

Effect of Emotional Freedom Techniques on Psychological Symptoms and Cravings among Patients with Substance Related Disorders

Selwan M. Balha¹, Omima Abo-Baker², Sahar Mahmoud³

¹(Clinical Instructor of Psychiatric /Mental HealthNursing ,T.I.N, Faculty of nursing, Alexandria University)

²(Prof. of Psychiatric /Mental Health Nursing ,Faculty of nursing, Ain Shams University, Egypt)

³(Prof. of Psychiatric /Mental Health Nursing , Faculty of nursing, Ain Shams University, Egypt)

Abstract: **Background:** Numerous researchers have found a recurrent co-occurrence of craving & psychological distress among addict patients'. Thus, this necessitate applying evidence-based practice like the EFT techniques that are characterized by its simplicity, and used it as a self-help tool for managing craving , and psychological symptoms like anxiety and depression. **Aim:** This study aimed to assess the effect of emotional freedom techniques on psychological symptoms & cravings among patients with substance related disorders. **Design:** Quasi experimental research design was used. **Setting:** The present study was conducted at Elmaamoura Hospital for psychiatric Medicine in Alexandria. **Subjects:** The subjects of the study comprised of 90 patients. **Tools:** Three tools were used:, **Tool I:** Interview questionnaire sheet (Socio-demographic and clinical data),, **Tool II:** Substance – related disorders &Alcohol Cravings (The Penn Alcohol Craving Scale(PACS),**Tool III:** The Symptom Checklist 90 scale (SCL-90 R),**Results:** Applying psycho-educational program of emotional freedom techniques (EFT) significant reducing level of craving, and All statistically significant decrease was observed in the three global indices (GSI,PSDI,PST) and all of the SCL-90 subscales nine dimensions after the sessions , indicating a reduction in psychological distress($P < 0.005$). **Conclusion:** Applying psycho-educational program of emotional freedom techniques (EFT) significant reducing level of craving, significant improvements in psychological symptoms among substance related disorders patients'. **Recommendations:** These results demonstrate that EFT could be an efficient adjunct tool for addiction treatment by reducing the high levels of craving & decreasing severity of the general psychological symptom distress among addict patients.

Keywords: Substance use disorders, Psychological symptoms, Craving, Relapse, Emotional freedom techniques.

I. INTRODUCTION

Substance use disorder is one of the major public serious health problems in all over the world that worry both the people & government . However the epidemiological data expected that in 2012, stuck between 162 million and 324 million people, the percent of population aged 15-64 are in between 3.5, and seven percent, had used an illicit drug mainly a substance belonging to the cannabis, opioids, cocaine or amphetamine-type stimulants group at least once in the previous year ⁽¹⁾.

In different studies substance related disorder has been linked a lot with craving and negative affective status. Craving and negative affect state that playing an important roles in the substance use relapse from more than 40 years ago ^(2,3) . Craving is one of the more prominent features, and intractable problem of addictive behavior that threatens addicts attempting to achieve abstinence. Along with the existence of psychological distress among substance related disorder that also playing an essential role in increasing the risk of relapse ^(2,4) .

In reality, addiction has been characterized as a chronic, relapsing disorder that are characterized by repeated loss of control that produces harmful consequences on the physical, psychological, interpersonal, legal, and financial aspects of an individuals' life". Also, substance abusers frequently report using of substances to self-medicate the psychological symptoms, whereas mental health issues may aggravate substance abuse .On the other hand, addiction treatment is typically delivered in an acute-care format ignoring the long-term, multi-faceted nature of recovery. Consequently, providing an effective intervention inside, and outside the clinical places for decreasing both psychological, and physical considering a high priority in mental health⁽⁵⁻⁷⁾ .

Emotional Freedom Techniques (EFT) is a novel intervention combining elements of exposure therapy, cognitive behavioral therapy, and somatic stimulation. Moreover , EFT being easy to apply, quick to learn, and simple nondrug therapy ,safe , reliable ,and effective to use in and outside clinical settings for reducing wide range of both psychological, and physical⁽⁸⁾.

Research reviews indicate that EFT is an effective treatment for anxiety, depression and other psychological disorders Over five thousand case reports demonstrate the effect of EFT on various psychological and physical symptoms .Research reviews indicate that EFT is an effective treatment for anxiety, depression and other psychological disorders .Over five thousand case reports demonstrate the effect of EFT on various psychological and physical symptoms^[9-11].

Several researches have research indicates that emotional freedom techniques is an effective treatment for stress , anxiety, depression, phobias, posttraumatic stress disorder , cravings of food addiction & drug addiction ,other psychological disorders, pain & physical symptoms⁽¹²⁻¹⁷⁾.

The present study sought to assess the effect of emotional freedom techniques on psychological symptoms & cravings among patients with substance related disorders which may governess the health professional to develop holistic health promotion for patients with addiction.

Significance of study

The relaxation response that delivered by EFT then allows addicts to react to possibly stressful situations more reasonably, and make a rational decision about whether relapsing into their addiction will resolve their issues or ultimately cause them more pain. Emotional freedom techniques (EFT), are so simple, used as a self-help tool which empowers people to enthusiastically add to their own healing and development process, can make the entire recovery process for addict patient both easier and shorter, possibly preventing relapses and giving addicts the way to treat themselves .These techniques don't discredit the medical and psychotherapeutic professions, but relatively serve to contribute to a holistic healing process. Hence, this study assesses the effect of emotional freedom techniques on psychological symptoms & cravings among patients with substance related disorders.

Aim of the study

This study aimed to assess the effect of emotional freedom techniques on psychological symptoms & cravings among patients with substance related disorders.

This aim was achieved through:

1. Assessing patients' substance –related disorders toward craving.
2. Assessing psychological symptoms of patients with substance –related disorders
3. Applying emotional freedom techniques by the investigator.
4. Implementing of emotional freedom techniques to reduce psychological symptoms & cravings among patients with substance related disorders.
5. Evaluating the effect of emotional freedom techniques on psychological symptoms & cravings among patients with substance related disorders.

