Prevalence and Epidemiological Features of Workplace Violence among Female Nurses at Governmental Hospitals in Qatar

Maha S. Almohannadi¹, Anees Alyafei², Rasha Salama³, Mohamad Gaith Al-Kuwari⁴, Izz Eldin Eljack⁵

¹Community Medicine Specialist, Hamad Medical Corporation, Qatar
²Community Medicine Consultant, Primary Health Care Corporation, Doha, Qatar
³Consultant and Advisor of Public Health, Ministry of Health, UAE
⁴Senior Preventive Medicine Consultant, Primary Health Care Corporation, Doha, Qatar
⁵Public Health Consultant, Aspetar Hospital, Qatar

Corresponding author: Anees AlYafei, Community Medicine Consultant, Primary Health Care Corporation, Doha, Qatar

Citation: Almohannadi MS, Alyafei A, Salama R, Al-Kuwari MG, Eljack IE (2021) Prevalence and Epidemiological Features of Workplace Violence among Female Nurses at Governmental Hospitals in Qatar. J Community Med Public Health 5: 205. DOI: 10.29011/2577-2228.100205

Received Date: 14 February, 2021; Accepted Date: 26 February, 2021; Published Date: 03 March, 2021

Abstract

Background: Violence against nurses is a silent epidemic, but today concerns are rising about the growing levels of violence towards nurses.

Objective: To estimate the prevalence of workplace violence among nurses working at governmental hospitals in Qatar.

Results: Surveying HCW with response rate of (90%), (390) nurses with mean age of (36.08 ± 7.747). Most of them were married (79.2%) and non-Qatari (95.4%). Verbal abuse was the most common type of violence (30.6%) followed by physical and sexual harassment of (5.5%) and (1.7%) respectively. In all types of the studied violence either patients or patients’ relatives were the most common source of the violence. Health care management was greatly encouraging all the staff for reporting such incidences (88%) comparing to support from colleges or friends.

Conclusion: Less than half of the nurses experienced workplace violence during the year prior to the study. Verbal abuse was the most common type while sexual harassment was the least common. The majority of attackers were patients, relatives of patients, then HCWs. There is a high need for raising awareness at HCW level as well as organizational level and implementing efficient mechanism to prevent and deal with such violence.

Keywords: Workplace violence; Female nurse; Verbal violence; Physical abuse; Sexual harassment

Abbreviations: HCWs: Health Care Workers; HMC: Hamad Medical Corporation; ICU: Intensive Care Unit; NIOSH: National Institute for Occupational Safety and Health; OSHA: Occupational Safety and Health Administration; PHCC: Primary Health Care Corporation; SPSS: Statistical Package of Social Sciences

Introduction

Violence at work has become an alarming phenomenon worldwide. The burden of the problem is unknown and recent surveys showed that current estimates represent only the tip of the iceberg [1].

Workplace violence is defined as “incidents where staff are abused, threatened or assaulted in circumstances related to their work, including commuting to and from work, involving an explicit challenge to their safety, well-being, or health”. Workplace violence affects the dignity of millions of workers worldwide. It is a major source of inequality, discrimination, stigmatization, and conflict at the workplace. Increasingly it is becoming a central human right [2].

Violence at workplace can affect the performance of Health Care Workers (HCWs) and may lead to frequent absence from work or job termination. Therefore, violence at work has a significant impact on the efficiency and effectiveness of health systems at large [3]. Workplace violence has been categorized into external violence, client-initiated violence and internal violence according to the Occupational Safety and Health Administration (OSHA) [4].

Over the past two decades, the toll of violent events on workers and workplaces has gained attention as a public health concern [5].
Workplace violence encompasses a spectrum of events ranging from verbal harassment to physical assault and homicide, though the bulk of research has emphasized physical violence, especially workplace homicides. On the other hand, verbal abuse and sexual harassment was found to be the most common forms of violence; the incidents found to be as traumatic as physical assault [6].

According to surveillance data from the National Institute for Occupational Safety and Health (NIOSH), an average of (20) workers’ lives are lost weekly as a result of violence at work [7]. Homicide continually ranks among the top three leading causes of fatal occupational injuries for all workers and is the leading cause of workplace fatalities for women [8].

