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Psycho educational Intervention Program for Relapse Prevention among Patients with Schizophrenia

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ABSTRACT

Background: Schizophrenia is a chronic illness that is often characterized by periodic relapses and incomplete remissions. **Aim of the study:** This study aimed to develop psycho educational program for prevention of relapse among the patients with schizophrenia and evaluate the effectiveness of the psycho educational program on the prevention of relapse among the schizophrenic patients. **Methods:** This study used a convenience sample of 60 patients with schizophrenia(15 female and 45 male) at Psychiatric Mental Health Hospital at Benha City. **Tools for data** were collected by using two tools: Structured interview questionnaire sheet concerning knowledge about schizophrenia and relapse and Drug Attitude scale (DAI-30). **Results** the findings demonstrated that the studied patients with schizophrenia had severe lack of knowledge about schizophrenia and relapse and non-compliant with medication before program implementation**.** There is a highly positive correlation between knowledge about relapse and schizophrenia and attitude toward drug compliance**. Conclusion:** Psycho education is an effective tool in improving patient's knowledge about schizophrenia and relapse. **The study recommended** that psycho-educational sessions need to be involved in the daily patient`s treatment program of the patients with schizophrenia even 10 minutes per day, and must be provided to all psychiatric patients voluntary and involuntary admitted, in psychiatric and in general hospitals.

Key words: Schizophrenia, Relapse prevention, Psycho-education.

INTRODUCTION

Schizophrenia is a mental illness that interferes with a person’s ability to think clearly, manage emotions, make decisions and relate to others. Many people living with schizophrenia have hallucinations and delusions, meaning they hear or see things that aren’t there and believe things that are not real or true. Organizing one’s thinking, performing complex memory tasks and keeping several ideas in mind at one time may be difficult for people who live with the illness. About one-half of people living with schizophrenia do not have awareness that their symptoms are part of an illness process **(The National Alliance on Mental Illness, 2011).**

Schizophrenia is often accompanied by relapse even while on treatment. Relapse has been defined as a worsening of psychopathological symptoms or re-hospitalization in the year after hospital discharge. Schizophrenia follows a variable course, with complete symptomatic and social recovery in about 1/3 of cases. Schizophrenia can however follow a chronic or recurrent course, with residual symptoms and incomplete social recovery **(Schennach et al.,2012).**

Symptoms of relapses usually occur gradually over time and are preceded by the emergence of early warning signs. These signs may subtle behavioral changes (e.g., concentration problems, social withdrawal, increased anxiety or depression) or the re-emergence of symptoms (e.g., hallucination). Monitoring early warning signs and taking rapid action when the signs are detected (e.g., temporarily increasing the dosage of antipsychotic medication) can reduce relapse **(Muesr & Jeste, 2011).**

So, the identification of early warning signs in serious mental illness is a key factor in any attempting to prevent relapse. This is so because when a relapse occurs, there is often about 3 to 4 weeks between the onset of the early signs of relapse and the development of the full relapse, so that it is possible to institute measures to stop the development of the relapse before the patient is incapacitated by it (**Biočina&Agius, 2011**).

Consequences of relapse can be enormous. Medical costs, non-medical costs and productivity losses associated with relapses are enormous from the economic perspective. Studies have found that patients have a poorer response to treatment in subsequent relapse episodes, as well as a longer time to remission with each subsequent episode. To the patients, a relapse with re-emergence of psychotic symptoms may imply the necessity of staying on medication for a considerably longer period of time or even on a long-term basis **(Pecenak, 2007).**

Discontinuing medication is tempting and seems logical to many patients when their psychotic symptoms have subsided, and is consistent to our usual conceptualization of recovery. Although antipsychotic maintenance treatment seems to be effective in preventing relapse, controlled studies suggested that the subsequent rate of relapse could be substantial even on maintenance medication **(Chen et al., 2010).**

In brief, medication discontinuation should be a joint and planned decision involving the patients, the careers and the clinicians. The clinicians should discuss openly with the patients all the possible options and consequences, and also look beyond the short-term risk and focus on the long-term health risks and benefits for the patient. After all, there are a small proportion of patients who could potentially remain relapse free even without maintenance medication **(Robinson et al., 2005).**

Additionally, relapse prevention is based on the observation that relapses usually develop gradually over several weeks, and are often preceded by subtle changes in the individual's mood, thinking or social behavior. Rapid intervention during the early stages of relapse (e.g. increasing the dosage of the medication) can often prevent a full blown relapse from happening (**Rubin et al., 2010**).

