

Assessment of stressful life events for patients with substance abuse in Baghdad city

تقييم الاحداث الحياتية الضاغطة للمرضى المتعاطين لمواد الادمان في مدينة بغداد

Ali M. Shakhat, MsC*

Mushatq T. Hashim, M.B, Ch. B, C.A.B. (Psych.)**

* Academic Nurse Specialist, Baghdad Teaching Hospital, Ministry of Health

** Professor and Psychiatrist, College of Medicine, University of Baghdad

المستخلص:

الهدف: تهدف الدراسة الحالية الى تقييم الاحداث الحياتية الضاغطة للمتعاطين لمواد الادمان في مدينة بغداد.
المنهجية: اجريت دراسة وصفية في مستشفى بغداد التعليمي و مستشفى ابن رشد للطب النفسي للمدة من ١ تشرين الثاني ٢٠١٢ ولغاية ٣ تموز ٢٠١٣. أختيرت عينة غير احتمالية " غرضية " من (٦٤) مريض مصاب بسوء استعمال المواد. جمعت المعلومات بطريقة المقابلة شبة الممنهجة من خلال استخدام استبانة مكونة من ثلاثة أجزاء :- المعلومات الديموغرافية و المعلومات الطبية ومقياس الاحداث الحياتية الضاغطة و يشمل (٤٩) فقرة موزعة على ستة أبعاد وهي البعد العائلي والاجتماعي، البعد الصحي، البعد الامني القانوني والاجرامي، بعد العمل والمدرسة، البعد المادي، وبعد تغير محل السكن. تم إجراء دراسة تجريبية لتحديد ثبات الإستمارة الإستبائية باستعمال طريقة (كروناخ الفا) وحددت مصداقيتها من خلال مجموعة مكونة من (١٣) خبير. استخدمت إجراءات التحليل الاحصائي الوصفي و الاستدلالي في تحليل البيانات.
النتائج: أشارت نتائج الدراسة إلى أن جميع افراد العينة (١٠٠%) من الذكور، وما يقارب نصف العينة تتراوح أعمارهم بين (٢٠-٢٩) سنة، (٥٠,٨%) منهم أكملوا الدراسة الابتدائية، متزوجين، عمال غير ماهرين، وأكثر من ثلثي العينة من سكنة المناطق الحضرية. وكذلك اظهرت النتائج ان بعد الحالة الصحية و البعد العائلي والاجتماعي يكون اكثر تأثيرا على المرضى من بقية الابعاد الأخرى.
التوصيات: اوصت الدراسة بضرورة زيادة وعي الافراد حول كيفية التعامل مع الاحداث الحياتية الضاغطة لتقليل من تاثير الاحداث الحياتية الضاغطة على الصحة النفسية.

Abstract:

Objective: The present study aims to assess the stressful life events for patients with substance abuse in Baghdad city.

Methodology: A descriptive study was carried out at (Baghdad teaching hospital and Ibn-Rushed Psychiatric hospital). Starting from 1st of December 2012 to 3rd of July 2013, A non-probability (purposive) sample of 64 patients that diagnosed with substance abuse, the data were collected through the use of semi-structured interview by questionnaire, which consists of three parts sociodemographic data, medical information, and Life events scale consists of 49-items distributed to six domains including, family and social domain, health domain, security, legal and criminal domain, work and school domain, financial domain, and change of residence domain. A pilot study was carried out to determine the questionnaire reliability through the use of (Cronbach alpha). Validity of the instrument was established through penal of (13) experts. Data was analyzed by application of descriptive and inferential statistical methods.

Results: The study findings revealed that all sample (100%) are males, and about half of sample were at age (20-29) years, (50.8%) of them had completed primary school, married, unskilled worker, and more than two third- of them were living in urban area. Health domain and family and social domain had more effects on patients than other domains.

Recommendations: Increase the individual awareness about management of the stressful life events to decrease the impact of life events upon their Psychological health.

Keywords: Assessment, Stressful life events, Substance abuse

Introduction:

Stress plays an important role in our life that produces a negative outcome and makes most common causing of physiological and psycho-pathological disorder depends on some factors related to the stress and to the person ⁽¹⁾.

