International Journal of Nursing
June 2019, Vol. 6, No. 1, pp. 141-150
ISSN 2373-7662 (Print) 2373-7670 (Online)
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Published by American Research Institute for Policy Development
DOI: 10.15640/ijn.v6n1a16
URL: https://doi.org/DOI: 10.15640/ijn.v6n1a16

Effect of Psycho Educational Program about Control of Suicidal Ideation among Psychiatric Patients on Nursing Staff's Knowledge and Practice

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Abstract

Introduction: Nurses are often on the front line positions for identifying and interviewing patients who are suicidal; therefore, nurses must be well trained in in the assessment of suicidal patients and know what to do when faced with a client who is actually suicidal. **Purpose**: The purpose of the study was to determine the effect of a psycho educational program about control of suicidal ideation among psychotic patients on a nursing staff's knowledge and practice. **Methods:** Aquatic-experimental design was utilized. Participants included a sample of 50 psychiatric nurses working at Tanta-Mental Health Hospital. Two tools were used for data collection; Nurse's knowledge about suicide Ideation questionnaire and an Observation Checklist for a Nurse's practice towards the suicidal patients. **Results:** Revealed that there was a statistically significant improvement between the mean score of total knowledge and the skills score before intervention, immediately after and after three month of intervention. **Conclusion:** There was marked increase in the overall knowledge and skills of the nurses as the result of receiving an educational program about control of Suicidal Ideation among psychotic patients on nursing staff knowledge and practice**.**

Key words: Suicide, Psychiatric Nurses, Knowledge, Skills.

Introduction

Suicide is a perplexing phenomenon that calls to mind very nature of human existence. It is a tragic event with strong emotional repercussions for its survivors and for families of its victims. It is away out of a problem or crisis that invariably causes intense suffering (Kneisl, Trigoboff , 2014; Mohr, 2009) Suicide is associated with unwanted or unfulfilled need an emotional reaction of hopelessness and helpless, an ambivalent conflict between survival and unbearable stress, a narrowing of perceived option, and a need for escape, the suicidal person's signal of distress(Ghio, Zanelli, Gotelli&Gabrielli ,2011;Sadoc, &Sadock,2008 ; Gould , Greenberg , Venting& Shaffer ,2006).

Suicide is considered a serious public health problem around the world and is the major cause of death and morbidity worldwide. It is estimated that, approximately one million people died by suicide each year. For every completed suicide there are somewhere between 10 and 40 attempted suicides (Botiga,Silva Sand Reginato,2015;Blackmore, Muncie, Weller, 2009)The trend is upward, and it is estimated that the number of suicides will be 1.53 million in 2020. The annual rate of suicide in Egypt was found to be 10 per100,000 with a high percentage in age group 15-44 years olds (Okasha .2010)

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Moreover, studies have shown that the risk of suicide among patients in general hospital was three times higher than that found in a general population This may reflect a higher severity of conditions within hospital setting (Pompili, Amador & Giradi ,2008).Suicide has a strong association with psychiatric disorders [8,9]. Approximately 90% of suicide victims have a diagnosable psychiatric illness, usually major depression disorders, schizophrenia, alcohol dependence, or personality disorders (Betz , Sullivan , Manton, Espinola & Boudreaux ,2009).

The role of psychiatric nurses is to help people to heal and recover, as well as to promote mental health, and wellbeing. Consequently nurses can experience interpersonal conflicts in keeping some-one alive who doesn't want to live(Minner ,2015;Mccann, Clark, McConnachie & Harvey I, 2006) In fact, psychiatric nurses who offer effective nursing care make the difference between life and death for suicidal patients. Each time someone dies by suicide it reinforces the need for nurses to enhance and advance the quality of nursing care provided, which includes working to design effective preventive strategies (Scheckel & Nelson , 2014).

Nurses are often in the front lines for identifying and interviewing a patient who is suicidal. Nurses who provide twenty-four hour care are in the best position to consistently meaningfully interact with patients and to help redirect suicidal behavior (Cheryl P, Janet Y, Barbara & Pamela, 2013). Nurse's availability and consistent visibility undoubtedly has an impact of suicidal patients. Furthermore, formal and informal plans of care must meet a variety of patient's needs (Kishi, Otsuka, Akiyama ,Yamada &ThurberS,2014).

