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Perceived severity and Barriers to Health Promotion of Male addicts in Early Recovery from Drug Use Disorder

Tingkat keparahan yang dirasakan dan Hambatan terhadap Promosi Kesehatan pada Pecandu Pria dalam Pemulihan Awal dari Gangguan Penggunaan Narkoba

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Abstract

Background: Drug addiction remains a significant public health issue globally, with substantial personal and societal impacts. Effective treatment and health promotion behaviors are crucial for recovery. **Specific Background:** In Iraq, the context of addiction treatment and the factors influencing health promotion behaviors among male addicts are underexplored. **Knowledge Gap:** There is limited understanding of the perceived severity and barriers to health promotion behaviors among male addicts in drug addiction centers in Iraq. **Aims:** Aims to assess the perceived severity and barriers to health promotion behavior among male addicts with a drug use disorder. **Methods:** A descriptive study design was utilized, with a convenience sample of 100 male individuals aged 15 to 45 from the Al-Ataa Hospital for Addiction and Psychological Rehabilitation. Data were collected via a questionnaire comprising socio-demographic characteristics and scales measuring beliefs regarding addiction. Cronbach's alpha for the perceived barriers and severity scales were 0.789 and 0.881, respectively. **Results:** The average participant age was 28 years, with 49% single, 71% living in lower-class neighborhoods, and 72% voluntary admissions. A significant relationship was found between educational level and health beliefs (p=0.00). The study revealed a high-level assessment of perceived severity and a moderate-level assessment of perceived barriers. **Novelty:** This study highlights the significant impact of educational level on health beliefs among male addicts, a relatively unexplored area in the region. **Implications:** The findings suggest that increasing awareness among patients and their families, establishing specialized hospitals, developing targeted policies, and leveraging media can enhance addiction treatment. This research underscores the need for comprehensive approaches involving various stakeholders to address drug addiction effectively.

Highlights:

1. **High Perceived Severity:** Addicts show high severity awareness.
2. **Education Impact:** Significant link between education and health beliefs.
3. **Policy Recommendations:** Establish specialized hospitals, targeted policies, media involvement.

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Introduction

The abuse of drugs is a significant and expensive health issue that has global implications. It poses challenges and has adverse effects on individuals, families, and communities, both physically and mentally (1). Several study results indicate a relationship among drug use and personality problems, suggesting that personality dysfunction might influence both the development and progression of drug-related issues (2). Drug use disorder occurs when an individual's consumption of alcohol or another substance results in health complications or disruptions in their performance at work, school, or home. called as addiction to drugs (3). There is increasing apprehension in Iraq regarding the impact of violence and war on drug abuse (4). Recent findings have revealed that abuse can significantly affect societal processes, so transforming it into a concern that encompasses both public health and social dimensions. Aside from various forms of opioid addictions, individuals also face health complications and social problems (5). Adolescents are particularly vulnerable to drug usage due to their lack of awareness regarding the repercussions of illicit substances and their incorrect views about them (6). Adolescent is an important stage as it is when the majority of behaviors that will have an impact on health in adulthood are established (7). The prevalence of substance abuse among adolescents is a significant global concern. It is associated with a higher likelihood of experiencing various well-documented consequences, including strained peer relationships, mental illness, an increased risk of suicide, engaging in risky sexual behavior, contracting HIV, impaired learning, frequent absences from school, higher rates of dropping out, and living in poverty (8).

Regarding drug use disorders, current information indicates that over 85% of individuals who meet the criteria for a drug use disorder throughout their early lives do so during puberty. Unlike adulthood, which exposes kids who do not meet the criteria for drug use issues, it is quite unlikely that one will ever mature (9).

The major age group of those who take narcotics worldwide is between 18 and 25 years. There has been an observed growth in opioid abused among young individuals, particularly in the age groups mentioned. Among the various substances abused, ingesting (3.8%) is among the most prevalent opioid worldwide (10). According to the findings provided by the Iraqi Ministry of Health in 2017, the prevalence of smoking in Iraq was 31% among males and 4% among females. Conversely, the prevalence of illicit drug addiction in Iraq was approximately 7.2%.

