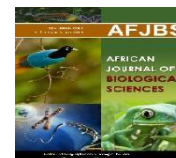


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Treatment Motivation and Guilt Feeling among Patients with Substance Use Disorder

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Abstract: Background: Patients with substance use disorder (SUD) often experience high levels of guilt. These feelings of guilt can lead to a generalization of negative emotions towards their substance use, impacting their motivation for treatment. **Aim of the study:** Assess treatment motivation and guilt feeling among patients with substance use disorder. **Subjects and Methods: Research design:** A descriptive correlational design was adopted to carry out this study. **Setting:** The present study was conducted at El-Azazi hospital for mental health in Abo Hamad City, Alsharkia Governorate, Egypt. **Sample:** A purposive sample of patients with substance use disorders (n= 153). **Tools of data collection:** Three tools were used for collecting data. Interview questionnaire sheet which composed of Socio-demographic and clinical data sheet, The Circumstances, Motivation, and Readiness (CMR) Scale. and Test of Self-Conscious Affect-3 (TOSCA-3). **Results:** The total mean score of treatment motivation was 76.22±7.45 and mean score of guilt feeling was 44.22±6.61. **Conclusion:** There was a highly statistically significant positive correlation between patients' motivation for treatment and guilt. **Recommendation:** Designing and implementing psych-educational programs for addict patients to improve their motivation for treatment and employ motivational interviewing techniques to help patients explore their ambivalence about treatment and guide them towards making positive changes.

Keywords: gut Treatment Motivation, Guilt Feeling, Substance Use Disorder

Introduction: Historically, substance use disorder (SUD) was seen as a sign of moral weakness or failure, best addressed through punitive actions. SUD is understood as a chronic disorder that involves a complex interplay of genetics, physiology and environment. SUD, cannot be cured through short term interventions, but there are effective long term treatments that reduce complications and improve quality of life. The disease concept

dampens negative attitudes toward individuals with SUD, and it is useful in taking away blame for patients who experience shame and guilt **(Rastegar & Fingerhood, 2020)**.

SUD is a chronic relapsing condition marked by obsessive drug seeking, prolonged use despite negative effects, and permanent brain alterations. Commonly described as "a complicated brain disorder and a mental illness. Particularly among young people who are of working age, SUD is one of the most severe public health issues, with detrimental effects on one's health, family, community, education, and career **(Kalema et al., 2021)**.

Keeping the individual sober as long as possible is the first aim of all SUD treatment programs. However, the desired result from the treatment may not always be obtained, depending on many factors. The most common reasons for unpleasant results are not having enough motivation to participate in the treatment and not having enough motivation to stay in the treatment. While motivation is seen as the readiness for a change, the most common cause of adverse course treatment is reported to be low motivation **(Erzin et al., 2020)**.

Treatment motivation can be defined as an internal psychological state consisting of acceptance of and readiness for change. It can be affected by both internal and external factors. In the context of addictive disorders, those factors include internal as well as external pressures, readiness to receive treatment, and the patient's perception of the treatment program and available support. Motivation for treatment on the part of patients with addictive disorders is known to affect their prognosis and is reported to be among the most common reasons for failed treatment adherence and relapse after treatment **(Bilici et al., 2014)**.

Also, treatment motivation is defined as a person's desire to alter their behavior. It plays a crucial role in the treatment of addictive behaviors like alcoholism and drug abuse **(Olubunmi & Adedotun, 2020)**. Additionally, motivation affects how likely patients are to seek out treatment options, adhere to treatment guidelines, and notably, make successful long-term improvements **(Meisler, 2020)**.

Moreover, treatment motivation was found as a predictor of treatment success in patients with SUD. It has been shown to play a substantial role in reducing the risk of dropout from SUD treatment. Therefore, identifying factors that can increase or decrease motivation are noteworthy. It is thought that treatment motivation can be increased by maintaining of healthy and high-quality close relationships; regulation of emotions; and increasing positive emotions **(Tekin et al., 2021)**.

Patients with SUD may experience a range of emotions that are more difficult to control and manage, Particularly in the early stages of their recovery. Among these feelings is guilt, which reflects negative views toward a specific event or action **(Moualeu, 2022)**. Also, there is evidence that individuals with a history of addictive behaviors experience excessive self-conscious emotions such as guilt. Research conducted on alcoholics presented that guilt is positively correlated with protective behavior strategies **(Iqbal et al., 2022)**.

Guilt is defined as a "Reaction to clashes between the ego and the superego" has an internal, specific and unstable attributional style. This indicates that guilt focuses on

behavior rather than self, which means it is adaptive encouraging the individual to adjust and behave in positive ways and forbids from committing compulsive behaviors, such as substance abuse **(Al-Ziadat, 2019)**.

Self-conscious emotions such as guilt typically occur in situations involving a mishap or a transgression of social norms and rules. Following a mishap or a transgression, guilt is assumed to motivate the actor to repair their actions. A person who experiences guilt feels that their actions were wrong. Because actions can be fixed, guilt results in attempts to resolve the wrong actions by repairing, confessing, or apologizing **(Nikolić et al., 2023)**.

