IOSR Journal of Nursing and Health Science (IOSR-JNHS)
e-ISSN: 2320–1959.p- ISSN: 2320–1940 Volume 8, Issue 6 Ser. III. (Nov - Dec .2019), PP 01-13
www.iosrjournals.org

Effect of Psych-educational Program on Self-Efficacy of Patient with Substance Use Disorders

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Abstract: Background; *Substance use disorders are one of the serious health problems that threaten the Egyptian government, as it deals with youth within the age of work and productivity.Studies show that self-efficacy has a vital role in preventing relapse among patients with substance use disorders. It's considered a protective agent toward the challenge or pressures that lead to fall into the cycle of addiction.* ***Aim of the study:*** *The study aims at evaluating the effect of psycho-educational program on self-efficacy of patients with substance use disorders.****Study design:*** *A quasi -experimental research design is used in the present study.****Setting:*** *The study is carried out at psychiatry and neurology center. The center is affiliated to Tanta University, Tanta city, Egypt .****Subjects;****the study subjects were 50 patients diagnosed with substance use disorders, they were selected according to the convenience sampling type.****Tools of the study:*** *there were four tools:tool (I) was developed by the researchers and consisted of socio-demographic data, clinical data, and patients' knowledge about substance use disorders, Tool (2) was General Self- Efficacy Scale (GSE).Tool (3) was Brief Situational Confidence Scale .Tool (4) Ways of coping questionnaire .The researchers developed psycho-educational program and implemented on study subjects to develop their self –efficacy.* ***Results:*** *self-efficacy of studied patients was improved after implementation of psych educational program.* ***Conclusion****: Based on the results of the present study, the findings confirmed the importance of increasing self-efficacy, among those patients with substance related disorders, and also confirmed the effect of the training program.****Recommendations:*** *Involved training program about developed self –efficacy for patients with substance use disorders in outpatients' treatment plan.*

Key wards*: self -efficacy, substance use disorder.*

Date of Submission: 04-11-2019 Date of acceptance: 20-11-2019

I. Introduction

Substance use disorder has become a serious health problem, it hinders or restrains individuals from accomplishing goals or dreams in life. In Egypt the percentage of patients with substance use disorder reached 6% from total population at 2015, and in Gharbya government, it reached 6.9% according to reports of ministry of health. These disorders were a phenomenon that affected all segments of our society and all ages especially adolescent and early adults [(1)]. Substance use disorders are a chronic disease characterized by drug seeking and compulsion and difficulty to control, despite harmful consequences [(2)] .It is considered a "relapsing" disease because people under recovery from it are at risk of returning to drug use even after years from abstain taking drug [(3)].

Patients with those disorders used psychoactive substances, which include alcohol, marijuana, bingo, hashish, sedative and hypnotics tablets, heroin, cocaine, tobacco and various kinds of cough syrups and other substances.This disorder has been viewed historically as a moral failing and lack of individual self- control, it is now recognized and treated as a chronic, relapsing disorder [(4)]. It is considered a brain disorder, due to the fact that, it involves functional changes of the brain in many ways including, memory, learning, motivation, motor activity, stress, self-control, those changes may last a long time after a person has stopped taking drugs, with proper care, many addicted patients can be treated successfully but other patients may struggle with their addiction throughout life [(5)].

Substance use disorders have biological, psychological, social and environmental predisposing factors that influence development and maintenance. Biological factor was a degree of reward that individuals experience when initially using a substance. The psychological factors, such as; using substances to cope with stress or emotional trauma. Social factors; such as; pressure of family members or friends to use substances, or

drugs, Environmental factors such as; accessibility of those substancesor low cost. Those factors can lead to regular use and chronic use that were lead to brain changes [6,7].

Substance use disorders devastate lives by creating physiological, psychological and social problems. Regarding biological problems, it included brain changes such as ; alterations in cortical (pre-frontal cortex), and sub-cortical (limbic system) regions involving the neuro-circuitry, and disturbed neurotransmitter pathways like dopamine, serotonin and this can lead to dramatic increases in the desire to obtain the drugs and inability to stop them even when life is affected negatively [8].

In addition to, psychological problems such as depression, suicide attempts, aggressive behaviors and cognitive functioning problems, social problems occur for example; patients laid, cheated people, and couldn't be trusted, patients gave up straight friends and hung with the wrong people, and their families are hurt, upset, and worried about their patients. Regarding their work performance; those patients were late a lot, didn't do a good job, and even got fired once. Moreover, patients broke spiritually, might have legal problems, or performed crimes , as a result of this , they felt they were not clean , their ambition and good values were robbed [9,10].

Self-efficacy is defined as an individuals' level of confidence about their ability to handle problems or situations, it involves sense-making whereby individuals learn to understand themselves and create expectations of their future performances. Self-efficacy is the belief that individuals can change risky health behaviors as a result of their own actions.The level of self-efficacy is mirrored in the individuals' attitude and behaviors, both at home and at society [11].

