Psychosocial Nursing Intervention for Enhancing Coping Skills to Reduce Drug Craving among Addicts

Nadia Ahmed Ahmed, Department of psychiatric/ Mental Health Nursing, Faculty of Nursing, Ain Shams University, d.nadiaaboelazm@gmail.com

Zeinab Loutfi, Department of psychiatric/ Mental Health Nursing, Faculty of Nursing, Ain Shams University.

Rania Abed El Hamid Zaki, Department of psychiatric/ Mental Health Nursing, Faculty of Nursing, Ain Shams University.

Abstract- Drug craving has been defined as tendency or compulsion to abuse substances. Coping skills approach provides a systematic way assessing the full range of antecedents' and consequences of abusing drug that influence an individual's craving potential and devising interventions to deal with them that are likely to reduce the probability of future relapse. Aim to enhancing coping skills to reduce drug craving among addicts. Study design: a quasiexperimental design was utilized to conduct this study. Setting: this study was conducted in the Heliopolis psychiatric Hospital. Subject: convenient sample of thirty patients suffered from drug craving at the addiction outpatient clinic, Data collection tools: 1) Socio-demographic interview questionnaire to assess the socio demographic characteristics of study subjects and data related to the previous history of drug abuse and relapse. 2) Drug craving questionnaire that was used to assess variable contributing to craving among drug abuse. 3) Coping Behavior Inventory (CBI) that was used to assess coping skills among drug craving patients. Results: The present study revealed that youth aged between twenty-five to thirty-five years were the most prone to multiple craving factors, the intervention program was successful in improving coping skills with high risk factors of craving. Conclusion: improvement of behavioral and cognitive coping skills with high-risk situation after program implementation. Recommendations: designing continuous health education programs for family caregivers and their patients with craving to teach them how to avoid craving and how to enhance their coping skills. Psychiatric /mental health nurses should have active role in helping patients with drug craving to cope effectively with high risk factors of craving.

Keywords: Drug craving, High risk factors, Coping.

I. INTRODUCTION:

Drug addiction is a major problem in society ruining the life and leading to use of national assets for combating addiction and its defects. Unfortunately, the number of addicts is gradually elevating that suffer from its physical, mental, cultural, familial, economical, as well as social consequences of addiction *(Jalilian, Karami, Ahmadpanah, et al., 2015).*

Drug craving has been defined as tendency or compulsion to abuse substances the studies have shown that drug craving disrupts attention in addicted ones and the individuals who experience relapses are more motivated by substances in comparison with other addicts and thus, the former group experience drug craving more (Ahmadpanah, Alavijeh, Allahverdipour, et al., 2013).

Concerning causes of craving, the factors or high-risk factors situations that can precipitate or contribute to craving episodes, include situations as upsetting or negative emotional state, social pressure to get high, interpersonal problems or relationship conflicts, positive feeling and desire to celebrate and lack of social support (Sayette, 2016).

Coping skills an action, a series of actions, or a thought process used in meeting a stressful or unpleasant situation or in modifying one's reaction to such a situation. Coping strategies typically involve a conscious and direct approach to problems, in contrast to defense mechanisms (*Kato, 2020*).

Coping skills increase resilience because they help patient learn how to properly handle negative emotions, panic attacks, and other difficult situations. When you effectively deal with a negative emotion or situation, you also move on and let go of the negative feelings that are associated with that experience (Algorani, & Gupta, 2020).

Commonly used coping mechanisms include changing one's perception of the issue at hand, using humor, using problem solving skills, employing stress management and relaxation techniques, seeking out and using the support of others, ventilating feelings, embarking on a physical exercise and activity routine, decreasing personal expectations, and avoiding self-blame (Somers, & Casal, 2020).

Substance abuse nurses often play a teaching role in addition to providing physical care. They teach patients about the dangers of drug abuse, including the physical and psychological effects; the damage to relationships and family life; and the impact on meeting basic needs such as holding down a job. They also educate patients regarding treatment options, including those they can use on either an inpatient or outpatient basis, and those they can use to stay drug-free long-term. Nurses might also educate a patient's family members about what to expect from the rehab process and how they can support their loved one's attempt to conquer drug addiction (*Public Health England (PHE)*, 2017).

