

Emotional Problems among Substance Dependent Patients Undergoing Detoxification

Fatma Saber Hassan Ibrahim ⁽¹⁾ Sahar Mahmoud Mohamed ⁽²⁾ Afaf Mohamed Fahmy ⁽³⁾

⁽¹⁾B.Sc. In Nursing, ⁽²⁾Professor of Psychiatric/ Mental Health Nursing, ⁽³⁾ Assistant Professor of Psychiatric/ Mental Health Nursing-Faculty of Nursing - Ain Shams University-Cairo-Egypt.

Abstract

Background: Substance use disorders co-occur at high prevalence with mental disorders, such as depression, anxiety, and bipolar disorder. Detoxification is a medical service that helps people withdraw from addictive substances in a medically safe and effective manner. **Aim:** to assess the emotional problems among substance dependent patients undergoing detoxification. **Design:** Descriptive design. **Setting:** in the National Center for Addiction affiliated to the Abbasia mental health hospital. **Sample:** Convenient sample of 92 substance dependent patients. **Tools:** Interviewing questionnaire sheet which consisted of socio-demographic characteristics of the studied patients and the clinical data about substance abuse, the General Health Questionnaire (GHQ-28), and Brief Substance Craving Scale (BSCS). **Results:** Less than two third of the substance dependent patient had family history of addiction, less than half of them aged between 30 to 40 years old when they started addiction, more than half of them feel that their health much worth than usual, and more than one third of them addicted drugs due to peer pressure. More than have of the substance dependent patients much more than usual had difficulty in staying sleep, and insomnia due to anxiety. fell constantly under strain, found getting everything on top of them, and feeling nervous and strung-up all the time. **Conclusion:** More than half of the substance dependent patients much more than usual thinks themselves as a worthless person. Felt that life hopeless. Also, the majority of them had a worth mental health score, and three quarters of them had a high total craving score. **Recommendations:** Further study should be carried out on the aspect of improving the substance dependent patients' self-esteem after detoxification. Coping skills educational programs to reduce craving belief among substance dependent patient.

Key words: Detoxification, Emotional problems, Substance dependent patients.

Introduction:

Substance abuse is a one of the major health problems that has been faced by humanity in the last few decades. It a chronic disease characterized by compulsive, or uncontrollable, drug seeking and use despite harmful consequences and changes in the brain, which can be long-lasting. The changes in the brain can lead to the harmful behaviors seen in people using drugs (*National Institute on Drug Abuse, 2021*).

Substance abuse also refers to a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances. The adverse consequences may be emotional, cognitive, behavioral, and physiological symptoms indicating that the individual continues use of the substance despite significant substance-related problems (*Parisi, 2021*).

Detoxification is viewed as the initial phase in drug treatment. During

which there is fear of the medications' lack in the body and the possibility of the detrimental physical, psychological, and euphoric effects caused by the withdrawal effects from drug abuse (*Lesser, 2021*).

Detoxification is a form of palliative care aimed to (reducing the intensity of any disorder) for many patients. It represents a point of first contact with the treatment system and the first step to recovery (*Juergens, 2021*).

On the other side, craving has been considered one of the core features of addiction, frequently appear in People who are in a state of substance withdrawal and compelling desire for the drug to which they are addicted as the substance will immediately provide effective symptomatic relief from the excruciating withdrawal experience (*American Psychiatric Association (APA), 2018*).

Withdrawal symptoms are different and can range from mild to severe. Symptoms depends also on the patients' age, physical and psychological characteristics, and the withdrawal process used. Symptoms can include insomnia, irritability, changing moods, depression, anxiety, aches and pains, cravings, fatigue, hallucinations and nausea (*Australian Department of Health, 2021*).

The role of nurse in detoxification depends on the drug of abuse and the specific treatment program in which the client is involved. Initially the client may require considerable physical care to ensure safety and promote comfort. The nurse should also be familiar with the signs and symptoms of common co-occurring medical disorders. Likewise, to be aware of the signs of withdrawal and how can affects the treatment of the presenting medical conditions. The nurse work directly with clients as well as their

families, often providing valuable information about substance use and its dangers (*Stockwell, 2021*).

Significance of the study:

Substance abuse continues to be a large public health concern. The adverse effects of substance use may also express at various levels including individuals, families, and communities. The effects of these problems have various dimensions, such as mental health problems, physical health, and economic consequences (*Essam Eldin, Othman & Salah Eldin, 2021*).

Substance use disorders (SUD) contribute to 11.8 million deaths globally per year and 1.5% of the global disease burden. It is estimated that 2% of the world population has a SUD, with some countries reporting a prevalence of SUD greater than 5%. More than half of the people with a SUD experience a mental health disorder at some point during their lives (*Aas, Vold, Gjestead, Skurtveit, Lim, Gjerde, Loberg, Johansson & Fadnes, 2021*).

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 (*Sabry, Ramy, Rabie 2018*).

In Egypt 2016, an estimated 6.8% of Egyptians over 15 years of age engaged in drug abuse. Annual prevalence of cannabis use is estimated to be 6.2%, opiates 0.4%, cocaine 0.1%, and amphetamines 0.5% (*WHO, 2016*).

The detoxification procedure is designed to reduce the negative impact and the severity of withdrawal symptoms. It also significantly increases the probability that the patient will experience a safe, effective discontinuation of substances by addressing psycho social issues during

detoxification and go on to participate in substance abuse treatment. Detoxification, is a crucial first step to foster the patient's entry into long-term treatment and recovery process. finally, without detoxification and an effective drug treatment program a person is going to keep experiencing cravings for the drug of choice and likely experience a relapse (*National Center for Biotechnology Information, 2021*).

Detoxification is aim to minimize the potential emotional, psychological harm and medical conditions that may result from quitting a drug (or drugs) after a sustained period of use such as impairments in energy, concentration, sleep, appetite, behavioral changes and mood changes commonly (anxiety, anger and depression). Also supervised detoxification can prevent potentially life-threatening complications that might appear if the patient was left untreated (*Sharp & Kelley, 2021*).

Aim of the Study:

This study aimed to assess the emotional problems among substance dependent patients undergoing detoxification.

The aim of this study achieved through answering the following research question:

- What are emotional problems among substance dependent patients undergoing detoxification?

