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Abstract

Background: Addiction is a major problem in Egypt, due to the rapidly growing and changing patterns of substance use considering its effect on quality of life. Aim of the study was to assess Quality of Life (QoL) and Coping Strategies among addict patients and the relationship between them. A descriptive correlational design was used in this study. This study was conducted at Minia Psychiatric Health and Addiction Hospital in Inpatient Unit and Outpatient Clinic. Four tools were used to measure the variables of this study. This included Personal & Medical data tool, Drug Abuse Screening Test (DAST-20), Short Form -36 Health Related Quality of Life questionnaire (SF-36) and Cope Inventory. The study sample comprised of 100 drug addict patients whose age ranged between >19 and 54 years. The main results of this study revealed that, total mean score of the Quality of Life was 58.02 ± 16.3 which indicated poor Quality of Life and the mean score of Coping Strategies was 119.4 ± 216 which also indicates moderate use of effective coping. There were significant negative correlations among Drug Abuse Screening Test and Quality of Life and Coping Strategies among addict patients. There was a significant positive correlation between QoL and Coping Strategies among patients. A psycho educational program is recommended to help drug addict patients cope effectively with stress and improve their quality of life.

Key words: Drug addiction, Addict patients, Quality of life, Coping strategies.

Introduction

Addiction is one of the most dangerous phenomena in human societies in the present era. Addiction is a condition in which the body must have a drug to avoid physical and psychological withdrawal symptoms. Addiction is so widespread in the world that it has turned into a chronic and social disease and has threatened social security⁽¹⁾.

Drug addiction, including the consumption of alcohol, tobacco smoking, cannabis use, and the non-medical use of medications and injecting opioids by people who inject drugs, are common especially among adolescents and young adults⁽²⁾ Society and acquaintances play a part in the increase abuse of drugs. In some social groups, drug abuse is a prerequisite for being accepted by others. Globally alcohol and tobacco are the most commonly used drugs⁽³⁾. In this respect, World Health Organization (WHO 2015) reported that 8.3% of the world's population aged 15 years and over consumed alcohol in the previous 12 months⁽⁴⁾.

World Health Organization (WHO) defined quality of life as "people's perception of life conditions in terms of the culture and value system, which is concerned with goals, expectations, criteria and important affairs⁽⁵⁾. Assessing the Quality of life (QOL) with drug users should be central to psycho-social approaches to understand drug use patterns and to subsequently address patterns of harmful use. (QOL) indicators have been used to assess health outcomes. Studies have indicated that, physical and psychological consequences of addiction result in a decrease in quality of life and life satisfaction of the addicts. Addicts have different biological, psychological, social and emotional requirements, which are different from those of healthy people⁽¹⁾.

Stress has been mentioned as an important and determinant factor in tendency toward substance abuse⁽⁶⁾. Stress coping strategies are the processes an individual uses to manage stressful stimulators⁽⁷⁾. In this respect, Nagase defined coping as a psychological procedure which is regarded as an individual's cognitive and behavioral efforts

to resolve stressful conditions. The initial mechanism involved in addiction and other dysfunctional attitude is coping with stressors⁽⁸⁾.

Nurses play an important role in the prevention of drug addiction. They can prevent non users from initiating use and prevent individuals who are experimenting with substance from progressing to chronic and abusive use of substances. Focus group was conducted between community and psychiatric nurses on drug addiction yielded culturally sensitive information which is useful in preventing drug abuse⁽⁹⁾.

Significance of the Study

Egypt's National Council for Fighting and Treating Addiction (UNODC, 2015), reported that, the percentage of drug users reached 2.4% of Egypt population. But the United Nations has declared that, number of addict patients have been increased to reach 5 millions of total population who reported that, addiction causes various social, mental and physical problems in addict patients. Also, addiction causes severe reduction in quality of life⁽¹⁰⁾.

Coping strategies influence how people deal with stressors in their lives, both in positive and negative ways. The addict will have developed some poor coping skills prior to and during their addiction. If they continue to rely on their old patterns for dealing with challenges, life will remain unsatisfying.

In Egypt, a few researches in this area revealed an apparent lack of psychiatric nurses' awareness of substance abuse, which should be one of psychiatric nurses' specialties. The current study could be helpful in gaining data about quality of life and coping strategies among addict patients to assist nurses' in their management properly.

