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Prevalence, Patterns, and Risk Factors of Workplace Violence among Nurses in Outpatient Clinics of Menoufia Governorate Hospitals

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Abstract: **Workplace violence against nurses is acknowledged as a continuously rising occupational hazard that requires a great attention worldwide. It is adversely affects quality of care and nurses' quality of life. Aim: Determine pattern, prevalence and risk factors of workplace violence among nurses in outpatient clinics. Design: Descriptive cross-sectional design. Subjects: Two hundred nurses working in the outpatient clinics of 4 general hospitals that selected using multistage random selection from Menoufia Governorate hospitals, Egypt. Tool: A structured interview questionnaire that derived from a questionnaire developed by International Labor Office, WHO, International Council of Nurses and Public Services International; and translated into Arabic language and validated by the researchers. The data collected was socio-demographic, workplace violence data, workplace characteristics, risk factors of workplace violence and consequences of workplace violence. Results: Most of nurses (96.5%) hadn't previous training about workplace violence, 79.0% were exposed to workplace violence, and the common type of violence was psychological 77.8% and sexual 8.9%. Sources of workplace violence were patients 45.6% and patients' relatives 43.0%. The consequences of WPV were psychological disturbance 44.9%, lack of desire for work 25.3%, absence form work 11.4% and increase the level of carefulness and alertness 18.4. The factors that might increase workplace violence in outpatient clinics were: at nurses' level, low level of educational; while at workplace level: restriction of patient care fees to specific place, work shifts, unknown procedures for reporting workplace violence, shortage of nurses, lack of safety measures, and unsuitable waiting place for patients. Conclusion: workplace violence is alarming and highly reported by nurses in outpatient clinics. The common type of violence was psychological and sexual-violence. The risk factors that might increase workplace violence were low level of education, work shifts, unknown procedures for reporting workplace violence, shortage of nurses, lack of safety measures, and unsuitable waiting place for patients. Recommendation: Effective educational preparation and training for nurses concerning strategies for prevention and reduction of violence are essential; develop workplace environment with enough safety measures, policies and procedures for managing workplace violence and enhancing public awareness about nurses' role are also emphasized.**

***Keywords*: Workplace violence, physical violence, verbal violence, sexual insults, outpatient clinic, risk factors.**

1. INTRODUCTION

Workplace violence (WPV) against health professionals is a worldwide problem with and growing incidence (WHO, 2002; Ferri et al., 2016). Nursing staff are the most exposed group among the all different categories of health occupations as reported by many researchers (Magnavita and Heponiemi, 2012; Terzoni11 et al., 2015; Pompeii et al., 2015). Violent incident against nurses is currently recognized by the World Health Organization, the International Council of Nurses, and Public Services International as a major health priority because a rising phenomenon (Kuehn, 2010). Workplace violence

is defined as "any act in which a person is abused, threatened, scared or assaulted in circumstances related to his or her employment and affecting his or her safety, well-being or health (International Labor Office (ILO, 2010); Canadian Centre for Occupational Health & Safety (CCOHS, 2012); The National Institute for Occupational Safety and Health (NIOSH, 2012).

Workplace violence against healthcare staff is frequently reported from diverse of countries. International reports demonstrated that around 10-50% healthcare staffs are exposed to violence every year and in certain settings this rate may reach over 85% (Esmaeilpour et al., 2011). The Occupational Safety and Health Administration (OSHA) reported that, annually about 2 million of health care workers are victims of WPV. The Liberty Mutual Safety Index 2011 informed that WPV was the tenth-leading cause of nonfatal occupational injuries, the fourth-leading cause of death and the leading cause of death among female nurses in the workplace (Monson et al., 2011). Occupational assaults and violent behaviors occur in healthcare and social service settings results in 48% of all nonfatal injuries. Observed increase in WPV has initiating high level of awareness among nurses regarding this concern (Bureau of Labor Statistics, 2010).

The main forms of WPV including verbal, physical, emotional abuse and sexual insults (Jackson et al., 2002; OSHA, 2012); bullying, harassment and intimidation are common in the nursing work environment (Kuehn 2010; Taylor et al., 2011; Dionisi et al., 2012). The main sources of violence among nurses are patients, patients' family and friends, health care members (Hahn et al., 2013). Patient may kick, spit, hit, scratch, push, and shout at nurses (OSHA, 2012). Many studies reported exposure of nurses to WPV including Australia 50% of the nurses experienced violence at their workplace (Hegney, et al., 2003). Moreover, in Australia 79.5% of nurses were experienced verbal violence and 28.6% experienced physical violence (Ople et al., 2010). In Tahran, the prevalence of WPV in the outpatient clinics was 29% (Taher, 2010), about one-third (29.9%) of nurses working at public health facilities in Southern Ethiopia experienced to at least one episode of the various forms of workplace in the past 6 months (Fute et al., 2015).

Several Arab studies have shown a rapid increase in the prevalence of WPV against nurses that ranged from 7% to 91.6% (Abbas et al., 2010; AbuAlRub and Khawaldeh, 2014). In Jordan the incidence of violence among nurses ranged from 22.5% to 91.6%, and the verbal form of violence was the most frequent (AbuAlRub and Al-Asmar, 2011; Esmaeilpour et al., 2011and Ahmed, 2012). In Riyadh, Saudi Arabia among nurses in the emergency departments, verbal violence was most common form of WPV (74.1%) and sexual violence was least form 1.9% for females and female nurses was reported a higher frequencies of verbal and sexual violence, while male nurses reported a higher frequencies of physical violence (Alyaemni and Alhudaithi, 2015). In Palestine, the violence against nurses was reported to be 80% (Kitaneh and Hamdan, 2012).

In Egypt, the prevalence of WPV among nurses of Cairo hospitals was 86.1%. Moreover among obstetrics and gynecology nurses, 72.9% of them reported verbal abuse was the most common form of psychological violence while 62.8% of the nurses reporting physical violence, mentioned being pushed and slapped as a form of physical violence. About half of the nurses (49.7%) reported formally violence events against them (Samir et al., 2012), in Assuit Governorate 93.2% of nurses exposed to workplace violence (El-Houfey, 2010) and in Ismailia Governorate, 27.7% of nurses were exposed to violence during work (Abbas et al., 2010).