The term stress has been used to describe a variety of negative feelings and reactions that accompany threatening or challenging situations, however, not all stress reactions are negative. A certain type of stress is necessary for survival, for example, pregnancy is one of the most stressful experiences of life ⁽²⁾.

Stress refers to conditions or events experienced by people during their lives that are not compatible with their current abilities and facilities and therefore it causes change on individual's health ⁽³⁾.

The stress is very significant in the health; therefore it has been the subject of considerable research in the last few years. Any environmental stimulus is considered as stressor ⁽⁴⁾.

The individuals can feel stressed when they exposed to major life events such as the death of parent, illness or change in residence. The stress occurs when individuals perceive an event as overly challenging and beyond their ability to cope. The occurrence of stress is one of the major contributors to mental health difficulties, especially with Iraq environment. These difficulties arise after the U.S.A invasion Iraq in March 2003, such as bombing accident, kidnapping etc. ⁽⁵⁾.

Negative or stressful life events may associate with a variety of health problems. For example, there is abundance of literature that identifies negative or stressful life events as a risk factor for substance abuse and adverse health outcome. Problems that are associated with stressful life events include drug overdose, suicide attempts, and depression ⁽⁶⁾.

The DSM-IV-TR (APA, 2000) identifies substance abuse as a maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to repeated use of the substance. Substance abuse has also been referred to as any use of substances that poses significant hazards to health. The DSM-IV-TR classified substances in eleven category including alcohol, amphetamines, caffeine, cannabis, cocaine, hallucinogens, Inhalants, nicotine, opioids,

phencyclidine, and sedatives, hypnotics, or anxiolytics ⁽⁷⁾. The extant literature shows that stress is a predictor of initial drug and alcohol abuse ⁽⁸⁾. Substance abuse has become one of the main problems affecting the Iraqi population in addition, drugs are affect Iraq due to their direct health effects and many crimes and terrorist attacks are committed under the influence of drugs ⁽⁹⁾.

Methodology:

The present study was carried out through the application of a descriptive study design which uses the assessment approach, and it was conducted on patients with substance abuse in Baghdad city starting from 1st of December 2012 to 3rd of July 2013. Non- probability (purposive) sample of 64 patients diagnosed with substance abuse by psychiatrist selected for the purpose of the study. Data were collected in both (in patients and out patients departments) from Ibn- Rushd Psychiatric hospital and from the Baghdad Teaching Hospital (Psychiatric ward) at the 10th Floor in addition to the outpatient clinic. A questionnaire was developed by researcher for the purpose of the study. It was comprised of three parts; the first part includes demographic data for patients; second part includes medical information and; third part includes stressful life events scale was developed by researcher throughout review of literature and related study it comprised of six domain: family and social domain, health status domain, security, legal and criminal domain, work and school domain, financial domain, and change of residency domain. A pilot study was carried out for the period of 12th to 24th Feb. 2013, conducted on ten patients who were selected randomly seven patients from Ibn-Rushed Psychiatric hospital, and three patients from Baghdad teaching hospital. The validity of the questionnaires was obtained through thirteen expert and the reliability was achieved through the application of Cronbach alpha correlation coefficient ($r = 0.70$) which was statistically acceptable.

Data were analyzed by use of statistical package social sciences (spss.) through following descriptive statistical data analysis approach (frequency, percentages, mean of score, standard deviation), and inferential statistical (Cronbach alpha correlation coefficient, and one way analysis of variance).