Nonfatal workplace assaults are more difficult to ascertain and estimates from the National Crime Victimization Survey, suggests that (2) million people experience nonfatal injuries due to violence at work [9,10].

The study is novel in the state of Qatar as it is the first study to spot the light on the violence among nurses at a governmental hospital.

Aim and Objective

The aim of this study is to estimate the prevalence of workplace violence among nurses working at governmental hospitals in Qatar during (2009).

Methods

Study Settings and Design

Governmental hospitals in Qatar were the setting of the study. Hamad Medical Corporation (HMC) is the premier non-profit health care provider in Qatar. Since its establishment, HMC has rapidly developed highly specialized medical facilities capable of providing state of the art diagnosis and treatment of diseases through more than (20) hospitals. HMC provides, secondary, tertiary health care and some comprehensive primary [11]. An observational cross-sectional design was conducted.

Study Population

The study included female nurses currently working in HMC. The estimated total number is found to be around (4158) female nurses. They are from various nationalities with different qualifications. The female nurses were enrolled in the study according to the eligibility criteria. Inclusion criteria: female nurses, all age groups, all nationalities, and certified nurses. While, the exclusion criteria is nurses on leave during the data collection period.

Sample Size and Sampling Technique

A total number of (4158) female nurses work in HMC. The data was obtained from the human resources department at HMC [12].

The effect size was (54.3%) [13] and the confidence level was (95%) with a (5%) statistical error.

EPI info 6 software computer program was used to calculate the appropriate sample size. The following sample equation was applied [14]:

\[ n = \frac{\text{DEFF} \times N_p (1-p)}{\left( \frac{d^2}{2 \times Z^2} \times (1-\alpha/2) \times (N-1) + p \times (1-p) \right)} \]

The sample size was accordingly calculated to be (350) nurses. We added (10%) to inflate our sample size compensating for non-response; the sample size hence was (385) nurses. A proportionate random sampling was applied to the lists, according to number of female nurses working in each hospital.

Research Instruments

The nurses were asked to complete a modified standardized questionnaire developed by the principal investigator. The questionnaire was divided into:

- The sociodemographic features.
- Interaction with patients among the studied population and awareness and encouragement about reporting the violence.
- The last (12) months experiences of physical and psychological violence which included, physical, verbal abuse, sexual harassment, and racial harassment.

Quality Measures of Questionnaire

The questionnaire was modified according to the cultural and environmental factors. In addition to the content validity, which was verified, it was translated into Arabic to overcome the language barrier; translation was done by a professional translation office. Also, translation-retranslation to verify the accuracy of the language. Review of questionnaire for any mistakes, misspellings, language difficulties and confusing questions, by the principal investigator, professors in the community medicine department, in addition to peer review. The principal investigator conducted pre-testing of questionnaire on (60) nurses, and these were excluded from the sample of the study.

Ethical Considerations

The approval for conduction of the study was attained from HMC Medical Research Center and Research Committee as well as permission from HMC executive director of nursing.

Participants’ written consent was obtained in order to contribute, after thorough explanation of the study. Confidentiality of data was ensured and kept in password secured computer as well as lockers with only access to the researcher.
Results

Collected data was coded and entered using Statistical Package of Social Sciences (SPSS®) software by the researcher. Questionnaires were distributed to (390) nurses and a total of (346) questionnaires were received back with a response rate of (90%).

Sociodemographic features of the participants

The mean age and standard deviation of the study subjects were (36.08 ± 7.747). Most of them were married (79.2%) with only (4%) being divorced or widowed. Almost all of the nurses were non-Qatari (95.4%). Most nurses (87.9%) in the study were staff nurses. About three-quarters of the nurses (73.1%) had work experience of more than (5) years, while only (2%) of them attained a working experience of less than one year. Around half of the nurses (54.6%) worked in inpatient care, only one nurse (0.3%) worked in home care and two nurses (0.6%) worked in technical services as shown in Table 1.