As well, the emotion of guilt is produced when individuals evaluate their behavior as failure but focus on the specific features of the self, or on the self's action which led to the failure. Because in guilt the focus is on a specific attribution, individuals are capable of ridding themselves of this emotional state through action. The corrective action can be directed toward the self as well as toward the other **(Michael Lewis, 2022)**.

Further, feelings of guilt involve a focus on a specific behavior (e.g., "I did *something bad*"). The experience of guilt is often accompanied by a sense of regret over the "bad thing done." Rather than provoking the defensive responses, this sense of regret tends to motivate reparative action **(Stuewig et al., 2015)**. As well, guilt appears to fund more pro-social behaviors, including the desire to apologize. Pertinent to the problem of addiction, and in keeping with this theoretical outlook, research suggests that proneness to guilt is protective from developing a substance abuse problem **(Treeby et al., 2018)**.

Nurses are often the first clinical providers that substance abuser patient sees in any health facility. They help the substance abuser patients regain their ability to function as fully as possible in a therapeutic environment. Nurses provide addiction treatment and rehabilitation services for substance abusers at all stages of the admittance process, from the initial assessment through treatment and follow-up care **(Pokuaa, 2021)**. As well, nurses play an important role in aiding individuals who are undergoing the drug rehabilitation. They map their improvement, help patients adjust to a new lifestyle by developing a treatment plan, also help them to adapt their life without drugs **(Fathy et al., 2021)**.

Additionally, nurses aid the recovery process by teaching a variety of skills-including social skills, family communication, family role responsibilities, and introducing the patient to new leisure activities. It is important to help the patient learn to foster personal responsibility for recovery. The nurse must cultivate awareness by the patient that he is responsible for change **(Keltner & Steele, 2019)**.

Significance of the study:

Substance use disorder (SUD) is one of the most important contemporary problems that negatively affects the individual and their environment in biological, psychological, and social ways. SUD causes problems such as decreased self-esteem, deterioration of close relationships, role loss, and sudden emotional changes **(Tekin et al., 2021)**. Several studies have shown that examining emotional problems in substance abuse clients is important

because people recovering from substance abuse experience different levels of guilt than the general population (**Derakhshandeh et al., 2023**).

Since the 1990s, a stream of literature has suggested that the emotions people experience in the wake of their misdoings are significantly related to outcomes—in particular, that feelings of guilt can play a supportive role in changing behavior in a constructive way. A recent revival of these theories on guilt examines the relevance of these emotions for the treatment of substance-dependent people (**Snoek et al., 2021**).

Also, motivation plays a significant role in treatment of any illness especially for the patients with addiction problems, as motivation is a factor which influences patients to look for treatment possibilities, follow instructions of the treatment and particularly make prosperous long term changes. Motivation is a first meaningful step towards changes in behavior and plays one of the central roles in addiction treatment; moreover, it is considered an important part in the outcome of the treatment (**Millere et al., 2014**). So the aim of study is to assess treatment motivation and guilt feeling among patients with substance use disorder.

Aim of the study:

The aim of the study was to assess treatment motivation and guilt feeling among patients with substance use disorder.

Research Questions:

- What is the level of treatment motivation among patients with substance use disorder?
- What are the levels of guilt feeling among patients with substance use disorder?
- Is there a relationship between treatment motivation and guilt feeling of patients with substance use disorder?

Subjects and methods:**Research design:**

A descriptive correlational research design was used to achieve the aim of this study.

Study setting:

The present study was conducted at El Azazi Hospital for Mental Health in Abo Hamad City, Alsharkia Governorate, Egypt, specifically in the rehabilitation and detoxification rooms for individuals with substance use disorder and addiction outpatient clinics.

The addiction outpatient clinic delivers care for patients from 9:00 a.m. to 1:00 p.m. every day except Friday. The hotline also delivers care from 12:00 p.m. to 4:00 p.m. three days a week (Sunday, Wednesday, and Thursday).

Study subjects:

A purposeful sample of patients who were diagnosed only with substance use disorder (153) present at the inpatient units and addiction outpatient clinics at El-Azazi Hospital for Mental Health at the time of the study, who meet the following inclusion criteria.

- Both male and female patients between the ages of 18 and 60
- Free from any medical or psychiatric comorbidity.
- Agree to participate in the study.

- All educational levels.

Tools of data collection:

Three tools were used to collect necessary data.

Tool I: Interview questionnaire sheet: It consists of two parts as follows:

Part (I): Socio-demographic sheet

This section was developed by the researcher to document the personal characteristics of the participant patients. It includes questions about age, age at onset of addiction, gender, residence, educational level, Job, marital status, and income.

Part (II): clinical data sheet.

This section was developed by the researcher to collect data about their place of treatment, duration of hospitalization, number of admissions to the hospital for addiction treatment, beginning of treatment, and types of substance abuse.