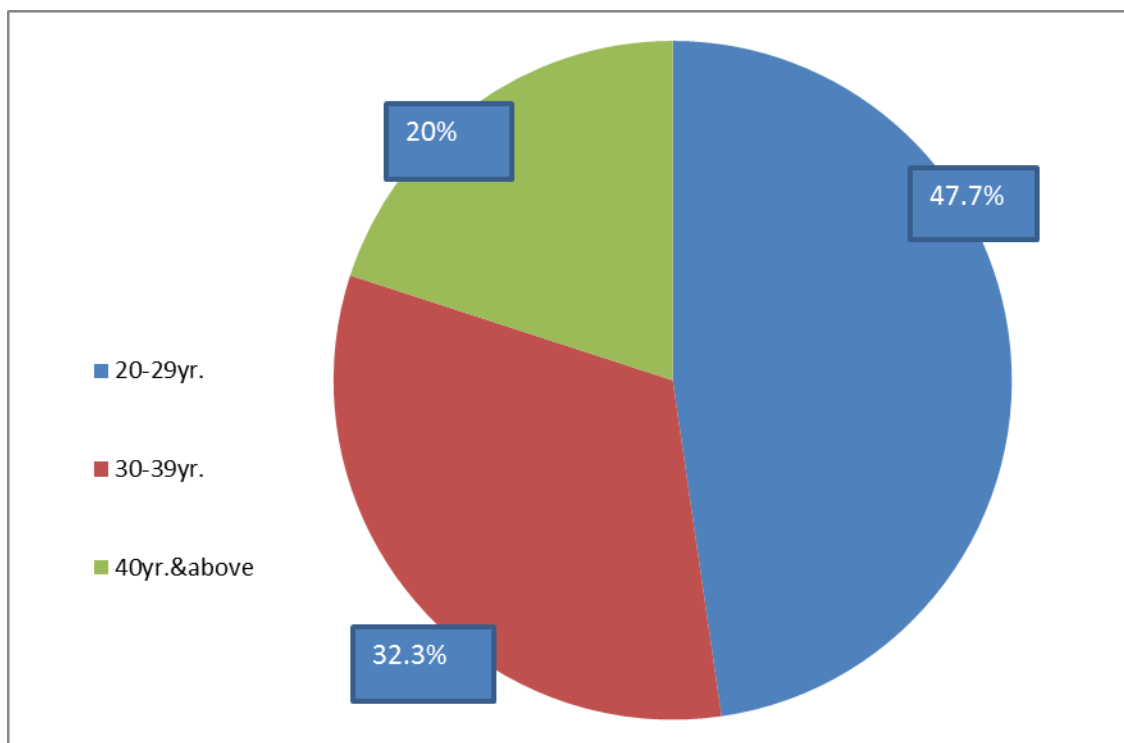
Results:

Figure 1. Distribution of the Study Sample according to age group

The result shows that about half (47.7%) of the sample were below 30 years old, while the lowest number is shown at age group (40 years and above) and they are accounted (20%).

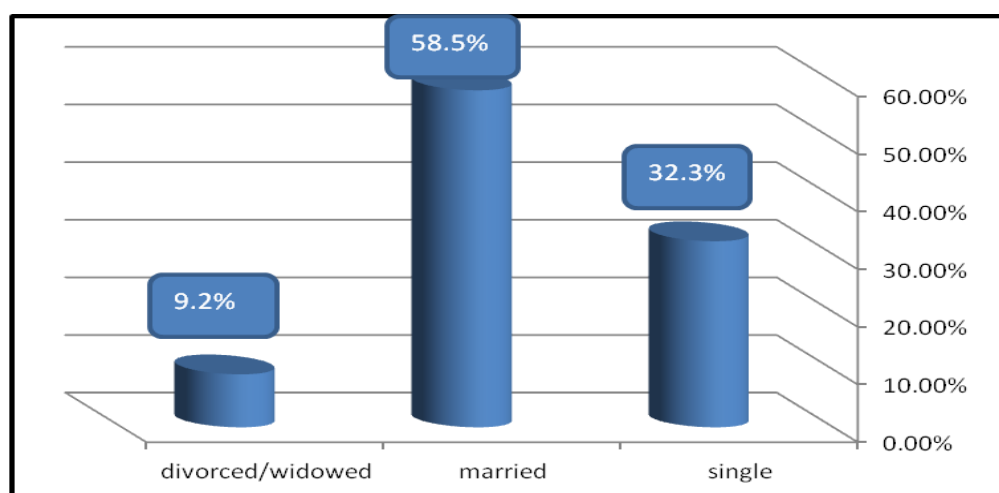


Figure 2. Distribution of the sample according to marital status

The result indicated that more than half (58.5%) of the sample was married.