Subjects and Methods:

I. Technical design:

The technical design of this study included the research design, setting of the study, subjects, and tools of data collection.

Research design:

Descriptive design has been utilized in this study.

Research setting:

The study was conducted in the National Center for Addiction affiliated to the Abbasia mental health hospital.

Subjects of the study:

A sample of 92 substance dependent patients who agree to participate in the study and fulfilled the following inclusion criteria:

- Sex: - both sex.
- Age:- from 18 years to 45 years.
- Period of substance dependence: - one year or more.
- Number of drug dependence (one or more than one substance abuse).

Selection of the sample:

Type of sample: Purposive sample.

Size of sample:

The sample size was 92.

Tool of data collection:

Data were collected by using the following tool:

I. Structured interviewing questionnaire sheet:

An Arabic questionnaire was developed by the researcher, after reviewing the related literature and consisted of two parts:

The first part consisted of the following:

A. Personal characteristics of the studied patients: included age, gender, educational level, marital status, occupation, types of admission, and family history.

B. The clinical data about substance abuse: That included age at the beginning of drug addiction, the current used drugs, route of administration, duration of drug

addiction, the reason for drug addiction, the pattern of usage, the intended purpose to abuse substance or drug addiction, and the general effect of drug addiction on health, problems associated with drug addiction.

The second part consisted of the following scales:

A. General Health Questionnaire (GHQ-28): It was developed by (*Goldberg, Gater & Sartorius, 1997*) and adapted by the researcher including 28 items, which grouped into four subscales; physical health (7 items), anxiety and insomnia (7 items), social dysfunction (7 items), and severe depression (7 items).

❖ **Scoring system:**

Each subscale contains seven items and used a four-point scale ranging from "not at all" to "much more than usual". These were scored respectively from 0 to 3 so that not at all indicated to (0), less than usual indicated (1), more than usual indicated (2), and much more than usual indicated (3).

The score of each subscale items were summed-up and the total of each subscale divided by the number of the total items, giving a mean score for each subscale. These scores were converted into a percent score. The score higher than 60% considered worth mental health and considered good mental health if it less than 60%.

B. Brief Substance Craving Scale (BSCS): It was developed by (*Somoza, Baker, Himmler, Locastro, Meziniskis & Simon, 1995*), and consisted of 16 items which used to assess the studied patients' craving for three addictive drugs over a 24-hour period. It was also asked about the

intensity, frequency, and duration of craving, and overall intensity of cravings during the past 24 hours since the last use of drugs.

❖ **Scoring system:**

All the items of intensity, frequency, and duration of cravings were rated on 5 point Likert scale. The score of each subscale items were summed-up and the total of each subscale divided by the number of the total items, giving a mean score for each subscale. These scores were converted into a percent score. The score higher than 60% corresponded to higher craving, and the score lower than 60% corresponded to low craving.

II-Operational design:

The operational design for this study included preparatory phase, pilot study and field work.

A. Preparatory phase:

This phase dealt with the preparation of the study design; data collection tools were based on reviewing current and past local and international related literatures related to various aspects of the study. This review was carried out through textbooks, internet search, articles, thesis, journals, periodicals and magazines to acquaint with the current relevant tool that was performed, for data collection then the content validity and reliability were reviewed and assessed by expert persons.

Validation of the Scales:

To achieve the criteria of trust worthiness of the tools of data collection in this study, the tools were tested and evaluated for their face and content validity by a jury group consisting of (5) experts at Faculty of Nursing of Ain Shams with academic categories (professors and assistant professors) of Psychiatric/ Mental Health Nursing department who reviewed the

tools for clarity, relevance, feasibility, comprehensiveness, understanding, and applicability. The required correction and modification were done as following:

During developing the data collection tools the researcher used the General Health Questionnaire (GHQ-28) rather than the General Health Questionnaire (GHQ-12) because it was insufficient assessment scale.

Reliability of the Scales:

The reliability of the tools was assessed using the developed questionnaires and reassessment was done after (7) days on the same subjects. The results were the same each time. The subjects (9 patients) who participated in the reliability test were excluded from the actual study subjects in order to estimate the time needed to fill in the study tools. The reliability of the scales done by Cronbachs' alpha

Table (1): Reliability of the scales:

Scale name	o of items	Cronbachs' alpha		
General Health Questionnaire (GHQ-28):	8	0.92	.79	.00
Brief Substance Craving Scale (BSCS):	6	0.94	.80	.00

Pilot study:

A pilot study was carried out on 9 patients which represented 10% from the total (substance dependent patients undergoing detoxification), and they were excluded from the study and replaced by another. The pilot study was conducted to assess the simplicity, practicability applicability, legibility, understandability and feasibility of the designated tools. It was also used to find the possible problems that might face the researcher

and interfere with data collection. The pilot has also served to estimate the time needed for each subject to fill in the sheets. Data obtained from the pilot study were analyzed, and minor modifications were done.

B. Field work:

After a letter obtained from the Dean of the Faculty of Nursing was submitted to the Manager of the National Center for Addiction affiliated to the Abbasia mental health hospital to obtain the agreement to conduct the study and determine the suitable time to meet the patients. The study was conducted over a period of five months which started from January to the end of May 2021; through the following steps.

- The first step:

Before starting the data collection an oral permission obtained from each patient. The researcher interviewed the patients, who agreed to participate in the study and undergoing detoxification after introducing herself, she explained the nature and purpose of the study to gain informed consent and their cooperation.

- The second step

After distribution of the tool. It took about 35 minutes to be filled. Data were collected (2) days/week (Sunday and Monday) from 9:00 am to 12:00 md at morning shift, at the end the researcher collected the answered tools from the patients and complete the process of data collection.

III- Administrative design:

An official letter requesting permission to conduct the study was submitted from the Dean of the faculty of nursing, Ain Shams University to the manager of the general secretariat of mental health and addiction treatment in (Abbasia - psychiatric mental health hospital). This letter included the aim of

the study and photocopy from data collection tools in order to get the permission and help for collection of data which lasted about 5 months for two days/week.

