

Survey on consequences of using narcotics and impact of therapy in two renowned rehabilitation centers in Dhaka



Daffodil
International
University

Project On

Survey on consequences of using narcotics and impact of therapy in two renowned rehabilitation centers in Dhaka

Submitted To

The Department of Pharmacy,
Faculty of Allied Health Sciences,
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In the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy

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Survey on consequences of using narcotics and impact of therapy in two renowned rehabilitation centers in Dhaka

APPROVAL

This project Survey on consequences of using narcotics in rehabilitation center, submitted to the Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Pharmacy and approved as to its style and contents.

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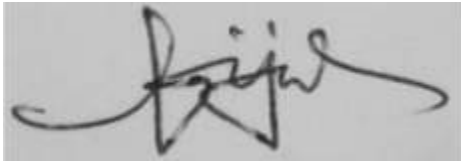
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Declaration

I hereby declare that this project reports “Survey on consequences of using narcotics and betterment of therapy in rehabilitation center” is done by me under the supervision of Farhana Israt Jahan, Assistant professor, Department of Pharmacy, Faculty of Allied Health Sciences, Daffodil International University. I also declare that neither this project nor any part has been submitted elsewhere for the award of Bachelor or any degree.

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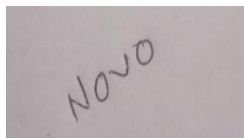
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.....

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Abstract

Introduction: Narcotics are substances that are meant to relieve pain, such as opium, however today there are many different sorts of narcotics that are utilized for addiction, such as yaba, cannabis, LSD, etc. Over time, addiction turns a person weird, and day by day, they develop socially awkwardness and hostility. This research covered the topic of drugs and drug addiction.

Goal of the study: The purpose of this study was to determine the consequences of using narcotics and the impact of therapy of two rehabilitation center in Dhaka. My goal is to help others who want to gain knowledge or willing to work on same platform and also spreading awareness, consequences of addiction, outcome of addictions as well.

Methodology: This study is a survey-based study, and around 115 participants took part in the survey. This study was conducted physically in two rehabilitation centers- “Golden Life Drug Treatment and Rehabilitation Center” and “BYFC Rehabilitation Center” in the city of Dhaka.

Result: According to the results of this poll, the majority of addicts who participated were between the ages of 16 and 19 (40%). The remaining members of the group consisted of those who were between the ages of 20 and 24 (32%), 25 to 30 (18%), and above 30 (10%). 90% of them are male. 70% addict patient are from urban and the main agent is yaba which comprises alone more than 40%. Unemployment plays for addiction purpose as 25% which is a major concern for society. Around 42% patient get released from rehabilitation center under 1-6 months where 32% patient get released within 1-6 months. In terms of therapy, only 30% of total therapy is treated with medication. More than 60% medicines are opioid antagonists. Rest is for managing behavior of patients (anti-depressants, sedatives and hypnotics mainly) . More than 40% feel drowsiness as major side effect. Around half of the addicted percentage became completely unsocial. 86% patients follow up doctors and specialists to live a healthy life after release. More than 80% bad behavior, discrimination, bad mouth is coming from surrounding people even after completely getting treated from rehabilitation center.

Conclusion: This study will help to know detail about narcotics addict and will help in the similar sector of studies that are being conducted.

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Key words: Narcotics, Opium, Cannabis

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Chapter One: Introduction

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1.1. Narcotic

Narcotic was originally a medical name for any psychoactive drug having numbing or paralyzing effects. [1] Since then, the word "opiate" has evolved to be synonymous with "opioid" in the United States. These drugs include morphine, heroin, and other synthetic opioids derived from opium. Those three are morphine, codeine, and thebaine (while thebaine itself is only very mildly psychoactive, it is a crucial precursor in the vast majority of semi-synthetic opioids, such as oxycodone or hydrocodone). [2-3] The word "narcotic" has a bad connotation and an unclear legal definition. In the United States, a narcotic drug like heroin is considered illegal when it is taken in any way that is not prescribed by a doctor (in this word sense, equal to any controlled substance or illicit drug). The phrase has a less pejorative meaning and a clearer definition in the field of medicine. [4-6] If a substance is classified as a narcotic under the law, the penalties for its distribution and use are often harsher than for other drugs. In the United States, for instance, both cocaine and amphetamines are considered "Schedule II" substances, but the punishment for possession of cocaine is harsher than that of possession of amphetamines since cocaine is a narcotic. [7]

History of Narcotic

It is claimed that the Greek physician Galen was the first person to use the word "narcotic" to describe substances that numb or deaden, leading to paralysis or a lack of sensation. It is derived from the Greek word ν (narcosis), which Hippocrates used to describe the process of numbing or the condition of being numbed. As the primary examples, Galen cited mandrake root, altercus (eclata), seeds, and poppy fluid (opium). [8-10] In its original use, the term "opiate" applied to any drug that numbed the senses, masked pain, or caused sleep. [11] At this time, the phrase is used in a variety of contexts. Others use the term "narcotic" to refer to any illegal drug, while others believe that the term "narcotic" refers only to chemicals that bind at opioid receptors (cellular membrane proteins that are triggered by substances like heroin or morphine). The term "narcotics" is used in the legal system of the United States to refer to opium, opium derivatives, and their semi-synthetic equivalents. [12] However, cocaine is also regarded as a narcotic under this system because of the analgesic effects that it has. 1926 was the year that saw the first documented use of the concept that included "any unlawful drug." Around the year 1600 is when people first started using it as an adjective. [13] There are a large number of distinct classes of drugs.