In this regard, studies have indicated that the ability to deal efficiently can reduce symptoms of psychopathology and thus by modifying appropriate psychiatric nursing intervention program become a must for providing the patients suffering from drug craving, by global strategies and skills needed for coping with these situations in order to develop alternative ways for avoid or mange high risk factors of craving without using drugs as identifying high risk situations for each patients (*Imkome*, 2018).

II. SIGNIFICANCE OF THE STUDY:

Substance abuse is becoming a serious mental health problem in Egypt as there is an increasing number of addict patients as indicated by the *National Addiction Report (2015)* the prevalence of addict patients were 20.6%.

Craving has been described as one of the major factors related to relapse to drug, alcohol, and/or tobacco use, a critical factor in treatment drop-out, and is a topic of discussion in most substance abuse treatment programs, particularly in relapse prevention work *(Abuse, & US, 2016)*.

Coping is the combination of thoughts and actions to deal with a threatening situation. It occurs in response to physical or psychological stress and manifest as behaviors, thoughts, or emotions that use to adjust to triggers or changes in life. Stressors are normally described as negative events such as the death of a loved one, a sexual, physical, or emotional trauma or abuse, loss of a job, or a divorce. However, positive events like a new job, marriage, birth, or moving can also contribute to your stress levels and require coping skills (*lacobs*, 2020).

III. THE AIM OF THE STUDY

This study aims to assess psychosocial nursing intervention for enhancing coping skills to reduce drug craving among addicts in order to help them avoid relapsing back to using drugs after a period of abstinence.

Hypothesis:

Psychiatric nursing intervention have a positive effect on enhancing coping skills to reduce drug craving among addicts in order to help them avoid relapsing back to using drugs after a period of abstinence through empowering them by adaption skills against biological, psychological and environmental factors of craving the patients are likely experiencing on everyday life.

IV. SUBJECTS AND METHODS:

Sampling and Setting:

The sample was chosen from the total number of patients who were visiting the outpatient clinic in Heliopolis psychiatric Hospital and suffering from a drug craving within six months.

1) Research design

Quasi-experimental study design (one group pre/post test) was used.

Tools for data collection

Tool (1): A) Socio- demographic interview sheet (Appendix I)

This questionnaire was constructed by the researcher after reviewing literature in the field of drug abuse and drug use.

This interview sheet comprised of two parts:

The first part: It deals with the socio demographic characteristics of study subject which includes age, sex, religion, marital status, level of education, occupation and monthly income (L.E).

The second part: It includes data related to previous history of drug use such as; types and nature of drug abused before and after relapse, duration of abuse, number of relapses, duration of abstinence and treatment related barriers against abstinence.

B) Drug craving questionnaire: (AppendixII, pre/ post formats):

This questionnaire designed by *Singleton et al., (1995)*, to assess biological, psychological, and environmental factors and related high-risk situations leading to craving, which consist of 74 statements of high-risk situations that lead to craving.

C) Coping behaviors Inventory (CBI) (Appendix III)

It was originally designed by *Litman, Stapleton, Oppenheim, and Peleg, (2008)*, to assess coping behaviors among drugs craving patients. It consists of (36) items of coping behaviors with psychosocial and environmental triggers leading to craving as relaxation, positive self-talking, sleep and rest, help group etc.

2) Operational Design:

The operational design includes preparatory phase, pilot study, and field work.

Phase I: Preparatory phase (data collection)

This phase aims at preparing and designing the training program in the form of training sessions for intervention through setting its objectives, preparing the psychiatric nursing activities according to the training objectives. A training program was designed in Arabic language by the researcher after reviewing the related past, current Arabic and English literature covering various aspects of the problem using available books, articles, periodicals, magazines to get accounted with the research problem and develop the content of the program, and evaluate its content by a panel of expert professors in the field of the study including the supervisors of the work.