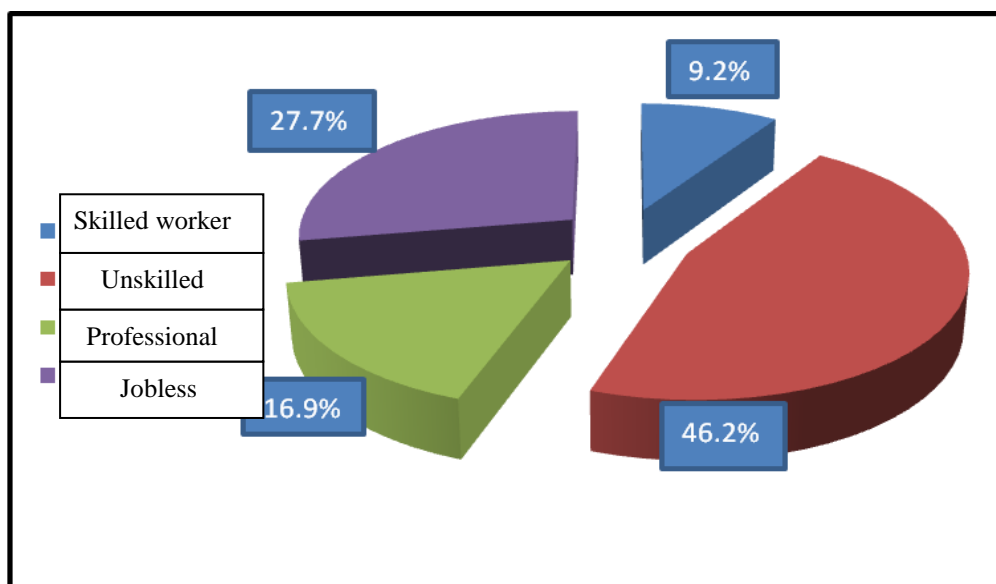


Figure 3. Distribution of the sample according to occupation

The result indicates that about half (46.2%) of the sample are unskilled worker followed by jobless (27.7%) whereas skilled worker had the lowest percentage (9.2%).

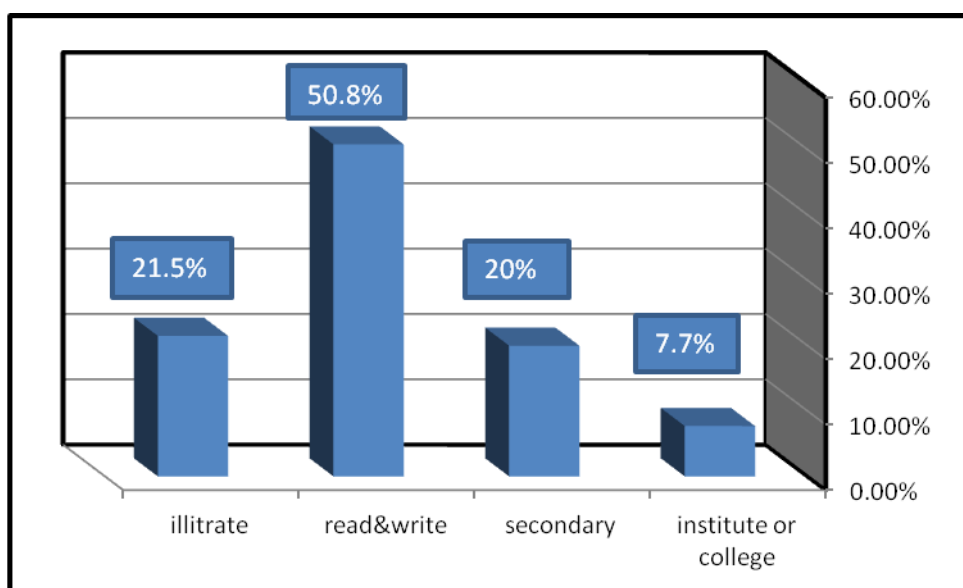


Figure 4. Distribution of the sample according to educational level

The result indicated that more than half (50.8%) of the sample is from educational group of " read and write" followed by group of illiterate (21.5%) then group of secondary level (20%) while lowest percentages of the sample (7.7%) is from educational group of " institute or college".