Preventing re-hospitalization of schizophrenia patients, the identified modifiable factors suggest further need for development and implementation of integrated mental health services in the community. The term ‘compliance’, ‘adherence’ and ‘concordance’ are not used consistently in the literature; some authors use them synonymously , whereas others define compliance (adherence: synonym) as the extent to which person complies with medication in accordance with the prescribed interval, dose and dosing regimen (**Cramer et al., 2008; and Rummel-Kluge et al., 2008**).

The key to managing relapse is awareness of the onset of behaviors indicating relapse. About 70% 0f patients and 90% of families are able to notice symptoms of illness recurrence, and almost all patients know when symptoms are intensifying. A

prodromal phase occurs before relapse. It is the time between the onset of symptoms and the need for treatment. With the majority of patients and families indicating a prodromal phase lasting longer than 1 week, it is essential that nurse collaborate with the patient, family, and residual staff regarding the onset of relapse (**Stuart, 2009**).

A crucial strategy in relapse prevention lies in identification of the early relapse signs. As relapses often develop gradually, being able to identify the triggers or early signs of relapse may help to prevent the relapse or at least in reducing the severity of the episode. Early recognition of an impending relapse is beneficial as treatment and support can be sought early, formats have influenced improvements in general The individual would suffer from less disruption to high social and occupational functioning as well as have a quicker recovery. Early relapse signs are subtle warning signs that the patient or caregivers notice before a full relapse of the illness is imminent. They may be symptoms such as poor sleep, feeling confused or nervous, being more isolative or difficulty concentrating. Early relapse signs are unique to the individual. Clinicians should help patients along with their caregivers to identify their individual early warning signs (**Rao, 2013**).

Psycho education is thus primarily a form of therapy conveying reassurance and hope, with the aim of optimally integrating empowerment of those whose close ones are affected, with professional therapeutic techniques in a working and therapeutic alliance (**Smerud & Rosenfarb, 2008**). The take-home-message of psycho educational programs must be that schizophrenic psychoses are induced by biological factors in combination with psychosocial stress; therefore, they must be treated with both medication and psychotherapeutic interventions (**Hauser & Juckel, 2012**).

Psycho education involves providing factual information about the nature of schizophrenia and the principles of its treatment, using a combination of teaching strategies. The goal of psycho education is behavioral change, which will lead to better treatment adherence as presented in the following table. It is designed for patients with schizophrenia, generally teaches participants that schizophrenia is a brain disorder that is partially helped by medication and other factors, including family involvement (**Muesr& Jeste, 2011**).

Psycho education has shown positive effects in relapse prevention. Most studies of psycho education for patients only have demonstrated that knowledge and adherence can be improved by means of educational interventions. Studies using more didactic and hospitalization may be avoided. In addition to this understanding of schizophrenia and treatment.

Evidence exists that even comparatively brief interventions can achieve significant improvements in patients with chronic psychiatric disorders **(Rummel-Kluge &Kissling, 2008).**

Psycho education does seem to reduce relapse, readmission and encourage medication compliance, as well as reduce the length of hospital stay in these hospital-based studies of limited quality. The true size of effect is likely to be less than demonstrated in this review – but, nevertheless, some sort of psycho education could be clinically effective and potentially cost beneficial. It is not difficult to justify better, more applicable, research in this area aimed at fully investigating the effects of this promising approach **(Xia et al., 2011).**

Aim of The Study

This study aims to:

- Assess the effect of psycho educational program for prevention of relapse among the patients with schizophrenia.
- Evaluate the effective of the psycho educational program on the prevention of relapse among the patients with schizophrenia

Research Hypothesis:-

The program will improve patients with schizophrenia knowledge about the importance of drug compliance for relapse prevention.

- **Materials &Method**

Research design:

A quasi experimental prospective research design (pre-test, posttest, and follow up) was utilized to fulfill the aim of this study.

Setting:

The study was carried out at the psychiatric Mental Health Hospital in Benha City; the hospital capacity is 277 beds. It serves psychotic patients and includes 6 departments (5 for males and 1 for females) The total numbers of the patients were 232 patients (38 females and 194 males)

Sample :

The studied patients were (60) patients who were admitted voluntary and met the following inclusion criteria, diagnosed as schizophrenic, the last admission not less than 6 months, able to communicate and had willingness to participate in the study. They were classified into 7 subgroups, and each group consists of (7-10) patients.