Ethical considerations:

The study proposal was approved by the Ethics committee of the Faculty of Nursing, Ain Shams University to responsible authorities. Official permission to conduct the study was secured from pertinent and responsible authorities. An informed consent form and voluntary participation was obtained from each participant before collecting data. This was done after explaining the study aim, objective, the nature of the study and demonstration of the data collection form with reassurance about confidentiality. No harmful maneuvers were performed or used. The participants were informed about their rights to refuse or withdraw from the study at any time without giving any reasons. Oral consent was obtained from each participant in the study. Humanity and dignity was considered.

IV- Statistical design:

Statistical analysis was done by using Statistical Package for Social Sciences (SPSS) version 20. Data were collected, revised, coded, organized, tabulated, and analyzed using frequencies, number, percentage, mean scores, standard deviation and correlation coefficient. Data were presented in the form of tables and figures. Quantitative data was presented by mean (\bar{X}) and standard deviation (SD). Qualitative data was presented in the form of frequency distribution tables, number and percent & correlation to detect the relation between the variables of the study (P- value).

Statistical significance was considered as follows:

- P- value < 0.05 Significant
- P- value < 0.001 Highly significant

Results:

Table (1): Represents the personal characteristics of the studied patients and shows that (59.8%) of them aged between 30 to less than 40 years old, with a mean age of (34.48 ± 7.65), (79.3%) are males, and about one third (32.6%) of them have intermediate education. Regarding the marital status and occupation, (47.8%) of the studied patients were married, and (43.5%) of them were craft workers. Concerning the admission, (73.9%) of them had voluntary admission.

Table (2): Describes that, (54.3%) of the substance dependent patients feel that their health much worth than usual, (43.5%) of them were feeling headache much more than usual, (42.4%) of them were suffering from tightness or pressure in their head, and (41.3) of them else need of energizers more than usual to improve health condition.

Table (3): Shows that, (51.1%, 53.3%, 52.2%, and 53.3%) of the substance dependent patients much more than usual had difficulty in staying asleep once they are off, fell constantly under strain, found getting everything on top of them, and feeling nervous and strung-up all the time respectively.

Table (4): Clarifies that, (48.9%) of the substance dependent patients more than usual take long time to do things than before, while (44.6%, and 43.5%) of them less than usual feel that they are playing a useful part in things, or being able to enjoy their normal day-to-day activities respectively.

Table (5): Demonstrates that, (53.3%) of the substance dependent patients much more than usual think

themselves as a worthless person, (43.5%) of them don't feel that the life isn't worth living, while (55.4%) of them definitely don't have any suicidal thoughts.

Figure (1): Shows that, the majority (85.9%) of the substance patients had a worth total mental health score, while the least (14.1%) of them had total good total mental health score.

Figure (2): Shows that, (75.0%) of the substance dependent patients had a high total craving score, while (25.0%) of them had low total craving score.

Table (6): Indicates that, there was highly statistically significant positive correlation between the substance dependent patients' total mental health and total craving at ($P \leq 0.001$).

Table (1): Frequency distribution of the substance dependent patients according to their personal characteristics, (n = 92).

Personal characteristics	No.	%
Age (years):		
18 - > 30 years	17	18.5
30 - > 40 years	55	59.8
40 - > 50 years	20	21.7
$\bar{X} \pm SD$	34.48 ± 7.65	
Gender:		
Male	73	79.3
Female	19	20.7
Educational level:		
Illiterate	15	16.3
Read and write	10	10.9
Primary education	7	7.6
Preparatory education	9	9.8
Intermediate education	30	32.6
University education	21	22.8
Marital status:		
Single	12	13.1
Married	44	47.8
Divorced	15	16.3
Separated	16	17.4
Widowed	5	5.4
Occupation:		
Technicians	14	15.2
Administrative work	2	2.1
Craft workers	40	43.5
Student	10	10.9
On pension	0	0.0
Don't work	26	28.3
Types of Admission:		
Voluntary	68	73.9
Involuntary	24	26.1

Table (2): Physical health among substance dependent patients, (n = 92).

Physical health items	No.	%
1- Perception of patients toward general health condition		
Better than usual	0	0.0
Same as usual	12	13.1
Worth than usual	30	32.6
Much worth than usual	50	54.3
2- feeling in a need of energizers		
Not at all	7	7.6
Less than usual	20	21.7
More than usual	38	41.3
Much more than usual	27	29.4
3- Run down and out of sorts.		
Not at all	5	5.4
Less than usual	18	19.6
More than usual	32	34.8
Much more than usual	37	40.2
4- Feeling that you have physical illness.		
Not at all	10	10.9
Less than usual	15	16.3
More than usual	36	39.1
Much more than usual	31	33.7
5-Suffer from headache.		
Not at all	2	2.2
Less than usual	11	11.9
More than usual	39	42.4
Much more than usual	40	43.5
6- feeling of tightness or pressure in head.		
Not at all	2	2.2
Less than usual	13	14.1
More than usual	38	41.3
Much more than usual	39	42.4
7- having hot or cold spells.		
Not at all	10	10.9
Less than usual	16	17.4
More than usual	32	34.8
Much more than usual	34	36.9

Table (3): Anxiety and Insomnia among substance dependent patients, (n = 92).

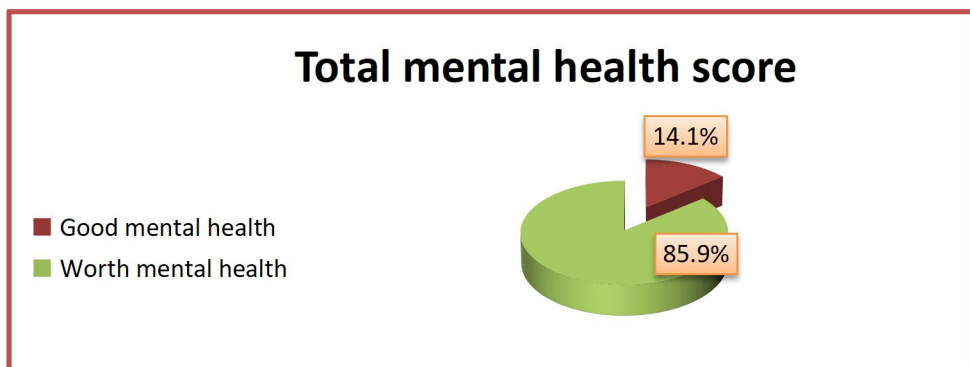
Anxiety and insomnia items	No.	%
1- Felt constantly under strain.		
Not at all	10	10.9
Less than usual	18	19.6
More than usual	40	43.5
Much more than usual	24	26.0
2-Been getting edgy and bad – tempered.		
Not at all	3	3.3
Less than usual	20	21.7
More than usual	22	23.9
Much more than usual	47	51.1
3- Been getting scared or panicky for no good reason.		
Not at all	0	0.0
Less than usual	13	14.1
More than usual	30	32.6
4-Found getting everything on top of you.		
Not at all	2	2.2
Much more than usual	49	53.3
Less than usual	9	9.8
More than usual	46	50.0
Much more than usual	35	38.0
5-Been feeling nervous and strung-up all the time.		
Not at all	8	8.7
Less than usual	10	10.9
More than usual	33	35.8
Much more than usual	41	44.6
6- Sleepless due to anxiety		
Not at all	0	0.0
Less than usual	11	11.9
More than usual	33	35.9
Much more than usual	48	52.2
7- Had difficulty in staying asleep once you are off.		
Not at all	12	13.0
Less than usual	13	14.1
More than usual	18	19.6
Much more than usual	49	53.3

