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# A comparative perception assessment study between renal dialysis and therapeutic nutritional techniques students regarding the effect of narcotics on human health and energy

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## ABSTRACT

**Background:** The drug addiction is regarded as an important big health problem all over the world nowadays and killing many people lives in adolescent and in all community groups. The common aspects of illegally usage drugs because of without doctor prescription which has spread in a rapid rate and has engaged in all the aspect of the world. **Objective:** To compare between renal dialysis and therapeutic nutritional techniques students perceptions regarding the effect of narcotics on human health and their future energy. **Materials and Methods:** A descriptive cross-sectional study performed among renal dialysis and therapeutic nutritional techniques students, and 188 students from three stages (first stage was excluded). The data was collected from the present students during their daily time. A specific sheet was distributed to them after obtaining their verbal consent. The collected data was obtained by direct contact with them, and the obtained information was analyzed after a complete description of the study's aim during the period from from1st October till 30th December/ 2024. **Results:** The study show that majority of the studied students are female (116- 61.7%), within the age between 20- 22 years (152- 80.8%), living in urban area (143- 76.1%), and from third stage (99- 52.7%).

Also, the results show that renal dialysis techniques students agree with the health-related problems (41- 43.6%) in comparison to (44- 46.8%) of therapeutic nutritional students that go with poor- peer relationship. **Conclusions:** Students perception of narcotic effects on human beings about the health problems, poor- peer relationship and involvement with juvenile justices system, and mental effect.

Students agree that narcotics causes academic difficulties by decline in students degree in and absenteeism from college

**Key words:** students perceptions, narcotics, renal dialysis, assessment

## Introduction

Narcotic drugs commonly mentioned as those medicine which have an effect on the central nervous system by its anesthetic ability , with simple productive results physically , and mentally dependence and can be addictive due to unreasonable adverse effect and abuse practice of it [1].

The main classification of Narcotic drugs into three main types opioids, cocaine, and cannabis. The incorrect usage patterns are directly or indirectly regarded as the main way for the infectious diseases spread mainly especially tuberculosis, hepatitis , and acquired immunodeficiency syndrome (AIDS), that are further more lead to serious social public problems [2, 3].

Drug use is a dangerous public health problem due of the diversity of aspects which involves, like the potential for dependency and its serious social consequences and outcomes. As a general the first contact with the drug occurs through the adolescence phase, because this period of life is pointed and filled by discoveries, and searches, with mainly increasing in the significance of groups, and later on conflicts with themselves and family and more over with the involvement in new spaces that lead them more risky to external situations such a drug use**.** and sexual risk behaviors [4,5].

Anesthetic preparations have a dual impacts and rules as both for pharmaceutical and narcotic effects; their scientific and rational application in strict accordance with the clinical instruction entitled them as medicinal products as increasing effective therapeutic aspects, on the other hand, the much prolonged and excessive abuse results in their addictive qualities as narcotics [6].

The scientific literature recommended that there is an linkage factors between protective risk and its effect for dangerous substance use among adolescence students [7]. The intense search for interest to be more new experiences, and juvenile personal identity, combined with the challenge of family and social structure are determined as triggers for drug use among them [8].

The Iraqi Republic, with an approximately population of 40 million people, is a country surrounded by the Iran at the east, Turkey at the north, Syria at the northwest, Jordan at the southwest, and Kuwait with Saudi Arabia for the south [9, 10].

which determines of the patterns and consequences results of drug use should be obtained from various legal and un-legal sources, each of them are accurately and fully suitable the substance use situation in Iraq. few notices from the WHO Regional Office report (WHO, 2010) on Iraq are that:

- The use of the drug is commonly present among youths, females and the main type of drugs are inhalants (e.g., paint thinners, glue); benzhexol (Artane®, an anti-Parkinson drug), and sedatives
- The other target group (adults) use benzodiazepines and benzhexol for improving the stresses which was caused by war and conflict and other many factors.
- The codeine is regarded as most popular type among them, and opiate usage primarily present as heroin or smoked opium
- The rising rates of drug use especially seen in prisons and in urban areas [11].

**The aim of the study** was to compare between renal dialysis and therapeutic nutritional techniques students perceptions regarding the effect of narcotics on human health
and body energy.

## Subjects and Methods

**The setting of the study:**

It was done at the college of health and medical techniques –kirkuk

**Sampling techniques method:**

This study was a descriptive cross-sectional study performed among renal dialysis and therapeutic nutritional techniques students.

The total sample consisted of 188 students from three stages. (first stage was excluded).

The data was collected from the present students during their daily time. A specific sheet was conduced to them after obtaining their verbal consent. The collected data was received by direct contact with them, and information was analyzed after a complete explanation of the study's aim and objectives.

**Study period:**

The total period for data collection was (3 months) starting from1st October till 30th December/ 2024, according to designed time table which has been done by the researchers to collect the needed information.