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Fig 01: Greek physician Galen

Morphine and codeine are the two types of narcotic medications that are used most often. Both heroin and morphine are manufactured from opium for use in medicine. Heroin is the opium derivative that is used for recreational reasons more often than any other narcotic. Fentanyl, oxycodone, tramadol, pethidine (Demerol), hydrocodone, methadone, and hydromorphone are some of the synthetic medications that were developed with an opium basis and are used for the treatment of pain. Regularly, new formulations of already existing pain drugs are being developed. The most recent and up-to-date version, zohydro, a higher-dosage form of hydrocodone, was introduced in 2014. Zohydro is currently the most potent form of hydrocodone that has been developed for the treatment of pain; its potency is comparable to that of a moderate dose of oxycodone. [14]

1.2. Analgesics

Analgesics are medications that are used to alleviate pain. There are two primary classifications: non-narcotic analgesics, which are used to treat moderate pain, and narcotic analgesics, which are used to treat severe pain. [15]

Narcotic analgesics

Opioids are often used in narcotic analgesics. Opioid receptors, which are G-protein coupled receptors, are found throughout the brain, spinal cord, digestive system, and neurons in the periphery. These molecules bind to opioid receptors. [16]

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Mechanism

There are three subtypes of opioid receptors, which are denoted by the following names: mu (- opioid receptors), delta, and kappa (-opioid receptor). Natural opioids found in the body, such as enkephalins, dynorphins, and endorphins, do not bind selectively to any one kind of opioid receptor. The binding of the opioid receptors results in a cascade that ultimately leads to the opening of the channels and the hyperpolarization of the neuron. Mu, a form of K⁺ channel; Delta, also a type of K⁺ channel; and Kappa, a type of Ca²⁺ channel are the types of channels found in opioid receptors. A post-synaptic inhibition of neuronal activity as well as a pre-synaptic inhibition of neurotransmitter release may be the result of hyperpolarization. Analgesia can be lessened by post-synaptic neural inhibition, and its effectiveness might be diminished further by central hyperactivity. Ca²⁺ channels shut in Kappa receptors rather than K⁺ channels, while K⁺ channels open in Mu and Delta receptors. This is one of the ways that the mechanism of Kappa receptors differs from that of Mu and Delta receptors. [17]

1.3. Narcotic Drugs

Consolidating all prior accords and streamlining the worldwide drug control apparatus, the 1961 Convention was a great success in international drug control and was further enhanced by the 1972 Protocol. The 1961 Convention regulates the growth of "narcotic substances," which includes opium poppies, coca shrub, cannabis plants, and their derivatives (although cocaine is a stimulant drug rather than one that induces sleep). Opium and its derivatives, morphine, codeine, and heroin are only some of the 138 narcotic medicines that are regulated. Synthetic drugs like methadone and pethidine, as well as cannabis and coca leaf, are also included. To ensure that controlled substances are only used for medical and scientific research, Convention parties agree to restrict their production, manufacturing, export, import, distribution, stockpiling, trading, use, and possession. Governments must provide estimates and statistical reports to INCB on the forms provided for that purpose, detailing the quantities of pharmaceuticals needed, produced, and used, as well as the amounts seized by police and customs officials. The system of estimates initially adopted by the 1931 Convention is widely regarded as the secret to the effectiveness of the control system created under the 1961 Convention. All states, whether or not they are signatories to the 1961 Convention, are included in the estimating system. When it comes to the legal distribution of medications that are under international regulation, INCB produces an annual technical report.

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Among the prescription opioids are:

- Oxycodone
- Oxymorphone
- Hydrocodone
- Hydromorphone
- Fentanyl
- Morphine
- Codeine
- Methadone
- Tramadol
- Buprenorphine



Fig 02: Oxymorphone

Opioids include the illicit street narcotic heroin.

Morphine

Strong opiate morphine is naturally present in opium, a dark-brown substance found in poppies (*Papaver somniferum*). It is mostly used to treat pain, but it is also often used recreationally or used to create other illegal opioids. Morphine may be given orally, sublingually, inhaled, injected into a muscle, injected under the skin, intravenously, into the area surrounding the spinal cord, transdermal, or as a rectal suppository. It causes analgesia and modifies perception and emotional reaction to pain by acting directly on the central nervous system (CNS). With repeated use, tolerance and reliance might develop on both a physical and psychological level. It is widely used for pain from myocardial infarction, kidney stones, and labor pain and may be used for both acute and chronic pain.

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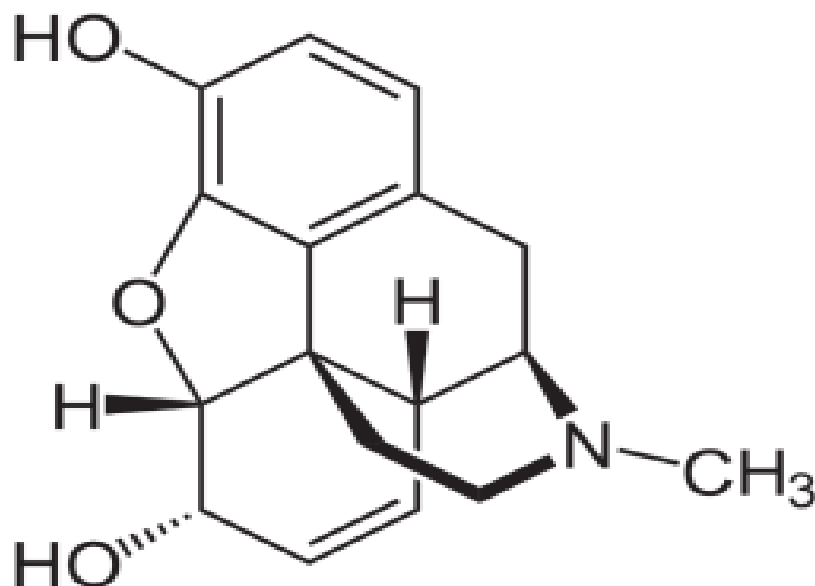