Aim of the Study

Aims of the current study were to:

1. Assess quality of life and coping strategies among addict patients.
2. Determine the relationship between (QOL) & coping strategies among addict patients.

Subjects and method

Research Design:

A descriptive correlational research design was used to achieve the aims of the current study.

Setting

This study was conducted in Minia Psychiatric Health and Addiction Hospital at Inpatient and Outpatient clinic. The capacity for the hospital is 53 beds. The hospital serves Minia governorate and its districts.

Sample:

A purposeful sample of 100 male and female addict patients divided equally into 50 cases from inpatient and 50 cases from outpatient clinic were included in the study.

Inclusion Criteria:

- Both genders.
- Age ranged from 18-55 years old.
- Different types of drugs addiction.
- History of addiction less than 10 years.

Exclusion Criteria:

- Patients who are diagnosed as mentally retarded.
- Patients with dual diagnosis.
- Alcoholics only.

Data Collection Tools:

Four tools were used for collecting data in this study which revised, translated and back translated by five experts in psychiatric nursing and medicine. First tool consists of:

1. Part (I) Personal Data:

Developed by the researcher which included: personal data such as patient age, gender, level of education, occupation residence, income, religion, and media at home.

1- Part (II) Medical Data:

Developed by the researcher and revised by supervisors which include: Diagnosis, history of addiction, substance used by the patient, method of administration chronic disease, hospitalization, cause of abuse, age at onset, duration of addiction.

2- Drug Abuse Screening Test (DAST-20) (Harvy & Skinner 1982) ⁽¹¹⁾.

Questions concern information about potential involvement with drugs.

In the statements "drug abuse" refers to (1) the use of prescribed or over the counter drugs in excess of the directions and (2) any non-medical use of drugs. The various classes of drugs may include: cannabis (e.g. marijuana, hashish), solvents, tranquilizers (e.g. Valium), barbiturates, cocaine, stimulants (e.g. speed), hallucinogens (e.g. LSD) or narcotics (e.g. heroin).

Scoring system:

A score of "1" is given for each yes response, except for items 4, 5, and 7, for which No response is given a score of "1." Based on data from patient population, cut off scores of 6 through 11 are considered to be optimal for screening for substance use disorders. Using a cut off score of <11 more accurately identifies the patients who do not have a substance use disorders (Harvey A. Skinner 1982).

3- Short Form -36 Health Related Quality of Life questionnaire (Jhon .et.al., 1992) ⁽¹²⁾:

It was prepared by John et al., (1992) which considered a reliable and values tool for measuring health related quality of life the short form (SF) 36 is the most widely used health-related quality of life (HRQoL) survey instrument in the world today. It is comprised of 36 items that assess seven health concepts; physical functioning, role limitations caused by physical health problems, role limitations caused by emotional problems, social functioning, emotional well-being & energy, fatigue, pain, and general health perceptions. Exploring these seven quality of life indicators of the SF-36 (Short Form -36 questionnaire) helps to measure health-related quality of life in addict patients.

Scoring system:

The SF-36 consists of seven subscale scores. Each scale is directly transformed into a 0-100 scale on the assumption that each question carries equal weight. The lower the score the more disability. The higher the score the less disability and better functioning i.e., a score of zero is equivalent to maximum disability and a score of 100 is equivalent to no disability.

4-COPE Inventory (Carver 1997) ⁽¹³⁾:

Multidimensional coping inventory contains 53 items to assess the different ways in which people respond to stress. Five subscales each of them consists of four items measure conceptually distinct aspects of problem focused coping (active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support), five subscales measure emotion -focused coping (seeking emotional & social support, positive reinterpretation, acceptance, denial, turning to religion) and three scales measure coping response that, gradually are less useful dysfunctional attitudes (focus on and venting of emotions, behavioral disengagement, mental disengagement). Patient's responses indicated how frequently they use each coping strategy.

All answers are scored on a 4-point scale ranging from "Don't do this at all" to "Do this a lot." The lower the total score "53" to "106" indicates less use of effective coping leads to dysfunctional attitude such as drug addiction. Score from "107" to "160" is considered moderate use of effective coping which usually represent majority of human responses (emotion focused coping). The higher the score from "161" till reach 212 indicates optimal use of effective coping strategies (problem focused coping).

