

Nurse's Awareness of the Relationship Between Suicidal Ideation and Schizophrenic Patient's Positive/Negative Symptoms.

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Abstract

Background: Suicidal thoughts and behaviors are very common among schizophrenic patients. Nurses have vital role in decreasing incidence of suicide among schizophrenic patients through increase their awareness of the relationship between suicidal ideation and positive / negative symptoms of schizophrenia. **Aim of the study:** study aims to assess nurse's awareness of the relationship between suicidal ideation and schizophrenic patients' positive/negative symptoms. **Research methods:** A descriptive exploratory research design was utilized. A convenience sample was selected in this study. The subject of the present study consisted of (70) nurses (males and females) who are working in Port-Said Psychiatric Mental Health Hospital (PSPMHH). **Tools:** A self-reports study tools were developed by the researcher and it consists of 3 tools. **First tool:** Socio-demographic data. **Second Tool:** Nurse's knowledge about schizophrenic disorder. It consisted of three parts. **Third Tool:** Nurse's awareness of suicidal ideation in schizophrenic patients. It consisted of three parts. **Results:** There is no statistically significance relationship between socio-demographic characteristic and nurse's awareness of positive & negative symptoms of schizophrenia. While, there is statistically significance relationship between scholastic psychiatric experience & total nurse's awareness of the relationship between suicidal ideation and positive / negative symptoms of schizophrenia. **Conclusion:** Majority of the studied nurses subject weren't aware of positive / negative symptoms of schizophrenic patients. Nearly three quadrant of studied nurses subject weren't aware of the relationship between suicidal ideation and positive/negative symptoms of schizophrenic patients. Majority of the studied nurses subject don't have the ability to recognize different clues that may indicate early intention for suicide made by schizophrenic patients. **Recommendation:** Orientation programs/seminars should be developed about the existence of the relationship between specific positive & negative symptoms of schizophrenia and suicidal ideation among Egyptian patients.

Key words: Nurses awareness, Schizophrenia, Positive/ Negative symptoms", "Suicidal ideation

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Introduction

Self-awareness is a psychological state in which people are aware of their traits, feelings and behavior. Alternately, it can be defined as the realization of oneself as an individual entity (Crisp&Turner,2014).In our study awareness means perception and

knowledge of nurses toward relationship between suicidal ideation and schizophrenic patient's positive and negative symptoms .

Suicide is one of the leading causes of premature death among schizophrenia patients. It has been reported that 18-55% of schizophrenia patients attempt suicide during

the disorder, and 2-13% of the patients die from suicide (Isik,2007). In retrospective studies which investigated medical records of 72 schizophrenic patients in a multi-central study in Turkey found that 52% of the patients had suicidal thoughts or suicidal attempts and 28% of those patients tried to commit suicide at least once, while in some follow-up studies, 10-13% of schizophrenic patients succeed in committing suicide (Yildiz, Yazici&Boke,2010).

The importance of suicide cannot be ignored as the United States alone sees more than 30000 suicide victims annually .Among those particularly at risk for committing suicide are individuals suffering from schizophrenia and other chronic psychotic disorders. Suicidal behavior is a major public health problem and schizophrenia is markedly affected by suicide. Early and continuous monitoring of suicidality is important and high- risk groups are easily identified (Koslow,Ruiz&Nemeroff,2014).

Command auditory hallucinations are the psychotic symptoms most frequently associated with suicidal behavior (Taylor&Hor,2010), perhaps particularly so in the most vulnerable-to suicide of these patients. Command hallucinations command a person to do things. One of the things a voice might command a person with schizophrenia to commit suicide. Because the person with schizophrenia may not be able to recognize that the voice is not real, the command to commit suicide can be very compelling (Yung&McGorry,2012).

Suicidal behaviors are accompanied by suicidal ideation, so the identification of risk factors is a great important . Known risk factors for suicide in schizophrenia include male, gender, a negative attitude toward treatment, impulsive behavior, alcoholism, social isolation, poor psychosocial functioning, depression, previous suicide attempts or behavior , chronicity of illness with many acute episodes and remission,

awareness of the deteriorative effects of the disorder, fear of further deterioration and a loss of confidence in treatment(Kelly,Shim,Feldman,Yu&Conley ,2004).

Clinical description of the patients who commit suicide and the identification of risk factors are fundamental for the design of care strategies. Most suicide acts occur during a period of high vulnerability: the first year of disease. So, the prevention of suicide must be a major priority for the nurses , but also for the family and social workers: research and correction of risk factors, evaluation and treatment of suicidal behavior. Cares can use pharmacological means, psychotherapy, psychosocial and psycho-educative programs to fight against loss of social insertion and stigmatization(Gavaudan,Besnier&Lançon, 2006).

Suicide is considered more preventable than any other cause of death, it means saving a life. All suicidal persons are ambivalent about life and therefore are never 100% suicidal and approximately 80% of all potential suicidal victims give some clue before exhibiting self -destructive behavior (Shives,,2012).