Workplace violence has significant impact on the effectiveness of health systems and quality of care provided, especially in developing countries (Fute et al., 2015) and has adverse effects on nurses including lack of concentration, stress, decreased productivity, job dissatisfaction, unwillingness to stay, increase absenteeism, chronic fatigue and sleep disorder (Constance et al., 2011; Khademloo et al., 2013; Blando et al., 2013). Since nurses work as front-line care providers to provide care and support to the patient with different medical conditions and facing many stressful situation and aggression from many sources, therefore, the current study was designed to determine the pattern, prevalence and risk factors of the workplace violence among nurses in outpatient clinics at Menoufia Governorate hospitals.

1.1. Aim of the study:

Determine pattern, prevalence and risk factors of the workplace violence among nurses in outpatient clinics.

1.2. Research Questions:

1- What is the prevalence of WPV among nurses in outpatient clinics?
2- What are the types of workplace violence among nurses in outpatient clinics?

3- What are the common sources of WPV among exposed nurses in outpatient?
4- What are the consequences of WPV among exposed nurses?
5- What are the risk factors of WPV among nurses in outpatient clinics?

2. SUBJECTS AND METHOD

2.1. Design: A descriptive cross-sectional design was used to achieve the aim of the study.

2.2. Setting: This study was conducted in outpatient clinics of governmental hospitals that were chosen using multistage random selection according to the following: Four out of nine districts of Menoufia Governorate were selected. These districts were Shibin Elkom, Elbagor, Menouf, and Elshohda. Then, one governmental hospital was selected from each district hospitals. These hospitals were Shibin Elkom teaching hospital, Elbagor general hospital, Sirse Ellian general hospitaland Elshohda general hospital. The data were collected from outpatient clinics of the previously mentioned hospitals.

2.3. Sample: The study sample was 200 nurses that constitute all nurses working in the outpatient clinics of Shibin Elkom, Elbagor, Sirse Ellian, Elshohda hospitals.

Inclusion criteria: Both female and male nurses, full time work nurses and nurses who have at least 2 years of experience in outpatient duties.

2.4. Instruments: The data of the current study were collected using a structured interview questionnaire that selected after extensive literature review. The selected interview questionnaire was developed by International Labour Office (ILO), World Health Organization (WHO), International Council of Nurses (ICN) & Public Services International (PSI), Geneva 2003. Then the questionnaire was translated from English to Arabic language and reviewed by Arabic, English speaker specialist. This translated version was modified by the researchers to fit the target population. In addition to the modified questionnaire two front pages were developed by the researcher to collect personal and workplace data. These questionnaires were in the form of multiple choice questions and the participants of the study were asked to sign around the statement of choice in each question. These questionnaires consisted of four parts. Part 1: Socio-demographic characteristics of nursing staff and included 8 questions such as age in years, sex, marital status, work experience in outpatient clinic, educational qualifications, hospital name, job title and previous training about WPV. Part 2: Workplace violence data during the last 12 months that consisted of 16 questions included previous exposure in WPV, type of experienced violence, source of experienced violence and characteristics of work place environment such as presence of suitable places for patient waiting, crowding level in of outpatient clinics and it relation to the occurrence of violence, preparation outpatient department to manage the violent behaviors, presence of security measures, outpatient clinic environment facilitate patient service delivery, if the patient sheet concerned with data about his violent behaviors, if patient care fees is restricted to specific places, if number of nurses suitable for number of patients and working in different work shifts, presence of reporting policy regarding WPV, presence of known procedures for reporting WPV. Part 3: This part concerned with questions related factors that increasing WPV and the potential consequences of WPV on nurses in outpatient clinic.

2.5. Validity and reliability of data collection instrument:

The data collection instrument that translated and modified by the researcher was reviewed after translation by Arabic, English speaker specialist and suggested modification were carried out accordingly. Then the instrument was revised for content validity by a panel of five experts in community health nursing and their recommended modifications were carried out accordingly. The reliability of the instrument was tested by the researchers for the internal consistency by administration of the tool to 20 participants (pilot study) and they were excluded from the study sample and any necessary modification was done according to the results of pilot study. The data of the pilot study was entered to SPSS and to test the reliability of the tool. The reliability of the instrument was done to ensure the internal consistency to the questionnaire by using Cronbach's alpha coefficients for the questionnaire (alpha = 0.91). Based on alpha coefficient, the questionnaire of the study was reliable for data collection.

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2.6. Pilot study

Before starting data collection, a pilot study was carried out on 10% of the nurses (20 nurses) of the sample that meet the inclusion criteria of the study to assess the feasibility of the study as well as clarity, applicability and the time needed to fill the tool of the study. The needed modifications were done as revealed from the pilot study. The subjects of pilot study were excluded from the total study sample.

2.7. Administrative approval

Official letter was obtained from the formal authority of Faculty of Nursing Menofia University directed to the director of each hospital to get their agreement and their permission to conduct the study.

2.8. Ethical consideration

Oral consent was obtained from each participant of the study after detailed explanation of data collection procedure and purpose of the study by the researchers. All of the subjects who agreed to participate in the study were assured about confidentiality and anonymity of the information. They were informed about their right to withdrawn from the study at any time without giving a reason. The researchers were always available for any needed clarifications.

2.9. Data collection procedure

The data of the present study was conducted using self-administered questionnaire sheet. The data was collected during the morning shifts of the working days of the week. After administrative approval and informed consent, the questionnaire sheets were administered to each participant by the researchers and explanation of the study aim as well as the method of filling the questionnaire were provided. The researchers were assured the participants for the confidentiality of their information, then the participants were asked to fill in the questionnaire and any clarifications were done by the researchers.

Study period: The study was conducted through a period of three months (January to March, 2017).

Statistical analysis:

The collected data were entered, statistically analyzed and tabulated using SPSS software (Statistical Package for the Social Sciences, version 20.0. Quantitative data were presented using descriptive statistics in the form of frequencies and percentages, and means and standard deviations. For qualitative variable and comparison between data of two independent groups' Chi-Square test was performed. Multivariate Regression Analysis was performed to estimate B and its 95% confidence interval (CI) and for each of the independent variables as risk factors for WPV (Dawson and Trapp, 2001). Statistical significance was considered at p-value <0.05.

4. RESULTS

The subjects of this study were all nurses (200) working in outpatient clinics of selected hospitals, who met the inclusion criteria, who agreed to participate in the study and provided complete data. The collected was used to determine pattern, prevalence and risk factors of the workplace violence among nurses in outpatient clinics.