Drug abuse is a growing problem in Iraq, as well as in several emerging nations. The prevalence of addiction among young individuals in Iraq is linked to public health issues, including poverty and school absenteeism. A recent survey conducted in Iraq revealed that 41.7% of young males are smokers. This alarming statistic suggests that smoking is often associated with the use of illicit drugs, which can have detrimental impacts on the lives of young individuals, including alcohol dependency and cognitive impairments (11). Statistical studies published by significant international organizations, particularly the WHO, the International Narcotics Control Committee (INCC), and the United Nations Educational, reveal a steady rise in drug abuse worldwide. The only variation between countries lies in their patterns of drug consumption. Undoubtedly, this trend poses a significant threat to a society's cultural, social, and economic foundations, ultimately leading to its destruction. This issue is of such paramount importance that no country can claim to be completely immune to its consequences. All assessed resources consistently indicate that the magnitude of the situation is catastrophic (12). Statistics indicate that those suffering with mental diseases, such as alcoholism and drug addiction, are the main reasons behind suicide and suicide attempts (13).

The Health Belief Model (HBM) is a psychological model for promoting behavior change in relation to health. It was established in 1950 by researchers in the area of public health in the United States (US). The aim of the model is to encourage individuals to adopt healthier behaviors and improve their overall lifestyle (14).

The main aim of health education is to improve individuals' health behaviors by engaging their active involvement. Individuals' behaviors, including preventive behaviors related to addiction, are contingent upon their beliefs. The Health Belief Model (HBM) is a significant and precise model that illustrates the correlation between health beliefs and behavior. This comprehensive model efficiently mitigates diseases and operates under the assumption that individuals' preventative behaviors are influenced by their beliefs (15,16). Therapy-seeking behavior refers to an individual's actions in seeking suitable therapy when they recognize that they have health issues (17). A strong motivation to quit drug abuse and a deep understanding of addiction issues are positive indicators for preventing relapse (18). Recent comprehensive epidemiological research has indicated that the main focus for preventive measures should be on drug abuse after effective recovery and treatment (19).

Methods

Study Design and Setting

A descriptive study design was used to conduct a questionnaire survey in the drug rehabilitation center, the Al-Ataa Hospital for Addiction and Psychological Rehabilitation in Baghdad, during the period from 14th January 2024 to 5th June 2024.

Sample of the Study

A convenience non-probability sampling approach was used to recruit addicted patients who had previously been subjected to treatment for addiction. After treatment, the patients showed a desire to return to drug abuse. The total sample size was 100 from Baghdad. Therefore, inclusion criteria required that the participant be: self-identified as having an alcohol and drug abuse; had been abstinent from alcohol and drug abuse for more than 2 weeks; male only with age between 15 and 45; had the ability to consent, and Exclusion criterion was addict have psychosis history and physical illness.

Study Instrument

The instrument consists of two parts: part I involved, to describes the male addicts' socio-demographic characteristics such as (age, marital status, residential area, level of education, profession, and socioeconomic status) and part II involves the using a scale to measure male addicts' beliefs towards addiction. Cronbach's alpha internal reliability is 0.789 for the perceived barriers scale and 0.881 for the perceived severity scale. The overall scale consists of (17) items, (8) items for perceived severity and (9) items for perceived barriers measured on a 5-point Type Likert Scale distributed among the two subscales to gauge the changes in HBM among male addicts. The responses for these items (1) strongly disagree, (2) disagree, (3) I don't know, (4) agree, and (5) strongly agree, with a higher score indicating higher agreement of the beliefs.

Data analysis

Statistical analysis was conducted in IBM SPSS 27.0 using whole numbers and percentages, while mean and standard deviation were used to define continuous variables.

Methods of Data Collection

The research was based on information gathered from January 2, 2024, to February 5, 2024. The researcher personally gave the questionnaires to the participants. The researcher received permission to administer it from the Nasiriyah Health Directorate and the Rusafa Health Department.

Ethical Consideration

This is a valuable section of the study concerned with the ethical considerations of scientific research in initiating the sample collection process. A special meeting was held with the director of each addiction treatment center to explain the study and obtain permission. Patients' names were not obtained. Another meeting was held with the addicted patients to inform them of the study and its purposes, and all patients were provided with complete information about this study

Result and Discussion

Result

Socio-Demographic Variables	Groups	Freq.	%
Age/years M.s ±SD = 28.4±7.7	15-25 years	38	38.0
	25-35 years	41	41.0
	35- 45 years	18	18.0
	45-55 years	3	3.0
	Total	100	100.0
Marital Status	Married	29	29.0
	Single	49	49.0
	Widowed	6	6.0
	Divorced	16	16.0
	Total	100	100.0
Residential area	Upper-class neighborhood	29	29.0
	Lower class neighborhood	71	71.0
	Total	100	100.0
Educational Level	Not read & not write	1	1.0
	Read & write	24	24.0
	Elementary School	24	24.0

