



Arab American University
Faculty of Graduate Studies

**Knowledge, Attitudes, and Practices Among
Bethlehem Universities' Students Regarding Drugs
Addiction and Available Services**

By

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**This thesis was submitted in partial fulfillment of the
requirements for the Master's degree in
Health Informatics
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universities' students regarding drugs addiction, addicts
and available services**

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This thesis was defended successfully on 07/07/2021 and approved by:

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Declaration

The thesis entitles “Knowledge, attitudes, and practices among Bethlehem universities’ students regarding drugs addiction and available services” is conducted under the supervision of Dr. Ayesha AlRifai -Adjunct Professor of Health Policy & Public Health at Birzeit University and Arab American University of Palestine.

I hereby declare that this thesis is my own work and effort and that it has not been submitted anywhere for any award. Where other sources of information have been used, they have been acknowledged and that this thesis (or any part of it) has not been submitted for a higher degree to any other university or institution.

Signature: 

Date: 

Acknowledgment

I would like to express my lovely and worm thanks, gratitude, and appreciation to my supervisor Dr. Ayesha AlRifai who gave me this golden opportunity to do this wonderful thesis on the topic and provided me with all needed support and assistance to succeed. My great thanks and appreciations to Dr. Yousef Mimi and Dr. Ola Husien.

Abstract

This study aimed to assess the knowledge, attitudes, and practices among Bethlehem universities' students regarding drugs addiction and available treatment services at Palestinian National Rehabilitation Center in Bethlehem City.

This thesis used the quantitative and qualitative analytical descriptive approach, in order to achieve the main goal of the study. The researcher built the study tools being a questionnaire and a semi structured interviewing schedule. Data were collected, analyzed and compared with previous studies for commonalities and differences. A total of (359) male and female university students from Bethlehem Palestine Ahliya University and Dar Alkalima Universities completed the study questionnaire, and (10) beneficiaries from the services of Palestinian National Rehabilitation Center (PNRC) whose treatment plans were disrupted as a result of converting the center into a Covid-19 treatment center were interviewed.

More than two thirds (66.3 %) of the respondents agreed that addiction is considered a disease. More than (42 %) said that drugs release stress.

Around (48%) of respondents believe drugs give their bodies energy. Around (70 %) agreed that the higher of the cultural/ financial level are, the less drug addiction tendency is and vice versa. Overall, the study provided evidence that the majority of respondents have moderate knowledge, moderate to excellent positive attitudes, and moderate positive practices about drug addiction, addicts, and available rehabilitation services in PNRC.

The study recommends public awareness and organized campaigns on addiction and available services, especially among youth, and calls upon the Palestinian Ministry of Health to enhance and promote addictions services as the only addiction service facility in Palestine.

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LIST OF ABBREVIATIONS

Abbreviation	Meaning
COVID -19	Coronavirus disease (2019), (SARS-CoV-2).
UNODC	The United Nations Office on Drugs and Crime
KAP	Knowledge, Attitudes, and Practices.
PNRC	Palestinian National Rehabilitation Center
MOH	Ministry Of Health
ICD 10	International Classification of Diseases
NGOs	Non-Governmental Organizations
UNRWA	United Nations Relief and Works Agency for Palestine Refugees
RTA	Road Traffic Accidents
ECG	Electrocardiogram
SPSS	Statistical Package for the Social Sciences

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Chapter One

1.1 Introduction

The phenomenon of drug addiction "especially between youth" has become more dangerous than cultural invasion, as cultural invasion aims to undermine and control the believe and the way of thinking, while addiction and drug promotion among respondents aim to eliminate the minds and bodies simultaneously.

The matter is, if this phenomenon has been spread among the respondents of the community and its members in general, this society will become at risk and its future is blurred. Therefore, drug addiction has become one of the most critical problems that concern officials worldwide, especially in the era of technology and the ease of information exchange.

Respondents in Palestine become the largest group of society that is called shift towards the "demographic opportunity" represented by the transfer of the population structure in favor of respondents at the productive and work age at a time when the importance of respondents stems from their existing and anticipated economic and social contribution. It faces increasing economic and social challenges, the most important of which are: unemployment and the un-relevance of the outputs of the educational system with the labor market.

According to Palestinian Central Bureau of Statistics, the Palestinian society is young and more than a third of the population is under (15) years old. And the percentage of individuals who are in the age group between (0-14 years) in (2020) is estimated at about (38%) of the total population, with (36%) of them at the West Bank and (41%) in the Gaza Strip. It is noted that the percentage of individuals aged above (65) years has

decreased, as their percentage was estimated in (2020) at about (3%) of the total population, by (4%) in the West Bank and (3%) in the Gaza Strip.

Unfortunately, addiction has been spread between females as well as male but there are no studies conducted on females (Palestinian Central Bureau of Statistics, 2020).

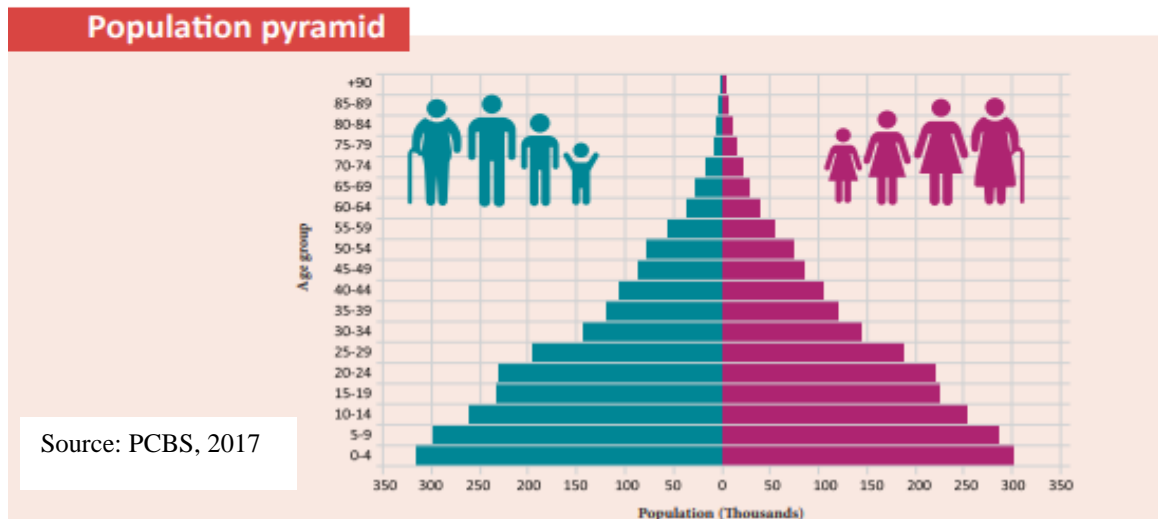
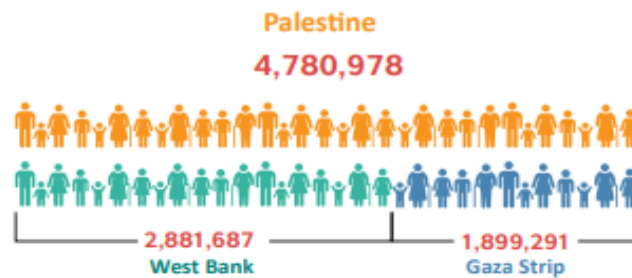


Chart 1: Palestinian population pyramid (2017)

The United Nations Office on Drugs and Crime (UNODC), in Austria, in June 2020, reported that about (269) million people used drugs worldwide during (2018), which is (30) percent more than in (2009), while more than (35) million people suffer from drug use disorders, also the global report includes an analysis of the impact of the COVID-19 pandemic on drug markets. Although the impact of the pandemic is not yet fully known, border and other restrictions associated with responding to it have caused an actual

shortage of drugs on the streets, leading to an increase in prices and a decrease in the degree of purity (UNODC, 2020).

1.2 Background

Addiction is a primary, chronic disease involving brain reward, motivation, memory and related circuitry; it can lead to relapse, progressive development, and the potential for fatality if not treated. While pathological use of alcohol and, more recently, psychoactive substances have been accepted as addictive diseases, developing brain science has set the stage for inclusion of the process addictions, including food, sex, shopping, and gambling problems (David, 2012)

Also addiction has become known by international health organizations as a chronic disease and not a deviant or criminal behavior. In front of this fact, it became necessary for the Arab community to change the perception of the addiction patient and raise awareness about the concept and nature of this disease, especially since this collective view has a significant negative impact and was the cause of Obstructing and delaying the recovery of many addictions (Addcounsel report, 2020).

1.3 Research Significance and Justifications

This study is the first after the only National Rehabilitation Center was set up in Bethlehem city in (2018) according to the researcher. It will explore the link, if any, between service availability and selected population group Knowledge, Attitudes, and Practices (KAP) regarding drug addiction and available services. In itself it may be considered as a form of behavior change communication as regards drugs addiction and available services.

Assessment of drugs addiction related knowledge, attitudes and practice among university students is important as it guides to formulate effective prevention and educational programs about addiction and practices toward it. It also promotes service utilization behavior among the target population, if and when needed.

The importance of this study stems from the fact that it sheds light on the drug addiction phenomenon and its impact on potential users, their families, and public health.

To fill the information gap in this field, as it is considered one of the few researches in the West Bank and the first in Bethlehem Governorate studying the question of addiction drugs from potential users' perspective.

Results will provide service improvement insights to the Palestinian National Rehabilitation Center and other service institutions that deal with this phenomenon.

1.4 Research Problem

In light of the increase of the number of addicts, many challenging issues have been facing the Palestinian Ministry of Health such as, their ability to provide treatment services, rehabilitation cost, beside the opportunity cost. Which becomes a real burden for the government?

Despite addiction's dangerous effects, the Drug Enforcement Administration recorded in 2017 the number of drug abusers in Palestine with approximately (55,000) abusers: (30,000) in the West Bank; about (15,000) in East Jerusalem; and (10,000) in the Gaza Strip. Then in (2017), according to the Palestinian National Institute of Public Health, statistics show a huge increase in the number of drug abusers, which exceeded (80)thousand users, in both the West Bank and Gaza strip (Palestinian National Institute of public health, 2018).

Based on the mentioned statistics, the Palestinian ministry of health established the alternative treatment center in Ramallah in (2013), which provided treatment and recovery services for more than (400) cases at the outpatient clinic.

Then in (2019), the Palestinian National Rehabilitation Center (PNRC) was established in Bethlehem, where methadone is used as a substitute for opioids to reduce the risk of illegal substances and to provide inpatient (Detoxification, Rehabilitation and guidance services) for more than (200) patients in the first year from different districts of West Bank, the majority of them were adult males. However, most respondents, don't have enough information about addiction and treatment services (MOH, 2017).

This study will assess knowledge, attitudes and practices of Bethlehem Respondents as college students, about drug addiction and available services and the extent to which they influence their associated practices.

1.5 Research Objectives

This study mainly aims to assess knowledge, attitudes, and practices among Bethlehem universities' students regarding drugs addiction and available services.

1. To assess the knowledge Bethlehem respondents, have about drug addiction and available services.
2. To explore the respondents' attitudes towards drug addiction and available services in Bethlehem.
3. To explore the participant practices / behaviors toward drug addiction and available services.
4. To understand the relationship between selected demographic variables and respondents' knowledge, attitudes and practices about drug addiction and services.

5. To explore factors influence obtaining healthcare services for drug users of both sexes in Bethlehem.
6. To explore the extent of electronic recovery services acceptability among study respondents as a harm reduction measure addressing associated stigmas.

1.6 Summary:

Addiction is a psychological and physical condition which is classified under mental disorders according to the International Classifications of Diseases (ICD-10). In Palestine, people with addiction used to go to psychiatrists in the private and governmental clinics and other non-governmental institutions seeking treatment and addiction recovery services. In early (2019) the first Palestinian rehabilitation center was established in Bethlehem, but still service utilization rate remains low especially among respondents, who appear to be ignorant about addiction, treatment and other available services let alone the huge social stigma surrounding this behavioral health issue altogether .

This study aims to assess the level of knowledge, attitudes and practices regarding addiction and available services at the Palestinian national rehabilitation center among Bethlehem Respondents. It will also examine the acceptability of electronic recovery services as a harm reduction approach.

Chapter Two

Drug Addiction Services in Palestine

2.1 Introduction

Health care services in Palestine, is provided by the Ministry of Health, military medical services, NGOs from civil society institutions, the United Nations Relief and Works Agency for Palestine Refugees (UNRWA), in addition to the private sector.

Although the Palestinian Authority allocates a large part of its resources to the health sector from our gross domestic product as mentioned in the semi-annual report of the general budget of the Palestinian Authority (2019), that Health sector has got 12% of the main budget.

Health care providers share the provision of health care services to citizens at the three health services levels: Primary, secondary and tertiary health care.

- (749) primary health care centers spread all over Palestine, provide health needs for its physical, psychological and social aspects, and its core function is not only to cure diseases but also to provide all the care and health services for citizens throughout their life including counseling, preventive services, Mother and child services, School health, Mental and psychological health, Addiction recovery services, Dental health, RTA (road traffic accidents), Environment health, and other medical services.
- (84) hospitals / secondary and tertiary health care services, including Mental and psychological hospitals with (6435) beds in average of (12.9) bed per (100000) persons.

Despite all the challenges and obstacles that health sector faces as a result of the Israeli occupation, MOH with the cooperation and support of the international community and United Nations organizations especially the World Health Organization, were able to prevent the health system from collapse and achieving good health indicators at the level of the Eastern Mediterranean Region (MOH annual report, 2019).

2.2 Addiction in Palestine

The General Director of the Alsadiq Altaieb organization, which is a non-governmental organization, providing rehabilitation services for addicted people, Majid Alloush, confirmed, in an interview in June (2020), that according to the latest Palestinian statistics issued at the beginning of (2018), the number of drug addicts was (26,500). There are more than (80,000) drug users, which is large numbers of individuals who are using drugs because they are facing many economic, political, and social problems, as they can't adapt and solve them. as well as the lack of a well horizon future for young people that might push them to be addicted especially ages (14-35) years more.

Alloush, the head of the organization added that during the months of March, April and May, the percentage of drug users increased and the number of drug dealers increased despite the Corona pandemic and closures, and there was exploitation by them because of the preoccupation with fighting the Corona pandemic and increased their sales (NISAA FM, 2020).

2.3 Palestinian National Rehabilitation Center

At the beginning of February (2019), the first inpatient was admitted to the PNRC with a total of (302) cases from different districts of West bank by the end of (2019).

And the following tables, shows the cases distribution according to the range of age as shown in Table (1) below:

Table (1): Service Users by Age Distribution in the Year (2019)

Age	< 18	18 - 30	31 -40	41 – 50	>50	Total
No.	11	169	75	35	11	301

Cases Distribution according to their treatment status as shown in Table (2) below.

Table (2): Service Users by Treatment Status Distribution in (2019)

Category	Treatment Status	Number of Patients
Clear	Negative Initial test / Drugs Free	8
	Follow up Cases	51
	Withdrawal	24
	Inpatients / Under treatment	15
	Methadone Patient	2
Total		100
Total number		140
Relapsed	With follow up	15
	Withdrawal	15
Total		30
Mental health referral		15

Medical referral	5
Prisoner	9
Death	2
Total	31
Total Number of Patients	301

(MOH annual report, 2019)

PNRC locates at the center of Bethlehem city, a multidisciplinary team working together in an organized and well-structured therapeutic plan of work, under supervision of Ministry of Health.

An emergency department prepared and other related necessary departments such as Laboratory, Pharmacy, ECG (electrocardiography), and hospitality departments such as laundry, kitchen, and indoor gymnasium and outdoor playground, tines, and garden.

The facility is surrounded with high walls, under restricted security to assure patient privacy and to prevent patient from going outside before finishing therapy.

Currently, most PNRC patients face troubles during Covid – 19 pandemics in receiving their treatment because the center has become an isolation center to treat covid – 19 cases.

Psychologist and social workers have continued their follow up treatment plans by calling patients on the phone to maintain counseling and supporting services. Still, unfortunately, almost most of cases are collapsed as a result of being again at the same previous circumstances, dealing with the same friends and facing the same social and other problems. In this study the researcher has interviewed (10) of the patients who have been admitted to PNRC to assess their knowledge, attitudes, and practices towards PNRC treatment services.

2.3.1 Drug Addiction and Available Services at PNRC:

As mentioned previously, there are two main stages in an addiction treatment plan at PNRC; the first stage is called the Detoxification stage, where patient should be kept under medical supervision, and away from his family and friends.

And the second stage which is called the rehabilitation stage, where social, psychological, educational, recreation, occupational therapy sessions are provided.

2.4 Addiction and Electronic Recovery Services:

Nowadays, there are many smart recovery innovations used to provide effective prevention and treatment services that are affordable, time reduction, equitable, and can be access easily in a simple way for all who seek medical intervention. (Beck, 2017)

Since addiction treatment services are covered by MOH health insurance, which is available for all for free and PNRC is the only governmental center where addiction rehabilitation services are available, some patients couldn't get benefit of it as a result of geographic obstacles, treatment time (which may last for couple of months), social stigma, and other burdens. So E-services might be a good choice for all therapeutic sessions at the rehabilitation stage after finishing the Detoxification stage to avoid the previous difficulties.

