Nurses Perception toward Predictors of Violence Behavior among Psychiatric Patients in Workplace

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ABSTRACT

Violence in psychiatric settings is complex work place problem. This study **aimed** to assess-nurses' perception toward predictors of violence behaviour among psychiatric patients in work place. Descriptive design was used to achieve the aim of this study. This study setting: was conducted at psychiatric departments in (EL-Abbassia) mental health hospital of Psychiatry in Cairo. **Subjec**t: A convenient sample of 100 nurse's from700 nurses who were working in the previously mentioned setting. **Tools**: Data were collected using (1) interviewing sheet containing (a) Socio-demographic sheet for personal characteristics and (b) Nurses' awareness of signs of violence in psychiatric patients most susceptible to violence. (2) Questionnaire to assess nurse's awareness to ward predictors of aggressive patients. **Results**: The present study revealed that one hundred of nurses were male's. More than one third of nurses were more than10 years of experience. The majority of nurses were had training courses about violence and forecast the signs of violence that will start to appear on a patient. While nurses' awareness of signs of violence in psychiatric patients most susceptible to violence were more than two third. A positive relation between nurse's knowledge and experience toward predictors of violence behaviour among psychiatric patient in work place. **Conclusion**: This study has contributed to the knowledge based on assessment for nurses Perception toward Predictors of Violence behaviour among Psychiatric Patients in Workplace. There is more than one half of nurses' awareness of signs of violence in psychiatric patients most susceptible to violence. The study **recommended** replication of the current study on large sample and different hospitals settings to be able to generalize the results. Further study is recommended to identify effectiveness of nursing intervention to increase nurse awareness of work place violence. Educational training program for psychiatric nurses to improve their communication skills to manage work place violence in their health care setting. Psychological supportive nurse's session to help psychiatric nurse's manage their Psychological problems. Development of interventions to psychiatric nurse's to prevent and respond to patient violence, as well as support nurse working with violent patients.

Key words: Predictor, Nurses perception, Violence behavior, Psychiatric patient.

INTRODUCTION

Workplace violence against healthcare workers employed in psychiatric inpatient wards is a serious occupational issue that involves both staff and patients; the consequences of workplace violence may include increased service costs and lower standards of care (*Gabriele, Ettorre. Vincenza and Pellicani, 2017*). Interpersonal violence is a major societal problem with consequences for health and well- being**.** Nurses often provide the first line of contact with the health care team and are well situated to mobilize resources and the initial intervention (*Iozzino, 2016*).

Violence in psychiatric settings is complex work place problem (*Pice, 2016*). Aggression is an aggressive act that involved physical or verbal assault, or verbally intimidating behaviour that occurs at work. The WPV may cause complications for staff, organizations, and society. Even the fear of encountering it creates occupational stress, thereby negatively affecting the health of employees, organizational performance and efficiency (*Pourshaikhian, Gorji, Aryankhesal, Khorasani-Zavareh & Barati, 2016*).

Workplace violence can cause job stress which in turn could affect the nurses life

satisfaction and harmful to psychiatric nurses' causing job stress, which can lead to the retirement of nursing personnel, and emotional harm, including mental health difficulties, such as reduced self-esteem and post-traumatic stress disorders for the nurses *(WHO, 2019).*

A study of work place violence among 500 Egyptian mental health nurses, found that 54% suffered from verbal harassment and 79% had experienced physical harassment over the previous 6 months, leading to poor quality of life *(World Health Organization, 2016).*

Predictors of workplace violence: Several predictive and protective factors of workplace violence, with specific regard to physically aggressive behaviour, higher levels of anger expression did predict aggressive behaviour, while hostility was also, predictive. Other predictors of aggressive and violent behaviour that found was (i.e., lifetime substance use disorders, early age at the first contact with DMHs, longer illness duration) *(Stefano, Barlati, Alberto, Stefana, Francesco, Bartoli, Giorgio and Bianconi, 2019).*

The psychiatric patient with history of violence has a serious brain disorder and drug and alcohol abuse. Other indicators of potential violence in mentally ill include antisocial personality disorder; neurological impairment. Type of delusions and type of hallucinations (command hallucinations (schizophrenia or bipolar disorder) *(Mericle and Havassy, 2018).*

Significance of the Study:

Work place violence is a serious and global health problem. It has been reported as a significant issue for health care providers; including nurses and other staff directly involved in patient care *(World Health Organization, 2016).* The prevalence rates of violence among psychiatric patients range between 5 and 20% *(Chukwujekwu and Stantley, 2011).*

Studies indicate that mental health nurses face the highest risk of violent attacks by patients. Especially physical and verbal violence and sexual assault *(Baby, 2014).* Workplace violence can cause job stress, which in turn could affect the nurse's life satisfaction. Therefore, the purpose of the current study was to assess the nurse's perception toward predictors of violence behavior.

AIM OF THE STUDY

This study aims to assess nurses' perception toward predictors of violence behavior among psychiatric patient in work place.