Research Hypothesis: Emotional freedom techniques will affect positively in reducing psychological symptoms & cravings among patients with substance related disorders.

II. MATERIALS

Research design: A Quasi experimental research design was utilized to fulfill the aim of the current study.

Research setting: The present study was conducted at Elmaamoura Hospital for psychiatric Medicine in Alexandria. It located in Alexandria Governorate, Egypt.

Research subjects

- **Type of the sample:** Convenient sample was used in the current study.
- **Sample Size:** The sample of this study was comprised of 90 (divided into two equal groups =45) with substance – related disorders who meet the following criteria:-
 - Age: 18-45 years old
 - From both sex
 - Educational level: at least read & write.
 - Being detoxified.
 - Do not currently participating in other psychological therapies

Tools for data collection: The data for this study were obtained using the following three tools:

- **Interview questionnaire sheet** that include Socio- Demographic, and History of Substance –Related Disorders Data for patients with substance related disorders.
- **Penn Alcohol Craving Scale (PACS):** This tool was adapted from Witkiewitz et al. (2010) to be used for assessing craving for both alcohol & other drugs for SUDs patients⁽¹⁸⁾.
- **The Symptom Checklist90 (SCL-90 R):** This tool was developed by Derogatis et al (1973), and it was translated to Arabic language by Elbehiry (2005) to be used for to evaluate a broad range of psychological problems and symptoms of psychopathology^(19,20).

Pilot study

It was conducted on 10 adult patients with substance related disorder (10% of the study sample, who were not included in the study sample) from the previously mentioned settings to evaluate the clarity and applicability of the study tools. Those patients were excluded from the actual study sample. The time estimated to fill the questionnaire was ranged from 30 to 35 minute.

The reliability of the scales used in the data collection form through measuring its internal consistency. It demonstrated a good level of reliability for all scales as follows.

Tools	No. of Items	Cronbach Alpha coefficient
substance –related disorders Cravings (PACS)	5	0.835
The Symptom Assessment 90 (SCL-90)	90	0.946

III. FIELD WORK

The study was started and finished through the establishment of the subsequent phases:

A) Assessment and planning phase: he researcher attended the neuropsychiatric outpatient clinic 5 days per week, from 9.00 AM. To 2.00 PM. The data collection lasted over two months starting from the beginning of May to the end of July 2018. A number of interviewed patients per week ranged from 2-3. The researcher interviewed each patient individually and briefly explained the nature and the purposes of the study, and asked for participation. All patients were informed that participation is voluntary.

After obtaining the acceptance of patients' to participate in the present study. Collection of data of (the socio-demographic questionnaire, the Penn Alcohol Craving scale ,and The Symptom Checklist 90 scale. So, each patients need about 25-35 minutes to complete the questionnaire.

B) Implementation phase: The teaching sessions were conducted in a classroom located at the first floor of the psychiatric hospital. The program content and its objectives were developed by the researcher in the form of 22 sessions each session take about 30- 45 minutes according to the patient understanding and span of attention. The implementation of psycho-education Emotional freedom techniques program lasted over a period of 7 months, starting from August 2018 to February 2019 for all family patients under the study.

Every session of the program has general and specific objectives; these were achieved through several teaching methods and media as lecture, group discussion, role playing, booklet, video, and posters.

Program sessions

Introductory Session: During the initial session the researcher explained the program objective.

- **Session (1: 3)** include information about; substance use disorder (SUDs),the primary motives for seeking addiction treatment, detection of the primary motives for seeking addiction treatment,
- **Session (4:10)** include the following; overview knowledge of addiction relapse ,high risk situations for relapse, the stage of relapse ,the different relapse triggers, skills of demonstrating different relapse triggers, carrying out of personal secure alternatives plan for relapse cues, and knowledge about substance craving.
- **Session (11:22)** :include Emotional Freedom Techniques exercises like ; deep breathing technique, progressive muscles relaxation technique, Emotional Freedom Techniques(basic recipe) , Emotional Freedom Techniques(gamut pressure points), knowledge about how to deal with substance craving ,develop a plan of how to deal with substance craving, develop a plan of how to deal with the guilt feeling (toward self),conduct a plan of how to deal with the guilt feeling (toward others), demonstration of how to deal with the with anger feeling, developing assertiveness skills ,implement of a plan for dealing with fear of relapse after dreaming of drug abuse, and finally conduct a plan of how to deal with fear experience when meeting drug abuse friends.

Ending session: Evaluate the effectiveness and the outcomes of the program implementation.

Ethical Considerations:

Prior to study conduction, ethical approval was obtained from the Scientific Research Ethical Committee of the Faculty of Nursing, Ain Shams University. Also, an official permission was obtained from the Ethical Committee of General secretariat for mental health at the Ministry of health in Cairo.

The researcher met the study subjects to clarify the aim of the study and take their *approval (oral consent). The researcher also met the study subjects to clarify the aim of the study and to get their approval to participate.

They were reassured about the anonymity and confidentiality of the collected data, which was used only for the purpose of scientific research. The subjects' right to withdraw from the study at any time was assuring.

IV. RESULTS

Table (1) shows that more than half of the study and control groups (75.6% and 60% respectively) their age was ranged from 18-35 years ,males represent 100%, &95.6% for the study &control group respectively, 8.9%, and 44.5% of both group were single . It's found that more than one half of the patients of the patient in study, and control group (57.7 % , 64.4% respectively) were craft workers. The majority of the studied groups were living in urban areas, more than half of the study and control groups were living with their families, more than one half (53.3%) of the study group had enough income.

Table (2) portrays that the age of the patient at the beginning of the addiction, it's found that more than half of the patient in study group & control group (60 % , and 62.2% respectively)were less than or equal eighteen years old, more than half of the patients stated that curiosity is the main cause for their addiction, and were used from five or more

different types of substances. The majority of the patients were consumed opioids substances. Also, it was observed from the patients' hospital records that tramadol & heroin were the most used substance via this classification.

