

## Relation between Workplace Violence among Staff Nurses And Their Self-Esteem

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### Abstract

**Background:** work place violence is considered as one of the important factors leading to termination of employment and job dissatisfaction in medical personnel and has a large effect on the quality of services, patients' satisfaction, and efficacy and efficiency of personnel performance. **Aim:** the present study was aimed at assessing relation between work place violence among staff nurses and their self-esteem. **Design:** Descriptive, co-relational design was used. **Setting:** the study was conducted at Al-Nabawy Al-Mohandis General Hospital affiliated to ministry of health which is located in El fayoum governorate. **Subject:** The study consisted of a convenient sample of (100) staff nurses. **Tools of data collection:** two tools were used namely Workplace violence questionnaire and self-esteem inventory sheet. **Results:** the most experienced violence type among studied staff nurses was upon the bullying (46%), followed by verbal violence (35%) and sexual violence (32%). On the other hand, racial harassment were the least type experienced among studied staff nurses (19%). mean percent 79% from studied staff nurses had a highest perception regarding total self –esteem. **Conclusion:** there were positive statistically significant correlations among all dimensions of workplace violence. Moreover, there were no relation between workplace violence and self–esteem among studied staff nurses. **Recommendations:** Conduct training programs for nursing personnel regarding violence and coping strategies to deal with workplace violence

**Keywords:** Workplace Violence, Staff Nurses, Self-Esteem.

### Introduction:

Violence is defined as an intentional use of physical strength, or as a threat or action against itself, someone else, a group, or community. According to the definition by the World Health Organization, violence includes physical assault, murder, verbal abuse, bullying/mobbing, sexual and racial harassment, and psychological stress. Workplace violence (WPV) is an increasingly-growing health problem and the common cause of health disturbance in emergency medical services (EMS) personnel around the world. WVP is classified in to physical, verbal, and cultural violence. Violence has a negative effect on the health of EMS personnel (Sahebi et al., 2019)

WPV is considered as one of the important factors leading to termination of employment and job dissatisfaction in medical personnel and has a large effect on the quality of services, patients' satisfaction, and efficacy and efficiency of personnel performance. An overview of databases shows that WPV in medical centers is not specific to a certain

community or setting. Also, 70%-80% of physicians, nurses, and EMS personnel experience one or more instances of violence yearly (Honarvar et al., 2019).

Nurses, receive the highest rate of violent attacks in health care Centers and are roughly 3 times more likely to be exposed to workplace violence than the employees working in other occupations. In addition, they are more exposed to verbal, emotional, physical, and even sexual abuse. Based on the Occupational Safety and Health Administration (OSHA), 80% of serious violence in health centers occurs due to nurses' interactions with patients. Also, Nurses' direct contact with patients and their families perhaps is one of the reasons why they are mostly abused (Shi et al., 2020). Nurses also spend more time with patients compared to other employees. Such violence in the workplace can negatively affect the provision of medical services and create a hostile environment women and employees, and consequently affect the quality of service

delivery. Moreover, if continued, it can face human resources management with several serious problems such as employee dissatisfaction, defect in the workflow, the reduced employee productivity, and absenteeism (Shi et al., 2020).

Self-esteem is a vital part of the human cognitive process in that the individual is always trying to maintain their self-esteem, which affects the person will behave and feel. Violence too is used as a self-regulating process that helps to maintain the perpetrator's self-esteem. Individuals who have a very high self-esteem are more prone to aggressive behavior" like violence and harassment. Low self-esteem can lead to aggression in the form of violence (Arand, 2019).

#### **Significance of the study:**

Worldwide, more than half of nurses have experienced some form of violence. According to the International Council of Nurses WPV is 'any incident where the staff is abused, threatened or assaulted at work (Liu et al., 2019).

In Lower Egypt, the prevalence rates of violence against nurses that were detected by two studies showed marked discrepancies; 86.1% in Cairo University and 27% in Ismailiya In Upper Egypt, a study was conducted in BeniSuef and found that 92.8% of BeniSuef nurses were exposed to workplace violence at least once during their working lifetime (Hassan, Amein, & Ahmed, 2020).