Research Questions: This study is based on answering the following questions:

- What are the nurses perception toward predictors of violence behavior among psychiatric patient in work place?
- What are the predictors of violence behavior among psychiatric patients?

SUBJECTS AND METHODS

I. Technical Design:

The technical design for this study includes the research design, research setting, subjects of the study and tools of data collection.

1) **Research design:** A descriptive design. Was used to achieve the aim of this study.

2) **Research setting**: This study had been conducted in the psychiatric mental health hospital (EL-Abbassia). The time consumption for each sheet consumes approximately 15- 20 minutes and 25 minutes in case of some question disruption.

3) Subject:

A- Selection of sample: Selection of sample contained type of sample, about 100 nurses from 700 of total nurses at least 10% of the total nurse's number who were working in inpatient department of El-Abassia Governmental Hospital for Psychiatric mental health.

- **Type of sample:** Convenient sample form psychiatric mental health nurses
- The criteria for eligibility in the study sample were as follows.

Criteria of sample

Inclusion criteria

- **Population**: An oral consent was obtained from each nurse to be involved in the study with right to withdraw at any time.

- **Level of education**: diploma nurse and diploma of health technical institute.

▪ **Years of experience**: at least one year**.**

Sample size determination: Sample size is calculated based on the reported value of experienced physical violence 56.1% and the total number of available nurses = 700 assuming a margin of error 10% and alpha error 0.05 a minimum sample size of 95 nurses is required. Hence, a sample size of 100 nurses will be considered.

$$Sample\ Size = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1+(\frac{z^2 \times p(1-p)}{e^2 N})}$$

Tools of data collection

Tools were used for data collection of this study were:

I. Socio_demographic sheet:

A personal interview sheet for nurses: It was designed by the researcher to collect data about psychiatric nurses, it contained the following items: Sex, Age,, marital status, educational Level, year of experience, Current Job, training courses.

II. Questionnaire to measure nurses perceptions of the predictors of patient aggression, It was developed by the researcher This questionnaire has it been developed to assist individuals in identifying the frequency with which they have been confronted with aggressive or violent behaviour during the last year in the course of their professional work as a health care worker in psychiatry.

Scoring System*:*

Total number of question was 33 questions.
Scoring System of perception*:*
Scoring system was adopted with rating ranging from:
(3 grades) for (Agree), (2 grades) for (Not sure) and (1 grade) for (Disagree) for each item.
Score % = (the observed score / the maximum score) × 100

Total score was from 20-60 grades:

Nurses perception for total positive violence >90%.

Nurses perception for total negative violence ≤50%.
Total predictor of violence (≤ 80 %.-> 90%).

III. Operational design:

Operational design for this study includes preparatory phase, pilot study, field work, ethical considerations.

A- Preparatory phase:

This phase deals with the preparation of the study design; data collection tools were based on reviewing current and past local and international related literatures about nurses' perception of the predictors of patient aggression. This review was carried out through using available books, articles, periodicals journals, and internet search to be acquainted with the current relevant tools that were performed, for data collection then the content validity and reliability were reviewed and assessed by experts.

Tools Reliability

Questionnaires were tested for content reliability by group of five experts in psychiatric nursing. The required modifications were carried out accordingly, and then test-retest reliability was applied. The tools approved to be strongly reliable (r. =0.8), the validity and reliability test was confirmed by using Chi-square (x^2) test.

Testing the reliability through Cronbach's Alpha reliability analysis.

Table (1): Cronbach's Alpha reliability analysis.

This tables show Alpha Cronbach's test which used to measure the internal consistency (Reliability of the used tool or instrument) the reliability score of tool as above is (0.812 & 0.803) for perception and predictor respectively.

While validity score of tools is (0.822 & 0.812) for nursing knowledge and experience respectively this indicated high total internal consistency of the used tool.

- Final reliability (Cronbach's alpha) = 0.808

- Final validity (Content valiantly) = 0.817

Tool	Reliability		Validity		Internal consistency
	Reliability Coefficient	Cronbach's Alpha	Self validate	Content valiantly	
Perception	0.788	0.812	0.861	0.822	Good
Predictor	0.725	0.803	0.756	0.812	Good

Tools Validity: To achieve the criteria of trust worthiness of the tools of data collection in this study, it was tested and evaluated for face and content validity by a jury group consisting of five experts from faculty members in the nursing from Ain Shams University. To ascertain relevance, clarity, and completeness of the tools, experts elicited responses that were either agree or disagree for the face validity and for content reliability, important, not important, and comments. The items on which 90% or more of the experts have agreed were included in the proposed tools.

- **Field Work:**
  - Before starting the data collection, an informed consent was obtained to conduct the study form the director of EL-Abbassia hospital for mental health to facilitate data collection.
  - The actual field work for the process of the data collection has consumed three months started at beginning of October 2020and was completed by December2020.