Table 1 showed that more than half of nurses (56.5%) aged 50 years and more and only 14.0% were 39 years or less with mean age 48.9±8.0 years. The majority of (95%) studied nurses were females. More than the quarters of nurses (76.5%) were married, half of the nurses (50.5%) had 10 years or less work experience, one quarter of them had 11 to 20 experience years and about one quarter had work experience 21 years or more and the mean duration of work experience of nurses was 13.8 ±9.4 years. The majority of nurses (90.5%) had a nursing diploma as main educational qualification. Moreover ,the majority of nurses (95%) working as a staff nurse and only 3.5% of nurses received educational sessions about violence in health care setting and only 3.5% of studied nurses attended sessions about WPV.

Figure 1 revealed that more than three quarters (79.0%) of studied nurses were exposed to a various type of violence through their work in outpatient clinics and only 21.0% of them reported that they were not exposed to violence.

Figure 2 revealed that the most common experienced type of WPV was psychological violence as reported by 77.8% of nurses, while the lowest one was the physical type as reported by 0.6% of nurses. The findings of this figure1 and figure 2 provide the answer of the first and the second research questions.

Figure 3 illustrated the sources of WPV among exposed nurses in outpatient clinics. As revealed, the main sources of WPV were patients and patient relatives (45.6% and 43%) respectively and the less frequency source of violence was supervision members and the health care members (4.4% & 1.9%) respectively as reported by nurses. The findings of this figure provide the answer of the first and the third research questions.

Figure 4 illustrated the reported consequences of WPV among exposed nurses. As shown, psychological disturbance was reported by about half of nurses (44.9%), lack of desire for work was reported by 25.3% of nurses, absence form work was revealed by 11.4%; while 18.4 of nurses reported that exposure to violence increase their level of carefulness and alertness. The findings of figure 4 provide the answer of the fourth research questions.

Table 2 showed the characteristics of workplace environment as reported by nurses in outpatient clinics the findings of the table revealed that about two thirds (63.0%) of nurses reported that outpatient clinics had suitable waiting place for patients. Regarding the level of crowding in outpatient clinics, more than half of nurses (52.5%) reported that the clinics were very crowded, while one third of them (33.5%) reported moderately crowded and 14% reported little crowded. Concerning the effect of crowding level on the occurrence of violence in outpatient clinics, about two thirds (61.5%) of nurses reported that crowding increase the occurrence of violence, whereas only 10% reported that no effect of crowding on the occurrence of violence, 72.0 % of nurses reported that outpatient clinics department prepared well to manage the violent behaviors. Two thirds of nurses (66.5%) reported that outpatient clinic environment facilitate patient service delivery, while 61.0% of them mentioned that outpatient clinic provided with security measures (e.g. guards, alarms, portable telephones). The majority of nurses (75.5%) clarified that patient sheet did not concerned with any data about his violent behaviors. More than two thirds (69.5%) of nurses reported that patient care fees is restricted to specific places, 52.0% of them mentioned that number of nurses suitable for patients number and only 39.0% working in different work shifts

Figure 5 represented nurses,' opinion regarding factors that might increasing WPV in outpatient clinics. The reported factors were overcrowding of the clinics, shortage of nursing staff, lack of safety measures in the place, shortage of equipment and supplies, instability of clinic place and unsuitable waiting place for patients; as reported by (67.5%, 65.5%, 59.0%, 56.5%, 51.5% and 45.5%) of nurses respectively. The findings of this figure provide support the fifth research questions.

Table 3 revealed no statistical significant relation between WPV and marital status, work experience or previous training about WPV (P= 0.065, 0.590 and 0.165) respectively. On the other hand nurses aged 50 years or more were likely to be more exposed to WPV (P= 0.015); females were more exposed to WPV than males (P= 0.006). Statistical significant association between educational qualification and exposure to violence was revealed (P< 0.001), nurses who had nursing diploma were more exposed to WPV and staff nurses were likely to expose to WPV (P< 0.001).

Table 4 demonstrated the relationship between nurses opinion about factors increasing violence and exposure to violence in outpatient clinics. The table represented that there was statistical significant association between overcrowding of the clinic, unsuitable waiting place for the patients, shortage of nurses in outpatient clinics, lack of safety measures in outpatient clinics and instability of the clinics (P = 0.014, 0.006, P <0.001, 0.011, P <0.001) respectively. While no statistical significant association was revealed between shortage of equipment and supplies and exposure to WPV (P = 0.135).

Table 5.displays the results of Multivariate Logistic Regression model for predicting WPV risk factors. The findings of the model point out that nurse with low level of educational qualification were more exposed to WPV compared to nurse with high level of educational qualification, P= .000, B= 1.7, IC =1.223-1.689; Restriction of patient care fees to specific place was more likely to increase WPV among nurses, t= -2.447, P= 0.015; nurses who working in different work shifts were more exposed to WPV, P= 0.001, B= 1.771, CI= 1.547-4.825. Also in the same table, nurses who work at outpatient clinic with known procedures for reporting WPV were approximately twice times less likely to have working violence compared with nurses who work at outpatient clinic without known procedures for reporting WPV, P = .035, B = 1.624,

CI= 1.326 - 4.462; shortage of nurses staff in outpatient was predicted as risk factor of exposure to WPV among nurses, P= 0.007, B=1.845; CI= 1.561 – 5.235. Moreover, lack of safety measures in outpatient was predicted as a risk factor for increasing WPV, P=.010, B= 1.665, CI = 1.471-4.329; and unsuitable place for patients waiting within outpatient clinic was a predictor risk factor to increase exposure to WPV among nurses, P=0.001, B = 1.862, IC=1.423-4.723. On the other hand, marital status, nurses age, work experience, job title, preparing of outpatient clinics to manage the violent behaviors, overcrowding of outpatient clinics, preparing of outpatient clinic to manage violence, development of outpatient clinic to facilitate patient care delivery or presence of policy concerning reporting of WPV, all were not significantly predictive risk factors of WPV (P>0.05 for each). The findings of table5 provide the answer to the fifth research questions.

Table 1: Socio-demographic characteristics of studied nurses (N=200).