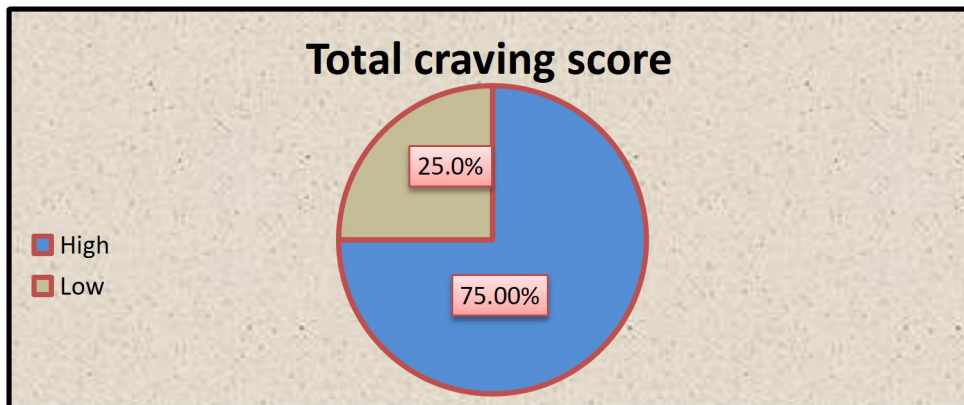
Table (4): Social dysfunction among substance dependent patients undergoing detoxification, (n = 92).

Tension and social dysfunction items	No.	%
1- Been managing to keep yourself busy and occupied.		
More than usual	8	8.7
Same as usual	19	20.7
Less than usual	34	36.9
Much less than usual	31	33.7
2- Been taking long time to do things than before.		
More than usual	45	48.9
Same as usual	17	18.5
Less than usual	20	21.7
Much less than usual	10	10.9
3- Felt on the whole you were doing things well.		
More than usual	10	10.9
Same as usual	15	16.3
Less than usual	38	41.3
Much less than usual	29	31.5
4- Been satisfied with the way you've carried out your task.		
More than usual	12	13.0
Same as usual	18	19.5
Less than usual	32	34.9
Much less than usual	30	32.6
5- Felt that you are playing a useful part in things.		
More than usual	4	4.3
Same as usual	9	9.8
Less than usual	41	44.6
Much less than usual	38	41.3
6- Felt capable of making decisions about the things.		
More than usual	18	19.5
Same as usual	19	20.7
Less than usual	33	35.9
Much less than usual	22	23.9
7- Been able to enjoy your normal day-to-day activities.		
More than usual	15	16.3
Same as usual	10	10.9
Less than usual	40	43.5
Much less than usual	27	29.3

Table (5): Presence of severe depression among substance dependent patients, (n = 92).

Severe depression items	No.	%
1- Been thinking of yourself as worthless person.		
Not at all	1	1.1
Less than usual	12	13.0
More than usual	30	32.6
Much more than usual	49	53.3
2- Felt that life is entirely hopeless.		
Not at all	16	17.4
Less than usual	18	19.5
More than usual	33	35.9
Much more than usual	25	27.2
3- Felt that life isn't worth living.		
Not at all	40	43.5
Don't think so	33	35.9
More than usual	14	15.2
Much more than usual	5	5.4
4- Prefer to be isolated from others to think about certain things.		
Not at all	24	26.1
Don't think so	20	21.7
Has crossed my mind	29	31.5
Definitely have	19	20.7
5- Found at times you couldn't do anything because your nerves were too bad.		
Not at all	8	8.7
Less than usual	14	15.2
More than usual	36	39.1
Much more than usual	34	37.0
6- Found yourself wishing you were dead and away from it all.		
Not at all	15	16.3
Less than usual	12	13.0
More than usual	26	28.3
Much more than usual	39	42.4
7- Found that the idea of taking your own life kept coming into your mind.		
Definitely not	51	55.4
I don't think so	34	37.0
More than usual	7	7.6
Much more than usual	0	0.0

**Figure (1):** Percentage distribution of the substance dependent patients according to



their total mental health score, (n = 92).

Figure (2): Percentage distribution of the substance dependent patients according to their total craving score to the addictive drugs, (n = 92).

Table (6): Correlation between the substance dependent patients' total mental health and total craving, (n = 92).

Items	Total mental health	
	R	P-value
Total craving	0.703	0.001**

Discussion:

Substance abuse is one of the most important social deviations, which is foundation of many social damages and problems at the community level. Every part of the substance abusers' life as social life, family life, work productivity, physical health and personal relationships is affected. Also Substance abuse in work environment increases accidents, theft, absenteeism, and workers' compensation claims while decreasing in the quality of work performed overall (*El-Sayed, 2020*).

Detoxification is the process of disengaging a person from a specific psychoactive substance in a safe and effective manner. The choice of which strategy to use for detoxification can depend on many factors, involving clinical judgment, the users' personal

preference and circumstances, lifestyle and expectations, degree of dependence and concurrent health problems.

