

## Relation between Substance Use Craving and Self -Efficacy in Addict Patients

Abelmouttelb Abdelkawy Abdelmouttelb<sup>1</sup>, Sahar Mahmoud Mohamed Elewa <sup>2</sup>, Fatma Ata Abdelsalhen <sup>3</sup>

Demonstrator of Psychiatric/Mental Health Nursing<sup>1</sup>, Professor of Psychiatric/Mental Health Nursing<sup>2</sup>, and Assistant Professor of Psychiatric/Mental Health Nursing <sup>3</sup>, Faculty of Nursing Ain Shams University-Cairo-Egypt.

### Abstract

**Background:** Craving is closely interconnected with substance addiction. Although, it has also been identified as a relevant factor in continued substance use and relapse after stopping, self-efficacy, is the ability to resist substance use in risk situations. **Aim:** The study was aimed to assess a relation between substance use craving and self-efficacy in addict patients. **Design:** A descriptive correlational design was utilized in this study. **Setting and subject:** Conducted on convenient 250 hospitalized addict patients in addiction and rehabilitation department at El-Abbasia Psychiatric Hospital in Cairo. **Data Collection tools:** Using Socio-demographic data sheet, Brief Substance Craving Scale (BSCS) and Alcohol Abstinence Self-Efficacy Scale (AASE). **Results:** High percent of the studied patients had severe level craving, and middle level of self-efficacy. **Conclusion:** There was a statistically significant negative correlation between substance craving and substance abstinence self-efficacy. **Recommendations:** The present study recommended that developing psychosocial intervention for Enhancing self-efficacy and resilience among addict patients.

**Keywords:** Craving, Addiction, Self-efficacy, Relapse, Coping Patterns.

### Introduction

Drug addiction is a chronic disease characterized by craving leading to a relapsing cycle of intoxication, bingeing, withdrawal, and craving. Unlike casual use or dependence, drug addiction reflects a persistent cycle of drug seeking and taking that overcomes despite diminished pleasure from taking the drug, as well as grave consequences on well-being and quality of life (Ceceli, & et-al, 2022).

Drug craving is defined as a strong and unquenchable desire for drug users to re-obtain the psychoactive substances they have experienced and the driving force to subconsciously pay excessive attention to drug-related cues and continue to use addictive drugs regardless of the consequences (Zhang, & et-al, 2020).

Self-efficacy is a process of determining individual ability to optimal use his/her owns cognitive abilities, motives, or various behaviors with firm objective for defiance

problems. Also, Self-efficacy is individual mind to fix own behavior and thinking and is an unprompted readiness to do uncharacteristic efforts for achievement (Flavier, 2018).

Alanazi, & et-al, (2022). Add that Abstinence Self-Efficacy (ASE) plays an essential role in the maintenance of abstinence from drugs and alcohol which is a belief regarding one's ability to successfully resist performing a behavior, and outcome expectancies, meaning the anticipated consequences of performing a behavior.

Mental health nurses have a specific role toward those patients with substance use disorders through helping patients to overcome many barriers that negatively influence attitudes toward seeking professional help encourage patients to develop their self- efficacy by learning appropriate knowledge and practicing essential skills to prevent drug abuse (Witkiewitz, & et-al, 2022).

### Significance of the study

Substance use disorder is one of the overarching health and social issues that might seriously disrupt individuals' self-control and

Additionally, 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 (Symvoulakis, & et-al, 2022).

According to, National Addiction Research Study (2018) revealed the prevalence of substance regular use to be 33% in Cairo, 22.4% in Upper Egypt, and 9.6% in Delta (Rabie, & et-al 2020). As well as the relapse rates following treatments are high and typically reaches 40–75 % in 3 weeks to 6 months period following treatment (Moradinazar, & et-al, 2020).

Overall, craving, and self-efficacy were considered a crucial factor contributing to 'quitting failure' and drug use relapse. Thus, assessing the relation between substance use craving and self- efficacy have a leading role in improving functional, mental health, preventing high-risk events, and increasing psychological adjustment (Altman, & et-al, 2022).

**Aim of study** is to assess the relation between substance use craving and self-efficacy in addict patients.

**Research Questions:** This study is based on answering the following question:

1- What is the relation between substance use craving and self-efficacy in addict patients?

#### Research Design:

A descriptive relational design has been utilized to fulfill the aim of the study and answer the research questions.

**Setting of the Study:** Addiction and rehabilitation department at El-Abbasia Psychiatric Hospital in Cairo.

self-efficacy Eldin, & et-al, (2021). In addition to ontrol 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.

**Subjects:** A sample was conducted on 250 hospitalized addict patients.

**Sample Size:** Using formula and considering the population size equals seven hundred/year, we can obtain the sample size as the following- :

$$S = (3.841 \times 700 \times 0.5 \times 0.5) \div (0.05 \times 0.05 \times 699) + (3.841 \times 0.5 \times 0.5) = 248.24 \sim 250$$

So, the sample size was 250

#### 4-Tools of data collection:

**1-Interviewing Socio Demographic Questionnaire** It was designed by the researcher after reviewing related literature and it included two parts:

**A- First part:** Personal data such as age, socioeconomic status, Martial status, and address.

**B- Second part:** Clinical data about substances abuse: included, types, onset, duration, route, etc.

**2 -Brief Substance Craving Scale (BSCS):** It was originally developed by Somoza, & et-al (1995). It adapted and translated to Arabic by the researcher. to assess craving among substances of abuse. It consists of fifteen item that measure situations of intensity and frequency of craving. Each item is rated on a 5-point likert scale ranged by statistical from (1) None, (2) Mild, (3) Moderate, (4) Sever, and (5) Extreme.

**3- Alcohol Abstinence Self-Efficacy Scale (AASE):** It was originally developed by DiClemente, & et-al, (1994). It adapted and translated by the researcher to assess personal confident against taken substance. It consists of 40 items. It includes 4 main parts: negative affect, social/positive, physical, and other concern and craving and urges. Each main part includes 10 statements. Each item is rated on a

5-point likert scale ranged by statistical from (1) None, (2) Low, (3) Middle, (4) High, and (5) Excellent.

### **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 are tested by five experts from faculty members in the nursing field from Ain Shams and University.