Fig 03: Morphine structure

When given intravenously, the highest impact is felt after approximately 20 minutes, and when given orally, the maximum effect is felt after about 60 minutes. The duration of the effect is between 3 and 7 hours. Long-acting morphine preparations come in both brand-name and generic forms under the MS-Contin, Kadina, and other brands. Low blood pressure, nausea, vomiting, and reduced respiratory effort are a few morphine side effects that might be dangerous. Morphine is abuse-prone and addictive. Opioid withdrawal symptoms might occur if a person's dosage is decreased after a prolonged period of usage. Morphine often causes sleepiness, vomiting, and constipation as adverse effects. It is suggested to take morphine with caution if you are pregnant or nursing since it might harm the unborn child. Between 1803 and 1805, German chemist Friedrich Sertürner discovered morphine. It is widely accepted that this is the first time an active chemical from a plant has been isolated. Merck started commercializing it in 1827. Following the development of the hypodermic syringe in 1853–1855, morphine use increased. Because it often induces sleep, Sertürner gave the drug the name morphium in honor of the Greek deity of dreams, Morpheus. The opium poppies straw is the main source of morphine in isolated form. About 523 tons of morphine were produced in 2013. A total of 45 tons, or a 400% increase over the previous 20 years, were used just for treating pain. The developed world was where this application was mostly found.[18] Heroin, hydromorphone, and oxycodone are made from morphine in around 70% of the world's supply. [18-20] It is classified as a Schedule II substance in the US, Class A in the UK, and Schedule I in Canada. [21] It is listed as one of the Essential Medicines by the World Health Organization. [22] Numerous brand names are used to market morphine. With more over 4 million prescriptions written in 2020, it was the 140th most often prescribed drug in the country. [23-25]

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Hydromorphone

Dihydromorphinone, or hydromorphone, is an opioid used for severe pain and marketed under the trade name Dilaudid. Only in cases of cancer-related pain is long-term usage suggested. It may be taken orally or injected into a vein, muscle, or subcutaneously for usage. The half-hour mark is often the starting point for effects, with a maximum five-hour duration. Dizziness, drowsiness, nausea, itching, and constipation are common negative reactions. Abuse, hypotension, epilepsy, respiratory depression, and serotonin syndrome are all possible adverse effects. Opioid withdrawal may occur with a sudden decrease in dosage, according to Generally, usage during pregnancy or nursing is not advised.[26] In order to exert its effects, hydromorphone is thought to stimulate opioid receptors, most prominently in the central nervous system. An intravenous dose of 2 milligrams of hydromorphone is about comparable to 10 milligrams of morphine. In 1923, hydromorphone received a patent.[27] It is considered a "essential medicine" by the World Health Organization. It is a generic drug that may be purchased today [28]. More than two million prescriptions were written for it in the United States in 2017, placing it at #205 on the list of most frequently prescribed drugs.[29] Morphine is the starting material for hydromorphone [30-31].

Tramadol

An opioid pain medicine, tramadol (also known as Ultram) is effective for treating moderate to severe pain. When used orally in an immediate-release formulation, pain relief often sets in within an hour. Injections are also an option. You can get it together with paracetamol (acetaminophen). Constipation, itching, and nausea are typical negative reactions to opioids. Hallucinations, convulsions, a heightened risk of serotonin syndrome, drowsiness, and drug addiction are all possible adverse reactions. Those with renal or liver disease may need a dose adjustment. Those who are pregnant or at risk of suicide should not use this medication [32] Nursing mothers who take a single dosage of a medication that is not indicated for them should not typically cease breastfeeding.[33]

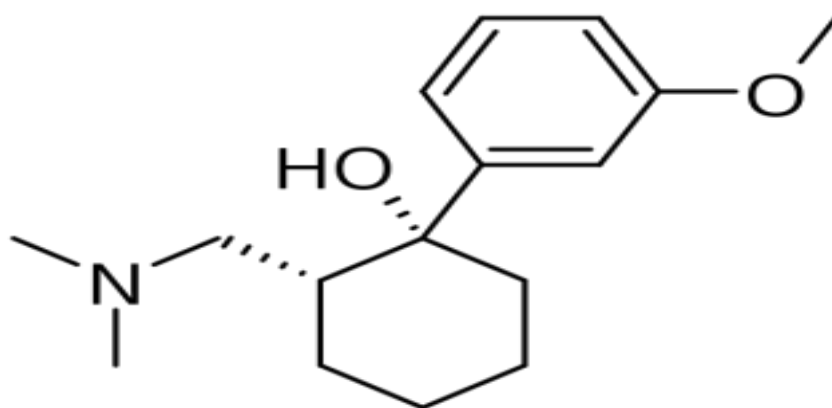


Fig 04: Tramadol structure

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O-desmethyltramadol (desmetramadol) is an opioid with increased affinity for the μ -opioid receptor that is produced in the liver when tramadol is metabolized. [34] Both serotonin and norepinephrine reuptake are inhibited by tramadol, making it a more well-rounded analgesic (SNRI). [35] The West German pharmaceutical firm Grünenthal GmbH first marketed tramadol in 1977 under the brand name "Tramal." The drug had been invented in 1963. [35-36] It gained legal standing in the US and UK in the middle of the last century. [15] It is sold as a generic drug under a variety of brand names across the globe. More than 17 million prescriptions were written for it in the United States in 2020, making it the 35th most frequently prescribed drug that year. [37-38]

Codeine

The opiate and morphine prodrug codeine is effective against pain, coughing, and diarrhea. Used for both medicinal and recreational purposes, it is widely available. The opium poppy (*Papaver somniferum*) has it in its sap. [39] Those with moderate discomfort might benefit from it. Paracetamol (acetaminophen) or a nonsteroidal anti-inflammatory medication (NSAID) like aspirin or ibuprofen may have synergistic effects. Acute cough suppression in either children or adults is not supported by evidence. [40-41] [should be revised] As a cough suppressant in Europe, it is not advised for children under the age of 12. It is often consumed orally. The average onset time is 30 minutes, and the highest duration is 2 hours. The duration of its effects is short, lasting around 4-6 hours. Codeine, like other opioids, has the potential to be abused. Nausea, vomiting, constipation, itching, dizziness, and sleepiness are typical adverse reactions. Addiction and trouble breathing are two of the more serious potential side effects listed in. It is unknown at this time whether its usage during pregnancy is safe. Breastfeeding poses risks of opiate toxicity for the infant, hence care must be used. As of the year 2016, it is not advised for usage in youngsters.[42] How fast the liver converts codeine into morphine and how effective it is a matter of heredity. It was in 1832 that Pierre Jean Sobriquet found the active ingredient in codeine. Codeine was the most widely used opiate in 2013, with production at around 361,000 kg (795,000 lb.) and consumption at about 249,000 kg (549,000 lb.). It is an essential medicine recognized by the World Health Organization. Codeine is found in opium in very small amounts (approximately 2%). [43]