Tool II: The Circumstances, Motivation, and Readiness (CMR) Scale:

This scale was developed by **De Leon et al., (1994)**. The scale was designed to assess one's motivation and readiness for treatment among patients with substance use disorders. It consists of 18 items divided into three subscales: circumstances, motivation, and readiness for treatment. The items in the subscale of circumstances refer to external conditions that influence decisions to enter or remain in treatment (circumstances 1, i.e., the first 3 items) and to leave treatment (circumstances 2, i.e., the last 3 items). The motivation subscale (5 items) refers to a client's inner reasons for change, whereas the readiness subscale (7 items) measures the individual's perceived need for treatment in order to change.

Scoring system:

The CMR scale is an 18-item, self-administered questionnaire. The instrument features Likert-type responses rated on a 5-point scale reflecting the extent of agreement with the respective items (1 = strongly disagree to 5 = strongly agree). The scores of the 18 statements were summed up and reversed for four items (4, 5, 6, and 12). Besides, potential total scores for CMR range from 0 to 90, with higher scores indicated higher motivation and readiness for treatment.

Tool III: Test of Self-Conscious Affect-3 (TOSCA-3): (short version):

This scale was developed by **Tangney et al., (2000)** to measure shame-proneness and guilt-proneness as individual traits. The shortened TOSCA-3 is a scenario-based self-report questionnaire and covers various situations that may occur in daily life. This scale is comprised of a series of 11 scenarios with 3 responses, including shame-proneness (11 items), guilt-proneness (11 items), and blaming others (externalization) (11 items).

For the purpose of this study, we take only eleven items of guilt felling.

Scoring system:

These 11 scenarios scored individually on a Likert-type, 5-point scale ranging from 1 (never) to 5 (always), respectively. The scale scores were calculated by summing the 11 items of guilt reaction and scores range from 11 to 55.

The level of guilt feeling was categorized as follows:

- Low: total score: 11-25
- Moderate: total score: 26-40
- High: total score: 41-55

Content validity& Reliability:

Tools were translated into Arabic, utilizing the translation and back translation methods. The tools were revised by five-person panels of experts. Five-person panels of experts include: a professor of the psychiatric medicine department at Zagazig University; a professor of psychology at the Faculty of Arts at Zagazig University; two assistant professors of psychiatric and mental health nursing at Zagazig University; and one assistant professor of community health nursing at Zagazig University. They revised the tools for clarity, applicability, comprehensiveness, and understanding. Their recommendations were taken into consideration.

Tools were tested for their reliability using Cronbach's alpha. The values were revealed as follow Circumstances, Motivation and Readiness scale (0.742), and Self-conscious affect scale (0.703).

Fieldwork:

The data collection phase of the study took three months from mid-July to mid-October of 2023. The researcher went to El-Azazi Hospital two days per week, from 9:30 a.m. to 2 p.m., to collect data. The data sheet was completed at the same time of distribution.

After obtaining the required permission to conduct the study, the researcher met with the manager of the hospital and head nurses to explain the study aim and procedures, as well as the information assortment forms to them, obtain their consent, and gain their cooperation to proceed with data collection. Then the researcher interviewed the selected patients, introduced herself, explained the purpose and nature of the study. She then obtained written consent for participation in the study from selected patients.

Then, the researcher interviewed each patient individually and explained each statement in the data collection forms carefully to him, then choose the answer that suited them. A detailed explanation was given to obtain their cooperation while filling out the tools of the study. The total time that all three tools took ranged from 15 to 20 minutes, depending on the patient's level of understanding and ability to answer each question.

Pilot study:

A pilot study was carried out on 10 % of study subjects (16 patients with SUD) to test applicability, feasibility, clarity of the tools. In addition, to estimate the time required for filling out the data collection forms. The patients involved in the pilot study were included in the main study sample as there was no modification was needed in the data collection form.

Administrative and ethical considerations:

The study was approved by ethics committee and dean of the Faculty of Nursing, Zagazig University with code M.DZU.NUR/177/11/4/2023. Then, an official permission to conduct

the study was obtained by submitting an official letter issued from the Dean of the Faculty of Nursing at Zagazig University to the director of the General Secretariat of Mental Health and Addiction Treatment in Cairo City. Accordingly, approvals to conduct the study were obtained from the director of the General Secretariat of Mental Health and Addiction Treatment following the application of all required procedures and documentation, which took about 2 months. Then, approvals were obtained from the hospital director and the nursing director of El-Azazi Hospital for Mental Health.

As well, a written consent for participation in the study was obtained from the patients after fully explaining the aim of the study. The studied patients were given the opportunity to refuse participation and were notified that they could withdraw at any stage of filling out the tools. Additionally, the studied patients were assured that the information would be confidential and used only for research purposes.

Statistical analysis:

All data were collected, tabulated and statistically analyzed using SPSS 20.0 for windows (SPSS Inc., Chicago, IL, USA 2011). Quantitative data were expressed as the mean \pm SD and qualitative data were expressed as absolute frequencies (number) & relative frequencies (percentage). ANOVA (One-way analysis of variance) test was used for comparison between more than two different groups of quantitative data which were normally distributed. The student "t" test was used for comparison of means of two independent groups of quantitative data which were normally distributed. Pearson correlation coefficient was calculated to assess relationship between study variables, (+) sign indicate direct correlation & (-) sign indicate inverse correlation. Multiple linear regression (step-wise) was also used to predict factors which affect total motivation, Self-conscious affect. Cronbach alpha coefficient was calculated to assess the reliability of the scales through their internal consistency. P-value < 0.05 was considered statistically significant, p-value < 0.001 was considered highly statistically significant, and p-value \geq 0.05 was considered statistically non-significant.