Once permission was granted to proceed with the study, the researcher visited the study setting and met with nurses having patient with violent behaviour who fulfilled the inclusion criteria. After introduced herself and the objective of the study, she explained the nature of purpose of the study to gain cooperation and emphasizing that all collected information is strictly confidential then oral consent was obtained from them, the researcher started interview with psychiatric mental health nurses using data collection tools.

The researcher collected data on 3days\week through using the study tools, the time consumption for each sheet consumes approximately 15- 20 minutes and 25 minutes in case of some question disruption. Which lasted three months in three days per week (Sunday, Tuesday and Thursday).

II. Administrative Design:

An official permission was obtained from Dean of the faculty of Nursing Ain Shams University to the directors of the study setting were The inpatient clinics, the researcher included the aim of work, and the expected benefits. It ensured confidentiality of the information obtained.

Ethical considerations: Approval was obtained from ethical committee to conduct this study. The researcher explained the objective and aim of the study in a simple and clear manner to be understood by nurses verbal consent of each participant to share in the study was obtained before collecting any data. Data was obtained from each participant and was assured that confidentiality of the data would be assured and maintained and not be used outside this study without approval. During the data collection, the nurses were informed about the nature of the study. Each participant had the right to withdraw from the study at any time. Also, confidentially of their names and information were regarded..

III. Statistical design:

The collected data were coded, tabulated and statistically analyzed using IBM SPSS (statistical package for social sciences) software version 22.0, IBM. Descriptive statistics were done for quantitative data as minimum and maximum of the range as well as mean +SD (standard deviation) for quantitative normally distributed data, The level of significance was taken at P value < 0.050 is significant, otherwise is non-significant. P-value > 0.05 Non-Significant (NS). P-value < 0.05 Significant (S). P-value < 0.001 Highly Significant (HS).

Total score in each scale was computed by having sum of all questions, and then the sum was divided into three parts, the lowest 22.36% was considered low, the middle 33.6

% to 57.63 % was considered moderate and the

RESULTS

Table (1): represents that less than half of the studied nurses (46%) were 20<30 years, 100% of them were males, more than two thirds (66%) were married, more than two thirds (65%) had finished diploma of a health technical institute, more than one third (35%) had finished nursing diploma, less than two thirds (56%) had 1–5 years of experience, and more than one third (39%) had 15–20 years of experience.

Figure (1): indicates that more than one third (41.69%) of psychiatric patients had high level of positive violence indicator while less one quarter (24.25%) had low level of violence **(threatening physical violence).**

Figure (2): demonstrates that less than one half (49.8%) of psychiatric patients had high level of negative violence indicator **(nervous confusion)** and also less than one half (46.6%) had low level of negative violence (**quiet opposition**).

Figure (3): shows that less than one half (47.69%) of psychiatric patients had total negative violence indicators scale, while more than one third (37.95%) of psychiatric patients had total positive violence indicators scale.

As shown in **Table (2),** there was highly statistically significant between nurses' awareness of total positive violence indicator and their age with P-value <0.001. There was no statistically significant between nurses' awareness of total positive violence indicator and their job with P-value > 0.05. There was

remaining was considered high.

highly statistically between nurses' awareness of total positive violence indicator and their marital status with P-value < 0.001. There was highly statistically between nurses' awareness of total positive violence indicator and their educational level with P-value <0.001. There was highly statistically significant between nurses' awareness of total positive violence indicator and years of experience scale with P-value < 0.001.

Table (3), represents there was highly statistically significant between nurses' awareness of total negative violence indicators and their age with P-value < 0.001. There was highly statistically significant between nurses' awareness of total negative violence indicators and their job with P-value < 0.001. There was no statistically significant between nurses' awareness of total negative violence indicators and their marital status with P-value > 0.05. There was highly statistically significant between nurses' awareness of total negative violence indicators and their educational level with P-value < 0.001. There was highly statistically significant between nurses' awareness of total negative violence indicators and their years of experience with P-value < 0.001.

Table (4): indicates a significantly positive correlation between nurses' perceptions regarding to total positive and negative indictors and total predictor of violence (r =0.853, 0.896, 0.697 with P-value < 0.001** HS).

Table (1): Frequencies of socio-demographic characteristics among psychiatric mental health nurses under the study **(N=100)**.