Nursing intervention has been generally be formulated based on a patient's need for constant monitoring and emotional support to maintain safety. Moreover, psychiatric nurses focus -primarily on human experience of distress and aims to promote healing and understanding, support and acceptance and through helping patients find meaning in their experience (Kerkhof, 2008). **Gibb (2009)** emphasizes the importance of communication in addition to safety and supportive intervention.

Therefore, nurses must be well trained in the assessment of suicidal patients and know what to do when faced with a client who is actually suicidal This would likely decrease a nurse's stress when working with suicidal patients and will be effective in decreasing injuries to patients as well as staff.

Research Hypothesis

-Staff nurse's knowledge and skills means score expected to increase post educational program about control of suicidal ideation among psychotic patients.

Methodology

Study design and Sample

A quasi-experimental one-group pretest-posttest research design was used in this study. The study was conducted at Tanta- Mental Health Hospital (inpatients ward) affiliated to ministry of Health and Population. It also provides health care services to three Governments, namely El – Gharbeya, El – Menofeya, and Kafr– El – Sheikh. A 50 psychiatric nurses (calculated using Epi-Info software) who work in the previous mentioned setting were selected randomly for this study. The inclusion criteria were: at least one year experience in psychiatric field and currently providing direct care for psychotic patients. The study was conducted in April 2017 and finished in October 2018.

Tools of the study

The data was collected by using two tools

Tool I consist of two parts

Part1) Structured Interview Schedule related to Socio-Demographic Data

The researcher developed this part and it includes items such as: age, sex, residence, educational level, marital status, years of experience at psychiatric nursing, previous suicide and prevention training.

Part 2) Questioning a Nurse's knowledge about Suicide Ideation

This part was developed by the researcher after a review of related literature (Botiga ,Silva Sand Reginato,2015; Scheckel & Nelson , 2014;Taha, 2011; King & Vidourek ,2012;Morgan &Priest ,2011; Kishi Otsuka, Akiyama,Yamada &Thurber,2014 ;Pompili, Amador & Giradi ,2008; Meehan, Kapur , Hunt, Turnball & Appleby,2007).It was used to assess nurse's knowledge about suicide.

The questionnaire consisted of 121items presented in nine sections; concept of suicide(4 items), suicide rate of prevalence(5 items), suicide risk factors(15 items), psychiatric symptoms (19 items), psychiatric disease causing suicide(14 items), methods of suicide (8items), ethical principles in dealing with suicidal patients(8 items), treatment modalities for suicide(8 items), and nursing role to prevent suicide(40 items). All questions were answered as a yes/no. Scoring was as the follows: For positive items, true statement =1, false statement =0 For negative item, true statement = 0, false statement=1.The total score will be summated. The minimum score is 0 and the maximum score is 121.

Tool II:Observation Checklist for Nurse's Practice towards a Suicidal Patients.

The check list was developed by the researcher after a review of related literature(Aflague&Ferszt,2016;MinnerJ ,2015; Pisani , Cross & Gould ,2014; King &Vidourek ,2012; Noreen, Lawerence ,2011;Nick Nthony, Chris,2006;Peat ,2001 Clark, Watson, 19995) It was used to assess a nurse's skills regarding suicidal patients. It consisted of 84 items divided into 8 subscale; accept patient as individual(7items),use therapeutic communication skill (23 items),early detection of suicide warning signs(7 items), maintain safe environment(18 items) ,help patient to cope with his problems,(8 items), promote self-esteem and hope for patient(7 items),change patient negative thoughts (6 items) and promote patient social interaction with other(8 items). There are two responses for each question ;(done=1, not done=2); the minimum score is 0 and the maximum score is 84.

Procedure:

Prior to data collection, an official letter was addressed from the dean of the faculty of nursing to the director of Tanta Mental Health Hospital to request their permission and cooperation for data collection.Tool I & Tool II Nurse Knowledge about Suicide Ideation Questionnaire and Observation Checklist for Nurse's Practice Towards the Suicidal Patients were developed by the researcher after a review of literature. A panel of ten expert viewers was consulted to further refine the item pool of the two developed tool. The viewers were asked to rate the importance and fit of the items according to a five-point scale (0 to 4, where 0 = completely unimportant and 4 = completely important).The experts were required to give the corresponding score in terms of the importance of items. After reviewing all items considered relevant to the aim of study, suggestions were made and some items were modified. The validated tools were then tested for their reliability and Cronbach alpha was used and found to be 0.806, and 0.672respectively for tool I, II which represent highly reliable tools. Study procedure was revised and approved by the ethical Committee of the Faculty of Nursing, Tanta University.

