence and improve security measures.

Subjects and methods

A cross-sectional study was carried out between June and October 2015 among health care professionals (physicians, nurses and paramedics) of all three public hospital ER departments of Tabuk city, Saudi Arabia (two belonging to Ministry of health and one belonging to military division). The whole population was targeted due to small numbers. A predesigned self-administered questionnaire distributed to all working physicians, nurses and paramedics in the involved hospitals` ER departments. The questionnaire includes demographic data of the respondents, workplace characteristics, the prevalence of violence events during the previous 12 months, risk factors contributing to workplace violence, personal opinions, perceptions, attitudes, experiences and recommendations concerning the subjects' workplace violence. The used questionnaire was mainly developed from the WHO survey questionnaire about violence in health care settings.[17] It is in Arabic and previously validated and tested for reliability.[18] All research ethics steps were followed according to Declaration of Helsinki:[19]

Data were collected, reviewed, coded and entered into the computer. Data were presented in the form of frequencies and percentages for qualitative variables and mean±standard deviation for continuous variables. Chi-squared test was used for comparing qualitative data. Statistical analysis was done using SPSS program version 20 where p-value at or below 0.05 was utilized as a cut-off for statistical significance.

RESULTS

The study included 129 health care professionals. Their age ranged between 21 and 62 years with a mean±SD of 31.1±8.3 years. Table 1 presents their background characteristics. Almost two-thirds were males (64.3%) and married (66.7%). More than half of them (55.8%) were recruited from the military hospital. Nearly half of them were physicians (48.8%) whereas 34.1% were nurses. More than half of them (59.7%) had an experience of 5 years or less in ER departments whereas 72.1%% had an experience of five years or less of working in Saudi Arabia hospitals.

History of violence during working hours in ER was reported among the majority of health care professionals (90.7%) as demonstrated in figure1.

As shown in table 2, workplace violence was more significantly reported among older healthcare professionals (>35years) (p=0.027), those working in Ministry of Health ED departments (p=0.044), physicians (96.8%) followed by nurses (90.9%) (p=0.004), those having longer experience in ER departments (p=0.015) and in KSA (p=0.015).

Table 3 shows that physical and verbal insults exceeded two times among 20.9% and 65.2% of healthcare professionals who exposed to workplace violence, indicating the frequency of this phenomenon among them.

More than half of violent insults (58.9%) took place during night shifts. In most of the cases (79%), violence was committed by hands or fists whereas, in 17.3% of the case, weapons or instruments were used. Also, in most of the cases (76.7%), violence was committed by patient`s relatives/friends whereas, in 32.6%, they were committed by patients themselves. In a vast majority of insults (94%), the offenders were males and aged between 26 and 35 years in more than half of insults (54.7%). Table 3

Violence insults that experienced in ER department were reported in only 38.5% of cases. The commonest reasons of non-reporting as mentioned by healthcare professionals were a previous experience of reporting violence with no action was taken (65.3%) and feeling that the violent event was part of their job and there was no need to report (25%). Table 3.

A majority of the respondents (86.3%) were dissatisfied with security measures in the hospital and 61.5% of them reported that violence affected their performance in the period immediately following the violent event. However, only 25.6% of them claimed that they acted against their principles or done anything against their nature because of a threat of violence. Almost half of them (50.4%) cited that they have ever thought of quitting the ER or changing workplaces due to violence. Table 3.

According to healthcare professionals` perspectives, the commonest reported reason for violence in the ER departments agreed upon by them were absence of punishment (90.6%), followed by shortage in the number of staff (88.4%), overcrowding (87.6%), lack of security (86.7%) and long waiting time for the patient (79%). Table 4

The best solutions agreed upon by health care professionals to reduce ER workplace violence were encouragement and establishment of system to report violent events (91.5%), establishment of punishment policy that is clear for both health workers and patient and their companions (91.5%), physical separation through a line that non-authorized people cannot cross (90.7%), presence of armed police force (90.7%) and increase the number of ER department staff (90.7%). Table 5

Table 1: Baseline characteristics of the participants.

	Frequency n=129	Percentage
Age (years)		
≤35	97	75.2
>35	32	24.8
Gender		
Male	83	64.3
Female	46	35.7
Workplace		
Ministry of Health	57	44.2
Military	72	55.8
Marital status		
Married	86	66.7
Un-married	43	33.3
Position		
Physician	63	48.8
Nurse	44	34.1
paramedics	22	17.1
Experience in ER department (years)		
≤5	77	59.7
6-10	24	18.6
>10	28	21.7
Experience in the current ER department (years)		
≤5	93	72.1
6-10	24	18.6
>10	12	9.3

Table 2: Factors associated with workplace violence among ER health care professionals.