Table (3) shows that the main Causes of previous relapse according to the patients' perspective is friend companionship, that represent more than three quarter of the study group (77.8%).

Table (4) represents that a continuous increase in the percent of low craving in the study group from pretest to posttest stages; from (60% to 97% respectively). While the percent is fluctuating as follows in the control group from pretest to posttest (64.4% to 62.2% respectively) in posttest stage. There were highly statistically significant difference between pretest and post implementation of psycho education emotional freedom techniques among substance related disorder patients' related to total levels of craving as confirmed by paired t test ($p < 0.001$).

Table (5): represents that the patients in the study group expresses lower total scores of the following symptoms; somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety symptom in the post test compared to pretest stage. This difference is highly statistically significant between pretest and posttest ($p < 0.001$).

Table (6): shows that the patients in the study group reveal lower total scores of the following symptoms; **hostility, phobic anxiety, paranoid ideation, psychoticism, and additional symptom** in the post test compared to pretest stage. This difference is highly statistically significant between pretest and posttest ($p < 0.001$).

Table (7) The results also indicated that the patients in the study group expresses lower positive symptoms total (PST) mean score in the post test ($52.67 + 14.76$) compared to pretest stage ($68.91 + 14.33$). Furthermore, the same table showed that the patients in the study group expresses lower positive symptom distress index (PSDI) symptom mean score in the post test ($1.69 + 0.38$) compared to pretest stage ($3 + 0.5$). Regarding global severity index (GSI), it is observed that patients in the study group expresses lower global severity index (GSI) mean score in the post test ($0.96 + 0.28$) compared to pretest stage ($2.27 + 0.53$).

V. DISCUSSION

Experiencing negative psychological states & craving were playing an crucial role in the substance use relapse⁽⁴⁾. Thus, assessing level of craving, and psychological symptoms among addict patients could be of benefit in improving substance relapse outcomes

The findings of this study (Table 1) revealed that, the preponderance of the patients were less 35 years old. From the researcher point of view, the results of this study can be as a result of many reasons like curiosity, imitate friends, friends offer, family member addiction, overcoming fatigue & hardship at work, and alleged sex fantasy.

This is in line with the studies from Italy, United States, and India which have reported similar observations during this concern^(21,22).

Additionally, the predominate age for the initiation of substance use during this study was lower than or equal 18 years old, that represents 61.1% of the studied patients. From the researcher point of view, adolescents usually look for a sense of self and personal identity, through an intense exploration of personal values, beliefs, and goals. Thus, trying drugs for the first time through curiosity after listening to their teens friend or somebody else describe the way the substance get them feel of being high.

This results is in line with is that the extremely almost like reported in a very another study performed by Kumar, et al (2013)⁽²³⁾. Concerning the gender, all the patients who joined the rehabilitation center were males.

According to researcher opinion, the increased numbers of male patients for this study could be related to, the use of some substances reflected the Egyptian culture acceptance from men in as; it reflects the machismo in some popular regions for the males. Additionally, the male have an informal access to illicit substances than females.

These findings were compatible with a report conducted in USA by substance abuse and mental health services administration (2016) that reported that men have higher rates of use or dependence than women^(24,25). Regarding residence of the studied subjects, the current study pointed out that urban patients establish 82.2%, which demonstrating higher percentage of addiction than those of rural areas.

From the researcher point of view, this result could also be associated with that the higher risk in urban areas may be related to contextual factors, such as neighborhoods with increased level of crime, isolation and customarily stressful life circumstances, which can enhance addiction vulnerability. Thus, it absolutely was reported that Egypt came fifth within the rankings of cannabis consumption, each year⁽²⁶⁾.

These findings were well-matched with a report conducted at USA by Rigg.& Monnat, (2015) that reported that urban areas have higher rates of prescription opioid misuse than rural adults areas⁽²⁷⁾. Moreover, it absolutely was observed that 61.2% of the studied subjects were day workers (craft worker).

This result from the researcher opinion may due to the sort of non-permanent and unstable work, still as results in non-permanent salary and will be stay without a job. On the other hand, people who are jobless or otherwise out of the work force may face financial hardship or just have more unstructured time, either of which might end with a higher tendency to alleged these substances".

These findings were a line with a report carried out in Egypt by Ali, Abdeldayem (2017) that reported that craft workers patients have higher rates among drug Users patients in Egypt. In the same time, these results were kind of like a study in conducted in Egypt by Badel, and Greaney (2013) that titled with "Exploring the Link between Drug Use and Job Status in the U.S". This study reported that there was a link between Drug Use and Job Status^(28,29).

This study shown that, the majority of the patients in studied subjects were consumed opioids substances (table2). These results of the current study from the researcher point of view may be due to Egyptian adolescences alleged o use these substances for treatment of ejaculation, for the extension of orgasm, and increase pleasure. Also, it absolutely was used as painkiller such a large number of craft workers alleged these substances to bear the hardship of this work, feeling of pleasure and luxury

The results of this study were compatible with the report of the Egyptian Ministry of Social Solidarity in 2018, which found that 20% to 40% of patients with substance use disorders (SUD) use tramadol⁽³⁰⁾. Moreover, Egyptian youths with SUD revealed a higher percentage of tramadol use that reached 83%^(31,32).

The studied patients of the recent study shown that addict friends accompaniment was the leading cause for their relapses. From the researcher point of view, these results can be as a result of peer pressure that play an essential role in effecting of a personal act and think in certain manner no matter of individual's personal wishes by way of direct impacts, modeling, and perceived norms. As a consequence, many patients find troubles to replace old friends with new friends because of their addiction stigma. So, it is possible for the patient to return to relapse again more & more times.

This result also kind of like studies conducted by Gaironeesa, et al., (2015), and Bashir, et al., (2015) that found significant relationship between peer pressure and illicit drugs and alcohol^(33,34).