Phase II: (Exploratory phase):

A pilot study was performed before conducting the actual study. It was carried out on 5 patients as representing 10% of total sample in order to ensure the clarity of questions, applicability of the tools and the time needed to complete them.

The researcher excluded all subjects who were involved on the pilot study from the main study sample.

Phase III: Designing phase (planning):

This phase aims at planning for educational program for addict patient for reducing craving through setting objectives, preparing the educational skills and designing the methodology and media. The materials for the program were obtained from the textbook, journals, periodicals, magazines and the online references

Tools validity and reliability:

To achieve the criteria of trustworthiness of the tools of data collection in this study, the tools were tested and evaluated for their face and content validity, and reliability.

Face and content validity were tested by seven expertise in three different specialties in public health nursing, mental health nursing and nursing administration. They were from different academic categories, as, professors and assistant professors to ascertain relevance, clarity and completeness of the tools, experts elicited responses, which were either agree or disagree for the face validity and content radiality.

D) Psychiatric Nursing Intervention supervisors.

Pilot study:

A pilot study was carried out in the first half of July, 2019, before data collection. The pilot study included 10% of the study subject fulfilling the previously mentioned criteria. Those who shared in the pilot study were included in the main study sample.

Field work:

The actual field work for the process of the data collection had consumed. After an official permission was obtained from the director of Heliopolis psychiatric Hospital to precede the study, the researcher embarked on field work. Data collection for this study was carried out within a period 6 months, started at the first of July.

Ethical Considerations:

The research approval obtained from Scientific Research Ethical committee in Faculty of Nursing at Ain Shams University before starting the study. The researcher clarified the objective and aim of the study to the nurses included in the study. The researcher assured maintaining anonymity and confidentiality of the subject data. The addict patient informed that they are allowed to choose to participate or not in the study and that they have the right to withdraw from the study at any time.

Phase IV: Implementation phase:

Field work:

The actual process of data collection consumed 6 months started from July 2019. Data were collected weekly (Monday) two group for every day. Before conducting the educational program, participating patient were asked to give a written or verbal agreement to participate in the study. The researcher explained the aim and objectives of the study to participating women. All women were informed that participation is voluntary.

The educational program was implemented in the form of sessions for small group of craving patient, each group range from 5 patient. However, Pre-test carried out in July2019 (educational program consisted of 21 sessions. to ensure that every participating understands the session's content, sessions started with objectives, taking into consideration using a simple language to suit personal differences. Each session lasted from 30-60 minutes according to patient responses and active participation, as well as the time available and the content of each session.

Phase V: Evaluation of the program:

After conducting the educational program the substance abuser women were thanked for their participation and asked to fill the post-test. The evaluation of the effectiveness of the program was done immediately after its implementation by comparing the change in women through applying the same tool of the pre-test.

3)Statistical design

The collected data were organized, analyzed using appropriate statistical significant tests. The data were collected and coded using the Computer Statistical Package for Social Science (SPSS), version 20, and was also used to do the statistical analysis of data.

Quantitative data were expressed as mean± standard deviation (SD). Qualitative data were expressed as frequency and percentage.

The following tests were done:

- lacktriangle Chi-square (x²) test of significance was used in order to compare proportions between qualitative parameters.
- Pearson and (t) tests were used to compare frequencies and correlation between study variables and using a nova test for measuring quantity.
- Pearson's correlation coefficient (r) test was used to assess the degree of association between two sets of variables.
- The confidence interval was set to 95% and the margin of error accepted was set to 5%. So, the p-value was considered significant as the following:

Probability (P-value)

- P-value ≤0.05 was considered significant.
- P-value ≤0.001 was considered as highly significant.
- P-value > 0.05 was considered insignificant.

Limitation of the study:

Delaying patients to the appointment of the group, sometimes some of the hospital's treating team overlaps the group. In addition, the number of female patients was small compared to the number of male patients, which led to a lack of comparison between them.

V. RESULTS:

Table (1): Distribution of the studied sample according to their socio-demographic data and admission data (N=30).