Results:

Table (1): Show frequency distribution of studied patients according to socio-demographic characteristics. The table reveals that, slightly more than three-fifths (62.1) of studied patients were 30 -< 45 years old and the mean age of them was 33.61 ± 7.51 , and about three-fifths (59,5%) of them began addiction at age less than 20 years. Regarding gender, all of studied patients were male (100%). Nearly half (51,6%, 51.6, and 49,7%) of studied patients were from rural areas, married, and had secondary education respectively. Also the same table reveals that, about three-quarters (72.5%) of studied patients were manual workers. Concerning income, about two-thirds (65,4%) of the patients had insufficient income.

Table (2): Show frequency distribution of studied patients according to clinical characteristics. This table displays that, more than three-quarters of studied patients were from inpatient unit (78,4%), and 71,7% of the patients stayed in the hospital less than 30 days with mean \pm SD = 20.98 ± 17.95 . As well, more than three-quarters (77.1%) of studied

patients admitted to hospital for addiction treatment less than 3 times. In addition, most of studied patients (86,9%) started treatment less than 5 years.

Figure (1): Show percentage of types of substance abused among the studied patients. It's clear from this figure that three-fifths (60,10 %) of studied patients had abused heroin.

Table (3): Shows total mean scores of the treatment motivation and its domains and mean scores of guilt self-talk of Studied Patients. This table show that, the highest mean score was readiness to enter treatment (31.32 ± 3.25), followed by motivation (23.18 ± 2.69), and the least mean score was circumstances (21.71 ± 3.70). The total mean score of treatment motivation was $=76.22 \pm 7.45$. Also, the same table reveals that, the mean score of guilt feeling was 44.22 ± 6.61 .

Table (4): show Correlations between domains of treatment motivation and guilt feeling. It is clear from this table that there was highly statistically significant positive correlation between patients' Circumstances score and Motivation for treatment ($r = 0.278$), Readiness for treatment ($r = 0.311$), and Guilt self- talk ($r = 0.281$). It also shows a highly statistically significant positive correlation between patients' motivation for treatment and both readiness for treatment ($r = 0.629$) and guilt self-talk ($r = 0.341$) also, between patients' readiness for treatment and guilt self-talk ($r = 0.308$)

figure (2): shows Correlation between total treatment motivation and guilt feeling. It is clear from this figure that there was highly statistically significant positive correlation between total treatment motivation and guilt feeling (p -value < 0.001)

Result:

Table (1): frequency distribution of socio-demographic characteristics of studied patients (n=153):

Socio-demographic characteristics	NO.	%
Age per years		
18 -<30	48	31.4
30 -< 45	95	62.1
≥ 45	10	6.5
Mean \pm SD	33.61 \pm 7.51	
Age at onset of addiction		
less than 20 years	91	59.5
20-30	44	28.8
>30-40	16	10.5
>40 years	2	1.3
Gender		
Male	153	100.0
Female	0	0.0
Residence		
Urban	74	48.4
Rural	79	51.6
Education level		
Illiterate	15	9.8

Basic education	41	26.8
Secondary education	76	49.7
University education	21	13.7
Job		
Not work	13	8.5
Manual worker	111	72.5
Employer	29	19.0
Marital status		
Married	79	51.6
Divorced	14	9.2
Widow	2	1.3
Single	58	37.9
Income		
Sufficient	53	34.6
Insufficient	100	65.4

Table (2): frequency distribution of clinical characteristics of studied patients (n=153):

clinical characteristics	NO.	%
Place of treatment		
Outpatient	33	21.6
In-patient	120	78.4
Duration of hospitalization per days (n=120)		
<30 days	86	71.7
30-60 days	34	28.3
Mean± SD	20.98±17.95	
Number of admissions to hospital for addiction treatment		
<3	118	77.1
≥3	35	22.9
Beginning of treatment (years)		
<5years	133	86.9
≥5 years	20	13.1