### **Pilot study**

The Pilot study was carried out in February 2021 to March 2021 before data collection on 10% of the sample (25 patient) (later excluded from the actual study subjects) to test the reliability, clarity of questions and applicability of the tools, and the time needed to complete them then the tools were modified according to the findings of the pilot study. Reliability of substance craving scale was included 15 items have Cronbach's Alpha (0.87), Also reliability of substance abstinence Self-efficacy was included 40 items has Cronbach's Alpha (0.912). The time needed to fill out the tools was about 20 to 30 minutes.

### **Field work**

#### **First step:**

Before starting the data collection, the researcher met with the head nurses and nursing staff in their wards (each ward separately) after introducing himself, explained the nature and purpose of the study to gain their oral permission and cooperation

#### **Second step:**

the researcher interviewed individually and explained the nature and purpose of the study to gain their oral consent. After distributing the tools. The questionnaire was read, explained, and choices were writing by the researcher in some cases.

#### **Third step:**

The researcher after collecting the answered sheets from the patients in their ward, then gathered it for apply suitable analytical statistics

### **Ethical considerations**

An ethical approval was obtained from the chairperson and the council members of psychiatric / mental health nursing department, ethical committee, and the dean of the faculty of the nursing. And verbal consent was obtained from the addict patients, and they were notified of the freedom to participate or withdraw at any time from the study without giving reasons before distributing the data collection tools and after explanation of the purpose of the study; anonymity was assured and maintained; no burden or risk imposes on patients; no coercion or pressure applies. reassurance about confidentiality of the information given and that it was used for scientific research only.

### **II. Statistical Design:**

The statistical analysis of data was done by using the Statistical Package for Social Science (SPSS) program, version 22. The first part of data was descriptive data which was revised, coded, tabulated, and statistically analyzed using percentage, arithmetic mean(x) and standard deviation (SD). The following tests were used to test relations for significance. For quantitative data by chi-square tests-correlation by Pearson correlation.

#### **Degree of significance results were: -**

P. Value >0.05 (Not Significant)

P. Value <0.05 (significant)

P. Value <0.001 (Highly Significant)

### **Results:**

**Table (1-A):** reveals that; 43.6% of the patients were in age group 25-34 years with mean age 33.74 + 8.36. Regarding marital status and education level, 44.4% of them were single and 34.8% of them had elementary education. In relation to occupation and residence, 52.8% of them were handcrafts and 66.4% were from rural residence. Concerning to monthly income, 51.2 % of them reported that they had enough income. Finally, 64.0 % of the studied patients were from families consist of  $\geq 4$  members.

**Table (1- B):** reveals that the opiates "heroin", hallucinations pills and amphetamines "apetryl", and stimulants "tramadol" were the most common substance abuse among addict

patients. They represent 92.8%, 72.8% 72.8%. Respectively, concerning to mode of abuse oral and inhalation were the most common mode.

**Table (1- B Cont.):** shows that; The table revealed that all addict patients were cigarette smokers, while 40.04% of them were shisha smokers. about duration of addiction 48.8% of the patients have been abuse substances more than 10 years. Additionally, 58.0% of them had addicted family history within 2nd degree where 30.4 % of them were from the relationship. Moreover, 27.6 % of them were had previously legal problems.

**Also, the table reveals that;** 58.8% of the studied patients first trial for treatment. Moreover 36.8% of the addict patients were not satisfied about treatment. While 25.6% of them had low satisfaction level. Also, 40.4 % had one relapse. As regards to causes leading to relapse that the main cause is poor communication with health care team 36.8% and expensive cost of treatment respectively 22.8% Moreover, 28.4% of them reported that they missed to take the substance  $\geq 3$  times during last 24 hrs.

**Furthermore, the table shows that;** 32.0% of the studied patients reported that the duration of substance craving was too short (1hrs < 4hrs) during the last 24 hours. Also, the time taken between quit addiction and relapse was day-week in 31.2 % of them. Additionally, first dose taken after relapse was less than the usual in 52.0 % of them.

**Table (2):** shows that; 43.6%, 28.0% and 27.2 % of the addict patients had extremely craving When you are having enough money to get it, hearing someone talk about drugs., and seeing a drug dealer selling to people.

Also, 38.4%, 38.0%, 37.6%, 36.4 %, 34.4%, 32.8%, 29.0% and 26.4 % of the studied patients had severe craving When you are having unconscious desire to abuse, accidentally find the substance you use, seeing something that reminds you of the substance used, seeing something that reminds you of the substance used, sharing in a social occasion, used substances in it, passing in seller's/dealer place, remembering the taste, facing a situation where you're used to dealing with

others, watching tools, you've been using (syringe-paper in abundance).

Additionally, 36.0% of the studied patients had moderate craving about the substance that When The desire to return the previous circumstances of living.

**Figure (1):** illustrates that, the 39.6% of the addict patients suffering from severe craving.

**Table (3):** reveals that; 43.2%, 41.2%, 37.6%, 35.2%, 32.8%, 29.2%, and 27.2% of the addict patients had low confidence when hearing a close person have a problem, feeling nervous breakdown due to frustration, remembering sad events that have occurred in the past, feeling angry in yourself, inability to express personal feelings to someone, feeling sense thing isn't right, feeling like someone controls your life and you want to feel free and independent.

Meanwhile, 40.4%, 32.8% and 28.4% of the studied patients had no confidence when feeling upset, anxious, stressed, depressed and sad, feeling of inadequacy less than others, feeling increase job and living stressors.

**Table (4):** reveals that; 36.0%, 33.6%, 30.8% and 28.8% of the addict patients had low level confidence when sharing happiness with friends, celebrating in happy occasion, feeling self-confident and calm. satisfied of your abilities. However, 28.0%, 28%, and 24.8% of them had no confidence when you are out with your friends and want to have more fun, seeing people whom you used substances together, and feeling that things are getting better finally.

**Table (5):** As observed from the table 41.6%, 41.2%, 34.0%, and 31.6% and 28.0% of the addict patients had low level confidence When failed in trait to do something, feeling in ability to resist sleeping, feeling exhausted and physically stressed, having a stomach upset, increase your activity and vitality due to doubting in ability. However, 32.0%, and 30.8% of them had no confidence When feeling nauseous. feeling difficulty in falling asleep (insomnia).

**Table (6):** reveals that; 44.8%, 38.0%, and 35.2% of the addict patients had low confidence when perceiving that you cannot give up the abuse, proving that small dose not led to addiction, and

suffering from various pains due to withdrawal symptoms.

