## Quality of Life among Patients with Substance Induced Psychosis

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# **1.ABSTRACT**

**Background:** Substance Induced Psychotic Disorder (SIP) is the diagnostic term for a specific mental health condition where individuals experience hallucinations, delusions, or both within a period of one month of using or withdrawing from prescription drugs, illegal drugs, and/or alcohol. Patients with substance induced psychosis have poor quality of life (QoL) due to negative effects of substance on all aspect of life as housing, job and social communication. Aim: This study aims to assessing quality of life among patients with substance induced psychosis. **Method:** The study was carried out using a descriptive research design on a convenient sample of 60 patients diagnosed with substance induced psychotic disorder. **Results:** Results of this study revealed that majority of the studied subjects had low level quality of life with Mean±SD (57.22±9.65). Caused that by 55% of sample had single, all studied sample take drugs like bango, hashish, tramadol and alcohol, all sample experience hallucination, 65% experience delusion and 55% has impaired social relation. **Conclusion:** Social skills training program implemented by nurses is recommended in the treatment journey of patients with substance induced psychosis who have poor quality of life.

Key Words: Substance Induced Psychosis, Quality of Life.

## **2.Introduction:**

One of the most serious problems that warrant the attention of the Egyptian government is drug addiction. The problem predominately affects youth, who are at a productive and working stage of their lives. The prevalence of substance use disorder (SUD) recorded highest rate in the last years, The World Drug Report (2022) reported that approximately 284 million persons worldwide struggle with drug use disorders while 1 in 7 people undergo treatment. The prevalence rate of (SUD) across Africa, the Middle East and Asia ranges from 2-5% (Ritchie & Roser, 2022).

The state of the literatures firmly supports a link between drug misuse and the emergence of psychotic symptoms. Numerous studies have demonstrated the psychotomimetic effects of illegal substances such as hallucinogens, cannabis, amphetamines and cocaine (Cooper & Rosenblat, 2017). Prolonged use can lead to transitory psychotic symptoms brought on by severe intoxication, but it can also produce a condition that is strikingly similar to a primary psychotic disorder (Inchausti, Gorostiza, Gonzalez & Oraa, 2020).

Substance induced psychosis disorder (SIPD) is described as delusions and/or hallucinations connected to the biological effects of a substance supported by indication from clinical history and examination findings (American Psychiatric Association, 2018).

The World Health Organization defines quality of life (QOL) as Person's view of their place in life in relation to their objectives, expectations and concerns in the context of the beliefs and worth. Occupation, physical and psychological health, leisure activities, social connection, education, religious views and safety are common measures of life quality (Barcaccia& Barbara, 2013).

According to Rich, Huang& Torregrossa (2020) patients with substance induced psychosis have poor quality of life which may negatively impact aspects of their life like housing, job and social interaction for several reasons. Psychoactive substances have deteriorating effect on sensations, perceptions, mental processes and behavior via altering chemical signaling in the brain. This can cause long-term changes in the brain circuits that control normal learning and memory functions which impact daily living activities (Koob & George, 2015). According to Segrin (2000), quality of life, self-efficacy, passion, happiness, job satisfaction and environmental mastery. These factors have significant positive relationships with various facets of social skills i.e. People with



positive psychological well-being have positive social relation and interactions.

# 2.1Aim of the study

This study aims to assessing quality of life among patients diagnosed with substance induced psychosis in an Egyptian public mental health facility.

## **3.Subjects and methods**

### 3.1Study design

This study employed a descriptive research design.

### 3.2Setting

The study was conducted at in-patient and out-patient clinics of Psychiatric Department at Mansoura University Hospitals.

## 3.3Study Sample

A convenience Sample of 60 patients was fulfilling the following criteria

## **Inclusion criteria**

- 1-All patients with substance induce psychosis diagnosed by psychiatry specialist at the department
- 2- Age from 16 to 60 years old
- 3- Both sexes were included.

### **Exclusion criteria**

- 1- Schizophrenia spectrum and other psychotic disorders with no history of substance use
- 2- Patients admitted for the treatment of substance use disorders with no experience of psychosis.