Prevention requires knowledge of the dynamics of suicide and the ability to recognize the potential for suicidal actions in every client. So, reducing mortality and morbidity from suicidal behavior remains a clinical challenge in the care of patients with schizophrenia(Pompili,Ruberto&Tatarelli,2004).

Significance of the study

In Egypt, there is no estimation for the incidence and prevalence of suicide among schizophrenic patients. Various studies have identified risk factors for suicide in schizophrenic patients which are of great value for prediction and prevention of self-inflicted death. Despite great efforts, both on

the side of drug treatment and psychosocial strategies.

Nurses should be aware of their duty and responsibility towards their clients, even from themselves whenever possible. Hopefully, through all their efforts, the tide of senseless loss of life can be turned, and choices will be made looking toward life instead of away from it. Through;- decrease the risk of suicidal behavior, support effective coping strategies and promote well-being (**Schultz&Videbeck,2013**).

This study focus on a number of issues that are of paramount importance for the understanding and prevention of suicide in these patients through assessing nurses' awareness about relationship between suicidal ideation and positive and negative symptoms of schizophrenic patient . This study should help in future plan for , pointing the need to improve quality of care of schizophrenic patient, pointing to the need of supporting educational programs addressed to nurses and to establish a constructive nurse-patient relationship.

Aim of the study

Assess nurse's awareness of the relationship between suicidal ideation and schizophrenic patients' positive and negative symptoms.

Research Question:

1. What are nurses' level of awareness of positive and negative symptoms of schizophrenic patients?
2. Do nurses realize the relationship between positive/ negative symptoms and suicidal ideation among schizophrenic patients?
3. What are nurses' level of awareness of different clues that may indicate

schizophrenic patient's early intention for suicide?

Subjects And Methods

Research design

The design for this study was a descriptive study design.

Setting:

The study was carried out in Port-Said Psychiatric and Mental Health Hospital(PSPMHH) .The hospital consists of five different departments (three males and two females departments) with bed capacity around 130 patients. Only 118 beds from them are usually occupied. From 118 patients there are nearly 74 patients who have the diagnosis of schizophrenia with its different types.

Subjects:

The subject of this study included a convenience sample nurses (male and females) .Originally total number of nurses working in (PSPMHH) were eighty seven (87) nurses . Ten percent of this number was selected to pilot study. After completion of pilot study , the total number of nurses became seventy nine (79). At the beginning of the study the number of nurses in (PSPMHH) became seventy one (71) as eight of them went on long vacation. Seventy nurses accepted to participate in the study while one nurses refused to participate therefore the total number of the subject who continued in the study became seventy nurses.

Tools of data collection:

Structured interviewing questionnaire developed by the researcher. These questions collected and adapted from Schultz & Videbeck (2013),Elder et al., (2013);Townsend,(2014), which includes:

First tool:

Socio demographic data (e.g. age, gender, level of education, marital status....etc.)

Second tool:

Nurses' knowledge about schizophrenic disorders :It consists of three parts as follows:

- ❖ **Part I:** Nurses' educational background about schizophrenia . It include 3 questions
- ❖ **Part II:** Nurses' awareness of positive and negative schizophrenic symptoms. It include 8 questions, there are subside questions therefore total numbers of scores were 17 score.
- ❖ **Part III:** Nurses' clinical experience with schizophrenic patients. It include 5 questions.

Third tool:

Nurses' awareness of suicidal ideation in schizophrenic patients::It consists of three parts as follows:

- ❖ **Part I** :Nurses' awareness of suicide as a threat to schizophrenic patients . It include 10 questions.
- ❖ **Part II:** Nurses' awareness about suicide and its relationship to schizophrenia. It include 16 questions.
- ❖ **Part III:** Nurses' awareness of the relationship between suicidal ideation and positive and negative schizophrenic symptoms .It include 4 questions.

Scoring system:

The structured questionnaire sheets consists of three tools. In all questions, if the answer was correct scored one point while incorrect answer scored zero. The total scores of two tools was **47scores**. The percentage of overall scores was calculated. Subsequently, nurses' level of awareness has been classified as follows; unsatisfactory level of awareness for nurses who got scores less than 60%, satisfactory level of awareness for nurses who got scores equal or more than 60%.

- ❖ **Tool(1)** : It is descriptive data ,consists of (8) questions.

- ❖ **Tool(2)** : Consists of three parts:

- Part (1): It is descriptive data ,consists of (3) questions.

- Part(2): It consists of (8) questions, there are subside questions therefore total numbers of scores were 17 score. It's satisfactory level for answers were 10 score.

- Part (3): It is descriptive data ,consists of (5) questions.

- ❖ **Tool(3)** :Consists of three parts:

- Part (1): It consists of (10) questions and it's score were (10) scores. It's satisfactory level for answers were 6 scores.