Socio-demographic characteristics	No.	%
Age by year		
≤ 39 years	28	14.0
40-49 years	59	29.5
≥50 years	113	56.5
Mean±SD	48.9±8.0	
Gender		
Male	10	5.0
Female	190	95.0
Marital status		
Married	153	76.5
Divorced	15	7.5
Widowed	32	16.0
Work experience		
≤ 10 years	101	50.5
11-20 years	50	25.0
≥ 21 years	49	24.5
Mean±SD	13.8 ±9.4	
Educational qualifications		
Nursing diploma	181	90.5
Nursing institution	9	4.5
Bachelor of nursing	10	5.0
Job title		
Head nurse	10	5.0
Nursing staff	190	95.0
Previous training about workplace violence		
Yes	7	3.5
No	193	96.5

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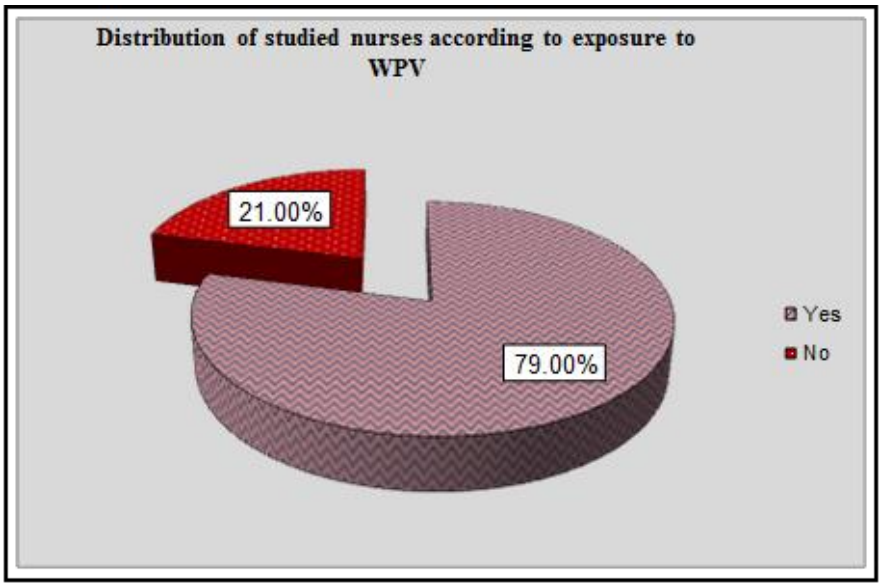

Figure 1: Distribution of studied nurses according to exposure to WPV (N = 258).

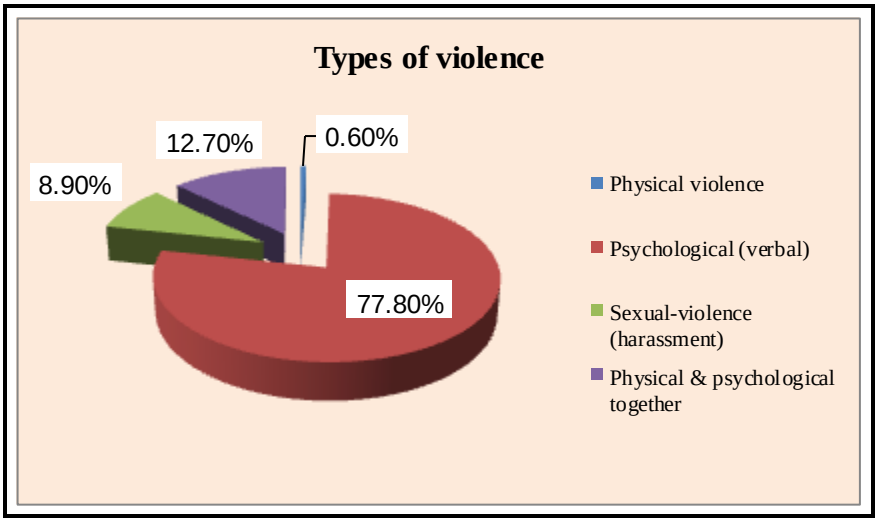

Figure 2: Distribution of studied nurses according to the types of WPV (N = 258).

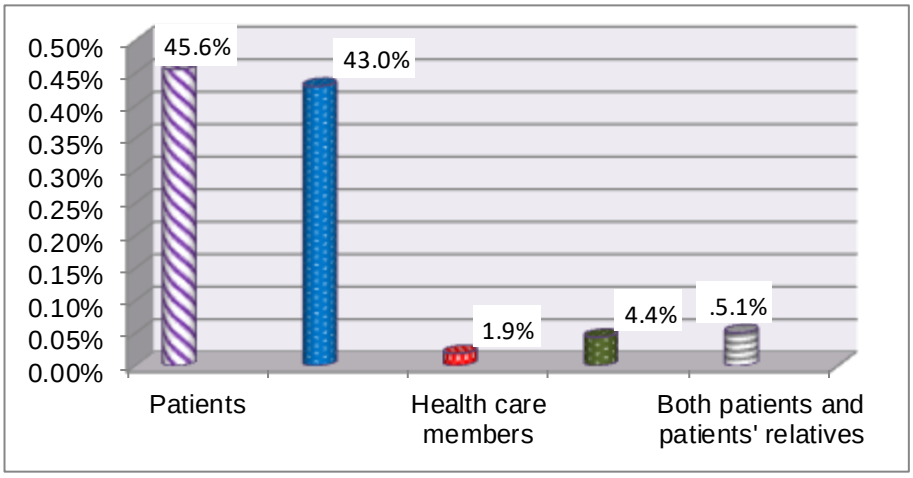

Figure3. Sources of WPV among exposed nurses in outpatient clinics (N =158).

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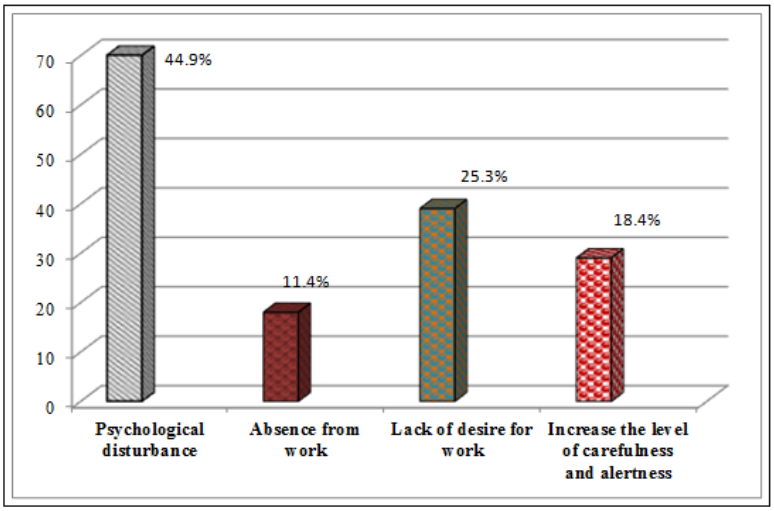