Socio-demographic data	No.	%
Gender		
Male	26	86.7
Female	4	13.3
Age (years)		
18>25 years	5	16.7
25>35 years	12	40.0
35+ years	13	43.3
Mean±SD	31.50±5.92	
Marital status		
Single	2	6.7
Married	17	56.7
Divorced	11	36.7
Presence of children		
Yes	23	76.7
No	7	23.3
Level of education		
Read & write	2	6.7
Primary school	9	30.0
Secondary & technical school	6	20.0
University level	13	43.3
Occupation		
Don't work	5	16.7
Student	11	36.7
Technical worker	6	20.0
Professional worker	8	26.7
Monthly in come (L.F.)		
Monthly income (L-E) > 500 LE		20.0
500-> 1000 LE	6	20.0
		43.3
1000->1500 LE	13 5	
1500 + LE	5	16.7
Residence		26.7
Alone	8	26.7
With parents	12	40.0
With husband and children	10	33.3
Therapeutic stage	20	1000
Rehabilitation	30	100.0
Detoxication	0	0.0

Table (1) shows that, more than two fifth (43.3%) of addict patients under study were in age more than 35 and at university level and their monthly income 1000->1500 L.E. Regarding their occupation, it was found that 36% of them were students and 40% living with their parent and all of them were in rehabilitation stage.

Table (2): Comparison between pre-program and post-program of patients according to their level of craying scale on drugs (N=30)

Loyal of anaring scale on drugs	Pre		Post		Chi-square test	
Level of craving scale on drugs	No.	%	No.	%	x2	p-value
Craving High	20	66.7%	5	16.7%	15.429	<0.001**
Craving Low	10	33.3%	25	83.3%	15.429	(HS)

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Total	30	100.0%	30	100.0%	
Iotai	30	100.070	50	100.070	

^{**}p-value < 0.001 HS

Table (2) This table represents that, there a highly statistically significant difference was observed as regards patients level of craving before and after program implementation where a high level of craving (66.7%) was found before the program implementation, versus a minority of patients reported high degree of craving after program implementation, representing (16.7%).

Table (3): Comparison between pre-program and post-program of the studied sample according to their level of coping behaviors inventory (N=30).

Coning Dobovious Inventory	Pre		Post		Chi-square test	
Coping Behaviors Inventory	No.	%	No.	%	x2	p-value
Low behaviors	15	50.0%	3	10.0%		
Average behaviors	12	40.0%	9	30.0%	10 142	<0.001** (HS)
High behaviors	3	10.0%	18	60.0%	19.143	
Total	30	100%	30	100%		

^{**}p-value < 0.001 HS

Table (3) shows that, there was highly statistically significant difference was observed as regard coping behaviors inventory level of patient before and after program implementation where a high behavior (10%) was before the program implementation, versus a post program implementation, representing (60%).

Table (4): Relation between patients regarding Pre-Level of craving scale on drugs and their Pre level of Coping Behaviors Inventory (N=30).

Level of coping	Level of Craving scale on drugs Craving Low Craving High Chi-square						e test	
behaviors inventory	No.	%	No.	%	No.	%	x2	p-valued
Low behaviors	0	0.0%	15	75.0%	15	50.0%		
Average behaviors	7	70.0%	5	25.0%	12	40.0%	16.875	<0.001**
High behaviors	3	30.0%	0	0.0%	3	10.0%		
Total	10	100.0%	20	100.0%	30	100.0%		

^{**}p-value <0.001 HS

Table (4) shows that there were **statistically significant relations** between the patients regarding pre level of craving scale on drugs and their pre level of coping behavior inventory, with p-value < 0.05 S.

Table (5): Relation between patients regarding post Level of craving scale on drugs and their post level of Coping Behaviors Inventory (N=30).

Level of coping behaviors	Level of Craving scale on drugs Craving Low Craving High			Total		Chi-square test		
inventory	No		No		No			p-
		%		%		%	x2	valued
Low behaviors	0	0.0%	3	60.0%	3	10.0%		
Average							18.	<0.001*
behaviors	7	28.0%	2	40.0%	9	30.0%	18. 8	*
High behaviors	18	72.0%	0	0.0%	18	60.0%	O	
Total	25	100.0%	5	100.0%	30	100.0%		

^{**}p-value <0.001 HS

Table (5) shows that there were **statistically significant relations** between the patients regarding post level of craving scale on drugs and their post level of coping behavior inventory, with p-value 0.05S.