- Part (2): It consists of (16) questions and it's score were (16) scores. It's satisfactory level for answers were 10 scores.

- Part (3): It consists of (4) questions and it's score were (4) scores. It's satisfactory level for answers were 2 scores.

- ❖ Therefore, total number of satisfactory score for tools questions were **28 scores**.

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Operational design:

The operational design includes preparatory phase, tool's validity, pilot study and field work.

Preparatory phase:

It includes reviewing of recent literature, different studies and theoretical knowledge of various aspects related to lifestyle risk factors using books, articles, internet, periodicals and magazines to develop tools of data collection.

Tools validity:

Content validity (or logical validity) was used for modified tools by the researchers. It was ascertained by a Jury consisting of four experts in the field of psychiatric mental health nursing and medicine for the content validity (3 experts in nursing field, two of them were professor and one was assistant professor , and other one was professor of psychiatric medicine). Recommended modifications were done accordingly.

Pilot study:

A pilot study was carried out after the development of the tools and before starting the data collection, it was carried out on 8 nurses (10%) who were working in PSSMHH. The subjects included in the pilot study were excluded from the study subjects.

Field work:

The data were collected over a period of one month , the actual field work was carried out from 23 June (2015) to 23 July (2015). The researcher was available 4 days/week in all shifts (early, late, night). The purpose of the study was explained by the researcher to all nurses (70) who were included in the study. Three interviewed questionnaire ,developed by researcher ,were

given to each nurse to fill it in the presence of the researcher for any clarification.

Administrative design:

An official permission for collection of data was obtained using proper channels of communication. Official letters were sent from the Faculty of Nursing, Suez Canal University (SCU) to the director of study setting, explaining the aim of the study and its expected outcome. Permission from director of hospital and its head nurse have been approved to conduct the study at this hospital after obtaining permission from General Secretariat of Mental Health in Abbasia hospital in Cairo (which taken period from 1 May to 22 June ,2015) .Each nurse was asked to give verbal consent to participate in the study after full explanation of the nature of the study and it's expected beneficial outcomes.

Ethical consideration

The agreement for participation of the nurses was taken after explanation the aim and nature of the study. The researcher informed the nurses that participation in the study was voluntary, also they were notified that they were assured that the information would be confidential and will be used for the research propose only, and they have the right to withdraw from the study at any time.

Statistical analysis:

All data were collected, tabulated and subjected to statistical analysis. Statistical analysis is performed by SPSS in general (version 17), also Microsoft office excels is used for data handling and graphical presentation. Quantitative variables are described by the Mean, Standard Deviation (SD) Chi-squared test is used for categorical variables relations. Significance level is considered at $P < 0.05$, while P -values < 0.01 is Considered highly significant.

Results

Socio-demographic characteristics shows that :The mean age of the studied nurses' was 27.54 ± 6.23 years with a range of 20-30 years. While, 87.1% of nurses were female and 65.7% of them were married. Regarding nurses' level of education 51.4 % of them have finished technical secondary school, while only 2.9% have finished bachelor degree.57.1% of the studied nurses had attended post scholastic studies/ training in psychiatric nursing . Regarding to their

scholastic studies, 77.1% of the studied nurses have studied psychiatric nursing courses . 42.9% of them have 5 to less than 10 years' experience in psychiatric field. 77.1% of studies nurses had studied schizophrenia ,Out of this number. 42.6% of studied nurses didn't get clinical training in psychiatric field . Only 16.7% of studied nurses who reported that scholastic clinical training was enough to qualify them to work in the psychiatric hospital.

Nurses awareness of positive and negative schizophrenic symptoms.

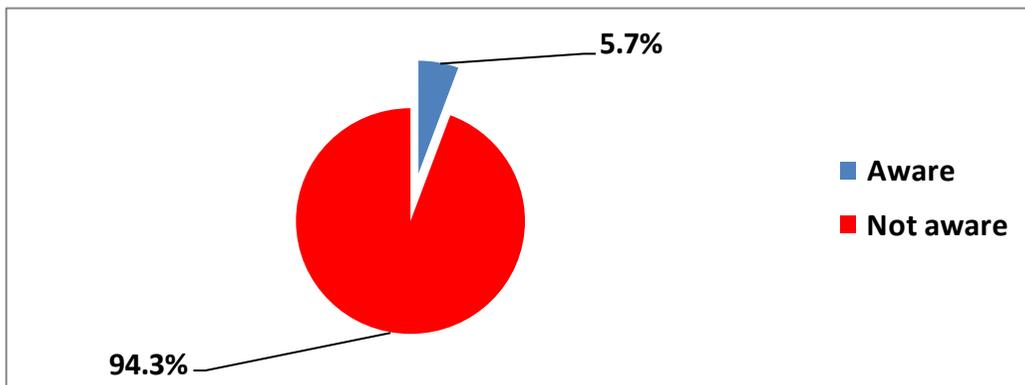


Figure (1) shows that 94.3% of studied nurses were aware of positive and negative symptoms of schizophrenia.