Figure4. Consequences of WPV among exposed nurses (N = 158)

Table2. Characteristics of workplace environment as reported by studied nurses (N= 200)

Characteristics of workplace environment	No.	%
Outpatient clinics have suitable patients' waiting places		
Yes	126	63.0
No	74	37.0
Crowding level of Outpatient clinics		
Very crowded	105	52.5
Moderately crowded	67	33.5
Little crowded	28	14.0
Violence is affected by crowding level		
Yes	123	61.5
No	20	10.0
Sometimes	57	28.5
Outpatient clinics department prepared to manage the violent behaviors		
Yes	144	72.0
No	56	28.0
Outpatient clinic provided with security measures (e.g. guards, alarms, portable telephones)		
Yes	123	61.0
No	77	39.0
Outpatient clinic environment facilitate patient service delivery		
Yes	133	66.5
No	67	33.5
The patient sheet concerned with data about his violent behaviors		
Yes	49	24.5
No	151	75.5
Patient care fees is restricted to specific places		
Yes	139	69.5
No	61	30.5
Number of nurses suitable for number of patients		
Yes	104	52.0
No	96	48.0
Change work shifts		
Yes	78	39.0
No	122	61.0
Presence of reporting policy regarding WPV		
Yes	117	58.5
No	50	25.0
Don't know	33	16.5
Presence of known procedures for reporting WPV		
Yes	129	64.5
No	71	35.5

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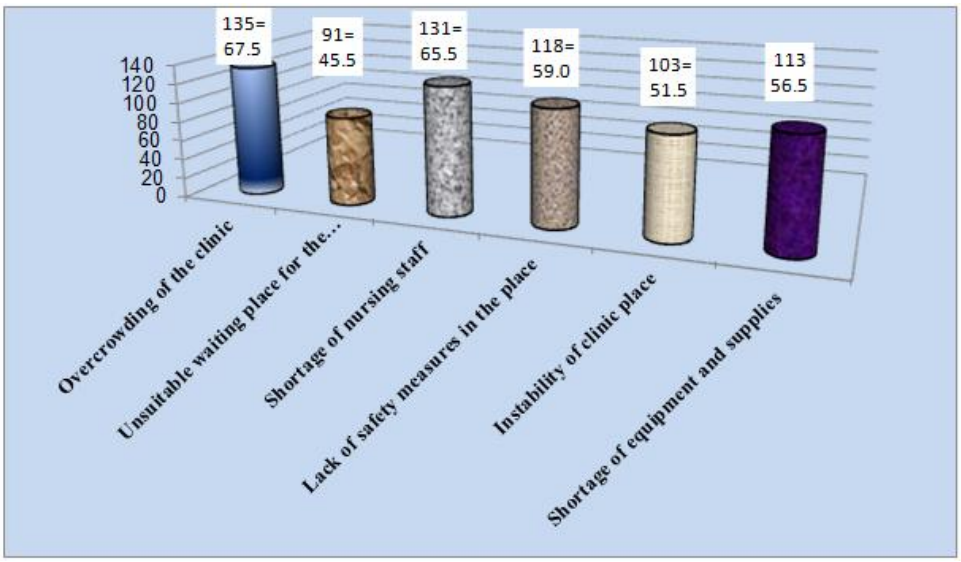

Figure5. Nurses opinion regarding factors increasing WPV in outpatient clinics

Table 3: Relationship between exposure to WPV among outpatient clinics and socio demographic data (N = 200).

Socio-demographic data	Exposure to WPV in outpatient clinics							
	Exposed (158)		Not exposed (42)		Total		X^2	P-value
	No.	%	No.	%	No.	%		
Age category /year								
≤ 39 years	24	15.2	4	9.5	28	14.0	8.42	0.015
40-49 years	39	24.7	20	47.6	59	29.5		
≥50 years	95	60.1	18	42.9	113	56.5		
Sex								
Male	8	5.1	2	4.8	10	5.0		
Female	150	94.9	40	95.2	190	95.0	0.94	0.006
Marital status								
Married	116	73.4	37	88.1	153	76.5		
Divorced	15	9.5	0	0.0	15	7.5	5.48	0.065
Widowed	27	17.1	5	11.9	32	16.0		
Work experience								
≤ 10	82	51.9	19	45.2	101	50.5		
11-20	37	23.4	13	31.0	50	25.0	1.06	0.590
≥21	39	24.7	10	23.8	49	24.5		
Educational qualification								
Nursing diploma	151	95.6	30	71.4	181	90.5		
Nursing institution	7	4.4	2	4.8	9	4.5	39.76	<0.001
Bachelor of nursing	0	0.0	10	23.8	10	5.0		
Job title								
Head nurse	0	0.0	10	23.8	10	5.0	40.43	<0.001
Staff nurse	158	100.0	32	76.2	190	95.0		
Previous training about WPV								
Yes	7	4.4	0	0.0	7	3.5	1.93	0.165
No	151	95.6	42	100	193	965		

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Table4. Relationship between nurses opinion about factors increasing WPV and exposure to violence in outpatient clinics (N = 200).

Factors increasing WPV in outpatient clinics	Exposure to WPV						X^2	P
	Exposed (158)		Not exposed (42)		Total			
	No.	%	No.	%	No.	%		
Overcrowding of the clinic	100	63.3	35	83.3	135	67.5	6.075	0.014
Unsuitable waiting place for the patients	64	40.5	27	64.3	91	45.5	7.566	0.006
Shortage of nursing staff	94	59.5	37	88.1	131	65.5	12.011	<0.001
Lack of safety measures in outpatient clinics	86	54.4	32	76.2	118	59.0	6.495	0.011
Instability of clinic place	66	41.8	37	88.1	103	51.5	28.505	<0.001
Shortage of equipment and supplies	85	53.8	28	66.7	113	56.5	2.236	0.135

Table 5. Multivariate logistic regression model for predicting work violence risk factors among studied nurses