Table (6): Relation between patients regarding total score of craving scale on drugs and their total score of coping behaviors inventory pre and post (N=30).

Items			Total score of inventory	coping behaviors			
				Pre-Program	Post-Program		
matal and a	Pre-Program	R	0.906				
		p-value	<0.001**(HS)				
				1	N	30	
craving scale on drugs		R		0.928			
		Post-Program	p-value		<0.001**(HS)		
			N		30		

^{**}p-value <0.001 HS

Table (6): This table shows that there were **statistically significant correlation** between thepatients regarding total score of craving scale on drugs and their total score of coping behavior inventory pre and post, with p-value <0.001HS.

VI. DISCUSSION

The results of the present study revealed that, patients in the age group35+ years constitute the highest percentage among drug craving patient's understudy.

This result may be due to lack of interpersonal skills to cope with daily life stressors such as establishment of career and lack of involvement in more productive work, lack of meaningful goal for life in the absence of future plan, Limited financial resources and inability to meet demands of life.

This result agreed with *Namazpoor*, *et al.*, *(2017)*, who found that most patient who are drug craving from the age group 35+ years, mentioned that precipitant of drug craving patients for this age group appear as inability to cope with interpersonal stressors, failure to find satisfying job, lack of mutual relationship and loss of family or social support.

In relation to craving, the current study result revealed that a highly statistically significant improvement was observed as regards patients' level of urge and craving to drugs before and after program implementation.

This may be due to the fact that the psychiatric nursing intervention program helped the patients with drug abuse craving to cope effectively with urge and craving to drugs through practicing craving interventions and lapse management skills.

This finding agreed with *Hosny, (2018),* who mentioned that urge management skills enhancing patient's ability to maintain abstinence from substance abuse and promote recovery process.

Regarding to their craving about "places and things, the current study that revealed that the patient under study complain from sever craving before program implementation, while after the program implementation, this score was reported to with p-value <0.05 S.

This could be due to the fact that stopping thought strategies and assisting the patient to identify cognitive errors helped the patient to develop healthy coping response to this negative thought and reduce its severity.

This result is congruent with *Mohamed et al., (2015)* who explain that practicing cognitive reconstructuring and reframing skills can redirect the patients with drug abuse craving toward more positive thoughts and maintain positive behaviors that promote recovery from addiction.

Regarding to social reason, this study showed that almost three quarters of craving patients under study were craving to drug for ability to confront the hard situation and share the peer pressure before the program implementation, while this score was reduced after program implementation. This improvement in patient's response occurred through coping skills training and acquiring other social skills needed for limiting high risk relationships that inhibit recovery from craving.

This result is supported by *Singh et al., (2020),* who clarified that training the patients in drug abuse on how to cope with offers to use drugs and practicing drug refusal skills make the relapsed patients able to responds quickly and convincingly with crave factors once they arise.

Regarding to familial reason, the present study result showed that family causing craving to their patients, the preprogram test showed that the majority of family caregivers believed that the craving to drug abuse was

resulting from irresponsible behavior from their patient, in post program, near third quarter of them accepted craving as a part of recovery.

It could be due to the effect of psychiatric nursing intervention improves the family caregiver's knowledge and information about the disease for causes, stages, and types of treatments.

These finding are congruent with *Rahman et al., (2016)*, who stated that psychiatric nursing intervention should promote the family's caregivers of substance abusers a necessary knowledge to address craving. Concerning to emotions before and after program implementation, the current study finding pointed to the obvious improvement in the response to positive emotions among craving patients after program implementation.

This might be attributed to the effect of psychiatric nursing intervention program in increasing the craving patient's knowledge and skills about coping strategies to deal with environmental situation and psychosocial factors of craving that accelerate negative emotions as anger, frustration, anxiety, boredom, depression, grief etc.