| Parameter	Frequency %
1.Gender	
Male	100
2. Age	
from 20 to less than 30 years	46
from 30 to less than 40years	41
From 40 to less than 50 years	0
from 50 to less than 60 years	13
3. Marital Status	
Married	66
Single	21
Widow	2
Divorced	11
4. Degree of Education	
Nursing diploma	35
Diploma of a health technical institute	65
Baccalaureate in nursing	0
Diploma of psychiatric nursing	0
5. Number of years of psychiatric experience	
From year to less than five years	56
From five to less than ten years	3
From ten to less than fifteen years	2
From fifteen to less than twenty years	39
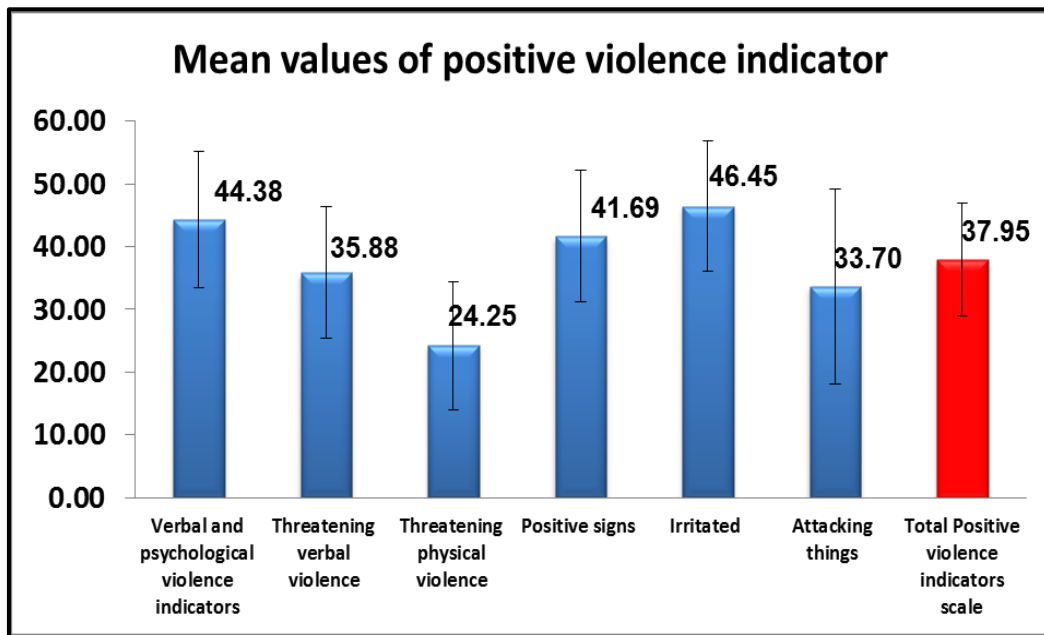
Figure (1): Percentage distribution of nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding positive violence indicators.
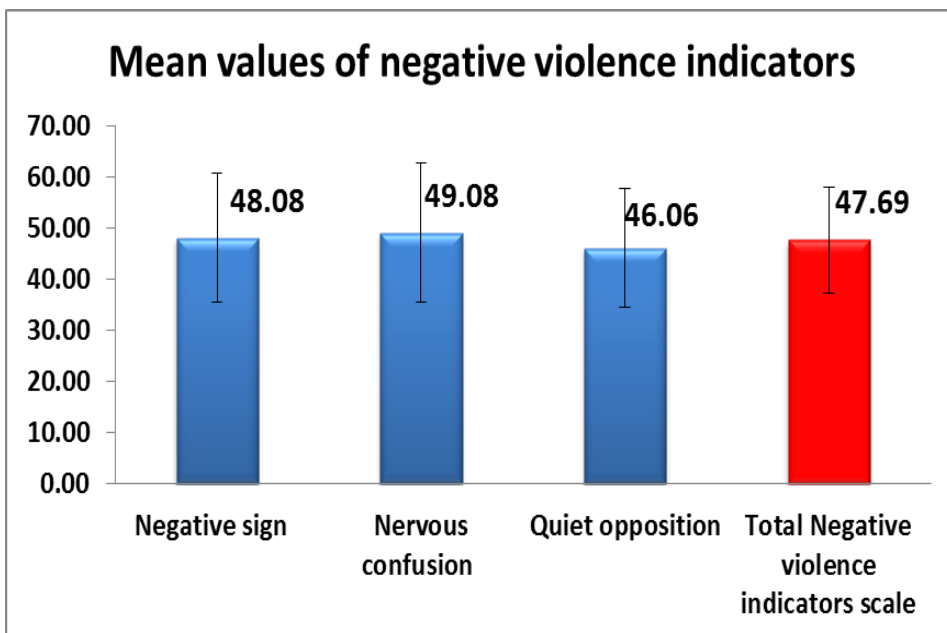
Figure (2): Percentage distribution of nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding negative violence indicators.
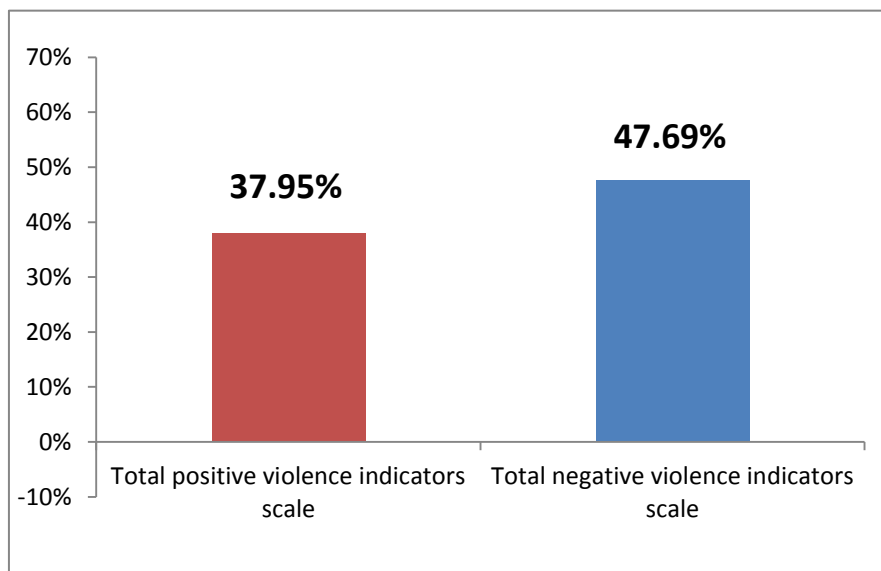