Procedure:

An official permission was granted from the director of Minia Hospital for psychiatric health and addiction. Addict Patients were interviewed on an individual bases to explain the nature and purpose of the current study. Also, oral consent was taken from patients and written consent was taken from patients' committee of the psychiatric patients' rights in the hospital.

Pilot Study:

A pilot study was conducted at the beginning of the study. It included 10% of the total sample (5 inpatient cases and 5 outpatient cases) to investigate the data collection tools were checked for their content validity, clarity and feasibility. No modifications were done. One hour was the

time needed to fill tool. Finally cases of pilot study were included in the study.

Data collection:

Data were collected within 6 months from June 2016 to November 2016. Structured interviews conducted in one room of the in-patient department and in the out-patient rest place; questions were asked and recorded by the investigator.

Ethical Consideration:

1. A written initial approval was obtained from the research ethical committee of the Faculty of Nursing, Minia University. Oral consent was obtained from each participating patient after explaining the nature and benefits of the study such as information during assessment about healthy

ways of coping. Each assessment tool was coded without writing patients name on it for the purpose of privacy and confidentiality. Patients were assured that they could withdraw at any time from the current study without any effect on their treatment and care.

Statistical Analysis:

Data were tabulated and analyzed by using “statistical package for the social science “(SPSS) version 22. The content of each tool was analyzed, categorized and then coded by investigator. Descriptive statistics were calculated as frequencies, percentage, mean and standard deviation. Chi square was also used. Probability (P-value) is considered significant at or less than 0.05 and considered highly significant at or less than 0.001.

Results:

Table (1): Distribution of the studied patients according to mean scores of drug abuse screening test (DAST-20) (n=100):

| Drug abuse screening test (DAST-20) | In patient N=50 | | Out patients N=50 | | Total | |
|--------------------------------------|--------------------|-------|----------------------|-------|---------|-------|
| | No. | % | No. | % | No. | % |
| Range of abuse | 6-17 | | 1-19 | | 1-19 | |
| Mean ±SD | 11.8±2.2 | | 8.04±4.2 | | 9.8±3.9 | |
| (didn't have substance use disorder) | 15 | (30%) | 37 | (34%) | 52 | (52%) |
| (had substance use disorders) | 35 | (70%) | 13 | (26%) | 48 | (48%) |

Table (1); shows that, mean score of drug abuse was 9.8±3.9. Also, it was found that, more than half (52%)

didn't have substance abuse disorder while, 48% had substance use disorder.

Table (2): Distribution of the studied sample according to the mean scores of short form -36 of quality of life (SF- 36 QoL) (n=100):

| QoL | In patient N=50 | Out patients N=50 | Total |
|---|--------------------|----------------------|------------|
| Physical functioning | 0-100 | 0-100 | 0-100 |
| Mean ±SD | 70.7±28.07 | 84.2±20.1 | 77.6±25.1 |
| Role limitation due physical health | 0-100 | 0-100 | 0-100 |
| Mean ±SD | 67.02±42.7 | 69±38.6 | 68.04±40.4 |
| Role limitation due to emotional problems | 0-100 | 0-100 | 0-100 |
| Mean ±SD | 64.5±38.9 | 60.6±37.3 | 62.5±37.9 |
| Social functioning | 0-100 | 0-100 | 0-100 |
| Mean ±SD | 43.6±37.2 | 59±34.3 | 51.5±36.4 |
| Pain | 0-100 | 0-100 | 0-100 |
| Mean ±SD | 68.1±33.5 | 51.3±30.5 | 59.4±32.2 |
| Emotional well being | 0-100 | 0-87 | 0-100 |
| Mean ±SD | 48.7±19.1 | 46.2±20.7 | 47.4±19.9 |
| Public health | 0-70.8 | 0-79.1 | 0-79.1 |
| Mean ±SD | 37.4±14.9 | 41.1±18.9 | 39.4±17.09 |
| Total QOL score | 12.8-78.7 | 25.1-88.2 | 12.5-88.2 |
| Mean ±SD | 57.1±16.9 | 58.8±15.9 | 58.02±16.3 |

Note: Higher score indicates better quality of life or absence of disability.