The prevalence of WPV varies between countries. In Egypt, the prevalence of verbal abuse and physical abuse among nurses was 69.5% and 9.3% respectively. Nursing, as a profession, is described as a "high intensity profession", the reasons have already been extensively formulated. This in itself has negative effects on the self-esteem of the nurse, both as a person and as a professional (Maniou et al., 2018) Workplace violence affects the nurses self-esteem and quality of work and causes inequality, discrimination, disorder, and conflict at work (Hosseini et al., 2018) & (Albalwei et al., 2021). So conducted the present study to assess relation between

workplace violence among staff nurses and their self-esteem

#### **Aim of this study:**

The present study was aimed at assessing relation between work place violence among staff nurses and their self-esteem.

#### **Research Question:**

Is there relationship between workplace violence among staff nurses and their self-esteem?

#### **Subjects and Methods:**

##### **Research design:**

Descriptive, co-relational design was followed in carrying out this study. A descriptive correlational study is a study in which the researcher is primarily interested in describing relationships among variables, without seeking to establish a causal connection.

##### **Setting:**

The study was conducted at Al-Nabawy Al-Mohandis General Hospital affiliated to ministry of health which is located in El fayoum governorate.

##### **Subjects of the study:**

The subjects of this study consisted of a convenient sample of (100) staff nurses who are working in critical care units in the above mentioned setting, taken after fulfilling the inclusion criteria which is they had Period of experience more than one year in the above mentioned setting.

##### **Tools of data collection:**

Data for this study was collected by using two tools namely; Workplace violence questionnaire and self-esteem inventory sheet.

**Tool I: Workplace violence questionnaire:** It consists of two parts as the following:

This part aims to collect socio-demographic characteristics of nurses and includes; age, gender, nursing qualification, marital status, years of experience, work setting , work shift and monthly income.

This questionnaire adopted from (Karwan 2007) it aimed to assess workplace violence among staff nurses. It contains nine dimensions

including 35 items divided as follow: 28 items to ask about exposure to work place violence and 7 items to ask about the person who did the work place violence

#### ❖ Scoring system:

Responses were ranging from (1)=never, sometimes(2) and (3)= always. The reverse scoring was used for negatively stated item number one at reporting dimension, so that a higher score indicates higher level of workplace violence. The sums of cases were converted into percent scores, and for the categorical analysis of each category as well as for the total score of workplace violence, a score of 60% or higher was considered as high violence level, while, less than 60% was considered low level workplace violence.

#### Tool 2: Self-esteem inventory sheet:

The self-esteem inventory sheet was adopted from (Rosenberg, (1965) Including 10-item scale that measures global self-worth by measuring both positive and negative feelings about the self.

#### ❖ Scoring system

All items are answered using a 4-point Likert scale format ranging from strongly agree to strongly disagree. Items 2, 5, 6, 8 are reverse scored. Give “Strongly Disagree” 1 point, “Disagree” 2 points, “Agree” 3 points, and “Strongly Agree” 4 points. The total scale were summed-up and the total divided by the number of the items, and the sum scores were converted into percent scores. Higher scores indicate higher self-esteem.

#### Operational design

The operational design includes preparatory phase, pilot study, and field work.

#### Preparatory phase

The researcher reviewed current and past, local and international related literature using books, articles, periodicals, journals and internet.

#### Pilot study:

A pilot study was conducted on 10% of staff nurses they represented (10 nurses) of total subjects they were selected randomly from the

study subjects to test the feasibility, practicability of the tools and clarity of the language of the questionnaires. It helped in identifying potential obstacles and problems that may be encountered during the period of data collection. It has also served to estimate the time needed for filling the questionnaire (40 - 50) minutes. It is included in the study sample.