### **3.4Instruments of data collection**

The following tools were operated to collect data

# Tool (1): Socio-demographic and clinical characteristics sheet:

The researcher established this sheet based on revising recent related literature. It included information about:

- A. socio-demographic characteristics of the studied sample as: age, sex, education, marital condition, residence ... etc.
- B. Clinical data which included: diagnosis, onset of disease, and duration of illness, number of admission admissions to mental health facilities, family history of mental health issues and substance use.

### Tool (2): The drug users quality of life scale (DUQOL)

To evaluate people's quality of life, Hubley, Anita, Lara, and Palepu (2007) developed the Drug Users Quality of Life Scale (DUQOL). It was used to assess a person's contentment with 22 distinct parts of their life as well as their overall quality of life. It was composed of 7-point Likert scales with a range of 1 to 7 (very unhappy to extremely satisfied), producing a typical total score for quality of life, a typical total score for crucial regions, and an average total score for insignificant components. (Hubley et al., 2007). The scale was converted into Arabic language and adjusted by the researcher and the supervisors, and then it was presented to a translation expert to verify its authenticity to suit the Egyptian culture.

## **3.5Ethical consideration**

Permission was acquired from the Research Ethics Committee of Faculty of Nursing, Mansoura University. Informed consent was attained from participants before commencing with data collection. The researcher introduced herself with simple description of the purposes of the study to participants. Confidentiality of participants' information, secure treatment of their data, and their right to withdraw at any time from the study without giving any cause were explained and assured to them.

### **3.6Statistical analysis**

Data was analyzed using The Statistical Package for Social Sciences (SPSS) version 21. Qualitative variables were presented as numbers and percentages. Pearson coefficient test was used to test the correlation between quantitative variables. P value of ( $\leq 0.05$ ) was considered statistically significant.

### 4.Results

Table (1) shows that the age of the studied sample ranges from 18- 55 years with mean $\pm$ SD29.8 $\pm$ 6. Nearly half of the sample (51%) aged between 18-30 years. The entire study was men. According to level of education, more than third of the study subjects (37%) is able to read and write and other had primary and preparatory education, while 33% secondary education and education constituted only 7% of the sample. Regarding marital status, more than half of the study (55%) is single. Nearly 58% of the study lives in rural areas. About 60% of subjects are technical workers. The whole study lives either with their parents or with their partners, half of the study receive financial support and care from their parents.

Table (2) shows that all the studied sample experience hallucinations while

65% of the sample experience delusions. As regard to medication adherence, nearly half of study (40%) was intermittently taking medication with assistance from their care givers. Concerning the type of abused substances, more than quarter of the study (28.3%) was taking Bango and hashish, while 10% used Tramadol and bango.

Table (3) shows that 43.3% of the studied sample neglect personal hygiene while more than half of patients (51.7%) perform personal hygiene with assistance from other. According to eating pattern, more than one third of patients (38.3%) reported that they eat by themselves while 15% refuse to eat. Concerning sleep disturbance, (46.7%) struggle with sleep initiation. Regarding physical illness, (65%) of the sample does not complain of physical illness. About 55% of sample has difficulty in initiating or maintaining relation with others.

Table (5) Illustrates that the mean scores and standard deviation of quality of life (QoL) in the sample were (57.22±9.65). The table also revealed that more than two thirds (61.7%) of the subjects were very dissatisfied and moderately dissatisfied and the rest of sample were slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied with quality of life items i.e. family and partners relation, health care, education, housing, Independence and free choice, money and Feeling good about yourself.

## 5.Discussion

According to Ferraro et al., (2021), a diagnosis of substance-induced psychosis may be made in up to 25% of patients who are admitted to the hospital for the first time with psychosis. Patients with substance induced psychosis have diminution in quality of life due to negative influence of substances on many facets of person's life and well-being.

The socio-demographic characteristics of the present study showed that men comprised the whole study participants. This might be because girls in Egypt are stigmatized more than boys for consuming drugs, making it humiliating for females to visit a mental health facility seeking helps. In relation to this, a study done by Rabie et al., (2020) which showed that about 80% of the studied sample is male and 20% are female. On the other hand, Canto and Botti (2016) revealed that the percentage of addiction was higher in male than female.