Although addiction may necessitate detoxification to begin drug rehabilitation treatment, there are many reasons that patients must undergo detoxification. On the other hand, patients entering detoxification are undergoing profound personal and medical crisis. Withdrawal itself can cause or exacerbate current emotional, psychological, or mental problems (*Das, 2020*).

The current study represented that more than half of the substance dependent patients their age were between 30 to less than 40 years old with a mean age of 34.48 ± 7.65 years. This may be related to

different factors such as the patients' inability to cope with the life stressors, loss of support systems (family or social support), career pressure and they are unfulfilled responsible in their life.

This result was in the same line with *Farag (2019)*, who conducted a study about "Perceived stigma, Self-stigma and Social Functioning among Individuals with Substance Abuse Disorders in Alexandria", and found that slightly more than half of the studied patients aged between 30 to less than 40 years old with a mean age of 33.88 ± 7.20 years, while this result disagreed with *Ali (2018)*, who conducted a study about "The Effect of Expressive Disclosure Writing on Self-stigma Depression, Anxiety and Stress among Substance Dependent in Alexandria", and found that most of the addicted patients aged between 25 to 35 years old.

Concerning the substance dependent patients' sex; the current study revealed that more than three quarters of them were males. This may be because male in this age have a different life challenges and frequent life demands (such as career development, stable financial status, and social prestige) that require psychosocial adaptation and stable circumstances. This result in accordance with *Kamal, Dijkstra, Oene, Duren, & Jong (2016)*, they performed a study about "Psychiatric Comorbidity, Psychological distress, and Quality of Life in Gamma-hydroxybutyrate-dependent Patients in Dutch", and found that more than two thirds of the studied patients were males, while this result disagreed with *Vederhus, Pripp, & Clausen (2016)*, they performed a study about "Quality of Life in Patients with Substance Use Disorders Admitted to Detoxification Compared with those

Admitted to Hospitals for Medical Disorders: Follow-Up Results in Norway", and found that most of the studied patients were females.

As regards the substance dependent patients' educational level; the present study showed that about one third of them had intermediate education. These results reflect that they have wrong belief that substance abuse enhances their power to work as well as having a little knowledge about the substance abuse side effect.

This result was in accordance with *Dadgarmoghaddam, Baseri, Alipourtabrizi, & Khajedaluee (2016)*, they developed a study about "The Assessment of Self-Esteem in Addicted Women in Iran", and found that near to half of addicted patients had diploma, while this result disagreed with *Abdelnaby (2018)*, who developed a study about "Effect of Mindfulness Meditation on Craving among Drug Addicts in Egypt", and found that the majority of the studied patients had primary education.

Regarding the substance dependent patients' marital status, the present study result showed that less than half of them were married. This result may be because the studied patients think that the addictive drugs may improve the sexual functions or problems and increase the feeling of happiness. This result was in the same line with *Abd Elhamid (2018)*, who performed a study about "Psychosocial Adjustment among Substance Abuser during Rehabilitation Phase of Treatment in Egypt", and found that majority of the studied sample were married, while this result was against the result of *Elasyed (2020)*, who performed a study about "Effect of Psycho-educational Nursing Program on Social

Adjustment and Self-esteem among Substance Abusers in Egypt", and found that more than half of the studied subjects were single.

According to the substance dependent patients' occupation; the present study showed that less than half of them were crafts workers. This may be related to the studied patients imitate their coworkers' experiences with psychological problems additionally this may be due to the availability of the substance or drugs among crafts worker community. This result supported with *Choopan, Kalantarkousheh, Aazami, Doostian, Farhoudian, & Massah (2016)*, they conducted a study about "Effectiveness of Emotion Regulation Training on the Reduction of Craving in Drug Abusers in Iran", and found that the majority of the substance abuser clients had a job, while this result disagreed with *Gyawali, Choulagai, Paneru, Ahmad, Leppin, & Kallestrup (2016)*, they conducted a study about "Prevalence and Correlates of Psychological Distress Symptoms among Patients with Substance use Disorders in Drug Rehabilitation Centers in Urban Nepal: A cross-Sectional Study", and found that the majority of the studied sample were unemployed.

Concerning the substance dependent patients' admission; the present study showed that less than three quarters of them had voluntary admission. This may because the studied patients have been experienced physical, psychological, and legal problems additionally they have a strong desire to overcome the negative effect of substance abuse or drugs. This result was consistent with *Opsal, Kristensen, & Clausen (2019)*, they conducted a study about "Readiness to Change among Involuntarily and

Voluntarily Admitted Patients with Substance Use Disorders in Norway", and found that less than three quarters of the studied patients had voluntary admission, while this result disagreed with *Anna, Mitsuhiro, Figlie, Diehl, Pillon, & Laranjeira (2021)*, they conducted a study about "Relapse in Involuntary Substance Treatment: A transversal Study in Brazil", and found that more than half of the studied patients had involuntary admission.

Regarding the substance dependent patients' physical health, the present study results described that more than half of them feel that their health much worth than usual, less than two fifths of them were feeling headache much more than usual, and less than two fifths of them were suffering from tightness or pressure in their head. These results may be because during withdrawal, the body is attempting to reach a new state of homeostasis as it dismisses the patients' drug of choice. This also can result in a significant instability in brain chemicals and may accompany significant mental and physical health consequences.

These results agreed with *Jabeen, Venkataswamy, Sadaf, & Reddy (2018)*, they performed a study about "Drug Abuse, Causes and Treatment among Addict Patients in India", and found that the majority of the studied patients mentioned that they had much worth health as they were suffering from persistent headache, nausea, vomiting, and tightness or pressure in head, while these results disagreed with *Buddy & Gans (2020)*, they performed a study about "Assessment of the Withdrawal Symptoms among Drug Addiction Patients in Australia", and found that most of the studied patients were

suffering from sleeping difficulties, runny nose, fatigue, and irritability.

In relation to the presence of anxiety and insomnia among the substance dependent patients; the study findings showed that more than half of them much more than usual had difficulty in staying asleep once they are off, fell constantly under strain, found getting everything on top of them, and feeling nervous and strung-up all the time respectively. These results may be because most kinds of substance use acutely disrupt sleep-regulatory systems in the brain, affecting the time it takes to fall asleep (latency), duration of sleep, and sleep quality that make the patient constantly under strain and feeling nervous.