#### Field work:

Data collection of the study lasted along eight weeks, beginning of December 2021 till the end of January 2022. The researcher visited the selected setting four days per week the filling time for the questionnaire sheet took about 40 to 50 minutes. Data collected from 3 to 4 staff nurses every visit. Data collection was done during the morning, afternoon and night shifts according to a pre-determined schedule before distributing the questionnaire, the purpose of the study and components of the tools were explained to the participants in the study settings. Then, the researcher distributed the data collection sheets to the respondents individually in their work place, and was present all the time for any needed clarification after the participant completed it to ensure the absence of any missing data.

#### Ethical Considerations:

The study proposal was approved by ethical committee in faculty of nursing, Ain Shams University. The researcher met the directors of hospital both medical and nursing to clarify the aim of the study and seek their support and their approval and written approval was obtained. The researcher met study subjects to explain the purpose of the study and obtain their approval to participate in it. They reassured about the anonymity and confidentiality of the data collected, and using only for the purpose of scientific research. The subjects had the right to withdraw from the study at any time they assured during data collection period.

#### Administrative design:

An official letter requesting permission to conduct the study was directed from the dean of the Faculty of Nursing Ain Shams University to the hospital director to obtain their approval

to carry out this study. This letter included the aim of the study and photocopy from data collection tools in order to get the permission and help for data collection.

#### Statistical design:

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Quantitative continuous data were compared using the non-parametric Mann-Whitney. Qualitative categorical variables were compared using chi-square test. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of workplace violence and self-esteem score, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was considered at  $p$ -value  $<0.05$ .

#### Results:

**Table (1):** Shows the Socio-demographic characteristics of studied staff nurses. As indicated in the table, majority of them (93 %) were female. In addition, more than three quarters (76%) their age ranged between  $22 \geq 37$  years old, and had experience years between  $5 \geq 10$ , and three quarters (75%) had insufficient monthly income.

**Figure (1):** Shows that, 63% of the staff nurses had diploma in nursing, 34% of them had

technical institute, while 3% of them had bachelor qualification.

**Table (2):** Shows the most experienced violence type among studied staff nurses was upon the bullying (46%), followed by verbal violence (35%) and sexual violence (32%). On the other hand, racial harassment were the least type experienced among studied staff nurses (19%).

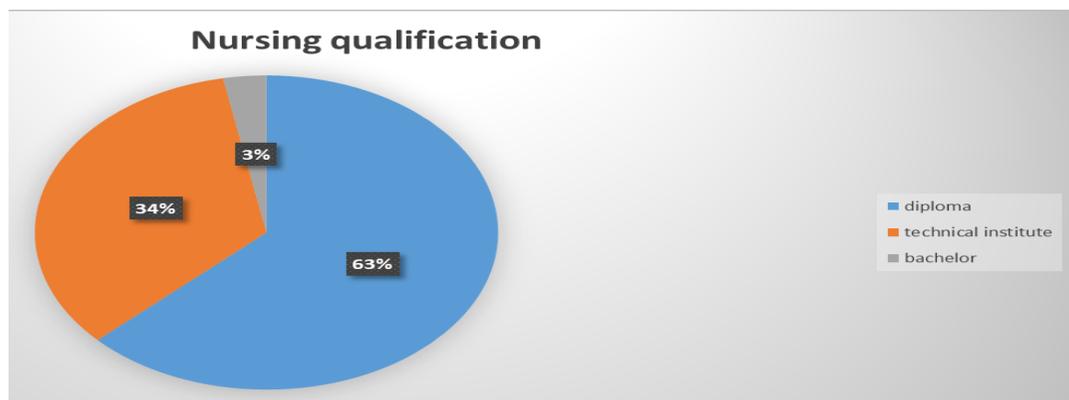
**Figure (2):** Reveals that, 39% of the studied nurses had low exposure to workplace violence and 29% had high exposure to workplace violence while, 32% of them had moderate exposure to workplace violence

**Table (3):** Shows that, the studied staff nurses had a highest perception regarding the self-esteem items (I take a positive attitude toward myself, On the whole, I am satisfied with myself, and I wish I could have more respect for myself), (Mean percent 90%, 97%, and 98%) respectively. Meanwhile, the studied staff nurses had a lowest perception regarding the items (At times I think I am not good at all, I certainly feel useless at times, and All in all, I am inclined to feel that I am a failure), (Mean percent 5%, 7%, and 11%) respectively. Additional, mean percent 79% from studied staff nurses had a highest perception regarding total self-esteem.