1.4. Department of Narcotics Control

In Bangladesh, the primary government agency charged with drugs regulation is the Department of Narcotics Control.[44]

History

The Department of Narcotics Control is a government agency in Bangladesh that issues license for the import, export, sale, transport, etc. of drugs and conducts raids against illegal narcotics. It was established on 2 January 1990 under the Ministry of Home Affairs and is related to the National Narcotics Control Board. [45] Abdul Wahab Bhuiyan is the Director-General of the Department of Narcotics Control. They

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can't maintain order in Bangladesh because they don't have enough troops. One of their goals is to hire more people and improve customer service.[46]

1.5. Drug rehabilitation

Drug rehabilitation refers to the process of receiving medical or psychotherapeutic treatment for a dependency on psychoactive substances such as alcohol, prescription drugs, and illicit drugs such as cannabis, cocaine, heroin, or amphetamines. These substances can be found in alcohol, prescription drugs, and street drugs. The overarching goal is to provide the patient with the tools necessary to address drug dependency, if it is present, and to put an end to the abuse of substances in order to prevent the psychological, legal, financial, social, and physical repercussions that may be brought about. The treatment consists of receiving therapy from professionals, taking medicine to treat depression or other problems, and engaging in peer support groups with other addicts.[47]

1.6. Types of Drug rehabilitation

Help in overcoming an addiction to drugs may be found via a wide variety of treatment options, including as residential treatment (in-patient or out-patient), community support groups, extended care facilities, recovery or sober homes, addiction counseling, mental health care, and medical care. There are treatment facilities that cater to people of certain ages and genders. An American survey of treatment providers from three different institutions (the National Association of Alcoholism and Drug Abuse Counselors, Rational Recovery Systems, and the Society of Psychologists in Addictive Behaviors) was conducted to measure the treatment provider's responses on the Spiritual Belief Scale (a scale measuring belief in the four spiritual characteristics Alcoholics Anonymous identified by Ernest Kurtz). The scores were found to explain 41% of the variance in the treatment outcomes (a scale measuring adherence to the disease model or the free will model addiction). Instead of focusing just on treating the addiction, effective therapy takes into account all of the patient's requirements. Furthermore, detoxing from alcohol or drugs with medical assistance is insufficient as a therapy for addiction on its own. The National Institute on Drug Abuse (NIDA) suggests beginning treatment with detoxification, then moving on to behavioral therapy and medication (if necessary), and finishing with relapse prevention measures. According to the National Institute on Drug Abuse (NIDA), successful treatment must include both medical and mental health treatments, in addition to follow-up alternatives including community or family-based recovery support networks. No of the approach used, the level of motivation shown by the patient is an essential component of successful therapy. Therapies for persons who are addicted to prescription medicines tend to be quite similar to treatments for those who are addicted to substances that impact the same brain systems as prescription drugs. Methadone and buprenorphine are two examples of medications that may be used in the treatment of addiction to prescription opiates. On the other hand, behavioral treatments can be utilized in the treatment of addiction to prescription stimulants, benzodiazepines, and other substances. [48]

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Among the many varieties of behavioral treatment are:

- ✓ Helping patients identify, prevent, and manage triggers for relapse is a primary goal of cognitive-behavioral therapy.
- ✓ Supporting the patient's rehabilitation through enhancing family functioning is a primary goal of multidimensional family therapy.
- ✓ The goal of motivational interviewing is to encourage patients to make positive lifestyle changes and seek medical help.[49]
- ✓ Positive reinforcement techniques, such as motivational rewards, are used to convince people to give up their drug of choice.[50]
- ✓ Abstaining from drugs including cocaine, methamphetamine, alcohol use disorder, and opioids is much easier when supplemented with EEG biofeedback in addition to traditional 12-step programs, religious practices, and medical intervention.[51]

Depending on the patient's requirements and history of drug use, treatment might take a lengthy time. According to research, most patients need therapy for at least three months, and longer stays are linked to greater results. Addiction to prescription drugs affects everyone equally. It has an impact on individuals from all areas of life and has the potential to be quite harmful. [52]

Medications

To treat addiction and dependency to other opioids like heroin, morphine, or oxycodone, some opioid drugs are often employed, such as methadone and more buprenorphine. According to the harm reduction ethos, maintenance treatments like methadone and buprenorphine work by lowering opiate cravings and the hazards that come along with using illicit drugs, such as illness, arrest, jail, and death. Both substances may be used as detoxification assistance or as maintenance medicines (taken continuously). [53] With extremely high rates of relapse (79–100%) within three months of detoxification from lev-acetylmethadol (LAAM), buprenorphine, and methadone, all available studies compiled in the 2005 Australian National Evaluation of Pharmacotherapies for Opioid Dependence suggest that maintenance treatment is preferable. [54] The National Institute on Drug Abuse (NIDA) states that patients stabilized on adequate, sustained doses of methadone or buprenorphine can keep their jobs, refrain from criminal activity and acts of violence, and lessen their risk of contracting HIV and hepatitis C by ceasing or reducing their use of injection drugs and drug-related high-risk sexual behavior. A long-acting opioid antagonist with low negative effects is naltrexone. It is often recommended for illnesses that need outpatient care. Alcohol and opiates' euphoric effects are blocked by naltrexone. In the first three months, naltrexone reduces the chance of relapse by roughly 36%. However, it is far less successful in keeping patients in the drug-treatment system or assisting them in maintaining sobriety (retention rates at 90