	History of workplace violence		χ^2	p-value
	Yes N=117	No N=12		
Gender				
Male (n=83)	75 (90.4)	8 (9.6)		
Female (n=46)	42 (91.3)	4 (8.7)	0.31	0.860
Age (years)				
≤35 (n=97)	85 (87.6)	12 (12.4)	P value of Fischer Exact test 0.027	
>35 (n=32)	32 (100)	0 (0.0)		
Workplace				
MOH (n=57)	55 (96.5)	2 (3.5)		
Military (n=72)	62 (86.1)	10 (13.9)	4.06	0.044
Marital status				
Married (n=86)	80 (93.0)	6 (7.0)		

Unmarried (n=43)	37 (86.0)	6 (14.0)	1.65	0.198
Position				
Physician (n=63)	61 (96.8)	2 (3.2)		
Nurse (n=44)	40 (90.9)	4 (9.1)		
Paramedic (n=22)	16 (72.7)	6 (27.3)	11.2	0.004
Experience in ER department (years)				
≤5 (n=77)	66 (85.7)	11 (14.3)		
6-10 (n=24)	23 (95.8)	1 (4.2)		
>10 (n=28)	28 (100)	0 (0.0)	8.37	0.015
Experience in the current ER department (years)				
≤5 (n=93)	81 (87.1)	12 (12.9)		
6-10 (n=24)	24 (100)	0 (0.0)		
>10 (n=12)	12 (100)	0 (0.0)	8.32	0.016

Table 3: Description of workplace violent insults among ER health care professionals

	Frequency	Percentage
Frequency of physical insults		
No	76	58.9
≤twice	26	20.2
>twice	27	20.9
Frequency of verbal insults		
No	15	11.6
≤three times	30	23.3
>three times	84	65.2
Timing of the violent event		
Daytime shift	36	27.9
Night shift	75	58.1
Both shifts	18	14.0
Nature of the physical insult (n=81)		
Use of weapons/instruments	14	17.3
Hands/fists	64	79.0
Both	3	3.7
Violence usually has committed by*		
Patient`s relatives/friends	99	76.7
Patient himself	42	32.6
Others	4	3.1
All	4	3.1
Offender`s gender		
Male	110	94.0
Female	7	6.0
Offender `s age (years)*		
18-25	37	31.6
26-35	64	54.7
36-45	29	24.8
>45	3	2.6
All	6	5.1
Reporting violence that you experienced in ER department		
Yes	45	38.5
No	72	61.5
If No, Why? (n=72)*		
-You felt that the violent event was part of your job and there was no need to report	18	25.0
-Previous experience of reporting violence with no action taken	47	65.3
-You were afraid of the consequences	5	6.9
-You did not how to report or to whom you should report	5	6.9
Satisfaction with security measures in the hospital		
Yes	16	13.7

No	101	86.3
Did violence affect your performance in the period immediately following the violent event?		
Yes	72	61.5
No	45	38.5
Have you acted against your principles or done anything against your will because of threat of violence?		
Yes	30	25.6
No	87	74.4
Have you ever thought of quitting the ER or changing workplaces due to violence ?		
Yes	59	50.4
No	58	49.6

* The sum exceeds 100%

Table 4: The main reasons for violent behavior in the ER department

Reasons	Agree N (%)	Neutral N (%)	Disagree (N)
Lack of security	112 (86.7)	14 (10.9)	3 (2.4)
Absence of punishment	117 (90.6)	10 (7.8)	2 (1.6)
Long waiting time for the patient	102 (79.0)	16 (12.4)	11 (8.6)
Shortage in the number of staff	114 (88.4)	11 (8.5)	4 (3.1)
Overcrowding	113 (87.6)	16 (12.4)	0 (0.0)
Lack of patient's privacy	45 (34.9)	36 (27.9)	48 (37.2)
Cultural and religious beliefs (e.g., male relatives do not want their females to be examined by male doctors)	76 (58.9)	34 (26.3)	19 (14.8)
Psychiatric illness of the offender	76 (58.9)	32 (24.8)	21 (16.3)

Table 5: The best solution to reduce ER workplace violence

Solution	Agree N (%)	Neutral N (%)	Disagree N (%)
Physical separation (a line that non authorized people cannot cross and if he/she did it would be considered breaking the law and deserve legal punishment)	117 (90.7)	9 (7.0)	3 (2.3)
Presence of armed police force	117 (90.7)	9 (7.0)	3 (2.3)
Training on how to deal with angry people and stressful events	111 (86.0)	9 (7.0)	9 (7.0)
Encourage and establishment of system to report violent events	118 (91.5)	9 (7.0)	2 (1.5)
Establishment of punishment policy that is clear for both health workers and patient & their companion	118 (91.5)	11 (8.5)	0 (0.0)
Increase number of ER department staff (Doctors, nurses, paramedic)	117 (90.7)	9 (7.0)	3 (2.3)
Divide the ER department into two departments one for male and the other for female only	88 (69.0)	27 (20.9)	13 (10.1)