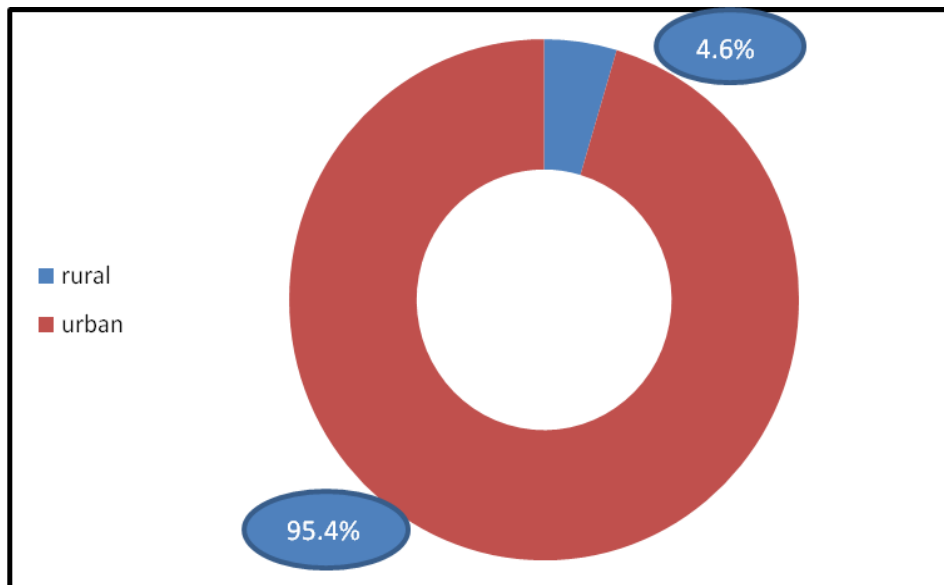


Figure 5. Distribution of the sample according to residence

The result indicates that the majority (95.4%) of the sample are lives in the urban.

Table 1. Family and social domain related stressful life events effect on the substance abuser

List	Family and social domain	Mean	Standard deviation
1.	Death of Spouse	1.14	0.634
2.	Death of one Family Member	1.62	0.056
3.	Death of one relative	1.60	1.170
4.	Death of close friend	1.28	0.875
5.	Divorce	1.42	0.748
6.	Divorce brother or sister	1.31	1.900
7.	Marital Separation	1.35	0.891
8.	Marriage	1.31	0.828
9.	Spinster	1.18	0.610
10.	Failed or end romantic relation	1.49	1.048
11.	Marital reconciliation	1.23	0.702
12.	Family Arguments	2.09	1.027
13.	Son or daughter leave home	1.15	0.643
14.	family member Gain new	1.14	0.348
15.	Trouble with relative of spouse	1.42	0.900
16.	Occasions	1.14	0.634
17.	Change in recreation	1.45	0.811
Average of total domain		1.372	0.813

The results reveals that the more effect of social and family domain related stressful life events on substance abusers is from "family arguments" "death of one family member" and" death of one relative . Whereas the less effect is coming from "family member gain new" ,"death of spouse" and "son or daughter leave home".

Table 2. Health domain related stressful life events effect on the substance abusers

List	Health status domain	Mean	Standard deviation
18.	Personal illnesses	1.72	0.893
19.	Illnesses of any family member	1.49	1.017
20.	Change in sleeping habits	1.89	1.062
21.	Change in eating habits	1.34	0.923
	Average of total domain	1.61	0.975

The result reveals that the more effect of health status domain related stressful life events on substance abusers is from "change in sleeping habits "and" personal illnesses ". Whereas the less effect is coming from "change in eating habits ".

Table 3. Security, criminal and legal domain related stressful life events effect on the substance abusers

List	Security, criminal and legal, domain	Mean	Standard deviation
22.	Unsafe felling	2.18	1.249
23.	Kidnapping or arrest	1.32	0.903
24.	Kidnapping of one family member	1.09	0.522
25.	Kidnapping of one relative	1.11	0.504
26.	Kidnapping of close friend	1.09	0.522
27.	Bombing accident In front you	1.46	1.047
28.	I see killing in front me	1.46	1.062
29.	Menacing to kill	1.34	0.889
30.	Arrest of one family member	1.26	0.834
31.	Arrest of one relative	1.18	0.556
32.	Arrest of closed friend	1.52	0.731
33.	Minor violation of law	1.25	0.751
	Average of total domain	1.35	0.797

The result shows that the more effect of Security, criminal and legal, domain related stressful life events on substance abusers is from "unsafe felling" while lowest effect from Kidnapping of one family member or Kidnapping of close friend".