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days for naltrexone, buprenorphine, and methadone are 12%, 57%, and 61%, respectively). Ibogaine is a hallucinogen that has been advocated for use by certain fringe organizations to break both physical dependency and psychological need for a variety of substances, including opiates, stimulants, alcohol, and nicotine. It has never been the subject of any controlled trials that have shown its efficacy, and neither doctors nor pharmacists nor addictionologists acknowledge it as a kind of therapy. Additionally, the drug ibogaine, which results in tachycardia and long QT syndrome, has been linked to a number of fatalities. The drug is a prohibited Schedule I restricted substance in the United States, and the overseas institutions where it is given may vary from hotel rooms to one modestly sized rehabilitation facility, with little to no monitoring. [55] Some antidepressants have been shown to be beneficial in the setting of nicotine addiction and quitting smoking. These drugs include nortriptyline and bupropion. [56] Nortriptyline is a tricyclic antidepressant that has been tried to help people quit smoking, but it has not received FDA approval for this application. Bupropion blocks the re-uptake of nor-epinephrine and dopamine and has been licensed by the FDA for this purpose. Other drugs that are used to treat alcoholism include acamprosate, disulfiram, and topiramate (a brand-new anticonvulsant sulphonated sugar). Patients with severe addiction who use acamprosate are able to successfully sustain sobriety for weeks or even months. [57] Disulfiram causes an extremely unpleasant response that includes flushing, nausea, and palpitations when alcohol is used. Patients with high levels of motivation are more likely to benefit from it, and some addicts only utilize it in high-risk circumstances. [58] Disulfiram should not be used by patients who intend to continue drinking or who may be at risk of relapsing since it may cause the previously stated, very dangerous, and potentially deadly disulfiram-alcohol interaction. [25] A legally accessible gas called nitrous oxide, sometimes referred to as "laughing gas," is used for anesthetic during various dental and surgical operations, in food preparation, and to power rocket and racing engines. Gas may also be inhaled by drug users on occasion. Like all other inhalants, it is well-liked because it has effects that change consciousness while sparing users from some of the legal ramifications of illegal narcotics. Misuse of nitrous oxide may have catastrophic short- and long-term effects on human health, including brain damage, hypoxia, a major vitamin B12 deficit, and nerve damage. Hypoxia is a sort of oxygen deprivation. Nitrous oxide has been shown to be a successful addiction therapy, while being risky and addictive on its own. [59-60]

Residential treatment

Without insurance, in-patient residential treatment for those with an alcohol use problem is often highly costly. The average American program lasts 28 to 30 days. The duration is completely determined by the providers' experience. In the 1940s, customers typically remained for three weeks: one to adjust to the physical changes, one to grasp the program, and one to two weeks to stabilize. In America, between 70 and 80 percent of residential alcohol treatment facilities include 12-step counseling. Al-Anon, Cocaine Anonymous, Narcotics Anonymous, and AA are just a few examples. Recent research that found "higher program completion rate for those with a family member or significant other participated in a seven-day family program" points to the significance of family involvement in residential treatment patient retention. [61]

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Brain implants

In the first experiment of its type in the US, patients with severe opioid addiction are receiving brain implants to help diminish their cravings. Brain scans are the first step in treatment. Following the procedure, a tiny 1mm electrode is inserted into the precise region of the brain that controls impulses like addiction and self-control. This course of treatment is only for those who have tried everything else, including medication, behavioral therapy, and/or social interventions. It is a highly rigorous trial, with regulators, ethicists, and several other regulating agencies watching over it.[62]

1.7. Psychological dependency

Many drug treatment centers work to help addicts overcome their psychological dependence by instructing them in sober social skills. In particular, patients are sometimes advised or even obliged to avoid contact with their friends who are still actively using the addictive drug. Addicts are urged to analyze and alter their behaviors that contribute to their substance abuse in the twelve steps of the recovery process. Many initiatives stress the unending nature of the healing process. Also stressed is total abstinence from legal substances like alcohol, rather than efforts at moderation that might lead to relapse ("One is too many, and a thousand is never enough.") It's still up in the air whether or not people with a history of abuse can learn to be moderate. [63] Substances that are addictive modify the chemical make-up of the brain, and these effects persist even after the user stops taking the drug. Due to this alteration in brain structure, therapy is an integral aspect of the recovery process and should not be skipped. [64]

1.8. Recovery

There are no universally accepted metrics for gauging success in drug treatment, therefore the concept of recovery remains contested and open to interpretation. Although "near abstinence" has been evaluated in certain research, the Betty Ford Institute defines recovery as a state of total abstinence and individual well-being. The procedure of selecting rehabilitation programs has been made more difficult by the plethora of meanings. The Recovery Model was developed in the United States as a response to the psychiatric survivor movement, which contends that a mental health diagnosis may be devastating to one's self-esteem and independence. The Recovery Model emphasizes a humanistic approach to helping individuals through addiction, as opposed to the more medicalized approaches used by other treatment programs that concentrate on remission or a cure. If you can't find a reference, The Recovery Model is characterized by its emphasis on the client's strengths rather than their weaknesses and its emphasis on reintegration into society even as it assists them in overcoming their addiction and moving on to more fulfilled lives despite their addiction symptoms. Client and provider partnership in designing a customized route to recovery is another important tenet of the Recovery Model. In the Recovery Model, there is no predetermined sequence of activities that one must complete before progress may be made with a client. [65] To aid in recovery, the Recovery Model employs integral theory, a four-

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pronged strategy that considers internal and external elements as well as the person and the community as a whole. Consciousness, Behavior, Culture, and Systems make up the four corners of Integral Theory. [66] The neurological underpinnings of dependency are explored in Section A. In the second section, we explore methods of bolstering confidence and fostering a sense of belonging, including the use of spiritual practices. Recovery from active addiction necessitates repairing the "eroded connections" that it has generated in the third quadrant. Negative outcomes associated with drug use, such as losing a job, getting in trouble with the law, or losing a home, are common in Quadrant Four. [67] The goal of using integral theory is to go beyond the false choice between "using" and "not using," shifting the emphasis to one's whole emotional, spiritual, intellectual, and physical development rather than just their use of any one substance. [68]