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Table (1): Difficulties in dealing with schizophrenic patients as reported by the studied nurses .

Variables	N	%
Difficulties as reported by nurses	34	48.6
#Types of Difficulties:-		
Lack of attention-	9	26.5
Sudden Irritability -	8	23.5
-Suicidal attempts	9	26.5
-Difficulties in communication	11	32.4
-Suspicious in others	6	17.6
-Hyperactivity	5	14.7
- Irascible	3	8.8
- Harming others.	4	11.8
- Personal hygiene	2	5.9
- Labile mood	2	5.9
- Poor insight.	3	8.8
-Isolation.	2	5.9
- Aggressiveness	2	5.9

Table (1) shows that 48.6% of the studied nurses reported that they have difficulties in dealing with schizophrenic patients. 26.5 % of the studied nurses reported that they have a difficulty in dealing with schizophrenic patients who attempt suicide. 32.4% of them reported that they have difficulties in communication with schizophrenic patients. Also 11.8% of the studied nurses reported that they have difficulty with schizophrenic patient when they are trying to harm others.

Table (2): Awareness of studied nurses subject about their role to prevent attempting suicide for schizophrenic patient .

Nursing intervention for suicide	Aware		Unaware	
	N	%	N	%
-Maintain low level of stimuli in client's environment.(low lighting, few people , low noise level and simple decor)	0.0	0.0	70	100.0
- Seclusion room could be used if necessary.	0.0	0.0	70	100.0
- Intervene at the first sign of increased anxiety , agitation or verbal or behavioral aggression. Offer empathetic response to the client's feelings.	0.0	0.0	70	100.0
- Avoiding sitting patient alone.	3	4.3	67	95.7
-Encourage patient to participate in physical activities.	7	10.0	63	90.0
-Remove all dangerous objects from client's environment.	19	27.1	51	72.9
-Observe client's behavior frequency do this while carrying out routine activities.	15	21.4	55	78.6
-Use of mechanical restrains may be necessary	12	17.1	58	82.9
- Maintain calm attitude toward the client, as the client's anxiety increases offer some alternative e.g talking about situation.	25	35.7	45	64.3
- Giving emergency medication as doctor order.	24	34.3	46	65.7
awareness of nurses About their role to prevent Attempting suicide for schizophrenic patients	0	0.0	70	100.0

Table (2) shows that; all of the studied nurses 100% aren't aware that maintain low level of stimuli in client's environment ,use of seclusion room and intervene at the first sign of increased anxiety , agitation or verbal or behavioral aggression , can be used to avoid patients' suicide. 95.7% of them aren't aware that avoiding sitting patient alone is an important actions. Also 90.0% of them aren't aware that encourage patient to participate in physical activities is an important actions that they should take to avoid patients' suicide. Finally results shows that all of studied nurses weren't aware about their role to prevent attempting suicide for schizophrenic patients.

Nurses awareness about clues made by schizophrenic patients that may indicate their early intention for suicide.

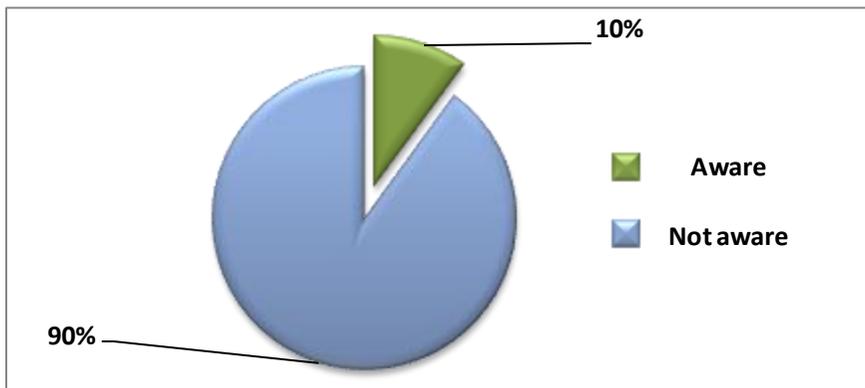


Figure (2) shows that only 10% of studied nurses subject had a satisfactory level of awareness to recognize clues made by schizophrenic patients that may indicate their early intention for suicide.

Nurses' awareness of suicide as a threat to schizophrenic patients.