Table 4. Work and school domain related stressful life events effect on the substance abusers

List	Work and school domain	Mean	Standard deviation
34.	Unemployment	2.05	1.397
35.	Trouble with boss	1.20	0.733
36.	Trouble with co-worker	1.22	0.625
37.	Beginning work	1.06	0.300
38.	Spouse stopping work	1.08	0.444
39.	Changes in type of work	1.12	0.451
40.	Change in work place	1.25	0.638
41.	Change occupation	1.09	0.522
42.	Retired	1.00	0.000
	Average of total domain	1.23	0.568

The results reveal that the more effect of work and school domain related stressful life events on substance abusers are from "unemployment" Whereas the less effect is coming from "retired ".

Table 5. Financial domain related stressful life events effect on the substance abusers

List.	financial domain	Mean	Standard deviation
43.	Change in financial status	1.57	1.089
44.	Taking out a big loan for purchase house or car	1.06	0.390
45.	Taking out a small loan for purchase basic needs	1.23	0.745
46.	loses of some thing	1.35	0.874
Average of total domain		1.30	0.777

The result reveals that more effect of financial domain related stressful life events on substance abusers is from "Change in financial status " Whereas the less effect is coming from "Taking out a big loan for purchase house or car ".

Table 6. Residence domain related stressful life events effect on the substance abusers

No.	Residence domain	Mean	Standard deviation
47.	Transfer to new house	1.31	0.828
48.	Overseas& voluntary immigration	1.22	0.760
49.	Compulsive immigration	1.14	0.634
Average of total domain		1.22	0.740

The results reveal that the more effect of residence domain related stressful life events on substance abusers is from "transfer to new house".

Table 7. Total stressful life events effect on the substance abusers

Stressful life events domains	Mean	Standard deviation
Social and family	1.37	0.818
Health status	1.61	0.795
Security, legal, criminal	1.35	0.797
Work /school	1.23	0.568
Financial	1.30	0.777
Residence	1.22	0.745

This table reveals that the "Heath domain" related to stressful life events gets higher mean (1.61) which indicates that it has more effects on patients with substance abuser followed by "family and social domain" whereas "residence domain" gets lower mean which indicates that it has lower effects on patients with substance abuser.

Table 8. One way analysis of variance in stressful life events of substance abusers with regard to age

variables		Sum of Squares	df	Mean Square	F	Sig.
Family Social	Between Groups	109.999	2	54.999	2.529	0.088
	Within Groups	1348.216	62	21.745		
Health	Between Groups	1.389	2	0.695	0.124	0.883
	Within Groups	346.672	62	5.591		
Security	Between Groups	23.168	2	11.584	1.009	0.371
	Within Groups	711.848	62	11.481		
Work school	Between Groups	25.455	2	12.727	1.961	0.149
	Within Groups	402.299	62	6.489		

Table 8. Continues

Financial	Between Groups	3.087	2	1.544	0.311	0.734
	Within Groups	307.897	62	4.966		
Residence	Between Groups	14.884	2	7.442	6.263	0.003
	Within Groups	73.670	62	1.188		
Total	Between Groups	29.208	2	14.604	0.201	0.818
	Within Groups	4500.577	62	72.590		

df = degree of freedom, Sig.= level of Significance, F.= F-statistics

The result reveals that there is a significant in the residence domain of substance abuser with regard to age significant at $p \leq 0.05$, while there is no significant difference in the other stressful life events domain of substance abuser with regard to age.

Table 9. One way analysis of variance in stressful life events of substance abusers with regard to educational level

variables		Sum of Squares	df	Mean Square	F	Sig.
Family	Between Groups	20.421	3	6.807	0.289	0.833
	Within Groups	1437.794	61	23.570		
Health	Between Groups	7.175	3	2.392	0.428	0.734
	Within Groups	340.887	61	5.588		
Security	Between Groups	43.733	3	14.578	1.286	0.287
	Within Groups	691.283	61	11.333		
Work school	Between Groups	18.312	3	6.104	0.909	0.442
	Within Groups	409.442	61	6.712		
Financial	Between Groups	16.656	3	5.552	1.151	0.336
	Within Groups	294.329	61	4.825		
Residency	Between Groups	0.296	3	0.099	0.068	0.977
	Within Groups	88.258	61	1.447		
Total	Between Groups	120.684	3	40.228	0.557	0.646
	Within Groups	4409.101	61	72.280		

df = degree of freedom, Sig.= level of Significance, F.= F-statistics

The result reveals that there is no significant difference in the stressful life events domains of substance abusers with regard to their educational level at $p \leq 0.05$.