Regarding to the level of craving, the findings of the current study in Figure (1), clarified that, 40% of the studied subjects reported high level of craving at preprogram implementation. According to the researcher point of view, these results may be due to many craving symptoms triggers among those patients that they are usually get suffering when they exposure to situations of their daily routines. In addition to face a variety of physical, emotional and social stressors and in order to be able to make self-identity. All of these situations that are well-defined by their addiction

These results were constant with Kharb, et al., (2018) in study entitled "relationship between Craving and Early Relapse in Alcohol Dependence in India". The study illustrated that patients who had significantly higher craving score at the time of discharge were relapsed⁽³⁵⁾. Moreover, the current study result indicates that there was a significant decrease in craving symptoms at post program implementation

From the researcher point of view, these results might be due to the psycho-education emotional freedom techniques program sessions helped the patients' to identify the high risk situations for relapse, address relapse triggers, carry out of personal secure alternatives for relapse cues, manage their relapse triggers, recognize addiction craving, and distinguish between the different characteristics of craving. Also, handling negative thought and emotion through provision of relaxation technique as an element of emotional freedom techniques to reduce anxiety and stress.

In the same way, a research carried out by Stapleton, et al., (2020) that entitled "online delivery of emotional freedom techniques for food cravings and weight management". The study shown that EFT efficacy in lessening food cravings, psychological symptomatology, body mass index and weight among obese patients from pre to post intervention⁽³⁶⁾.

As regards somatic symptoms, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety symptom this study found to experience significant drops in these symptoms after implementation psycho-educational program of emotional freedom techniques.

From the researcher point of view, these results can be thanks to practice of relaxation techniques as an element of the EFT program were found to be useful in decreasing these symptoms; practicing these technique are playing supportive role for the patient try to effectively resolve emotional issues associated with difficult past events, help the patient to deep and complete acceptance to both feelings and oneself.

Additionally, confronting and managing the anxiety and negative feelings that will face the patients. Also practicing relaxation techniques training, and enhancing problem-focused strategies are thought to produce an efficient reduction on these symptoms among those patients.

Results of this study are within the line with other empirical studies which reported that emotional freedom techniques effective in improvement of a spread conditions associated with somatic, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety symptom that performed by Church, et al., (2016), Stapleton, et al., (2016), Lee, et al., (2015), Stewart, et al., (2013), and Bougea, et al., (2013)^(15,37-40).

Similarly, this result also was in agreement with another study conducted by Church, and David (2019) entitled "Borrowing Benefits: Clinical EFT (Emotional Freedom Techniques) as an Immediate Stress Reduction Skill in the Workplace". This study revealed that implications of EFT help in decreasing a variety of psychological symptoms among working populations⁽⁴¹⁾.

Concerning phobic anxiety symptoms, hostility, phobic anxiety, paranoid ideation, psychoticism, and additional symptom. The findings of the current study represented a major effect on reduction of those symptoms post implementation of EFT program among substance related disorder patients.

The significant decrease of those symptoms in this study could be also attributed from the researcher point of view that EFT program sessions generally focus on enhancing coping skills, and helping the patient to compact their fears (fear of craving, fear of relapse, fear of haven't any sober friends, fear of meeting old friends, fear of guilt). Moreover each round of EFT coupled to with deep relaxation to neutralize anxiety sensation.

This result's congruent with the result of study conducted by Xanthou (2020) entitled with "The Effectiveness of "EFT Emotional Freedom Techniques" in People with Phobias" which shown that the efficiency of EFT for the treatment a spread of phobias patients⁽⁴²⁾. This is in line with several studies that demonstrated a statistically significant decrease in psychological symptoms like phobic anxiety symptoms, hostility, phobic anxiety, paranoid ideation, psychoticism, and additional symptom. These studies conducted by Gaesser, and Karan (2017), clond (2016), and Suh, et al., (2015)⁽⁴³⁻⁴⁵⁾.

Concerning the global indices of distress, the findings of the present study represented a significant effect on reduction of the global severity index (GSI) symptoms post implementation of EFT program among substance related disorder patients.

According to the researcher opinion the result of this study can be due to the psycho-education emotional freedom technique program sessions is effective in addressing psychological problems and decrease the negative emotion, negative energy, along with their negative thoughts and substituted it with positive ones. Moreover, increase awareness about the craving triggers, and high risk situation for relapse, training the patient on the correct ways to practice of relaxation techniques, and enhancing the assertiveness skill among the substance related patients'.

The results of the yielded study is came in agreement with study conducted by Church, et al., (2016), Geronilla, et al., (2014) that EFT represent significant improve in psychological symptoms among studied subjects^(46,47).

VI. CONCLUSION

In the light of the study findings, it can be concluded that there were a significant reduction in craving level & significant improvements in psychological symptoms that include; somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, & psychoticism after implementation of psycho-educational program of emotional freedom techniques (EFT)

VII. RECOMMENDATIONS

In the light of the findings of the present study, the following *are* recommended: Training of all psychiatric team and graduated psychiatric nurses about utilization of psycho-education emotional freedom technique program to help them in practical applications and holistic health promotion for patients with addiction.