Figure (3): Percentage distribution of nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding total positive and negative

Table (2): Comparison of means of scores of sub groups of socio-demographic characteristics as regards nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding to total positive violence indictor **(N=100).**

Item	Total positive violence indictor				
	No	mean	SD	t	p-value
Age (years)					
20<30 years	46	36.15	2.59		
30<40 years	41	34.70	9.05	53.01	<0.001
50<60 years	13	54.59	4.54		
job					
Nurse	94	37.85	9.27	-0,.44	0.66189 > 0.05
Head nurse	6	39.52	0.00		
Marital Status					
Married	66	35.88	7.30	-3.38	0.00104 <0.001
Single	34	41.98	10.60		
Level of Education					
Secondary Nursing Diploma	35	45.90	7.67		
Secondary Diploma Nursing Technician	65	33.67	6.38	8.50	<0.001
Years of experience					
1<10 years	59	33.08	6.41	-8.54	<0.001
10<20 years	41	44.97	7.43		

Table (3): Comparison of means of scores of sub groups of socio-demographic characteristics as regards nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding to total negative violence indictor **(N=100).**

Item	Total negative violence indictor				
	No	mean	SD	t	p-value
Age (years)					
20<30 years	46	42.56	4.03		
30<40 years	41	50.19	12.24	17.70	<0.001
50<60 years	13	57.99	8.67		
job					
Nurse	94	46.69	9.87	-4.14	0.00007 <0.001
Head nurse	6	63.46	0.00		
Marital Status					
Married	66	48.13	10.12	0.59	0.55447 > 0.05
Single	34	46.83	10.94		
Level of Education					
Secondary Nursing Diploma	35	56.32	8.62		
Secondary Diploma Nursing Technician	65	43.05	8.1	7.69	<0.001
Years of experience					
1<10 years	59	40.97	4.83	-12.40	<0.001
10<20 years	41	57.36	8.35		

Table (4): Correlation between nurses' perceptions toward predictors of violence regarding to total positive and negative indictors and total predictor of violence using Spearman's rank correlation coefficient (rs) (N=100).

		Total positive	Total negative
Total positive violence indictor	r		0.853
	p-value		<0.001**
Total negative violence indictor	r	0.896	
	p-value	<0.001**	
Total predictor of violence indictor	r	0.697	
	p-value	<0.001**	

DISCUSSION

The incidence of aggression toward health care staff on psychiatric wards, including nurses, is repeatedly depicted as being higher in comparison with the workplaces of other clinical disciplines. The incidence of aggression among mentally ill patients is conditioned by a wide spectrum of various predictors such as the psychopathology of disease, incidence of aggression in the patient's history, patient's age, alcohol and substance abuse, general atmosphere on the psychiatric ward, communication between the health care staff and the patients, and their approach towards the patients. Depicted the internal, external, and situational-interaction models through which he explained the reasons for outbreaks of aggression **(Tomagová et al., 2016).**

Health care staff uses various methods and strategies in the management of patient aggression. Their choice may be related to their attitude towards patient aggression, including their perception and comprehension of the causes of aggressive behaviour **(Baby, 2018).**

- **Regarding socio-demographic characteristics of mental health nurses:**

The results of the present study revealed that one hundred percentage were male under the study were in age from 25–30 years.

This result may be due to there was a higher mean performance toward aggressive patients and the nature of work in psychiatric emergency which requires physical fitness and more experience to verbal and physical aggression.

This result agrees with that of **Edward, (2016)** who stated in the study of "Creating a sense of belonging to build safe patients," that male nurses have greater odds of physical assault from patients, relatives, or staff than female nurses. More specifically, male nurses may be located in higher numbers in higher risk areas (such as mental health and emergency departments).

Although this result disagrees with that of **Jonker & Goossens, (2018)** who stated in the study of "Patient aggression clinical psychiatry perception of mental health nurses," that more than two thirds of the samples were females.

Concerning nurses' marital status, the findings of the current study revealed that slightly more than one quarter of nurses under study were single and slightly more than two thirds were married.