Tools of data collection: The following tools were used for data collection:

Tool One: Structured interview questionnaire which consists of three parts:

Part one includes: Socio-demographic and clinical data questionnaire:

A-Socio-demographic data: to elicit data about the patients characteristics such as age, sex, marital status, level of education, occupation, type of occupation, position of the patient in his/her family and residence.

B- Clinical data: which includes; date of last admission, mode of last admission, number of previous admissions, age at the beginning of illness, insight about illness, name of illness if there is a family's member suffering from mental illness and his/her relationship with the affected family member, and symptoms that led to his\her last hospitalization.

Part Two: Structured interview questionnaire schedule concerning knowledge about schizophrenia :-

It was designed by the researcher based on the literature review to assess patient`s knowledge about schizophrenia, it was consisted of 10 items: definition of schizophrenia, causes, signs and symptoms, methods used in the treatment of schizophrenia, drugs that are given to the patient, side effects of the drug, ways of coping with side effects, compliance with medication, causes of compliance and non-compliance

Part three:- Structured interview questionnaire schedule concerning knowledge about relapse. It was also designed by the researcher based on the literature review to assess patient`s knowledge about relapse, it was consisted of 9 items: relapse definition, did patient have

knowledge about causes of relapse, causes, warning symptoms of relapse, actions taken when relapse occur, relapse prevention methods, ways of coping with hallucinations, delusions and ways of adaptation with stress.

Tool two: Drug Attitude Inventory; (DAI-30) **(Hogan et al, 1983):** The DAI consists of a questionnaire that is completed by the patient. It includes a series of questions, each with true/false answers, pertaining to various aspects of the patient's perceptions and experiences of treatment. The original scale consists of 30 questions. The patient should be asked to read each statement in the questionnaire and decide whether they believe it to be true or false as applied to their own experience with medications.

Tool Three: The Psychoeducational intervention program to prevent relapse among the schizophrenic patients: it is consists of 12 sessions, which implemented as 2 sessions/ week. Each session lasted from 60-90 minutes.

Method

Tools (1) and (3) were developed by the researcher based on the literature review, translated and retranslated.. Tools (1) and (2) were translated by the researcher into Arabic. **Content Validity:** Validity of tools was done by a group of (5) experts. Two of them are specialized in the Psychiatric medicine and the other three are specialized in the psychiatric field to check the relevancy, comprehensiveness. According to their opinions, modifications were done and the final form was developed. The modification were (modify some words to give the right meaning of the phrase, added some phrases or questions. For example, methods used in the treatment of schizophrenia added seclusion and restraints and causes of relapse added overloaded stress. The questionnaire consisted of questions in the form of close ended questions. The experts were asked to evaluate tools' relevance and to check the clarity and feasibility of designed tools and to estimate the time needed to complete its items. It was carried out on 6 patients, who were schizophrenic patients excluded from the main study sample. According to the result of the pilot study, no changes were required.

Reliability of the tools:

Reliability statistics of the developed tool (knowledge of schizophrenic patients about schizophrenia and relapse was: 0, 5349

Ethical considerations:

A written letter was issued from the Dean of Faculty of Nursing, Benha University to obtain the approval for data collection from the Psychiatric Mental hospital and then from the General Secrtraite. The objectives and the nature of the study were explained and then it was possible to carry out the study with minimum resistance.

Before conducting the study, patients were assured that the data will be collected from the questionnaires will remain confidential and that no personal identification was needed by any means. Patients were informed that they could refuse to participate in the study, or withdraw from it at any time and then acceptance of them to participate in the study was taken through written consent (Appendix IV). **The operational design** describes the pilot study, and field work

Pilot study:

After the tools have been designed, they were tested through a pilot study, which was done before embarking on the field work to check the clarity and feasibility of designed tools and to estimate the time needed to

complete its items. It was carried out on 6 patients, who were patients with schizophreniaexcluded from the main study sample. According to the result of the pilot study, no changes were required.

Field work

The actual study was divided into three phases: Phase (1): The researcher reviewed all the schizophrenic inpatients records in order to choose those who meet the inclusion criteria. Before starting the interview, a written consent was obtained from each patient after the explanation of the study‘s purpose.

Patients were interviewed using tools 1and 2 as pre-test. The interviewing schedule were filled by the researcher for each patient (pre-test) each interview lasted 20-30minute depending on the patient‘s capacity to respond. This process(pre-test) took two months .

Phase (2):

A-Program development

Based on the results obtained from the previous phase (phase one), and review of the related literature, the psychoeducational intervention program was developed in order to provide the patients with knowledge about schizophrenia, relapse and importance of drug compliance.