1.9. Counseling

Individuals get assistance from counselors in identifying the habits and issues that are associated with their addiction. It is possible to get this kind of support on an individual basis; however, it is far more usual to obtain it in a group environment. This type of assistance may include crisis counseling, weekly or daily counseling, and drop-in counseling services. Counselors get education that prepares them to design rehabilitation programs that assist patients in re-establishing healthy habits and provide coping methods whenever a circumstance that poses a danger arises. It is quite usual for them to also deal with family members who are impacted by the addictions of the client, or they may work within a community to prevent addiction and educate the general public. It is important for counselors to be aware of the ways in which addiction affects the overall individual as well as the others in their immediate environment. [69] There is a connection between counseling and the procedure known as "intervention," which is when the loved ones of an addict seek the assistance of a trained professional in an effort to convince the addict to enter drug treatment. This procedure starts with the initial aim of the experts, which is to get the individual who is addicted to admit they have a problem and to stop denying it. Patients who are in denial about their addiction may be unable to face the reality of their condition or may be afraid to do so. This prevents them from taking any steps to change their life and keeps them engaging in behaviors that are harmful. As soon as this goal has been accomplished, the counselor will begin coordinating with the family of the addict in order to provide assistance and support to them in their efforts to promptly enroll the addicted family member in a drug recovery program. In such case, the individual will be asked to leave and told not to expect any type of help from anybody until they enter a drug rehabilitation program or an alcoholism treatment program. An intervention may also be carried out away from one's family, namely in the context of one's place of employment with one's coworkers. The sober coach method is one technique, but one with limited application. At this method, the client is attended to by the provider(s) in his or her home and place of employment — for any efficacy, around-the-clock — who acts similarly to a nanny in order to direct or manage the patient's conduct. [70]

1.9. Drugs used in rehabilitation

As part of an inpatient or outpatient rehab program, medications for addiction therapy may be provided.

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Medication for heroin and opiate addiction

- Methadone. An opiate used for mild to severe opiate addictions is methadone.
- Suboxone (buprenorphine).
- Naltrexone.

1.10. Drug rehabilitation meaning:

It endorses a set of principles and beliefs regarding the helplessness of individuals over their drug use and turns to a Higher Power to assist patients overcome the illness of chemical dependence. The program's goal is to treat patients who are suffering from chemical dependency. Counselors and patients work together in this approach to choose the best way to get patients back on their feet.

1.11. Rehabilitation process

Rehabilitation is the process of assisting a person in achieving the best degree of function, independence, and quality of life that is achievable given their current circumstances. Rehabilitation does not cure or reverse the harm that was caused by sickness or trauma; rather, it assists in returning the person to their optimum level of health, functioning, and well-being.

1.12. Challenges of rehabilitation

- Health deterioration results from restricted access to assistive technology.
- Limited activity
- Restrictions on involvement.
- Increased reliance
- Reduced standard of living

1.13. Success of criminal rehabilitation

A study that was published in 2019 by the State of California stated that the California Department of Corrections and Rehabilitation (CDCR) had failed to rehabilitate 62 percent of the offenders who were released in 2017-2018.

1.14. Advantages of rehabilitation

It may be possible to avoid expensive hospitalization, cut down on the amount of time spent in the hospital, and prevent readmissions. Individuals who engage in rehabilitation are also able

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to participate in educational and lucrative work opportunities, maintain their independence while living at home, and have a reduced need for financial or caregiver assistance.

1.15. Importance Of Drug Rehabilitation

Reputable rehabilitation clinics are essential because they will always have a constructive influence. This is because drug addiction has a devastating impact not only on those who take drugs but also on the people around them. These facilities are intended to assist recovering addicts in reclaiming control of their life. They provide a variety of services, including therapy and counseling, among others. If you find that you have a problem with drug addiction, it is essential that you choose a reputable rehabilitation facility so that you may get assistance in overcoming the issue and returning to your regular life. The majority of respectable treatment facilities provide the services of licensed counselors and medical professionals who are highly prepared to assist those who are addicted to drugs in kicking their harmful habits. In many cases, it is necessary to participate in intensive treatment like this one, despite the fact that it is not always simple to convince an addict to check into a rehabilitation clinic. It is going to be quite simple for you to stop taking drugs after you are accepted to a rehabilitation facility since you will have the opportunity to be in a drug-free environment for as long as you choose. You will be better equipped to handle the challenges that arise as a result of your decision to give up drug use if you do so. People who have poor social functioning may benefit tremendously from treatment at one of these rehabs. In addition, if you have a lengthy history of drug usage, you should check into a treatment facility for substance abuse as soon as possible.

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Chapter Two: Literature review

2.1. Mei Yang, Jules Mamy, Pengcheng Gao, Shuiyuan Xiao “From Abstinence to Relapse: A Preliminary Qualitative Study of Drug Users in a Compulsory Drug Rehabilitation Center in Changsha, China” PLOS ONE June 24, 2015.

It's common for drug addicts to relapse after being drug-free. It is still unknown what people's actual living circumstances are during times of abstinence and how these circumstances either assist or prevent relapse. Relapse is influenced by a number of variables. Twenty drug addicts chosen from a Changsha mandatory isolated drug rehabilitation clinic participated in qualitativ in-depth interviews. Open-ended questions on the participants' histories of drug use, addiction, treatment, social milieu, abstinence, and relapse served as the basis for the interviews. Participants were urged to contribute their own personal experiences as well. Digitally recorded and completely transcribed interviews were used. The analyses included the data of 18 persons who had previously reported abstinence experiences. Thematic analysis and inductive hand coding were used to evaluate the data and identify themes. The majority of drug users were able to quit using drugs with ease. Their lives were complicated by difficulties during abstinence, including unfavorable financial circumstances, inadequate familial and social support, interpersonal disputes, stigma and prejudice, all of which kept them outside of mainstream society.

2.2. Azizul Islam, and Md. Faruque Hossain “Drug abuse and its impact on Bangladesh” academic journal Vol.9(11), pp. 143-156.