However, 51.6%, 44.4%, 37.2%, and 36.8% of them had no confidence when craving to experiment with taking substance to find out what happen (curiosity), craving to substance use for one-time is not problem, testing your willingness to use and your ability to abstinence, convince yourself that you are a new person, your abstinence self-efficacy.

**Figure (2):** illustrates that, 61.2% of the studied patients had middle self-efficacy regarding substance abstinence.

**Table (7):** shows that there was a statistically significant relation between substance craving level and patient's age, marital status and educational; level at P-value =0.000. Also, there was a statistically significant relation between substance craving level and patient's occupation,

residence, and monthly income at P-value =0.018, 0.021 and 0.043, respectively.

**Table (8):** shows that there was a statistically significant relation between substance abstinence self-efficacy level and patient's educational level, occupation, and monthly income at P-value =0.000. Also, there was a statistically significant relation between substance abstinence self-efficacy level and patient's marital status at P-value =0.003.

However, there was no statistically significant relation between substance abstinence self-efficacy level and patient's age and residence at P-value= 0.755 and 0.872, respectively.

**Table (9):** clarifies that there was a statistically significant negative correlation between substance craving and substance abstinence self-efficacy among patients under study at P value 0.03

**Table (1-A):** Distribution of socio-demographic characteristics of the addict patients (n=250).

Socio-demographic characteristics	Items	N	%
Age (years)	18-24	36	14.4
	25-34	109	43.6
	35-44	85	34.0
	≥ 45	20	8.0
	Mean SD		33.74 + 8.36.
Marital status	Single	111	44.4
	Married	76	30.4
	Divorced	37	14.8
	Widowed	26	10.4
Educational level	Read/ write	62	24.8
	Primary	87	34.8
	Secondary	61	24.4
Occupation	University or more	40	16.0
	Do not work	78	31.2
	Handicraft's work	132	52.8
	Administrative job	40	16.0
Residence	Urban	84	33.6
	Rural	166	66.4
Monthly income	Enough	90	36.0
	Fairly enough	128	51.2
	Not enough	32	12.8
Number of Family members	2	58	23.2
	3	32	12.8
	≥ 4	160	64.0

**Table (1-B):** Clinical data about the addict patients (n=250).

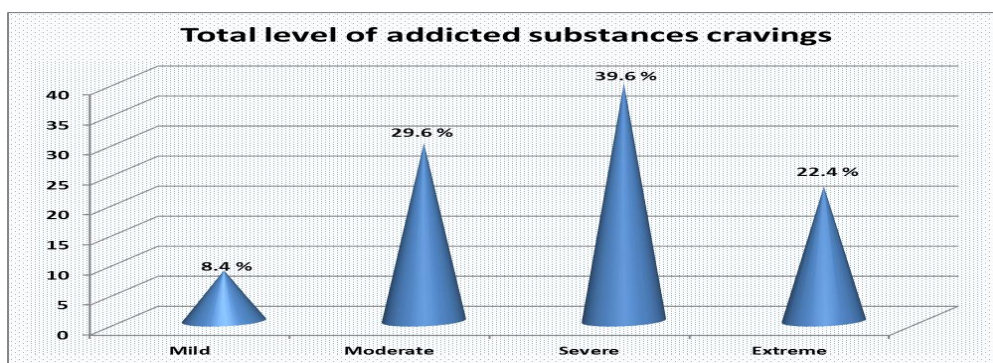
Abused Substances	Types	N	%
Opiates*	Heroin (Powder-bisa)	232	92.8
Hypnotic pills*	Valium	4	1.6
	Rohypnol (abo saliba)	45	18.0
Alcohol*	Alcohol	21	8.4
	Whiskey	45	18.0
	Beer	66	26.4
Marijuana*	Banjo (bango)	97	38.8
	Hashish	153	61.2
Hallucinations pills and Amphetamines*	Ecstasy	13	5.2
	Apetryl	182	72.8
Stimulants*	Tramadol (Strawberry/ faralwa)	182	72.8
	Cocaine (high substance)	63	25.2
Modes of Abusing*	Oral	250	100.0
	Inhalation	250	100.0
	Smoking	244	97.6
	Injection	132	52.8

**Table (1- B Cont.):** Clinical data about the addict patients (n=250).

Variables	Items	N	%	
Smoking	Cigarette	Yes	250	100.0
History	Shisha	Yes	101	40.4
Duration of addiction	Less than 1 year	20	8.0	
	1 -<5 years	56	22.4	
	5 -<10 years	52	20.8	
	≥ 10 years	122	48.8	
Family History of Addiction	Yes	145	58.0	
	No	105	42.0	
Relationship degree with the other addict family member	First degree (father & brothers)	69	27.6	
	Second degree (uncles & cousins)	76	30.4	
Previously legal Problems due to addiction	Yes	69	27.6	
	No	181	72.4	
Hospitalization for treatment	Previous Voluntary Hospitalized Admission	99	39.6	
	Previous Involuntary Hospitalized Admission	4	1.6	
	First Hospitalized Admission	147	58.8	
Satisfaction level of Treatment	Not satisfied	92	36.8	
Now	Very low	53	21.2	
	Low	64	25.6	
	Moderate	23	9.2	
	Very satisfied	18	7.2	
The number of relapses times	1	101	40.4	
	2	82	32.8	
	≥ 3	67	26.8	
Cause leading to relapse among addict patients	Unavailability of places for treatment	54	21.6	
	Expensive cost of treatment	57	22.8	
	Poor communication with health care team	92	36.8	
	Complex admission procedure	22	8.8	
	Easy access to abused substances during Treatment	25	10	
Frequency of craving during last 24 hrs.	None	46	18.4	
	1	64	25.6	
	2	69	27.6	
	≥3	71	28.4	