2.5 Addiction, Recovery and Treatment Stages and Informatics

Patients who came willingly to receive therapy, got approval to join the center under specific criteria, and their care givers should sign a consent form before being admitted to assure that they will finish all the therapeutic stages.

The first stage in addiction treatment is called detoxification: the safe withdrawal of the drug or alcohol from the body. With the exception of hallucinogens and volatile

substances, chronic use of drugs and alcohol is associated with the occurrence of tolerance and physical dependence. Withdrawal from nervous system inhibitors such as barbiturates and benzodiazepines, some symptoms could occur such as tremors, sweating, anxiety, convulsions, or delirium so patient should be under continuous supervision. Patient might feel uncomfortable, and in severe withdrawal symptoms, withdrawal from nervous system stimuli might be accompanied with depression, fatigue, excessive need for sleep, and increased appetite. (Orford, 2001).

This stage could last for more than one month, then patient started the rehabilitation stage, which includes many approaches as the following:

2.5.1 Psychosocial Treatment Phase

This therapeutic phase includes individual psychological treatment for the abuser, and then it extends to the family. This stage also includes practical training for the abuser on making decisions, solving problems, and facing pressures.

2.5.2 Cognitive Behavioral Therapy

In the next stage of treatment; addicts learn methods and strategies for dealing with and overcoming cravings for drugs.

- Developing a comprehensive personal plan to deal with subjects that pose a threat in the future.
- Learn problem-solving skills to overcome psychological and social problems that constitute an obstacle to treatment.
- Learn and practice decision-making skills and drug or alcohol rejection skills.

Ways to avoid and prevent relapse and deal with it if it occurs.

2.5.3 Strategies to Increase Motivation for Change (APPROACH) used in PNRC

These strategies will increase the motivation of the addict to accept the idea of treatment, engage and continue with it.

Empathy and respect for the patient establish a warm relationship between therapist and patients, who has a supportive and protective role during therapy inside the PNRC facility, and will take care of the patient and listen to him after discharge using smart recovery tools through a virtual meeting. In order to provide well-prepared and timely advice when needed to maintain the achieved goals.

2.5.4 Occupational Therapy

It aims to help the addict gain his capabilities and effectiveness in his daily activities of life, field of work, and to treat the problems that prevent his return to his/ her job.

2.5.5 The Social Rehabilitation Phase

This process aims to reintegrate the addict into the family and society. Therefore, treatment depends on improving the relationship between the two parties, and helping the addict to regain the confidence of his family and society in him.

2.5.6 Prevention phase

It means the therapeutic follow-up of those who have been cured, for periods ranging between six months and two years from the beginning of treatment, with training and his family on early detection of relations that are warning of potential setback, and the speed of preventive action towards them. All these Phases of treatment services are provided for individuals and in groups that are both useful.

2.5.7 Group Therapy

In particular, group therapy could be conducted in an effectively using specific applications, and colleagues share with each other their experiences, strength, chemical dependency, or other social problems. It is a voluntary program that no one should join it compulsory. Each participant acts as a personal guide to steer clear of alcohol, drugs, or any other addiction.

2.5.8 Group Therapy for Families

It is a family-based treatment approach for addicted patients, and this approach defines addiction as a result of a network of influences (starts with the individual, family, friends, and society) and suggests that reducing unpleasant behavior and increasing likeable behavior can occur in several ways and different places.

Individual and group sessions can be at the clinic, home, school, or other social sites, where therapists and adolescents work together to develop decision-making skills, problem-solving skills and develop their communication skills in order to express their emotions and feelings so they can deal with life pressures and problems, and teach them how to differentiate between influence and control, to have a positive impact on their children.

2.5.9 Social Intervention

Aims to treat any family or social problems that may contribute to return to drug abuse.

2.5.10 Social Skills Training for Families

Improving the relationship between addicts and their families then with the community, as addiction usually leads the addict to be estranged away of his family and society and helps the addict to regain the confidence of the family and society. Community stigmas

and attitudes toward addiction is the most effective factor which has two faces as it could be preventive factor that encourage respondents to stay away from addiction, and it could make addicted respondents afraid of being involved in any therapeutic center.

Many cases faced relapse after finishing therapy, according to PNRC (95%) of discharged patients have been relapsed as a result of many factors most of them are related to their families, friends, community, their economic status, and other psychological factors.

So maintaining therapy for the first two years after being discharged is very important.

Nowadays, there are many mobile applications used as a recovery tool where therapeutic sessions can be conducted to maintain therapy and this research is going to evaluate respondents attitudes toward such services.

2.6 Summary

According to the Palestinian Central Bureau of Statistics, number of living people in Palestine has reached (4.98) million, including (2.99) million in West Bank and (1.99) million in Gaza Strip, while more than (300,000) Palestinians live in East Jerusalem by mid-year (2019).

Number of hospitals has reached (84), including Mental and psychological hospitals with (6435) beds in average of (12.9) bed per (100000) persons (MOH,2019).

One of MOH primary concerns, is drug abuse treatment, as the Palestinian people suffer from chronic stress due to the political and economic status resulted by occupation, which made MOH in early (2019), to prepare PNRC with (50) beds to receive patients from different districts. At the first year (302) patients have finished successfully their therapy and were discharged, (169) out of (301) patients were between (18 -30) years'

old which give us an indication that drugs are more distributed between respondents who are the builders and fathers of the future. After being discharged, a treatment plans include follow up services and counseling session should be maintained for the first two years after been discharged, which will be more practical and reduce travelling costs and time, this research will check the knowledge attitudes and practices toward PNRC treatment services and e- recovery services.

Chapter Three

Literature Review

3.1 Introduction:

In this chapter, the researcher will identify the main concepts of the study, drug addiction and its impact on human rights to life, human right to economic and social development. Then to summarize the main addiction related studies which have been conducted globally, regionally and locally.

3.2 Conceptualization

3.2.1 Addiction

Addiction is compulsive need for and use of a habit-forming substance. It is accepted as a mental illness in the diagnostic nomenclature and results in substantial health, social and economic problems. In the diagnostic nomenclature, addiction was originally included in the personality disorders along with other behaviors considered deviant. But it is now considered a clinical syndrome (Hesse, 2006)

And it is defined by The American Psychiatric Association (2020) as:

"A complex condition, a brain disease that is manifested by compulsive substance use despite harmful consequence. People with addiction (severe substance use disorder) have an intense focus on using a certain substance(s), such as alcohol or drugs, to the point that it takes over their life" (Yi et al., 2017).

But Adam (2018) in his research defined it as *"a psychological and physical inability to stop consuming a chemical, drug, activity, or substance, even though it is causing psychological and physical harm" (Liranso et al., 2017).*

3.2.2 Knowledge Attitudes and Practices:

- **Knowledge:**

A term refers to the degree of respondents awareness and ability to answer questions about addiction in the pre-structured questionnaire presented

And defined in Merriam Webster as “*the fact or condition of knowing something with familiarity gained through experience or association*” (Meredith, 2021).

- **Attitudes:**

Means the feeling and reactions toward drug addiction between university students as design by the researcher in five point Likert scale, and defined in Merriam Webster as a “*feeling or emotion toward a fact or state*” (Meredith, 2021).

- **Practices:**

Refers to behaviors and what actions students do toward addiction, and colleges who are addicted. And defined in Merriam Webster as “*to perform or work at repeatedly so as to become proficient*” (Merriam Webster, 2021).

- **University Students:**

University students of both sex (male, and female), who are studying at Bethlehem governance universities in Bethlehem University, Palestine Ahliya University, and Dar Al Kalima University.

3.2.2 Is Addiction Treatable?

fact or condition of being addicted to a particular substance, thing, or activity." Medically it is a "chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequence, and long-lasting changes in the brain. (Fluyau, 2021).

And defined by American Society of Addiction Medicine (2019) as:

Addiction is a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences.

Prevention efforts and treatment approaches for addiction are generally as successful as those for other chronic diseases (American Society of Addiction Medicine, 2019).

2. Drugs and the human right to life

Right to live and to achieve the highest level of health is the most important rights of human, as they are related to the human's ability to survive and stay healthy. At the same time, they are a direct target for "drugs" and these two rights have been protected in various international conventions. The United Nations Universal Declaration of Human Rights states in paragraph (3) as the following: "Everyone has the right to life, liberty, and the stay safe".

Health concept is the evidence of fulfillment right to life for human being as it is defined by the World Health Organization: "*complete physical, mental and social safety, not only the absence of disease or disability*" (WHO,2021).

3. Drugs and the Human Right to Economic and Social Development

The process of drug abuse impedes the economic and social progress of human; The drug abuser becomes often unable to manage his own affairs or fulfill his obligations towards others, thus he becomes a burden on his family and society as a result of his inability to work, also abuser may lose his right to education, participation and integration in cultural life and because of his health conditions and his economic inability to meet the costs of education, and this matter extends to include members of the user's family. Also effects of substance abuse frequently expand beyond the nuclear family. Extended family members can experience feelings of abandonment, anxiety, fear, anger, concern, embarrassment, or guilt. (Shamsaei, 2019).

3.3 Contextualization

3.3.1 Global Context:

Many studies have been conducted around the world to measure attitudes among respondents toward addiction and drug abuse,

1. Knowledge, Attitudes and Beliefs Regarding Drug Abuse among male of Rural Community, Lahore, Pakistan (Masih et al., 2019).

In (2019) a quantitative cross-sectional study was conducted on a sample of (100) males in Lahore, Pakistan to assess the KAP towards addiction before and after a health talk. The conceptual framework was set upon "Perceived Effect Theory" which explains the effect of attitudes on behaviors. Results showed increased prevalence of better knowledge among the targeted sample after the health talk.

Based on the results, it was highly recommended to implement strategies to support educational programs which aims to improve respondent's knowledge about addiction under supervision of policy makers, religious men, and health workers.

2. Line Grebstad; 2016. "Choosing to live": Experiences of Coping in Recovery from Drug Addiction a Phenomenological study (Line, 2016).

Globally, in Norway (2016), a research titled "Choosing to live", the researcher has adopted a semi structured interviews, qualitative approach to explained the physiological processes behind addiction, and the detrimental effect of substance use, then he explained recovery and how to cope in recovery with self-doubt and how to have a positive outlook on self then how to take responsibility for one's own recovery.

The researcher talked about Gender differences and that what women seeking recovery faces then how to enable both sexes to create a drug free identity.

This study focused on how treatment facilities have to cope with the residents using variety ways to motivate them. The researcher has applied coding on the patient ID during data collection stage to assure the patient privacy, and after analysis, results were that therapy should focus on oneself and changes (goals, dreams...) can be achieved gradually by controlling the Vulnerability Factors and learning how to be able to Make a Choice.

3. Knowledge of Health Effects and Substance Use among Students of Tertiary Institutions in Southwestern, Nigeria (Ajoke et al., 2013).

A study in (2013) was conducted on a sample of (2297) students who were selected using a multipurpose sampling technique to assess KAP toward substance abuse and related side effects on health. Results showed a significant relationship between level of

knowledge about substance abuse and addiction. Furthermore, results assumed that drug education is highly recommended to reduce number of addicts.

4. Prevalence and associated factors of illicit drug use among university students in the association of southeast Asian nations (Yi et al., 2017).

A cross sectional study was conducted in (7) countries in southern Asia, on a convenient sample of (800) males and females at different universities to assess effect of educational programs on student's behaviors and practice toward drug addiction.

Results showed that drug addiction varies from one country to another according to the income level, self-awareness and knowledge level of the drug's side effects.

Male is (9) times more likely to be addicted than females, students in low income countries and those living away from their parents were more likely to be frequent drug abusers.

The researcher recommended that behavior-related social intervention programs must be presented to reduce the prevalence of drug abuse in ASEAN countries.

5. Drug and Substance Abuse Knowledge and Attitudes among Respondents in Addis Ababa Ethiopia (Liranso, 2017).

The researchers considered addiction as a disorder that occurs especially with respondents therefore, they utilized a qualitative method to collect related information about knowledge and attitudes regarding drugs and substance abuse among respondents in Addis Ababa. The study sample was selected through the purposive sampling technique, and then analyzed thematically.

Results referred to causes of addiction to environmental factors and psychological factors such as stress.

And they recommended that stakeholders should focus their efforts in highlighting substance abuse disorder.

The previous studies agreed that knowledge and attitudes has a direct and strong influential effect on student's behavior toward addiction which means that social intervention programs must be applied on respondents at the age between (17-25) years who are more likelihood to be at risk of addiction hazard.

3.3.2 Regional Context

1. Respondents attitudes towards drugs / field study at Ma'an district - Jordan (Towasy et al., 2013).

This study aimed to identify the respondents' attitudes towards drugs in the Ma'an governorate in Jordan, and to reveal the prevailing culture's features in explaining this phenomenon, and awareness of its dimensions among this social group.

The study was conducted on a sample of (6) communities, the sample size was (538) of respondents, and results concluded that:

1. Most of the addicted respondents' categories are the unemployed (26.6 %), then university students (12.1%).
2. Respondents trust clerics in limiting the spread of drugs, the anti-drug department and school teachers.
3. The most effective way from respondents' perspective to limit the spread of drug phenomenon is to apply restrictive laws and sanctions against drug dealers and promoters.

Based on the results of the study and to face the challenge of drugs spread and their dangers to young people, specifically in local communities, the researchers recommend the following:

1. Establish awareness-raising programs and spread a positive culture limiting the spread of drugs in the border areas most connected to international crossings.
 2. Attention to developing media contents that are scientifically planned aimed to promote a positive culture among respondents that strengthens their immunity against the temptation of drug traffickers, and confronts the consumer culture that aims to indirectly prepare respondents for abuse
- 2. Title Knowledge of Substance Abuse Among High School Students in Jordan (Haddad et al., 2010).**

The researchers have conducted a self - administrated questionnaire on (400) students of the Kingdom of Jordan high schools to explore their knowledge, attitudes and practices towards substances abuse.

1. Boys and girls have good knowledge about substance abuse and the harmful effects and results of addiction.
2. The majority of respondents included in the study, perceived addiction as a real problem and were aware of it.
3. Most of them have set religions principles as a principle to prevent themselves from such behaviors.
4. Policy makers, healthcare workers are responsible of setting well-organized and pre-structured educational programs and lectures about addiction.
5. Provide treatment plans which are affordable and accessible for those in need.

3. Respondents attitudes towards drug abuse and its formation factors: An applied study on secondary and intermediate school students in Al Majma'ah governorate (Alnafeesa, 2008).

This study aimed to find out attitudes of Al Majmaah Governorate in Saudi Arabia high school students towards drug abuse and to find out whether the preventive programs provided are sufficient and fruitful.

The researchers used social survey method, in which a questionnaire was designed to measure student's attitudes towards drug use. The study sample included all high school students in Al Majmaah exclusively and comprehensively, then a simple random sample was equally drawn from all schools at the governorate, in a total number of both male and female sample was (341) students

Main results:

1. Results showed that respondents are well-known about drugs, as it has been viewed and focused in the media, whether in preventive programs or when telling stories that clarify the fate of drug users or even through films that deal with drugs, but they do not know all types of drugs, which may not be less dangerous than similar ones.
2. Results also showed a statistically significant relationship between the practice of smoking and the trend towards drug use, which means that the more a person smoked, the closer he is to fall into drug use.
3. There is a statistically significant relationship between having a friend or a relative who uses drugs and the positive trend towards addiction, indicating that the more a person knows a relative or friend who is using drugs, the closer he is to falling into drug abuse.

4. There is a statistically significant relationship between knowing how to obtain drugs and the positive trend towards addiction, which indicates that the more the person knows how to obtain drugs, especially if he/ she is a friend or colleague, the closer to falling into drug abuse.

4. Factors of drug abuse and how to treat them from a viewpoint University student in the State of Kuwait (Al mishaan, 1998):

Based on a sample of (303) male and female students from only two questions asked: What are the causes of drug use? However, how to prevent it?

Results of the study were as the following:

- Regarding abuse, from the male's point of view, bad friends ranked first, as the rate was (57%), then the family disintegration rate was (77.7%), and females 'view was similar to male view.
- Regarding prevention methods from the male's point of view: were the international awareness programs with a rate of (88.8%), and in a second way was the Religious awareness by (70.9%), then being away from bad friends by (49%), after those proper instructions with (50%) and finally, the good time investment is ranked fifth, (45.3%).
- As for the female's viewpoint: the correct social upbringing and guidance ranked first, by a percentage of (68.3%), strengthening religious awareness by (64.5%), then keeping away from bad companions by (49.2%), and time investment by (6.41%).

5. Al-Buraihi study (2002): entitled the impact of social demographic characteristics on respondents the phenomenon of drugs in the United Arab Emirates (Badawi ,2016).

This study aimed to find out the attitudes of young people towards this phenomenon, whether negative or positive, is through:

- Identify the sources of knowledge of young people about drugs.
- Identify the student's resources of knowledge about drugs, addiction at the university.
- Identify student's source of drugs, places where students use drugs, motives that drove them to addiction.
- Clarify students' attitudes toward addiction and to what extent students are involved in activities to reduce the risk of addiction.

The questionnaire was conducted on a sample of (918) male and female students from different universities and the study results were:

- Most of the respondents were acknowledged that the usual places of abuse are cars.
- Heroin is the most commonly used drug among students, and the most common method of abuse is the injection.