These findings were in contrast with *Houchins (2021)*, who conducted a study about "Assessment of Heroin Withdrawal Symptoms among Drug Addiction Patients in America", and found that more than three quarters of the studied patients were suffering from insomnia, agitation, and anxiety, while these results contradicted with *Gupta Bansal, Kaur, & Sing, (2015)*, they conducted a study about "Pattern of Shifting of Substance Abuse Among Drug Addicts Undergoing Treatment at (drug addiction centers) in Punjab, India", and found that more than two thirds of the studied patients had panic attack, and more than half of them were always over worry.

As for the social dysfunction among the substance dependent patients; the present study results clarified that slightly less than half of them more than usual takes long time to do things than before, while less than half of them less than usual feel that they are

playing a useful part in things or being able to enjoy their normal day-to-day activities respectively. These results may be because substance abuse leaves many negative impacts on the patients' self-efficacy via the cognitive and psychological alterations it causes. Hence, low self-efficacy leads to feeling of failure, dissatisfaction of one's role in the society, dissatisfaction of quality of life, impaired interpersonal skills, social interactions, and social adjustment.

These results were in the same line with *Kamarudin, Sulaiman, Kusenin, & Amin, (2020)*, they conducted a study about "The Effect of Individual Psycho-education Intervention on Self-efficacy among Opioid Dependent Patients in Methadone Clinics in Malaysia", and found that before the psycho-educational intervention implementation more than two thirds of the studied patients were unable to perform their usual daily activities, and they were always feel that they are a burden on their family and society, while these results disagreed with *D'Silva & Aminabhavi (2017)*, they conducted a study about "Adjustment, Self-efficacy and Psychosocial Competencies of Drug Addicted Adolescents in Mapusa", and found that more than three quarters of the studied patients mentioned that the drugs helps them to be more stable and to be able to perform more daily tasks.

Regarding the presence of severe depression among the substance dependent patients; the present study findings demonstrated that more than half of them much more than usual thinks themselves as a worthless person, less than half of them don't feel that the life isn't worth living, while more than half of them definitely don't have any suicidal thoughts. These findings may be because

substance abuse can activate or intensify the feelings of loneliness, sadness, and hopelessness often associated with depression.

These findings were in accordance with *Mohamed, Ahmad, Hassaan, & Hassan (2020)*, they performed a study about "Assessment of Anxiety and Depression among Substance Use Disorder Patients: A case-control Study in Egypt", and found that the vast majority of the studied patients were suffering from different levels of depression and the highest present was for severe depression, but there were no suicidal thoughts among those patients, while these findings were against the results of *Niciu, Chan, Gelernter, Arias, Douglas, Weiss, Anton, Farrer, Cubells, & Kranzler (2011)*, they performed a study about " Subtypes of Major Depression among Substance Dependence Patients in the Eastern United States", and found that more than half of the studied patients usually feel that the life isn't worth living and they were more likely to have attempted suicide.

According to the substance dependent patients' total mental health score; the study results showed that the majority of them had a worth total mental health score, these results may be due to substance use patterns especially frequent use, are found to be associated with residual cognitive impairment and poor mental health. Or due to Anxiety and depression are among the most common problems reported by persons seeking treatment for drug addiction. Additionally they persist behind detoxification and remission of addictive behavior.

This result supported with *Abd El-Moneim, Abdellah, Fawzy, &*

Mohammed (2020), they performed a study about "Assessment of Addicted Cases Admitted to Addiction Management Unit of Neurology and Psychiatry Hospital at Assiut University", and found that most of the studied patients had poor total mental health score. This result also supported with *Andreas, Lauritzen & Nordfjaern (2015)*, they performed a study about "Co-occurrence between Mental Distress and Poly-drug Use: A ten Year Prospective Study of Patients from Substance Abuse Treatment", and found that more than half of the studied people with a substance use disorder experienced poor mental health.

Regarding the substance dependent patients' total craving score to the addictive drugs; the present study findings showed that three quarters of them had a high total craving score, These results may be because the addictive drugs takes long time to be quite, the patients were experience some barriers and challenges such as (drug misuse which consider is effective part in life style, loss of pleasurable state associated with drugs abuse among peer group, negative emotions, negative affect and stress related to withdrawal process, and additionally may be thinking after treatment what is the next step and the quality of life after discharge.

These results agreed with *Cavicchioli, Vassena, Movalli, & Maffe (2020)*, they performed a study about "Is Craving a Risk Factor for Substance Use among Treatment-seeking with Individuals with Alcohol and Other Drugs Use Disorders: A meta-analytic Review in France", and found that more than three quarters of the substance dependent patients had higher total levels of craving. These results also agreed with

Mohammadzadeh, Khosravani, & Feizi (2017), they performed a study about "The Comparison of Impulsivity and Craving in Stimulant-Dependent, Opiate-dependent and Normal Individuals in Iran", and found that stimulant-dependent and opiate-dependent patients had more impulsivity and craving than the normal control group.

Concerning the correlation between the substance dependent patients' total mental health and total craving; the present study indicated that there was highly statistically significant positive correlation between the studied patients' total mental health and total craving at ($P \leq 0.001$). this result may be because of the mental health conditions of the patients is affected and affected by craving for drugs., When patient misuse drugs the different withdrawal symptoms appear which effect on mental health conditions and cause some problems such as (increase stress, tension, fatigue, increase risk of anxiety and depression, and unstable living conditions), therefore strong or intense desire and repetitive use of drugs again elevated to avoid this symptoms, decrease worse mental health and prediction low quality of life. Additionally, low craving score associated with good mental health and vice versa.

This result agreed with *Fatseas, Serre, Swendsen, & Auriacombe (2018)*, they performed a study about " Effects of Anxiety and Mood Disorders on Craving and Substance Use among Patients with Substance Use Disorder: An ecological Momentary Assessment Study in the United States", and found that that there was highly statistically significant positive correlation between the patients' total anxiety and mood disorders and their total craving. The same result also agreed

with *Zilberman, Tavares, & El-Guebaly, (2017)*, they performed a study about "Relationship between Craving and Personality in Treatment-seeking Women with Substance-related Disorders in Iran", and found the craving scores were positively correlated with depression.