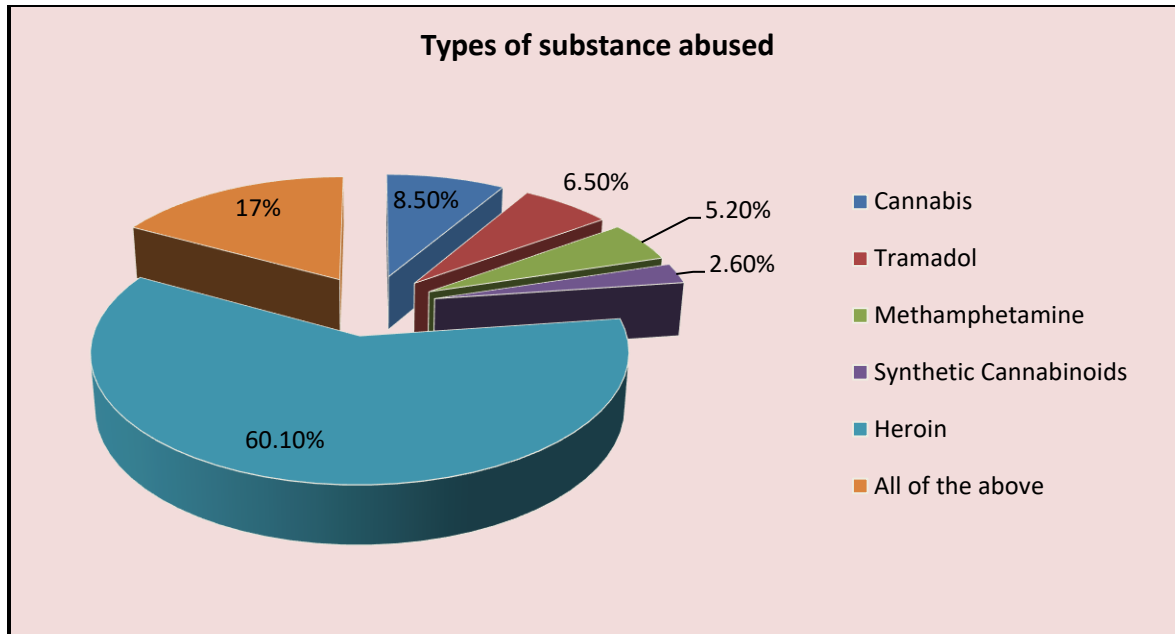


Figure (1): Percent of types of substance abused among the studied patients (n=153).

Table (3): Total mean scores of the Circumstances, Motivation and Readiness (CMR) Scale and mean scores of guilt self-talk of Studied Patients (n=153).

Item	Mean± SD
Circumstances	21.71±3.70
Motivation	23.18±2.69
Readiness	31.32±3.25
Total treatment motivation	76.22±7.45
Guilt feeling	44.22±6.61

Table (4): Correlation matrix between domains of treatment motivation and & guilt feeling (n=153).

Domains	Circumstances	Motivation	Readiness
	R (p-value)	R (p-value)	R (p-value)
Motivation	0.278 (<0.001**)		
Readiness	0.311 (<0.001**)	0.629 (<0.001**)	
Guilt feeling	0.281 (<0.001**)	0.341 (<0.001**)	0.308 (<0.001**)

*: significant(p<0.05). **: statistically highly significant (p<0.001). (r): correlation coefficient

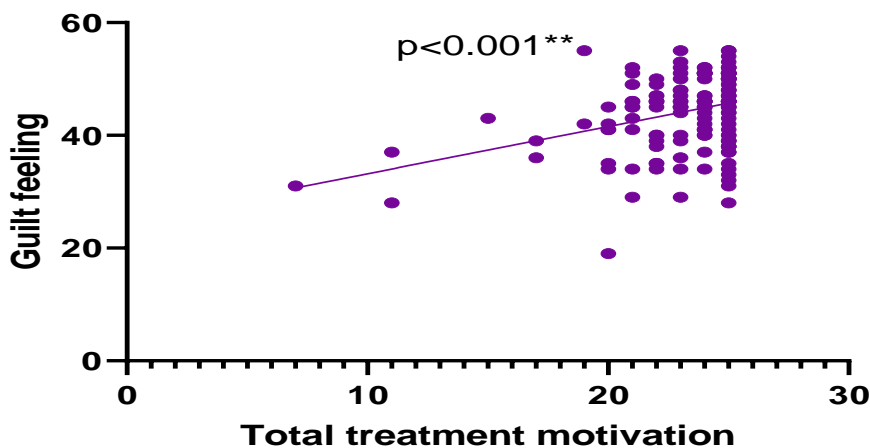


Figure 2: Scatter dot graph showing significant positive Correlation between total treatment motivation and guilt feeling.

Discussion:

Concerning the socio-demographic characteristics of studied patients, the findings of the present study indicated that slightly more than three-fifths of studied patients were 30 -< 45 years old, with a mean score was 33.61 ± 7.51 and about three-quarters of them were manual workers. As well, nearly half of the studied patients were from rural areas, married, and had secondary education. The possible explanation for these results might be due to that individuals at this age have experienced many stressors, such as establishing a career, anxiety about the future, and a curiosity to take substance. So, abuse some drugs or substances to lessen the impact of stressors. As well, this is probably because most people in manual work have the erroneous belief that substances enhance their physical abilities.

These results were in agreement with a study carried out by **Abdelkawy Abdelmouttelb et al., (2022)** in Cairo, which clarified that about more than two fifths of the studied patients were in the age group 25–34 years with a mean age of 33.74 ± 8.36 years, the majority of the studied sample were from rural residence, and most of the patients were handicraft work.