	Intermediate school	24	24.0
	Prep graduate	17	17.0
	Bachelor salam Diploma	8	8.0
	Postgraduate Degrees (Master, Ph.D.)	2	2.0
	Total	100	100.0
Monthly household income	It is Enough	47	47.0
	Enough to some extent	35	35.0
	Not enough	18	18.0
	Total	100	100.0
Profession	Employee	26	26.0
	Free Business	43	43.0
	Students	3	3.0
	Not Have Work	28	28.0
	Total	100	100.0
Admission of the patient to the hospital	Voluntary	72	72.0
	Involuntary	28	28.0
	Total	100	100.0

Table 1. *Distribution of Male Addicts by Socio-Demographic Variables*

Table (1) shows that patients (100%) with an average age of (28.4±7.7) years old adolescents who participated in this study aged 25-35 years old and constituted (41%), Nearly half of the participants were single (49%), Residential area findings revealed that (71%) were lives at lower class neighborhood, Level educational of participants were respectively (24%) as Read & write, Elementary School, Intermediate school for each of them. Regarding the Monthly household income, most of the study sample answered that it is enough (47 %); regarding the Profession, most of the study sample answered that free business accounted for (43%) among all study samples, Finally Admission of the patient to the hospital were voluntary (72%) among all study sample.

A.Perceived Severity:

List	Questions	Weighted	Freq.	%	M.s ±SD	Ass.
1	Substance addiction wastes family and community spending.	Strongly Disagree	12	12.0	3.47±1.410	High
		Disagree	20	20.0		
		I do not know	7	7.0		
		Agree	31	31.0		
		Strongly Agree	30	30.0		
2	Failure to prevent addiction can lead to serious illness and reduced life expectancy.	Strongly Disagree	9	9.0	3.36±1.307	High
		Disagree	22	22.0		
		I do not know	17	17.0		
		Agree	28	28.0		
		Strongly Agree	24	24.0		
3	Substance use increases the risk of death in young people.	Strongly Disagree	7	7.0	3.66±1.265	High
		Disagree	13	13.0		
		I do not know	21	21.0		
		Agree	25	25.0		
		Strongly Agree	34	34.0		
4	Failure to prevent addiction can lead to increased violence, neurological distress as well	Strongly Disagree	10	10.0	3.49±1.251	High

	as reduced academic achievement.	Disagree	12	12.0		
		I do not know	20	20.0		
		Agree	35	35.0		
		Strongly Agree	23	23.0		
5	Non-addiction prevention reduces social popularity and credibility.	Strongly Disagree	30	30.0	3.03±1.636	Moderate
		Disagree	13	13.0		
		I do not know	9	9.0		
		Agree	20	20.0		
		Strongly Agree	28	28.0		
6	Taking substances even for once is dangerous.	Strongly Disagree	16	16.0	3.23±1.392	Moderate
		Disagree	18	18.0		
		I do not know	14	14.0		
		Agree	31	31.0		
		Strongly Agree	21	21.0		
7	Substance use changes your life plan dangerously.	Strongly Disagree	15	15.0	3.41±1.379	High
		Disagree	10	10.0		
		I do not know	21	21.0		
		Agree	27	27.0		
		Strongly Agree	27	27.0		
8	Substance use reduces a person's vitality.	Strongly Disagree	13	13.0	3.24±1.457	Moderate
		Disagree	29	29.0		
		I do not know	7	7.0		
		Agree	23	23.0		
		Strongly Agree	28	28.0		

Table 2. *Scale Health Beliefs of Male Drug Users Regarding Drugs Re-Abuse Prevention Using the Health Belief Model:*

(MS) Mean of Scores, (SD) Standard deviation, Level of Assessment (low =1- 1.66, Moderate= 1.67-3.32, High=3.33-5)"

In terms of statistical mean and standard deviation, this table demonstrated that the high responses regarding scale health beliefs of male drug users regarding drug re-abuse prevention using the health belief model-perceived severity in excepts items (5,6, and 8) demonstrated a moderate level of assessment.