3.3.3 Local Context

1. Health and psychological effects of drug abuse by university respondents (Albadawi, 2016).

This study was conducted on Al Najah University students in (2016) about drug use and the health and psychological effects of drugs. The researcher used a descriptive analytical approach to identify the causes of drug abuse, and it's physical and

psychological effects, and the fundamental preventive role of the university in increasing the awareness of the dangers of drugs through:

- Conduct courses and targeted programs to influence motivation between respondents and correct their attitudes toward substances use. This requires experts and skilled instructors to develop self-confidence and to promote a healthy lifestyle among the respondents.
- Awareness development for respondents of the possibility of overcoming their problems and resisting psychological and social tension in other things away from drugs.

2. Role of policies and services of official and civil institutions in combating drug abuse in West Bank from the point of view of addicts and workers (Tayem, 2017).

In a study conducted in West Bank in (2017), the researcher explained the effects of psychological, social, family, societal, economic, and security on drug abuse.

Among the factors that lead to drug abuse, there are many causes. However, the most important are the psychological reasons (such as severe depression, anxiety and a feeling of alienation) and the social factors (within school and friends), religion and social values.

The researcher pointed out that legal factors encourage abuse, as the death penalty is not applied to drug users as stipulated in the Palestinian Drugs Law No. (10) of (1955), or the Military law of Drugs / (1975) and the non-deterrent sanctions from the researcher's point of view.

In addition to political factors (pressure, tension and ease of availability of drugs due to the occupation.

Then the researcher explained the theories of drug abuse and how to prevent addiction, and pointed to the role of governmental and private institutions and the media in preventing addiction.

This study found:

- The necessity of implementing the Palestinian drug law (2015).
- The need for integrated treatment centers for an addictive problem with a full recovery services.

The knowledge of addiction is a security related problem, and the psychological, social and public health dimension.

4. Drug abuse: Causes and Socioeconomic Implications (Eliwi, 2016).

Eliwi spoke in his study in (2016) about the danger of drugs within any society and the psychological, social and economic effects on the individual and society.

However, policymakers, social workers, and psychologists have begun to treat and limit those effects. The researcher aimed to deeply understand the causes of drug use to enable us recognize its dangerous effects as it was considered as a pathological phenomenon that needs treatment.

The study questions were about the causes of drug abuse, and the existing preventive efforts to combat abuse.

The researcher highlighted the necessity of individual preventive efforts to counter drug use: the effort made by a person to combat this phenomenon such as a physician, a psychiatrist, social worker etc.

Those efforts are either awareness or educational programs for the abuser's families, and educate the abusers about serious physical, mental, psychological, and social impacts.

- Community efforts to prevent drugs: This responsibility is for Ministry of Social Affairs to treat the causes of addiction, and to avoid it.
- The role of the Ministry of Information.
- The role of the Ministry of Health.
- The role of schools.
- Preventive efforts of unions and their role in combating drug abuse.

Palestinian socio-economic context facilitates the insidious spread of drugs, and adolescence is considered as a critical high-risk population group, and poverty, political tension, spare time, and peer influence .

Studies found that men are three times more likely than women to use drugs. In addition, the first use of drugs was found to occur before (18), and addiction has become one of the public health challenges. However, preventive and therapeutic services are inadequate in our country and public knowledge about it is limited (MOH, 2017).

Studies globally showed that age, sex, economic level, place of living and educational level affect the probability of being addicted.

Studies agreed that addiction might have a negative impact not only for the person himself but also it affect the families as well as the society.

Stakeholders must give highlight such issue as it causes a negative impact on the whole society.

After the Palestinian national institute of public health researches and based on its recommendations, the Ministry of Health (MOH) established the Palestinian National Rehabilitation Center (PNRC) in Bethlehem, the first and the only governmental center for addiction treatment in Palestine. And this study is designed to assess the knowledge level about PNRC's current services.

3.4 Framework for Analysis:

The ecological model is essential to explain the concepts of addiction and recovery, as it is a phenomenon that emphasizes the need to build a culture of change, to encourage the behavior of addict to move to recovery and stay healthy to develop the country.

This model considers every individual an integral part of society, which means that community health and safety begins with individual's health. Therefore final stage of addiction recovery for every addict is to be reintegrated into his / her society.

On the other hand, social stigmas play a major role in preventing patients to seek therapy, and socioecological theory helps to explain respondents decisions toward addiction, which reflects their attitudes.

3.4.1 Socio-Ecological Model:

Social ecology is a set of theoretical principles for understanding the dynamic relationships between various personal and environmental factors between living organisms and their environment. Social ecology focuses on the social, institutional, and cultural contexts of relationships between people and the surrounding environment. This perspective emphasizes multiple dimensions (physical environment, social and cultural environment, and personal traits), at multiple levels (individuals, groups, and organizations), and the complexities of human attitudes (the cumulative effect of events

over time). Social ecology also includes interdependence and balance from systems theory to describe the mutual and dynamic interactions between individuals and the environment (Stokols, 1996).

To contribute to an improved understanding of addiction, we need to understand all factors that influence it. This model provides better understanding of addiction and the effect of potential prevention activities and strategies.

This model reflects the interaction between individual, relationship, community, and societal factors related to addiction. Also this model helps us to identify individuals who are at potential risk of addiction in order to protect them. And to what extent the society plays role to encourage or prevent addiction culture.

This model clarifies the influence of factors by level, and shows that prevention interventions that should be conducted across multiple levels at the same time.

- **Individual**

The first level identifies biological and personal history factors that increase the likelihood of becoming an addict. Some of these factors are age, education, income level, or history of abuse. Prevention strategies at this level promote attitudes, beliefs, and behaviors that prevent a person from being addicted. Specific approaches may include conflict resolution, religious habits, self-monitoring, self-awareness and controlling, self-engagement in treatment and relapse following an attempt to be treated (Jalali, 2020).

- **Relationships**

The second level examines close relationships that may increase the risk of experiencing addiction. A person's closest friends, partners and family members influence their

behavior and contribute to their experience. Prevention strategies at this level may include parenting or family-focused prevention and counseling programs and mentoring and respondents programs designed to strengthen problem-solving skills and promote healthy relationships among families (Center of Disease Control and Prevention, 2021).

- **Community**

The third level examines the daily activities places, such as schools, workplaces, and neighborhoods, in which social relationships occur and seeks to identify the characteristics of these settings that are associated with becoming addicted.

Prevention strategies at this level impact the social and physical environment. For example, by reducing social isolation, improving the economic and study environment, recreation activities, sanction policies, and improving the social environment within school and workplace settings at the society level (Center of Disease Control and Prevention, 2021).

- **Societal**

The fourth level looks at the broad societal factors that help create a culture in which addiction is reinforced or inhibited. These factors include social and cultural norms that support addiction as an acceptable way to resolve conflicts. Other large societal factors include the health, economic, educational and social policies that help maintain economic or social inequalities between groups in society”.

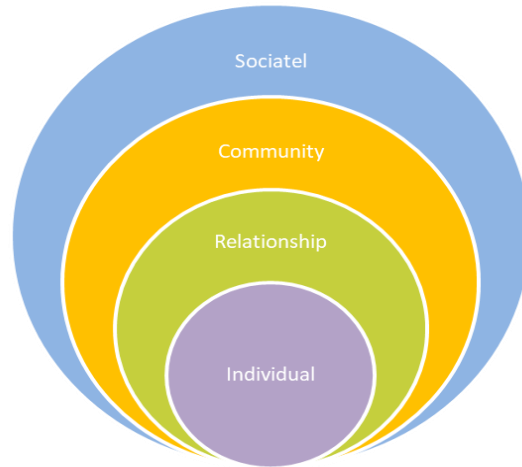


Chart no. 2: The Social-Ecological Model: A Framework for Addiction.

3.5 Summary:

The socio ecological framework will be useful in explaining the respondents' attitudes and practices towards addiction and the etiological factors that stands behind their behaviors and their decisions to be addicted.

This theory describes the relations between individuals and their families then with their societies. And it describes individuals as the main component of any society, being healthy (socially, psychologically, and physically) means healthy society.

Using drugs harms nearly the whole-body systems, and it negatively affects the health, causing a lot of health problems such as loss of appetite, weakness, accumulation of dangerous toxins in the body, respiratory diseases, a weakness of the immune system, which makes addicted person more vulnerable for infectious, nerves system disturbances, mental and psychological disturbances such as anxiety, tension, hallucinations, in addition to insomnia. and other chronic diseases. As well as drug abuse harm society as a result of many social problems related to lack of ability to build good social relations, addict tendency to isolation and to be alone all the time, which

lead to a deterioration in the economic situation of society due to the inability of addicts to work, beside of money wastage.

And the hazard of Society exposure to many crimes such as road traffic accidents, theft, murder and lack of safety. And the spread of communicable diseases related to addiction that harms society as a whole, such as AIDS.

Chapter Four

Methodology

4.1 Research Method

The methodology is a way to determine the method that the researcher will use through his search to prove his hypothesis. The systematic and logical formulation of principles and tools that enables the researcher to achieve the research results and solve the research problem. There are types of research method such as the descriptive method, the historical method, and the experimental method.

Researchers follow different behaviors and methods to reach solutions for the research problems, interpretations of phenomena, or truth. However, the behavior and approach followed, are directly proportional to the research problem and its special circumstances, and this is called the research method or the research methodology.

“Quantitative methods have been widely used because of the fact that things that can be measured or counted gain scientific credibility over the unmeasurable. But the extent of biological abnormality, severity, consequences and the impact of illness cannot be satisfactorily captured and answered by the quantitative research alone. In such situations qualitative methods take a holistic perspective preserving the complexities of human behavior by addressing the "why" and "how" questions. ... an attempt has been made to highlight the strengths and weaknesses of both the methods and also that a balanced mix of both qualitative as well as quantitative methods yield the most valid and reliable results” (Cindy, 2020).

4.2 Research Approach

In this study, the researcher used a mixed-method (qualitative and quantitative) approach in its completion. The descriptive cross-sectional analytical method to assess the level of knowledge, attitudes, and practices of the studied population about addiction, available services, and support of electronic addiction recovery

The quantitative method; a cross-sectional survey was designed, where a specially designed questionnaire comprising (53) questions was employed, to explore the knowledge, attitudes and practices of Bethlehem Universities students towards addiction and treatment services that PNRC provides being the only available specialized services (see Appendix I).

In the qualitative part, semi structured interviews were conducted with a sample selected from PNRC beneficiaries whose treatment plans was discontinued as a result of the Center conversion to a Covid-19 treatment center (see Appendix II).

4.3 Target Population and Setting

All full-time male and female university students who are registered as regular students at first university degree programmes in one of the three universities in Bethlehem- being the study settings- made up the target population in this study. According to the total number of eligible students in each university being in (2021); (3414) in Bethlehem University, (2284) in Palestine Ahliya University / students, and (450) in Dar Al-Kalima University College of arts and culture, a proportionate to size sample was selected form this target population and settings.

4.4 Research Questions and Hypothesis

- **The main question of the study is:**

What is the level of knowledge, attitudes and practices (KAP) of Bethlehem university students regarding addiction and available services, offered at the Palestinian national rehabilitation center?

- **Sub questions:**

1. What are the knowledge, attitudes and respondent's practices regarding addiction and the availability of addiction recovery services in Bethlehem?
2. How do respondents act (practices) towards addicts and addiction?
3. What factors influence obtaining healthcare services for drug users of both sexes in Bethlehem?
4. What is the extent of electronic recovery services acceptability among study respondents as a harm reduction measure addressing associated stigmas?

- **Research Hypothesis**

- 1) **H₀**: There is no significant relationship between knowledge and practices regarding PNRC addiction recovery services among Bethlehem university students.
- 2) **H₀**: There is no significant relationship between attitudes and practices regarding PNRC addiction recovery services among Bethlehem university students.

4.5 Assumptions

1. Respondents may have prior knowledge about drug addiction, and its available services in PNRC.

2. Respondents may have different attitudes among addiction and its related treatment services.
3. Respondents who are in Bethlehem universities are aware and have different practices towards addiction and related effects and available treatment services.

4.6 Research Boundaries

- **Qualitative Boundary:** Regular students of Bethlehem Universities.
- **Morphological Boundary:** Measuring Knowledge Attitudes and Practices of students toward addiction.
- **Time Boundary:** The academic year (2020/2021).
- **Geographical Boundaries:** Bethlehem governorate.

4.7 Sample Selection and Size

This study was conducted on nonrandom convenience sample of (362) Bethlehem city universities students of both sexes. Respondents were studying Bachelor of Arabic, English languages, Science, Paramedical studies, Nursing and midwifery, Accountant, Business, Interior Design, Graphic Design, Film Production, Contemporary Arts, Diploma of Ceramic and Glass Art, Diploma of Art Education, Diploma of Metalworking, Diploma of Contemporary Fine Arts, Diploma of Documentary Film Production, Performing Arts, Tourism studies, and Sport.

The sample size was calculated using the specialized web-based service site “Population Proportion Sample Size”. Based on the size of the target population and sampling frame of the three universities being as large as (6148) university students altogether, and

given the margin error of (5%) and confidence level of (95%), the sample size was determined at (6.0%) of the target population, which equals (370) participants selected from the three universities.

A total of (370) questionnaires were distributed and (359) were returned. Hence the response rate reached (97%). Broken down by university setting, the sample distribution was as follows; Bethlehem University ($3414 * 6\% = 205$), Palestine Ahlyia University ($2284 * 6\% = 137$) and in Dar Al-Kalima University College is ($450 * 6\% = 27$). Nonetheless, the data collection coincidence with Covid-19 lockdown and safety measures variably impacted the response per university setting, more so in Bethlehem and Palestine Ahlyia Universities where only (155) out of (205), and (124) out of (137) responses, consecutively, returned. The counterbalance was made from Dar Al-Kalima University to compensate for the missing responses and preserve the overall sample size.

4.7.1 Inclusion Criteria: All the registered students in Bethlehem Governorate universities which are three universities, Bethlehem university, Palestine Ahlyia university, and Dar alkalima University and who are more than (17) years and less than (22) years old.

4.7.2 Exclusion Criteria: All irregular students studying in the open education system at the targeted universities who are at more than (22) years of age.

4.8 Survey Tool: Piloting, Validity and Reliability

The survey tool was first validated by a panel of experts composed of three supervisors. Then piloted with twenty students from a Hebron district university setting to assess

reliability that *relates to the consistency of a measure. A participant completing an instrument meant to measure motivation should have approximately the same responses each time the test is completed* (Heale et al., 2015). Quantitative data were collected, diverted into excel sheet, then analyzed using SPSS, means were calculated and divided into the three domains of; knowledge, attitudes sand practices to enable responses weight calculations using the mean ranges.

Table 3: Weight of responses based on their means by measurement tool domains

domain	Mean range	Degree
Knowledge	Less than 1.89	Poor
	1.90- 2.63	Moderate
	More than 2.63	Excellent
Attitudes	Less than 1.96	Poor
	1.97-2.40	Moderate
	More than 2.40	Excellent
Practice	Less than 1.03	Poor
	1.04-1.51	Moderate
	More than 1.51	Excellent

Reliability of the questionnaire was calculated using (Cronbach Alpha) formula.

Cronbach's alpha statistical significance is a coefficient measures representing the reliability of a questionnaire's answers (Alexandros, 2007). And it was measured to be as follows:

The reliability was measured for all Attributes of the questionnaire after distributing it to into a sample of (20) students from Hebron University, then data collected and

stability of the study tool was calculated by the internal consistency method using Cronbach Alpha stability equation formula, as is evident in the following table.

Table 4: Cronbach Alpha by Domain

Domain	Sample	Number of questions	alpha
Student Knowledge about addiction and PNRC treatment services	20	25	0.89
Students Attitudes towards PNRC services	20	16	0.84
Students Practice towards PNRC treatment services	20	12	0.75

For student's knowledge about addiction and available treatment services value of Cronbach alpha was (0.89). The second area to be tested, which is student's attitudes towards addiction and available treatment services, alpha value was (0.84). The third area which was respondents' practices towards addiction and available services alpha value was (0.75).

Cronbach's alpha was used to calculate reliability coefficients for survey tools that use Likert scale type, which is triple in this survey tool. Cronbach's alpha estimates the reliability of tool responses (questionnaire) evaluated by subjects indicating the stability of the tools. Cronbach's alpha ranges from zero to one with higher values indicating that the elements measure of the same dimension. Conversely, if the Cronbach's alpha is low (near 0), then this means that some or all of the elements are not measured in the same dimension. But in this research tool values are (.075, 084, and 0.89) which is a good reliability measure of this tool.

In the qualitative part, semi structured interviews were conducted on (10) drug addicts who have stopped receiving treatment services at PNRC after Covid -19 pandemic.

Face to face interviews were set with (10) beneficiaries who had received treatment sessions at PNRC, to provide us with more details about addiction, and their treatment journey.

4.1 Research Limitations

- **Geographic:** This study has been limited to Bethlehem universities students. Therefore, the overall work directly dealt with students of Bethlehem Governorate and outskirts, which are mostly citizens of southern West Bank, so students from north governorates are almost excluded.
- **Timing:** the researcher encountered many time constraints related to the delay in the distribution and the retrieval of the questionnaire, which led to delayed results and so on scheduling the interviews.
- **Accessibility:** the research is confined of Bethlehem Universities students, who have started online learning modality as a result of covid –19 pandemics, which made students' accessibility less attainable.