The persons with a high level of self-efficacy have the following characteristics; positive feelings about themselves, having a high level of tolerance towards frustration, positive adaptation; accepting responsibilities, assessing situations correctly, having a good self-control and the belief that the things they are undergoing are the result of their own behaviorsor actions .People with high self-efficacy experience more happiness, optimism, and motivation. In contrast, people with low self-efficacy, have a general negative attitude toward people and social situations, they are more liable to depression, anxiety, suffering from feelings of worthlessness, inferiority, and emotional instability, so leading to dissatisfaction with life.[12]

Self- efficacy among people with substance use disorders means their ability to change their habits of useing these substances. Studies have demonstrated that people, who are trusted in their ability to change their habits, are successful in stopping substance use, In spite of how much of these substances they use or how heavily they are addicted [13].Control of substance use can be practically developed by improving self- efficacy. Patients with high self- efficacy have ability to resist substance use in high stress or risk situations. However, patients with low level self- efficacy and having negative effects coping with life stressors. They are liable to relapse again after being treated because they become frangible to resist the trigger or high risk situations. These mean that high self-efficacy serve as a role of resilience [14].

Mental health nurses have a specific role toward those patients with substance use disorders through collaboration with patients and their families, they should encourage patients to develop their self- efficacy by learning appropriate knowledge, and practicing essential skills to prevent drug abuse [15].Today, psycho-educational programs are constructed to increase self-efficacy and to empower people with substance use disorders for changing behaviors and solving lifelong defeating habits, those programs also help patients to build personal goals based on their needs ,value and wants and build their self- confidence, adapt with their life stressors which are responsible for behaviors and bad habits, and improve interpersonal functioning and global adjustment. [16]

Aim of the Study:

The present study aims at evaluating the effect of psycho-educational program on self-efficacy among patients with substance use disorders.

Research Hypothesis:

The self-efficacy of patients with substance use disorders is expected to improve after implementation of psycho-educational program.

Subjects and Method

Research design: A quasi -experimental research design was used in the current study.

Setting: The study was carried out at psychiatry and neurology center. This center is affiliated to Tanta University. Its capacity was 80 beds for psychiatric patients, and 20 beds for patients with substances use disorder This center provids health care services to Gharbya, Monifia, and Kafer Elsheikh governates. It works 7days /week, 24hrs/day.

3-Subjects

The study subjects were 50 patients diagnosed with substance use disorder. They were selected from the previous mentioned setting. This number was determined according to the power analysis equation (power of the test 90% and significant level at alpha $\alpha = 0.05$). They were selected by using convenience sampling design. The studied sample was fulfilling the following inclusion criteria; adult patients, patients were in rehabilitation phase of treatment, and did not have comorbid psychiatric disorders.

Tools of the study

The data of the study was collected using the following tools:-

Tool (I):- Structured Interview Schedule sheet ,It was developed by the researchers and it consisted of three parts: -

Part one; Socio-demographic data:it included sex, age, address, educational level, marital status, and type of work, income and its sources, and telephone number.

Part 2: Clinical data: It included questions about age of patients at first usage of drugs, and reasons of getting used, family history of addiction, number of previous hospitalization, reason of current hospitalization, and family reaction toward patients

Part 3:Patients' knowledge about substance use disorders: it involved nine questions to measure patients' knowledge about meaning of substances related disorders, predisposing factors to use those substances, its manifestation, common types of substances, signs of relapse and ways of prevention. These questions were given a score according to the patients' answer as following: - complete correct answer scored (3), incomplete answer scored (2) and the incorrect answer or don't know scored (0). The total score of questions was summed and ranged from zero to 27.The higher scored was indicated to patients who had goad knowledge.

Tool (2):- General Self - Efficacy Scale (GSE)

This scale was developed by **Schwarzer, R., et al (1995)** [17] It used to measure self- efficacy. This scale composed of 10 items. Patients' responses were measured in four likert scale; not at all true (1) to exactly true (4). The reverse items number 3,5,8,9 and 10 were scored in opposite direction. The total score was summed and ranged from 10 – 40.The higher score referred to higher self - efficacy. The level of self- efficacy was determined by a statistical specialist as flowing; Less than 50 % from total score means low level of self - efficacy, 50 – 75 % indicates moderate level of self - efficacy , and more than 75 % refers to high level of self - efficacy.

Tool (3): Brief Situational Confidence Scale.

This scale was developed by **Annis. H et al (1990)** [18].It consisted of eight items, about eight trigger situations that are faced by patients with substance use disorders, and measured how patients felt confident in these situations, and resist the urge to use drugs. The patients' responses were measured in five point likert scale from 0%; "not at all confident" to 100% "totally confident". The total score was summed and ranged from zero to 800. The higher scored indicated to patients felt higher confidence to resist trigger situations. The level of confidence was determine by a statistical specialist and explained as; Less than 50 % from total score was low level, 50 – 75 % was moderate level, and more than 75 % was high level of confidence.