These coping strategies include anger management skills, assertiveness training, conflict resolution skills, relaxation techniques, problem solving skills and skills needed for enhancing self-efficacy.

That explanation was given by *Sayed et al., (2020)*, mentioned that the patient with drug use patients needed to gain coping with stress and unhappy situations that causes negative emotions, (e.g., sadness, anger, loneliness etc.) in order to enhance the patient's ability to manage these emotions, as skills includes stopping thought procedures, relaxation technique and anger management and problem-solving management.

Concerning the level of coping among drug craving patients, the result of the current study revealed that there was observed improvement in the level of coping with risk factors of craving after program implementation.

This could be due to the psychiatric nursing intervention program helped the patient to develop new strategies for coping with high-risk situations and environmental factors of craving and making lifestyle changes to decrease the crave for drugs These coping strategies include urge management, relaxation techniques, refusal skills, relapse prevention, and cognitive reconstructing skills.

This study finding is supported by *Ahmadpanah et al., (2013)* who found that training the craving to drug patients on coping with high-risk situations of craving could reduce the possibility of craving. As intervention strategies include refusing drugs in social situation, anger management skills, stopping for negative thought techniques, laps management skills, relaxation technique for tension, and anxiety.

Furthermore, coping patterns among patients with drug craving patients were evaluated before and after training program. Before the program, the frequency of effective coping pattern was very low.

They have shown high significant improvement in coping patterns with high risk factors of craving after program implementation. These finding consistence with *Ismail et al., (2019),* who reported that coping skills training as the part of treatment intervention to focus on situations that may be at high-risk situation of craving is of considerable value in abstinence from drug.

These coping skills help patients to change life style and identifying those activities that tend to place them at risk for using.

The current study finding displayed that psychiatric nursing intervention program had a positive effect on enhancing coping with urge and craving to drugs among more than half of patients.

It could be due to training the patients on practicing urge management skills and craving intervention as keeping in company of nondrinkers and away from people who drink, going in touch with old drinking friends who became better now for getting help and support, avoidance places where drugs are available or staying hidden indoor, facing up the bad feelings and thinking that related to the period of addiction.

This consistence with *Carreiro et al.*, (2020), who mentioned that teaching the recovered patients from drug craving and urge management skills could be promoting coping and improving abstinence including recalling unpleasant experiences that result from using, anticipating the benefits of stopping addiction, seeking support during episodes of urge or craving.

The current study that revealed coping patterns after program implementation was practicing relaxation exercises to cope with high-risk situation of craving.

This could be due to the greater influence of relaxation on mental and physical state. It's an effective way of coping with various high-risk situation of craving exacerbated by drug use as tension, stress, anger, anxiety, sleeplessness, and craving to drugs. The effect of relaxation is achieved through focusing on relaxing the muscle of the body and the thoughts associated with relaxation begin to craving those associated with tension, so negative emotional state can be prevented or reduced.

Similar explanation was given by *Mead & Honours, (2020),* who mentioned that relaxation technique is the first anxiety, tension, craving and other negative emotions before the become out of hand. It can break the chain of unpleasant events or thoughts before the patient reach the weak point of negative emotions that's better than focusing on what happened after the feeling occurs.

VII. CONCLUSION:

The current study which conducted on 30 patients with drug craving concluded that, the educational program is effective for reducing drugcraving among addicts

VIII. RECOMMENDATIONS:

- Continuous health educational program should be provided for patients with drug crave to teach them how to deal with their craving.
- Should be implementation large group of addiction patients with craving to enhancing coping skills to reduce drug craving among addicts.

For families:

- Continuous health educational programs should be provided for family caregivers of patients with drug craving to teach them how to cope effectively their addict patient psychological problem.
- Counselling sessions should be given for family of patients with addiction o how to reduce their burden of care of their patient.

For nurses:

- Continues workshop should be done for nurses to help them how to deal with their addict patients.

For researcher:

- Further studies are needed to focus on identifying factors that are predisposing factors with drug use in coping and increasing vulnerability to crave.
- Further researches on how to decrease social stigmatization among family caregivers of patient with drug addiction.

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