4.2 Ethical Considerations:

Interview ethical considerations:

The researcher made sure that the basic human rights of individuals were respected and adhered to in context search. The following main considerations were emphasized:

- Respondents were informed about the objectives of the interview.
- Verbal consent was obtained from them at the beginning of the interview.

- Respondents informed that they are voluntarily agreed to be part of this study.
- Questions read clearly and researcher made sure that the respondents understand the meaning of the question.

Then the researcher explained to the participant the following:

- Information about the purpose of the study.
- What is expected of the respondents?
- The participant is volunteer and can be stopped at any time.
- Ensuring confidentiality and anonymity.

4.3 Summary

The researcher used mixed qualitative and quantitative approaches. A descriptive cross sectional analytical study was conducted on (359) respondents from Bethlehem governorate universities using a special designed questionnaire within KAP model, and a pre designed face to face interviews.

Data were collected during the second semester of the academic year (2019/2020), then were processed and analyzed using a software package (SPSS). Qualitative data was content analyzed.

Chapter Five

Findings and Data Presentation

5.1 Introduction

In this section the researcher presents the study results obtained from the data collected during the second semester (2019/2020). Ethical approvals and necessary permissions were granted from the Arab American University, and Bethlehem University, Palestine Ahliya University, and Dar Alkalima University.

5.2 Respondents Demographics and Background

Sex, age, university, university specialization, address, place of living during studying, Computer and internet knowledge, source of information about addiction and available treatment services are shown in the table below.

Table (5): Study respondents by demographic & background data

Variables		N (359)	%
University	Ahliya	124	34.5
	Bethlehem	155	43.2
	Dar Alkalima	80	22.3
Gender	Male	163	45.4
	Female	196	54.6
Age	less than 21	181	50.4
	22-25	159	44.3

	26 and more	19	5.3
Living place	City	143	39.8
	Village	134	37.3
	Camp	82	22.8
Program	Diploma	82	22.8
	Bachelor	277	77.2
College	Administrative and Financial Sciences	50	13.9
	Medical Sciences	64	17.8
	Arts	75	20.9
	Law	28	7.8
	Nursing	13	3.6
	Sciences	11	3.1
	Other	118	32.9
Computer and internet knowledge	Excellent	221	61.6
	Poor	125	34.8
	Moderate	13	3.6

5.3 Knowledge, Attitudes, and Practices of Respondents and Their Perception of the Availability of Addiction Recovery Services in Bethlehem

Table (6): Knowledge, attitudes, and practices of respondents regarding availability of addiction recovery services in Bethlehem

Item	category	(N=359)	%	P-value
Knowledge	poor	39	10.9	0.054
	moderate	262	73.0	
	excellent	58	16.2	
Attitudes	poor	49	13.6	0.385
	moderate	252	70.2	
	excellent	58	16.2	
Practices	poor	68	18.9	0.00
	moderate	235	65.5	
	excellent	56	15.6	

The results show that the majority of respondents (73.0%) have moderate knowledge about level of availability of addiction recovery services in Bethlehem, (16.2%) of them have excellent knowledge, while (10.9%) of them have poor knowledge.

For the attitudes, the majority of respondents (70.2%) have moderate attitudes, (16.2%) of them have poor attitudes, and (13.6%) of them have excellent attitudes.

For the practices, the majority of respondents (65.5%) have moderate practice, (18.9%) of them have excellent practice, while (15.6%) of them have poor practice.

Table (7): P- values for the respondents' knowledge domain by attributes (N=359)

N	Attributes	No		I do not know		Yes		P-value
		N	%	N	%	N	%	
1	Drug addiction is classified as a disease	97	27.0	24	6.7	238	66.3	0.000
2	I have dealt with someone addicted to drugs	191	53.2	7	1.9	161	44.8	0.110
3	Cannabis is classified as an addictive drug	106	29.5	58	16.2	195	54.3	0.000
4	Drugs are a way to relieve the stress of life	168	46.8	40	11.1	151	42.1	0.342
5	Addicts are more likely to have suicidal thoughts	89	24.8	52	14.5	218	60.7	0.000
6	Drugs give your body energy	118	32.9	70	19.5	171	47.6	0.000
7	Addicts are more likely to have strokes	87	24.2	92	25.6	180	50.1	0.000
8	Addicts are more at risk of accidents	41	11.4	54	15.0	264	73.5	0.000
9	A recovered person is more likely to be a re-addict	61	17.0	67	18.7	231	64.3	0.000
10	The higher the cultural level, the less drug addiction tendency is	71	19.8	38	10.6	250	69.6	0.000
11	The lower the financial level, the less drug addiction tendency is	89	24.8	57	15.9	213	59.3	0.000
12	Convulsions are addiction withdrawal symptoms	59	16.4	84	23.4	216	60.2	0.000

13	Addiction withdrawal is dangerous for the addict's life	107	29.8	79	22.0	173	48.2	0.000
14	I heard before about the Palestinian National Rehabilitation Center	91	25.3	35	9.7	233	64.9	0.000
15	I know the services that PNRC offers	97	27.0	50	13.9	212	59.1	0.000
16	I know a drug addict who benefited from the services of PNRC	122	34.0	42	11.7	195	54.3	0.000
17	I have previously visited PNRC	267	74.4	17	4.7	75	20.9	0.000
18	The Palestinian Ministry of Health provides free drug addiction treatment services	49	13.6	79	22.0	231	64.3	0.000
19	I heard about electronic drug addiction treatment services (Virtual)	108	30.1	48	13.4	203	56.5	0.000
20	Electronic treatment services assure patients privacy	53	14.8	77	21.4	229	63.8	0.000
21	Electronic treatment services save time for the beneficiary	60	16.7	82	22.8	217	60.4	0.000
22	Electronic medical services reduce transportation burden	49	13.6	51	14.2	259	72.1	0.000
23	Electronic recovery services reduce the costs of accessing face to face sessions	57	15.9	83	23.1	219	61.0	0.000

24	Electronic recovery services reduce the beneficiary's exposure to social stigma	55	15.3	69	19.2	235	65.5	0.000
25	Electronic recovery services give the beneficiary more space to self-expressions about his/her reasons of addiction	52	14.5	90	25.1	217	60.4	0.000

P-value, or probability value, is a number describing how likely it is that research data would have occurred by random chance (i.e. that the null hypothesis is true for the whole questions were (0.000), which means that if P-value is lower than (0.05) (the threshold) this gives an indication that there is a strong significant scientific evidence base against the pertinent null hypothesis in the research.

While if P-value is higher than the threshold, means that there is no statically significant indicator to prove the null hypothesis (McLeod, 2019).

After calculated P-value, through SPSS most values for the first section of the questionnaire, were (0.00) which means that there is no significant relationship between knowledge and practices regarding addiction and PNRC available treatment services.

Unless, two answers which are question no. (2). I have dealt with someone addicted to drugs were P-value was (0.110), and for question no. (4), Drugs are a way to relieve the stress of life P-value were (0.342) but also both are less than (0.50) which means that there is a significant relationship between knowledge and practices towards addiction, and PNRC treatment services.

Table (8): P- values for the respondents' attitudes domain by attributes (N=359)

N	Attributes	No		I do not know		Yes		P-value
		N	%	N	%	N	%	
1	I consider drug addict a stigma to the family	281	78.3	32	8.9	46	12.8	0.000
2	I believe drug addiction is a disease that can be treated	30	8.4	27	7.5	302	84.1	0.000
3	Drug addiction causes family problems	22	6.1	28	7.8	309	86.1	0.000
4	My community is intolerant to drug addicts	27	7.5	42	11.7	290	80.8	0.000
5	I am in favor of legalizing smoking marijuana without penalizing its use, as is the case in many countries of the world	118	32.9	75	20.9	166	46.2	0.000
6	A drug addict is responsible for the success of his treatment	48	13.4	70	19.5	241	67.1	0.000
7	A drug addict is a criminal, not a victim	203	56.5	64	17.8	92	25.6	0.000
8	It bothers me to live next to someone addicted to drugs	232	64.6	77	21.4	50	13.9	0.000
9	Palestinian authority must punish the drug addict	228	63.5	65	18.1	66	18.4	0.000
10	Tougher penalties for drug addicts are the solution to the addiction problem	75	20.9	41	11.4	243	67.7	0.000
11	One-time drug use is not addictive	201	56.0	68	18.9	90	25.1	0.000

12	Drug addiction is an out-of-control problem in Palestine	217	60.4	59	16.4	83	23.1	0.000
13	Availability of drugs is a danger to young people	28	7.8	33	9.2	298	83.0	0.000
14	The existence of one center specialized in drug addiction treatment in Palestine is enough	170	47.4	81	22.6	108	30.1	0.000
15	Awareness raising sessions about drug addiction should be conducted at schools	32	8.9	34	9.5	293	81.6	0.000
16	Ministry of Health should make more informative efforts about drug addiction treatment services	25	7.0	32	8.9	302	84.1	0.000

P- Values of (0.00) universally applied to all attributes of attitudes above, which means that there is no significant relationship between attitudes and practices towards addiction, and available treatment services provided by PNRC.

Table (9): P- Values for Respondents' Practices Domain by Attributes. (N=359)

N	Attributes	No		Yes		p-value
		N	%	N	%	
1	I have had a dose of a certain type of drug before	311	86.6	48	13.4	0.000
2	I reject a family member for addiction	267	74.4	92	25.6	0.000
3	I Stay away from a friend if I find out that he is an addict	258	71.9	101	28.1	0.000
4	Having someone in my family or friend addicted to drugs increases the likelihood	267	74.4	92	25.6	0.000

	that I will use drugs					
5	I get angry when I know that one of my friends or family members is addicted to drugs	238	66.3	121	33.7	0.000
6	I inform my friend's family if I find out he is addicted to drugs	246	68.5	113	31.5	0.000
7	I help a male addicted person if needed	232	64.6	127	35.4	0.000
8	I participate in awareness raising sessions about drug addiction	233	64.9	126	35.1	0.000
9	I do not marry a person who recovered from addiction	277	77.2	82	22.8	0.000
10	I visit my friend while he is being treated from addiction	266	74.1	93	25.9	0.000
11	I Lend money to a friend that I know is addicted	290	80.8	69	19.2	0.000
12	I help a female addicted to drugs if needed	257	71.6	102	28.4	0.000

Cardiol (2013), in his study Interpreted p-value, that it indicates how probable the results are due to chance. And puts values into the following categorizations:

- If $p = (0.05)$ means that there is a (5%) probability that the results are due to random chance.
- If $p = (0.001)$ means that the chances are only (1) in a thousand.

The choice of significance level at which you reject null hypothesis is arbitrary. Conventionally, (5%), (1%) and (0.1%) levels are used. In some rare situations, (10%) level of significance is also used.

Statistical inferences indicating the strength of the evidence corresponding to different values of p are explained as under:

Table (10): P-values inferential Meaning

Values of p	Inference
$p > 0.10$	No evidence against the null hypothesis.
$0.05 < p < 0.10$	Weak evidence against the null hypothesis
$0.01 < p < 0.05$	Moderate evidence against the null hypothesis
$0.05 < p < 0.001$	Good evidence against null hypothesis.
$0.001 < p < 0.01$	Strong evidence against the null hypothesis
$p < 0.001$	Very strong evidence against the null hypothesis

Source: P Value, Statistical Significance and Clinical Significance (Padam Singh, 2013).

Since P-value for all questions of this section is (0.0), this means that there is no significant relationship between knowledge, attitudes and practices towards PNRC addiction treatment services among Palestine Ahliya University students.

Table (11): Pearson Correlation Between Knowledge and Attitudes Concerning PNRC Addiction Recovery Services Among Palestine Ahliya University Respondents

Variables	N	Pearson Correlation	p-value
Knowledge versus attitudes	124	-0.126	0.163

The result shows that there is no significant relationship at ($\alpha \leq 0.05$) between knowledge, and attitudes towards addiction and PNRC addiction recovery services among Palestine Ahliya university respondents ($p > 0.05 = 0.163$). In addition, Pearson correlation result showed the same results.

Table (12): Pearson correlation for the relationship between knowledge and attitudes on PNRC addiction recovery services among respondents of Bethlehem university

Variables	N	Pearson Correlation	p-value
Knowledge versus attitudes	155	-versus0.163	0.043

The result shows that there is a negative significant relationship at ($\alpha \leq 0.05$) between knowledge and attitudes towards -addiction and PNRC addiction recovery services among Bethlehem university students ($p < 0.05 = 0.043$). and negative significant relationship mean in practical terms, that if knowledge about addiction increased, practices will not increase positively towards PNRC treatment services.

Table (13): Pearson Correlation Between Knowledge And Attitudes On PNRC Addiction Recovery Services Among Respondents Of Dar Alkalima

Variables	N	Pearson Correlation	p-value
Knowledge versus attitudes	80	-0.180	0.110

The result shows that there is no significant relationship at ($\alpha \leq 0.05$) between knowledge and attitudes towards PNRC addiction recovery services among Dar alkalima students ($p > 0.05 = 0.110$).

There is no significant relationship between knowledge and attitudes on PNRC addiction recovery services among students in the three universities.

Table (14): Pearson Correlation For The Relationship Between Knowledge And Attitudes On PNRC Addiction Recovery Services Among Respondents Of The Three Universities

Variables	N	Pearson Correlation	p-value
Knowledge versus attitudes	359	-versus0.180	0.001

The result shows that there is a highly negative significant relationship at ($\alpha \leq 0.05$) between knowledge and attitudes on PNRC addiction recovery services among students in the three universities, since ($p < 0.05 = 0.001$). and Pearson Correlation value is (-0.180), which means current knowledge and attitudes don't affect practices toward addiction and treatment services provided by PNRC.

Table (15): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By University Name

Domains by scale		University						Total		*P-value
		Palestine Ahliya		Bethlehem		Dar alkalima				
		N	%	N	%	N	%	N	%	
Knowledge	Poor	17	4.7	15	4.2	7	1.9	39	10.9	0.633
	Moderate	89	24.8	116	32.3	57	15.9	262	73.0	
	Excellent	18	5.0	24	6.7	16	4.5	58	16.2	
Total		124	34.5	155	43.2	80	22.3	359	100.0	
Attitudes	Poor	22	6.1	16	4.5	11	3.1	49	13.6	0.263
	Moderate	80	22.3	112	31.2	60	16.7	252	70.2	
	Excellent	22	6.1	27	7.5	9	2.5	58	16.2	
Total		124	34.5	155	43.2	80	22.3	359	100.0	
Behavior	Poor	26	7.2	29	8.1	13	3.6	68	18.9	0.197
	Moderate	72	20.1	105	29.2	58	16.2	235	65.5	
	Excellent	26	7.2	21	5.8	9	2.5	56	15.6	
Total		124	34.5	155	43.2	80	22.3	359	100.0	

* X^2

Results show that most of Al-ahlyia students with percentage of (24.8%) have moderate knowledge about PNRC addiction recovery services, (5.0%) have excellent knowledge, and (4.7%) have poor knowledge.

For Bethlehem university, (32.3%) of the students have moderate knowledge about PNRC addiction recovery services, (6.7%) have excellent knowledge, and (4.2%) have poor knowledge.

For Dar alkalima students, (15.9%) of the students have moderate knowledge about PNRC addiction recovery services, (4.5%) have excellent knowledge, and (1.9%) have poor knowledge.

Also, most of Al-ahlyia students with percentage of (22.3%) have moderate positive attitudes about PNRC addiction recovery services, (6.1%) have excellent and (6.1%) have poor positive attitudes.

For Bethlehem university, (31.2%) of the students have moderate positive attitudes about PNRC addiction recovery services, (7.5%) have excellent positive attitudes, and (4.5%) have poor positive attitudes.

For Dar alkalima students, (16.7%) of the students have moderate positive attitudes about PNRC addiction recovery services, (3.1%) have poor positive attitudes, and (2.5%) have excellent positive attitudes.

For the practice theme, most of Al-ahlyia students with percentage of (20.1%) have moderate practices toward PNRC addiction recovery services, (7.2%) have excellent and poor practice.

For Bethlehem university, (29.2%) of the students have moderate practice toward PNRC addiction recovery services, (8.1%) have poor practice, and (5.8%) have excellent practice.

For Dar alkalima students, (16.2%) of the students have moderate practice toward PNRC addiction recovery services, (3.6%) have poor practice, and (2.5%) have excellent practice.

Table (16): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By Gender.

Patterns		Gender				Total		*P-value
		Male		Female				
		N	%	N	%	N	%	
Knowledge	Poor	25	7.0	14	3.9	39	10.9	0.016
	Moderate	118	32.9	144	40.1	262	73.0	
	Excellent	20	5.6	38	10.6	58	16.2	
Total		163	45.4	196	54.6	359	100.0	
Attitudes	Poor	24	6.7	25	7.0	49	13.6	0.828
	Moderate	112	31.2	140	39.0	252	70.2	
	Excellent	27	7.5	31	6.8	58	16.2	
Total		163	45.4	196	54.6	359	100.0	
Behavior	Poor	34	9.5	34	9.5	68	18.9	0.007
	Moderate	94	26.2	141	39.3	235	65.5	
	Excellent	35	9.7	21	5.8	56	15.6	
Total		163	45.4	196	54.6	359	100.0	

* X^2

The results show that most males of Bethlehem university respondents, a percentage of (32.9%) have moderate knowledge about PNRC addiction recovery services, (5.6%) have excellent knowledge, and (7%) have poor knowledge.