The present study revealed that, about half of the study population aged between 18-30years and the rest of the studied subjects between 30-45 years. This may be attributed to peer pressure and increase demands during this period like as need for job, production and marriage which increase stress, tension and people may use drugs a way to relieve stress. This result is consistent with Meulewaeter , Schauwer and Pauw (2022) study which reported that, the age between 20-40 years is the most common age of substance use. On the contrary, Yassa and Badea (2019) study which showed that the most affected age of addiction was 15-21 years old.

Regarding education level, more than two thirds of the studied sample had decreased education level. Therefore, most of the studied patients are technical worker; this may return to effect substance on brain process to learn. This is line with Alfadaly et al., (2018) study, which reported that most of their sample of drug abuse had decreased educational level.

In the light of the socio-demographic findings of this study, more than half of the sample is single which may be due to their young age and the effect of substance use on their social relationship. This explains why half of the sample receives care from their parents. This is consistent with Sprong et al., (2019) study which reported that drug use is highly frequent among single participants.

In relation to the clinical characteristics of the studied patients, it appears that Hashish and bango were the most commonly abused substances by the studied sample, which may be explained by the fact that these substances are easily accessible and it is usually perceived by the majority of lay people as a non-addictive plant. This is in line with Bassiony et al., (2018) findings, which reported that Cannabis was the most commonly misused Substance among Egyptian college pupils.

In the light of the findings of this study, low level quality of life among the studied sample before implementing social skill training program was reported. This might be attributed to the destructive effects of substance use on physical, psychological and social wellbeing besides prolonged use has negative effect on daily living activities. This is consistent with Livingston et al, (2020) who reported that substance use negatively impact all aspects of life and results in declined quality of life. The present study illustrated a negative correlation between personal hygiene, eating pattern and sleep disturbance with quality of life. This result can be interpreted that substance induced psychosis disorder has undesirable effect on activities of daily living. This finding is consistent with the study conducted on Therapeutic Community Center in Brazil by Limberger and Andretta (2018) who asserted that there was negative correlation between quality of life and use substance.

## 6.Conclusion

Based on the findings of the current study, it can be concluded that majority of the studied subjects have low and moderate quality of life.

### 7.Recommendations

Based on the current results the following recommendations are suggested; patients with substance induced psychosis should be encouraged to participate in social skills training program at the time of diagnosis to improve their quality of life and social skills. Further studies are needed about the effective and vital role of social skills in treatment of patients with substance induced psychosis.

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 Table (1): Socio-demographic characteristics of the sample (N=60)

Socio-demographic Characteristics	N (60)	100%
Age (year)	11 (00)	10070
18 less than 30 years	31	51%
30  less than  45	20	10%
Moon+SD	20 8333+6 02303	4770
Sov.	27:8555±0:02505	
Sex	60	1000/
fomale	00	100%
	0	070
Education	14	220/
Illiterate	14	23%
Read and write, primary, preparatory	22	37%
Secondary education	20	33%
Higher (university) education	4	7%
Marital Status		
Single	33	55%
Married	22	36.7%
Divorced	4	6.7%
Widowed	1	1.7%
Occupation		
dose not work	16	26.7%
technical worker	36	60%
Governmental employee	8	13.3%
Residence		
Urban	25	41.7%
Rural	35	58.3%
Patients' care provider		
None	3	5%
Mother or father	30	50%
Wife or husband	13	22%
Brothers or sisters	7	11.5%
Relatives, uncles, aunts	7	11.5%

Table (	2):	Clinical	svmr	ntoms (	experience	d by f	he studied	sample	during	the in-	natient s	stav	(N=60	h.
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Clinical Symptoms	N(60)	100%
Hallucinations		
Does not experience hallucinations	0	0%
Experiences hallucinations	60	100%
type of hallucination: (if present)		
Auditory only-	9	15%
-Visual only	9	15%
Mixed auditory and visual-	42	70%
Delusions		
Does not experience delusion	21	35%
Experiences delusion	39	65%
type of delusion: (if present)	57	0570
-Persecution	10	16.7%
-Grandeur	5	15%
-Doubt	9	8.3%
-Persecution and doubt	15	25%
Adherence to medication		
Non-compliant	12	22%
Compliant	48	80%
Type of compliant:		
-Regular	16	26.7%
- Interrupted	9	25%%
-Taken medication alone	5	8.3%
-Taken medication with someone help	18	40%
Other with smoking		
Bango	14	23.3%
Hashish	13	21.7%
Tramadol	7	11.7%
Bango and hashish	17	28.3%
Tramadol and bango	6	10%
Alcohol with other substance	3	5%