**Table (4):** Presents the correlation of Workplace violence and self-esteem dimensions. This table indicates there is no relation between Workplace violence and self-esteem among studied staff nurses.

**Table (1):** Frequency and percentage of studied staff nurses according to their socio-demographic characteristics (n=100).

Characteristics	No.	Percent
<b>Age:</b>		
<22	6	6
22≥37	76	76
37+	18	18
<b>Mean ± SD 25.45±6.93</b>		
<b>Gender:</b>		
Male	7	7
Female	93	93
<b>Experience years:</b>		
<5	10	10
5≥10	76	76
10+	14	14
<b>Mean ± SD 6.38 ±5.61</b>		
<b>Work shift</b>		
Day	43	43
Evening	40	40
Night	17	17
<b>Monthly income</b>		
Sufficient	25	25
Insufficient	75	75

**Figure (1):** distribution of the studied subject related to nursing qualification**Table (2):** Total exposure to workplace violence according to types among studied staff nurses (n=100).

Violence types	Low		Moderate		High	
	N	%	N	%	N	%
Physical violence	52	52	25	25	23	23
Homicide	50	50	25	25	25	25
Racial Harassment	43	43	38	38	19	19
Psychological violence	32	32	41	41	27	27
Bullying	35	35	19	19	46	46
Sexual violence	37	37	31	31	32	32
Verbal abuse	26	26	39	39	35	35

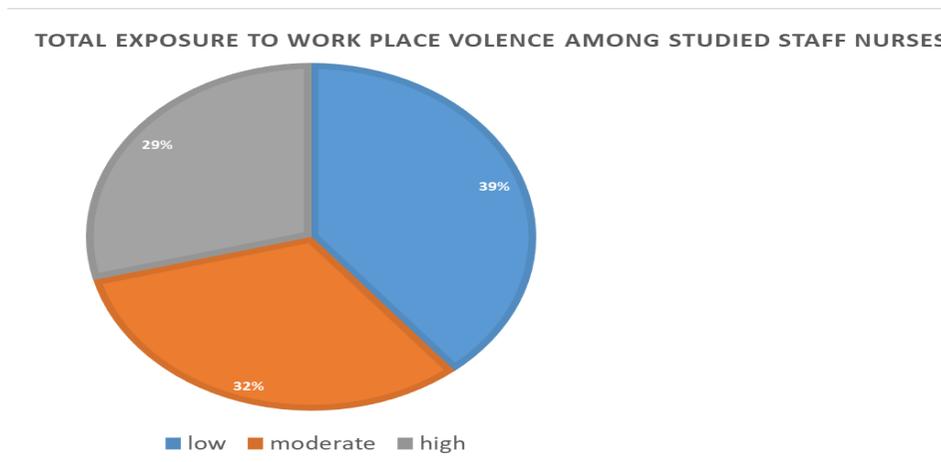


Figure (2): Total exposure to work place violence among studied staff nurses.

Table (3): Mean score of studied staff nurses response toward self-esteem items (n=100).

Self-esteem items	Mean percent Max=100
I feel that I am a person of worth at least on an equal plane with others	72
I feel that I have a number of good qualities	89
All in all, I am inclined to feel that I am a failure	11
I am able to do things as well most other people	74
I feel I do not have much to be proud of	32
I take a positive attitude toward myself	90
On the whole, I am satisfied with myself	97
I wish I could have more respect for myself	98
I certainly feel useless at times	7
At times I think I am not good at all	5
Total	79

Table (4): correlation matrix of Workplace violence and Self –esteem dimensions scores n= (100)

Dimensions	Self –esteem
Workplace violence	.038

**Discussion:**

Workplace violence cause many physical and psychological complications, such as physical injuries, tension headaches, anger, fear, depression, anxiety, feeling of guilt, decreased self-esteem, undesirable effects on the quality of patient care, reduced work morals, occupational burnout, frustration, and negative attitudes towards work. Additionally, disturbances such as the loss of working days, constraints on activity or work, termination of employment, job change, and even death are serious complications of occupational violence. Hence, there is a relationship between the incidence of workplace violence and absenteeism and this relationship has a negative

impact on the employees’ job satisfaction. In addition, violence can affect the whole healthcare team and affect the quality of services provided to patients (Bloom, 2019).