**Data collection tool:**

A scientifically prepared questionnaire were prepared by the researchers, adapting the recent updates in associated books and literature. Questionnaire items included four important parts:

Part-1-The main demographic characteristics of the study students like (age, residence with the sex, mother and father education, family number).

Part-2- The perceptions of students about the narcotic risk effects ON

Part-3- The students perception regarding the effect of narcotics on human beings and body energy

The last part was about the possible preventive strategies (measures).

**Inclusion criteria**:

All the available students

**Exclusion criteria:**

The first-year students.

**Statistical analysis of data:**

Descriptive statistics were used for the current data collected, and a number with a percent was performed for all the statements with yes or no answers.

The statistical test used was an chi- square test to correlate the significance between the variables included in the study, and the reading of (P value < 0.05) was significant.

The average satisfaction index was equal to (100+ 20) / 2 x 100= 60%

The results calculated according to this formula were grouped into acceptable satisfaction and unacceptable satisfaction index [12]

**Ethical approval**

The study was done in accordance with the main ethical guidelines, which have their origins in the Declaration of Helsinki. It was prepared with students after receiving both verbal and written agreement before starting the study. The protocol and the students data and consent form were reviewed and agreed upon by a local ethics committee according to document number 1 (from the first time of the data collection on 1/10/2024).

## Results

**Table 1.** Characteristics of study students

| Socio- demographic parameter | | Number (188) | Percent |
|---|---|---|---|
| Age / years (in years) | 18- 20 | 20 | 10.6 |
| | 20-22 | 152 | 80.8 |
| | >22 | 16 | 8.60 |
| Sex | Male | 72 | 38.3 |
| | Female | 116 | 61.7 |
| Residency | Rural | 45 | 23.9 |
| | Urban | 143 | 76.1 |
| Father educational level | Not read and write | 42 | 22.3 |
| | Primary | 20 | 10.6 |
| | Secondary | 79 | 42.1 |
| | Higher educational level | 47 | 25.0 |
| Mother educational level | Not read and write | 41 | 21.8 |
| | Primary | 29 | 15.5 |
| | Secondary | 81 | 43.1 |
| | Higher educational level | 37 | 19.6 |
| Family number | 0-2 | 33 | 17.5 |
| | 3-5 | 69 | 36.7 |
| | >5 | 86 | 45.8 |
| Stage | Second stage | 89 | 47.3 |
| | Third stage | 99 | 52.7 |

Table 1 presents that most of the studied students are female (116- 61.7%), within the age between 20- 22 years (152- 80.8%), living in urban area (143- 76.1%), and from third stage (99- 52.7%).
Regarding the educational level, (79- 42.1%) with a primary father education while for mother (81- 43.1%) with secondary level.

**Table 2.** Study students distribution for the risk effects of narcotics

| **Risk effects of narcotics** | **Total number of students N= 188** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | **Academic difficulties** | | **Health related problem and energy effect** | | **Poor- peer relation ship** | | **Involvement with juvenile justices system** | |
| | No. | % | No. | % | N0. | % | N0 | % |
| Renal dialysis techniques students N= 94 | 32 | 34.1 | 41 | 43.6 | 17 | 18.1 | 4 | 4.2 |
| Therapeutic nutritional techniques students N=94 | 20 | 21.3 | 12 | 12.7 | 44 | 46.8 | 18 | 19.2 |
| Total | 52 (27.7%) | | 53 (28.2%) | | 61 (32.4%) | | 22 (11.7%) | |

Table 2 shows that renal dialysis techniques students agree with the health-related problems (41- 43.6%) in comparison to (44- 46.8%) of therapeutic nutritional students
that agree with poor- peer relationship.
On the other hand (4- 4.2%) from renal dialysis techniques students go with involvement with juvenile justices' system in comparison to (18- 19.2%) from therapeutic nutritional students.