**Table (2):** Distribution of addicted substance craving among addict patients (n=250).

Items	None		Mild		Moderate		Sever		Extreme	
	N	%	N	%	N	%	N	%	N	%
Intensity/Severity of craving substance use	54	21.6	42	16.8	74	29.6	42	16.8	38	15.2
The desire to return the previous circumstances of living	44	17.6	57	22.8	90	36.0	47	18.8	10	4.0
Have unconscious desire to abuse.	24	9.6	53	21.2	73	14.8	96	38.4	4	1.6
Remembering the taste.	26	10.4	26	10.4	63	25.2	82	32.8	53	21.2
Sharing in a social occasion, used substances in it.	32	12.8	14	5.6	37	14.8	91	36.4	76	30.4
Passing in seller's/dealer place.	26	10.4	31	12.4	58	23.2	89	34.4	46	18.4
Thinking taking small dose just for craving.	12	4.8	55	22.0	48	19.2	102	10.8	33	13.2
Accidentally find the substance, you use.	38	15.2	25	10.0	46	18.4	95	38.0	46	18.4
Seeing something that reminds you of the substance used.	18	7.2	23	9.2	65	26.0	94	37.6	50	20.0
Facing a situation where you are used to dealing with others.	24	9.6	55	22.0	57	22.8	64	29.0	50	20.0
Watching a picture or ad about another substance better than what you are using it	53	21.2	55	22.0	60	24.0	36	14.4	46	18.4
Watching tools, you have been using (syringe- paper in abundance)	29	11.6	34	13.6	60	24.0	66	26.4	61	24.4
Seeing a drug dealer selling to people	33	13.2	48	19.2	57	22.8	44	17.6	68	27.2
Having enough money to get it.	29	11.6	18	7.2	48	19.2	46	18.4	109	43.6
Hearing someone talk about drugs.	41	16.4	26	10.4	56	22.4	57	22.8	70	28.0

**Figure (1):** Total level of addicted substance craving among the studied patients (n=250).

**Table (3):** Distribution of substance abstinence self-efficacy according to negative affect among the addict patients (n=250).

Items When	No Confidence		Low Confidence		Middle Confidence		High Confidence		Excellent Confidence	
	N	%	N	%	N	%	N	%	N	%
Feeling upset, anxious, stressed, depressed and sad	101	40.4	110	44.0	37	14.8	0	0.0	2	0.8
Feeling nervous breakdown due to frustration.	46	18.4	103	41.2	63	25.2	18	7.2	20	8.0
Inability to express personal feelings to someone.	80	32.0	82	32.8	51	20.4	19	7.6	18	7.2
Feeling sense thing is not right	71	28.4	73	29.2	63	25.2	39	15.6	4	1.6
Feeling like someone controls your life and you want to feel free and independent.	62	24.8	68	27.2	43	17.2	48	19.2	29	11.6
Remembering sad events that have occurred in the past.	83	33.2	94	37.6	36	14.4	16	6.4	21	8.4
Hearing a close person have a problem	87	34.8	108	43.2	28	11.2	25	10.0	2	0.8
Feeling angry in yourself.	67	26.8	88	35.2	71	28.4	10	4.0	14	5.6
Feeling of inadequacy less than others.	82	32.8	44	17.6	51	20.4	39	15.6	34	13.6
Feeling increase job and living stressors	71	28.4	48	19.2	57	22.8	62	24.8	12	4.8

**Table (4):** Distribution of substance abstinence self-efficacy according to social pressure situation among the addict patients (n=250).

Items When	No Confidence		Low Confidence		Middle Confidence		High Confidence		Excellent Confidence	
	N	%	N	%	N	%	N	%	N	%
Feeling self-confident and calm.	14	5.6	77	30.8	75	3.0	58	23.2	26	10.4
Satisfied of your abilities.	54	21.6	72	28.8	33	13.2	67	26.8	24	9.6
Wanting to be relax during holidays	48	19.2	66	26.4	87	34.8	35	14.0	14	5.6
Celebrating in happy occasion	71	28.4	84	33.6	22	8.8	69	27.6	4	1.6
Watching substances offered in a social situation.	60	24.0	52	20.8	84	33.6	36	14.4	18	7.2
Feeling that things are getting better finally.	62	24.8	42	16.8	53	21.2	54	21.6	39	15.6
Sharing happiness with friends.	54	21.6	90	36.0	49	19.6	41	16.4	16	6.4
Seeing people whom you used substances together	70	28.0	52	20.8	67	26.8	49	19.6	12	4.8
When you are out with your friends and want to have more fun	70	28.0	55	22.0	59	23.6	64	25.6	2	0.8
Having a harmony relationship with your family.	58	23.2	28	11.2	80	32.0	56	22.4	28	11.2

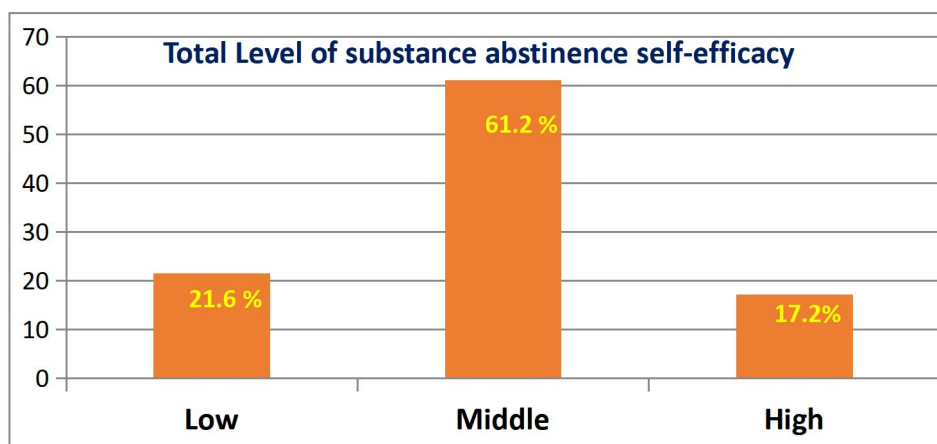


**Table (5):** Distribution of substance abstinence self-efficacy according to physical and other concerns among the addict patients (n=250).

Items When	No Confidence		Low Confidence		Middle Confidence		High Confidence		Excellent Confidence	
	N	%	N	%	N	%	N	%	N	%
Suffering from a headache.	36	14.4	74	29.6	86	34.4	46	18.4	8	3.2
Feeling difficulty in falling asleep (insomnia)	77	30.8	44	17.6	37	14.8	56	22.4	36	14.4
Feeling in ability to resist sleeping	24	9.6	103	41.2	46	18.4	55	22.0	22	8.8
Dreaming about substance using/taking	40	16.0	51	20.4	85	34.0	48	19.2	26	10.4
Feeling exhausted and physically stressed	49	19.6	85	34.0	41	16.4	26	10.4	4	1.6
Enhancing sexual desire/pleasure	56	22.4	24	9.6	70	28.0	66	26.4	34	13.6
Failed in trait to do something	47	18.8	104	41.6	48	19.2	27	10.8	24	9.6
Increase your activity and vitality due to doubting in ability	64	25.6	70	28.0	44	17.6	41	16.4	21	8.4
Feeling nauseous.	80	32.0	38	15.2	32	12.8	72	28.8	28	11.2
Having a stomach upset	60	24.0	79	31.6	65	26.0	34	13.6	12	4.8

**Table (6):** Distribution of substance abstinence self-efficacy according to cravings and urges situation among the addict patients (n=250).