 Table (3): Clinical presentation of the studied sample during admission (N= 60)
 60

Clinical Data (Physical Characteristics(	N=60	100%
Personal Hygiene		
Neglected	26	43.3%
With assistance	31	51.7%
Alone	3	5%
Eating pattern of patient		
Refuse to eat	9	15%
Anorexia	17	28.3%
Eats with assistance	10	16.7%
Eat by himself	23	38.3%
Eat and ask for more	1	1.7%
Sleep problems		
Difficulty in the initiation of sleep	28	46.7%
Difficulty in continuity of sleep	16	26.7%
Wake up early and can't continue sleep	16	26.6%
Social Relationship		
Neither initiates nor maintains relation with others	33	55%
Initiate but not maintain relation with others	20	33%
Initiate and maintain relation with others	7	12%

Quality of life	N(60)	100%
Feeling good about yourself		
Very dissatisfied and Moderately dissatisfied.	24	40%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	26	43.3%
Moderate satisfied and very satisfied.	10	16.7%
Drug treatment		
Very dissatisfied and Moderately dissatisfied.	45	75%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	15	25%
Education		
Very dissatisfied and Moderately dissatisfied.	27	45%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	21	35%
Moderate satisfied and very satisfied.	12	20%
Family		
Very dissatisfied and Moderately dissatisfied.	10	16.7%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	48	80%
Moderate satisfied and very satisfied.	2	3.3%
Friends		60.00/
Very dissatisfied and Moderately dissatisfied.	41	68.3%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied	13	21.7%
Moderate satisfied and very satisfied.	6	10%
Health care		<b>a a a</b> (
Very dissatisfied and Moderately dissatisfied.	15	25%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	25	41.7%
Moderate satisfied and very satisfied.	20	33.3%
Housing	24	100/
Very dissatisfied and Moderately dissatisfied.	24	40%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	26	43.3%
Moderate satisfied and very satisfied.	10	16./%
Money View dispetiefed and Medantals dispetiefed	20	(2.20/
Very dissaushed and Moderately dissaushed.	38	03.3%
Slightly dissatisfied, Neutral (neither dissatisfied nor satisfied) and slightly satisfied.	13	21./%
Noderate satisfied and very satisfied.	0	1370
Neighborhood safety	24	409/
Very ussanshed and Moderately dissanshed.	24	4070
Moderate settisfied and vory settisfied	20	33.370 26.70/
Sov	10	20.770
JCA Very dissatisfied and Moderately dissatisfied	38	63 3%
Viry ussatistical and moderately dissatistical.	16	26 7%
Moderate satisfied and very satisfied	6	10%
Transportation	0	1070
Very dissation	22	36.7%
Slightly dissatisfied Neutral (neither dissatisfied nor satisfied) and slightly satisfied	$\frac{22}{26}$	43 3%
Moderate satisfied and very satisfied	12	20%
Patient Percention OOL	12	2070
Very dissatisfied and Moderately dissatisfied	37	61 7%30%
Slightly dissatisfied Neutral (neither dissatisfied nor satisfied) and slightly satisfied	18	8 3%
Moderate satisfied and very satisfied.	5	0.070
Total drug user quality of life	-	
Mean±SD (57.22±9.65)		

# Table (4): Baseline quality of life scale (before implementing the intervention program) (N=60).

Table (6): Correlation between socio-demographic & clinical characteristics of the sample and quality of life.

	Socio-demographic & clinical characteristics	Pearson correlation(r)	Sig.(p)
	Education	.311*	.016
	Marital status	.185	.157
	Occupation	.177	.177
Quality of life	Age at onset of the disorder	.070	.594
	Substance use	-125	.340
	Personal hygiene	- 060	.648
	Eating pattern	-029	.828
	Social relationship	.019	.884
	Sleep disturbance	-084	.521

\*Correlation is significant at the 0.05 level (2-tailed).