| Socio-demographic Data                | Frequency |
|---------------------------------------|-----------|
| Age (Completed Years)                 |           |
| < 30                                  | 81        | 23.4 |
| 30-35                                 | 94        | 27.2 |
| 36-40                                 | 93        | 26.9 |
| > 40                                  | 78        | 22.5 |
| Marital Status                        |           |
| Single                                | 58        | 16.8 |
| Married                               | 274       | 79.2 |
| Divorced/ Widowed                     | 14        | 4.0  |
| Nationality                           |           |
| Qatari                                | 16        | 4.6  |
| Non-Qatari                            | 330       | 95.4 |
| Job Title                             |           |
| Staff nurse                           | 304       | 87.9 |
| Charge nurse                          | 32        | 9.2  |
| Head nurse                            | 10        | 2.9  |
| Work Experience (Completed Years)     |           |
| <1                                    | 7         | 2.0  |
| 1-4                                   | 86        | 24.9 |
| 5-10                                  | 123       | 35.5 |

Table 1: Distribution of socio-demographic data among the studied population in Qatar: (n=346).

Table 2 shows that the majority of the nurses (86%) have routine direct physical contact with patients. Three quarters of the nurses work with adult patients (74.5%), followed by elderly patients (40.2%), then infants (34%).

The least worked with adolescents (27%) and children (25.2%). More than half of the nurses (56.3%) worked with both sexes of the patients, whereas (27.6%) worked with female patients and (16.1%) worked with male patients.

Upon assessment of awareness about reporting of violence, most of nurses (86.4%) in the sample stated that there are procedures for the reporting of violence in their workplace. Also, (84.7%) confirmed that there is encouragement to report workplace violence. The vast majority reported that workplace management is the main encouragement source for reporting as illustrated in Figure 1.

| Variables                      | Frequency |
|--------------------------------|-----------|
| Routine direct physical contact with patients | 293       | 86.0 |
| The patients most frequently worked with: |           |
| Infants                        | 116       | 34.0 |
| Children                       | 86        | 25.2 |
| Adolescents                    | 92        | 27.0 |
| Adults                         | 254       | 74.5 |
| Elderly                        | 137       | 40.2 |
| Sex of patients                |           |
| Females                        | 94        | 27.6 |
| Males                          | 55        | 16.1 |
| Both                           | 192       | 56.3 |

Table 2: Distribution of interaction with patients among the studied population in Qatar, 2009: (n= 341).
Prevalence of Workplace Violence

Physical Abuse

Only (19) nurses (5.5%) were subjected to physical violence in the workplace during the last (12) months. Figure 2 shows that the majority of the physically attacked nurses were pinched (63.2%), followed by being pushed (52.6%). Slapping and biting attained the least frequency with the same percentage (21.1%).

Verbal Abuse

In term of verbal abuse in workplace, (106) nurses (30.6%) were exposed to verbal violence in their workplace during the last (12) months. Most of the participants (74%) reported that verbal abuse was experienced sometimes from frequency perspectives as shown in Table 3.

Sexual Harassment

In term of exposure to sexual harassment in the workplace, results shows that only (6) nurses (1.7%) were subjected to sexual harassment in the workplace during the last (12) months. Five nurses (83.3%) confirmed that sexual harassment occurred once in the last year, but only one nurse (16.7%) affirmed that it occurred sometimes.

Moreover, half of the sexual harassment exposures reported that it was from the patients, while one third (33%) claimed it was from other HCW as illustrated in Figure 3.

Racial Harassment

In term of racial harassment in workplace among the studied population, fifty nurses (14.5%) had been racially harassed in the workplace during the last (12) months. Majority of them (80%) selected sometimes to determine the rate of the harassment. Furthermore, more than half of the studied nurses (56%) were racial harassed by relatives of the patients, (44%) was by patients themselves and (38%) was by HCWs.

Discussion

The current study was conducted to determine the burden of workplace violence among nurses in Qatar. A response rate as high as (90%) which is similarly found in studies conducted in Riyadh.
and South Taiwan (86.8%) and (94.8%) respectively [13,15]. On the contrary, a study carried out in Hong Kong showed a lower response rate (25%) [16].