Conclusion:

In the light of the present study findings and research question, the following can be concluded-:

More than half of the substance dependent patients much more than usual had difficulty in staying asleep once they are off, fell constantly under strain, found getting everything on top of them, and feeling nervous and strung-up all the time. Slightly less than half of them more than usual takes long time to do things than before, while less than half of them less than usual feel that they are playing a useful part in things or being able to enjoy their normal day-to-day activities. Further, more than half of the substance dependent patients much more than usual thinks themselves as a worthless person, less than half of them don't feel that the life isn't worth living, while more than half of them definitely don't have any suicidal thoughts. Also, the majority of the substance dependent patients had a worth total mental health score, and three quarters of them had a high total craving score.

Recommendations:

- Further study should be carried out on the aspect of improving the substance dependent patients' self-esteem after detoxification.
- Further study should be carried out on the aspect of improving the substance dependent patients' quality of life after detoxification.

- A psycho educational program about social adjustment should be applied for the substance dependent patients based on a treatment protocol during their hospitalization.
- Educational program and group education to impart skills including self-awareness, self-management, distraction and positive coping skills in an attempt to prevent relapse due to undesirable experience such as craving

References:

- Aas, C., Vold, J., Gjestad, R., Skurtveit, S., Lim, A., Gjerde, K., Løberg, E., Johansson, K., & Fadnes, L. (2021):** Substance use and symptoms of mental health disorders: a prospective cohort of patients with severe substance use disorders in Norway. *Substance Abuse Treatment, Prevention, and Policy*. Available at: <https://substanceabusepolicy.biomedcentral.com/articles/10.1186/s13011-021-00354-1>. Accessed on 20 July 2021.
- Abd Elhamid, M. (2018):** Psychosocial Adjustment among Substance Abuser during Rehabilitation Phase of Treatment. Published master thesis in Faculty of Nursing, Ain Shams University, Egypt. Pp.98.
- Abd El-Moneim, W., Abdallah, N., Fawzy, M., & Mohammed, S. (2020):** Assessment of Addicted Cases Admitted to Addiction Management Unit of Neurology and Psychiatry Hospital at Assiut University. *Zagazig Journal of Forensic Medicine & Toxicology*; 18(1): P.10.
- Abdel-naby, R. (2018):** Effect of mindfulness meditation on craving among drug addicts. Published Doctorate thesis in Faculty of Nursing, Ain Shams University, Egypt. Pp.116.
- Ali, A. (2018):** The effect of expressive disclosure writing on self-stigma depression, anxiety and stress among substance dependent. PHD Thesis, Alexandria university, Faculty of nursing. Department of psychiatric nursing and mental health.
- American Psychiatric Association (APA). (2018).** Understanding alcohol use disorders and their treatments. www.apa.org/helpcenter/alcohol-disorders.aspx
- Andreas, J., Lauritzen, G., & Nordfjaern, T. (2015):** Co-occurrence between mental distress and poly-drug use: a ten year prospective study of patients from substance abuse treatment. *Addict Behavior*; 48(2): Pp.71–8. doi: 10.1016/j.addbeh.2015.05.001.
- Anna, W., Mitsuhiro, S., Figlie, N., Diehl, A., Pillon, S., & Laranjeira, R. (2021):** Relapse in involuntary substance treatment: a transversal study. *Revista Colombiana de Psiquiatría* 49 (4): P. 5. <https://doi.org/10.1016/j.rcp.2019.02.004>.
- Australian Department of Health, (2021):** Addiction withdrawal symptoms. Available at: <https://www.healthdirect.gov.au/addiction-withdrawal-symptoms>. Accessed on 30 August 2021.
- Buddy, T., Gans, S. (2020):** Assessment of the Withdrawal Symptoms among Drug Addiction Patients in Australia. Available at: <https://www.verywellmind.com/what-is-withdrawal-how-long-does-it-last-63036>. Accessed on 16 July 2021.
- Cavicchioli, M., Vassena, G., Movalli, M., & Maffe, C. (2020):** Is craving

- a risk factor for substance use among treatment-seeking with individuals with alcohol and other drugs use disorders? A meta-analytic review. Available at: https://www.researchgate.net/publication/340959131_Is_craving_a_risk_factor_for_substance_use_among_treatmentseeking_with_individuals_with_alcohol_and_other_drugs_use_disorders_A_metaanalytic_review. Accessed on 20 July 2021.
DOI:10.1016/j.drugalcdep.2020.108002
- Choopan, H., Kalantarkousheh, M., Aazami, Y., Doostian, Y., Farhoudian, A., & Massah, O. (2016):** Effectiveness of Emotion Regulation Training on the Reduction of Craving in Drug Abusers. *Addiction & Health*; 8(2): Pp. 6875. PMID: 27882203 PMCID: PMC 5115639.
- D'Silva, J., & Aminabhavi, V. (2017):** Adjustment, Self-efficacy and Psychosocial Competencies of Drug Addicted Adolescents. *Journal of Psychology*; 4(1): Pp. 13-18 <https://doi.org/10.1080/09764224.2013.11885489>.
- Dadgarmoghaddam, M., Baseri, H., Alipourtabrizi, R. & Khajedaluae, M. (2016):** The Assessment of Self-Esteem in Addicted Women. *Razavi Int JMed*, 4(2): Pp. 1-6. doi. 10.5812/rijm.12021.
- Das, S. (2020):** Detoxification of Drug and Substance Abuse, *Medical Toxicology*. DOI: 10.5772/intechopen.90380. Available at: <https://www.intechopen.com/books/medical-toxicology/detoxification-of-drug-and-substance-abuse>. Accessed on 28 June 2021.
- El-Sayed, S. (2020):** Effect of Psycho-educational Nursing Program on Social Adjustment and Self-esteem among Substance Abusers, Doctorate thesis, Benha University, Psychiatric & Mental Health Nursing Department, Egypt, P. 111.
- Essam Eldin, R., Othman, H., Salah Eldin, H. (2021):** Evaluation of Substance Abuse Cases Admitted in ICU of Poison Control Center- Ain Shams University Hospitals by Certain Clinical Scoring Systems; *Ain Shams Journal of Forensic Medicine and Clinical Toxicology*. January 2021, 36: 90-97.
- Farag, Z., (2019):** Perceived stigma, Self- stigma and social functioning among individuals with substance abuse disorders. Master thesis, Alexandria university, Faculty of nursing. Department of psychiatric nursing and mental health.
- Fatseas, M., Serre, F., Swendsen, J., & Auriacombe, M. (2018):** Effects of anxiety and mood disorders on craving and substance use among patients with substance use disorder: An ecological momentary assessment study. *Drug Alcohol Depend*; 187: Pp. 242-248. doi: 10.1016/j.drugalcdep.2018.03.008.
- Gupta, V., Bansal, P., Kaur, A., & Sing, G. (2015):** Pattern of shifting of substance abuse among drug addicts undergoing treatment at (drug addiction centers) in Punjab. *Journal of Evolution of Medical and Dental Sciences*; 4(37): Pp.6546-6550. DOI: 10.14260/jemds/2015/949.
- Gyawali, B., Choulagai, B., Paneru, P., Ahmad, M., Leppin, A. & Kallestrup, P. (2016):** Prevalence and correlates of psychological distress symptoms among patients with substance use disorders in drug