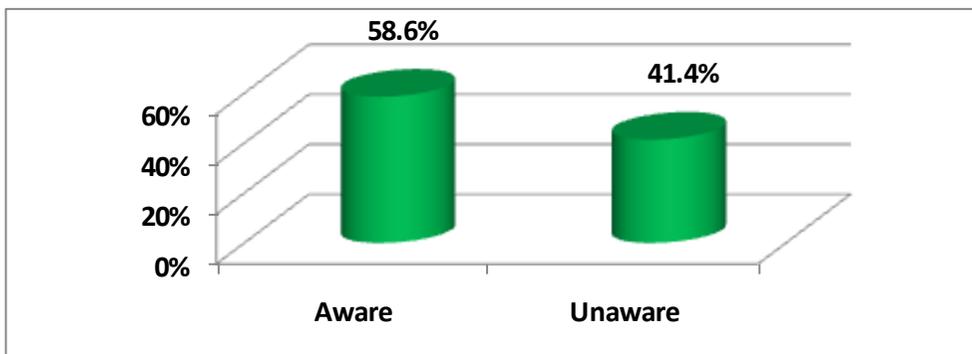


Figure (3) : shows that 58.6% of the studied nurses are aware of suicide as a threat to

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schizophrenic patients , while 41.4% of them aren't aware about that.

Nurses' awareness about suicide and its relationship to schizophrenia.

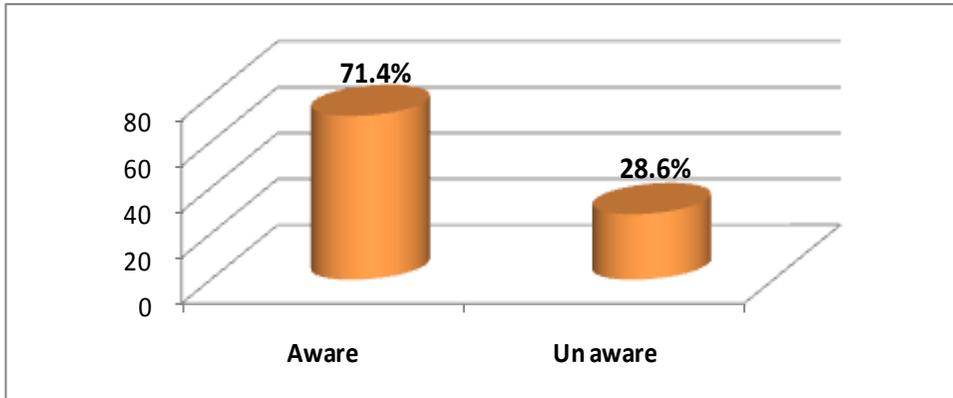


Figure (4) : shows that 71.4% of the studied nurses are aware of suicide and its relationship to schizophrenia , while 28.6% of them aren't aware about that.

Nurses' awareness of the relationship between suicidal ideation and positive and negative schizophrenic symptoms.

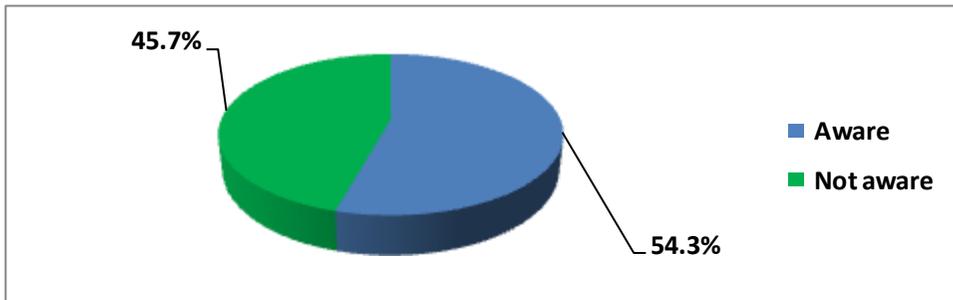
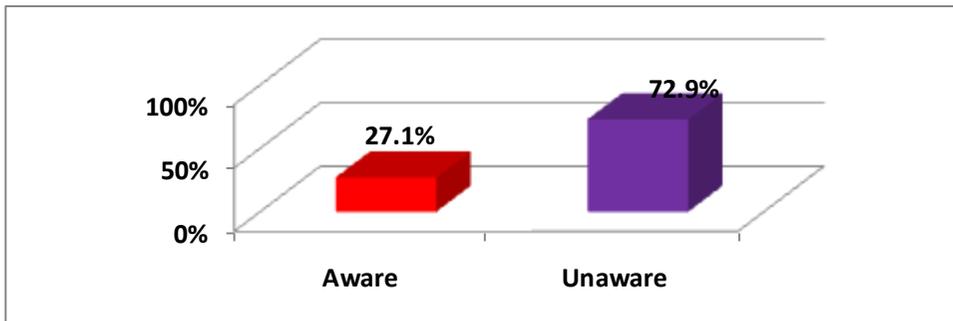


Figure (5) shows that 54.3% of the studied nurses are aware of the relationship between positive & negative symptoms of schizophrenic patients and suicidal ideation, while 45.7% of them are not aware about that.

Total awareness of relationship between suicidal ideation and positive and negative symptoms of schizophrenic patients.



Finally Figure (6) show that 72.9% of studied nurses were not aware about total awareness of relationship between suicidal ideation and positive and negative symptoms of schizophrenic patients.