Compared to the female respondents of Bethlehem universities, results showed (40.1%) of female respondents have moderate knowledge about PNRC addiction recovery services, (10.6%) have excellent knowledge, and (3.9%) have poor knowledge.

For respondents' attitudes towards PNRC recovery services: (31.2%) of the Male respondents have moderate positive attitudes about PNRC addiction recovery services, (7.5%) have excellent positive attitudes, and (6.7%) have poor positive attitudes.

Also, most of Female respondents with percentage of (39%) have moderate positive attitudes about PNRC addiction recovery services, (6.8%) have excellent and (7%) have poor positive attitudes.

For practices/ behaviors towards addiction, results showed that (26.2%) of Male respondents have moderate practices regarding PNRC addiction recovery services, (9.7%) have excellent practices, and (9.5%) have poor practices. For female respondents' behavior towards PNRC addiction services, results showed that (39.3%) of the female respondents have moderate practices towards PNRC addiction recovery services, (9.5%) have poor practices, and (5.8%) have excellent practices.

Table (17): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By Age.

Domains scaled		Age						Total		*P-value
		Less than 21		22-25		26 and more				
		N	%	N	%	N	%	N	%	
Knowledge	Poor	23	6.4	16	4.5	0	0.0	39	10.9	0.107
	Moderate	135	37.6	110	30.6	17	4.7	262	73.0	
	Excellent	23	6.4	33	9.2	2	0.6	58	16.2	
Total		181	50.4	159	44.3	19	5.3	359	100.0	
Attitudes	Poor	31	8.6	18	5.0	0	0.0	49	13.6	0.021
	Moderate	127	35.4	113	31.5	12	3.3	252	70.2	
	Excellent	23	6.4	28	7.8	7	1.9	58	16.2	
Total		181	50.4	159	44.3	19	5.3	359	100.0	
Behavior	Poor	30	8.4	38	10.6	0	0.0	68	18.9	0.011
	Moderate	126	35.1	97	27.0	12	3.3	235	65.5	
	Excellent	25	7.0	24	6.7	7	1.9	56	15.6	
Total		181	50.4	159	44.3	19	5.3	359	100.0	

* X^2

Results showed that students who are less than (21) years old have moderate knowledge about PNRC addiction recovery services with percentage of (37.6%), (6.4%) have excellent knowledge, and (6.4%) have poor knowledge. Students who are between (22-25) years old, have moderate knowledge about PNRC addiction recovery services with percentage of (30.6%), (9.2%) of them have excellent knowledge, and (4.5%) were poor knowledge.

Students above (26) years old, (4.7%) of them have moderate knowledge about PNRC addiction recovery services, (0.6%) have excellent knowledge, and non-have poor knowledge.

Also, students who are less than (21) have percentage of (35.4%) moderate attitudes about PNRC addiction recovery services, (6.4%) have excellent and (8.6%) have poor attitudes.

University students between (22-25) years, have a percentage of (31.5%) of moderate attitudes about PNRC addiction recovery services, (7.8%) have excellent attitudes, and (5%) have poor attitudes.

Students who are above (26) years old, (3.3%) of the them have moderate attitudes about PNRC addiction recovery services, (0%) have poor attitudes, and (1.9%) have excellent attitudes.

For the practice theme, students who are less than (21) years have got a percentage of (35.1%) have moderate practice toward PNRC addiction recovery services, (7%) have excellent and (8.4%) have poor practice.

Students between (22-25) years old, (27%) of them have moderate practice toward PNRC addiction recovery services, (10.6%) have poor practice, and (6.7%) have excellent practice.

(3.3%) of the students who are older than (26) years, have moderate practice toward PNRC addiction recovery services, (0 %) have poor practice, and (1.9%) have excellent practice.

Table (18): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By Place Of Living

Domains scaled		Place of living						Total		*P-value
		City		Village		Camp				
		N	%	N	%	N	%	N	%	
Knowledge	Poor	10	2.8	22	6.1	7	1.9	39	10.9	0.099
	Moderate	112	31.2	90	25.1	60	16.7	262	73.0	
	Excellent	21	5.8	22	6.1	15	4.2	58	16.2	
Total		143	39.8	134	37.3	82	22.8	359	100.0	
Attitudes	Poor	18	5.0	16	4.5	15	4.2	49	13.6	0.165
	Moderate	96	26.7	96	26.7	60	16.7	252	70.2	
	Excellent	29	8.1	22	6.1	7	1.9	58	16.2	
Total		143	39.8	134	37.3	82	22.8	359	100.0	
Behavior	Poor	26	7.2	26	7.2	16	4.5	68	18.9	0.982
	Moderate	93	25.9	89	24.8	53	14.8	235	65.5	
	Excellent	24	6.7	19	5.3	13	3.6	56	15.6	
Total		143	39.8	134	37.3	82	22.8	359	100.0	

* X^2

Results showed that (31.2%) of students who are living in the City have moderate knowledge about PNRC addiction recovery services, (5.8%) have excellent knowledge, and (2.8%) have poor knowledge.

(25.1%) of students who are living at Villages, have moderate knowledge about PNRC addiction recovery services, (6.1%) of them have excellent knowledge, and (6.1%) were poor knowledge.

(16.7%) of students of Camps, have moderate knowledge about PNRC addiction recovery services, (4.2%) have excellent knowledge, and (1.9%) have poor knowledge.

Regarding Attitudes, Results showed that (26.7%) of students who are living in the City have moderate positive attitudes towards PNRC addiction recovery services, (8.1%) have excellent positive attitudes, and (5%) have poor positive attitudes.

Around (27%) of students who are living at Villages, have moderate positive attitudes towards PNRC addiction recovery services, (6.1%) of them have excellent attitudes, and (4.5%) have poor positive attitudes.

Around (17%) of students living at Camps, have moderate positive attitudes towards PNRC addiction recovery services, (1.9%) have excellent positive attitudes, and (4.2%) have poor positive attitudes.

About practices, Results showed that (25.9%) of students who are living in the City have moderate positive practices towards PNRC addiction recovery services, (6.7%) have excellent positive practices, and (7.2%) have poor positive practices.

A quarter (24.8%) of students who are living at Villages, have moderate positive practices towards PNRC addiction recovery services, (5.3%) of them have excellent practices, and (7.2%) have poor positive practices.

Around (15 %) of students living at Camps, have moderate positive practices towards PNRC addiction recovery services, (3.6%) have excellent positive practices, and (4.5%) have poor positive practices.

Table (19): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By University Program.

Domains scaled		Program				Total		*P-value
		Diploma		Bachelor				
		N	%	N	%	N	%	
Knowledge	Poor	5	1.4	34	9.5	39	10.9	0.229
	Moderate	65	18.1	197	54.9	262	73.0	
	Excellent	12	3.3	46	12.8	58	16.2	
Total		82	22.8	277	77.2	359	100.0	
Attitudes	Poor	13	3.6	36	10.0	49	13.6	0.320
	Moderate	60	16.7	192	53.5	252	70.2	
	Excellent	9	2.5	49	13.6	58	16.2	
Total		82	22.8	277	77.2	359	100.0	
Behavior	Poor	14	3.9	54	15.0	68	18.9	0.038
	Moderate	62	17.3	173	48.2	235	65.5	
	Excellent	6	1.7	50	13.9	56	15.6	
Total		82	22.8	277	77.2	359	100.0	

* X^2

This table shows that (18.1%) of Diploma program students at Bethlehem university have moderate knowledge about PNRC addiction recovery services, (3.3%) have excellent knowledge, and (1.4%) have poor knowledge.

Compared to the Bachelor program students of Bethlehem universities, results showed that (54.9%) of them have moderate knowledge about PNRC addiction recovery services, (12.8%) have excellent knowledge, and (9.5%) have poor knowledge.

For diploma program student's attitudes towards PNRC recovery services: (16.7%) of them have moderate positive attitudes towards PNRC addiction recovery services, (2.5%) have excellent positive attitudes, and (3.6%) have poor attitudes.

Also, most of bachelor students with percentage of (53.5%) have moderate positive attitudes regarding PNRC recovery services, (13.6%) have excellent and (10%) have poor attitudes.

For practices/ behaviors towards addiction, results showed that (17.3%) of diploma program students have moderate practices regarding PNRC addiction recovery services, (1.7%) have excellent practices, and (3.9 %) have poor practices.

For bachelor student's behavior towards PNRC addiction services, results showed that (48.2 %) of the female students have moderate positive practices towards PNRC addiction recovery services, (15 %) have poor positive practices, and (13.9 %) have excellent practices.

Table (20): P- values for the domains of respondents' knowledge, attitudes, and practices by specialization area

Domains scaled		College														*P-value
		Ad. and Finance		Medical Science		Arts		law		Nursing		Science		Other		
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	
Knowledge	Poor	6	1.7	4	1.1	11	3.1	6	1.7	1	0.3	0	0.0	11	3.1	0.669
	Moderate	38	10.6	50	13.9	52	14.5	18	5.0	9	2.5	8	2.2	87	24.2	
	Excellent	6	1.7	10	2.8	12	3.3	4	1.1	3	0.8	3	0.8	20	5.6	
Total		50	13.9	64	17.8	75	20.9	28	7.8	13	3.6	11	3.1	118	32.9	
tud	Poor	6	1.7	6	1.7	11	3.1	8	2.2	2	0.6	0	0.0	16	4.5	0.285

	Moderate	31	8.6	49	13.6	52	14.5	15	4.2	10	2.8	10	2.8	85	23.7	
	Excellent	13	3.6	9	2.5	12	3.3	5	1.4	1	0.3	1	0.3	17	4.7	
Total		50	13.9	64	17.8	75	20.9	28	7.8	13	3.6	11	3.1	118	32.9	
Behavior	Poor	13	3.6	11	3.1	16	4.5	5	1.4	4	1.1	1	0.3	18	5.0	0.092
	Moderate	23	6.4	47	13.1	47	13.1	17	4.7	7	1.9	10	2.8	84	23.4	
	Excellent	14	3.9	6	1.7	12	3.3	6	1.7	2	0.6	0	0	16	4.5	
Total		50	13.9	64	17.8	75	20.9	28	7.8	13	3.6	11	3.1	118	32.9	

* X

Students who have moderate knowledge about PNRC available services are distributed according their college are as the following:

Respondents studying specializations that are not mentioned in the questionnaire have got (24.2 %) then Arts students with (14.5 %), medical sciences (13.9%), administration and financial sciences (10.6%), then Law students (5%), after that Nursing students (2.5%) and science students (2.2%).

(5.6%) of respondents from different colleges have excellent knowledge about PNRC treatment services, then (3.3 %) of Arts college students, (2.8%) of medical sciences, (1.7%) of finance students, (1.1%) of Law student and (0.8%) of both Nurses and science students.

(3.1 %) of both Arts student and students from other different colleges have poor knowledge about PNRC available services, after that (1.7%) of both Law and finance students, then (1.1%) of medical sciences students then (0.3%) of Nursing students.

Respondents who have moderate positive attitudes towards PNRC available services are distributed according their specializations are as the following:

Respondents studying programs that not mentioned in the questionnaire have got (23.7%) then Arts students with (14.5 %), medical sciences (13.6%), administration and financial sciences (8.6%), then Law students (4.2%), after that both Nursing students and science students (2.8%).

Respondents from different specialization areas who have excellent positive attitudes towards PNRC treatment services were (4.7%), then (3.6 %) of Finance college students, (3.3 %) of Arts sciences, (2.5%) of medical sciences students, (1.4%) of Law student and (0.3%) of both Nurses and science students.

Respondents from other different colleges who have poor positive attitudes towards PNRC available services were (4.5 %), after that (3.1%) of Arts students, then (2.2%) of Law students then (1.7%) of both Finance and medical sciences students and (0.6%) of Nursing students.

Respondents who have moderate positive practices and behaviors towards PNRC available services are distributed according their college are as the following:

Respondents studying programs that not mentioned in the questionnaire have got (23.4%) then both medical sciences and Arts students with (13.1 %), administration and financial sciences (6.4%), then Law students (4.7%), science students (2.8%), after that Nursing students (1.9%).

Some (5%) of Students from different specialization areas have poor positive attitudes towards PNRC treatment services, then (4.5 %) of Arts sciences, (3.6 %) of Finance college students, (3.1 %) of medical sciences students, (1.4%) of Law student and (1.1%) of Nurses and (0.3%) of science students.

A similar percent (4.5%) of Students from different colleges have excellent positive practices towards PNRC treatment services, then (3.9 %) of Finance college students, (3.3 %) of Arts sciences, (1.7%) of both medical sciences and Law students, (0.6%) Nurses students.

Table (21): P- Values For The Domains Of Respondents' Knowledge, Attitudes, And Practices By Computer And Internet Knowledge.

Patterns		Computer and internet knowledge						Total		*P-value
		Excellent		Poor		Moderate				
		N	%	N	%	N	%	N	%	
Knowledge	Poor	20	5.6	18	5.0	1	0.3	39	10.9	0.447
	Moderate	168	46.8	85	23.7	9	2.5	262	73.0	
	Excellent	33	9.2	22	6.1	3	0.8	58	16.2	
Total		221	61.6	125	34.8	13	3.6	359	100.0	
Attitudes	Poor	26	7.2	22	6.1	1	0.3	49	13.6	0.059
	Moderate	156	43.5	89	24.8	7	1.9	252	70.2	
	Excellent	39	10.9	14	3.9	5	1.4	58	16.2	
Total		221	61.6	125	34.8	13	3.6	359	100.0	
Behavior	Poor	42	11.7	22	6.1	4	1.1	68	18.9	0.820
	Moderate	146	40.7	82	22.8	7	1.9	235	65.5	
	Excellent	33	9.2	21	5.8	2	0.6	56	15.6	
Total		221	61.6	125	34.8	13	3.6	359	100.0	

* X^2

The results showed that (64.8%) of students who have an excellent computer and internet skills have moderate knowledge about PNRC addiction recovery services, (9.2%) have excellent knowledge, and (5.6%) have poor knowledge.

Compared to students with poor computer and internet skill, were results showed that (23.7%) of them have moderate knowledge about PNRC addiction recovery services, (6.1%) have excellent knowledge, and (5%) have poor knowledge.

Also, according to study results (2.8%) of students with moderate computer and internet skill, have moderate knowledge about PNRC addiction recovery services, (0.8 %) have excellent knowledge, and (0.3 %) have poor knowledge.

Concerning student's attitudes towards PNRC recovery services: (43.5 %) of students have excellent computer and internet skills, have moderate positive attitudes towards PNRC addiction recovery services, (10.9 %) have excellent positive attitudes, and (7.2 %) have poor attitudes.

Students with poor computer and internet skills were (24.8%), have moderate positive attitudes towards PNRC addiction recovery services, (3.9 %) have excellent positive attitudes, and (6.1 %) have poor attitudes.

And those who have moderate computer and internet skills, results showed that (1.9 %) of them have moderate positive attitudes towards PNRC addiction recovery services, (1.4 %) have excellent positive attitudes, and (0.3 %) have poor attitudes.

Regarding the Practices, study findings showed that (40.7%) of students who have excellent computer and internet skills have moderate practices toward PNRC available addiction services, (11.7%) have poor practices, and (9.2 %) of them have excellent practices.

(22.8%) of students with poor internet skills have, moderate practices towards PNRC available addiction services, (6.1 %) have poor practices, and (5.8 %) of them have excellent practices.

And (1.9 %) of students with moderate computer and internet skills have moderate practices and behaviors toward PNRC available treatment services, (1.1%) of them have poor practices and (0.6 %) have excellent practices.

5.4 Respondents Knowledge, Attitudes, And Practices Towards Drug Addiction

Questionnaire Item No	Statement (Number of respondents)	Yes	No	I don't know
1	Addiction classified as a disease	66.3 %	27 %	6.7 %
3	Cannabis is an addictive drug	54.3 %	29.5 %	16.2 %
4	Drugs relieve life stress	42.1 %	46.8 %	11.1 %
6	Drugs give your body energy, as some believe	47.6 %	32.9 %	19.5 %

Results showed that the respondents have a good knowledge about drug addiction, high rates of positive results were found, and very low rates of “I don't know” which reflect a high level of knowledge among respondents.

Questionnaire Item No	Statement (Number of respondents)	Agree	Disagree	Neutral
27	I believe drug addiction is a disease that can be treated	84.1 %	8.4 %	7.5 %
28	Drugs causes family problems	86.1 %	6.1 %	7.8 %
30	I am in favor of legalizing smoking marijuana without penalizing its use,	46.2 %	32.9 %	20.9 %
36	One time drug use doesn't cause addiction	25.1 %	56 %	18.9 %
37	Drug addiction is an out-of-control problem in Palestine	23.1 %	60.4 %	16.4%
38	Availability of drugs is a danger to young people	83 %	7.8 %	9.2 %

Results showed that respondents, have very strong positive attitude regarding drugs abuse effect on addict's families, which can be explained by the social- ecological model that indicates the relation between individual, family, and society. (83%) agreed

that drugs availability is a reason of addiction, and more than (60%) said that addiction is not an out-of-control problem in Palestine.

Questionnaire Item No	Statement (Number of respondents)	Agree	Disagree	Neutral
42	I have had a dose of a certain type of drug before	13.4 %	86.6 %	0

More than 13% of respondents, admitted that they had drugs before, which is a high indication of curiosity between youth.