- rehabilitation centers in urban Nepal: a cross-sectional study. *BMC Psychiatry*; 16(1): P.314. doi: 10.1186/s12888-016-1003-6.
- Houchins, M. (2021):** Assessment of Heroin Withdrawal Symptoms among Drug Addiction Patients in America. Available at: <https://drugabuse.com/drugs/heroin/detox-withdrawal/>. Accessed on 16 July 2021.
- Jabeen, I., Venkataswamy, M., Sadaf, J., & Reddy, N. (2018):** Drug Abuse, Causes and Treatment among Addict Patients. *Research Journal of Pharmaceutical Dosage Forms and Technology*; 10(4): Pp.975-4377. DOI:[10.5958/0975-4377.2018.00038.1](https://doi.org/10.5958/0975-4377.2018.00038.1).
- Juergens, J. (2021):** Drug and Alcohol Detox. Available at: <https://www.addictioncenter.com/treatment/drug-and-alcohol-detox/>. Accessed on 20 August 2021.
- Kamal, R., Dijkstra, B., Oene, G., Duren, J., & Jong, C. (2016):** Psychiatric comorbidity, psychological distress, and quality of life in gamma-hydroxybutyrate-dependent patients. *Journal of Addictive Diseases*; 36(1): P.1. doi.org/10.1080/10550887.2016.1214000.
- Kamarudin, E., Sulaiman, W., Kusenin, N., & Amin, A. (2020):** The effect of individual psycho-education intervention on self-efficacy among opioid dependent patients in methadone clinics in Malaysia. *Journal of Nusantara Studies (JONUS)*; 5(2): Pp.103-128. DOI: 10.24200/jonus.vol5iss2pp103-128.
- Lesser, B. (2021):** A Step by Step Guide to Drug Detoxification. Available at: <https://dualdiagnosis.org/guide-drug-detox/>. Accessed on 10 August 2021.
- Mohamed, I., Ahmad, H., Hassaan, S., & Hassan, S. (2020):** Assessment of anxiety and depression among substance use disorder patients: a case-control study. *Journal of Middle East Current Psychiatry* volume; 27(22): P. 1. <https://doi.org/10.1186/s43045-020-00029-w>.
- Mohammadzadeh, M., Khosravani, V., & Feizi, R. (2017):** The comparison of impulsivity and craving in stimulant-dependent, opiate-dependent and normal individuals. *Journal of Substance Use*; 23(2):Pp.1-6. DOI:[10.1080/14659891.2017.1394384](https://doi.org/10.1080/14659891.2017.1394384).
- National Center for Biotechnology Information (2021):** Detoxification and Substance Abuse Treatment. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK64110/>. Accessed on 10 August 2021.
- National Institute on Drug Abuse, (2021):** Treatment Approaches for Drug Addiction Drug Facts. Available at: <https://www.drugabuse.gov/publications/drugfacts/treatment-approaches-drug-addiction>. Accessed on 11 August 2021.
- Niciu, M., Chan, G., Gelernter, J., Arias, A., Douglas, K., Weiss, R., Anton, R., Farrer, L., Cubells, J., & Kranzler, H. (2011):** Subtypes of Major Depression among Substance Dependence Patients. *Addiction*; 104(10): Pp.1700–1709. doi: 10.1111/j.1360-0443.2009.02672.x.
- Opsal, A., Kristensen, O., & Clausen, T. (2019):** Readiness to change among involuntarily and voluntarily admitted patients with substance use

- disorders. *Journal of Substance Abuse Treatment, Prevention, and Policy*; 14(47): P. 1. <https://doi.org/10.1186/s13011-019-0237-y>.
- Parisi, T. (2021):** Overview, Essential Concepts, and Definitions in Detoxification. Available at: <https://www.ncbi.nlm.nih.gov/books/NBK64119/#A85324>. Accessed on 20 August 2021.
- Sabry, N., Ramy, N., & Rabie, M., (2018).** National addiction survey in Egypt 2015-2017. 19th EPA-section-Congress Epidemiology & Social Psychiatry, pp 99-100.
- Sharp, A., & Kelley, R. (2021):** Drug Detox: Process, Side Effects & Effectiveness of Detoxification. Available at: <https://americanaddictioncenters.org/drug-detox>. Accessed on 7 September 2021.
- Stockwell, N. (2021):** Substance Abuse & Mental Health Nurses: What They Do and How to Become One. Available at: <https://www.therecoveryvillage.com/professionals/jobs/nurses/>. Accessed on 30 August 2021.
- Vederhus, J., Pripp, A., & Clausen, T. (2016):** Quality of Life in Patients with Substance Use Disorders Admitted to Detoxification Compared with those Admitted to Hospitals for Medical Disorders: Follow-Up Results. *SAGE Journals*; 18(2): P.7. <https://doi.org/10.4137/SART.S39192>.
- WHO (2016):** Egypt health profile 2015. Regional Office for the Eastern Mediterranean, 2016. World Health Organization.
- Zilberman, M., Tavares, H., & El-Guebaly, N. (2017):** Relationship between craving and personality in treatment-seeking women with substance-related disorders. Available at: <https://bmcp psychiatry.biomedcentral.com/articles/10.1186/1471-244X-3-1>. Accessed on 20 July 2021.