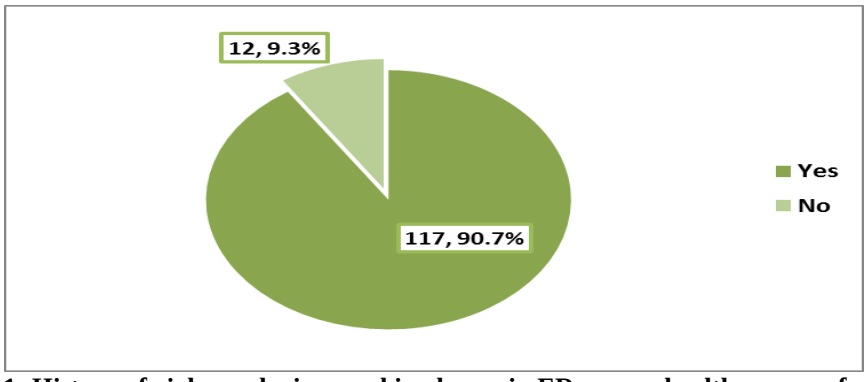

Figure 1: History of violence during working hours in ER among health care professionals

DISCUSSION

Workplace violence towards health care professionals has increased during the last decades, particularly in ER departments with serious consequences that may extend beyond individuals to an entire health care organization.[20]

In the present survey, workplace violence was reported by the majority of healthcare professionals (90.7%). In another study conducted in Saudi public hospitals,[21] more than two-thirds of healthcare professionals experienced some form of violence in the year before the survey. Studies conducted in developed[22-26] and developing[18, 27-29] countries vary in their estimation of the magnitude of healthcare professionals who exposed to violent acts. Comparing our results with those reported from other countries is difficult because of differences in the definition of violence, variation in setting and population as well as in the methodologies utilized.

Contrary to several studies,[5,6,10,30] the physicians were overwhelmingly more likely to be exposed to violent events than nurses and finally paramedics despite the fact that nurses comprise one of the largest groups in the health care professions, they provide 24-hours care and they have direct contacts with patients. The conduction of this study in ER departments may explain this as physicians are in direct contact with patients as equal as nurses. Also, the critical situation of patients and/or their relatives may contribute to this high rate of violence.

The finding that the majority of health care professionals, particularly physicians and nurses were exposed to workplace violence may question the availability of violence prevention programs and security measures in the Saudi hospital ER departments and may have an implication on occupational health. In the present study, the majority of health care professionals (86.3%) were dissatisfied with security measures in the hospital. Workplace violence significantly increased the likelihood of health care professionals` absenteeism, job dissatisfaction and poor physical and mental health and can negatively impact the quality of care.[31] Martino (2007)[32] noted that job security is always associated with low risk of violence at work.

In this study, respondents who reported exposure to violence during the past year were asked to identify their aggressors. The majority of perpetrators of violence were the relatives of patients, followed by the patients themselves. These results are similar to those reported in the literature,[21, 33] which indicated that when people are exposed to critical health conditions and are transferred to ED departments in hospitals for medical intervention, they and their relatives or friends have high levels of stress and feelings of anger and frustration which in turn, might be manifested in the use of violence against others, possibly healthcare providers.[29, 34] According to Kwok et al., (2006)[35] patients and their relatives were the main perpetrators in all cases.

In the present study, only 38.5% of the respondents reported the violent insults. Meanwhile, almost two-thirds of those who did not notify reported that they had previous experience of reporting violence with no action taken. In addition, more than half of the victims claimed that violence affect their performance in the period immediately following the violent event and they thought of quitting the ER or changing workplaces due to violence. Thus, these violent events will affect the overall health care delivery. Therefore, a Further investigation is warranted in order to determine triggering factors and measures of prevention.

Among important limitations of the current survey is its cross-sectional design which did not confirm the causality of the association between compared variables. The self-reported questionnaire utilized in this study also is subjected to inaccurate reporting and misclassification bias. Finally, the study was limited to workplace violence exposure among ER health care professionals. Nonetheless, this study collecting data on the nature of workplace violence in addition to the identification of risk factors will help the development of effective policies and practical approaches to address workplace violence in ER departments of different health care facilities in Saudi Arabia.

Conclusively, workplace violence is a significant problem facing a considerable proportion of healthcare professionals in emergency departments, Tabuk, Saudi Arabia.

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