This result may be due the marriage takes patience and acceptance and get certain responsibilities in work, home and children care arrangements so the married nurses able to cope and problem solving skills in certain situations rather than single nurses.

This result agrees with that of **Jayakumar & Kalaiselv, (2014).** Who stated in the study of ": quality of work life-an over view" who suggest that married person able to cope and problem solving skills in certain situations rather than single person.

Concerning the nurses' years of experience, the findings of the current study revealed that more than one half of nurses had 1–5 years of experience and more than one third of nurses had >20 years of experience.

In the current study, there was a higher mean performance score toward aggressive

patients among nurses with higher years of experience. This result may be due to the more exposure and reported episodes of aggression, the length period of nurse's practice and ability to handle the patient with violence.

This result agrees with that of *Lantta, Anttila, Kontio, Adams, Va¨lima¨& Ki, (2016)* who stated in the study of "violent events ward climate and ideas for violence prevention among nurses in psychiatric wards: a focus group stud' experience of violent events included a variety of warning signs and high-risk situations which helped them to predict forthcoming violence.

Concerning level of education, the current study revealed that about more than one third of the nurses had nursing diploma and more than two thirds had diploma of health technical institute.

In the current study, there was a higher mean performance score toward aggressive patients among nurses with diploma of health technical institute. This result may be due to those nurses with higher years of nursing experience.

This result agrees with that of *Jonker & Goossens, (2018)* who stated in the study of "Patient aggression clinical psychiatry perception of mental health nurses" that the majority of the nurses had a non-bachelor degree in nursing showed significantly higher self-efficacy scores for the management of patient aggression than their bachelor-educated colleagues.

- **Regarding nurses' awareness of signs of violence among psychiatric patients in workplace:**

Concerning assessment of nurses' awareness of signs of violence in psychiatric patients in workplace, the current study revealed that about more than two thirds of patients most susceptible to violence are those who suffer from schizophrenia.

In the current study the highest percentage of violence behaviour observed among patients with schizophrenia that may be related to specific psychotic symptoms, such as different types of delusions and hallucination.

This result agrees with that of *Grassiet A. Alsaleem, Abdullah Alsabaani & Abdulrahman M. Al-Bishi, (2018)* who stated

in the study of "Violence towards healthcare workers" that less than two thirds of most violent patients suffered from schizophrenia and/or had delusional syndromes, the majority had a history of violence, and had previous psychiatric admissions.

Concerning training courses on how to deal with patients with aggressive behaviour, the current study indicated that the majority of nurses had training courses about how to deal with patients with aggressive behaviour.

This result may be due to educational preparation of nurses for potential experiences of aggression might help them to understanding of aggression in the behaviour of patients throughout their future career.

This result agrees with that of *Jonker & Goossens, (2018)* who stated in the study of "Patient aggression clinical psychiatry perception of mental health nurses" that the Control and Restraint Course, training in aggression management, had been completed by 74 of the 85 nurses.

Although this result disagrees with that of *Jansen, Dassen & Burgerhof, (2017)* who stated in the study of ": Psychiatric nurses attitude towards in patient aggression" that less than two thirds of nurses were not trained to manage aggression and the majority reported that restraining interventions such as seclusion and fixation were not practiced on their wards.

Concerning the frequency of violent episodes, the current study demonstrated that violent episodes were twice a week and the majority of the studied nurses needed to attend training courses on how to deal with patients with aggressive behaviour. More than three quarters of the studied nurses answered that the basics of dealing with violent patient were the isolation of the patient.

This result may be due to nature of the populations served and mental illness in itself may of course lead to violent behaviour.

This result disagrees with that of *Grassiet et al. (2018)* who stated in the study of "Violence towards healthcare workers" that the rate of occurring violence was 7.5% and the rate of aggression among violent patients was 2.8 incidents per patient, with 0.18 incidents per day (approximately 1 incident every 5 days).

Concerning the incidence of violence, the findings of the current study revealed that more than two thirds of nurses answered that the large number of patients was the reason behind the increase in the incidence of violence within the department. They also reported that more than two thirds of the violence incidences occurring inside the hospital were in the evening.

This result may be due to overcrowded-poor staffing, poor environmental design, uncomfortable setting, and inadequate security as alarms.

This result disagrees with *Iozzin, (2016)* who stated in the study of "A systematic review evaluating health-related quality of life, work impairment, and healthcare costs and utilization in bipolar disorder" that almost 1 in 5 patients admitted to acute psychiatric wards committed an act of physical violence while in hospital.

Concerning the role of nursing in reducing the incidence of violence in the department, promotion of equality and constant observation were the main roles.

This result may be due to that, psychiatric nurses who attended in-services training and were empowered with latest psychiatric knowledge and skills were more effective when dealing with psychiatric patient.