B- Program implementation

The psychoeducational intervention program was implemented to all the studied patients with schizophrenia(all voluntary admitted patients with schizophrenia who were (60). The patients were classified into seven groups and each group composed of 7 to 10 patients. The program was implemented in the form of sessions which lasted for about 60-90 minutes and 10 minutes for break. Each group attended 12 sessions, scheduled as 3 sessions per week for duration of about 4 weeks. The sessions of the psychoeducational intervention program were carried out during the period from the beginning of January 2013 to the end of July 2014.

Phase 3: This phase concerned with the evaluation of the implementation of the program immediately after the program implementation (Phase 2) by reapplying the questionnaire about knowledge about schizophrenia and relapse and DAI to make the immediate post-test to the study group. After three months of the program implementation, the researcher interviewed patients to make the follow up test.

Statistical Design: The collected data were organized, coded, computerized, tabulated and analyzed by using the statistical package for social science (SPSS), version (20). Data analysis was accomplished by the use of number, percentage distribution, mean, and standard deviation, and correlation, coefficient. A significant level value was considered when $p<0.05$.

Results:

Table (1):-Distribution of the studied patients with schizophreniaaccording to their socio-demographic characteristics(n=60).

Socio-demographic Characteristics	Studied schizophrenic patients	
	N	%
Age		
18-	2	3.3
28-	14	23.3
38-	17	28.4
48-	19	31. 7
58 and more	8	13.3
Mean ± SD	32.8 ± 1.07	
Sex		
Male	45	75.00
Female	15	25.00
Marital status		
Single	35	58.3
Married	8	13.3
Divorced	14	23.4
Widowed	2	3.3
Separated	1	1. 7
Level of education:		
Illiterate	8	13.3
Read and write	5	8.3
Basic learning	23	38.3
Secondary education	16	26. 7
High education	8	13.3
Occupation		
Woking	23	38.3
Not working	37	61.7
Type of occupation(total= 23)		
Manual work	3	13.0
Skilled work	11	47.9
Employee	9	39.1
Residence		
Rural	46	76. 7
Urban	14	23.3

Table (2): Distribution of the studied patients with schizophreniaaccording to their insight about their illness (n=60).

Insight about schizophrenia	Studied schizophrenic patients	
	N	%
Patient insight		
• Have insight	13	21.67
• Have no insight	47	78.33
Name of the disease(total= 13)		
• Depression	5	38.5
• Schizophrenia	8	61.5

Table (3): The effect of the psychoeducational intervention program on knowledge of the patients with schizophrenia about schizophrenia and relapse

Time of the psycho educational intervention program	Knowledge of the studied schizophrenic patients about schizophrenia and relapse.			Comparison	Differences		Paired T-test	
	Mean	±	SD		Mean	SD	T	P-value
Pre	34.533	±	14.449	**Pre – Post**	60.564	33.036	13.596	< 0.001**
Post	95.218	±	30.084	**Pre - Follow up**	57.095	14.427	25.648	< 0.001**
Follow up	87.143	±	7.944	**Post - Follow up**	11.865	25.247	2.859	< 0.001**

Table (4): The effect of the psycho educational intervention program on attitude of the studied patients with schizophrenia toward drug compliance.

Time of the psycho-educational intervention program	Attitude of the studied schizophrenic patients (DAI)			Comparison	Differences		Paired T-test	
	Mean	±	SD		Mean	SD	T	P-value
Pre	13.783	±	3.141	**Pre – Post**	2.073	3.853	3.989	< 0.001**
Post	15.909	±	2.406	**Pre - Follow up**	0.500	4.346	0.746	> 0.05
Follow up	14.190	±	2.865	**Post - Follow up**	1.162	2.723	2.596	< 0.05*

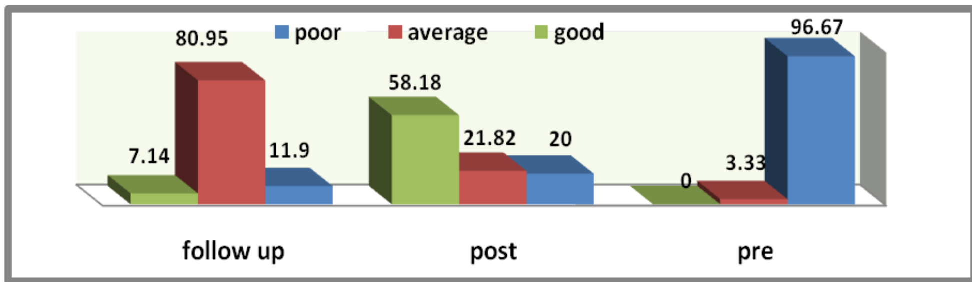

Figure (1): Total knowledge of the studied schizophrenic patients about Schizophrenia