B. Perceived Barriers:

List	Questions	Weighted	Freq.	%	M.s ±SD	Ass.
1	Saying no to the suggestion of my friends to take substances is difficult for me.	Strongly Disagree	35	35.0	2.47±1.417	Moderate
		Disagree	24	24.0		
		I do not know	11	11.0		
		Agree	19	19.0		
		Strongly Agree	11	11.0		
2	My family's awareness of Addiction prevention behaviors are insufficient.	Strongly Disagree	20	20.0	2.88±1.402	Moderate
		Disagree	25	25.0		
		I do not know	21	21.0		
		Agree	15	15.0		
		Strongly Agree	19	19.0		
3	The awareness of principals and teachers	Strongly Disagree	16	16.0	2.98±1.263	Moderate

	about addiction prevention is insufficient.	Disagree	19	19.0		
		I do not know	29	29.0		
		Agree	23	23.0		
		Strongly Agree	13	13.0		
4	In the country, substances are my available easily.	Strongly Disagree	4	4.0	4.05±1.192	High
		Disagree	11	11.0		
		I do not know	11	11.0		
		Agree	24	24.0		
		Strongly Agree	50	50.0		
5	Addiction prevention behavior takes time and expense.	Strongly Disagree	21	21.0	3.11±1.463	Moderate
		Disagree	12	12.0		
		I do not know	28	28.0		
		Agree	13	13.0		
		Strongly Agree	26	26.0		
6	There are few experts and people who know how to prevent addiction.	Strongly Disagree	40	40.0	2.46±1.534	Moderate
		Disagree	22	22.0		
		I do not know	6	6.0		
		Agree	16	16.0		
		Strongly Agree	16	16.0		
7	Talking about addiction is hard and embarrassing for me.	Strongly Disagree	15	15.0	3.44±1.466	High
		Disagree	16	16.0		
		I do not know	12	12.0		
		Agree	24	24.0		
		Strongly Agree	33	33.0		
8	Addiction prevention behavior costs a lot.	Strongly Disagree	17	17.0	2.98±1.310	Moderate
		Disagree	20	20.0		
		I do not know	26	26.0		
		Agree	22	22.0		
		Strongly Agree	15	15.0		
9	Asking for help from the families to do addiction prevention behavior is scary and difficult.	Strongly Disagree	24	24.0	2.76±1.327	Moderate
		Disagree	22	22.0		
		I do not know	16	16.0		
		Agree	30	30.0		
		Strongly Agree	8	8.0		

Table 3. *Scale Health Beliefs of Male Drug Users Regarding Drugs Re-Abuse Prevention Using the Health Belief Model*

"(MS) Mean of Scores, (SD) Standard deviation, Level of Assessment (low =1- 1.66, Moderate= 1.67-3.32, High=3.33-5)"

In terms of statistical mean and standard deviation, this table demonstrated that a moderate response scale health beliefs of male drug users regarding drug re-abuse prevention using the health belief model-perceived barriers in all items except items (4 and 7) demonstrated a high level of assessment.

Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	Sig.
Age	Between Groups	0.013	1	0.013	0.020	0.888
	Within Groups	66.027	98	0.674		

	Total	66.040	99			
Marital Status	Between Groups	1.470	1	1.470	1.489	0.225
	Within Groups	96.720	98	0.987		
	Total	98.190	99			
Residency	Between Groups	0.163	1	0.163	0.784	0.378
	Within Groups	20.427	98	0.208		
	Total	20.590	99			
Educational Level	Between Groups	9.144	1	9.144	16.753	0.000
	Within Groups	53.489	98	0.546		
	Total	62.633	99			
Monthly Income	Between Groups	1.763	1	1.763	3.152	0.079
	Within Groups	54.827	98	0.559		
	Total	56.590	99			
Profession	Between Groups	0.563	1	0.563	0.227	0.635
	Within Groups	243.227	98	2.482		
	Total	243.790	99			
Admission of the patient to the hospital	Between Groups	0.053	1	0.053	0.260	0.611
	Within Groups	20.107	98	0.205		
	Total	20.160	99			

Table 4. *Significant Relationship among Health Beliefs of Male Drug Users Regarding Drugs Re-Abuse Prevention concerning their Socio-Demographic Variables (n=100)*

d.f: Degree of freedom, F: F-statistics.

Findings demonstrated that there was no significant relationship among health beliefs of male drug users regarding their socio-demographic variables except that there was a significant relationship in male educational level ($p=0.00$).