Items When	No Confidence		Low Confidence		Middle Confidence		High Confidence		Excellent Confidence	
	N	%	N	%	N	%	N	%	N	%
Suffering from various pains due to withdrawal symptoms.	73	29.2	88	35.2	37	14.8	28	11.2	24	9.6
Craving to experiment with taking substance to find out what happen (curiosity)	129	51.6	56	22.4	24	9.6	25	10.0	16	6.4
Testing your willingness to use and your ability to abstinence	93	37.2	88	35.2	34	13.6	27	10.8	8	3.2
Craving to substance use for one-time is not problem	111	44.4	40	16.0	81	32.4	12	4.8	6	2.4
Perceiving that you cannot give up the abuse	46	18.4	112	44.8	33	13.2	38	15.2	21	8.4
Getting a new substance, you are never use it before.	77	30.8	40	16.0	61	24.4	40	16.0	32	12.8
Convince yourself that you are a new person, your abstinence self-efficacy	92	36.8	46	18.4	45	18.0	48	19.2	19	7.6
Convince yourself that substance or alcohol have no effect on you.	65	26.0	58	23.2	56	22.4	45	18.0	16	6.4
Proving that small dose not led to addiction	49	19.6	95	38.0	52	20.8	44	17.6	10	4.0
Believe you are not addict person	45	18.0	46	18.4	78	31.2	52	20.8	29	11.6



**Figure (2):** Total level of substance abstinence self-efficacy among the studied addict patients (n=250).

**Table (7):** Relationship between substance craving level and socio-demographic characteristics of the studied patients (n=250).

Socio-demographic characteristics		N	Mean Rank	Kruskal Wallis Test (X <sup>2</sup> )	P-value
<b>Age (years)</b>	18-24	36	138.33	36.140	0.000* (S)
	25-34	109	128.61		
	35-44	85	98.06		
	≥ 45	20	202.10		
<b>Marital status</b>	Single	111	123.06	38.276	0.000* (S)
	Married	76	95.93		
	Divorced	37	146.66		
	Widowed	26	192.23		
<b>Educational level</b>	Read/ write	62	91.76	19.37	0.000* (S)
	Elementary	87	131.54		
	Secondary	61	145.34		
<b>Occupation</b>	University	40	134.40	7.992	0.018* (S)
	Do not work	78	143.50		
	Handicrafts	132	114.39		
<b>Residence</b>	Administrative	40	127.05	5729	0.021* (S)
	Urban	84	140.30		
	Rural	166	118.01		
<b>Monthly income</b>	Enough	90	137.57	6.286	0.043* (S)
	Fairly enough	128	123.09		
	Not enough	32	101.19		

✚ Mann Whitney test was used, \* P-value ≤ 0.05 Significant (S), P-value > 0.05 Non-significant (NS).

**Table (8):** Relationship between the total level of substance abstinence self-efficacy and socio-demographic characteristics of the studied patients (n=250).

Socio-demographic characteristics		N	Mean Rank	Kruskal Wallis Test (X <sup>2</sup> )	P-value
<b>Age (years)</b>	18-24	36	127.28	1.190	0.755 (NS)
	25-34	109	125.95		
	35-44	85	128.07		
	≥ 45	20	108.90		
<b>Marital status</b>	Single	111	121.95	14.145	0.003* (S)
	Married	76	139.10		
	Divorced	37	139.39		
	Widowed	26	81.12		
<b>Educational level</b>	Read/ write	62	113.92	72.72	0.000* (S)
	Elementary	87	171.85		
	Secondary	61	70.54		
	University	40	126.45		
<b>Occupation</b>	Do not work	78	134.14	24.66	0.000* (S)
	Handicrafts	132	136.14		
	Administrative	40	73.55		
<b>Residence</b>	Urban	84	124.46	6885	0.872 (NS)
	Rural	166	126.02		
<b>Monthly income</b>	Enough	90	147.61	15.817	0.000* (S)
	Fairly enough	128	108.42		
	Not enough	32	131.63		

Mann Whitney test was used, \* P-value ≤ 0.05 Significant (S), P-value > 0.05 Non-significant (NS).

**Table (9):** Correlation between substance craving and substance abstinence self-efficacy among patients under study

Patient's variables	Substance Abstinence Self-Efficacy	
	R	P-value
Substance Craving	0.131-	0.039* (S)

\* P-value ≤ 0.05 Significant

## Discussion

Cravings, the main feature of addiction, are the drivers of continued drug abuse and a return to addiction after recovery. It refers to a physical and mental state of craving for a specific psychoactive drug, which is manifested by the individual and directed to a drug previously taken (Shahin, & et-al, 2021).

Self-efficacy of the addicted patient plays a different role that has an effective effect in the optimal handling of those severe symptoms, which include the psychological state and the physical state. The addict when he feels the extent of the losses he is exposed to because of his addiction and reveals himself in front of himself and becomes more aware of

what he is in and asks for help to stop and recover (Salim, & et-al, 2015).

### Part 1: - Socio-demographic characteristics of the addict patients.

**Pertaining to patient's age**, the findings of the present study revealed that about more than two fifths of the studied patients were in age group 25-34 with age  $33.74 \pm 8.36$ . This may be due to individual in this age have been experience many stressors such as establishing career, financial independency of the family, anxiety from the future, hopelessness, as well as they had a curiosity to take substance. So, abusing some drugs/ substances to lessen impact of stressors. with Sharma, & et-al, (2018). Present most of the drug addicts were in

25–34-year age group. However, this result was disagreed with **Razali, & Madon, (2021)**. present more than half of total patients was aged 16-25 years.

**In relation to patient's marital status**, the findings of the present study revealed that more than two fifths of the studied patients were single." this may be due to the most of them had unstable working condition, and there had a social problem due to substance abuse. These results similar with the results of study performed by **Müller, Znoj and Moggi, (2019)** who found that three fifths of the studied patients were single.