Tool (4): Ways of coping questionnaire

This questionnaire was developed by **Folkman . S. (2008)** [19].It consisted of 64 items that measured the capacity of patients to cope successfully with stress. This scale is divided into eight subscales to measure eight domains of coping skills as following: confronting coping, distancing, self-controlling, seeking social support, accepting responsibility , escape-avoidance, plan of problem-solving, and positive reappraisal Each subscale consisted of eight items, and each item of this scale was rated on five point likert scale which ranged from; never (0) to always (4). The total score of this questionnaire was between 64 to194. The individual who had higher score indicated that he had better coping strategies.

Method

The steps of this study were conducted as follows:

Obtaining legalapprovals:

An official permission to conduct the study was obtained from the dean of Faculty of Nursing to be given to the director of Psychiatry and neurology center to obtain their permission for data collection. The director was informed about the goal of the study, time of data collection and expected duration.

Ethical consideration:
a. Informed consent was obtained from patients to participate in the present study after explaining the nature and purpose of the study.
b. Reassuring the study subjects that confidentiality and privacy were maintained during data collection and obtaining information was used only for the purpose of the study.
c. Respecting the right of the study subjects to refuse participation or withdraw from the study at any time of data collection.
d. The present study had approval from ethical committee of Faculty of Nursing to conduct this research study.
e. The study didn't produce any physical or emotional harm to studied patients

Preparation of the tools

The study tools were translated into The Arabic Language and tested for content validity by a jury of five experts that consisted of two professors in the field of psychiatry at the Faculty of Medicine, and three professors in field of psychiatric mental health nursing at the Faculty of Nursing, Tanta University. The required modifications were done accordingly such as changing few words with more simply. The tools 2, 3 and 4 were tested for its reliability by testing them on five patients and re-testing by using cronbachs alpha test. The reliability statistics of tool two was 0.912, tool three was 0.794, and tool four was 0.873.

A pilot study: It was conducted on 10 % of total study subjects (5 patients) after taking their approval to test the feasibility and applicability of the study tools and estimating approximate time required for interviewing the patients, as well as identifying obstacles that might be faced during data collection. After applying pilot study, no modification was done accordingly. The pilot subjects were not involved in the actual study.

Actual study: The actual study was divided into the four phases;

I- Assessment phase:

The study subject was selected according to previous criteria and the researchers interviewed each patient individually to explain the purpose of the study, and filled the study tools. The time consumed to complete the answered of study tools from each patient ranged from 25 to 30 minutes**.**

2- Planning phase: based on the results of assessments phase, the needs of studied patients were determined and the researchers developed psycho-educational program after reviewing of the recent related literatures [7, 20-25]. In addition, colored booklet was prepared for distributing to studied patients as a reference.

3- Implementation phase

The study group (50 patients) was divided into ten subgroups, five patients for each. Each subgroup attended eight sessions for two weeks (4 sessions per week). The time of each session ranged from one to one and half hours. All sessions were implemented in the morning shift at 11 A.M to 12.30 P.M. The duration of psycho educational program was 20 weeks (5 months). The program was carried out in the training room of the previous mentioned sitting. The room was arranged to contain six chairs in a cycle shape, portable laptop, and data show.

The program sessions were explained as a follows:

Session (1): Introductory session: This session aimed to orient patients about purpose, importance of the program, its schedule, content, In addition to established therapeutic relationship, rapport, and building trust between the researchers and patients, and between patients" themselves.

Session (2): Nature of substance use disorders and its manifestation.

Studied patients learned through this session a meaning of substance use disorders, common types of substances used, its manifestation and adverse side effects , and common ways were used by addicted patients .The researchers used power point and displayed video about this content followed by discussion.

Session (3): Causes of relapse and predisposing factor of relapse.

Through this session studied patients recognized a main concept of relapse to use substance, and its predisposing factors, stages of this relapse, and it's criteria. The done through presentation of researchers, followed by taken feedback from the patients, and discussion and interaction among them.

Sessions (4 &5): High risk situations of substance use disorders (stressors and triggers).

During fourth and fifth sessions the researchers explained nature of life stressors, its' sources, and how negatively effect on patients. Moreover, the researchers explained common triggers, stimulus, and weakness time that lead to relapse after recovery such as; places, objects, and people or memorized time of using substances. The patients were helped to discover their own stressful life situations and their triggers or stimulus that caused relapsed. Furthermore patient recognized their early signs of their relapse and how caught it early. This was done through exercises about different life situations that trigger or crave for relapse, role plays, and followed by brainstorming, discussion and interaction between patients and researchers.

Session (6): The concept of self-efficacy and its benefits.
Thorough this session, the studied patients learned about self - efficacy, its meaning, sources, and its importance. They also identified the main characteristics of people with high self -efficacy and those people with low self - efficacy. The researchers gave presentation by using PowerPoint followed by taken feedback from patients.

Session (7 &8): **ways to develop self- efficacy:**

In seventh session, the studied patients explored causes of lowered self-efficacy among people with substance used disorders, and warning signs that lead to this conclusion, in addition they were trained on ways to develop their self- efficacy such as: developing self- awareness, focusing on their positive aspect, and own strength to deal with urges to addiction, Positive self-talking, improving their mood, avoiding negative thoughts or stimulus idea to use drug, planning to solve life problems, making suitable decisions. These were done through display various exercises demonstrated by researchers and re-demonstrated by patients, role playing about different life situations that were displayed by studied patients, and followed by discussion.