This research explores drug misuse and its consequences on Bangladesh with the goal of identifying the social and familial factors that contribute to addiction as well as the causes and outcomes of drug abuse. Using purposeful sampling for sample collection, a descriptive crosssectional study was carried out in Bangladesh to evaluate the causes and consequences of its impact. Participants included recent graduates from various public and private universities, civil servants, and members of the civil society. The results showed that drug misuse is multifaceted and has to be dealt with as such. Many addicts consider the Narcotics Department's new rehabilitation policies and prices to be expensive and burdensome. Many people, especially young ones, want to stop using drugs but, sadly, they seldom succeed in doing so. While speaking with the investigators, the addicts expressed a desire for therapy to reverse the harmful effects of the narcotics. Therefore, as part of a comprehensive drug strategy that addresses both preventative and therapeutic concerns, the government should include both the family and society, which are the two institutions most successful at preventing drug addiction. These two organizations, working in tandem with governmental and nonprofit initiatives, can play a critical role in reducing drug demand and preventing drug usage in the nation. For a successful response to combat drug misuse in the nation, urgent fundamental institutional and policy reforms involving all relevant agencies are also required.

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Chapter Three: Goal of my study

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My goal of studies is given bellow

- I. To determine the demographic data in rehabilitation centers
- II. To determine the highly vulnerable area of addiction
- III. To determine the types of addiction time to recover from narcotics addiction
- IV. To determine the duration of participants in rehab center
- V. To determine the kinds of narcotics mostly used.
- VI. To determine the used therapy
- VII. To determine the mostly used medicines used for addiction purpose
- VIII. To determine the side effect of narcotics
- IX. To determine the long term of using narcotics
- X. To determine the response after being drug free
- XI. To determine the percentage of patients who follow up doctors after being released
- XII. To determine the bad behavioral response from surrounding people after being released

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Chapter Four: Methodology

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A survey-based study Survey on consequences of using narcotics in rehabilitation center. Totally 115 respondents participated in this survey.

This work was physically performed in “Golden Life Drug Treatment and Rehabilitation Center” at Mirpur and “BYFC Rehabilitation Center” at Savar, Dhaka. After compiling the numerous pieces of information, each one was checked for correctness and internal consistency to remove any missing or conflicting information. The widely used upgraded version of Microsoft was used for information research.

Before beginning the information assortment, educated verbal permission was taken from the investigation members. The respondents' identities were kept secret, and participants in the research were informed that they might drop out at any point throughout the information-gathering process. The Department of Pharmacy supported the investigation.

Chapter Five: Result

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5.1. Gender

Table: Gender percentage of addicted people	
Gender	Percentage
Male	90
Female	10

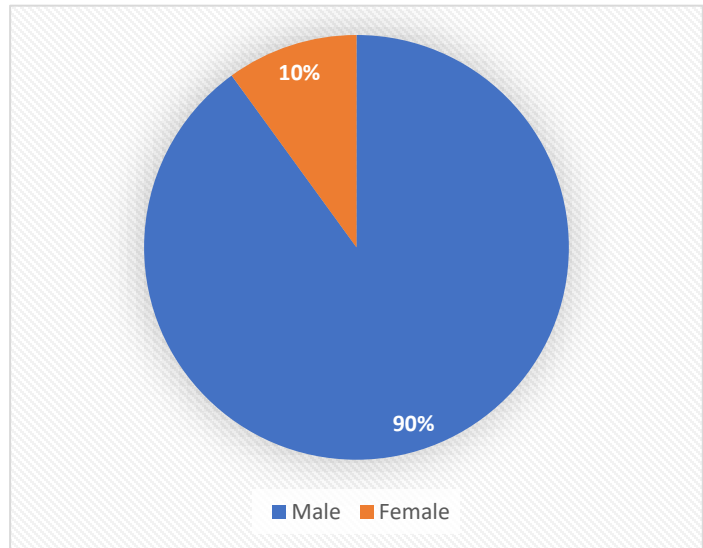


Fig 05: Pie chart of gender of addicted participants

According to a survey conducted at a rehab center, 90% of participants are men and 10% are women, and they are both drug addicts.

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5.2. Age of Addict participants

Table: Age percentage of addicted people	
Age group	Percentage
16-19	32
20-24	40
25-30	18
Above 30	10

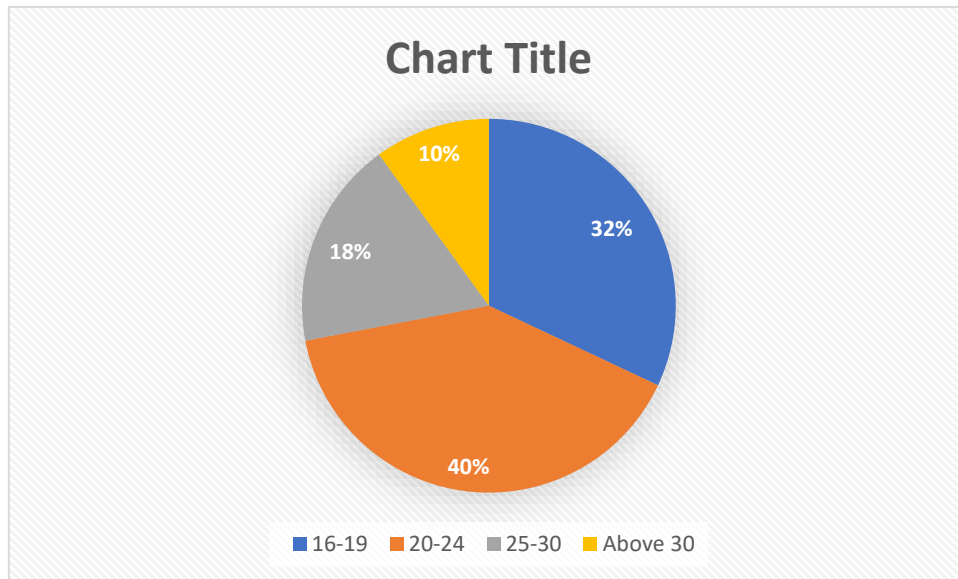


Fig 06: Pie chart of age of Addicted participants

According to this survey, most of the addicts who took part were between the ages of 16 and 19 (40%). People between the ages of 20 and 24 (32%), 25 to 30 (18%), and over 30 (10%) made up the rest of the group.