Variables	Source of variance	Sum of Squares	d.f	Mean Square	F	Sig.
Smoking and Hookah	Between Groups	0.000	1	0.000	0.000	1.000
	Within Groups	20.160	98	0.206		
	Total	20.160	99			
Taking Medications	Between Groups	0.403	1	0.403	0.243	0.623
	Within Groups	162.507	98	1.658		
	Total	162.910	99			
When did you first start using drugs regularly?	Between Groups	0.030	1	0.030	0.048	0.826
	Within Groups	60.720	98	0.620		
	Total	60.750	99			
Evaluate your health condition at present.	Between Groups	3.630	1	3.630	4.187	0.043
	Within Groups	84.960	98	0.867		
	Total	88.590	99			

Table 5. *Significant Relationship among Health Beliefs of Male Drug Users Regarding Drugs Re-Abuse Prevention Concerning Their Behavioral Habits Variables (n=100).*

d.f: Degree of freedom, F: F-statistics.

Findings demonstrated that there was no significant relationship among health beliefs of male drug users about their Behavioral Habits variables except that there is a significant relationship with evaluating your health condition at present. (p=0.043).

Discussion

According to the findings (Table 1), shows that patients (100%) with an average age of (28.4±7.7) years old. Adolescents who participated in this study were aged 25-35 years old and constituted (41%). The findings in this study are consistent with numerous other studies showing that men are more likely than women to abuse substances (20, 21). Concerning the study subjects' marital status, the majority of the sample was single (49%); regarding the residential area, its findings revealed that (71%) found that the largest percentage are those who live in lower-class neighborhoods, and this is due to the lack of culture and societal and family control in these areas. Concerning the study sample's level of education and profession, the highest percentage refers to (24%) Read & write, Elementary School, and Intermediate school, respectively, and (43%) of the study sample are free works.

In addition, the study results indicate that more study subjects have a Monthly household income. Most of the study sample answered that it was enough (47%). Finally, Admission of the patient to the hospital was voluntary (72%) among all study samples. the study's results showed that most of the study sample patients were smokers, accounting for (72%). Regarding the number of times a person uses narcotic substances, we found that (31%) of users use narcotic substances once or twice a day, which is the highest percentage. Concerning how old you were when you first started using drugs, the highest percentage regularly in the group between the ages of (21-30) years was (48%).

According to (Table 2), Perceived Severity of Scale health beliefs of male drug users regarding drug re-abuse prevention using the health belief model, which exhibits a high level of assessment, Perceived Severity must be perceived and deemed to be at risk of addiction with consequences. This is because the participating addicts in our study observed the possibility of opioid misuse due to addiction. Therefore, it may have an additional real effect on perceived severity and experience greater danger than others. Perceived severity was found that the male addicts believed in the extent of the harm that could result from this harmful condition and the possibility of causing death. This finding is supported by (22), who found the repeated measures ANOVA is a significant difference in the study group in Health Belief Model constructs and also perceived severity toward substance abuse (P < 0.001).

Concerning Perceived Barriers of scale, health beliefs of male drug users regarding drug re-abuse prevention using the health belief model exhibit a moderate level of assessment (Table 3); perceived barriers it is one paying greater attention to eliminating barriers to implementation. The findings showed that the HBM moderately affected the dimensions of the perceived barriers. This may be because of the age-related characteristics of the addicts, which lead them to behave without planning or awareness, and the emotional and social situation of addicts can cause other reasons. These findings are consistent with the studies (23,24), proving that behaviour relations with decreased perceived barriers have been proven. The main causes of the perceived barriers to decreasing are costs of treatment, cost of referring to an addiction center, unavailability of medications, family problems, lack of knowledge, and cultural and economic factors.

(Table 4) shows data analysis has revealed that age, marital status, residency, monthly income, profession, and admission of the patient to the hospital have no significant relationship with the overall health beliefs of male drug users regarding drug re-abuse prevention domains of the study sample, except that there is a highly significant relationship between the educational level of male addicts and health beliefs for them. This result was supported by (25), who found that relapse was not significantly associated with age, gender, marital status, religion, or occupation status.

However, in (Table 5) a significant relationship exists between evaluating your health condition at present and the health beliefs of male drug users regarding drug re-abuse prevention..

Conclusin

According to the researcher, the first step in treating addiction, regardless of the narcotic drug, is the awareness of the patient and his family about his condition, or sometimes the patient himself feels that he needs treatment. Although some of these cases are rare, they do exist. Through the researcher's meetings with the patients, most drug addicts inside the treatment center during the sample collection period were there for the first time to receive treatment. the researcher found that there was a desire among the addicts for their need for treatment, so they decided to treat.

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