Through eighth session, patients learned effective ways to cope stress, stimulus or triggers to using substance. They were being trained about how to improve negative feeling into positive one through deep breathing exercise, massage, physical exercise, positive visualization, mediation, muscle relaxation techniques.These were done through a watching video about these exercises and followed by demonstrating and re- demonstrating

Teaching methods andaids used during the sessions:

- **Methods of teaching**: during this program the researchers used lectures, group discussion , brainstorming and role playing, demonstration and re-demonstration
- **Aids used during the program :**

1. PowerPoint presented on laptop, prepared by the researchers in a simplified and meaningful Arabic language.
2. Videos about common substance that causes disorders, its manifestations, and withdrawal symptoms in addition to stress management.
3. Handout bookletsabout contents of this psycho educational programwere given to the patients to guide them for preventing relapse.

4- Evaluation phase

The study tools were reapplied on all studied sample immediately after the end of the training program and after three months, The actual study was carried out during the period from first February 2018 to end August 2018.

5- Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software statistical computer package version 23 (Statistical Package for Social Studies). For quantitative data, the range, mean and standard deviation were calculated. For comparison between more than two groups, Analysis of Variance (ANOVA) was used and calculated to compare between means of these groups, The level of significance was adopted at $P<0.05$.

Table (1):- Distribution of studied patients according to their socio-demographic characteristics

Socio-demographic data	**Number (**No **.=50)**	**%**
Sex (Male)	50	100
Age in years:		
20-	28	56
30-	16	32
40-	3	6
50-52	3	6
Range	20 -52	
Mean+ SD	29.18+7.82	
Residence:		
Rural	23	46
Urban	27	54
Educational level:		
Illiterate	4	8
Read & write	2	4
Primary	8	16
Secondary	27	54
University	9	18
Marital status		

Single	20	40
Married	22	44
Widow / Divorced	8	16
Job:		
Manual worker	20	40
Skilled workers	17	34
Employee	4	8
Business man	6	12
Student	3	6
Family monthly income:		
Enough	23	46
Not enough	21	42
Financial problems	12	24
Source of income		
Patient working	23	46
Family	17	34
Stealing	10	20

#family income responses not mutually exclusive

Table (1) represented the socio-demographic characteristics of the studied patients. All of study sample were males with the mean age 29.18+7.82 and more than half (54%) of studied patients were from urban area. Regarding marital status 44% of studied patients were married and (40%) were single. Additionally, more than half of them had secondary level of education (54%).Concerning their job, more than one third (40%) had manual work, and 34% had skilled work. Regarding family monthly income, 42% of the studied patients hadn't enough income, and 24% had financial problems, and mainly sources of their income were from patients' working (46%), family member (34%), or stealing (20%).

Table (2):- Distribution of studied patients according to their clinical data

Clinical data	Number (No =50)	%
Age of patient at first substance use:		
<15	17	34
15-	27	54
20-	2	4
25-30	4	8
Range	13-30	
Mean+SD	17.64+5.59	
Reasons of substance use		
Avoid tiredness and increase energy	40	80
Peer pressures	33	66
Improve mood	28	56
Sense of masculinity	26	52
Curiosity	26	52
Family troubles	19	38
Promote activity and memory	11	22
Improve sexuality	5	10
Family history of addiction		
Present	30	60
Absent	20	40
Numbersof previoushospitalization		
None	16	32
1	15	30
2	4	8
3	11	22
4-6	4	8
Reasons of current hospitalization		
Side effects of drugs	50	100
Feeling as burden on family	46	92
Stigma as addict by the community	44	88.
Withdrawal symptoms	43	86
Mal adaptive coping	37	74
Insomnia	29	58
Family reactions towards patient :		
Force patient to treatment	44	88
Stigmatizing the patient	44	88
Afraid from the patient	33	66
Isolate patient and limited his movement	31	62
Neglecting	26	52
Care and sympathy	22	44

#Response not mutually exclusive

The second table reveals a clinical data of studied patients. This table shows that the mean patients' age at first substance use was17.64+5.59 with range from13-40, and median 16. The most common reasons for drug abuse among patients were to avoid tiredness and increase energy (80%), pressures of their peers, or close friends (66 %), improve mood states (56%), used drug due to curiosity (52 %) or to a sense of masculinity (52%), while the fewest reasons to use drugs were family troubls (38%), promote activities and memory (22%), and improve their sexuality (10%).

This table also shows, The main reasonsof current hospitalization among the subjects, these were side effects of substances used (100%), feeling burden on their families (92%), needed to treat due to stigma from the communities (88%), asking treatment due to withdrawal symptoms (86%), and about three-quarters of patients due to maladaptive coping with stress, and more than half (58%) of them admitted because suffering from insomnia. Regarding, their families' reaction, the majority of them forced patients to treatment, and had stigma from them (88%), and more than half were afraid from patients, isolated patients and limited their movement, and around half of their families showed neglecting patients. While 44% of them showed caring, and sympathy toward their patients.