Pilot study

A pilot study was conducted on 20 nurses who worked at Tanta Mental Health Hospital to test the feasibility and applicability of tool I and tool II, as well as determining possible obstacles that might be encountered during the period of data collection.Afterwards they were asked to provide their comments about problems in completing it, including whether it was clear and understandable, and also whether the content was complete and relevant. After its implementation and according to the results, necessary modification was done accordingly.

Actual study

The researcher performed pre-tests to the selected subjects by application tool I &tool II.Tool I (Nurse's Knowledge about Suicide Ideation Questionnaire) was distributed the nurses and they were asked to fill in answers the presence of the researcher for necessary clarification. Tool II (Observation Checklist for Nurse's Practice toward Suicidal Patients) was applied by indirect observation to each nurse during their contact with patients and perform nursing care. The time of the observation was at least 10 minutes in the morning shift for 3 times because a number of nurses were more available in the morning shifts than others. Before the beginning of the program, the researcher fixed a meeting time with the participants, on Sundays, or Mondays (every other weeks).

A Psycho- educational program was then developed by the researcher based on the results from the pre-test and from a review of literature (Botiga, Silva Sand Reginato,2015; Minner,2015; Scheckel&Nelson , 2014;Pisani , Cross & Gould , 20014;Taha 2011;Morgan &Priest ,2011.;Noreen C, Lawrence E ,2011;Nick ,2009;Oordt MS[1], Jobs DA, Fonseca , Schmidt ,2009; Sadock, &Sadock ,2008 , Wallace &Peggy ,2008;Gould, Greenberg , Venting& Shaffer ,2006; Nthony, Chris,2006 ;Tripodi& Bender 2006)The researcher prepared for sessions starting with the creation of the suitable environmental condition for conducting the program. At Tanta Mental Health Hospital, the conference class was used for discussion, explanation, and demonstration.

At Tanta University Hospital, the program was conducted in nurses' room. The researcher prepared videos, pictures and power point presentations to be used in the educational program. A booklet was developed and was distributed to every nurse for enforcement and as a reference.

A psycho- educational program was implemented by the researcher after review of related literature(Botiga ,Silva Sand Reginato,2015; Miner ,2015; Cross & Gould, 20014; Scheckel&Nelson, 2014;Taha,2011;Morgan &Priest ,2011.Pisani , Nthony , Chris,2006 ; Noreen, Lawrence ,2011;Nick ,2009; Sadock, &Sadock ,2008 ; Gould , Greenberg , Venting& Shaffer ,2006)The program was offered through twelve sessions. These sessions was presented through lecture and discussion, visual -aids and handouts. The researcher informed the nurses about the title of the video or the image before its presentation then discussed it and offered a feedback. The researcher started each session by asking the nurses about what was taught in the previous session and ended it by summarizing what was given during the present session. This took about 10 minutes each session. The total number of the study subject were divided into 5subgroups. Each sub group was composed of 10 nurses. Each sub group attended twelve –session.This sessions were scheduled as 4 sessions per week - in the morning shifts for a duration of about 3weeks.Total sessions for all nurses was take about 15 weeks. The researcher distributed booklets to the nurses at the end of the program as a source of reference.Program sessions' content

First session: Introductory session, explain of the program's purpose, and objectives and its schedule.
Second session: Meaning of suicide, prevalence, causes, risk factors for suicide, and methods of suicide.
Third session: Psychiatric disorders associated with suicide.
Fourth session: Psychiatric symptoms associated with suicide, and appropriate nursing care.
Fifth session: Ethical responsibility of nurses toward suicide patients.
Sixth session: Therapeutic communication techniques for nurses dealing with suicidal patients and their application.
Seventh session:Therapeutic techniques for helping patients to control suicidal ideation.
Eighth session: Psychiatric nursing roles for suicidal patients including the process of assessmentand intervention.
Ninth session: Treatment modalities that may be used for persons at risk for suicid**e**. "
Eleventh session: Role play for nurses that encourage them to explore own concern toward suicidal patients and clarify any misinterpretation.
Twelfth session: Termination of the program, immediate test, distribute the booklet about suicide prevention.