The frequency distribution of socio-demographic data among the studied population was determined. The mean age and standard deviation of the study subjects was (36.08 ± 7.747). Most of nurses in the study were married (79.2%). Almost all of the nurses were non-Qatari (95.4%). As large as (87.9%) of them were staff nurses, and percent of (73.1%) had work experience of more than (5) years. This goes along with the general trend of the workplace demographics in Qatar [17].

More than half of the nurses (54.6%) worked in inpatient care and only (1) nurse (0.3%) worked in home care. Different findings were achieved in a study carried out in Taiwan showing that most of members were working in acute health care wards [18].

This study showed that (5.5%) of nurses were subjected to physical violence in the workplace during the last (12) months. Consistently, Adib, et al. in Kuwait study (2002), had estimated that physical violence had been experienced during the (6) months prior to their study by (7%) of the nurses working in Kuwaiti hospitals [19].

Higher frequencies were found in Riyadh by Mohamed [13], South Taiwan by Lin, et al. [15] and Thailand by Sriphichayan, et al. [20]; showing that the occurrence of physical violence were reported by (16.2%), (12.7%) and (10.5%) and of the studied samples respectively. Higher rates were also reported in Taiwan by Wen-Ching, et al. [19] where the occurrence of physical violence was (29.6%), and in mid-south USA study done by Erickson, et al. [21], it was (82%) of the studied nurses were exposed to physical assaults during their work.

In addition, a survey conducted in emergency departments, ICU and general floor nurses in Florida by May, et al. had revealed that (74%) of nurses were victims of physical assaults for one year [22]. The reason for these high rates in USA may be explained by the fact that these studies were conducted in emergency and psychiatric departments.

Our study revealed much lower rates of physical violence which may be due to cultural and environmental variations. The lower rate of physical violence in Qatar also points out to the strenuous role of the legislations and official organizations to protect workers from violence during their work.

The majority of the assaulted nurses were pinched (63.2%), pushed (52.6%), beaten (36.8%) followed by being kicked (31.6%). Slapping and biting attained the least frequency with the same percentage (21.1%). A study among nurses at a general hospital in Southern Thailand done by Kamchuchat, et al., showed that pushing (52.9%), kicking (47.1%) and hitting (41.2) were the most common type of physical assaults, not going along with the pattern revealed in our study [23].

Types of physical violence attackers among the studied population in our study, in a descending pattern were patients (78.9%), relatives of the patients (26.3%) and HCWs (5.3%). Similarly, in Kuwait by Adib, et al., UK by Hesketh, et al. [24], South Taiwan by Lin, et al. [25] and in Thailand by Sriphichayan, et al.; the majority of the perpetrators of physical violence were patients [26].

Considering verbal violence in the workplace, our study showed that (30.6%) of nurses were exposed to verbal violence in their workplace during the last (12) months. Correspondingly, studies conducted by Ferrinho, et al. in Portugal, Tomev, et al. in Bulgaria, Palacios, et al. in Brazil and Deeb in Lebanon showed that verbal abuse was experienced by (27.4%), (32.2%), (39.5%) and (40.9%) respectively, of the respondents in the last year [27-30].

Studies carried out by Sriphichayan, et al. in Thailand, Adib et al in Kuwait and Lin, et al. in South Taiwan showed even higher frequencies where occurrences of verbal abuse were reported by (47.7 %), (48%) and (53.9%), respectively of the studied sample. Much higher rates were found in Taiwan by Wen-Ching, et al. and in Australia by Mayhew, et al. studies showing that the incidence rate of verbal abuse was (62.9%) and (67%), respectively [31].

Conclusions

In conclusion, this study found that less than half of the nurses experienced workplace violence during the year prior to the study. Verbal abuse was the most common type while sexual harassment was the least common. The majority of attackers were patients, relatives of patients, then HCWs.

There is a high need for raising awareness at HCW level as well as organizational level and implementing efficient mechanism to prevent and deal with such violence.

Conflict of Interest

Authors have no financial interest, arrangement or affiliation with anyone in relation to this research that could be perceived as a real or apparent conflict of interest in the context of the subject of this study.

Acknowledgement

We are grateful to those professionals who took the time and effort to participate in the study from PHCC. I would also like to convey thanks to the patients who participated in this study by giving me their time and information.
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