Table (3):- Types of substances used by studied patients as reported by them

Type of substance use among studied subject	**Number (No.=50)**	%
Tramadol	35	70
Hashish	34	68
Bango	26	52
Morphine	22	44
Apetryl	21	42
Cough syrups	20	40
Sedative / hypnotics	18	36
strox	18	36
Hallucinogens	16	32
Cocaine	16	32
Voodoo	15	30
Alcohol	15	30
Lyroline / Lyrica	6	12
Nalofine	5	10

≠Responses not mutually excusive

The third table shows the types of substances that are used by studied patients. The first line of used substances was tramadol (70%), then hashish, bango, morphine, apetryl, and cough syrups (68%, 52%, 44%, 42% , 40%) respectively.

Table (4) Distribution of studied patients regarding to their self – efficacy by the times of psycho-educational program implementation

Total self-efficacy scale score	**Before program** No.=50		**Immediate after program** No.=50		**After 3 months of program** No.=50	
	No	%	No	%	No	%
Low	20	40.0	5	10.0	5	10.0
Moderate	30	60	34	68.0	29	58
High	0	0.0	11	22	16	32
Mean+ SD	53.50+10.87		65.80+12.62		68.55+14.96	
F	52.536					
P	0.001*					

* Statistically significant difference at ≥ 0.05.

The fourth table represents improvement in patients' self-efficacy immediately and after three months of the educational program than before, 32% of the studied patients had high self – efficacy after three months of the program compared with 22% afterimmediately, and nothing before the program. In addition , 58% of studied patients had moderate level of self-efficacy after three months of the program compared with 68% immediately after the program, and 60% in before. The mean score of patients' self – efficacy improved gradually after the program (53.50 +10.87, 65.80+ 12.62 and 68.55 + 14.96 respectively). There were a statistically significant difference between patients' self - efficacy in before, immediately and after three months of psycho- educational program (F=52.536 , p -value = 0.001)

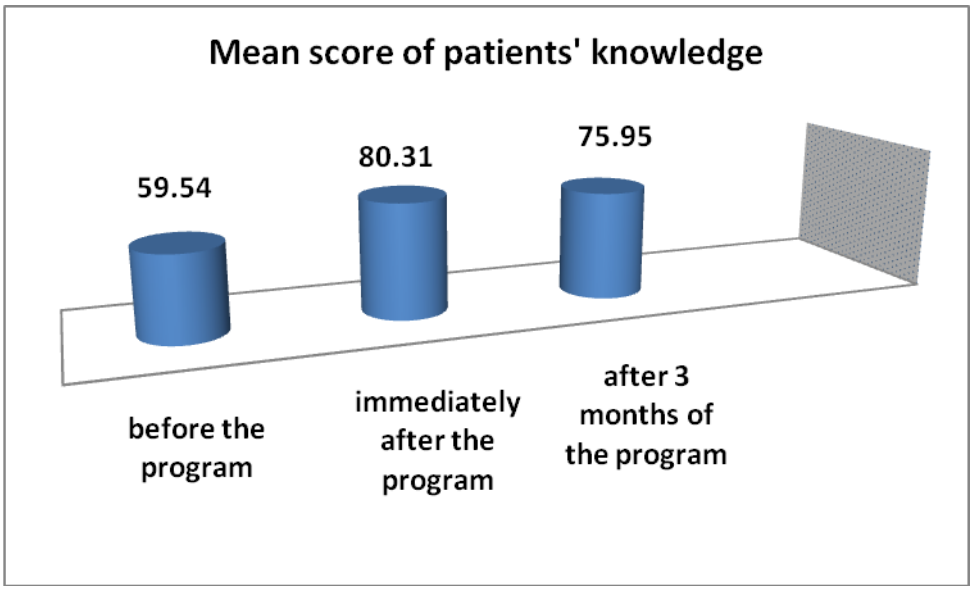

Figure (1) Comparison between mean score of knowledge among studied patients by the time of psycho-educational program implementation (No.= 50)

Figure one appears that mean score of knowledge among studied patients after 3 months of psycho educational program was less than immediately after the program, and more than before.

Table (5): Distribution of studied patients according to their confidence to resist urges of use substances.

Confidence level	**Before program** No.=50		**Immediately After program** No.=50		**After 3 months of program** No.=50	
	No	%	No	%	No	%
Not at all confident	13	26	3	6	5	10
Mild confident	29	58	25	50	15	30
Moderate confident	8	16	20	40	21	42
Strong confident	0	0	2	4	9	18
Mean +SD	32.09+14.32		47.09+15.94		52.09+19.54	
F	153.294					
p	0.001*					

*Statistically significant ≥ 0.05

The Fifth table shows comparison between before, immediate, and after 3 month psycho-educational program concerning patients' confidence to resist triggers situations to using substances. The table reveals that 42 % of the studied patients had moderate level of confidence after three months of the program compared with 40 % after immediate and 16% before program. Moreover 18 % of studied patients had high level of self - confidence after 3 month of the program compared with only 4 % immediately after and no things before program. The mean score of studied patients' confidence to resist the trigger situations was improved immediately after the program and after 3 month compared than before (47.09± 15.94) (52.09 ± 19.59) (32.09 ±14.32) respectively. There was a statistically significant difference regarding patients self - confidence to resist trigger situations between before, immediate after and after 3 months of implementation of the program.

