

Lifestyle among Patients with Substance Use Disorder

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Abstract

Background: Substance use disorder is a chronic disease. Managing it after rehabilitation requires lifestyle changes, regular therapist visits and, from time to time, changes in treatment plan. Lifestyle typically reflects an individual's attitudes, way of life, values, or world view. Therefore Lifestyle is the key ingredients that make up a person's health and wellbeing, including (but not limited to) relationships, employment status and accommodation. Aim: This study aimed to assess a Lifestyle of patients with substance use disorder. Design: A descriptive study design was utilized to achieve the aim of this study. Setting: The study was conducted in the outpatient addiction clinic at Al- abbasia Mental Health Hospital. Subject: A purposive sample of 50 adult patients. Tools of data collection: 1) A structured interview questionnaire 2) Semi-structured interview for the brief psychiatric rating scale 3) The substance use disorder patients' lifestyle questionnaire. Results: The results of this study showed there were unsatisfied lifestyle dimensions (diet, sleep exercise and dealing with pain, anger, problems and relationships and effective communication the work environment) among patients with substance use disorder. Conclusion: The current study concluded that unsatisfied lifestyle among patients with substance use disorder. Recommendations: The current study recommended that, Establishing life style modification programs in hospitals, focusing on both short and long-time care for patient with substance use disorder.

Key words: lifestyle, substance use disorder, lifestyle questionnaire.

Introduction

People who are addicted can't stop using drugs even when they really want to. Their priorities change and getting drugs can become more important than their loved ones, responsibilities, and life goals. Substance use disorder can be treated, but recovery can take time—sometimes a long time. Like other chronic diseases such as heart disease, drug addiction often requires treatment throughout a person's life. (Szalavitz, 2017) Substance use disorder is a chronic disease. Managing it after rehabilitation requires lifestyle changes, regular therapist visits and, from time to time, changes in treatment plan. A relapse could be a sign that it's time for a new approach; one of the most effective ways to prevent a relapse is to establish new, healthy habits in recovery – especially ones you are motivated to do and are excited about. You can make a number of changes to promote a drug-free lifestyle (Wagener, Patterson, Saavedra, Houchins, Brande, Villa, Maldonado, Doutaz, Crane, Watkins and Condon, 2018).

Many who develop a substance use problem have depression, attention deficit

disorder, post-traumatic stress disorder, or another mental problem. A stressful or chaotic lifestyle and low self-esteem are also common (Thomas McLellan, 2017).

Recovery is characterized by continual growth and improvement in one's health and wellness that may involve setbacks. Because setbacks are a natural part of life, resilience becomes a key component of recovery.

(Hunsleyand Eric. J, 2018) Lifestyle typically reflects an individual's attitudes, way of life, values, or worldview. Therefore, a lifestyle is a mean of forging a sense of self and to create cultural symbols that resonate with personal identity. Surrounding social and technical systems can constrain the lifestyle choices available to the individual and the symbols she/he is able to project to others and the self (Genova, 2015).

Lifestyle is the controlled behavior and activities of a person. Lifestyles play a role in preventing diseases, which in turn decreases health care expenses .

Lifestyle factors include dieting and fasting, exercising and physical activities, stress level and sleeping, smoking, medications and drugs (*Al-koth, Ibrahim, 2016*).

Significance of the study:

According to the National Survey for Mental Health in Egypt the most prevalent disorders are mood disorders (specifically major depressive disorders) and substance use disorder disorders (43.7% and 30.1% of the sample respectively).

The prevalence of substance use disorder 2%; which is again similar to the results of the national survey of addiction and also explains the importance of the increased attention in planning the services for managing addiction (*Abd-el-Maksoud Rabie, Sabry, M.Shaker, Sally Noby and Ali, 2017*).

Lifestyle is the key ingredient that makes up a person's health and wellbeing, including (but not limited to) relationships, employment status and accommodation. The impact that lifestyle balance can have on SUD cannot be overstated. For example, aspects of lifestyle imbalance, such as unemployment, relationships breakdowns and homelessness, are likely to increase the risk of and exposure to substance use as a coping mechanism (*Davies, Elisonr, Ward and Laudet, 2015*).

Aim of the study:

This study aimed to assess the Lifestyle for patients with substance use disorder.

SUBJECTS AND METHODS:

Research design:

A descriptive exploratory research design was conducted to achieve the aim of this study.

A- Setting:

The data was collected from the outpatient addiction clinic at Al-abbasia Mental Health Hospital.

B- Subject:

The sample was chosen as the number of available patients with substance use disorder of the present study were 50 patients who meet the following criteria:-

- Sex: males and females.
- Age: more than 18 years.
- Different educational levels.