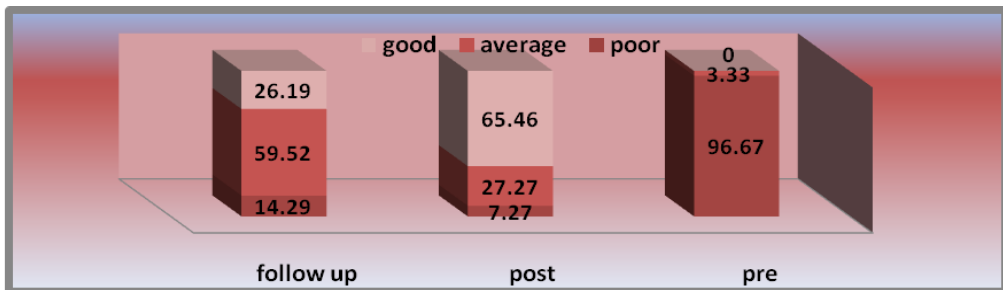

Figure (2): Total knowledge of the studied schizophrenic patients about relapse.

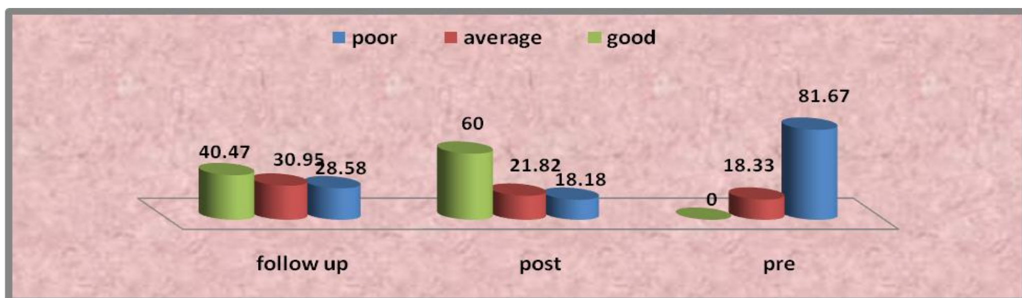

Figure (3): Total knowledge of the studied patients with schizophreniaabout coping with stress, hallucination and delusion

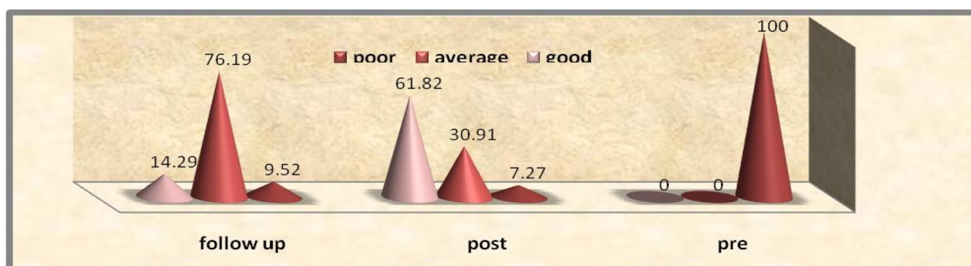

Figure (4): Total knowledge of the studied patients with schizophrenia about schizophrenia and relapse.

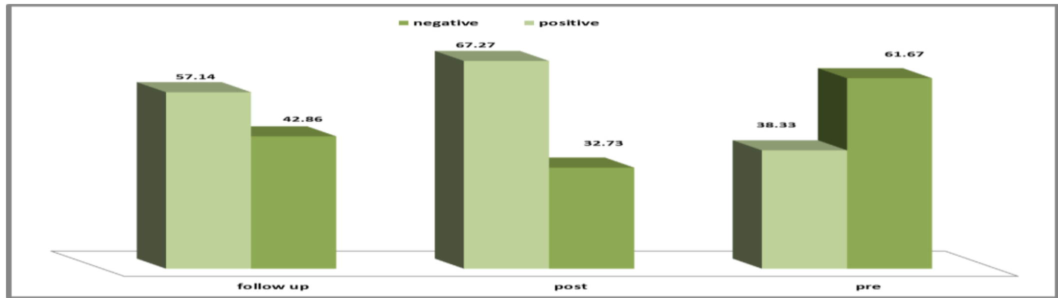

Figure (5): Total attitude of the studied patients with schizophrenia toward Drug Attitude Inventory