Regarding socio-demographic characteristics of studied staff nurses the present study result showed that, majority of them were female, more than three quarters their age ranged between 22≥37 years old, had experience years between 5≥10, three quarters of them had insufficient monthly income and two thirds of them had diploma in nursing. While, more than one third of them were graduates of Technical Educational Institute of nursing and half of them were married, highly percentage of them working in medical ICU.

The present study finding in the same line with **Maniou et al., (2018)** who conducted study entitled "Workplace violence, anxiety and self-esteem in nursing staff of primary, emergency and intensive care units on the island of crete" and founded that the majority of the studied nurses were women and, mean age for the total sample was 41.73 (SD=7.33 years) and the highly percentage of them were married. While, disagree in relation to nursing qualification more than two thirds of the sample were graduates of technological Educational Institute (TEI) also, less than one tenth of them had a master's degree.

Also contrast with **Hosseinikia et al., (2018)** applied study entitled "A cross-sectional multicenter study of workplace violence against emergency medical technicians staff nurse" and illustrated that, all the studied nurse were male, the mean age of the subjects was 31.77  $\pm$ 6.24 years and their age range was 22 to 53 years, about two thirds of them had a bachelor's degree. The difference between studied samples may be due to difference in demographic characteristics.

Regarding total exposure to workplace violence according to types among studied staff nurses the current study result illustrated that, highly percentage of exposure was less than half of them exposed to bullying, followed by more than one third of them exposed to verbal violence and one third of them exposed to sexual violence. On the other hand, less than one fifth of them exposed to racial harassment were the least type experienced among studied staff nurses. This may also be due to the time differences that the people in recent times may enter to different socio-economic instabilities which may be taken as a pushing factor for violence that happened against nurses.

This result disagree with **Kibunja et al., 2021)** reported that, the main workplace violence were verbal abuse followed by physical violence, and sexual harassment. Also **Musengamana et al., (2022)** showed that, more than half of the studied nurses exposed to verbally abused, more than one tenth of them were bullied/mobbed, minority of them exposed to physical violence, and sexual harassment additionally, **Bernardes et al., (2020)** who applied study entitled "Workplace

violence among nursing professionals" and founded that, highly percentage exposure to violence was verbal abuse.

Also, **Saadawi, Shazly & Ahmed(2022)** who conducted study entitled "Relationship between workplace violence and turnover intention among staff nurses at EL-Fayoum university hospitals" and founded that, exposure of the studied nurses to verbal/psychological workplace violence was the highest, while sexual violence was the lowest, overall, a majority of them don't exposed to sexual violence. This may be due to fear of being stigmatized as a troublesome and incompetent person and also may be due to cultural differences and the way in which violence is described

Regarding total exposure to workplace violence the current study result showed that, less than two fifths of the studied nurses had low exposure to workplace violence. This result disagree with **El sharkawy & Mondoor, (2021)** who applied study entitled "violence among female health care worker" and **Sisawo, Ouédraogo & Huang (2017)** who conducted study entitled "Workplace violence against nurses in the Gambia: mixed methods design" and presented that, more than two thirds of the studied nurse exposed to workplace violence. This might be due to the negative community attitude towards female and may be due to victim not reported to any one due to fear of being stigmatized.

Concerning studied staff nurses response toward self-esteem items the current study result showed that, the studied staff nurses had a highest perception regarding the self-esteem items (I take a positive attitude toward myself, On the whole, I am satisfied with myself, and I wish I could have more respect for myself), respectively. Meanwhile, the studied staff nurses had a lowest perception regarding the items (at times I think I am not good at all, I certainly feel useless at times, and all in all, I am inclined to feel that I am a failure) respectively. Additional, mean percent about most of the studied staff nurses had a highest perception regarding total self-esteem.