Exclusion criteria:

- Patient who are having psychiatric diagnosis.

D-Tools of data collection

Interview questionnaire tool was developed by the researcher based on literature review to assess-

A-the demographic data of patient with substance use disorder such as (Age, Sex, Education, etc...).

B-The clinical data & patient history of (substance use, dependent substance, previous setbacks, etc....)

C-Semi-structured interview for the brief psychiatric rating scale) that assess the psychiatric symptoms and form consists of 24 symptom constructs, each to be rated in a 7-point scale of severity ranging from "not present" to "extremely severe" if a specific symptom is not rated, it is marked "NA" (not assessed).

Tool (2): The substance use disorder patients' lifestyle questionnaire was developed by the researcher including 103 statements that were grouped into 7 sections that include 1-diet (17 item), 2- sleep & rest (10 item) 3- physical activity (10 item), 4-Dealing with pain and anger (10 item), 5-dealing with problems (12 item), 6- relationships, effective communication (12 item) & assertiveness (20 item) and the last item 7-work environment (12 item). Scoring System for

The scoring system:

The substance use disorder patients' lifestyle questionnaire consists of 103 statements, the response to each statement was frequently (given 3) sometimes (given 2) and never (given 1) The total score for every section was calculated by summing the patient responses, and then the total score for the entire questionnaire were calculated.

The total scores for every section and the total score for the questionnaire were categorized into unsatisfied, moderately satisfied and satisfied as follows.

Table (1): The scoring system of the lifestyle questionnaire.

The lifestyle sections	No. of items	≤50 unsatisfied	>50-≥75 moderately satisfied	>75 satisfied
1-Diet	17	0-17	18-25	26-34
2-sleep & rest	10	0-10	11-15	16-20
3-Physical activity (exercise)	10	0-15	11-15	16-20
4- Dealing with pain and anger	10	0-15	11-15	16-20
5-Dealing with Problems	12	0-12	13-18	19-24
6- Relationships & effective communication,	12	0-12	13-18	19-24
(B) Assertiveness skills	20	0-20	21-30	31-40
7-Work environment	12	0-12	13-18	19-24
Total of lifestyle	103	0-103	104-154	155-206

Administrative design:

The researcher contacted the Research Department, which requested a list of requirements to pass the Ethics Committee of the General Secretariat for Mental Health.

Ethical Consideration:

Prior to conducting the pilot study, ethical approval was obtained from the scientific ethical committee of Faculty of Nursing Ain Shams University. In addition, oral and written informed consent was obtained from each participant prior to data collection. They were assured that anonymity and confidentiality would be guaranteed and the right to withdraw from the study at any time without giving any reason.

Ethics, values, culture and beliefs were respected.

Operational design

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

Phase I: Preparatory phase (data collection).

It includes reviewing of the past and current related literature and different studies covering the various aspects of life styles of patient with substance use disorder by using books, articles, periodicals, magazines and online references to get acquainted with the research problem and develop the study tools. The researcher developed the study tools and Jury Opinionnaire to assess validity was done by 5 experts in nursing and psychiatry and then translated into English language-by-language experts and back translated to ensure its accuracy.

Phase II: (Exploratory phase):

1-Sample size:

The required sample size calculated based on the following equation (Buderer, 1996):

$$n = [(Z_{(\alpha/2)} + Z_{\beta}) / (P_1 - P_2)]^2 \cdot (p_1 q_1 + p_2 q_2)$$

n = required sample size per group

$Z_{\alpha/2} = 1.96$ (The critical value that divides the central 95% of the Z distribution from the 5% in the tail)

$Z\beta = 0.84$ (The critical value that separates the lower 20% of the Z distribution from the upper 80%)

P 1 = prevalence of the drug abuse in intervention group = 41% (Hovhannisyan et al. 2020).

P 2 = prevalence of the drug abuse in intervention group = 59% (Hovhannisyan et al. 2020).

$q = 1 - p$

2-The pilot Study:

A pilot study was carried out after the adaptation of the tools and before starting the data collection. It was conducted on (10%) of the expected sample size to test the clarity, feasibility and applicability of the study tools. In addition, it served to estimate the approximate required time for interviewing the substance user patient as well as to find out any problems that might interfere with data collection. After obtaining the result of the pilot study, there were no modifications of tools. The participants in the pilot study were excluded from the main study sample .

3-Testing the reliability through Cronbach's Alpha reliability analysis

Table (2): Cronbach's Alpha reliability analysis.