REFERENCES

- [1] United Nations Office on Drugs and Crime (UNODC). Global overview of drug demand and supply: latest trends, cross-cutting issues: new york, united nations office on drugs and crime,2018. Retrieved from: <https://www.unodc.org/wdr2018/> (booklet 2).
- [2] Sinha, R. The clinical neurobiology of drug craving. *Current opinion in neurobiology*,2013, 23(4), 649–54. doi:10.1016/j.conb.2013.05.001.
- [3] Ludwig, A. , &Wikler, A."Craving" and relapse to drink. *Quarterly Journal of Studies on Alcohol*,1974, 35(1-A), 108–130.
- [4] Engel ,K., Schaefer,M., Stickel,A., Binder,H., Heinz, A., and Richter, C.The role of psychological distress in relapse prevention of alcohol addiction. Can high scores on the SCL-90-R Predict Alcohol Relapse? *Alcohol and Alcoholism*,2018, 51(1), Pages 27–31, <https://doi.org/10.1093/alcalc/agv062>
- [5] National Institute of Mental Health. Mental Health Information: Brochures and Fact Sheets. Retrieved from: https://www.nimh.nih.gov/health/publications/stress/19-mh-8109-5-things-stress_142898.pdf.
- [6] National Institute on Drug Abuse (NIDA),(2018, February 27).Common Comorbidities with Substance Use Disorders. Retrieved from <https://www.drugabuse.gov/publications/research-reports/common-comorbidities-substance-use-disorders> on 2020, January 1
- [7] National Institute on Drug Abuse (NIDA). Media Guide. Retrieved from <https://www.drugabuse.gov/publications/media-guide> on 2020, January 1
- [8] Craig, G . *EFT Manual (PDF)*. Archived from the original (PDF) on 2016-03-03. Available at : <https://web.archive.org/web/20160303213253/http://www.spiritual-web.com/downloads/eftmanual.pdf>
- [9] Church, D., House, D. Borrowing benefits: Group treatment with Clinical Emotional Freedom Techniques is associated with simultaneous reductions in posttraumatic stress disorder, anxiety, and depression symptoms. *Journal of Evidence-Based Integrative Medicine*,2018, 23, 1-4.
- [10] Church, D., & Feinstein, D. The manual stimulation of acupuncture points in the treatment of post-traumatic stress disorder: A review of Clinical Emotional Freedom Techniques. *Medical Acupuncture*, 2017, 29(4), 1–12. doi:10.1089/acu.2017.1213
- [11] Nelms, J. & Castel, D. A systematic review and meta-analysis of randomized and non-randomized trials of Emotional Freedom Techniques (EFT) for the treatment of depression. *Explore: The Journal of Science and Healing*, 2016,13(6), 416-26.
- [12] Yount, G., Church, D., Rachlin, K., Blickheuser, K., & Cardonna, I. Do noncoding RNAs mediate the efficacy of energy Psychology?. *Global Advances in Health and Medicine*, 2019, 8, 2164956119832500
- [13] Rosyanti, L., Hadi, I., Tanra, J., Islam, A., Hatta, M., Hadju, V., Ibrahim, K. The effectiveness of an SQ-EFT (Spiritual Quranic Emotional Freedom Techniques) intervention in patients with schizophrenia. *Health Notions*, 2018, 2(8), 895-900.
- [14] Church, D., House, D. Borrowing benefits: Group treatment with Clinical Emotional Freedom Techniques is associated with simultaneous reductions in posttraumatic stress disorder, anxiety, and depression symptoms. *Journal of Evidence-Based Integrative Medicine*,2018, 23, 1-4.

- [15] Church, D., & Nelms, J. Pain, range of motion, and psychological symptoms in a population with frozen shoulder: A randomized controlled dismantling study of Clinical EFT (Emotional Freedom Techniques). *Archives of Scientific Psychology*, 2016, 4(1), 38-48.
- [16] Church, D. & Brooks, A. CAM and Energy Psychology Techniques Remediate PTSD Symptoms in Veterans and Spouses. *Explore: The Journal of Science and Healing*, 2014,10(1), 24-33. Doi: <https://doi.org/10.1016/j.explore.2013.10.006>.
- [17] Church, D., Asis, M. A., & Brooks, A.J. Brief Group Intervention Using Emotional Freedom Techniques for Depression in College Students: A Randomized Controlled Trial. *Depression Research and Treatment*, 2012, 1-7. Doi: <http://dx.doi.org/10.1155/2012/257172>.
- [18] Witkiewitz, K., & Bowen, S. Depression, craving, and substance use following a randomized trial of mindfulness-based relapse prevention. *Journal of consulting and clinical psychology*, 2010, 78(3), 362–374.
- [19] Derogatis, L., Lipman, R., Covi L. SCL-90: an outpatient psychiatric rating scale – preliminary report. *Psychopharmacol Bull*, 1973,9: 3–28.
- [20] البحيري، عبدالرقيب. قائمة الأعراض المعدلة ،مصر،القااهرة:مكتبة الأنجلو المصرية،2005، متاح علي : <http://site.iugaza.edu.ps/ihammad/files/2017/02/%D8%A7%D9%84%D9%85%D9%82%D8%A7%D9%8A%D9%8A%D8%B3.docx>
- [21] Bhol J, NayakM, Mahanta A ,Sethi,P., and Dash ,M. Relationship between components of socio demographic profile and substance use among psychiatric patients admitted in a tertiary care hospital- in eastern India. *Galore International Journal of Health Sciences & Research*,2019, 4(3): 116-123.
- [22] Gallo, K. The relationship between age of onset of drug use, drug dependence, mental disorders, and offense type and severity .*Electronic Theses, Projects, and Dissertations*,2015, 131. Available at : <https://scholarworks.lib.csusb.edu/etd/131>
- [23] Kumar N, Kanchan T, Unnikrishnan B, Thapar R, Mithra P, Kulkarni V, Papanna,N, Holla,R. SarathyS . Profile of substance use among patients attending de-addiction Centresin Coastal City of Southern India. *PLoS ONE* ,2013,8(2): e57824. doi:10.1371/journal.pone.0057824.
- [24] Substance Abuse and Mental Health Services Administration (US); Office of the Surgeon General (US). Facing addiction inAmerica: the surgeon general's report on alcohol, drugs, and health [internet]. Washington (dc): us department of health and human services; 2016 nov. Chapter 1, introduction and overview of the report. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK424860/>
- [25] Ali H, Bushra R, Aslam N (2011).Profile of drug users in Karachi City, Pakistan. *East Mediterr Health Journal* ; 17: 41–5.
- [26] ABCD Agency UG. Weed Index 2018 report ,2018. available at :<http://weedindex.io>
- [27] Rigg, K., Monnat, S. Urban vs. rural differences in prescription opioid misuse among adults in the United States: informing region specific drug policies and interventions. *The International journal on drug policy*,2015, 26(5), 484–491. <https://doi.org/10.1016/j.drugpo.2014.10.001>
- [28] Ali A, Abdeldayem.S. The Effect of Expressive Disclosure Writing on Self-Stigma, Depression, and Anxiety among Drug Users in a Governmental Hospital in Egypt: A Non-Randomized SCHOLARLY PAGES Controlled Trial. *J Depress Anxiety Disord* ,2017,1(1):31-40
- [29] Badel A, Greaney B. Exploring the link between drug use and job status in the U.S,2013. Available at : <https://www.stlouisfed.org/publications/regional-economist/july-2013/exploring-the-link-between-drug-use-and-job-status-in-the-us>.
- [30] Abbas,A. Hammam, R.; El-Gohary, S., Sabik, L., Hunter, M. Screening for common mental disorders and substance abuse among temporary hired cleaners in egyptian governmental hospitals, Zagazig City, Sharqia Governorate. *Int. J. Occup. Environ. Med. (The IJOEM)* 2013, 4, 171–213.
- [31] Ali, H. . Retrospective review of tramadol abuse. *Slovenian Veterinary Research*, 2018, 55 ,1-3.doi: 10.26873/SVR-677-2018.