The evaluation of the effect of psycho -educational program was done by using tool I, and tool II on psychiatric nurses and performed theas same as pre- test immediately after implementation of the psycho-educational program (post-intervention1) and three months later after implementation of the psycho- educational program (post -intervention 2).

Statistical Analysis

The collected data was organized, tabulated and statistically analyzed using SPSS version 19 (Statistical Package for Social Studies) created by IBM, Illinois, Chicago, USA. For numerical values, the range mean and standard deviations were calculated. The differences between two mean values were compared using student's t test. Differences of mean values between more than two groups were tested by analysis of variance (F) test,followed by a Bonferroni test whenever a result was significant. The relations between quantitative variables were tested by Pearson's correlation coefficient (r). The level of significance was adopted at $p<0.05$. For categorical variables, the numbers and percentages were calculated and the associations and between variables were tested by chi square (X^2).

Results:

Table (1)-Shows that most patients were male (76%.) The highest percentage of the studied patients had an age range between 30to 40 years were 60% With mean 37.30+11.42. Regarding the marital status of nurses 80% of the subjects were married,and only 2% were divorced. In relation to the level of education, the table revealed that(30%)of the studied nurses graduated from secondary school of nursing, while only (2%) had a master or doctoral degree in nursing.

The table also presented that's 40% of the studied nurses had experience in psychiatric nursing for more than 10 years. Concerning the patients' occupational status, it was observed that 56% of the studied subjects were unemployed, and only 4% of them were retired. In relation to previous training on suicide prevention, the table reveals that 74% of the studied nurses had not received previous training on suicide prevention

Figure (1): Illustrates that there is a statistically significant relation between level of knowledge pre, immediate and after the educational program. The results showed that 20% of the studied nurses had good level of knowledge before the educational program. While it increased to 47% in the same category immediately after the educational program implementation and then it became 33% after three months of program implementation.

Figure (2): Reveals that 60% of the studied nurses had poor level of performance before the educational program. While it declined to 20% in the same category and after three months of the program implementation.

Tables (2): Indicate that there was a negative and non-significant relation pre, post and follow up program regarding their total performance score and academic qualification in the field of suicide prevention where (P=0.017). Also a negative and non-significant relation was found between their performance score and previous training in suicide prevention where (P =0.903).

Table (3): Shows that there was a statistically significant relationship between the nurses' total performance score and total knowledge score immediately after implementation of the program as P-value = (0.045) and r =(0.285).Also there was a statistically significant relationship between the nurses' total performance score and total knowledge score at follow up of implementation of the program as P-value = (0.009) and r =(0.365).

Table (1): Distribution of studied subjects according to their socio-demographic and clinicalcharacteristics.

Variables	**Number (n=50)**	**%**
Age in Years	15	30.0
20-	30	60.0
30-	5	10.0
40-		
Range	20-42	
Mean±SD	**30.98±6.13**	
Sex		
Male	12	34.0
Female	38	76.0
Marital Status		
Single	7	14.0
Married	40	80.0
Widow	1	2.0
Divorced	2	4.0
Residence		
Urban	17	34.0
Rural	33	66.0
Education level		
Nursing diploma	21	42.0
Bachelor of nursing	12	24.0
Secondary school of nursing	17	34.0
Experience at Psychiatric nursing in years		
1-	14	28.0
6-10	16	32.040.0
>10	20	
Range	1-13	
Mean±SD	**6.94±4.13**	
Previous training in suicide prevention		
Yes	13	26.0
No	37	74.0

Table (2): Relation between the total nurses' performance score and demographic data

Characteristics	Mean ±SD	Z / X^2	P
Age in years:		0.925	0.355
<30	13.07±6.79		
≥30	15.46±8.95		
Sex:		0.080	0.936
Males	14.90±7.55		
Females	14.68±8.70		
Marital status		1.060	0.289
Currently not married	18.90±10.49		
Currently married	13.70±7.55		
Residence:		1.369	0.071
Urban	16.29±8.15		
Rural	13.94±8.48		
Educational level:		5.187	0.017
Nursing diploma	12.33±7.53		
Bachelor of nursing	17.92±5.21		
Secondary school of nursing	15.47±10.44		
Experience in years		5.810	0.055
1-5	14.00±9.15		
6-10	19.25±9.86		
>10	11.65±4.33		
Previous training		0.122	0.903
Yes	14.62±9.42		
No	14.78±8.10		

Table (3): Correlation between the total performance score and total knowledge score

Correlation	**Performance**	
Knowledge	R	P
Before intervention	0.172	0.233
Immediately after	0.285	0.045*
After three month	0.365	0.009*

Figure (1):-The effect of training programs on the total mean score of studied nurses' knowledge pre, post ,and follow up of the implementation of the training program.