**Regarding patient's occupation**, the findings of the present study revealed that more than half of the studied patients were handicraft workers. This result of patients' study clarified that most of substance abuser are handicraft work. This may be due to the most people in this work area have erroneous belief that substances enhance their physical, and sexual abilities, also easily to get substances. These results supported with the study done by with **Muller, & et-al (2019)**, in a study entitled "How Are Self-Efficacy and Motivation Related to Drinking Five Years after Residential Treatment a Longitudinal Multicenter Study". They found that slightly less than three fifths of the studied patients were handicraft workers. Also, this result was agreed with the **Ibrahim, Mohamed, & Fahmy, (2022)**. The study entitled "Emotional Problems among Substance Dependent Patients Undergoing Detoxification." showed that less than half of them were handicraft workers.

**In relation to patient's residence**, the findings of the present study revealed that majority of the studied patients were from rural residence. "This may be due to beliefs of public in rural area that substance erroneous belief about using as enhance physical, and sexual power, as well as accessible of variety substances. This result was inconsistent with **Shahin, & et-al, (2021)**, in a study entitled "Correlation of self-compassion and spiritual well-being with drug craving in people with

substance use disorders" who found that three fifths of the studied patients were from urban.

**Owing to patient's monthly income**, the findings of the present study revealed that slightly more than half of the studied patients had enough income. "The researcher view this may be related to the highest percent of them had daily earn money from work." This result was agreed with **Bogaers, & et-al, (2022)**. In the study titled "Seeking treatment for mental illness and substance abuse: a cross-sectional study on attitudes, beliefs, and needs of military personnel with and without mental illness." The author found that more than half of the target population were get enough monthly income to buy substance.

**Owing to abused substances among the addict patients**, the result "heroin" is the prevailing substance abuse among the patients in present study and followed by hallucinations pills and amphetamines "apetryl," and stimulants "tramadol." "These may be due to the "heroin" have a quick dependency, and fast effect on a withdrawal symptom concerning to a hallucination pill "apetryl," and stimulants "tramadol" these may be prevailing belief that have this substance person awareness and controlling pain." This result agreed with **Ceceli, & et-al (2022)**. In the study titled "The neurobiology of drug addiction cross-species insights into the dysfunction and recovery of the prefrontal cortex." Found that heroin was the most common abused substance among the addict patients. Also, this result was consistent with **Taha, & et-al, (2019)**. In the study titled "Cannabis and Tramadol are Prevalent among the First Episode Drug-Induced Psychosis in the Egyptian Population." Show cannabis and tramadol are on the top list of the drug/substances.

**Regarding to history of smoking**, the findings of the present study revealed that the entire of the studied patients were cigarette smokers. "This may be due to the smoking as a sign of a maturity (be a man), mode of coping with stress, as well as imitate of each other's."

This result was agreement with study of **Peacock, Leung & et-al (2018)** in the study titled “Global statistics on alcohol, tobacco and illicit drug use: 2017 status report” reported the highest level of smoking related to tobacco “cigarette”.

**In relation to duration of addiction**, the findings of the present study revealed that less than half of the studied patients were addicted for  $\geq 10$  years. “This may be related to different factors they have a variety of social problems these consider as a mode of coping with stress.” This result was agreed with **Abd Allah, & et-al, (2022)**. in a study entitled “A study of comorbidity between opioid addiction and major depressive disorders in El Hussein university hospital.” Found that most of patients were addicted for  $\geq 10$  years. In addition to, this result was agreed with **Filiz, & Polat (2022)**. In the study titled “The correlation between the addiction profile and general self-efficacy of patients receiving treatment for substance use disorder.” That reported the mean duration 5:10 years.

**Owing to family history of addiction**, the findings of the present study revealed that more than half of the studied patients had family history of addiction. “This related to most of addict patients had been identify with their parents and relatives.” This result was agreed with **Ibrahim, & et-al (2022)**. The study entitled “Emotional Problems among Substance Dependent Patients Undergoing Detoxification.” Found that less than two third of the substance dependent patient had family history. Additionally, this result was agreed with **Rabie, & et-al (2020)**. In the study titled “Prevalence updates of substance use among Egyptian adolescents.” Explained that the most of patients of this study have family history of addiction.

**Pertaining hospitalization for treatment**, the findings of the present study revealed that more than half of the studied patients were in the first hospitalized admission. “This may be related to them want to get-away

from social, and illegal problems, as well as some of them have internal motive to treatment.” This result was disagreed with **Nordeck, & et-al, (2018)** In the study titled “Rehospitalization and substance use disorder (SUD) treatment entry among patients seen by a hospital SUD consultation-liaison service”. Rehospitalization rates were significantly higher among patients.

**Concerning Satisfaction level of Treatment**, the findings of the present study revealed that more than one third of the studied patients were not satisfied. “This may be related to different causes such as, physical problems, lack of involvement in treatment plan at admission time, unexplained hospital routine, and they have been suffering from admission procedures.” This result was disagreed by **Saur, & et-al, (2022)**. In the study entitled “App-based maintenance treatment for alcohol use disorder after acute inpatient treatment: Study protocol for a multi-centre randomized controlled trial.” Patients were satisfied regard to efficacy and cost-effectiveness of service.

**Owing to the number of relapses times**, the findings of the present study revealed that two fifths of the studied patients had one relapse time. “That related to them had been have same social circumstance before treatment, as well as they in-appropriate follow up after detoxification.” This result was justified with **Senn, & et-al, (2022)**. In the study aimed to identify when and with what probability relapses occur.” A first relapse event declined steadily over the 42 days, and the risk to experience a first relapse declines steadily during treatment.

**Concerning Cause leading to relapse among addict patients**, the findings of the present study revealed that Poor communication with health care team was the main cause for relapse among more than one third of the studied patients. “This may be due to different causes, the most of staff were firm in interacting with patient, in-consistency among staff and patients, additionally the most of addict patients

have been experience of negative emotions such as anxiety, and depression.” This result was agreed by **Stevenson, & et-al, (2017)**. In the study “Establishing smoke-free homes in the Indigenous populations of Australia, New Zealand, Canada and the United States”. It extremely difficult to maintain abstinence for extended periods of time, procrastinated in quitting, reinforced smoking, and experienced physical and psychological addictions due to impaired communication with health team.