Predictors	β	Std. Error	t	B	95% CI of B		P
					Lower	Upper	
Marital status	.099	.103	.960	1.10	0.316	2.647	.338
Nurses age	-.018	.012	-1.523	0.98	0.410	1.647	.129
Work experience	.001	.010	.081	1.00	0.365	2.506	.935
Educational qualification	-.340	.094	-3.632	1.71	0.223	1.689	.000*
Job title	.122	.135	.902	1.13	1.143	3.468	.368
Crowding level of Outpatient clinics	-.012	-.012	-.050	0.988	0.752	2.354	.960
Outpatient clinics department prepared to manage the violent behaviors	-.349	.264	-1.324	0.705	0.325	2.143	.187
Patient care fees is restricted to specific places	-.601	.246	-2.447	0.548	0.423	2.631	.015*
Working in different work shifts	.572	.166	3.448	1.771	1.547	4.825	.001*
Presence of known procedures for reporting WPV	.485	.228	2.127	1.624	1.326	4.462	.035*
Presence of reporting policy for regarding WPV	.282	.204	1.381	1.325	1.140	4.152	.169
shortage of nurses	.613	.223	2.747	1.845	1.561	5.235	.007*
Outpatient clinic environment facilitate patient service delivery	.038	.204	.185	1.038	0.514	2.523	.853
Presence of safety measures in outpatient clinics	.510	.197	2.587	1.665	1.471	4.329	.010*
Presence of suitable place for patients waiting	.622	.178	3.493	1.862	1.423	4.723	.001*

β= Multivariate Logistic Regression Coefficient, SE=Standard Error of β
P=Significance of β, *Significant (P<0.05), CI = Confidence Interval.

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5. DISCUSSION

The current study was carried out on two hundreds of nurses working in outpatient clinics to determine pattern, prevalence and risk factors of the workplace violence among nurses in outpatient clinics during the last 12 months. According to the present study findings, the mean age of studied nurses was 48.9±8.0, the mean years of nurses' work experience in outpatient was 13.8 ±9.4, the majority of them had Nursing diploma and most of them were staff nurses. Regarding the previous training about WPV, most nurses hadn't received any training about WPV, this result was in line with those of Alyaemni & Alhudaithi, (2015) in Ryiad, Saudi Arebia and Abbas, et al. (2010) in Ismailia, Egypt, both reported that eighty three percent of nurses under their studies had not received any training in handling WPV. Moreover, Koukia et al., 2013), in Greece they revealed that there was no training in violence reduction strategies was given to physicians, nurses or nurse assistants. Concerning exposure of nurses in outpatient clinics to WPV, the prevalence of violence among nurses was 79.0%. This finding was in agreement with those of Samir et al., (2012) in Cairo hospitals, Abbas et al. (2010), El-Houfey et al., (2015) in Assuit university hospital and Kwok et al., (2006) in Hong Kong. They all reported the high prevalence rate of WPV was 86.1%, 83.1%, 93.2% & 76% respectively. These different percentages related to different study settings and the different sample size. On contrary, Samir et al., (2012) was reported that 14.4% of nurses in outpatient clinics were exposed to WPV. This difference might be due to the work load that results from the shortage of nursing staff and overcrowding as reported by nurses in our study. Also the prevalence of WPV in the current study was higher than those of Gacki-Smith et al., (2009) in USA, the prevalence rate was 25 %, Kitaneh and Hamdan, (2012) in Palestine founded the prevalence rate of WPV among health professionals including nurses was 20.8 %. These may be due to cultural and socio economic differences between the countries.

From the present study findings, the most common types of violence that nurses exposed to were psychological violence and sexual violence while the lowest type was the physical violence. These findings consistent with several studies that reported the high prevalence rate of psychological then sexual and the lowest was physical type (Abbas et al., 2011; Algwaiz and Alghanim, 2012; Alyaemni & Alhudaithi, 2015; Banda et al, 2015; Sisawo et al. 2016; Alkorashy and Al Moalad, 2016) Moreover, the current study findings in contrast with the findings of AbuAlRub et al., (2007) in Iraq who had revealed that 42.2% of nurses exposed to physical attack at their workplace. The difference might be attributed to culture differences among the studied groups or differences in sample size.

Concerning the source of WPV among studied nurses, the main sources of WPV were patients and patient relatives. Nonetheless they are not the sole perpetrators of WPV, but supervision members and the health care members considered as another sources. This finding was in line with Alexander and Fraser, (2004) in Australia and Kwok et al, (2006) in Hong Kong, they reported that the most frequent sources of WPV against nurses were committed by patients followed by patients' relatives. Moreover, many studies supported the current findings (Esmaeilpour et al., 2011; Fujishiro et al., 2011; Cashmore et al., 2012; Hamdan & Abu Hamra, 2015; Al-Omari, 2015; ALBashtawy and Aljezawi, 2016; Alkorashy & Al Moalad, 2016) they reported that patients and patients' relatives were the main sources of WPV among nurses. Moreover, the present findings were supported by Samir et al., (2012) they revealed that patient relatives were 38.5%. The increased rate of WVP form patients and their relatives might be attributed to the shortage of nursing staff as revealed from the current study, which might lead to increase patient waiting time and lack of acceptable nursing services which may precipitate abuse from patients or their relatives. The findings of this study found that about ten percent of nurses also exposed to WPV from health care members and supervisors and these findings were supported by Samir et al., (2012) who revealed that about thirty percent of nurse reported that administrative team was a main source of WPV. Moreover, Pai and Lee, (2011) revealed that the main perpetrators of psychological violence were staff members, co-workers and supervisors. These finding were inconsistent with the basic requirement for nurses' work environment that must be safe and the health care team must work in collaboration and sympathetically.

As regard the consequences of WPV among exposed nurses, in this study 44.9% of nurses reported increasing psychological stressors, 25.0%, reported lake of desire to work, 11.5% reported absence from work and 18.6% increase level of carefulness and alertness, were the major consequences of WPV, these findings were in agreement with many studies including Kamchuchat et al., (2008) in Thailand, they found that the major consequence of WPV on nurses was psychological consequences; Ferri et al., (2016) in Italy revealed that the main consequences reported by abused health care workers were fear, anger, irritation, anxiety, depression, shame, guilt, feelings of powerlessness, and dissatisfaction;

El-Gilany et al., (2010) in Saudi Arabia they stated that the majority of primary HCWs (96.7%) were being disturbed after violent experiences and (46%) of them reported being more alert and attentive.