Table (6):-Distribution of studied patients regarding to their effective ways to cope with stress by the times of implementation of psycho-educational program.

Ways of effective coping with stress	Before intervention Mean +SD	Immediately after Mean +SD	After 3 months Mean +SD	F	p
Confronting	56.83+7.84	66.17+10.49	68.22+12.92	54.984	0.001*
Distancing	56.89+9.87	59.39+10.62	60.89+12.53	2.230	0.119
Self-control	53.80+8.85	60.50+7.81	63.55+9.62	29.791	0.001**
Seeking social support	54.29+10.15	66.64+11.69	71.21+12.77	62.054	0.001**
Accepting responsibility	64.38+11.52	73.13+10.12	70.50+10.12	23.765	0.001*
Escape – avoidance	66.56+13.35	69.06+11.90	71.56+12.93	3.922	0.026**

Plan for problem solving	51.43+12.09	62.00+12.66	66.64+14.06	57.110	0.001**
Positive reappraisal	52.61+12.86	60.78+14.17	66.00+17.44	38.459	0.001**
Total mean of effective ways of cope to stress	55.70+5.69	62.93+5.47	65.80+7.70	111.362	0.001*

#Response not mutually exclusive

* Statistical significant difference at ≥ 0.05

The sixth table explores the difference between mean score of effective ways to cope with stress that are used by studied patients in before, immediate and after three months of application of the psych-educational program. There were an increase in mean scoring of all ways of coping immediately and after three months of the program than before. In addition to, mean score of total ways of effective coping increased gradually after the program. There were statistical significant differences between before, immediate and after three months of the program regarding all effective coping ways dealing with stress.

II. Discussion

Self-efficacy has a vital role in preventing relapse among patients with substance use disorders. Its considered a protective agent toward the challenges or pressures that lead to fall into cycle of addiction [(16)] The present study develops a psycho educational program to improve self- efficacy of those patients, and it shows enhancement of self- efficacy among those who attended this program, immediately and after three months. This finding may be due to the activities that are applied through the implementation of this program, where the patients had more insight about their abilities, learned problem solving skills, and effective coping methods to deal with difficulties and stress situations, and acquire more strengths and power that increased their confidence in themselves to have life without drug addiction .

The finding of the present study is supported by a study by **El- ayari, O. et al (2019),** in Egypt. They focus on motivational interviewing with substance abusers as power of counseling to help patients with substance use disorders to improve their self-efficacy and find significant improvement immediately and after three months of motivational interviewing sessions [(26)]. Moreover, in to the study done by **Shey-khnezhad.F, et al (2019 ,**they implemented group education about self-efficacy and craving tendencies for drug abusers and found that they significantly increased their self-efficacy and decreased tendenciesto craving. They concluded that changing life style of drug abusers enhanced their self-efficacy and reduce craving [(27)].

Furthermore, **Heydari. A et al (2014)** applied on their study Bandura's social cognitive theory on addicted patients and found that intervention had a significant effect on improving client's self- efficacy and those people had successfully quitted drugs [(28)]. In the same context, **Ibrahim, et al (2011**) studied the relation between self-efficacy and relapse of addiction and found that the patients with high self-efficacy show more tendencies to obtain abstains relapse, and more constant in facing risk situations [(13)].

According to, **Karatay. G , et al (2017)** they reported self-efficacy among youth is an effective factor in preventing the use of harmful substances. They concluded that if patients believe that they have abilities to cope effectively with high-risk situations, that help them to behave more rationally in facingthe challenges and resisting pressures of social environment to use addictive substances [(29)].

Moreover, **Soudagar. S et al (2015)**stated that improving self-efficacy of those patients leads to enhancing their performance, diminishing their withdrawals symptoms, increasing their resistance to stress, and preventing thier consequences [(30)]. In the same line **Davis K, & Arterberry. J (2017)** found on their study, that low self-efficacy can destroy patients' motivation, interfere with cognitive abilities ,and have undesirable effect on physical health[(31)].This is in agreement with a study that was done by **Fida. R. et al (2018)** who state that low self-efficacy leads to greater anxiety and less successful opportunities to cope with risk factors that stimulated addiction [(32)].

The present study discovers that those patients who attended psycho educational program acquire knowledge about substance related disorders than before. They know the meaning of these disorders, its manifestation, common types of addictive substances, the predisposing factors of using and relapsing manifestation, and their preventions. But their knowledge decreases after three months of program, this may explained by the fact that knowledge may be liable to forgetting by time, while the skills of continuous practice and applicability in daily life events are fixed .