This result contrast with **Maniou et al., (2018)** who founded that, the majority of nurses had a moderate self-esteem. An explanation

could be that newly hired nurses are challenged to adapt to new work settings, policies, and regulations and work environment, demonstrate some nursing procedures for the first time, being responsible for a number of patients with different needs, so it is possible to feel uncomfortable, incompetent, insecure and this may affect nurse's identity which all considered the component of self-esteem. Also, it was found that minority of them had very low self-esteem, less than one fifth of them had low self-esteem and more than one tenth of them had high self-esteem. Also, the results showed that the General self-esteem was 12.27 (mean), the Social self-esteem 6.35 (mean), the Personal self-esteem was 3.86 (mean) and the scale of lie was 4.77. Also **Alzoubi, Jaradat, & Juda, (2021)** who applied study entitled "Verbal abuse among newly hired registered Jordanian nurses and its correlate with self-esteem and job outcomes" and founded that, the mean score of nurse's self-esteem in this study was 22.6, which considered moderate.

Regarding correlation matrix of workplace violence and self-esteem dimensions scores the current study result indicated that, there is no relation between Workplace violence and self-esteem among studied staff nurses. This result disagree with **Hampton, Tharp-Barrie & Kay Rayens, (2019)** who conducted study entitled "Experience of nursing leaders with workplace bullying and how to best cope" and reported that, negative correlation between workplace bullying and self-esteem. This result contrast with **Arand, (2019)** who mentioned that, there was a statistically significantly negative relationship between self-esteem and bullying and harassment. Also **Ebrahim & Elrefaey, (2018)** who applied study entitled "The relationship between bullying, achievement factors, and self-esteem among nursing" and founded that, no statistically significant between total bullying and total self-esteem.

### **Conclusion:**

In the light of the current study findings, it can be concluded that,

Less than half of the studied staff nurses exposed to bullying, followed by more than one third of them exposed to verbal violence and one

third of them exposed to sexual violence. On the other hand, less than one fifth of them exposed to racial harassment, had the highest percentages to cause workplace violence. Most of the studied staff nurses had a highest perception regarding total self-esteem. Additionally, there were positive statistically significant correlations among all dimensions of workplace violence. Moreover, there were no relation between workplace violence and self-esteem among studied staff nurses.

### **Recommendations:**

Based on the current study finding the following recommendations were proposed:

- The current results highlight the importance of implementing innovative programs that enhance the nurses' job's core dimensions and increasing their sense of fulfillment.
- Workplace policies and procedures are needed that focus on the security of the environment, reporting and surveillance, and education for all employees and managers on how to prevent and manage violence.
- Develop and adopt a standard definition of workplace violence; strengthen and adopt regulatory and/or accrediting agency (e.g., Occupational Safety and Health Administration) recommendations on workplace violence in health care settings including institutional, community, and academic settings, as a requirement for workplace safety.
- Educational seminars focus on communication techniques and stress or conflict resolution to effectively manage violence in the workplace.
- Eliminate institutional barriers for a safe work environment by supporting a culture of open communication and reporting among nursing staff, faculty, health care personnel, and students regarding violence in the workplace.
- Conduct a mandatory incident reporting system, review of security teams' responsibilities, and incident follow-up by management.
- Hospital administrators need to develop a workplace violence policy.
- Nurses exposed to workplace violence must receive a comprehensive treatment and support after violent attack.