As well, the current study results revealed that all of the studied patients were male, and about two-thirds had insufficient income. About three-fifths of the studied patients began addiction at age less than 20 years. The reason for the male predominance in this study could be attributed to the fact that stigma in society toward person who addicted drugs; especially if those persons are female, Egyptian culture does not accept addicted women. So, women prefer to go to private clinics for treatment to conceal their addiction and its related stigma.

These findings were consistent with the study performed in Egypt by **Elyamany et al., (2020)** which found that the highest percentage of the studied substance abusers (96.2%) were male, about half of the sample didn't have enough monthly income, and more than two-thirds initiated substance abuse at the age of less than 20 years.

Concerning the clinical characteristics of the studied patients, the present study findings indicated that more than three-quarters of studied patients were from inpatient unit and slightly less than three-quarters stayed in the hospital for less than 30 days, with a mean score was 20.98 ± 17.95 days. Most of the studied patients started treatment for less than 5 years and more than three-fourths admitted to the hospital for addiction treatment less than three times. Also, three-fifths of the studied patients had abused heroin. These findings might be explained by several reasons, including the fact that heroin induces rapid and intense euphoria by binding to opioid receptors in the brain. As well, heroin can be smoked, snorted, or injected, and its effects are felt almost instantly, making it appealing to addicts who seek immediate relief.

The previous findings were in the harmony with study by **Shahin et al., (2021)** which clarified that the majority of the studied patients had one to two admissions to a psychiatric hospital, and more than half of the patients were dependent on heroin. However, these findings were inconsistent with study conducted by **Gemeay et al., (2019)** in Egypt, which showed that tramadol was the first line of substance abuse among patients.

Concerning treatment motivation, the imperative aim of the current study findings that, the highest mean score was readiness to enter treatment (31.32 ± 3.25), followed by motivation (23.18 ± 2.69), and the least mean score was circumstances (21.71 ± 3.70). The total mean score of treatment motivation was 76.22 ± 7.45 . This might be explained by several factors that include overspending on substances, legal consequences, feeling of burden on family, and stigma that attached to addict patient, all of these factors motivates patients to seek treatment. Also, recognizing the potential long-term consequences about the risks associated with continued use can prompt addicts to engage in treatment. Additionally, the desire to prevent further loss may encourage them to seek treatment.

These results were in the same line with study conducted by **Tabrizi, (2015)** in the United States which showed that the highest mean score was patient readiness to enter treatment ($M = 30.53$, $SD = 4.49$), followed by the scores for patient motivation ($M = 22.45$, $SD = 2.94$), and the least mean score was patient circumstance ($M = 21.19$, $SD = 3.54$), and the total mean score of treatment motivation ($M = 74.16$, $SD = 8.99$). Also, a study conducted by **Razali, (2023)** in Malaysia, revealed that the highest mean score was readiness to enter treatment (26.83 ± 3.11), followed by motivation (20.85 ± 3.00), and the least mean score was Circumstances (19.75 ± 3.56). The total mean score was 67.43 ± 7.40 .

The current study results revealed that the Circumstances, Motivation and Readiness for treatment were highly statistically significant related to duration of hospitalization that range from 30-60 days. It was evident that the longer the hospital stay, the greater the motivation for treatment. This might be attributed to few obvious factors like unavailability of alcohol and substances in hospital, and alleviation of withdrawal suffering by pharmacotherapy. Additionally, psychotherapy by trained persons also influences the

readiness for change as patients acquire knowledge about substance related disorders than before.

This result was harmony with study conducted by **Ghosh et al., (2020)** in India which found that treatment of patient with alcohol dependence syndrome, as an inpatient in a hospital has a significant positive effect for motivation to change. Also, they found significant change in the stage of motivation from pre-contemplation to contemplation to action stage. Even after a short duration of hospital stay, motivation level for change showed improvement compared to baseline pretreatment level.

Conversely, these findings were in disagreement with a study carried out by **Akdağ et al., (2018)** found that patients with opioid use disorder initially showed high motivation for treatment, but their motivation decreased with treatment, indicating low chances of long-term positive results.

Regarding guilt feeling, this study result revealed that the mean score of guilt feeling was 44.22 ± 6.61 , This might be explained by most of the studied patients may feel guilty for the actions they have taken while under the influence of substances such as lying, stealing, or engaging in illegal activities. Also, they may feel responsible for the harm caused to themselves or others as a result of their substance use.

This result was to some extent in harmony with the study of **Kushnir et al., (2016)** in Canada, which clarified that the mean score of guilt feeling was 40.72.

Regarding correlation between treatment motivation and guilt feeling among studied patients, the core objective of the current study was to identify the correlation between treatment motivation and guilt feeling among patients with substance use disorder. the current study result showed that there was a highly statistically significant positive correlation between patients' motivation for treatment and guilt. This outcome indicated that patients who display high levels of motivation for treatment may also experience elevated feelings of guilt. This might be explained by the fact that patients who feel guilty about their behavior may be more motivated to seek treatment as a way to address these feelings of guilt. Also, the sense of responsibility and remorse associated with guilt self-talk may drive individuals to take positive steps towards recovery and change. This result was supported by **Doyle, (2022)** who stated that guilt's role in substance using populations has been established as an adaptive behavioral mechanism, where individuals who have increased guilt-proneness are more likely to seek help.