Table (3): The relationship between socio-demographic characteristic and nurses' awareness of positive & negative symptoms of schizophrenia

Items	Total awareness about symptoms of schizophrenia				X ²	P value
	Not aware		Aware			
	N	%	N	%		
-Degree of education						
• Diploma of nursing	31	47.0	1	25.0	.978	.613
• technical secondary school	33	50.0	3	75.0		
• bachelor	2	3.0	0	0.0		
- Scholastic psychiatric experience						
• Yes	51	77.3	3	75.0	.011	.916
• No	15	22.7	1	25.0		
- Getting clinical training					.047	
• Yes	30	57.7	1	50.0		.829
• No	22	42.3	1	50.0		
-Clinical training was enough to qualify to work in the psychiatric hospital					.415	
• Yes	9	17.3	0	0.0		.519
• No	43	82.7	2	100.0		
-Post-scholastic studies/ training						
• Yes	24	66.7	16	76.2	.001	.977
• No	12	33.3	5	23.8		
-Numbers of years of psychiatric experience						
• less than 5 years	24	36.4	2	50.0	3.916	.141
• from 5 years to 10 years	30	45.5	0	0.0		
• more than 10 years	12	18.2	2	50.0		

X²= Person Chi-Square Tests, Sig. at 95% Confidence Interval and p value <0.05, *= statistically significant.

Table (3) shows that there is no statistically significance relationship between socio-demographic characteristic and nurse's awareness of positive & negative symptoms of schizophrenia

Nurse's Awareness of the Relationship between Suicidal Ideation and Schizophrenic Patient's Positive/Negative Symptoms

Table (4): The relationship between socio-demographic characteristic & total nurse's awareness of the relationship between suicidal ideation and positive and negative symptoms of schizophrenia

Items	Total awareness				X ²	P value
	Not aware		Aware			
	N	%	N	%		
-Degree of education						
• Diploma of nursing	25	49.0	7	36.8	1.189	.552
• technical secondary school	25	49.0	11	57.9		
• bachelor	1	2.0	1	5.3		
- Scholastic psychiatric experience						
• Yes	36	70.6	18	94.7	4.578	.032*
• No	15	29.4	1	5.3		
- Getting clinical training					.541	
• Yes	23	54.8	8	66.7		.462
• No	19	45.2	4	33.3		
-Clinical training was enough to qualify to work in the psychiatric hospital					.771	
• Yes	8	19.0	1	8.3		.380
• No	34	81.0	11	91.7		
-Post-scholastic studies/ training						
• Yes	20	66.7	20	74.0	.005	.945
• No	10	33.3	7	26.0		
Numbers of years of psychiatric experience						
• less than 5 years	17	33.3	9	47.4	1.908	.385
• from 5 years to 10 years	22	43.1	8	42.1		
• more than 10 years	12	23.5	2	10.5		

X²= Person Chi-Square Tests, Sig. at 95% Confidence Interval and p value <0.05, *= statistically significant.

Table (4) shows that there is statistically significance relationship between scholastic psychiatric experience&total nurse's awareness of the relationship between suicidal ideation and positive and negative symptoms of schizophrenia (X²=4.578, P value=032*).

Discussion

Positive symptoms such as disordered thoughts, delusions and hallucinations, it responds well to medication (Kneisl & Trigoboff, 2009). Negative symptoms are deficits of normal emotional responses or of other thought processes, and responds less well to medication. There is relationship between positive and negative symptoms of schizophrenic patient and

attempting suicide (Smith, Weston & Lieberman,2010).

The nurse staff has an important role in reducing the incidence of suicide in schizophrenic patients. They need for continuous training for applying this training to improve the standard of patient care. It has been observed that there are schizophrenic inpatients who attempted suicide in PSPMHH. This caused by lack of awareness of the nursing staff of their role with

schizophrenic patient. Therefore, the greater awareness of nursing staff about relationship between positive and negative symptoms of schizophrenic patient and suicidal ideation, the greater awareness about their role thus will lead to low incidence of schizophrenic inpatients who attempt suicide.

Interpretation and discussion of results obtained from the current study were presented in four main sections; the first section describes socio-demographic characteristics of the studied nurses subjects, the second section concerns the nurses' level of awareness of positive and negative symptoms of their schizophrenic patients, the third section describes nurses' level of awareness about different clues that may indicate schizophrenic patient's early intention for suicide, Finally fourth section concerns with the relationship between positive and negative symptoms of schizophrenic patients and suicidal ideation.