5.5 Respondents Knowledge, Attitudes, And Practices Towards Drug Addicts:

Questionnaire Item No	Statement (Number of respondents)	Yes	No	I don't know
5	Addicted person is more likely to have suicidal thoughts	60.7 %	24.8 %	14.5 %
7	Addicted person is more likely to have strokes	50.1 %	24.2 %	25.6 %
8	Addicted person is more at risk of accidents	73.5 %	11.4 %	15 %
9	A recovered person is more likelihood to be addicted to drugs again	64.3 %	17 %	18.7 %
10	The higher the cultural level, the less drug addiction tendency	69.6 %	19.8 %	10.6 %
11	The lower the financial level, the less drug addiction tendency	59.3 %	24.8 %	15.9 %

Respondents showed that they have a good knowledge about addicted persons, problems that may faces, and role of cultural and financial levels in being addicted. But in this part, many responses were “I don't know” which mean that a high rate up to quarter of the in some question have a doubt regarding drugs effect on health.

Questionnaire Item No	Statement (Number of respondents)	Agree	Disagree	Neutral
26	I consider drug addict a stigma to his family	12.8 %	78.3 %	8.9 %
29	My community is intolerant of drug addicts	80.8 %	7.5 %	11.7 %
31	A drug addict is responsible for the success of his treatment	67.1 %	13.4 %	19.5 %
32	A drug addict is a criminal, not a victim	25.6 %	56.5 %	17.8 %
33	It bothered me to live next door to someone addicted to drugs	13.9 %	64.6 %	21.4 %

Results showed that society does not consider drug addicts as a stigma, and addicted person is a victim, but at the same time society is intolerant of them, this means that individual affects and being affected by the sophisticated relations surrounding society.

Questionnaire Item No	Statement	Agree	Disagree	Neutral
2	I have never dealt with someone addicted to drugs	44.8 %	53.2 %	2%
43	I reject a member of my family if he is addicted to drugs	25.6 %	74.4 %	0
44	I Stay away from a friend if I find out that he is addicted to drugs	28.1 %	71.9 %	0
45	Having someone in my family or friend addicted to drugs increases the likelihood that I will use drugs	25.6 %	74.4 %	0
46	I get angry when I know that one of my friends or family is addicted to drugs	33.7 %	66.3 %	0
50	I do not marry a recovered person from addiction	22.8 %	77.2 %	0
52	I Lend money to a friend that I know is addicted	19.2 %	80.8 %	0

Results showed very high rates of positive practices of respondent towards addicted persons. Starts with the acceptance of an addicted family member, and the preventive

practices to support and protect them. Which also reflects the relation and family role of dealing with addicted person in a positive and effective way.

5.6 Respondents' Knowledge About Withdrawal, PNRC And Provided Services

Table (28): Respondents Knowledge About Withdrawal, PNRC And Provided Treatment Services				
Questionnaire Item No	Statement	Yes	No	I don't know
12	Convulsions are symptoms of withdraw from drug addiction	60.2 %	16.4 %	23.4 %
13	Withdrawal from drug addiction is dangerous for the addict person	48.2 %	29.8 %	22 %
14	I heard before about the PNRC	64.9 %	25.3 %	9.7 %
15	I know the services that PNRC provides towards drug addicts	59.1 %	27 %	13.9 %
16	I know a drug addict who has benefited from the services of PNRC	54.3 %	34 %	11.7 %
17	I have previously visited PNRC	20.9 %	74.4 %	4.7 %
18	The Palestinian Ministry of Health provides free drug addiction treatment services	64.3 %	13.6 %	22%
19	I heard about electronic drug addiction treatment services (Virtual)	56.5 %	30 %	13.4 %
20	The electronic treatment services assure patients privacy	63.8 %	14.8 %	21.4 %
21	Electronic treatment services are not time consuming for the recipient	60.4 %	16.7 %	22.8 %
22	Electronic medical services reduce transportation burden	72.1 %	13.6 %	14.2 %
23	Electronic recovery services reduce the costs of accessing face to face treatment	61 %	15.9 %	23.1 %
24	Electronic recovery services reduce the beneficiary's exposure to social stigma	65.5 %	15.3 %	19.2 %
25	Electronic recovery services give the beneficiary more space to express himself and the reasons of addiction	60.4 %	14.5 %	25.1 %

Most respondents have good knowledge about withdrawal symptoms, electronic recovery benefits, PNRC services but they didn't visit the center.

Questionnaire Item No	Statement	Agree	Disagree	Neutral
39	The existence of one center specialized in drug addiction treatment in Palestine is enough	30.1 %	47.4 %	22.6 %
40	Educational lectures about drug addiction should be conducted in schools	81.6 %	8.9 %	9.5 %
41	The Ministry of Health should make more efforts to introduce drug addiction treatment services	84.1 %	7 %	8.9 %

Almost a half of the sample said that one specialized center is not enough, and strongly agreed that educational lectures should be set, and MOH should spend more efforts to introduce available treatment services.

Questionnaire Item No	Statement (Number of respondents)	Agree	Disagree	Neutral
47	I inform my friend's family if they find out that he is addicted to drugs	68.5 %	31.5 %	0
48	I help a male addicted person if he needs it	64.6 %	35.4 %	0
49	I participate in educational lectures about drug addiction	64.9 %	35.1 %	0
51	I visit my friend while he is being treated from addiction	74.1 %	25.9 %	0
53	I help a girl addicted to drugs if she needs to	71.6 %	28.4%	0

Around (68.74%) have positive practices towards addicted friend's families, also they will participate in educational lectures if any. And they will help addicted female, if she seeks help.

5.7 Interview Results

Semi structured interviews were conducted with (10) respondents who were inpatients and unfortunately become outpatients during the period of which the center was providing covid – 19 treatment services. Interviews were face to face and by phone to assess their knowledge, attitudes, behaviors regarding PNRC and to discover the weaknesses and strengthen point that inpatient face during treatment journey inside PNRC, and to obtain future suggestions. Data were collected then analyzed manually to conclude valuable recommendations, which will lead to better level of care then better results. The following tables includes results:

Table (31):Interviewed Respondents' Sample Distribution.										
Respondents	1	2	3	4	5	6	7	8	9	10
Age	26	23	28	30	42	47	52	34	23	28
Sex (M/F)	M	M	F	M	M	M	M	M	M	M
Education Level	Tawjeehi	Diploma	B.A	Tawjeehi	Diploma	Tawjeehi	Primary	Secondary	Secondary	Primary
Address	Village	Camp	Village	Camp	Village	Village	City	City	City	City
Addiction Duration (Y/M)	4Y	3Y	6Y	7Y	7Y	8Y	7Y	6M	2Y	3M
Drugs Type	Nice	Heroin	Cannabi	Cannabi	Nice	Betadin	Nice	Ecstasy	Nice	Nice
Treatment stage	Detoxification	Detoxification	Rehabilitation	Rehabilitation	Rehabilitation	Rehabilitation	Rehabilitation	Detoxification	Rehabilitation	Rehabilitation
Bullying	Yes	No	Yes	Yes	Yes	No	No	No	Yes	Yes
Religion/Respondents Groups	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes

Results showed that (90 %) of the sample were males, only 1 female the researcher could conduct the interview with her due to couple of reasons the most important are that verbal

consent must be taken, and two cases refused even if the social workers who had previously set many therapeutic sessions together.

The second restriction was, that most females have withdrawal their treatment because PNRC, nowadays become a public area where any patient who suffers from Covid – 19 symptoms is visiting it with his care providers, which means that No privacy there is.

Almost (80 %) of the sample, has been addicted for a long period of time between (2 – 8)years, and by checking the available data there are (2)cases who have been addicted for more than (40)years, then finally decided to seek treatment intervention.

Results showed, that the most common type of drugs is called "Nice", which agrees with The Palestinian Ministry of Health Press Conference on the occasion of the International Day for Drug Control, that "Nice" is one of the most common drugs in Palestine, and it consists of manufactured chemicals that do not contain any of the drugs or psychotropic substances listed in the international schedules. Screening tests does not show any results on examining addicts, except that it leads to an increase or decrease in the appetite for food according to the substance added to it, hallucinations, tension, anxiety and sometimes depression, rot and dental problems. (Wattan News Agency, 2019). Nice drug is affordable, cheap, and can be easily manufactured from legal components, dried plant sprinkled with insecticide (K-300), and therefore the person who consumes this type is like someone inhaling the insecticide, where he feels dizziness and squalor. And when counted, the researchers found that (168) out of (366)

of addicts are using “Nice” in addition to ecstasy which Makes them feel more self-confident, increased alertness, awareness and ability to self-acceptance and feel more euphoric and ecstatic.

- (70%) of the sample have finished the first stage of therapy (Detoxification), (30%) were still at the first stage.
- (60 %) of the sample has been bullied.
- (50 %) of the sample has joined respondents and religious groups.

Table (32): Respondents’ Opinion About PNRC Services

Question	Address	Drugs Type	Treatment Stage	Sex	Answer	Weight
1				(M/F)		%
What is your opinion in PNRC services	Village	Nice	Detoxification	1M	Suitable and Appropriate	30.0
			Rehabilitation	2M		
	Camp	Cannabis	Rehabilitation	1F	Suitable and Appropriate	10.0
		Heroin	Detoxification	1M	Unsuitable/needs development	10.0
	City	Nice	Rehabilitation	2M	Suitable and Appropriate	20.0
				1M	Unsuitable/needs development	10.0
		Ecstasy	Detoxification	1M	Suitable and Appropriate	10.0

The first question was: What is your opinion in PNRC services

A very high average, (80 %) of the sample said that PNRC services are suitable, appropriate, and meeting their need, (30 %) of the sample were living at villages using Nice, (10 %) living at villages using Cannabis.

Some of them, (20 %) of the sample said that services are unsuitable, and needs development. And (10 %) are living at camps and using Heroin, also (10 %) are living at city using Nice.

These results give us indications that most of patients are happy with the services, and treatment plans for each individual are designed specifically to achieve goals.

Table (33): Respondents Reported Treatment Interruption After PNRC Service Conversion To Covid-19 Setting

Question	Address	Drugs Type	Treatment Stage	Sex (M/F)	Answer	Weight %
2						
How did you get affected by treatment interruption after PNRC service conversion from	Village	Nice	Detoxification	1M	Withdrawal Symptoms/Re-addicted	10.0
			Rehabilitation	2M	Re-addicted	10.0
		Cannabis	Rehabilitation	1F	Out-patient	10.0
	Camp	Heroin	Detoxification	1M	Relapse	10.0
		Cannabis	Detoxification	1M	Re-addicted	10.0
			Rehabilitation	1M	Withdrawal Symptoms/Out-	10.0

addiction					Patient	
to Covid19	City	Nice	Rehabilitation	2M	Out-patient	20.0
				1M	Re-addicted	10.0
		Extazia	Detoxification	1M	Relapse	10.0

Second question was: How did you get affected by treatment interruption after PNRC service conversion from addiction to Covid19.

Unfortunately, (60 %) of sample have been relapsed and re-addicted, they went back to the same circumstances with the same stress and same friends. (30 %) of them were at the rehabilitation level of treatment, which may last for more than one month until their bodies become free of drugs. Relapse prevention plans often are used within community-based treatment programs (Center for Substance Abuse Treatment; 2005).

One of the respondents said: “Unfortunately, I couldn’t achieve my treatment goal because of Corona, and I returned home back, again and again to the same difficulties, same stress, same friend, and I was enforced to use drugs again to cope with my life”.

Studies assured that each treatment plan should be followed at least by one to three months of intensive rehabilitative care in a residential treatment program, followed by continuing care, first in an intensive outpatient program (2 to 5 days per week for a few months) and later in a traditional outpatient program that meets (1)to (2)times per month. (Substance Abuse and Mental Health Services Administration (US), 2016).

In USA, studies proven that every dollar spent on substance use disorder treatment saves)\$4) in health care costs and (\$7) in criminal justice costs. (Ettner, 2006) But, what about expenditures that MOH spent during (2019)in treating addicts, and the breakdown

in providing inpatient rehabilitation services during Covid -19 Pandemic after changing PNRC into treatment center for symptomatic covid cases.

Future researcher should highlight here, that all resources that have been spent during (2019), at PNRC with patients should be taken into consideration when MOH plan is set for the coming years dealing with pandemics and infectious diseases.

Table (34): Respondents Reported Positives Of Being Inpatient In PNRC.

Question	Address	Drugs Type	Treatment Stage	Sex (M/F)	Answer	Weight %
3 What are the positives of being inpatient in PNRC	Village	Nice	Detoxification	1M	Treatment	10.0
			Rehabilitation	2M	Recovery , better health /environment	20.0
		Cannabis	Rehabilitation	1F	Never being	10.0
	Camp	Heroin	Detoxification	1M	New friends, away from stress	10.0
		Cannabis	Rehabilitation	1M	Almost recovered	10.0
	City	Nice	Rehabilitation	3M	Therapy , clean place, supervision	30.0
		Extazia	Detoxification	1M	Therapy , rest	10.0

Third question: What are the positives of being inpatient in PNRC

Unfortunately, inauguration of inpatient female department hasn't done yet, because number of female patient was only (3) during the first year of work.

Around (70 %) of respondents found PNRC a clean and a beautiful place to stay away from stress under supervision of qualified and well trained staff, get treated, have new friends and have time to set new plans for their future.

And only (10 %) of the sample which was female, who hasn't been an inpatient before, and (20 %) focused in their answers on therapy and medical treatment journey.

Table (35): Respondents Reported Negatives Of Being Inpatient In PNRC

Question	Address	Drugs Type	Treatment Stage	Sex	Answer	Weight
4				(M/F)		%
What are the negatives of being inpatient in PNRC	Village	Nice	Detoxification	1M	Pain / Home sickness	10.0
			Rehabilitation	1M	Pain	10.0
				1M	Home sickness / no privacy	10.0
		Cannabis	Rehabilitation	1F	Never being	10.0
	Camp	Heroin	Detoxification	1M	Pain / bad hospitality	10.0
		Cannabis	Rehabilitation	1M	Pain / missing friends	10.0
	City	Nice	Rehabilitation	3M	No visits / long LOS	30.0
		Extazia	Detoxification	1M	Exit restrictions No privacy	10.0

Results showed that (40 %) of respondents have suffered of pain, which is according to the previous studies is a common withdrawal symptom, also might include sweating, goosebumps, vomiting, anxiety, insomnia, and muscle pain. (Stoppler; 2021)

Another study has described withdrawal effects: Anxiety, irritability, agitation, Diaphoresis, shaking, chills, Lacrimation, rhinorrhea, Anorexia, nausea, vomiting, Cramping, mydriasis, Tachycardia, hypertension, Increased pain, Drug craving. (Bangert et al., 2019)

Also (30 %) were at detoxification level, where pain is normal at this stage. And with (10%) said that pain last for the next stage.

About missing families, (20 %) mentioned that they had home sickness, (10 %) missed their friends, (10%) said that privacy is not within the desired level.

Treatment period according to (30 %) is a very long period of time, and complains of visits ban.

LAKEVIEW HEALTH Addiction Treatment and recovery center locates in Florida State, mentioned that most drug treatment programs are at least (28) days in length and extend to (90) days or longer and it might expand beyond (120) days. (Teague; 2021) Depending on the type of drug, length of addiction and other personal factors.

Table (36): Respondents Recommendations To MOH Concerning PNRC Scope Of Services

Question	Address	Drugs Type	Treatment Stage	Sex (M/F)	Answer	Weight %
5 Your recommendations to MOH if PNRC services has changed	Village	Nice	Detoxification	1M	keep it for addiction	10.0
			Rehabilitation	1M	keep it for addiction	10.0
		Cannabis	Rehabilitation	1M	keep it for addiction	10.0
			Rehabilitation	1F	Receive Female addicts	10.0
	Camp	Heroin	Detoxification	1M	New activities for patients	10.0
		Cannabis	Rehabilitation	1M	New therapeutic techniques	10.0
	City	Nice	Rehabilitation	3M	Alternative facility	30.0
		Extazia	Detoxification	1M	Provide medicine	10.0

Beneficiaries' recommendations to MOH if PNRC scope of services has changed were as the following:

- (30 %) of respondents, who passed over treatment plan highly recommended that PNRC should continue to provide treatment services for addicts.

- (20 %) recommended that PNRC should have new therapeutic techniques, and to apply new approaches of therapy with more indoor activities for patients.
- (10 %) said PNRC, must start receiving female addicts.
- (10 %) said alternative medicines should be available at all MOH out-patient clinics.

Table (37): Respondents' Encouragement Of Other Addicts To Attend PNRC

Question	Address	Drugs Type	Treatment Stage	Sex	Answer	Weight
6				(M/F)		%
Do you encourage other addicts to join PNRC	Village	Nice	Detoxification	1M	Yes	10.0
			Rehabilitation	1M	Advise them to enroll	10.0
				1M	Encourage therapy	10.0
		Cannabis	Rehabilitation	1F	Stop it	10.0
	Camp	Heroin	Detoxification	1M	No comment	10.0
		Cannabis	Rehabilitation	1M	Guide them to PNRC	10.0
	City	Nice	Rehabilitation	1M	Stop addiction and find therapy	10.0
				2M	Join PNRC	20.0
		Extazia	Detoxification	1M	Nothing	10.0

Almost all participant said that they will guide other addicted friends to stop drug addiction, to seek therapy as soon as possible, but (20%) of the sample have no comments.