While this finding contradicted with the study conducted by **Slezakova, (2016)** which found that guilt was not positively and significantly correlated with one's motivation for treatment as was hypothesized.

Conclusion:

In the light of the main study results; it can be concluded that slightly more than three quarters of the studied patients had motivation for treatment and about half of the studied patient had guilt feeling. Additionally, highly statistical significant positive correlation between patients' motivation for treatment and guilt feeling.

Recommendations:

In view of the main results of the study the following recommendations were derived and suggested

- Developing education program for patients and family members about the nature of addiction, the biological and psychological factors contributing to addiction, the benefits of treatment, the consequences of not seeking help, and the resources available to help them.
- Employ motivational interviewing techniques to help patients explore their ambivalence about treatment and guide them towards making positive changes.
- Ongoing support and follow-up care post-treatment can help sustain motivation and prevent relapse. Regular checkins, counseling sessions, and access to support groups can keep patients engaged in their recovery journey.
- Further research: To achieve more generalizability of the results, it is recommended to repeat the current study on a larger, representative probability sample size in different governorates of Egypt.

References:

- Abdelkawy Abdelmouttelb, A., Mahmoud Mohamed Elewa, S., & Ata Abdelsalhen, F. (2022). Relation between Substance Use Craving and Self-Efficacy in Addict Patients. *Egyptian Journal of Health Care*, 13(3), 269-289.
- Akdağ, E. M., Kotan, V. O., Kose, S., Tıkır, B., Aydemir, M. Ç., Okay, İ. T., ... & Özkaya, G. (2018). The relationship between internalized stigma and treatment motivation, perceived social support, depression and anxiety levels in opioid use disorder. *Psychiatry and Clinical Psychopharmacology*, 28(4), 394-401. <https://doi.org/10.1080/24750573.2018.1478190>
- Al-Ziadat, M. A. (2019). Self-conscious Emotions and Self-forgiveness among Jordanian Substance Abusers. *Journal of Educational & Psychological Sciences*, 20(2).
- Bilici, R., Yazici, E., Tufan, A. E., Mutlu, E., İzci, F., & Uğurlu, G. K. (2014). Motivation for treatment in patients with substance use disorder: personal volunteering versus legal/familial enforcement. *Neuropsychiatric Disease and Treatment*, 10, 1599–1604. <https://doi.org/10.2147/NDT.S66828>
- Leon, G. D., Melnick, G., Kressel, D., & Jainchill, N. (1994). Circumstances, Motivation, Readiness, and Suitability (The CMRS Scales): Predicting Retention in Therapeutic Community Treatment. *The American Journal of Drug and Alcohol Abuse*, 20(4), 495–515. <https://doi.org/10.3109/00952999409109186>
- Derakhshandeh, N. G., Shahidi, S., & Ghanbari, S. (2023). Feeling of Shame and Guilt in Recovering Addicts: A Qualitative Study. *The Open Psychology Journal*, 16(1).
- Doyle, N. A. (2022). *The Complexities of Guilt, Shame, Stigma, and Substance Use among a Sample of United States Substance Using Adults* (Doctoral dissertation, University of Arkansas).
- Elyamany, M. E., Mahmoud, A. S., & Wahba, N. M. (2020). Social functioning and self-esteem among substance abusers at port-said psychiatric health hospital. *Port Said Scientific Journal of Nursing*, 7(3), 119-139.
- Erzin, G., KILINÇEL, O., Kukurcan, A., CİNGİ, M., İhsan, O. K. A. Y., Dalğar, İ., & Erol, G. Ö. K. A. (2020). Association between treatment motivation, addiction characteristics, craving and temperament traits in male patients with alcohol addiction. *Cukurova Medical Journal*, 45(1), 298-305. <https://doi.org/10.17826/cumj.653411>