Tool	Items	Reliability		Face validity	Internal consistency
		Reliability Coefficient	Cronbach's Alpha		
Lifestyle scale	9	0.69	0.72	94	Good
Brief psychiatric scale	24	0.78	0.84	90	Good

Field work :

The actual process of data collection consumed three months started from September to November 2020, data were collected twice weekly (Saturday, Tuesday).

Before data collection, participating patients were asked to give a written or verbal agreement to participate in the study and the researcher explained the aim and objectives of the study

All patients were informed that participation is voluntary the patient interview questionnaire that includes demographic characteristics, patient's clinical data, and patient's history was filled in by the researcher or the patients member according to their level of education. It takes about 15-20 minutes to be filled in for every patient.

The researcher only to assess the patient lifestyle filled in the substance use disorder patients' lifestyle questionnaire. It takes about 20-30 minutes to be filled in for every patient.

Statistical design

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

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

The following tests were done:

- Chi-square (χ^2) test of significance was used in order to compare proportions between qualitative parameters.

- Pearson and (t) tests were used to compare frequencies and correlation between study variables and using a nova test for measuring quantity.

- Pearson's correlation coefficient (r) test was used to assess the degree of association between two sets of variables

- The confidence interval was set to 95% and the margin of error accepted was set to 5%. So, the p-value was considered significant as the following:

- Probability (P-value)
- P-value <0.05 was considered significant.

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

Limitation of the study:

One of the challenges that the researcher faced in this study was the Corona pandemic

and the consequent difficulty of data collection, which made the researcher obliged to change the study setting from Okasha Psychiatric Center to Abbasiya Hospital

After that, implementing the requirements of the Ethics Committee of the General Secretariat of Mental Health, which took nearly three months, due to the routine.

Results

Table (3): shows that more than half (52%) had 30 > 40 years old, with mean and standard deviation 27.9 ± 5.83 and majority of the study sample was male (80.0%) and 94% from urban area. As regard qualification, slightly less than half (48%) reads and writes and 44% of the study sample had intermediate education and more than two thirds (68%) had free employment. Also, 50% had married. While more than half of patients were living alone

Table (4) reveals that, less than two thirds (62%) of the studied patients began smoking at the age of 10 > 15 years old and began drugs at 15 > 20 years old. Less than half (44%) dependent on hashish and (46%) relapsed for three times. Adding to that, less than half (48%) hospitalized twice.

Table (5): demonstrates that, nearly two thirds of the studied patients (66%) had chronic diseases, majority (87.9%) Hypertension or diabetes, more than half (54.5%) had an effect on their commitment to recovery regime, slightly less than three quarters (74%) had taken

medication to treat the disease and 80% took a medication to treat hypertension or diabetes . More than half (60%) weighted 50-60 kgm. Besides, less than one third, (38%) were between 150-160 cm and 160-170cm.

Table (6) illustrates that, 98%, 64% and 98% of the studied patient had never responded regarding refrain from drinking water during lunch, avoid eating fatty meals that contain fats and oils. And cut food into small pieces in mouth and chew it well before swallowing. Also 66% sometimes Keen to eat foods rich in iron and calcium, Refrain from eating excess sugars and eating before bedtime time enough.

Table (7) represents that, all studied patients (100%) had never response regarding avoid eating meals right before bed, refrain from forcibly sleeping and keen to create a place to sleep 64% never & 36% sometimes perform quiet entertainment to sleep in the event of anxiety during sleep.

Table (8) indicates that, 78% of the studied patient had never response regarding keen to practice walking exercise daily. Similarly, 100% responded never regarding doing flexibility exercises to strengthen the muscles of the upper and lower extremities only 22% sometimes

ke
en to practice walking exercise daily.

Table (9) displays that there was statistical relation between total lifestyle and brief psychiatric symptoms among studied patients.

Table (3): Distribution of the studied patients with substance use disorder according to their sociodemographic characteristics (N=50).

Items	N	%
Age		
18≥30	24	48
31 ≥40	26	52
Mean ± SD	27.9 ±5.83	
Sex		
Male	40	80
Female	10	20
Residence		
Rural	3	6
Urban	47	94
Education level		
reads and writes	24	48
Intermediate education	22	44
University education	4	8
Employment status		
free-employment	34	68
Government work	2	4
Does not work	8	16
Others	6	12
Marital Status		
Single	8	16
Married	24	50
Divorced	17	34
living at home		
Alone	27	54
with family	23	46

Table (4): Distribution of the studied patients with substance use disorder according to their history (N= 50).