Discussion:

Throughout the course of data analysis the result indicates that all of the study samples (100%) were males. This finding comes along with result obtained from other study which indicated that majority of the study subjects with substance abuse were male^(10, 11). In relation to age most of the study sample were (20-29) years old who were a counted (56.3%). This result is compatible with other study which indicated that more than half patients (56.41%) was in

age level 20-30 years old⁽¹²⁾. Regarding to marital status more than half of study sample (57.8%) were married whereas the divorced and widowed take the lowest percentage in study. This findings supported by result obtained from other study which indicated most of addict patients were married⁽¹³⁾. Relative to educational level result indicates that more half of patient (59.9 %) of study sample with primary level. This finding agrees with other worker he reported that the majority of study sample with low level of

education⁽¹⁴⁾. Concerning to occupation results of study shows (45.3%) of sample were un-skilled worker. This result is agree with result obtain from other study which indicated that majority of the study sample with substance abuse were unskilled workers⁽¹⁵⁾. Regarding to residence area the result shows majority of sample (95.3%) were living in urban area. This result is compatible with another worker he indicated that majority of drug abuser were living in urban area⁽¹⁶⁾.

In regard to family and social domain, the result indicated that the event " family arguments " more effects life event among sample is agree with other study results they found family arguments more prevalent given cause to substance abuse⁽¹⁷⁾.

The result reveals that change in " sleeping habits " more life event among sample than other health problems this result is supported by other workers they found that sleep disturbances was more common life event in addict patients⁽¹⁸⁾.

The finding indicated that the " unsafe felling " more effect life event among patients than other life event, this result agrees with the current security situation according to the researcher's point of view.

The result shows that the event "unemployment" was more effects life event among patients than other stressful life events related to work and school domain, another researcher found there was a link between drug and unemployment which is consistent with the present study findings⁽¹⁹⁾.

The result reveals that the event " change in financial status more effects in the life of sample, this result is supported by other workers they found change in economic status relate to drugs abuse⁽²⁰⁾.

The finding indicated that the "transfer to new house" more life event among patients, this result agrees with the current situation because instability of security according to the researcher's point of view.

The result reveals that the " health domain " gets higher mean (1.61) which indicates that it has more effects on patients with substance abuse followed by" family and social domain" whereas " residence domain" gets lower mean which indicates that it has lower effects on patients with substance abuse. Many researchers had got similar results, they mentioned that the

most stressing life events in the first place their health problems such as a family member's disease, and in the second place the family problems such divorce, arguments and problems between the couple or with their children regarding with alcohol consumption⁽²¹⁾.

The study found significant differences relative to patients' age at $P \leq 0.05$ level with regard to residency domain .This finding is supported by many workers they reported there was a positive and significant association between the life stress and age⁽²¹⁾.

The study found no significant differences relative to educational level at $P \leq 0.05$, this finding is agreed with other workers. They found marital, occupational, and educational status did not reveal any significant difference regarding to substance abuse⁽²²⁾.

Recommendations:

Increase an individual, family and community awareness about stress management to reduce the impact of life events upon their psychological health. Educational programs about substances abuse can be constructed and implemented from primary school to educate the students about the problems that associated with abuse substance.