**Table 3.** Relation of narcotic effects with the students perceptions

| **Students perceptions** | **Risk effects of narcotics** | **Renal dialysis techniques students N= 94** | | **Therapeutic nutritional techniques students N=94** | | **P* Value** |
|---|---|---|---|---|---|---|
| | | No. | % | No. | % | |
| Academic difficulties | Decline degrees | 17 | 53.1 | 2 | 10/0 | 0.001 |
| | Absenteeism from college | 9 | 28.1 | 11 | 55.0 | 0.052 |
| | Increase potential dropping out of college | 6 | 18/8 | 7 | 35.0 | 0.188 |
| Total | | 32 | 100.0 | 20 | 100.0 | |
| Health related problem | Decease body energy | 3 | 7.4 | 0 | 0.0 | 0.022 |
| | Physical disabilities and diseases | 9 | 21.9 | 2 | 16.7 | 0.119 |
| | Mental health | 29 | 70.7 | 10 | 83.3 | 0.507 |
| Total | | 41 | 100.0 | 12 | 100.0 | |
| Poor- peer relation ship | Stigmatization | 2 | 11.7 | 24 | 54.5 | 0.000 |
| | Disengagement from college and community activities | 14 | 82.4 | 9 | 20.5 | 0.685 |
| | Deprivation their peers and communities of the contributors | 1 | 5.9 | 11 | 25.0 | 0.089 |
| Total | | 17 | 100.0 | 44 | 100.0 | |
| Involvement with juvenile justices system | Delinquency | 2 | 50.0 | 9 | 50.0 | 0.089 |
| | Arrest | 1 | 25.0 | 2 | 11.1 | 0.016 |
| | Adjudication | 1 | 25.0 | 7 | 38.9 | 0.536 |
| Total | | 4 | 100.0 | 18 | 100.0 | |

* Chi test used

Table 3 shows that 53.1% of renal dialysis techniques students agree that narcotics causes academic difficulties by decline in students' degree in comparison to 55.0% from therapeutic nutritional techniques students agree with absenteeism from college with a p- value = 0.001
Regarding the health-related problems associated with narcotics, both students from renal dialysis and therapeutic nutrition techniques agree with mental effect of it (70.7%, 83.3%) respectively with a p- value = 0.507.
Concerning the relationship, two third of renal dialysis techniques students agree with Disengagement from college and community activities in comparison with 54.5% of therapeutic nutritional techniques students agree with Stigmatization with a p- value = 0.000

Both students from renal dialysis and therapeutic nutrition techniques agree with Delinquency as an effect of narcotics on Involvement with juvenile justices' system (50.0%) respectively with a p- value =0.089.

**Table 4.** Distribution of students sample according to satisfaction index about the preventive measures

| Preventive measures | Total students sample N= 188 | | | | | | | | P * value |
|---|---|---|---|---|---|---|---|---|---|
| | Renal dialysis techniques students N= 94 | | | | Therapeutic nutritional techniques students N=94 | | | | |
| | Acceptable satisfaction index | | Unacceptable satisfaction index | | Acceptable satisfaction index | | Unacceptable satisfaction index | | |
| | No. | % | No. | % | No. | % | No. | % | |
| Raise awareness and advocate for change | 72 | 76.5 | 22 | 23.5 | **39** | **41.4** | 55 | 58.6 | **0.000** |
| Encourage community involvement | 19 | 20.0 | 75 | 79.8 | 62 | 65.9 | 32 | 34.1 | **0.000** |
| Strengthen families with supportive services | 43 | 45.7 | 51 | 54.3 | 73 | 77.6 | 21 | 22.4 | **0.000** |
| Educate parents and care givers | **81** | **86.2** | 13 | 13.8 | **79** | **84.1** | 15 | 15.9 | **0.682** |
| Encourage sport activities in the college | **90** | **95.7** | 4 | 4.3 | **83** | **88.3** | 11 | 11.7 | **0.059** |
| Quoting user students from college | 54 | 57.4 | 40 | 42.6 | 66 | 70.2 | 28 | 29.8 | **0.068** |

Table 4 presents that the acceptable and unacceptable satisfaction index among the students, both students from renal dialysis and therapeutic nutrition techniques show a high satisfaction index for educating the parents and care giver and encouraging sport activities in the college (81- 86.2%), (79-84.1%) respectively with a p- value = 0.682

On the other hand (19- 20.0%) from renal dialysis techniques students show a low satisfaction index for encouraging the community involvement in comparison to (62- 65.9%) from therapeutic nutritional students (p- =0.000.)

## Discussion

Regarding table 1, it shows that the most of studied students are female, within the age between 20- 22 years, living in urban area with an educational primary level for fathers and secondary level for mothers.

A study was done by **Om Hashem Mohammed** etal / at Minia City/ Egypt to assess the attitude and knowledge of secondary school students about the drug abuse and the result show about (100%) of second-degree students with 20 years age and less, (85% & 84% accordingly) from rural area with their families. furthermore, for the educational level, (31.5%) of them had a higher father level, and (50%) were workers. while for educational level of mother (35.5%) had middle and (75%) are unemployed. While in technical part, they revel that (97%) age beyond 20 years, (50.5%) from urban area and (81%) living with their families. For the father's educational level (35.5%) read and write only, (56.5 %) were workers. In addition to that (34.5%) of mothers were illiterate and (65%) unemployed [**13].**

Simultaneously with this result, most of them live with their funemployed.he rural area. These findings were documented by **Raja / others** (2018), / [14] mentioned that most of study students (86%) live within a little small family and outside the city. In addition to that this results were in agreement with a study done by **Hamdi et al.,** (2016), / [15] reported that provincial, national available sources of data mentioned that (80%) of them arriving the schools in rural parts of the country are higher for reliability to record such abuse from drugs, mainly among students related to abuse of alcohol drinking and linked with risk behaviors. From the researcher opinions, it may relate to the parents busy for their children care and giving much enough time from much freedom level which is given in family and the major pressure effect from their overload studying. Regarding the students perceptions about the narcotics effects on human beings, the result show that renal dialysis techniques students agree with the healthrelated problems compared with therapeutic nutritional students that agree with poor- peer relation involvement and juvenile justices' system.