Items	N	%
Began smoking at the age of		
10 >15	31	62
15>20	19	38
Mean ± SD	14.46 ±2.25	
Began drug at the age of		
10 >15	21	42
15>20	29	58
Mean ± SD	15.54 ± 2.28	
The dependency		
Hashish	22	44
Heroin	12	24
Tramadol	16	32
Number of previous relapses		
1	2	4
2	20	40
3	23	46
>3	5	10
Number of hospital admissions		
1	4	8
2	24	48
3	21	42
>3	1	2

Table (5): Distribution of the studied patients with substance use disorder according to their clinical data (N=50).

Items	N	%
Do you suffer from chronic diseases		
Yes	33	66
No	17	34
If yes, what are these diseases (N=33)		
Hepatitis Pandemic	4	87.9
Hypertension or diabetes	29	12.1
The presence of any of these diseases affect your commitment to the recovery regime? N=33		
Yes	18	54.5
No	15	45.5
Do you take medications to treat a disease		
Yes	20	74
No	13	26
If yes, what are these medications? N=20		
Medicines to treat hypertension or diabetes	16	80
Medicines to treat the liver	4	20
Current weight approximately		
50-60 kgm	30	60
60-70 Kgm	20	40
Current height approximately		
140-150cm	12	24
150-160 cm	19	38
160-170cm	19	38

Table (6): Distribution of the studied patients with substance use disorder according to their diet as lifestyle (No=50).

Items	Frequently		Sometimes		Never	
	N	%	N	%	N	%
1. Are you able to stick to the recommended diet?	0	0	1	2	49	98
2. Refrain from drinking water during lunch.	0	0	1	2	49	98
3. Avoid soft drinks.	0	0	1	2	49	98
4. drinks caffeinated beverages (such as coffee or nescafe) in the permissible amount.	0	0	1	2	49	98
5. is committed to eating balanced diets that contain protein, carbohydrates, vitamins, etc.	0	0	17	34	33	66
6. Keen to eat foods rich in iron and calcium.	0	0	33	66	17	34
7. Refrain from eating excess sugars.	0	0	33	66	17	34
8. It is committed to eating before bedtime time enough.	0	0	33	66	17	34
9. Avoid eating junk food.	0	0	18	36	32	64
10. Avoid eating fatty meals that contain fats and oils.	0	0	18	36	32	64
11. is committed to dividing the daily meals to 5 or 6 snacks.	0	0	1	2	49	98
12. is committed to eating meals a day at regular times	0	0	1	2	49	98
13. You cut food into small pieces in your mouth and chew it well before swallowing.	0	0	1	2	49	98
14. Takes the time while eating a meal, which lasts up to 30 minutes.	0	0	1	2	49	98
15. Takes care to monitor your weight once a week.	0	0	18	36	32	64
16. Assesses yourself with a prize as much as your commitment to diet periodically.	0	0	18	36	32	64
17. Gets the support of a family member, such as the participation of your diet as a kind of encouragement to continue	0	0	18	36	32	64

Table (7): Distribution of the studied patients with substance use disorder according to their sleep and rest as a lifestyle (No=50).

Items	Frequently		Sometimes		Never	
	N	%	N	%	N	%
18. Go to bed early and at the same time every day.	0	0			50	100
19. Wakes up at the same time every day.	0	0	3	6	47	94
20. Takes the time to sleep from 6 to 8 hours per day.	0	0	17	34	33	66
21. Avoid consuming stimulants, such as coffee, right before bed.	0	0	4	8	46	92
22. Avoid eating meals right before bed.	0	0	0	0	50	100
23. Avoid sleeping during the day.	0	0	4	8	46	92
24. Refrain from forcibly sleeping.	0	0	0	0	50	100
25. Keens to create a place to sleep (reduce lighting and noise).	0	0	0	0	50	100
26. Takes a comfortable sleeping position to reduce episodes of sleep apnea.	0	0	23	46	27	54
27. Perform quiet entertainment such as reading or listening to music or the Qur'an to rehabilitate you to sleep in the event of anxiety during sleep	0	0	18	36	32	64

Table (8): Distribution of the studied patients with substance use disorder according to their physical activity as a lifestyle (No=50).