Throughout the present study, the finding explore that the most commonly used drugs by patients are Tramadol(70%) then, the others following drugs: Hashish, Bango, Morphine, Apetryl and Cough syrups, but patients can abuse more than one type of drugs at the same time. From the researchers' point of view, the widespread use of Tramadol in our study may be due to its easy illegal handling, rapid pain relievers, it helps to tolerating hard jobs and enhancement of sexual performance, especially that the most of studied sample had manual or skilled jobs, they might perceive that drug can increase their performance and reduce their fatigue.

This goes with a study done by **EL-Sherbiny. A (2015)** in Tanta university hospital in Tanta city, Egypt, they reported that tramadol was most frequent on their subjects [(33)], and the same by a study of **El galad.**

G et al (2O18) they conducted in El Fayoum city, Egypt [34].In contrast with the study by **Abd elmoniem. F, (2018)** they found that the most used drugs among their subjecst were Tobacco, Bango followed by Tramadol and Hashish [35].

It is important to mention that, all studied patients in our study were males, that is probably due to stigma in our society toward person who addicted drugs. Especially if those persons are female, our culture does not accept addicted women. So, the female patients are treated in secret and refuse to admit hospitals. This agrees with a study of **Mohamed. N.et al (2014)** In Egypt. They found in their sample little percentage of women, and concluded that this is due to their feeling of shame and that they are rejected from other people if they admitted psychiatric hospitals or follow up in outpatient clinic.[36]

On other hand, the present study reveals that studied patients acquired more confidence to resist trigger situations of relapse after attending psycho-educational program and this confidence increases gradually after three months of the program .The patients reported during the training program that they have power to deal with risky situations such as unpleasant emotions, physical discomfort, urges and temptations to use drugs, or social pressure to use,conflict with others, or pleasant times with other . From the researcher's view, improving self - confidence among those patients will lead to maintaining longer period of absence and improving patients' prognosis. This explanation in the present study is supported by a study of **Molero. M et al(2018)** who found that their patients after intervention had more confidence in their abilities to cope with different stressors appropriately, and that led to feeling of satisfaction and will being without using drugs [37].

In this context**, Tianqiang.Hu et al (2015)** concluded from their study that deficiency of self-confidence and feelings of uselessness among addicted patients lead to relapse [38]. In addition, **Harvey R. et al (2013)** stated that their studied subjects with substance used disorders had a lot of guilty feelings, shame, and self- criticism. And found those feeling were essential to enhancing their motivation and energy to cope with risky situations or weakness points on themselves toward addiction, which consequences improve their self-confidence and coping effectively with their illness [39].In the same line **Torrecillas. F,et al (2015)**measured self-efficacy and coping skills for patients in high risk situations to drug addiction and found that there is a strong relationship between low self-efficacy and the chronicity of drug usage, and concluded that self-efficacy was an important element in maintaining ability to cope with different stressors and social pressures to use substance[40]. This is supported by the study of **Abdollahi. Z(2014**)who focused on the relationship between addiction relapse and self-efficacy and reached the same conclusion [41].

Concerning the coping strategies that are used by studied patients, the study explores that those patients acquired effective coping strategies to deal with trigger situations to drug abused or stressful life situations after application of psych- educational program and their skill gradually increased after three months of implementation of this program. This improvement may be explained by the following : **First ;** more than half of the sample had economic problems due to drugs' addiction that gave motivation to learn how to stop addiction cycle, **Second ;** depending on the words of patients, the main reasons for admitting hospitals were the side effects of drugs which deteriorate the physical and psychological health , feeling of burden on their family, stigma that attached to them, withdrawal symptoms of drugs made their family members afraid and rejected them , all of these factors gave patients desire to change.

Third ; The different activities about common stressful life events that trigger addiction and adaptive and maladaptive responses were applied during training sessions. They are achieved by using role playing and discussion within the group of patients who have the similar problems and sufferings. This dynamic of interaction encourages patients to learn effective coping strategies to resist urges of substance use after discharge from hospitals.

It is important to mention that the most common coping skills that patients in our study acquired or improved are seeking social support to help; escaping or avoiding from stimulus or triggers situations to use drugs; accepting responsibility of having a role in their treatment plan, and responsibility toward their life; abilities to confronting stressful situations, and taking action, and the right to make decisions, and accept its consequences. In addition, plan for problem solving, and how to select the best solution based on a positive reappraisal of the situation.

Regarding social support as a skill taught to our studied patients .At the beginning of the training, the patients had difficulties to seek help or express about needs in front of other patients, they felt shame and expected refusal, but were gradually encouraged to express their emotions , needs and using verbal statements and nonverbal expression for telling own stories with drugs. They also listened to other patients who had the same complains, they interacted together, discussed , cried, smiled, supported each other, focused on strengthening themselves, they concluded that everyone has supportive person, if they didn't have support, they would search for them , and hope they could find .

In this context,**Lam. B (2019)** studied the effect of social support on psychological adjustment and wellbeing. They report that social support helps people to overcome their life stressors and lead to better adjustment and integration into society that leads to life satisfaction[42]. Furthermore, the studies conducted

by **Andó. B et al (2012)** found out that patients who are cooperative and seek social support during their treatment had long absence period from drug addiction[43].