International Journal of Novel Research in Healthcare and Nursing

 Vol. 7, Issue 2, pp: (30-45), Month: May - August 2020, Available at: www.noveltyjournals.com

- [32] Bassiony, M., Salah El-Deen, G., Yousef, U., Raya, Y., Abdel-Ghani, M., El-Gohari, H., Atwa, A. Adolescent tramadol use and abuse in Egypt. *Am. J. Drug Alcohol Abuse*, 2015, 41, 206–211.
- [33] Gaironeesa, H., Shazly, S., Maria, F. *The effect of peer pressure and leisure boredom on substance use among adolescents in low-income Cape Town Communities*, *Social Behavior and Personality: an international journal* 43, 2015.10.2224/sbp.2015.43.1.99.
- [34] Bashir N., Sheikh A, Bilques S, and Firdosi M. Socio-demographic correlates of substance use disorder patients seeking de-addiction services in Kashmir India -A cross sectional study. *British Journal of Medical Practitioners*, 2015, 8(4), 1-4.
- [35] Kharb, R., Shekhawat, L. S., Beniwal, R. P., Bhatia, T., & Deshpande, S. N. Relationship between Craving and Early Relapse in Alcohol Dependence: A Short-Term Follow-up Study. *Indian journal of psychological medicine*, 2018, 40(4), 315–321. https://doi.org/10.4103/IJPSYM.IJPSYM_558_17
- [36] Stapleton, P., Lilley-Hale, E, Mackintosh, G., Sparenburg, E. Online Delivery of Emotional Freedom Techniques for Food Cravings and Weight Management: 2-Year Follow-Up. *Journal of Alternative Complementary Medicine*, 2020, 26(2):98-106. doi: 10.1089/acm.2019.0309. Epub 2019 Nov 25.
- [37] Stapleton, P., Chatwin, H., Sheppard, L., & McSwan, J. The lived experience of chronic pain and the impact of brief Emotional Freedom Techniques (EFT) group therapy on coping. *Energy Psychology: Theory, Research, and Treatment*, 2016, 8(2), 18–28.
- [38] Lee, J. H., Chung, S., & Kim, J. A comparison of emotional freedom techniques–insomnia (EFT-I) and sleep hygiene education (she) in a geriatric population: a randomized controlled trial. *Energy psychology: theory, research, and treatment*, 2015, 7(1), 1–8. doi:10.9769/EPJ.2015.07.01.JL
- [39] Stewart, A., Boath, E., Carryer, A., Walton, I., Hill, L., Phillips, D. & Dawson, K. Can Matrix Reimprinting be effective in the treatment of emotional conditions in a public health setting? Results of a U.K. pilot study. *Energy Psychology: Theory, Research, and Treatment*, 2013, 5(1), 13–31.
- [40] Bougea, A., Spandideas, N., Alexopoulos, E, Thomaidis, T., Chrousos, G & Darviri, C. Effect of the Emotional Freedom Technique on perceived stress, quality of life, and cortisol salivary levels in tension-type headache sufferers: A randomized controlled trial. *Explore: The Journal of Science and Healing*, 2013, 9(2), 91-9.
- [41] Church, D. and David, I. Borrowing Benefits: Clinical EFT (Emotional Freedom Techniques) as an Immediate Stress Reduction Skill in the Workplace. *Psychology*, 2019, 10, 941-952. doi: 10.4236/psych.2019.107061.
- [42] Xanthou, A. The Effectiveness of "EFT - Emotional Freedom Techniques" in People with Phobias. *Dialogues in Clinical Neuroscience & Mental Health*, 2020, 3(1), 5-33
- [43] Gaesser A., Karan O. A randomized controlled comparison of Emotional Freedom Technique and Cognitive-Behavioral Therapy to reduce adolescent anxiety: A pilot study. *J Alt Comp Medicine*, 2017, 23(2):102–108. doi:10.1089/acm.2015.0316. [PubMed] [Google Scholar]
- [44] Clond, M. Emotional freedom techniques for anxiety: A systematic review with meta-analysis. *Journal of Nervous and Mental Disease*, 2016, 204(5), 388–95.
- [45] Suh, J. W., Chung, S. Y., Kim, S. Y., Lee, J. H., & Kim, J. W. Anxiety and Anger Symptoms in Hwabyung Patients Improved More following 4 Weeks of the Emotional Freedom Technique Program Compared to the Progressive Muscle Relaxation Program: A Randomized Controlled Trial. *Evidence-based complementary and alternative medicine : eCAM*, 2015, 203612. <https://doi.org/10.1155/2015/203612>.
- [46] Church D, Sparks T, Clond M. EFT (emotional freedom techniques) and resiliency in veterans at risk for PTSD: A randomized controlled trial. *Explore J Sci Heal*. In press, 2016.
- [47] Geronilla L, McWilliams M, Clond M. EFT (emotional freedom techniques) remediates PTSD and psychological symptoms in veterans: A randomized controlled replication trial. Presented at the Grand Rounds. Killeen, TX: Fort Hood, 2014.