In this regard, people who used to drugs abuse, or drinking alcohol or any other addicted product, feels like normal when they take the dose, as a result of what called "Tolerance" which means that their brain and body have adapted to the effect of drugs,

because brain is very plastic, and over time it adjusts to the increase of producing dopamine and other neurotransmissions and chemicals (Lee, 2016).

Table (38): Respondents Recommendations To MOH To Improve PNRCTreatment Services

Question	Address	Drugs Type	Treatment Stage	Sex (M/F)	Answer	Weight %
7						
Your recommendations to improve PNRCTreatment Services	Village	Nice	Detoxification	1M	Activities	10.0
			Rehabilitation	1M	More trained staff	10.0
				1M	E- services	10.0
		Cannabis	Rehabilitation	1F	Open female department E- services	10.0
	Camp	Heroin	Detoxification	1M	E- services Family visits	10.0
		Cannabis	Rehabilitation	1M	More beds	10.0
	City	Nice	Rehabilitation	1M	Mobile clinics	10.0
				1M	Promotion for PNRCTreatment services, e- services	10.0
				1M	Phone services	10.0
		Extazia	Detoxification	1M	Another center in the northern governorate	10.0

5.8 Summary:

Reliability of the questionnaire were calculated using Cronbach alpha formula, after being distributed on (20) students from Hebron governorate.

The internal consistency of each area of the questionnaire were (0.89) for the Knowledge, (0.84) for the attitudes, and (0.75) for the practices section. Which reflects a good consistency.

Then data were collected from (359)respondents from the targeted population, a scale of (poor, moderate, and excellent) for the three areas of the study were set, then answers and percentages were calculated.

P- values for each question of the questionnaire were calculated according to each demographic variable (age, gender, place of living, study program, college, specialist, and computer and internet skills).

The Pearson correlation between variables was calculated for the three universities.

Chapter Six

Discussion, Conclusion, and Recommendations

6. Discussion:

6.1 Introduction:

To study the relations between individual and society dealing with drugs issue, a special survey was designed to assess Knowledge, attitudes and practices towards addiction and PNRC available treatment services. The study was conducted on (359) students of Bethlehem Universities. More than a fifth (55%) of the sample were females, (45 %) were males between (21-26)years, (22.8%) were studying Diploma and (77.2%) attended to the bachelor programs.

The majority of the respondents have excellent computer skills, and almost (40%) live in cities, (37%) in villages and (22.8)are living in refugee camps.

6.2 Respondents' Knowledge, Attitudes, And Practices Towards Drug Addiction:

The majority of the Respondents, (66.3 %) agreed that addiction is considered as a disease, which is agreed with the American Society of Addiction Medicine addiction definition, which defined addiction as *a treatable, chronic medical disease involving complex interactions among brain circuits, genetics, the environment, and an individual's life experiences. People with addiction use substances or engage in behaviors that become compulsive and often continue despite harmful consequences. Prevention efforts and treatment approaches for addiction are generally as successful as those for other chronic diseases.* (American Society of Addiction Medicine,2019).

More than (54.3 %) of the respondents consider Cannabis as an addictive drug. Previous studies highlighted that “*attitudes towards cannabis use have softened: adult and adolescent perceptions of cannabis use risk have decreased since 2001*”(Hasin et al.,2015), (Carliner et al., 2017). However, there are a significant percentage, (29.5 %) that consider it as non-addictive drug, and (16.2 %) of the respondents don't know, which means that stakeholders should spend more efforts to correct respondents' knowledge regarding Cannabis.

More than (42 %) said that drugs release stress, which agrees with the findings of the previous studies which found that those who go to drug addiction have a different kinds of stress. Moreover, stress is one of the risk factors of being drug abuser, A series of population- based and epidemiological studies recognized stress as a predictive of addiction. (Sinha, 2008). However, (46.8%) of the respondents said that drugs do not reduce stress, which means that they have a good positive knowledge about stress related addiction.

Around (48%) of respondents have a misconception that drugs give their bodies energy as shown in the previous studies that gaining energy is one of the reasons behind being addicted.

Drug abuse, will give energy and increase concentration which help the user focus at school or work, and only street drugs will consider addiction and harm health or can cause addiction are two of eight Myths about substance abuse. (Cindy, 2020)

Drugs interact with the brain and body to alter moods, emotions, and behaviors by changing brain chemistry and a person's perceptions, and impacting how individuals interact with the world around them, Mind-altering drugs may slow down or speed up the central nervous system and autonomic functions necessary for living, such as blood

pressure, respiration, heart rate, and body temperature. Some of the brain's chemical messengers, or neurotransmitters, are also impacted by drug abuse, including Dopamine, Serotonin, Gamma-aminobutyric acid and Norepinephrine which might increase motivation, and attention. (Meredith; 2021)

But (32.9 %) said that it didn't provide their bodies with energy and (19.5 %) don't have any idea about this issue.

Drug addiction is an out of control issue in Palestine, (60.4 %) of the respondents disagreed this statement and as mentioned in a study prepared by the Palestinian National Institute of public health and Ministry of Health (2018), (26,500) male citizens use drugs dangerously, including (16,453) in West Bank and (10,047) in Gaza Strip, and the two most common types of drugs used in the West Bank are hashish and industrial marijuana, and the two most common types in Gaza are Erica and tramadol, in the absence of Accurate statistics for the percentage of addicted women.(National Institute of Public Health,2018) assures that addiction is a real problem that threatens our society.

6.3 Respondents' Knowledge, Attitudes, And Practices Towards Addicts

More than (50 %) of respondents agreed that an addicted person is more likely to have suicidal thoughts, have strokes, and at risk of accidents which is proven in the previous studies. A study titled "Drug Addiction as Risk for Suicide Attempts", concluded that Suicide is closely linked to substances use (Dragisic et al., 2015).

Around (70 %) agreed that the higher the cultural/ financial level is, the less drug addiction tendency is and vice versa, which agrees with all previous studies

emphasizing the link between addiction and culture and financial level. This also concurs with previous studies that concluded alcohol use and marijuana use in young adulthood were associated with higher childhood family socio-economic status (Patrick et al., 2012).

Overall, answers showed a positive social attitude towards addicted persons as (78.3 %) of respondents do not consider drug addict a stigma to the family who agreed with previous studies that found that globally addict is not a stigma to his family. However, regionally he is, and (80.8 %) of them agreed that their community is intolerant to drug addicts. In addition, statistics in the United States of America showed that stigma related suicide is the second leading cause of death among young people in the United States aged (15) to (34) years (centers for Disease Control Prevention, 2015).

Addcounsel, which is a private rehabilitation center in London on a global scale has reported in October (2020), that addiction patient's suffer in eastern Arab societies more than any other society, due to the fact that society deal with addiction and in particular substance addiction as an immoral act resulting mainly from the weakness of religious faith and the person's divine and reckless nature, while The truth is quite on the contrary, and addiction has been classified within a group of behavioral diseases that a person may be born with and make him more susceptible to addictive behavior, and some types of addictions may occur due to medical errors in prescribing some psychological treatments (Addcounsel, 2020).

More than half (56.5 %), disagreed that a drug addict is a criminal, not a victim, which is a strong indicator on attitudes and support potential from people at the addict's ecological circles, starting from his relationships with the family and friends, to the

service at the community and state levels. Studies and practical experiences have shown that the family plays a pivotal role in the addiction treatment process, positively and negatively. That is, it either contributes to the success of the recovery program and achieves ideal results or may be a reason to obstruct it and make matters worse. It is all related to the extent of their ability to understand the nature of the addiction patient and how dealing with it and most importantly, understanding the fact that addiction in the first place is a disease that requires treatment and not a crime that deserves punishment (Addcounsel report, 2020).

However, a quartet of the sample, (25.6 %) said that addicts are criminals, which corresponds with the Palestinian Law on Combating Narcotic Drugs and Psychotropic Substances (2015) Article (17) that reads thus:

A penalty of imprisonment for a period not exceeding one year and a fine of not less than five hundred Jordanian dinars and not more than two thousand Jordanian dinars or its equivalent in the legally circulated currency or either of these two penalties, every person who uses, imports, produces, manufactures, possesses or possesses any of the drugs or psychotropic substances. Or grow it or buy it with the intention of using it (The Palestinian Law on Combating Narcotic Drugs and Psychotropic Substances, 2015).

Almost half of the respondents have dealt with someone addicted to drugs, and (74.4 %) of respondents don't reject a member of my family if he is addicted to drugs, which give a good positive indicator of culture of accepting addicts within family or friend if any, support and help them to be treated. But the same percentage of respondents (74.4 %) said that having someone in their families or friend who are addicted to drugs increases the likelihood to will use drugs, which agrees with Mayo clinic report that considered

Children of parents who abuse drugs are more at risk of drug addiction, as fathers are role models for their children (mayo clinic, 2017).

A good percentage, (66.3 %) don't get angry when they know that one of their friends or one family member is addicted to drugs, and (77.2 %) of them never mind getting married to someone who recovered from addiction. Yet, most of the respondents (80.8 %) of the study sample said that they will not lend money to a friend that they know is addicted. Which means that the study population have a good positive attitude regarding recovered addicts, and they accept the fact of friend or family member become addicted and as a result they will give support.

6.4 Respondents Knowledge, Attitudes, And Practices Towards Withdrawal, PNR Provided Treatment Services:

6.4.1 Addiction Withdrawal

Around (60.2 %) knew that convulsions are symptoms of withdraw from drug addiction, which is not proven scientifically in previous researches as the main withdrawal symptom.

Complications such as convulsions and delirium are recognized in alcohol withdrawal. However, these have not been described as a feature of opioid withdrawal (Parkar, 2006).

Acute addiction withdrawal syndrome may include several characteristic symptoms, such as:

Nervousness or anxiety, trouble sleeping, frequent yawning, flu-like symptoms, nausea, diarrhea, hot and cold flashes, runny nose, excessive sweating, goosebumps, muscle

cramps/body aches and Withdrawal from drug addiction is dangerous for the addicted person (Amelia, 2021).

This threatens might be an obstacle that faces those who decide to be treated.

Withdrawal from drug addiction is dangerous for the addict person, as mentioned in the previous study that symptoms of withdrawal may feel like the flu at the beginning and these symptoms may last for couple of days, and sever symptoms may peak after about three days (Kristeen; 2018). But only (48.2%) of respondents know that it is and (29.8%) don't know.

Only (64.9 %) of respondents heard about the PNRC, (59.1 %) know the services that PNRC provides towards drug addicts, (54.3 %) knowing a drug addicted who has benefited from the services of PNRC, only (20.9 %) have previously visited PNRC and (64.3 %) know that Palestinian Ministry of Health provides addiction treatment services for free of charge.

Privacy was defined as a fundamental human right in the Universal Declaration of Human Rights at the (1948) United Nations General Assembly (Kayaalp, 2017). And according to the Palestinian law no (20), article (60), no. (4), which prevent infringe patient privacy, dignity, and religious and cultural beliefs. The policy of PNRC was not to allowed visits, even families of the patient, unless there is a family counseling session, which made some mystery about the facility and its services.

6.4.2 Electronic Recovery Service:

Nowadays, the new trend in treating addiction includes open-source web-based applications, Self-Management and Recovery Training (smart recovery), and virtual rehabilitation session especially in the last stage of recovery. Kelly in his study which

was conducted in Australia on both respondents and facilitators to explore their experience using SMART recovery self-management training, displaying strengths as communicated by those who utilize its services, concluded moderate to strong satisfaction from both sides (Kelly, 2017).

More than fifth of our respondents, (56.5 %) have heard about electronic drug addiction treatment services (Virtual) and (30 %) didn't hear before, majority of the respondents agreed that the electronic treatment services assure patients privacy, not time consuming, reducing transportation burdens, reduce the costs of accessing face to face treatment, reduce the beneficiary's exposure to social stigma, and give the beneficiary more space to express himself and the reasons of addiction which are the benefits of E-recovery services which agrees with the mentioned previous study.

More than (80 %) of respondents recommended that educational classes about drug addiction should be integrated into school system, and Ministry of Health should make more efforts to introduce drug addiction treatment services. This agrees with the previous studies that highlighted role of educational institutions in drug addiction prevention (Ameer, 2016).

Majority have positive practices towards addicts, and addiction treatment services as the following:

- (68.5 %) will inform their friend's family if they find out that he/ she is addicted to drugs.
- (64.6 %) will help a male addicted person if he needs it, as well as (71.6 %) will help a girl addicted to drugs if she needs it.
- (64.9 %) will participate in educational lectures about drug addiction if there is and (35.1%) will not.

- And finally, (74.1 %) will visit their friends while being treated from addiction if any, and (25.9 %) will not.

6.4.3 Respondent's Recommendation To MOH.

In the last question, the researcher asked recommendations to improve PNR

Respondents mentioned a list of recommendations, which are as the following:

1. MOH should plan to allocate another facility at the northern governorates to reduce the transportation burdens upon patients.
2. MOH should activate mobile treatment services, including consultations, counseling, and follow up services.
3. Staff training, to improve their skills and to Keep pace with development.
4. Implement new indoor and outdoor activities for patients during their stay at PNR.
5. To open female department as soon as possible.
6. MOH should promote available treatment services through social media, schools and universities lectures, and any other ways.

6.5 Summary:

In this chapter results showed, that (55%) of participant were females and (45%) were males, (77%) of them are attending to bachelor programs and (22.8%) are in diplomas programs.

The majority have excellent computer and internet skills, (40%) are living in the downtown, 37%) at villages, and around (33%) at camps.

Attributes of the questionnaire were classified into categories and organized thematically as the following:

1. Respondents' knowledge, attitudes, and practices regarding drug addiction.
2. Respondents' knowledge, attitudes, and practices regarding addicts.
3. Respondents' knowledge, attitudes, and practices regarding withdrawal and PNRC treatment provided services.

Results were discussed, and merged to previous studies, then questions of the interviews were discussed one by one and participant's experiences and recommendations were found.

6.6 Conclusions:

The researcher started the study with the assumption that there is a relationship between Knowledge, attitudes, and practice among Bethlehem universities students regarding drugs addiction, addicts and available treatment services.

1. The study provided evidence that most of Bethlehem universities students have moderate knowledge about drug addiction, addicts, and available rehabilitation services in PNRC.
2. Respondents have moderate to excellent positive satisfied attitudes toward addiction, addicts, and related treatment services.
3. In Bethlehem universities respondents are pretty aware of and have moderate positive practices towards addiction, addicts, and available treatment services.

This study generated solid evidence that there is a significant relationship between knowledge, attitudes and practices. Which means that we have to spend more efforts to increase the lack of knowledge about addiction treatment approaches, PNRC and its

services between all community layers and population groups especially between respondents.

In this regard, and through Social-Ecological Model, which reflects the relation between individual, relationships with family, friends, surrounding community, and the whole society. The study concluded that cost-effective recovery and rehabilitation management won't prevent crimes, decrease murders, robberies, suicidal, save lives, enrich society, and increase public health level, which is an indicator for the country's development. Vice versa we cannot ignore the negative role of society's intolerance of drug addicts and stress related to the deterioration of the economic, political, social, psychological conditions that contribute and shape the phenomena of addiction.

6.7 Recommendations

6.7.1 Knowledge About Drugs Addiction And Available Services

1. Publications should be made to increase knowledge about addiction, addicts, the services provided by the Ministry, and the stages of treatment in the PNRC.
2. PNRC must focus on the knowledge in addiction and explain the therapeutic stages to clear the misunderstanding and wrong perception regarding some relevant issues such as "treatment is painful", that can be done by addressing awareness activities in the universities and high schools.

6.7.2 Attitudes Regarding About Drugs Addiction And Available Services

1. Family support and counselling session are needed to universalize positive attitudes towards addicts and addiction in Palestine

2. Promote PNRC as the only available service facility, through the media focusing on social media.
3. Create a system of special personalized PNRC treatment plans on the basis of knowledge, attitudes, and practice for each addict, in reference with other international rehabilitation centers, taking into consideration new trends in therapy.

6.7.3 Practices About Drugs Addiction And Available Services

1. Educate the public especially youth by organized site visits to PNRC centers to enhance informed choices and positive attitude regarding PNRC therapeutic programs, treatment services, and facilities itself, while preserving patient privacy and security.
2. Enrolled PNRC beneficiary must be in his/ her own plan plans and should be appropriate to each, including motivation and reinforcement.
3. The researcher recommends that E- services must be piloted and subsequently adopted under supervision of qualified therapists, as soon as possible.

6.7.4 MOH, and PNRC Services:

1. This study with all its components from findings, objectives, mechanisms, and recommendations is recommended to guide PNRC work. It could form the foundations for a distinctive, practical, realistic, consistent, and targeted treatment plan for potential service users. It serves as a tool in achievement of goals set by MOH behind establishing PNRC.

2. The researcher recommends for PNRC to focus on, developing recovery plans for university students, during studying by assuring privacy and security to encourage addicts in universities to engage in treatment in the PNRC.

6.7.5 Further and Future Studies:

1. The researcher recommends for MOH to focus on the intellectual capital to enhance scientific research and data-driven planning on addiction. This can be achieved when MOH allows and uses the research to increase its intellectual or human capital.
2. PNRC is recommended to increase leading and engaging in the local, regional and international conferences regarding addiction for networking, experience exchange and information sharing.
3. The researcher recommends that continuum of recovery services, must be the most important point to focus on during the therapeutic journey to avoid relapsing. This means that any future service plans disruption must be utterly prevented.
4. The researcher recommends studies about SMART recovery – mobile applications to examine it feasibly in the Palestinian context.