- Fathy Mohamed, S., Mohamed Mourad, G., & Abed El Hamid Zaki, R. (2021). Stigma and Shame among Substance Abuser Women. *Egyptian Journal of Health Care*, 12(1), 1775-1784.
- Gemeay, E. M., Shama, G. T., Abo-Elyzeed, S. M., & Shalaby, H. K. M. (2019). Effect of Psych-educational Program on Self-Efficacy of Patient with Substance Use Disorders, *IOSR Journal of Nursing and Health Science* 8 (6), 01-13. DOI: 10.9790/1959-0806030113
- Ghosh, P., Barman, P., & Bhattacharjee, A. (2020). Factors influencing motivation in alcohol dependence syndrome patients in a tertiary care hospital of Assam. *International Journal of Research in Medical Sciences*, 8(9), 3288. DOI: <http://dx.doi.org/10.18203/2320-6012>.
- Iqbal, M., Yan, Y., Mubarik, S., Nadeem, M., Turan, M. B., & Younas, R. (2022). Shame and guilt activations: Associations and sociodemographic differences among polysubstance abusers. *Frontiers in Psychiatry*, 13, 1021876.
- Kalema, D., Van Damme, L., Vindevogel, S., Derluyn, I., Baguma, P., & Vanderplasschen, W. (2021). Correlates of motivation for treatment among alcohol service users in Uganda. *Therapeutic Communities: The International Journal of Therapeutic Communities*, 42(1), 4-15.
- Keltner N. L. & Steele D. (2019). *Psychiatric nursing*, 8th Ed, Elsevier, Pp: 392,393,374.
- Kushnir, V., Godinho, A., Hodgins, D. C., Hendershot, C. S., & Cunningham, J. A. (2016). Gender differences in self-conscious emotions and motivation to quit gambling. *Journal of gambling studies*, 32, 969-983. <https://doi.org/10.1007/s10899-015-9574-6>
- Meisler, A. W. (2020). Group treatment of PTSD and comorbid alcohol abuse. In *Group Treatment for Post-Traumatic Stress Disorder*, 1st Ed, Routledge, pp. 117-136.
- Michael Lewis. (2022). *The Self-Conscious Emotions*, 1st Ed, Encyclopedia on early childhood development, Pp:2,3.
- Millere, A., Pūce, A., Millere, E., Zumente, Z., Sudraba, V., Deklava, L., ... & Vagale, A. (2014). Treatment motivation factor analysis of patients with substance use disorders in Latvia. *Procedia-Social and Behavioral Sciences*, 159, 298-302.
- Moualeu, N. R. (2022). *Substance use disorder, shame, and self-forgiveness: A latent profile analysis* (Doctoral dissertation, Iowa State University).
- Nikolić, M., Brummelman, E., de Castro, B. O., Jorgensen, T. D., & Colonnese, C. (2023). Parental socialization of guilt and shame in early childhood. *Scientific Reports*, 13(1), 11767.
- Olubunmi, M., & Adedotun, A. S. (2020). Impact of self-efficacy and social support on intention to quit drug use among people with drug abuse cases. *Advances in Research*, 21(1), 67-74. DOI: 10.9734/AIR/2020/v21i130182
- Pokuua, M. A. (2021). *The Role Of A Nurse In Substance Abuse Rehabilitation-A Literature Review*. Available at https://www.theseus.fi/bitstream/handle/10024/513049/Pokuua_Mary.pdf;jsessionid=2D456289CEE996BFE6E47FA1BE5BEF5B?sequence=2 Accessed on 17\1\2024 at 3 pm Pp: 20-28
- Rastegar, D., & Fingerhood, M. I. (2020): *The American society of addiction medicine handbook of addiction medicine*, 2nd Ed, Oxford University Press, Pp:2,3.
- Razali, R. B. (2023). *Examining Relationship Between Motivation, Readiness and Self Efficacy among Inmates in the Therapeutic Community Rehabilitation Programme at Jelebu Rehabilitation Institute* Available at: <https://oarep.usim.edu.my/jspui/bitstream/123456789/22469/2/3211083%20Introduction.pdf>, Accessed on 4|3|2024 at 10 pm.
- Shahin, M. A. H., Hamed, S. A., & Taha, S. M. (2021). Correlation of self-compassion and spiritual well-being with drug craving in people with substance use disorders. *Middle East Current Psychiatry*, 28, 1-12.
- Slezakova, J. (2016). *The effect of shame and guilt on motivation for substance abuse treatment* (Doctoral dissertation, The Wright Institute).

- Snoek, A., McGeer, V., Brandenburg, D., & Kennett, J. (2021). Managing shame and guilt in addiction: A pathway to recovery. *Addictive behaviors*, 120, 106954. <https://doi.org/10.1016/j.addbeh.2021.106954>
- Stuewig, J., Tangney, J. P., Kendall, S., Folk, J. B., Meyer, C. R., & Dearing, R. L. (2015). Children's proneness to shame and guilt predict risky and illegal behaviors in young adulthood. *Child Psychiatry & Human Development*, 46, 217-227.
- Tabrizi, A. (2015). *Contrasting Perceptions of Motivation to Change: Clinicians and Substance Abuse Clients*. University of Nevada, Las Vegas. Available at <https://digitalscholarship.unlv.edu/thesisdissertations/2436/> Accessed on 14\3\2024 at 5 pm Pp: 48-55
- Tangney, J. P., Dearing, R. L., Wagner, P. E., & Gramzow, R. (2000). The Test of Self Conscious Affect-3 (TOSCA-3). Fairfax, Va.: George Mason University <https://doi.org/10.1037/t06464-000>
- Tekin, M. S., Özdemir, N., & Şahin, Ş. K. (2021). Effect of attachment styles, emotional regulation difficulty and mindful attention levels on treatment motivation in patients with substance use disorder. *Journal of Substance Use*, 26(4), 441-448.
- Treeby, M. S., Rice, S. M., Cocker, F., Peacock, A., & Bruno, R. (2018). Guilt-proneness is associated with the use of protective behavioral strategies during episodes of alcohol use. *Addictive behaviors*, 79, 120-123. <https://doi.org/10.1016/j.addbeh.2017.12.027>