International Journal of Novel Research in Healthcare and Nursing

 Vol. 7, Issue 2, pp: (30-45), Month: May - August 2020, Available at: www.noveltyjournals.com
Table (1): Distribution of the Patients with Substance Related Disorders according to their socio-demographic characteristics.

Variables	study group		Control group	
	N=45	(%)	N=45	(%)
Age(years)				
• 18-35	34	75.6%	27	60%
• >35	11	24.4%	18	40%
Min –Max	19 – 45		18 – 45	
Mean ±SD	32.29 ±6.4		33.87±7	
Gender				
• Males	45	100%	43	95.6%
• Females	0	0%	2	4.4%
Marital status				
• Single	22	48.9%	20	44.5%
• Married	17	37.8%	19	42.2%
• Divorced	6	13.3%	6	13.3%
• Widow	0	0%	0	0%
Educational Level				
• Read &write	8	17.8%	6	13.3%
• Primary	7	15.6%	5	11.2%
• Preparatory	8	17.8%	9	20%
• Secondary or Diploma	12	26.6%	18	40%
• University	10	22.2%	6	13.3%
• Higher	0	0.00%	1	2.2%
Occupation				
• Student	3	6.7%	0	0%
• Employee	2	4.4%	7	15.6%
• day worker (craft worker)	26	57.7%	29	64.4%
• Unemployed	7	15.6%	4	8.9%
• house wife	0	0. %	2	4.4%
• Others	7	15.6%	3	6.7%
Residence				
• Rural	8	17.8%	7	15.6%
• Urban	37	82.2%	38	84.4%
House hold inhabitants				
• Alone	5	11.1%	7	15.6%
• Their family	32	71.1%	28	62.2%
• their friends	0	0%	0	0%
• Hus/Housewife	8	17.8%	10	22.2%
Financial status				
• Enough	24	53.3%	11	24.4%
• More than enough	4	8.9%	3	6.7%
• Not enough	17	37.8%	31	68.9%

Table (2): Distribution of the study subjects according to their substance –related disorders profile characteristics

Variables	study group		Control group	
	N=45	(%)	N=45	(%)
Patients' age at the beginning of addiction				
<12	0	0%	2	4.4%
<=18	27	60%	28	62.2%
<=35	18	40%	15	33.3%
Main cause of substance addictions from patient's perspectives*				
Imitate friends	24	53.3%	26	57.8%
Curiosity	39	86.7%	28	62.2%
familial problem	8	17.8%	4	8.9%
friends offer	17	37.8%	12	26.7%
Emotional problem/scholastic failure	2	4.4%	5	11.1%
Death of one or both parents	3	7%	10	22.2%
exposure to excessive cruelty of the family	3	7%	3	6.7%
Unemployment	1	2.2%	3	6.7%
Excessive demonstration	8	17.8 %	4	8.9%
addiction to a family member	9	20.0%	6	13.3%
Psychological problem	0	0%	6	13.3%
Free time	2	4.4%	9	20%
physical pain	0	0.0%	6	13.3%
overcome fatigue and hardship	8	17.8%	10	22.2%
Other(sex)	9	20%	8	17.8%
Number of Substances				
1	0	0%	4	8.90%
2	2	4.40%	6	13.30%
3	5	11.10%	4	8.90%
4	8	17.80%	6	13.30%
5&more	30	66.70%	25	55.60%
Types of substance used*				
Substances1: Alcohol &Alcoholic beverage	43	95.6%	31	68.9%
Substances2: cannabis such as had hish&bango	43	95.6%	41	91.1%
Substances3 : opioids , heroin, tramadol, codeine ,nopain , Codaphen-N, tussilar,&Tussivan	43	95.6%	42	93.3%
Substances4: benzodiazepines e.g. Rohphenol , Calmipam, Apetryl, Zanax - Valium – Ativan	37	82.2%	33	73.3%
Substances5 : amphetamines e.g. Max , Ivansl ,cocaine , Ritalin, Ephedrine derivatives	5	11.1%	9	20%
Substances6 : volatile substances	30	66.7%	23	51.1%
Substances7 : muscle relaxants e.g. Sardalod	25	55.6%	23	51.1%
Substances8 : Hallucinogenic e.g. (Mescaline - L.S.D)	38	84.4%	26	57.8%
Substances9 : Mescaline, & Thiopental	8	17.8%	28	62.2%
Substances10: Psychotropic drugs, acetone , nicotine , Cogentin , Migranil, Voodoo, Astrox).	18	40.0%	23	51.1%

*The answer isn't mutually exclusive

International Journal of Novel Research in Healthcare and Nursing

Vol. 7, Issue 2, pp: (30-45), Month: May - August 2020, Available at: www.noveltyjournals.com

Table (3): Distribution of the study subjects according to their Causes of previous relapse according to the patients' perspective

Variables	study group (n=45)		Control group (n=45)	
	N	%	N	%
Causes of previous relapse according to the patients' perspective *				
• Familial causes	12	26.7%	14	31.1%
• educational causes	1	2.2%	0	0.0%
• Medical counseling causes	2	4.4%	6	13.3%
• free time causes	5	11.1%	15	33.3%
• social causes	4	8.9%	8	17.8%
• emotional causes	3	6.7%	6	13.3%
• Extra expenses causes	1	2.2%	2	4.4%
• inferiority	1	2.2%	4	8.9%
• Bad friends (addict friends)	35	77.8%	15	33.3%
• Craving	21	46.7%	16	35.6%
• feeling of boredom	17	37.8%	18	40%
• Others (sex)	10	22.2%	5	11.1%

*The answer isn't mutually exclusive

Table (4): Total levels of craving pre, and post implementation of psycho education emotional freedom techniques among substance related disorder patients'