Concerning factors that might increase WPV in outpatient clinics at nurses level was low level of educational qualification, while at workplace level were restriction of patient care fees to specific place, working in different work shifts unknown procedures for reporting WPV, shortage of nurses staff, lack of safety measures, unsuitable waiting place for patients. These findings were in congruence with Pai and Lee, (2011) and Chen et al., (2009) they reported lower education was determinant of violence. Samir et al., (2012) in Cairo hospitals and they founded that increased workload and shortage of nursing staff was the main cause of violence among nurses. Also, Alkorashy and Al Moalad, (2016) in Riyadh, Saudi Arabia, were in line with us, they reported that understaffing was risk factor for WPV among nurses. Pai and Lee, (2011) reported that night work shift increased the odds of experiencing sexual harassment. The results of the present study disagreement with Alyaemni & Alhudaithi's, (2015) findings which revealed that the most common causes or factors contributing to violent incidents were misunderstandings, language barriers, and a lack of clearly specified patient rights. Also, the findings of Shi et al., (2017) they found that nurses' age, department, years of experience and direct contact with patients were common risk factors at different levels of hospitals in China, and that was in disagreement with our results. Moreover, current findings were not in line with those of Shi et al., (2017), they reported that being female, increased anxiety level among staff, young age, short duration of employment, were the determinants of violence among nurses. The difference in risk factors between the current findings and the other studies might be attributed to cultural differences, political differences and the differences policies and procedures used in management of heath care systems.

6. CONCLUSION

Workplace violence is alarming and highly reported by nurses in outpatient clinics. The most common type of violence was psychological violence and sexual-violence, but physical violence is less frequent. The common sources of WPV were patients and patient relatives. The common risk factors that might increase WPV are low level of educational qualification, while at workplace level were restriction of patient care fees to specific place, working in different work shifts unknown procedures for reporting WPV, shortage of nurses staff, lack of safety measures, unsuitable waiting place for patients.

7. RECOMMENDATIONS

Based on the findings of the current study, design programs for effective educational preparation and training for nurses concerning violence and the strategies for prevention and reduction are highly requested. It is also necessary to develop the workplace environment with enough safety measures, policies and procedures for controlling and managing WPV as well as enhancing public awareness about the importance of nurses' role is emphasized.

REFERENCES

[1] Abbas M A., Fiala L A., Abdel Rahman A.&Fahim A., E.(2010). Epidemiology of workplace violence against nursing staff in Ismailia Governorate, Egypt. Journal of the Egyptian Public Health Association, 85(1-1):29–43.

[2] AbuAlRub RF, Khalifa MF, Habbib M B. (2007). Workplace violence among Iraqi hospital nurses. Journal of Nursing Scholarship; 39(3), 281–288.

[3] AbuAlRub R, & Al-Asmar A. H. (2011). Physical Violence in the Workplace among Jordanian Hospital Nurses. Journal of Transcultural Nursing; 22: 157-65.

[4] AbuAlRub R & Al Khawaldeh A.T. (2014). Workplace Physical Violence among Hospital Nurses and Physicians in Underserved Areas in Jordan. Journal of Clinical Nursing; 23: 1937- 47.

[5] Ahmed A.S. (2012). Verbal and physical abuse against Jordanian nurses in the work environment. East Mediterr Health Journal. [cited 2016 Jun 02];18(4):318-24.

[6] ALBashtawy M, Aljezawi M. (2016). Perspective of workplace violence in Jordanian hospitals: A national survey. Int Emerg Nurs.; 24: 61-5.

[7] Alexander C. & Fraser J. (2004). Occupational violence in an Australian healthcare setting: implications for managers. Journal of Healthcare Management; 49, 377–392.

[8] Algwaiz W M. & Alghanim SA. (2012). Violence exposure among health care professionals in Saudi public hospitals: a preliminary investigation. Saudi Med J. 33(1):76-82.

[9] Alkorashy H A. E., & Al Moalad F B. (2016). Workplace violence against nursing staff in a Saudi university hospital. International Nursing Review; 63(2), 226–232.

[10] Alyaemni A, & Alhudaithi H, (2015). Workplace violence against nurses in the emergency departments of three hospitals in Riyadh Saudi Arabia, Nursing Plus Open.

[11] Al-Omari H. (2015). Physical and verbal workplace violence against nurses in Jordan. International Nursing Review; 62 (1), 111–118.

[12] Banda CK, Mayers P, & Duma S. (2015). Violence against nurses in the southern region of Malawi. Elsevier J. of Johaniesburg University; 415-421.

[13] Blando J., O'Hagan E., Casteel C., Nocera M., & Peek-Asa C. (2013). Impac t of hospital security programs and workplace aggression on nurse perceptions of safety. Journal of Nursing Management; 21, 491-498.

[14] Bureau of Labor Statistics (2010). Workplace Violence: Issues in Response. Available at: http://www.fbi.gov/ publications/violence.

[15] Canadian Centre for Occupational Health & Safety. (2012). Violence in workplace. Available from: http://www.ccohs.ca/oshanswers/psychosocial/violence.html

[16] Cashmore A. W., Indig D., Hampton S. E., Hegney DG, & Jalaludin B. B. (2012). Workplace violence in a large correctional health service in New South Wales.

[17] [17] Chen W-C, Sun Y-H , Lan T-H & Chiu H-J (2009). Incidence and Risk Factors of Workplace Violence on Nursing Staffs Caring for Chronic Psychiatric Patients in Taiwan. *Int. J. Environ. Res. Public Health; 6*, 2812-2821.

[18] Constance J., Newman C. J., de Vries D., Kanakuze J., & Ngendahimana G. (2011). Workplace violence and gender discrimination in Rwanda's health workforce: increasing safety and gender equality. Hum Resour Health; 9:19.

[19] Dionisi A. M., Barling J., & Dupré K. E. (2012). Revisiting the comparative outcomes of workplace aggression and sexual harassment. Journal of Occupational Health Psychology; 17(4), 398-408.

[20] El-Gilany A.H., El-Wehady A. & Amr, M. (2010): Violence against primary health care workers in Al-Hassa, Saudi Arabia. Journal of Interpersonal Violence; 25 (4), 716–734.

[21] El-Houfey A, Abo El-Maged SH, Elserogy M & El Ansari W. (2015). Workplace Bullying Against Medical and Nursing Team Working At Emergency Departments in Assiut University Hospital. IOSR Journal of Nursing and Health Science (IOSR-JNHS) e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 4, PP 01-09.

[22] El-Houfey A. (2010). Students Health and Wellness at Assiut University. Unpublished Doctor Thesis, Faculty of Nursing, Assiut University.

[23] Esmaeilpour M., Salsali M., & Ahmadi F. (2011). Workplace violence against Iranian nurses working in emergency departments. International Nursing Review; 58(1), 130–137.