Table (5): Correlation between total knowledge about schizophrenia and relapse and attitude of schizophrenic patients toward drug

Correlation	Drug attitude inventory	
	R	P-value
Total knowledge	0.854	<0.001**

The result of the current study **showed** that, the mean age of the studied patients was 3.28 ± 1.07 years. sex, three quarter of them were males (75.0%)., more than half of them (58. 3%) were single and nearly one quarter of them (23.4%) was married, and (38.4%) reached basic education **(Table 1).**

The results revealed that more than three quarters (78.3%) of the studied schizophrenic patients had no insight about their illness, while only (21. 7%) had insight. This table also presents that more than half (61.5%) of those who had insight know the name their illness **(Table 2).**

There was a highly statistical significant difference between knowledge of the studied schizophrenic patients about schizophrenia and relapse before, immediately and 3 months after program implementation as P-value <0.01 **(Table 3).**

There was a highly statistical significant difference between patients' attitude toward compliance before, immediately and 3 months after program implementation as P-value<0.05 **(Table 4).**

There is a highly statistical significant difference between knowledge before, immediately and 3 months after program implementation **(Figure 1)**

The majority of patients (96.67%) had poor knowledge about relapse before the implementation of the program, while more than half of them (65.46%) had good knowledge immediately after the implementation of the program as well the highest percentage of them(59.52%) had average knowledge at 3 months after the implementation of the program**(Figure 2).**

The results revealed that the most of patients (81.67%) had poor knowledge about coping with stress, hallucination and delusion before the implementation of the program,

while more than half of them (60.00%) had good knowledge immediately after the implementation of the program as well more than one third of them (40.47%) had good knowledge at 3 months after the implementation of the program(**Figure 3).**

Al the patients (100.00%) had poor knowledge about schizophrenia and relapse before the implementation of the program, while more than half of them (61.82%) had good knowledge immediately after the implementation of the quantity and quality of the information or instruction given to program as well more than one third of them (76.19%) had average knowledge at 3 months after the implementation of the program **(Figure 4).**

There was a highly statistical significant difference between patients' total attitude toward compliance before, immediately and 3 months after program implementation **(Figure5).**

There was highly statistical significant correlation between total knowledge about schizophrenia and relapse and attitude of schizophrenic patients toward drug compliance as P-value<0.05 (Table 5).

DISCUSSION

Relapse in schizophrenia remains common and cannot be entirely eliminated even by the best combination of biological and psychosocial interventions. Relapse is one of the major contributing factors to the high burden of disability of mental illness **(Alsherif &Abd Elrahman,2013).**

The present study aimed to assess the effect of psycho educational program for prevention of relapse among the schizophrenic patients, and evaluate the effective of the psycho educational program on the prevention of relapse among the schizophrenic patients.

The results of the present study indicate that there is a highly significant differences between the patient`s knowledge before, immediately and 3 months after the program implementation. This may be because the most of them rarely or never recieve information about schizophrenia and relapse either from their doctors or their nurses. At the same time the results revealed that psychoeducation program was effective in improving patients' knowledge about schizophrenia, relapse and complinace with drugs.

Regarding the age of patients at the beginning of schizophrenia, the present those patients. **Sabra (2008),** who was revealed this deficiency of knowledge to the assumption made by the health care providers that the mentally ill people aren`t comptent enough to recieve information because their lack of insight and distorted thinking especially in schizophrenia which is a severe and chronic illness charaterized by lack of insight and results in cognitive impairements which make patients unable to remember their disease`s instructions about drugs or they might be very ill at the time of receiving that knowledge from their physician or nurses.

These results are in the same line with **Degmecic et al., (2007),** who reported that psychoeducation has proved to be highly effective therapeutic method to reduce relapse and re-hospitalization rates of schizophrenic patients. It is also similar to **Ruzanna et al., (2010),** who found that psychoeducation is an important tool in improving insight into illness among patients with schizophrenia. In addition to that, it is corresponding to **Chadzynska & Charzynska (2011),** who reported that increase in knowledge on illness was the most important gain resulting from participation in the sessions.