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a. Appendices:

Appendix I: The Questionnaire / in Arabic

Arab American University Palestine (AAUP)

Faculty of Graduate Studies



دراسة بعنوان

معرفة وتوجهات وسلوك الطلاب الجامعي نحو الإدمان والخدمات العلاجية التي يقدمها المركز الوطني في بيت لحم.

هدفت هذه الدراسة الى التعرف على أهم توجهات وسلوك الطلاب الجامعي نحو الإدمان والخدمات العلاجية التي يقدمها المركز الوطني في بيت لحم، ومن أجل تحقيق هدف الدراسة الرئيس، قامت الباحثة ببناء أداة الدراسة الاستبانة وتكونت من قسمين: الأول، البيانات الأولية والثاني، فقرات الدراسة، الرجاء وضع إشارة (x) أمام أحد البدائل الآتية: في المجال الاول (نعم، لا، لا اعرف)، وامام احد الفقرات الاتية في المجال الثاني والثالث (اوافق بشدة، اوافق، محايد، لا اوافق، لا اوافق بشدة) علماً أن البيانات التي ستدلون بها ستكون سرية ولن تستخدم إلا لأغراض البحث العلمي فقط.

شاكراً لكم حسن تعاونكم

الباحثة: رندا دار يعقوب

اشراف الدكتوراة : عائشة الرفاعي

(معرفة توجهات وسلوك الطلاب الجامعي نحو الإدمان والخدمات العلاجية التي يقدمها المركز

الوطني في بيت لحم)

القسم الاول: البيانات الاولية

الرجاء وضع اشارة (x) أمام احد البدائل الاتية التي تنطبق عليك

الجنس:	(1) ذكر <input type="checkbox"/>	(2) انثى <input type="checkbox"/>		
العمر:	<input type="checkbox"/> 21- فأقل	<input type="checkbox"/> 22-25	<input type="checkbox"/> 26 وأكثر	
مكان السكن:	(1) مدينة <input type="checkbox"/>	(2) قرية <input type="checkbox"/>	(3) مخيم <input type="checkbox"/>	
البرنامج الملحق فيه:	(1) دبلوم <input type="checkbox"/>	(2) بكالوريوس <input type="checkbox"/>		
الكلية:	(1) العلوم الإدارية والمالية <input type="checkbox"/>	(2) العلوم الطبية المساندة <input type="checkbox"/>	(3) الأداب <input type="checkbox"/>	(4) الحقوق <input type="checkbox"/>
(5) التمريض <input type="checkbox"/>	(6) العلوم <input type="checkbox"/>	(7) الرياضة <input type="checkbox"/>	(8) غير ذلك <input type="checkbox"/>
مدى معرفتي باستخدام الكمبيوتر والانترنت	(1) ممتازة <input type="checkbox"/>	(2) متوسطة <input type="checkbox"/>	(3) ضعيفة <input type="checkbox"/>	(4) معدومة <input type="checkbox"/>

القسم الثاني

الرجاء وضع اشارة (x) أمام احد البدائل الاتية التي تراها مناسبة من وجهة نظرك

المجال الاول:

معرفة الطلاب حول إدمان المخدرات وعلاجه

الرقم	الفقرات	نعم	لا	لا أعرف
1	الإدمان على المخدرات هو حالة مرضية			
2	تعاملت من قبل مع شخص مدمن على المخدرات			
3	الحشيش مادة تصنف على انها مخدرة تؤدي للإدمان			
4	المخدرات وسيلة لتخفيف ضغوطات الحياة كما يعتقد البعض			
5	الشخص المدمن أكثر عرضة للأفكار الانتحارية			
6	المخدرات تعطي طاقة جسدية كما يعتقد البعض			
7	المدمن على المخدرات أكثر عرضة للجلطات			
8	المدمن على المخدرات أكثر عرضة للحوادث			
9	المدمن على المخدرات المتشافي عرضة للإدمان عليها مرة أخرى			
10	كلما ارتفع المستوى الثقافي قل التوجه نحو الإدمان على المخدرات			
11	كلما قل المستوى المادي قل التوجه نحو الإدمان على المخدرات			
12	التشنجات من أعراض محاولة الانسحاب من الإدمان على المخدرات			
13	الانسحاب من الإدمان على المخدرات فيه خطر على حياة المدمن نفسه			
14	سمعت من قبل عن المركز الوطني الفلسطيني للتأهيل لعلاج الإدمان على المخدرات			
15	أعرف الخدمات التي يقدمها هذا المركز تجاه المدمنين على المخدرات			
16	أعرف أحد المدمنين على المخدرات استفاد من خدمات المركز الوطني الفلسطيني للتأهيل			
17	سبق وزرت المركز الوطني الفلسطيني للتأهيل			

			توفر وزارة الصحة الفلسطينية خدمات علاج الإدمان على المخدرات بشكل مجاني	18
			سمعت عن خدمات علاج الإدمان على المخدرات الالكترونية (عن بعد)	19
			تتميز الخدمات العلاجية الالكترونية بالمحافظة على سرية المرضى	20
			توفر الخدمات العلاجية الالكترونية الوقت على المنتفع	21
			تقلل الخدمات العلاجية الالكترونية من صعوبة المواصلات	22
			تقلل الخدمات العلاجية الالكترونية من تكاليف الوصول لتلقي العلاج الوجيه	23
			تخفف الخدمات العلاجية الالكترونية من تعرض المنتفع للحرج /الوصم الاجتماعي	24
			تعطي الخدمات العلاجية الالكترونية مساحة اكبر للمنتفع في التعبير عن مشاكله واسباب توجهه نحو الإدمان	25

المجال الثاني:

توجهات الطلاب حول إدمان المخدرات وعلاجه

الرقم	الفقرات	أوافق	محايد	لا أوافق
26	أعتبر المدمن على المخدرات وصمة عار لعائلته			
27	أعتقد أن الإدمان على المخدرات هو حالة مرضية يمكن علاجها			
28	الإدمان على المخدرات يسبب بمشاكل أسرية			
29	مجتمعي غير متسامح مع المدمنين على تناول المخدرات			
30	انا مع تشريع تدخين الحشيش دون ان يعاقب متناوله كما هو الحال في العديد من دول العالم			
31	المدمن على المخدرات مسؤول عن نجاح علاجه			
32	المدمن على المخدرات مجرم وليس ضحية			
33	يزعجني ان اسكن بجوار شخص مدمن على المخدرات			

			يتوجب على الجهات المسؤولة عقاب المدمن على المخدرات	34
			تشديد العقوبات على المدمن على المخدرات هي الحل لمشكلة الادمان	35
			تعاطي المخدرات لمرة واحدة لا يسبب الادمان على المخدرات	36
			الادمان على المخدرات مشكلة خارجة عن السيطرة في فلسطين	37
			توفر المخدرات يشكل خطر على فئة الشباب	38
			وجود مركز واحد متخصص بعلاج الادمان على المخدرات في فلسطين كافٍ	39
			يجب عمل محاضرات تثقيفية عن الادمان على المخدرات في المدارس	40
			يجب على وزارة الصحة بذل جهود اكثر للتعريف بخدمات علاج الادمان على المخدرات	41

المجال الثالث:

سلوك الطلاب حول إدمان المخدرات وعلاجه

الرقم	الفقرات	أوافق	محايد	لا أوافق
42	سبق لي وان أخذت جرعة من نوع معين من المخدرات من قبل			
43	انبذ أحد أفراد عائلتي اذا كان مدمن على المخدرات			
44	ابتعد عن احد اصدقائي اذا عرفت انه مدمن على المخدرات			
45	وجود شخص مدمن على المخدرات في عائلتي او صديق يزيد احتمالية ان اتعاطى المخدرات			
46	أغضب عندما أعرف ان احد اصدقائي او افراد عائلتي مدمن على المخدرات			
47	اقوم بابلاغ عائلة صديقي اذا عرفت انه مدمن على المخدرات			
48	أقوم بتقديم المساعدة لشاب مدمن على المخدرات إذا احتاج			
49	اشارك في المحاضرات التثقيفية حول الادمان على المخدرات			
50	لا اتزوج بشخص متشافي من الادمان			

			أقوم بزيارة صديقي اثناء فترة علاجه من الادمان	51
			أقرض المال لصديق اعلم بانه مدمن	52
			أقوم بتقديم المساعدة للفتاة المدمنة على المخدرات اذا كانت بحاجة لذلك	53

Appendix II: The Questionnaire / in English

Knowledge, attitudes and practices of Bethlehem university students towards

addiction and the services provided by Palestinian National Rehabilitation Centre

القسم الاول: البيانات الاولية

الرجاء وضع اشارة (x) أمام احد البدائل الاتية التي تنطبق عليك

الجنس:	(1) ذكر <input type="checkbox"/>	(2) انثى <input type="checkbox"/>						
العمر:	(1) 21- فأقل <input type="checkbox"/>	(2) 22-25 <input type="checkbox"/>	(3) 26 أكثر <input type="checkbox"/>					
مكان السكن:	(1) مدينة <input type="checkbox"/>	(2) قرية <input type="checkbox"/>	(3) مخيم <input type="checkbox"/>					
البرنامج الملتحق فيه:	(1) دبلوم <input type="checkbox"/>	(2) بكالوريوس <input type="checkbox"/>						
الكلية:	(1) العلوم الإدارية والمالية <input type="checkbox"/>	(2) العلوم الطبية المساندة <input type="checkbox"/>	(3) الأداب <input type="checkbox"/>	(4) الحقوق <input type="checkbox"/>	(5) التمريض <input type="checkbox"/>	(6) العلوم <input type="checkbox"/>	(7) الرياضة <input type="checkbox"/>	(8) غير ذلك <input type="checkbox"/>
مدى معرفتي باستخدام الكمبيوتر والانترنت	(1) ممتازة <input type="checkbox"/>	(2) متوسطة <input type="checkbox"/>	(3) ضعيفة <input type="checkbox"/>	(4) معدومة <input type="checkbox"/>				

القسم الثاني

الرجاء وضع اشارة (x) أمام احد البدائل الاتية التي تراها مناسبة من وجهة نظرك

The First Area:

Knowledge of students about drug addiction and its treatment services:

I do not know	No	Yes	Paragraphs	No
	N	P	Drug addiction is classified as a disease	1
	N	P	I have ever dealt with someone addicted to drugs	2
	N	P	Cannabis is classified as an addictive drug	3
	P	N	Drugs are a way to relieve the stress of life, as some believe	4
	N	P	Addicted person is more likely to have suicidal thoughts	5
	N	P	Drugs give your body energy, as some believe	6
	N	P	Addicted person is more likely to have strokes	7
	N	P	Addicted person is more at risk of accidents	8

	N	P	A recovered person is more likelihood to be addicted to drugs again	9
	N	P	The higher the cultural level, the less drug addiction tendency	10
	N	P	The lower the financial level, the less drug addiction tendency	11
	N	P	Convulsions are symptoms of withdraw from drug addiction	12
	N	P	Withdrawal from drug addiction is dangerous for the addict person	13
	N	P	I heard before about the Palestinian National Rehabilitation Center (PNRC)	14
	N	P	I know the services that PNRC provides towards drug addicts	15
	N	P	I know a drug addict who has benefited from the services of PNRC	16
	N	P	I have previously visited PNRC	17
	N	P	The Palestinian Ministry of Health provides free drug addiction treatment services	18
	N	P	I heard about electronic drug addiction treatment services (Virtual)	19
	N	P	The electronic treatment services assure patients privacy	20
	N	P	Electronic treatment services are time consuming for the recipient	21
	N	P	Electronic medical services reduce transportation burden	22
	N	P	Electronic recovery services reduce the costs of accessing face to face treatment	23
	N	P	Electronic recovery services reduce the beneficiary's exposure to social stigma	24
	N	P	Electronic recovery services give the beneficiary more space to express himself and the reasons of addiction	25

The Second Area

Students' attitudes about drug addiction and its treatment

Do not Agree	Neutral	Agree	Paragraphs	No
P		N	I consider drug addict a stigma to his family	26
N		P	I believe drug addiction is a disease that can be treated	27
N		P	Drug addiction causes family problems	28
N		P	My community is intolerant of drug addicts	29
P		N	I am in favor of legalizing smoking marijuana without penalizing its use, as is the case in many countries of the world	30
N		P	A drug addict is responsible for the success of his treatment	31
P		N	A drug addict is a criminal, not a victim	32
P		N	It bothered me to live next door to someone addicted to drugs	33
P		N	Palestinian authority must punish the drug addict	34
N		P	Tougher penalties for drug addicts are the solution to the addiction problem	35
P		N	One-time drug use is not addictive	36
P		N	Drug addiction is an out of control problem in Palestine	37
N		P	Availability of drugs is a danger to young people	38
P		N	The existence of one center specialized in drug addiction treatment in Palestine is enough	39
N		P	Educational lectures about drug addiction should be conducted in schools	40
N		P	The Ministry of Health should make more efforts to introduce drug addiction treatment services	41

The Third Area

Students' behavior on drug addiction and its treatment

Do not Agree	Neutral	Agree	Paragraphs	No
N		P	I have had a dose of a certain type of drug before	42
P		N	I reject a member of my family if he is addicted to drugs	43
P		N	I Stay away from a friend if I find out that he is addicted to drugs	44
P		N	Having someone in my family or friend addicted to drugs increases the likelihood that I will use drugs	45
N		P	I get angry when I know that one of my friends or family is addicted to drugs	46
N		P	I inform my friend's family if they find out that he is addicted to drugs	47
N		P	I help a male addicted person if he needs it	48
N		P	I participate in educational lectures about drug addiction	49
P		N	I do not marry a recovered person from addiction	50
N		P	I visit my friend while he is being treated from addiction	51
P		N	I Lend money to a friend that I know is addicted	52
N		P	I help a girl addicted to drugs if she needs to	53

Appendix III: Semi- structured Interview / Questions:

	العمر
	التحصيل الاكاديمي
	مكان السكن
	مدة تعاطي المخدرات
	نوع المخدرات
	المرحلة العلاجية عند خروجك من المركز (ازالة السمية / التأهيل)
	تعرضت للتنمر من المجتمع بسبب تعاطي المخدرات
	هل لجأت للدين او المجموعات الشبابية كحل بديل

- رأيك بالخدمات العلاجية التي يقدمها المركز الوطني الفلسطيني للتأهيل

- كيف اثر عليك انقطاعك عن تلقي العلاج / بعد تحويل المركز لمرضى كورونا

- الايجابيات اثناء فترة اقامتك في المركز

- السلبيات اثناء فترة اقامتك في المركز

- لو فرضنا ان المركز تحول لتقديم خدمات اخرى / ما هي توصياتكم لوزارة الصحة

- ماذا تفعل اذا عرفت ان احدهم يتعاطى مخدرات؟؟؟ وهل تشجعهم للعلاج؟؟ ولماذا؟؟؟

- اقتراحات لتطوير الخدمات في المركز

الملخص

هدفت هذه الدراسة إلى تقدير المعرفة والمواقف والممارسات بين طلاب جامعات بيت لحم فيما يتعلق بإدمان المخدرات والخدمات العلاجية المتاحة في المركز الوطني الفلسطيني لإعادة التأهيل في مدينة بيت لحم.

استخدمت هذه الرسالة المنهج الوصفي التحليلي الكمي والنوعي من أجل تحقيق الهدف الرئيسي من الدراسة. قامت الباحثة ببناء أدوات الدراسة وهي استبيان وجدول مقابلات شبه منظم. تم جمع البيانات وتحليلها ومقارنتها مع الدراسات السابقة لأيجاد القواسم المشتركة والاختلافات. أكمل ما مجموعه 359 طالب وطالبة جامعية من جامعات بيت لحم والأهلية ودار الكلمة استبيان الدراسة ، كما تم مقابلة 10 مستفيدين من خدمات المركز الوطني الفلسطيني لإعادة التأهيل (PNRC) ممن تعطلت خططهم العلاجية نتيجة تحويل المركز إلى مركز علاجي من إصابات كوفيد-19.

وافق أكثر من ثلثي المستطلعين (66.3%) على أن الإدمان يعتبر مرضاً. قال أكثر من 42% أن الأدوية تخفف من التوتر. يعتقد حوالي 48% من المستطلعين أن الأدوية تمنح أجسامهم الطاقة. وافق حوالي 70% منهم على أنه كلما ارتفع المستوى الثقافي / الإقتصادي ، قل اتجاه إدمان المخدرات والعكس صحيح. قدمت الدراسة أدلة على أن غالبية المستجيبين لديهم معرفة معتدلة ، ومواقف إيجابية متوسطة إلى ممتازة ، وممارسات إيجابية معتدلة حول إدمان المخدرات ، والمدمنين ، وخدمات إعادة التأهيل المتاحة في المركز الفلسطيني الوطني للتأهيل PNRC. توصي الباحثة بالتوعية العامة وتنظيم الحملات حول الإدمان والخدمات المتاحة ، خاصة بين الشباب ، وتدعو وزارة الصحة لتعزيز والترويج لخدمات الإدمان باعتبارها مرفق خدمة الإدمان الوحيد في فلسطين.