Section I: Socio-demographic characteristics of studied nurses subject and its relations with their awareness:

In relation to nurses' characteristics, the finding of the present study revealed that, nearly three quadrant of the studied nurses sample were between 20-29 years of age this results in accordance with the finding of **Mohammed, (2007)** who carried out a study in Elmnofiya university hospital entitled "Relationship between positive and negative of schizophrenia and suicidal ideation and nurses awareness about their role" and reported that highest percentage of nurses belonged to 20 to less than 40 years age group. From researcher point of view and according research results, although the majority of nurses in this study in the productive stage of knowledge, but nearly three quadrant of them aren't aware of the relationship between suicidal ideation and positive and negative symptoms of schizophrenia, possibly because many factors may be due to 22.9% of them don't studying

psychiatric course during scholastic studies. Also there were 42.6% of nurses who were, studying psychiatric courses during scholastic studies, don't getting clinical training in psychiatric courses. This is very apparent through dissatisfaction of majority of nurses about quality of psychiatric course which they have studied.

As regards to the level of education, the present result revealed that above half of nurses had finished technical secondary school and according to the research results, the educational qualification had no effect on the nurses' awareness. This result disagreed with (**Engin&Cam,2009**) who conducted study entitled "Effect of self-awareness Education on the self-efficacy and sociotropy–autonomy characteristics of nurses in a psychiatry clinic" and reported that the educational qualification had a positive effect on the nurses' awareness, thoughts, and behaviors in the psychiatry clinic. From researcher point of view, this disagreement may be related to numbers of factors which influence level of education such as numbers of years of working, disinterested nurses in psychiatric field and they aren't updating their knowledge.

According to experience in psychiatric field, the current study shows that less than half of nurses had experience from 5 to less than 10 years. According to research results, there is no significant relationship between number of years of experience and level of awareness. In contrast from this results (**Kumar, Mehta & Kalra, 2011**) who conducted study entitled " Knowledge of staff nurses regarding legal and ethical responsibilities in the field of psychiatric nursing " and reported that there is significant relationship between numbers of years of experience and knowledge of the study subjects regarding various major psychiatric disorders.

In our point of view, this disagreement may be due to several factors

such as inability of nurses to differentiate between positive and negative symptoms of schizophrenia. The limited number of nursing compared with large hospital capacity which does not enable them for good observation to patients with schizophrenia in terms of positive and negative symptoms (4-5 nurses in every department: nearly 40 patients), low level of knowledge of nurses and lack of courses which consequence affect their level of awareness.

As regards to scholastic schizophrenic experience, the present study showed that more than three quadrant of nurses had studied schizophrenia. According to research results, there is significant relationship between scholastic psychiatric studies and their level of awareness. In researcher point of view, this because scholastic schizophrenic studies had a positive effect on nurses' awareness of positive and negative symptoms and its relationship with suicidal ideation.

Regarding to getting scholastic clinical training in psychiatric field, the present study shows that more than half of nurses, who had studying psychiatric courses, had getting clinical training. According to research result, there is no significant relationship was found between getting clinical training and level of awareness. In contrary to the results (**Mariam, Bedaso, Ayano & Ebrahim, 2016**) who conducted study entitled "Knowledge, attitude and factors associated with mental illness among nurses working in public hospitals" and reported that those nurses who have took clinical training are two times more likely to be knowledgeable than those who do not took clinical training. In our point of view, disagreement may be due to; ineffective clinical training in Egypt during scholastic studies, short period of training, disinteresting nurses in psychiatric field who are forced to enter nursing field for employment, moreover; it cannot be ignored the high percentage of nurses who did not get

scholastic clinical training and that surly had an effect on nurses' level of awareness.

Section II: Nurses' level of awareness of positive and negative symptoms of their schizophrenic patients:

Regarding nurses' level of awareness of positive and negative symptoms of schizophrenic patients, the current study shows that majority of nurses weren't aware of positive and negative symptoms of schizophrenia. Meanwhile this finding disagreed with (**Kumar, Mehta & Kalra, 2011**) who reported that majority of nurses had a moderate knowledge in psychiatric field. In our point of view, this disagreement may be due to inadequate or insufficient scholastic psychiatric courses, inadequate scholastic clinical training, disinteresting nurses to update their knowledge and limited numbers of nurses compared to large numbers of patients (4-5 nurses in every department: nearly 40 patients).

In relation to difficulties that facing nurses in dealing with schizophrenic patient, current study show that less than half of nurses reported that they face difficulties. Slightly above one quadrant of them reported that they find difficulties in dealing schizophrenic patients with suicidal attempts. Thus, in turn, had an effect on their role with schizophrenic patients to prevent occurrence of suicide. So, continuous courses must be given to psychiatric nurses to increase their awareness of the relationship between suicidal ideation and positive and negative symptoms of schizophrenia.