Concerning age of the studied schizophrenic patients, the present study

revealed that the ages of the studied schizophrenic patients were ranged between 28- to 48- years old. This finding is congruent with the study done by **Ebrahim, (2011),** who found that the highest percentage of the studied subjects were ranged between 30-<40 years old. This result also in the same line with **Goldberg (2007) &Shives (2008),** who stated that age of onset is typically between late teens and mid-thirties. As regards sex, the present study showed that, two thirds of the studied patients were male; more than half of them were single not married and not working. These findings agree with **Alsherif & Abd El Rahman (2013)**, who reported that most of the patients were male and single not married. It is also in the same line with **Ebrahim (2011),** who found that more than half of the studied subjects were single and majority of them did not work. On the contrary, **Solanki et al., (2008),** who disagreeing with these findings, stated that most of the patients were married

The study showed that nearly half of the studied schizophrenic patients were affected by schizophrenia at the age of 25- years old. This result is in the same line with **Goldberg (2007) and Shives (2008)** who demonstrated that age of onset is typically between late teens and mid- thirties, although there are cases outside that range such as late –onset (after age 45) schizophrenia, which is seen more often in women, and a rare childhood schizophrenia .The illness is diagnosed most frequently in the early twenties for men and late twenties for women

Cosidering the insight of the studied patients with schizophrenia, the reults of the current study revealed that more than two thirds of those patients didn`t had insight about their illness. This is similar to **Buckley et al., (2007),** who stated that asignificant number of the patients with schizophrenia have very poor or complete absence of insight about their illness.

Concerning knowledge of the studied schizophrenic patients about relapse, the findings of the current study showed that there is a highly statistical difference between knowledge of those patients before, .immediately and three months after program implementation.

In other meaning, their knowledge improved after participation in the program than before. **Munro et al., (2011),** confirmed and reinforced this findings. For example, causes of relapse, majority of patients stated that non-adherence was identified as definite cause of relapse .This may be due to lack of insight, low level of education of those patients, or lack of chance to learn about relapse before participation in such psychoeducational program before.

As regards patient's compliance with medications, the results of this study revealed that nearly around two thirds of the studied patients had negative attitude toward drug compliance before program implementation as they stop drugs when feeling better and take drugs only when feeling sick.

Non-compliance with medication may be due to poor relationship between patients and hospital staff. As hospital staff, particularly nurses and doctors, don`t know all of the patients, they read their names on the records when they call them to take their medications or to be seen by the doctors. So creating a warm and friendly environment between the hospital staff and the patients will enhance satisfying relationship between them and improve drug compliance in addition to providing those patients with important information about drugs and its side effects.

As for correlation between knowledge of patients about schizophrenia and relapse and attitude toward compliance, the results of the current study demonstrated that there is a highly statistical significant correlation. This indicates that as the more knowledge they

get, the more positive attitude toward drugs they have.

Limitation of the study:-

- The limitation of the duration of patient`sreleased at any time as theywant.
- Lack of privacyduring program implementation. There was no special place for conducting the program; hence the researcherconducted the program in the Entertainment hall and some times in the in-patient wards. Because of this, the researcherwasexposed to interruptions by other patients, that lead to increaseddistractability of the studied patients and sometimes the researcherwasobliged to repeat or evenstratagain.

CONCLUSION

Psychoeducation is an effective tool in improving patients' knowledge and insight about schizophrenia and it's relapses, so it should be given to all patients suffering from schizophrenia. Drug compliance was related to the knowledge about drugs side effects, beliefs in compliance problem and attitude toward drug therapy. Psychiatric worker must understand the patients` ideas and feelings about their disease and it's therapy when dealing with the problem of drug compliance. If they can build a strong alliance with patients and their families, they will promote good drug compliance.

RECOMMENDATION.

- Involve patients as much as possible in their treatment plan to become active partner, gain their trust and co-operation.
- Participate patients` families and relatives in the treatment planning and enlisted as a source of encouragement and support.
- Family education about the patient`s illness, medication and methods of dealing with warning signs of relapse will be more effective.
- ***Recommendations aiming at hospital staff:***
- In-service training programs and workshops need to be implemented for hospital staff to provide them with enough information, training, and skills necessary for communicating effectively, and for providing new ways of coping with relapsed patients.
- Relationships between nurse-patient and doctor-patient need to be more therapeutically.

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References

Alsherif, Z. A., and AbdElrahman, S. G., E. (2013): Schizophrenic patients' perception of factors leading to relapse. Journal of American Science; 9(12): 512-517.

Biočina,S.M ., and Agius, M. (2011):Using Identification of Early Warning signs to prevent relapse of psychosis. Cutting Edge Psychiatry in Practice. Cambridge. 1(3):68-71.

Buckely, P.Wirshing, D., &Bhushan, P. (2007): Lack of insight in schizophrenia: impact on treatment adherence. CNS Drugs, 21: 129-141.Chadzynska, M., and Charzynska, K. (2011): The participation

of patients with schizophrenia in psychoeducation; the analyses from the patient's perspective. Archives of Psychiatry and Psychotherapy. 2:67-72.