[24] Ferri P., Silvestri M., Artoni C. Di Lorenzo R. (2016). Workplace violence in different settings and among various health professionals in an Italian general hospital: a cross-sectional study. Psychology Research and Behavior Management; 9: 263–275.

[25] Fujishiro K., Gee G. & de Castro A. (2011). Associations of workplace aggression with work-related well-being among nurses in the Philippines. American Journal of Public Health; 101 (5), 861–867.

[26] Fute M., Mengesha Z. B., Wakgari N. & Tessema G. A. (2015). High prevalence of workplace violence among nurses working at public health facilities in Southern Ethiopia. BMC Nursing; 14:9.

[27] Gacki-Smith, A. M., Juarez L. B., Cathy H., Linda R., & Susan L. M. (2009). Violence Against Nurses Working in US Emergency Departments. The Jounal of Nursing Administration Volume 39, Number 7/8, PP 340-349.

[28] Hahn S., Müller M., Hantikainen V., Kok G., Dassen T., & Halfens R .J. G. (2013). Risk factors associated with patient and visitor violence in general hospitals: Results of a multiple regression analysis. International Journal of nursing Studies; 50(3): 374-385).

[29] Hamdan M. & Abu Hamra A. (2015). Workplace violence towards workers in the emergency departments of Palestinian hospitals: a cross-sectional study. Hum Resour Health; 7: 13:28.

[30] Hegney D., Plank A., & Parker V. (2003). Workplace violence in nursing in Queensland, Australia: a self reported study. International Journal of Nursing Practice; 9, 261–268.

[31] International Labor Office (2010). Joint Programme on Workplace Violence in the Health Sector: workplace violence in the health sector country case studies research instruments. SURVEY QUESTIONNAIRE, ENGLISH, GENEVA.

[32] Jackson D., Clare J., Mannix J. (2002). Who would want to be a nurse? Violence in the workplace – a factor in recruitment and retention. Journal of Nursing Management; 10, 13-20.

[33] Kamchuchat C., Chongsuvivatwong V., Oncheunjit S., Yip T. W., & Sangthong R. (2008). Workplace violence directed at nursing staff at a general hospital in southern Thailand. Journal of Occupational Health, 50(2), 201–207.

[34] Khademloo M., Moonesi FS & Gholizade H. (2013). Health care violence and abuse towards nurses in hospitals in north of Iran. Glob J Health Sci; 5: 211.

[35] Kitaneh M., & Hamdan M. (2012). Workplace violence against physicians and nurses in Palestinian public hospitals: a cross-sectional study;12:469.

[36] Koukia E., Mangoulia P., Gonis N., & Katostaras T. (2013) Violence against health care staff by patient's visitor in general hospital in Greece: Possible causes and economic crisis. Open Journal of Nursing, 2013, 3, 21-27.

[37] Kuehn B. M. (2010). Violence in health care settings on rise. Journal of the American Medical Association, 304(5), 511–512.

[38] Kwok R P., Law YK., Li KE., Ng YC., Cheung MH., &Fung VK. (2006). Prevalence of workplace violence against nurses in Hong Kong. Hong Kong Med J.; 12(1): 6-9.

[39] Magnavita N., & Heponiemi T. (2012). Violence towards health care workers in a Public Health Care Facility in Italy: a repeated cross-sectional study. BMC Health Services Research; 12:108.

[40] Monson B., Scaglione D., & Allen K. W. (2011). Health care: violence in the workplace; Retrieved on 12/28/2014.

[41] National Institute of Occupational Safety and Health Fast Facts. (2012): Home Healthcare Workers - How to Prevent Violence on the Job. Nurses in Jordan. International Nursing Review, 62 (1), 111–118.

[42] International Labor Office, International Council of Nurses, World Health Organisation, Public Services International. (2003): Joint Programme on Workplace Violence in the Health Sector: workplace violence in the health sector country case studies research instruments. SURVEY QUESTIONNAIRE. ENGLISH. GENEVA.

[43] Occupational Safety and Health Administration. (2012). Guidelines for preventing workplace violence for healthcare and social service workers. Washington DC: U.S. Department of Labor Occupational Safety and Health Administration. One; 10(11), 1-14.

[44] Ople T., Lenthall S., Dollard M., Wakerman J., MacLeod M., Knight S., Dunn S & Pickard G. (2010). Trends in workplace violence in the remote area nursing workforce. Australian Journal of Advanced Nursing; 27(4), 18-23.

[45] Pai H-C & Lee S. (2011). Risk factors for workplace violence in clinical registered nurses in Taiwan. Journal of Clinical Nursing; 20, 1405–1412.

[46] Pompeii L. A., Schoenfisch A. L., Lipscomb H. J., Dement J. M., Smith C. D., & Upadhyaya M. (2015). Physical assault, physical threat, and verbal abuse perpetrated against hospital workers by patients or visitors in six U.S. hospitals. Am J Ind Med.; 58(11):1194–1204.

[47] Samir N., Mohamed R., & Moustafa E. (2012). Nurses‟ attitudes and reactions to workplace violence in obstetrics and gynaecology departments in Cairo hospitals. East Mediterr. Health J; 18(3): 198-204.

[48] Shi L., Zhang D, Zhou C, Yang L., Sun T, ao T. , & Xiangwen Peng X., (2017). A cross–sectional study on the prevalence and associated risk factors for workplace violence against Chinese nurses. Journal of epidemiology and community health; 7(6): e013105.

[49] Sisawo J. E., Yacine Y. S., Ouédraogo A. & Huang,S .(2016). Workplace violence against nurses in the Gambia: mixed methods design. BMC Health Services Research; 17:311 DOI 10.1186/s12913-017-2258-4.

[50] Taher H., et al. (2010) Attitude of primary health care nurses in Kuwait towards domestic violence against women. Bulletin of Alexandria Faculty of Medicine; 46 (4), 365–370.

[51] Taylor J. L. & Rew L., (2011): A systematic review of the literature: workplace violence in the emergency department. Journal Clinical Nursing; 20(7e8), 1072e1085.

[52] Terzoni S., Ferrara P., Cornelli R., Ricci C., Oggioni C., & Destrebecq A. (2015). Violence and unsafety in a major Italian hospital: experience and perceptions of health care workers. Med Lav.; 106(6):403–411.

[53] World Health Organization (2002). Violence and injury prevention, violence and health. http://www.who.int/violence_ injury_prevention/injury/work9/en/print.html.