This result agrees with that of *Jansen et al. (2017)* who stated in the study of ": Psychiatric nurses attitude towards inpatient aggression" that less than two thirds of nurses were not trained to manage aggression and the majority reported that restraining interventions such as seclusion and fixation were not practiced on their wards.

- **Regarding nurses' perceptions of the predictors of violence among psychiatric patients in workplace regarding verbal and psychological violence indicators:**

Concerning assessment of nurses' perceptions of the predictors of violence among psychiatric patients in workplace regarding verbal and psychological violence indicators, the majority of psychiatric patients sometimes yelled at the patient while less than three quarters of them sometimes threatened the patient and nurses with beating and less than three quarters never threatened the sick and nursing with a weapon. Regarding threatening

physical violence, the majority of them rarely tried to strangle the nurses.

This result may be due to that the patient in acute psychiatric setting, young age, history of psychiatric illness, higher level of anger, excessive feeling of rejection.

This result agrees with that of *Almeida, Bezerra, Filho & Marques, (2017)* who stated in the study of "Analysis of the scientific production on violence at work in hospital services" that the verbally abusive behaviour was the most frequently used behaviour by abuse sources, followed by "behave in inappropriate way", "belittle or humiliate", and other abusive behaviours. Verbally abused nurses reported that they were abused more by the majority of their colleagues, more than three quarters of patients, and less than three quarters of physicians.

Although this result disagrees with that of *Iversena, (2016)* who stated in the study of "Incidence of violent behaviour among patients in Psychiatric Intensive Care Units" that only 5 respondents (2.5%) said they had never experienced verbal violence and only (9.6%) reported that they rarely experienced it. (44.3%) had sometimes experienced verbal violence and (42.3%) often. The verbal violence most frequently encountered was obscenities (48.6%), non-specific threats (28.1%), and threats to person (8.1%), sexual harassment (7.9%), and personal threats (7.9%). Table 2 highlights the results obtained when asked to indicate the different types of verbal aggression encountered on a scale of 1 to 5, with 1 being the most frequent and 5 the least frequent.

- **Regarding nurses' perceptions of the predictors of violence among psychiatric patients in workplace regarding positive and negative violence indicators.**

Concerning assessment of nurses' perceptions of the predictors of violence among psychiatric patients in workplace regarding positive indicators included in this study, less than three quarters of psychiatric patients were sometimes depicting their excessive sense of isolation and less than three quarters of them sometimes make a noise while more than three quarters of them rarely goad.

Concerning assessment of nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding negative signs indicators included in this study, two thirds of psychiatric patients rarely insult nurses until they feel guilty, while less than two thirds of them sometimes say that they cannot tolerate others. For quiet opposition, more than three quarters of them sometimes have an innocent look while two thirds rarely insult until feeling guilty.

This result may be due to that the patient excessive feeling of rejection, persons who are victims of violence are sometimes at risk themselves of becoming violent; rejected by non‑aggressive peers, they seek out aggressive friends who in turn‑ reinforce peer violent tendencies

This result disagrees with that of *Choi, (2017)* who stated in the study of "The role of the nurse" that the significant negative relationship was confirmed between overall job satisfaction of nurses and physical aggression with no use of offensive weapon.

Although this result agrees with that of *Tomágová et al. (2016)* who stated in the study of "nurses' experience and attitudes towards in patient aggression on psychiatric wards" that the length of nurses' clinical practice positively correlates with the destructive attitude subscale and negatively correlates with the communicative attitude subscale. The length of nurses' practice and age positively correlate with internal factors, use of medication, and restraint subscales.

Concerning the statistically significant between nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding negative and positive indicators and their demographic characteristics, there was highly statistically significant between age (years), level of education, years of experience, and training courses, with P-value (<0.01).

There were statistically significant between nurses' perceptions toward predictors of violence among psychiatric patients in workplace regarding negative and positive indicators under study and that increase age, and training courses leading to increase knowledge about predictors of violence.

This result disagrees with that of *Jonker & Goossens, (2018)* who stated in the study of "Patient aggression clinical psychiatry perception of mental health nurses" that significant predictors of being confronted with aggression were age and years of nursing experience; being older and having greater nursing experience were associated with reduced incidence of being confronted with aggression.

There was statistically significant difference between nurses who had completed educational training on patient aggression and its management and those ones who had not completed any educational training in the use of restraints subscale only. Nurses who had attended educational training reported significantly greater consent to the use of restraints than nurses who had received no training.

These results were supported by *Tomágová et al. (2016)* who stated in the study of "nurses' experience and attitudes towards in patient aggression on psychiatric wards" that the most important training needs of psychiatric nurses are training in management of violence and aggressive behaviour, communication skills, and assessment skills, in order to improve their practice.

CONCLUSION

Based on the results and research question of the present study it can be concluded that:

- More than one third among nurses was more than 10 years of experience.

- The majority nurses were had training courses about on violence and forecast the signs of violence that will start to appear on a patient.

- More than two third of nurses' awareness of signs of violence in psychiatric patients most susceptible to violence.