A similar study was done in Iraq / Kurdistan by **Nazar etal** during 2017 to determine the effect of an educational intervention program for high school students to elevate their knowledge for substance use and its negative effects and consequences outcomes, which further more, activate students to take preventive and protective measures against substance use. They show that there was a highly significant statistical improvement in the knowledge mean score of students following the implementation of a health educational program from 15.959 ± 3.25 to 20.633 ± 3.26 ($p < 0.001$). also, no students remain with poor knowledge, and relatively more than half (50.2%) have reached a good knowledge level [**16].**

They more over motivated the introducing of an health educational program concerning substance use mainly in high school students and colleges in Erbil city and all over the Iraqi cities for knowledge improvement.

Another study was done in Tikrit city / Iraq during 2018- 2019 by Myada etal iamong the youth aged between 15 and 24 years in Tikrit cit among the youth aged between 15 and 24 years in Tikrit cit

another study was done by ***Mayada etal*** / tikrit city during 2018- 2019 on youth children between 15- 24 years age to assess the substance-abuse–interrelated attitude and knowledge in Tikrit. The results presents that 78% of them didn't know any substance abusers while 22 knew at least one substance abuser. In addition to that, a good number of females and males (57.4%) cannot able to define substance abuse exactly. They suggestive in their study that avoiding friends who are substance abusers can mainly help in the substance abuse prevention [**17].**

Regarding the negative effects of narcotics on human beings and their body energy, the results show that renal dialysis techniques students agree with its causing academic difficulties through decline in students degree compared with therapeutic nutritional techniques students agree with students absenteeism from the college correlated with health-related problems and decrease in energy and mental effects.

**Badea'a** etal done a study to evaluated the adolescents' attitude and knowledge toward substance abuse through January till the/15$^{th}$/2/ 2023 in Anbar Province/ Ramadi City, Iraq. They found that the accuracy rate of knowledge and attitude were 79.6% and 70.2%, accordingly and about 79.3% of respondents were convenience with terms related to drug addiction in Iraqi country. The statistical analysis of regression curve showed that higher knowledge scores were correlated with male and a household income more over IQD 600,000 monthly/P =0.001). The level of attitudes toward drug abuse prevention were interrupted by groups of men and employed fathers **[18].**

For the satisfaction index about the preventive measures towards narcotics, the study presents that both students from renal dialysis and therapeutic nutrition techniques show a high satisfaction index for educating the parents and care giver with encouraging sport activities in the college during their daily time.

Kenneth W Griffin *etal* mentioned in their study about the preventive program in adolescent that the most attractive interventions towards the target salient risky and protective factors mainly at the individual, family,

and/or community levels which are guided by relevant psychosocial theories concerning the etiology of substance use and abuse with some new modification suggestive ones such as addressing many factors that decrease the public health impact and outcome of effective prevention programming. It is however still the case that majority schools use family-based, non-evidence prevention programs, that often do don't exactly fit the families in greatest need, and starting up community prevention programs which requires substantial resources. It is clear that more research is quietly needed to facilitate the wide dissemination of good prevention programs into schools, families, and communities [**19].**

Further researches were done to verify the affectivity of preventive measures in Iraq , and one of that is a study done by Ihab Habeeb Abaas/ etal to detect the knowledge of the students towards substance abuse, with its preventive measures during 2021 in Al Sader city / Iraq, found that the level of students knowledge was low towards substance abuse and they suggestive in their study for further considerable lack towards substance abuse, and the urgent need to educate and participate students in courses learn about the dangers of drugs and how to avoid them [20, 21, 22, 23].

**Limitation of the study:**

Overload scheduled of the students with the difficulty in collection of the data

**Conclusions**

Narcotics effects human health, poor- peer relationship and juvenile justices system, and mental effect with decrease in body energy.

Narcotics causes academic difficulties by decline in students degree, and absenteeism from college

Disengagement from college and community activities are the main effects of narcotics on relationships and stigmatization.

Educating the parents and care giver with encouraging sport activities in the college are the most effective strategies for narcotics prevention.

## Recommendation

Further advanced educational active updated program about the narcotic effect and its risky groups with more concentration on the study current curriculum to involve the essential topics of narcotics and types.

More large studies can be adapted to involve a big number of people to be more representative and reliable.

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