Table (2) shows that, the highest mean score of QoL among the studied sample were related to physical functioning & role limitation; the mean scores were (77.6±25.1) and (68.04±40.4) respectively. However, the

lowest score were related to public health and emotional well-being (39.4±17.09) and (47.4±19.9) respectively and the total mean score of the quality of life was (58.02±16.3). This indicates that patients have poor quality of life.

Table (3): Distribution of the studied sample according to mean scores of coping strategies (n=100):

| COPE Inventory | In patient N=50 | | Out patients N=50 | | Total | |
|----------------|--------------------|---|----------------------|---|-----------|---|
| | No. | % | No. | % | No. | % |
| Range | 81-155 | | 87-161 | | 81-161 | |
| Mean ±SD | 114.2±19.5 | | 124.7±22.5 | | 119.4±216 | |

| | | | | | | |
|--|----|-------|----|-------|----|-------|
| Dysfunctional attitude or less use of effective coping | 18 | (36%) | 15 | (30%) | 33 | (33%) |
| Emotion focused coping or moderate use of effective coping | 32 | (64%) | 33 | (66%) | 65 | (65%) |
| Problem focused coping or optimal use of effective coping | 0 | | 2 | (4%) | 2 | (2%) |

Note:

- Lower mean score (53 to 106) indicates less use of effective coping.
- Mean score from (107 to 160) indicates moderate use of effective coping.
- Higher score from (161 to 212) indicates optimal use of effective coping.

Table (3) illustrates that; 65% of the studied sample used emotion focused coping and 33% of them used less useful coping strategies. However, only 2% employed problem focused coping strategies. Also, table (3) reveals

that, the mean score of coping strategies was 119.4±216. This indicates that, the studied sample were moderately use effective coping.

Table (4): Difference between subscales of drug abuse screening score and quality of life among the studied patients (n=100):

| QOL | DAST-20 | | |
|--------------|------------------------------------|------------------------------|--------|
| | Didn't have substance use disorder | Have substance use disorders | P |
| In patients | 64.2±13.8 | 54.2±17.4 | 0.07 |
| Out patients | 61.5±14.4 | 50.9±18.1 | 0.03* |
| Total | 62.2±14.1 | 53.3±17.5 | 0.007* |

Table (4) shows that, mean quality of life QoL score was significantly higher among subjects who didn't

have substance use disorders (62.2±14.1) than those who had substance use disorders (53.3±17.5) p=0.007*.

Table (5): Correlation between drug abuse screening test (DAST-20) and coping strategies among the studied patients (n=100):

| DAST-20 | Coping strategies | |
|--------------|-------------------|--------|
| | R | P |
| In patients | -0.004 | 0.9 |
| Out patients | -0.31 | 0.02* |
| Total | -0.31 | 0.001* |

Table (5) shows significant negative correlation (r=-0.31, p=0.001*) between drug abuse screening test and coping strategies of out-patient and studied total patients.

Table (6): Correlation between coping strategies and quality of life (QoL) among the studied patients:

| Coping strategies | Quality of life (QoL) | |
|-------------------|-----------------------|--------|
| | R | P |
| In patients | 0.35 | 0.01* |
| Out patients | 0.26 | 0.06 |
| Total | 0.30 | 0.003* |

As observed from table (6) that there was significant positive correlation (r=0.30, p=0.003*) between

coping strategies and quality of life (QoL) among total patients and in patient.

Discussion

The current study aimed to assess quality of life and coping strategies among addict patients and to determine the relationship between quality of life (QOL) & coping strategies among addict patients.

In relation to mean score of drug abuse among the studied patients, it was found that mean score of drug abuse was 9.8±3.9. The current study also illustrated that, slightly less than half of the studied sample had substance abuse disorder (table 1). This may be attributed to the majority of drug addict people take drug because of non-medical advice but they are probably heavily dependent on drug because of their inability to control withdrawal symptoms and due to

the pressure of bad friends, this is based on assessment of patients⁽¹⁴⁾.

As regard the mean scores of QOL among the studied patients, (table 2) the present study revealed that, the highest mean scores of QoL among the studied sample were related to physical functioning & role limitation due to physical activity. However, the lowest score were related to public health and emotional well-being and the total mean score of the quality of life was slightly more than half which indicated poor quality of life among drug addict patients. This finding could be explained in the light of less than three quarters of the studied sample were abusing drugs orally such as tramadol and tamol which known by increasing physical functioning reduce pain, improve mobility and

enhance daily functioning. Nevertheless the total score of quality of life is greatly impaired. This could be explained by the consequences of addiction which produces a reduction in quality of life and life satisfaction of the addicts.