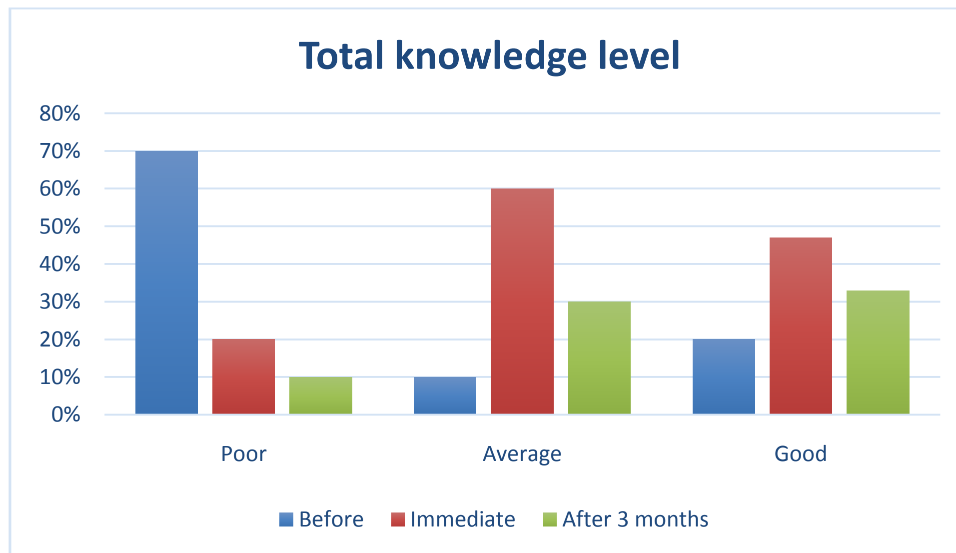
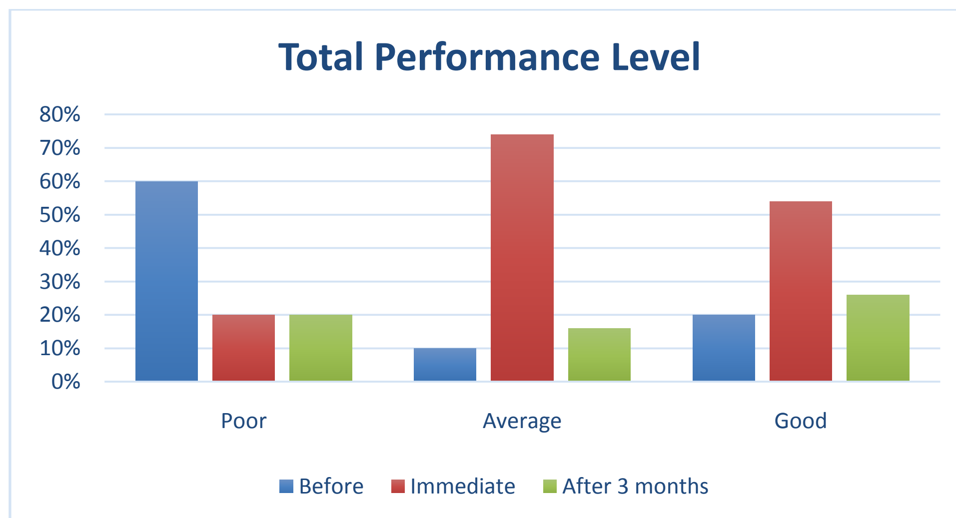


Figure (2):-The effect of training programs on the total mean score of studied nurses' performance pre, post ,and follow up of the implementation of the training program.