Section III: Nurses' level of awareness of different clues that may indicate schizophrenic patient's early intention for suicide

Concerning to awareness of nurses about clues that may indicate early intention of suicide, the current study show that only ten percentage of nurses were aware about clues that may indicate early intention of

suicide, Our finding is inconsistent with (Toftthagen,Talseth&Fagerstrom,2014)who conducted study entitled " Mental health nurses' experiences of caring for patients suffering from self-harm" and found that mental health nurses were able to observe signs of self-harm and sometimes experienced a sense of intuition regarding a patient's impending self-harm. Our findings are also disagreed with (Sun, Long, Boore & Tsao, 2006) who conducted study entitled "A theory for the nursing care of patients at risk of suicide" and found that nurses observed overt and covert suicidal clues (verbal and behavioral) displayed by psychiatric patients. This disagreement may be due to low level of nurses' knowledge and lack of presence of continuous courses specified in early warning signs of suicide as general in psychiatric field and particularly in schizophrenia.

Concerning to answers about clues that may indicate early intention of suicide current study shows that less than one quadrant of nurses were aware that verbal expression of death threats as early clues that may indicate early intention of suicide ,also less than one quadrant from the studied nurses who were aware that when patient is searching about sharp object , this is considered as a clues for suicide. This are important factors which should be known to staff nurses, lack of knowledge about them will lead to more suicidal patients.

Regarding to nurses' awareness about their role to prevent attempting suicide in schizophrenic patient, current study showed that all of nurses weren't have satisfactory level of awareness about their role, where all of nurses were not aware that maintain low level of stimuli in client's environment as nursing intervention should be taken to prevent attempting suicide. Also more than three quadrant of them were not aware that close observation to client behavior is very important step that should be taken to prevent occurrence of suicide. On

the same line (Betz, Miller, Barber & colleagues., 2013) who conducted study entitled "Lethal means restriction for suicide prevention: Beliefs and behaviors of emergency department providers and found that there were "large gaps in provider training, bias in treating patients with mental health issues, and skepticism about the effectiveness of suicide prevention approaches". Also (Puntil, York, Limandri & colleagues., 2013) who conducted study entitled "Competency-based training for PMH nurse generalists: Inpatient intervention and prevention of suicide" and reported that there is a gap in suicide-specific intervention training in educational programs.

In contrast from this results Mohammed (2007) who carried out a study and reported that majority of nurses were aware about their role to prevent occurrence of suicide. In our point of view this disagreement may be due to less than half of studied nurses sample where diplome and they don't taken satisfactory content of information about suicide and how they can prevent it .As well as we can't deny that less than half of nurses don't get scholastic clinical training in psychiatric course which had an direct effect on their awareness about their role.

Section IV: Nurses' level of awareness of relationship between suicidal ideation and positive and negative symptoms of schizophrenic patients

Concerning nurses' knowledge about suicide as a threats to schizophrenic patients, the current study shows that more than half (58.6%) of them were aware of that. This results was disagreed with (Kawanishi, Sato, Yamada & colleagues., 2006) who conduct a study in Japan entitled "Knowledge and attitudes of psychiatric nurses and nursing students concerning current suicide-related issues " and reported that nursing students and even nurses at a mental hospital and psychiatric social workers

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showed serious knowledge gaps concerning suicide and they are causes of current problem of increasing suicide. In our point of view, this disagreement may be due to presence of suicidal attempt in (PSPMHH) which lead to increase awareness of them about suicide. In my observation as an instructor with students at PSPMHH, there were increased in number of suicidal victims at hospital due to lack of nurses awareness about suicide clues which directly affect nurses' role to prevent occurrence of suicide such as close observation to patients. Therefore, there is a keen interest from the responsible persons at hospital to nursing staff to increase awareness about suicide and their role to curb it.

As regarding nurses knowledge about schizophrenia and its relation to suicide, the current study shows that nearly three quadrant of nurses were aware about schizophrenia and its relation to suicide. This results was disagreed with (Deribew & Tesfaye, 2005) who conducted study entitled " Assessment of knowledge, attitude and practice of nursing staff towards mental health problems in Jimma Zone, South Western Ethiopia" and reported that three quadrant of the nurses labeled schizophrenia as minor disease with poor knowledge about its prevalence , definition and relations with suicide. This disagreement may be due to increase numbers of schizophrenic patients in (PSSMHH), where nearly two-thirds of psychiatric patients in this hospital are schizophrenic patients, with increase numbers of years of experience where more than one third of studied nurses sample had from 5 to less than 10 years' experience in psychiatric hospital.

Conclusion

Most studied nurses sample weren't aware of positive and negative symptoms of schizophrenia. Majority of studied nurses sample weren't aware of the relationship between suicidal ideation & positive and negative symptoms of schizophrenia. While all of them didn't have the ability to recognize clues made by schizophrenic patients that may indicate early intention of suicide.

Recommendation

- Orientation programs/seminars about the existence of the relationship between

specific positive & negative symptoms of schizophrenia and suicidal ideation.

- Training programs should be constructed to update the skills and knowledge of nurses dealing with psychiatric patients who are attempt suicide, in meaning of early warning signs of suicide(clues of suicide) and nursing intervention to prevent occurrence of suicide.
- National survey to measure suicidal ideation among schizophrenic patients in Egypt.

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