- A positive relation between nurse knowledge and experience toward predictors of violence behaviour among psychiatric patient in work place.

- A significant positive correlation between nurses' knowledge and experience toward predictors of violence behaviour among psychiatric patient in work place.

RECOMMENDATIONS

The result of this study projected, the following recommendations:

In research:

1) Replication of the current study on large sample and different hospitals settings to be able to generalize the results.

2) Further study is recommended to identify effectiveness of nursing intervention to increase nurse's awareness work place violence.

In services:

1) Educational training program for psychiatric nurses to improve their communication skills to manage work place violence in their health care setting.

2) Psychological supportive nurse's session to help psychiatric nurse's manage their Psychological problems.

3) Development of interventions to psychiatric nurse's to prevent and respond to patient violence,

REFERENCES

Almeida, N.R., Bezerra, Filho, J.G. & Marques, L.A. (2017): Analysis of the scientific production on violence at work in hospital services. Rev Bras Med Trab.; 15 (1):101–12.

Baby, (2014): Psychiatric and Mental Health Essentials in Primary Care, 2nd edition, Great Britain by CPI, Pp1655.

Baby, (2018): Management of the aggressive emergency department patient: non-pharmacological perspectives and evidence base. Open Access Emerg Med.; 11: 271–290. Published online. doi: 10.2147/OAEM.S192884.

Choi, P.P. (2017): The role of the nurse. Nursing Standard, 29(41): 52.Choi, Pin. Nursing Standard; London: 52. DOI:10.7748/ns.29.41.52.e9772.

Chukwujekwu & Stantley (2011): Psychiatric Nursing Contemporary Practice, (5th edition), Lippincott Williams & Wilkins, Pp.426-448.

Edward, D.D. (2016): Creating a sense of belonging to bulid safe patients, psychology, 75, 196-204.

Gabriele, Ettorre, Vincenza and Pellicani, (2017): Workplace Violence toward Mental Healthcare Workers Employed in Psychiatric Wards: Acta Biomed. 21; 89 (4-S): 28-36. doi: 10.23750/abm.v89i4-S.7113.

Grassiet A. Alsaleem, Abdullah Alsabaani & Abdulrahman M. Al-Bishi (2018): Violence towards healthcare workers: A study conducted in Abha City, Saudi Arabia. Family Community Med.; 25(3): 188–193. doi: 10.4103/jfcm.JFCM_170_17.

Iozzino, (2016): A systematic review evaluating health-related quality of life, work impairment, and healthcare costs and utilization in bipolar disorder. Pp: 139–154.

Iversena (2016): Incidence of violent behaviour among patients in Psychiatric Intensive Care Units. Eur. J. Psychiat. Vol. 30, N. 1, 67-78.

Jansen, G.J., Dassen, T.W. & Burgerhof, J. (2017): Psychiatric nurses attitude towards inpatient aggression. Aggressive behaviour, 32, 44-53.

Jayakumar and Kalaiselv (2014): Quality of work life-an over view" Asian journal of management research: 140-151 (on line).http; indian research ournal.com_pdf-IJM.

Jonker, E.J. & Goossens, P.J. J. (2018): Patient aggression clinical psychiatry perception of mental health nurses, Journal of psychiatric mental health nursing, 15, 492-499.

Lantta, T., Anttila, M., Kontio, R., Adams, C.E., Va¨lima¨& ki, M. (2016): Violent events ward climate and ideas for violence prevention among nurses in psychiatric wards: a focus group study. International journal of mental health systems; 10(1):27.

Mericle, A. A. & Havassy, B. E. (2018): Characteristics of recent violence among entrants to acute mental health and

substance abuse services. Soc Psychiatry Psychiatric Epidemiology, 43, 392–402.

Pice (2016): Psychiatric nursing contemporary practice, 4thedition, Philadelphia: Lippincott Williams & Wilkins, Pp.280-290.

Pourshaikhian, M., Gorji, H. A., Aryankhesal, A., Khorasani-Zavareh, D., & Barati, A. (2016): A systematic literature review of workplace violence in pre-hospital setting. Arch trauma, (In press). Kashan, Iran. http://dx.doi. org/10.5812/ atr.28734

Stefano, Barlati. Alberto, Stefana. Francesco, Bartoli. Giorgio & Bianconi (2019): Violence risk and mental disorders (VIORMED2): A prospective multicenter study in Italy. https://doi.org/10.1371/ journal.pone.0214924.

Tomagová, Martina. Bóriková, Ivana. Lepiešová, Martina. Juraj, & Čáp. (2016): Nurses' experience and attitudes towards in patient aggression on psychiatric wards. Cent Eur J Nurs Midw; 7(3):462–469.

World Health Organization (2016): Mental Health: New Understanding, New Hope. Switzerland: World Health Organization.

World Health Organization. (2019): Report on violence and health. (Accessed on 25 Dec 2019). Available online: https:// www. who. int/ violenceprevention / approach/ definition/en