Discussion

The suicide-based training program in this study monitored two dimensions namely knowledge about suicide and nursing-practices to intervene a suicide. Concerning the level of knowledge about suicide, it was observed that there was a significant difference improvement in total level of nurse's knowledge about suicide immediately after the educational program. Such a result is supported by research evidences which indicates that nurses are able and willing to learn and understand information that improves their suicide intervention with patients through a training program. The researcher observed that the nurses during sessions were very interested and had the desire to know ever thing about suicide as they mentioned that this will help them in their personal or professional life. This result was supported bya study conducted by Giordano &Stickler,(2009) in California that involved the development of an educational module to enhance nurses' knowledge and skills in suicide prevention , Findings revealed a significant improvement pre- and immediate post- test in nurses' knowledge and skills in suicide prevention with overall improvement in the nurses' ability to identify and intervene to prevent an act of suicide. It is important to note that while most studies show evidence that training increases knowledge, at least one study found no such effect.

Specifically, Mishear, Hole, and Lavoie (2005) found that training did not significantly improve knowledge about suicide or the utilization of resources for gatekeepers or the suicidal individual six months after the training.Regarding the second target dimension of the training program in the present study, nursing skills was remarkable in the results of the current study; this may be due to practical sessions which allowed nurses to effectively practice suicide intervention skills over a period of time via simulated clinical situations, as well as role play sessions which allowed nurses to re-demonstrate important skills and receive feedback from researcher. This method also helped the nurses know how they can convey the appropriate response when intervening with suicidal patient. In this line, Pawn and Griffin,(2011) conducted suicide prevention training program pre training, one month after, and at three months after examining suicide-related knowledge and prevention skills, Results showed significant increases in suicide intervention skills ,as well as confidence in responding to and interacting with the suicidal person.

For measuring the level of skills after three months, it was noticed that there was a decline from a very high level to a high level. This may be due to that the fact that intervention skills-decline with time, especially at the hospitals where there was no training for this skill. This was contradicted by (Oordt, Jobs, & Schmidt,(2009) who observed mental health professionals changing suicide care practices in response to the training, and these results persisted after a 6 month follow-up.

It was observed also that the educational programs were more effective immediately after than at follow up. This was because strategies to maintain improvement were not implemented, nor was maintenance investigated, either at al or for long-term .Another explanation is time factor since the final assessment was after three months and the nurses didn't try to maintain their improved knowledge through frequent reading.

This likes a study conducted by (-Kishi et al-,(2014), where results showed improvement in nurse's knowledge about suicide in immediate post- test ,but this improvement was not maintained after one month of the program. In contrast to the study conducted by -(Tsai et al,-(2011) the result revealed that immediately after the training the nurses were much more aware of suicide warning signs and more willing to refer patients for professional counseling.

Regarding the relationship between the total knowledge- score about suicide and their skills after applying the program, the present study showed a significant relation between them in study. This indicates willingness of nurses to understand any information that improves their skills and delivering of high quality of care to suicidal patient Such a result supported the efficacy of the training program which was systematic and understandable in contrast to-David J (2007) who investigated the relationship between knowledge of suicide and the capacity to respond appropriately to suicidal people. The resulting lack of association between the two variables suggests they are independent, with both potentially important suicide prevention competencies.

In the final analysis , the findings indicated that experienced mental health nurses may have an important role in preventing suicidal acts/self-harm among patients .It is crystal clear that psycho-educational programs increase knowledge, and skills of studied nurses .Therefore, continuing education, training and support for nurses in their work with patients at risk for suicide should be implemented regularly by hospitals to maintain further increased suicide interventions skills of nurses ,so that nurses can develop therapeutic attitudes and responses towards patients at risk for suicide and provide helpful care.

Conclusion and Recommendation

Based on the results of the present study**,** It can be concluded that a marked increase in the overall knowledge and skills of the studied nurses as the result of receiving an educational program about control of suicidal ideation among psychotic patients on nursing staff's knowledge and practice.In the light of the result of this study, its thus recommended that apsycho-educational sessions about control of suicidal ideation should be provided in a treatment program during patients' hospitalization., providing cognitive behavioral sessions to modify suicidal ideas among high risk suicidal patient and educating suicidal patients about different coping strategies to deal with suicidal ideas when rehabilitating the patients to the community.

Acknowledgment

The author is grateful to all nurses who participated in this study and appreciate the research assistant efforts

Funding

This research didn't receive any specific grant from funding agencies in the public, commercial ,or not for profit sectors.

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