**Concerning Time between quit addiction and relapse**, the findings of the present study revealed that less than one third of the studied patients take from Day –week. “This result may be due to the most of addict patients in present study have poor self-control to resist desire to take substance and they have been not engaged in treatment plan.” This result was supported by **Al Thani, & et-al, (2022)**. In the study entitled “Factors associated with baseline smoking self-efficacy among male Qatari residents enrolled in a quit smoking study.” Relapse at 1 day to 3 months after a quit attempt was predicted by low levels of self-efficacy.

#### **Part 2: - Owing to levels of addicted substance craving according to situations**

**Abroad section of cases was suffering from extreme level of craving in three situation** such as, having enough money to get it, hearing someone talk about drugs., and seeing a drug dealer selling to people. “These may be related to the most of patients not practicing methods to overcoming triggers. additionally, they do not share with any support group which lead to have poor self-control to resist their situations which engaged, and them easily opportunity to get it, the dealer may be give them free drugs to re-attract them.” This result was agreed with **Badour, & et-al,(2017)**. In the study titled “Habituation of distress and craving during treatment as predictors of change in PTSD symptoms and substance use severity.” Of patients were suffering from severe craving when exposed to a similar situations of addiction ritual.

**Also, the high percentage of studied patients were suffering from severe level of craving within exposure for eight situations** as examples, having unconscious desire to abuse, accidentally find the substance you use, seeing something that reminds you of the substance used, seeing something that reminds you of the substance used, sharing in a social occasion, used substances in it, passing in seller's/dealer place, remembering the taste, facing a situation where you're used to dealing with others, watching tools, you've been using (syringe- paper in abundance). “These may be related to them not sharing in an individual or group therapy, having poor self-efficacy, not practice on good self-care due to unknown their triggers. These situations evoke their memories of taking/using narcotics as well as in-effective coping mechanisms.” This result was agreed with **TV, (2018)**. in the study titled “Principles of drug addiction treatment: a research-based guide” proved some situations such as seeing a drug dealer or friend who uses drugs and environmental cues like encountering objects, smells, or places that you associate with drugs and alcohol can produce intense cravings

**This study more than one third of situations suffering from moderate level of craving** when the desire to return the previous circumstances of living. “This may be related to previous living arousing negative feelings such as, anger, frustration of their relatives observing them.” This result was agreed with **Mallik, & et-al, (2021)**. In the study aimed to “Examining the role of craving and history, mindfulness, and psychological flexibility in a sample of individuals with substance use disorder.” Which present previous circumstances having role with craving by connected to others can lead to negative feelings, including anger, sadness, and frustration.

**Concerning to total level of addicted substance craving**, the findings of the present study revealed that slightly less than two fifths of the studied patients had severe craving. “This may relate to different factors such as, they during detoxification phase is distinguish by experience of negative emotions, incomplete

receive educational program due to effect of withdrawal symptoms, lack of support from staff, in-effective coping patterns, and low level of self-efficacy.” This result was approved by **Ibrahim, & et-al (2022)**. In the study titled “Emotional Problems among Substance Dependent Patients Undergoing Detoxification.” Three quarters of patient had a severe-level craving.

Furthermore, this result was consistent with **Zhang, & et-al (2020)**. In the study titled “The Effect of Physical Activity on Drug Cravings of Drug Addicts.” Present most studied patients suffering from severe craving.

### **Part 3: - In relation of substance abstinence self-efficacy**

**Firstly, part is a distribution of substance abstinence self-efficacy according to negative affect among the addict patients** the result explains highest of addict patients prone to low, and no self-confidence.

**According to, no self-confidence** when feeling of inadequacy less than others, feeling increase job and living stressors. “These may be due to emotion plays a crucial role in modifying to life changes and stressful events, and the most of them have a daily life hassle, absent of supporting system, and in-appropriate prepare to acquired coping skills which enhance personal abilities to handle with stressors.”

**Also, low self-confidence** when feeling upset, anxious, stressed, depressed and sad, hearing a close person have a problem, feeling nervous breakdown due to frustration, remembering sad events that have occurred in the past, feeling angry in yourself, inability to express personal feelings to someone, feeling sense thing isn't right, feeling like someone controls your life and you want to feel free and independent. “These may be due to inadequate role model, lack sense of identity, continues exposure to exaggerated negative criticism, and seldom of positive reinforcement from significant others. This in agreement with many studies such as **Razali, & et-al (2021)** in the study assess “High-Risk Situations of

Inclinations to Relapse among Former Drug Addicts” result explain that negative emotions such as “anger, guilt, depression, and boredom”. Leading to low, and no self-confidence among patients. However, these results were agreed with **Cyr, & et-al, (2022)**. In the study assess “Association Between Negative Affectivity and Craving in Substance-Related Disorders.” Found that there was a direct link between negative emotions, craving, and self-confidence level.

**Secondly, part of the distribution of substance abstinence self-efficacy according to social pressure situation among the addict patients** had middle self-confidence when having a harmony relationship with your family, watching substances offered in a social situation, and wanting to be relax during holidays. Also, low self-confidence when sharing happiness with friends, celebrating in happy occasion, feeling self-confident and calm. satisfied of your abilities. However, no confidence when you are out with your friends and want to have more fun, seeing people whom you used substances together, and feeling that things are getting better finally. “These due to some factors such as

They want to maintain their social position among peers when refused may be led to embarrassment of others, had in-effective coping patterns, getting of good mood within family, they had dependent personality.” According to agreement of **Wang, & et-al, (2022)**.in the study “Social support and depressive symptoms among addict patients”. Showed that direct relation between social support, and self-efficacy level as mediating factors to refusing addict behaviors.

**Thirdly, part of the distribution of substance abstinence self-efficacy according to physical and other concerns among the addict patients'** highest proportion of the addict patients had middle self-confidence when suffering from a headache, dreaming about substance using/taking, and enhancing sexual desire/pleasure. Also, low self-confidence failed in trait to do something, feeling in ability to

resist sleeping, feeling exhausted and physically stressed, having a stomach upset, increase your activity and vitality due to doubting in ability. However, they had no confidence when feeling nauseous, and feeling difficulty in falling asleep (insomnia). "These due to the experience of withdrawal symptoms, forced to re-use substance to get a relief, and lack of proper assessment and intervention from medical team." This result is in the same line with **Simonton, & et-al, (2022)**. In the study "A cross-sectional study of physical activity attitudes and preferences of individuals with opioid use disorder" show that agreement moderate level of self-efficacy with physical discomfort such as, pain that causes discomfort such as sleep problems, weight loss, and headaches, increasing the desire to reuse drugs.