Items	Frequently		Sometimes		Never	
	N	%	N	%	N	%
28. Adheres to the recommended exercise activities such as walking, strength training and aerobic exercises.	0	0	4	8	46	92
29. Makes sure to assess your physical condition before exercising.	0	0	12	24	38	76
30. Avoids exercising immediately after eating or when you feel tired.	0	0	7	14	43	86
31. Keens to practice walking exercise daily.	0	0	11	22	39	78
32. Sticks to the recommended time for walking for 30 minutes daily.	0	0	16	30	35	70
33. Makes sure to do the walking exercise correctly by taking slow and small steps while walking.	0	0	11	22	39	78
34. Is required to wear a pedometer calculator when you do exercise walking.	0	0	8	16	42	84
35. Is committed to wearing sportswear and shoes when exercising.	0	0	4	8	46	92
36. There are flexibility exercises to strengthen the muscles of the upper and lower extremities.	0	0	0	0	50	100
37. Takes breaks between strength training exercises for 2 to 4 minutes.	0	0	0	0	50	100

Table (9) Relation between total lifestyle and brief psychiatric symptoms among studied patients with substance use disorder at post implementation of the program (No=50).

ITEMS	Total of lifestyle						X2 P value
	Dissatisfied		Moderate N=12		Satisfied N=38		
	N	%	N	%	N	%	
Brief psychiatric symptoms.							X2= 3.23 P= 0.007
Mild	0	0	11	91.7	38	100	
Moderate	0	0	1	8.3	0	0	
Severe	0	0	0	0	0	0	

Discussion

Part I: Demographic & clinical characteristics among substance user's patients.

The findings of the current study revealed that majority of the study sample was male (80.0%) and more than half of the studied sample (52%), were from 30 to 40 years old, and the rest of the sample, which represented (48%), were from 18 to 30 years old with mean and standard deviation (27.9 ± 5.83). This result came in harmony with the study conducted by Mansour *Karajibani, et al.*, (2017) which entitled "Effectiveness of Educational Programs on Nutritional Behavior in Addicts Referring to Baharan Hospital, Zahedan (Eastern of IR Iran)" which show that the subject was Of 36 addict patients, 91.7% were men and 8.3 % women, age ranging from 21 to 56 years.

These results can attribute to young adults are particularly likely to be active substance users and to be affected by substance use problems *AbddelMoneim ,etal* (2020) Older people are typically no exposed as young people to new drugs

As regard qualification, slightly less than half (48%) reads and writes and 44% of the study sample had intermediate education and more than two thirds (68%) had free employment. From the researcher point of view this result may be due to drugs lead to continued absenteeism from work or school, which exposes the drug user to dismissal and the loss of his educational and career future .

These results matched with *AbddelMoneim ,etal* (2020) entitled (Assessment of Addicted Cases Admitted to Addiction Management Unit of Neurology and Psychiatry Hospital at Assiut University) the educational level of subjects was secondary technical schools in 47.5% of cases. University , illiteracy, preparatory, secondary general and primary schools represented 30%, 8.75%, 7.5% 3.75%, and 2.5% respectively..

These results also are in agreement with the result of study conducted by *Li Li and Shengyuan Yu* (2020) entitled "Heroin-induced headache in female heroin addicts" which represents that the educational level of the heroin dependent patients was considerably lower than that of the general Chinese female

population. Quarter of them had a relatively low income.

Regarding the current study represented that less than two thirds (62%) of the studied patients began smoking at the age of 10 > 15 years old and began drugs at 15 > 20 years old. These results also in agreement with the result of study conducted by *Rajabi ,A* (2019) "entitled Association between tobacco smoking and opioid use: A meta-analysis" which represents that opioid use or opioid use disorders were positively associated with earlier age at onset of smoking (pooled OR = 1.66; 95% CI: 1.28–2.16)

Part II: Relations between socio-demographic and clinical characteristics and lifestyles among substance user's patients.

The current study clarified that there was not statistically significant relation between total of lifestyle score and sociodemographic characteristics "Age, Sex, Residence, Education level, Employment status, Marital Status and living at home". also there was no statistically significant relation between total lifestyle and "age of beginning drug, the dependency, number of previous relapses and number of hospital admissions" also, there was no statistically significant relation between total lifestyle and "Suffer from chronic diseases, current weight approximately, Current height approximately . "

From the researcher point of view the chaotic and the unhealthy lifestyle of the substance user patient return to drugs and the addictive behaviors regardless of his age ,sex or any socio demographic characteristics .also the person recovering from addiction finds himself compelled to follow a completely new lifestyle, where his social relationships change in the first place, and he becomes close to the new personalities instead of his past companions, who are often addicts, as well as he may change the place or nature of his work, and adapt to these many and radical changes and this is what the current study has proven.

Conclusion

The current study concluded that there was unsatisfied lifestyle among Patients with substance use disorder.

Recommendations

The result of this study projected the following recommendations:

- Setup educational training programs for addiction nurses to recognize the healthy lifestyle, lifestyle modification programs for patients with substance use disorder.
- Replication of the current study on a larger probability sample is recommended to achieve generalization of the results.

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