Chen, E.Y., Hui, C.L., Lam, M.M., Chiu, C.P., Law, C.W., Chung, D.W., and et al. (2010): Maintenance treatment with quetiapine versus discontinuation after one year of treatment in patients with remitted first episode psychosis: randomized controlled trial. British Medical Journal.;341:c4024

Cramer, J. A., Roy, A., Burrell, A., Fairchild, C. J., Fuldeore, M. J., and et al. (2008): Medication Compliance and Persistence: Terminology and Definitions. VALUEINHEALTH; 11:44-47

Degmecic, D., Pozgain, I., and Filakovic, P.(2007): Psychoeducation and Compliance in the Treatment of Patients with Schizophrenia, Coll. Antropol.31(4): 1111–1115.

Ebrahim, F.S. (2011): Quality of Life among Long Hospitalized Schizophrenic Patients. Master Thesis. Faculty of Nursing, Benha University. P.p:8-60.

Goldberg, R. J. (2007): Practical and guide to the care of psychiatric patients, 3rd ed, USA, Mosby, P. 215.

Hauser, M., and Juckel, G. (2012): Psychoeducation in subjects at an elevated risk for psychosis; a critical review, Curr Pharm Design. 18(4): 566-569.

Hogan, T.P., Awad, A.G., and Eastwood, R.(1983): A self -report scale predictive of drug compliance inschizophrenics: reliability and discriminative validity. Psychol Med ;13:177–183.

Mueser, K.T., and Jeste, D. V. (2011): Clinical handbook of schizophrenia, 2nd ed, New York, USA, P. 269.

Munro et al., (2011): Hospital treatment and management in relapse of schizophrenia in the UK: associated costs. The Psychiatrist. 35:95-100.

Pecenak, J. (2007): Relapse prevention in schizophrenia: evidence from long term, randomized, double-blind clinical trials. Neuro- endocrinology Letters. 28 (1): 49-70.

Rao, S. (2013): Management of relapse in schizophrenia. The Singapore Family Physician. 39(1):22-25.

Robinson, D.G., Woerner, M.G., Delman, H.M., Kane, J.M. (2005): Pharmacological treatments for first-episode schizophrenia. Schizophrenia Bulletin. 31(3):705-22

Rubin,a., David,w., Springer, and Trawer,k. (2010): Clinician's guide to evidence–based practice, psychosocial treatment of schizophrenia.1st ed, John Wiley Et Sons Inc, New Jersy, USA.p.p.26-27.

Rummel-Kluge, C, Kissling, W. (2008): Psychoeducation in schizophrenia: new developments and approaches in the field. Current Opinion in Psychiatry. 21: 168-172.

Ruzanna, Z., Marhani, M., Parveen, K., and Cheah,Y.C. (2010): Dose psychoeducation improve insight of patients with schizophrenia. MJP online Early.

Sabra, A.(2008): Development and evaluation of an educational program for schizophrenic patients about medication compliance. Unpublished Doctorate Thesis. Faculty of Nursing. Tanta University.

Schennach, R., Obermeier, M., Meyer, S., Jäger, M., Schmauss, M., and Laux, G. (2012): Predictors of relapse in the year after

hospital discharge among patients withschizophrenia. Psychiatric Services. 63: 87-90.

Shives, L.R. (2008): Basic concepts of psychiatric mental health nursing, 7th ed, Philadelphia: Lippincott Williams& Wilkins, P.p:354-357.

Smerud, P.E., and Rosenfrab, I.S. (2009): The therapeutic alliance and family psychoeducation in the treatment of schizophrenia; an exploratory prospective change process study. J Cons Clin Psychol. 76(3): 505- 510.

Solanki, R., Singh, P., and Midha, A. (2008): Schizophrenia impact on quality of life. British Journal of Psychiatry; 50(3): 181-186.

Stuart, H. (2009): Fighting the stigma caused by mental disorders: past perspectives, present activities, and future directions. World clinical trials. Neuro-endocrinology Letters. 28 (1): 49-70.

The National Alliance of Mental Illness (2011):Understanding schizophrenia. Available at WWW.nami. Org.

Xia, J., Merinder, L.B., and Belgamwar, M.R. (2011): Psychoeducation for schizophrenia (Review), The Cochrane Library. (11).

Young, K.W. (2004): Quality of life of people with long-term psychiatric illness living in a residential home. International Journal of Psychosocial rehabilitation. 9(1): 133-145.