**Fourthly, part of the distribution of substance abstinence self-efficacy according to cravings and urges situation among the addict patients** most proportion of cases had middle self-confidence when believe you are not addict person. Also, had low self-confidence when perceiving that you cannot give up the abuse, proving that small dose not led to addiction, and suffering from various pains due to withdrawal symptoms. However, they had no confidence when craving to experiment with taking substance to find out what happen (curiosity), craving to substance use for one-time is not problem, testing your willingness to use and your ability to abstinence, convince yourself that you're a new person, your abstinence self-efficacy.

"These might be due to there were wanting to prove to themselves and others they had a power to test thing to meet peer expectation as well as they had a wrong belief that small dose does not cause addiction, loss of insight about nature of disease, want to improve the symptoms, low in perceptive, they can't give-up the abuse, resistance to change, and feelings of inadequacy. In addition to suffer from physical problems. These results were explained by **BILIĆAN, & et-al, (2022)** In the study aimed to "investigate effects of Dialectical Behavior Therapy Group Skills

Training (DBT-ST) on patients' severity of substance use status, mood and other psychological symptoms, difficulties in emotion regulation, interpersonal problem-solving skills, and social competence." Present no or low self-confidence within craving situations, and feelings due to impaired emotional regulation, present depressive and anxiety symptoms. This result was agreed with **Wang, & et-al, (2022)**. In the study titled "Association Between Psychiatric Symptoms and Craving in Drug Withdrawal." Showed lower, and no abstinence self-efficacy with craving and urges situations.

**In relation to Total level of substance abstinence self-efficacy**, the findings of the present study revealed that more than three fifths of the studied patients had middle level of self-efficacy. "These might be due to the various factors that because they have been suffering from different physical, psychological easily influenced by others, have in-effective coping mechanisms, lack of motivation to change, additionally they are newly involved in treatment and rehabilitation plan, they have lack of positive reinforcement to enhance behavior change, as well as absent of role model, surrounding of bad friends. Also, they are hesitant of their ability to quit of use. So much they may postpone trials of treatment, put the work off, see obstacles as failures, and see failures as a fault in themselves as a person.

This result was agreed with **Bozdağ, & Çuhadar, (2022)**. In the study titled "Internalized stigma, self-efficacy and treatment motivation in patients with substance use disorders." Confirmed the total self-efficacy scores of the patients were middle. However, this result was contradicted by **Al Thani, & et-al (2022)**. In the study entitled "Factors associated with baseline smoking self-efficacy among male Qatari residents enrolled in a quit smoking study." Participants reporting at least one quit attempt in the past year were more likely to report greater self-efficacy.

**Concerning the relationship between substance craving level and socio-**



**demographic characteristics of the studied patients**, the findings of the present study revealed that there was a statistically significant relation between substance craving level and patient's age, marital status, educational, occupation, residence, and monthly income. "These may be due to them confront many stressors in this age, have un-stable permanent daily work, and instability wage. Also, they are living in place characterized by several social problems." This result was nearly agreed with **Helmy, El Malk, & Salem, (2016)**. In the study titled "The Risk Factors That Lead to Addiction and Relapse among Addicted Patients." Show relationship between socio-demographic characteristics and craving to relapse had statistical significance within some items such as, patient's age, gender, marital status, educational, occupation, residence, and monthly income. Also, the result was consistent with **Gong, & et-al, (2021)**. In the study titled "Psychosocial factors predict the level of substance craving of people with drug addiction." Show socio-demographic characteristics effect on Psychosocial factors craving to relapse had statistical significance.

**Regarding the relationship between the total level of substance abstinence self-efficacy and socio-demographic characteristics of the studied patients**, the findings of the present study revealed that substance abstinence self-efficacy level of the studied patients was statistically significant related to their educational level, marital status, occupation, and monthly income while was not statistically significant related to patient's age and residence. "These may be due different factor; they have a mutual relation with others that support a coping abilities, they have educational level that permit them handle any situations, finally they have inconstant workplace and financial status". These results were in- consistent with **Hussein (2017)**. In the study titled "Relationship between Self-Efficacy and Relapse after Treatment among Substance Abusers in Bagdad City." Found almost socio-demographic characteristics of substance abusers are not significantly associated with their self-efficacy.

**In relation to the correlation between substance craving and substance abstinence self-efficacy**, the findings of the present study revealed that there was a statistically significant negative correlation between substance craving and substance abstinence self-efficacy. "These may be due to of addict patients just admitted to receiving treatment plan, and still suffering from severe withdrawal symptoms. Also, the treatment plan not handling individual difference between patients. As well as majority of addict patients using of high craving substance." This result was consistent with **Petker, & et-al (2021)**. In the study aimed to "Naturalistic Evaluation of an Adjunctive Yoga Program for Women with Substance Use Disorders in Inpatient Treatment: Within-Treatment Effects on Cravings, Self-efficacy, Psychiatric Symptoms, Impulsivity, and Mindfulness." Found statistically significant adverse association between substance craving and substance abstinence self-efficacy. In addition to, this result was appeared in another way by **Filiz, & et-al (2022)**. In the study "The correlation between the addiction profile and general self-efficacy of patients receiving treatment for substance use disorder." Decrease in self-efficacy belief increased the craving of addiction.

### **Conclusion**

This study concluded that: more than two fifth of the study sample had severe craving in confronting the risk situations, more than three fifth of the study sample had middle level of self -efficacy, there was a statistically significant negative correlation between substance craving and substance abstinence self-efficacy. The present study recommended that developing psychosocial program intervention for enhancing self-efficacy and resilience among addict patients.

### **Recommendation**

**In the light of the present study findings the following recommendations are suggested:**

- Develop of a Psych-educational Program for enhancing self-efficacy of patients with substance use disorders

- Developing a training program for addict patients about self-control to challenge craving triggers.
- Developing Inservice training program for nurses for enhancing coping skills to reduce drug craving among addict patients.
- Developing of Psychoeducational Program in Enhancing motivation to help in change addiction behavior.
- Establishment of counselling clinic for adolescent for enhancing life skills to improve their coping abilities to resist addiction triggers.

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