- Conduct training programs for nursing personnel regarding violence and coping strategies to deal with workplace violence
- Nurse Manager must be able to lead effectively and provide a working environment where nursing staff are satisfied and have a sense of fulfillment in their job.
- Establishing clear procedures for reporting incidents of violence and encouraging personnel to report cases of violence

### References:

- Albalwei H, Ahmed N, Albalawi N, Albalawi S & Al-Enazi N (2021):** Violence against Health Care Workers of Pediatric Departments in Saudi Arabia: Systematic Review. Archives of Pharmacy Practice, 12(1).
- Alzoubi F, Jaradat D & Juda A (2021):** Verbal abuse among newly hired registered Jordanian nurses and its correlate with self-esteem and job outcomes. Heliyon, 7(4), e06929.
- Arand J (2019):** The Effect of Self-Esteem, Bullying, and Harassment on Nurse Turnover Intention. This is to certify that the doctoral dissertation, Walden University.
- Bloom E (2019):** Horizontal violence among nurses: Experiences, responses, and job performance. Nurs Forum, 54(1), 77–83.
- Ebrahim R & Elrefaey S (2018):** The relationship between bullying, achievement factors, and self-esteem among nursing. International Journal of Novel Research in Health care and Nursing, 5(3), 476-489.
- El sharkawy S & Mondoer W (2021):** violence among female health care worker, Egyptian Journal of occupational medicin, 45(3), 199-216
- Hampton D, Tharp-Barrie K & Kay Rayens M (2019):** Experience of nursing leaders with workplace bullying and how to best cope. Journal of Nursing Management, 27(3), 517-526.
- Hassan E, Amein N & Ahmed S (2020):** Workplace violence against nurses at Minia district hospitals. Journal of Health Sciences, 10(1), 76-82
- Honarvar B, Ghazanfari N, Shahraki HR, Rostami S & Lankarani KB (2019):** Violence against Nurses: a Neglected and Health threatening Epidemic in the University Affiliated Public Hospitals in Shiraz Iran. Int J Occupat Environ Med, 10(3), 111.
- Hosseiniakia S, Zarei S, Najafi Kalyani M & Tahamtan S (2018):** A cross-sectional multicenter study of workplace violence against prehospital emergency medical technicians. Emergency medicine international.
- Karwan. K.F(2007).**Assessment of workplace violence against nurses in sulimani teaching hospital published thesis, 100-106.
- Kibunja B, Musembi H, Kimani R & Gatimu S (2021):** Prevalence and effect of workplace violence against emergency nurses at a tertiary hospital in Kenya: a cross-sectional study. Safety and health at work, 12(2), 249-254.
- Liu J, Gan Y, Jiang H, Li L, Dwyer R & Lu K (2019):** Prevalence of workplace violence against healthcare workers: a systematic review and meta-analysis. Occup Environ Med 76, 927e
- Maniou M, Zyga S, Vliamos S, Prezerakos P, Flora K & Pavlakis A (2018):** Workplace violence, anxiety and self-esteem in nursing staff of primary, emergency and intensive care units on the island of crete. J. Nurs. Care, 7(464), 2167.
- Musengamana V, Adejumo O, Banamwana G, Mukagendaneza M, Twahirwa T, Munyaneza, E & Kabakambira J (2022):** Workplace violence experience among nurses at a selected university teaching hospital in Rwanda. The Pan African Medical Journal, 41.
- Rosenberg M (1965).** Rosenberg self-esteem scale (RES).Acceptance and commitment therapy. Measures packages, 61(52), 18.
- Saadawi A, Shazly M & Ahmed A (2022):** Relationship between Workplace Violence and Turnover Intention among Staff Nurses at EL-Fayoum University Hospitals. Egyptian Journal of Health Care, EJHC, 13 (1).

- Sahebi A, Jahangiri K, Sohrabizadeh S & Golitaleb M (2019):** Prevalence of workplace violence types against personnel of emergency medical services in Iran: a systematic review and meta-analysis. *Iranian journal of psychiatry*, 14(4), 325.
- Shi L, Li G, Hao J, Wang W, Chen W & Liu S (2020):** Psychological depletion in physicians and nurses exposed to workplace violence: a cross-sectional study using propensity score analysis. *Int J Nurs Stud.*, 103, 103493
- Sisawo E, Ouédraogo S & Huang S, (2017):** Workplace violence against nurses in the Gambia: mixed methods design. *BMC health services research*, 17(1), 1-11.