Craving	Study group (N=45)				Control group (N=45)				
	High level		Low level		High level		Low level		
	N	%	N	%	N	%	N	%	
Pre Study	18	40%	27	60%	16	35.6%	29	64.4%	
Post Study	1	2.2%	44	97.8%	17	37.8%	28	62.2%	
Craving	Study group (N=45)				Control group (N=45)			T-test	
	Mean	±	SD		Mean	±	SD	T	P-value
Pre	15.24	±	5.29		12.24	±	6.333	2.427	0.948
Post	3.84	±	2.01		12.93	±	6.07	9.394	0.757
Paired t-test									
T	16.735				1.516				
P-value	<0.001**				0.254				

*significant at P≤0.05

** High Significant at P < 0.005

Table (5): Total scores of somatization, obsessive-compulsive, interpersonal sensitivity, depression, and anxiety symptom pre, and post implementation of psycho education emotional freedom techniques among substance related disorder patients'

Somatization	Study group (N=45)		Control group (N=45)		T-test	
	Mean	± SD	Mean	± SD	t	P-value
Pre	1.89	± 0.98	1.47	± 0.84	2.218	0.029*
Post	0.61	± 0.40	1.73	± 0.80	8.350	<0.001**
Paired t-test						
T	8.111		1.515			
P-value	<0.001**		0.133			
Obsessive-compulsive	Mean	± SD	Mean	± SD	t	P-value
Pre	2.41	± 0.61	2.05	± 0.75	2.481	0.015*
Post	1.14	± 0.42	2.24	± 0.70	9.018	<0.001**
Paired t-test						
T	11.455		1.247			
P-value	<0.001**		0.216			
Interpersonal sensitivity	Mean	± SD	Mean	± SD	t	P-value
Pre	2.28	± 0.73	1.96	± 0.74	2.065	0.042*
Post	1.17	± 0.43	2.18	± 0.69	8.292	<0.001**
Paired t-test						
T	8.837		1.425			
P-value	<0.001**		0.158			
Depression	Mean	± SD	Mean	± SD	t	P-value
Pre	2.70	± 0.67	2.26	± 0.78	2.809	0.006*
Post	1.16	± 0.41	2.37	± 0.75	9.527	<0.001**
Paired t-test						
T	13.156		0.666			
P-value	<0.001**		0.507			
Anxiety	Mean	± SD	Mean	± SD	t	P-value
Pre	2.45	± 0.70	1.89	± 0.78	3.595	<0.001**
Post	0.99	± 0.41	2.14	± 0.75	8.986	<0.001**
Paired t-test						
T	12.058		1.553			
P-value	<0.001**		0.124			

*significant at P≤0.05

** High Significant at P < 0.005

Table (6): Total scores of hostility, phobic anxiety, paranoid ideation, psychoticism, and additional symptom pre, and post implementation of psycho education emotional freedom techniques among substance related disorder patients'

Hostility	Study group (N=45)		Control group (N=45)		T-test	
	Mean	± SD	Mean	± SD	t	P-value
Pre	2.21	± 0.85	1.87	± 0.91	1.834	0.070
Post	0.85	± 0.49	2.10	± 0.91	8.105	<0.001**
Paired t-test						
T	9.248		1.200			
P-value	<0.001**		0.233			
Phobic anxiety	Mean	± SD	Mean	± SD	t	P-value
	Pre	1.44	± 0.93	1.02	± 0.89	2.199
Post	0.52	± 0.43	1.22	± 0.88	4.791	<0.001**
Paired t-test						
T	6.012		1.089			
P-value	<0.001**		0.279			
Paranoid ideation	Mean	± SD	Mean	± SD	t	P-value
	Pre	2.55	± 0.71	2.00	± 0.98	3.048
Post	1.12	± 0.47	2.29	± 0.83	8.237	<0.001**
Paired t-test						
T	11.265		1.531			
P-value	<0.001**		0.129			
Psychoticism	Mean	± SD	Mean	± SD	t	P-value
	Pre	2.08	± 0.53	1.68	± 0.84	2.760
Post	0.96	± 0.40	1.94	± 0.74	7.808	<0.001**
Paired t-test						
T	11.342		1.596			
P-value	<0.001**		0.114			
Additional	Mean	± SD	Mean	± SD	t	P-value
	Pre	18.20	± 8.70	15.78	± 5.92	1.543
Post	7.49	± 3.03	15.73	± 5.37	8.966	<0.001**
Paired t-test						
T	7.797		0.037			
P-value	<0.001**		0.970			

*significant at P≤0.05

** High Significant at P < 0.005

International Journal of Novel Research in Healthcare and Nursing

Vol. 7, Issue 2, pp: (30-45), Month: May - August 2020, Available at: www.noveltyjournals.com

Table (7): The global indices of distress (GSI, PSDI, PST) pre, and post implementation of psycho education emotional freedom techniques among substance related disorder patients' (N= 90, Study group= 45, Control group= 45)

(Total score)GT	Study group (N=45)			Control group (N=45)			T-test	
	Mean	±	SD	Mean	±	SD	T	P-value
Pre	204.56	±	47.89	166.96	±	60.7	3.262	0.002*
Post	86.84	±	25.46	185.04	±	55.48	10.792	<0.001**
Paired t-test								
T	14.559			1.476				
P-value	<0.001**			0.144				
Positive Symptoms Total (PST)								
Pre	68.91	±	14.33	60.73	±	14.72	2.67	0.008*
Post	52.67	±	14.76	68.31	±	11.87	5.539	<0.001**
Paired t-test								
T	5.296			2.688				
P-value	<0.001**			0.009*				
Positive Symptom Distress Index(PSDI)								
Pre	3	±	0.5	2.73	±	0.69	2.161	0.033*
Post	1.69	±	0.38	2.69	±	0.63	9.073	<0.001**
Paired t-test								
T	13.876			0.27				
P-value	<0.001**			0.788				
Global Severity Index (GSI)								
Pre	2.27	±	0.53	1.86	±	0.67	3.262	0.002*
Post	0.96	±	0.28	2.06	±	0.62	10.792	<0.001**
Paired t-test								
T	14.559			1.476				
P-value	<0.001**			0.144				

*significant at P≤0.05

** High Significant at P < 0.005