References:

1. Romosan, F.; Lenci, M. and Stoica, I.: Stressful Life Events and Anxiety Disorders, **T.M.J.**, Vol. (54) , No. (1), 2004, pp:36, 37.
2. Franken, R.: **Human Motivation**, 3rd ed. Belmont, CA: Brooks/Cole Publishing Company, 1994, pp: 54.
3. Larzelere, M.; and Jones G.: Stress and Health, Primary Care: **Clinics in Office Practice**, 2008, P. 839.
4. Caballo, E. and Cardefia, E.: Sex Differences in the Perception of Stressful Life Events, person. **Individual. Diff.** Vol. (23), No. (2), 1997, pp: 353.
5. Lunsky, y.: The Impact of Stress and Social Support on the Mental Health of Individuals, **J salud publica de mexico**, Vol. (50),No.(2), 2008, pp: 151.
6. AL-Hasnawi, S.: Attitude of Residents and General Practitioners Toward Substance Abuse in Iraq. **Medical Journal of Babylon**. Vol.(3), No.(1-2) 2006, p:107.
7. American Psychiatric Association (APA): **Diagnostic and Statistical Manual of Mental**

- Disorder**, 4th ed., revised Washington, 2000 p.52.
8. DeHart, T.; Tennen, H.; Armeli, S.; Todd, M., and Mohr, C.: A diary study of implicit self esteem, interpersonal interactions and alcohol consumption in college students. **Journal of Experimental Social Psychology**. 45(4), 2009,720-730.
 9. Semple, S. J.; Strthdee, A.; Zians, J.; and Patterson, L.: Life Events and Sexual Risk Among HIV-Negative, Methamphetamine Users. **The Journal of Sex Research**, Vol.(47), No.(4) 2010,p:2.
 10. AL-Sayyad, H.: Prevalence of drug addiction among psychiatric out patients. **Journal of Thi-Qar University**. Vol.6, No.2, 2011, P. 109.
 11. Al-khafaji , A .: Substance dependence in Diwania province. **Kufa Medical Journal**. 2010,Vol.13.No.2 ,p. 118.
 12. Ghanem, A; Abdel Rahman, R; mandour, R; and Attia, A: Detection of some substances abuse during daily practice in emergency hospital, Mansoura University. **J. Forensic Med. Clin. Toxicol**. Vol. 9 No. (1). 2010, p. 78.
 13. Mohamed; N. and Thabet, R .: Psychological distress and Social Support among Substance Abused Patients in a Psychiatric Hospital at Assiut Governorate. **Journal of American Science**. Vol.9, No.(1) 2013: P.6-12.
 14. Al-Hamzawi, A .: Prevalence of substance use disorders among prisoners in Diwania governorate, Iraq. **J Fac Med Baghdad**. Vol.(53), No.(1), 2011, p:33.
 15. Ngozi , A; Madubike, O; and Nwagwu .: A Study of the Trend and Extent of Drug Abuse Among Drug Abusers at the NDLEA Counseling Centre, Lagos. **Nigerian Journal of Clinical and Counseling Psychology**. Vol. 7 (1&2): 2001,17-34.
 16. Al-Malekee, R.: **Assessment of the physical, psychological, and social aspects of drugs abuser in Baghdad city**, Master thesis, college of Nursing, University of Baghdad, 2005, P. 80.
 17. Hammerbacher, M .; Lyvers, M.: Factors associated with relapse among clients in Australian substance disorder treatment facilities. **Journal of Substance Use**. Vol. 11 No.(6) 2006,387-94.
 18. Raj, H.; Ray, R . ; and Prakash , B. : Relapse precipitants in drug addiction: assessment in community setting. **Indian Journal of Psychiatry**. Vol.42 No.(3) 2000, p.253.
 19. Hussain , A.; and Al-Aboudi, S.: A study of Addictive Inpatients at Ibn-Rushd Psychiatric Teaching Hospital in Baghdad. **Sci. J. Nursing**, Vol. 20, No. 1-2, 2007, P.92.
 20. Al-Sawaf, F.; Al-Youzbaki. H.; & Al-Nuemai, M.: Women and Smoking: General and Social Perspectives, **Iraqi Journal of Medicine**. Vol.21, Issue:4, 2008, P.308-314 .
 21. Castillo, B; Marziale, M; Facundo, F; and Meza; M.: Stressful Situations In Life, Use And Abuse of Alcohol And Drugs By Elderly In Monterrey, **Mexico. Rev Latino- am Enfermagem**. 16 (especial) 2008:509-16.
 22. Margoob, A.; and Dutta ,S.: Drug abuse in Kashmir - experience from a psychiatry disease hospital. **Indian J psychiatry**. 1993 :163-165.