In this respect, Larson, (2005), Gonzales et al., (2009) and Alexandre (2014) found that, the lowest scores were in overall mental health and emotional well-being⁽¹⁵⁾. They also reported poorer general health; there were slight impairment in overall physical health status and role limitations⁽¹⁶⁾. Similarly, Moalemi, et al., (2010) reported that, physical and mental consequences of addiction can lead to decrease in the quality and life satisfaction and a drop in personal interactions, social and mental health domains⁽¹⁷⁾. By contrast, Young, et. al., (2012) reported that some of addicted substances are related to better QOL⁽¹⁸⁾.

The current study revealed that, nearly two thirds of the studied sample used emotion focused coping. This could be related to that the study was carried out in upper Egyptian culture which is known by using support system and expressing emotions while facing any stressful life events and only one third of them used less useful coping strategies. However, the lowest percentage employed problem focused coping strategies. The studied patients were moderately used effective coping (table 3). This result could be explained by that individuals have irrational thinking about abusing substances for assisting them to be more productive at work and enhance their quality of life. This result was supported by Hassan et al., (2013), Dorard et al.,(2013) and A'zami et al., (2014) who reported that, when addict patients faced with an environmental stressor they almost use inefficient/dysfunctional emotion-focused coping strategies such as increasing their substance abuse instead of problem-focused strategies and solving the problem leaving stressor not resolved⁽¹⁹⁾.

Concerning correlation between drug abuse screening test (DAST-20) score and QoL among the studied patients. The finding of the current study revealed that, there was significant negative correlation between Drug Abuse Screening score and QOL. (table 4).

This finding could be attributed to the effect of drug abuse on quality of life domains by decreasing sociability, increasing economic burden, and stigma regarding drug addiction reported by drug abusers. Several studies supported this finding such as Taylor et al., (2013) Amirfakhraei, et al., (2015) who reported that, drug addiction causes various social and mental problems in addition to physical one in people suffering from it and quality of life in addicted people decreased by increasing their drug addiction⁽²⁰⁾.

In the same line, findings of Marrlat et al., (2011) and Smith et al., (2005) showed that, mental and physical consequences of addiction lead to reduce quality of life and satisfaction of life in drug abusers⁽²¹⁾.

The present study illustrated that, there was a significant negative correlation between Drug Abuse Screening and Coping Strategies among the studied total patients (table 5). This can be explained in the light of substance abuse was considered one of the maladaptive coping. In other words; when person cope effectively with stress substance abuse will decrease. This finding was supported by Huijding, (2005) and Kiamarsi & Abolghasemi (2012) and A'zami, (2015) who concluded that addict

patients use less effective coping strategies or dysfunctional attitude more than healthy individual^(9,22).

Investigating correlation between coping strategies and QoL among the studied sample in the current study revealed that, there was significant positive correlation between coping strategies and quality of life QoL among total patients (table 6) which indicates using effective coping strategies improve quality of life. This finding could be explained in the light of the psychological concept of coping is associated with stress which is considered commonly related to all HRQoL domains that generate distress to an individual. As a result, individuals develop coping strategies to manage stress or health problems as well as to improve their overall quality of life QoL.

This finding of the current study is in the same line with Lua et al., (2012) who found that, "in terms of the relationships between coping mechanism and QoL parameters, there were significant positive associations between overall QoL versus coping strategies"⁽²³⁾. In this respect, Leigh et al., (2016) reported that, more use of maladaptive coping strategies was associated with poorer quality of life. Similarly Smedema et al., (2010) Kohler & Riessman., (2008) reported that, poor quality of life could result in individuals using inefficient coping styles. They explained their findings as using adaptive ways to cope with stress improve their problem solving ability and think positively so they can have better quality of life"⁽²⁴⁾.

Conclusion

This study concluded that addict patients suffer from lack of effective coping strategies and poor quality of life as well as positive correlation between coping strategies, drug addiction and quality of life.

Recommendations

A psycho educational program is recommended to improve their healthy use of effective coping to effectively improve quality of life.

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