Additionally, **Kelly. J et al. (2011)** stated that the patients who are unable to use adaptive social support network effectively in stressful social situations were more exposed to relapse of drinking alcohol[44].Similarly a study by **Heffer T. et al. (2017)**about psychosocial treatments for substance use disorders, they explored that patients who perceived higher levels of social support are less likely to use substances or refrain from misuse, and that support motivated them to engage in responsible behaviors[45].In another line, a study by **Murphy .L et al (2017)** concerning negative models of social support in inducing illegal drugs such as observing friends , peers or family members who used drugs, or drank alcohol lead to obtain and use these drugs [46].

Concerning a second skill that was learned by patients in the program in the present study it was escape or avoidance of stimulus or triggers to use substance, such as avoiding memories situations that patients experience failure, rejection, disappointment, or sadness as well as pleasured feeling or external stimulus or inner sensation that are associated with drugs usage. The studied patients developed these skills after the training than before. In this context, **Buckner.j et al. (2014)** stated that escape –avoidance as skill could be a key factor in the tension-reduced or relieved emotional distress of addicted persons, which emotional suffering is a characteristic of those people [47]. In contrast the study by **Cronkite .R et al (2013)** about coping strategies and their adverse outcomes among community adults, they founded that the studied men addicted patients who use avoidance as a coping strategies to deal with stressful situations were more drinking alcohol and suicidal ideation than other patients [48].

This is supported by **Holahan et al. (2015)** who explained that the individuals who engage in avoidance behaviors to cope with their life stressors by the time may have additional stressors and grow more problems [49]. It is important to mention that the avoidance skills in our study mean that avoiding triggers or stimulus to use drugs, does not mean avoiding facing stressful situations.

The third skill was learnt by studied patients in the present study was accepting responsibility. This responsibility is toward their own behaviors, their roles in plan of treatment plan, their duties toward themselves, seeking changing their life, facing problems, trying to solve, thinking about their future and planning to it. This skill gave meaning of their life and created motivation to achieve the best. The studied patients had already improved and developed this skill compared with before psycho-educational program. These findings agree with the study conducted by **Sudraba.V et al (2015)** , they develop stress coping strategies training program for addicted patients , they found that their patients increase their responsibilities and seek social support when need help, and also controlled themselves against drug addiction after this training [50].

When focusing on others skills that were learned by studied patients in the present study, such as confronting stress situations or problems, positive reappraisal to those actual situations or problems, planning for problem solving, and taking the best action, it's important to mention that those patients in the present study developed in these skills after immediately the psych- educational program and post three months. In this spot of light, using these skills makes patients use intellectual adjustment, adequate resources, and reduce their emotional distress related to life stressful situations which made them cope effectively with life problems.

In this context, **Marquez. A et al (2015**), reported that problem-focused coping is considered a protective factor against consumption of drugs and it's associated with better mental health and helping patients with addicted drugs to manage their internal and external demands of stress [51]. This is supported by **Brennan PLetal (2012)** who followed studied patients to improve their abilities to solve their daily life problems, and found out that these skills help them to avoid used substance if they faced high risk situations, and they would have empower to maintain against any temptation or craving [52].

Moreover, **Vala.M (2016)** studied the comparison between addicted and non-addicted people, and found from their longitudinal study, that the more self - control and use of effective coping skills, the more patients are supportive and successful in reducing drinking In the same line [53]. To sum up the acquired effective coping skills among those patients with substance used disorders lead to improve their confidence and develop their self-efficacy to live without drugs, and decrease their relapse in future.

III. Conclusion

Based on the results of the present study,thefindings confirmed the importance of increasing self-efficacy,and effective coping skills in the management of patients with substance related disorders, and also confirmed the effect of the training program.The majority of studied patients improved their levels of self-efficacy, were able to identify, and resistthe triggers situations to use these drugs or stress situations, and developedtheir effective coping skills, enhanced theirconfidence to dealing effectively with craving symptoms after the implementation of this psycho-educational program, and their knowledge about their illness improved but mean score of their knowledge declined after three months of the training program.

IV. Recommendations

Based on the previous findings of the present study, the following recommendations are suggested

- Involved training program about developed self - efficacy for patients with substances used disorder in outpatients' treatment plan.
- Developed training programs for health care providers about how develop self-efficacy among patients with substances used disorder, and its' positive effect to prevent their relapse.
- Developed health education program about hazards of substance use disorder for students in schools, universities, youth in out patient's clinics or hospitals.
- Workshops for adolescences about stress managements, effective ways of problem solving, steps of decision making, and social skills as a ways for primary prevention of using drugs.

Acknowledgement:

We thank patients who participated in this study, and health care staff in psychiatry and neurology center for providing the suitable place, and adequate time in daily routine of patient care, that helped conducting the psyche-educational program of the present study.

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Prof.Dr. Essmat Mohamed Gemeay" Effect of Psych-educational Program on Self-Efficacy of Patient with Substance Use Disorders" .IOSR Journal of Nursing and Health Science (IOSR-JNHS), vol. 8, no.06 , 2019, pp. 01-13.