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5.3. Area where addicted participants reside

Table: Percentage of most affected area by addicted people	
Area	Percentage
Urban	70
Rural	30

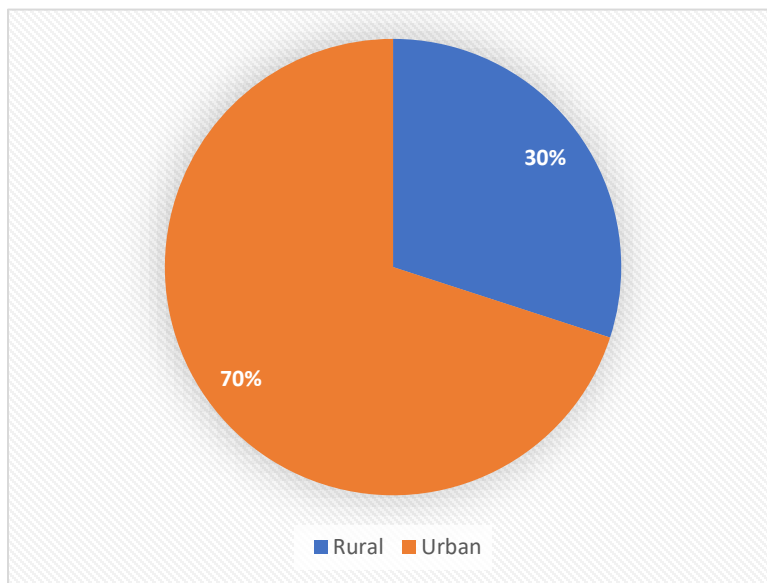


Fig 07: Pie chart of area of addicted participants reside

According to this survey, 30% of addicts lived in rural areas while 70% of them resided in urban areas, therefore it is reasonable that urban areas had a higher concentration of addicts than rural areas.

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5.4. Types of Addiction in Patients

Yaba	43
Phensedyl	30
Injection	15
Cannabis	12

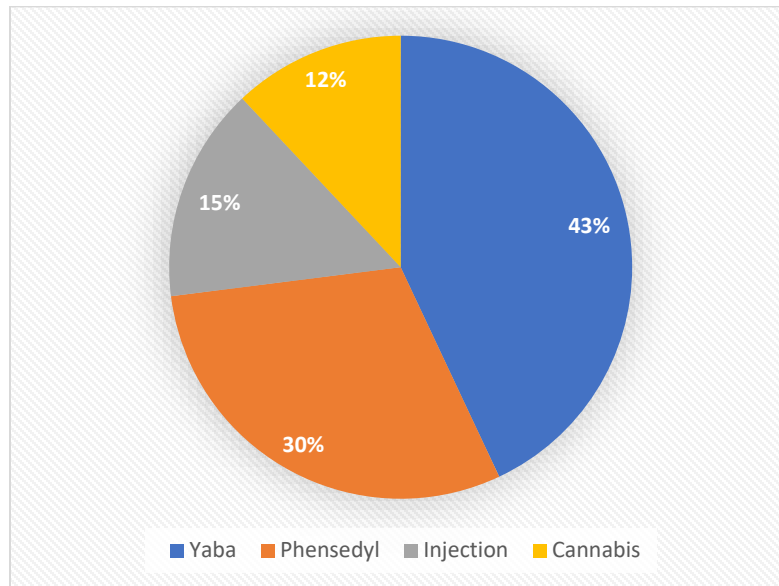


Fig08: Pie chart of types of Addiction in Patients

This study found that 43% of patients in rehab centers were Yaba addicts, which is greater than the rate for other drugs, 30% were phensedyl addicts, 15% were injection addicts, meaning they used drugs intravenously, and 12% were cannabis addicts.

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5.5. Duration of participants' stays at the rehab center

Table: Percentage of duration of addicted patients in rehab centers	
Less than a month	22
1-6 months	42
6-12 months	34
More than 12 months	2

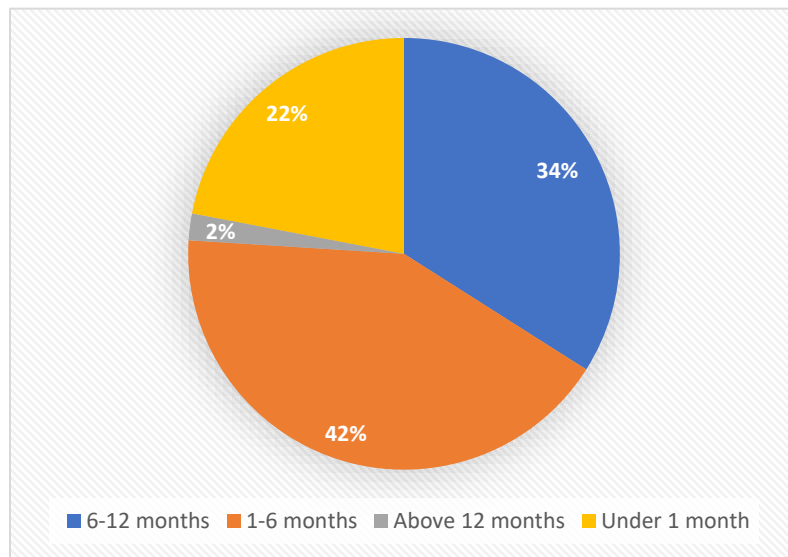


Fig 09: Pie chart of duration of participants' stays at the rehab center

Based on this survey, 42% of people stay at a rehab center for one to six months, 34% for six to twelve months, 2% for more than 12 months, and 22% for less than one month.

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5.6. Cause of Narcotics Addiction

Long term tobacco use	35
Divorce/Death of loved ones	30
Financial problem (Unemployment)	25
Lack of family involvement	10

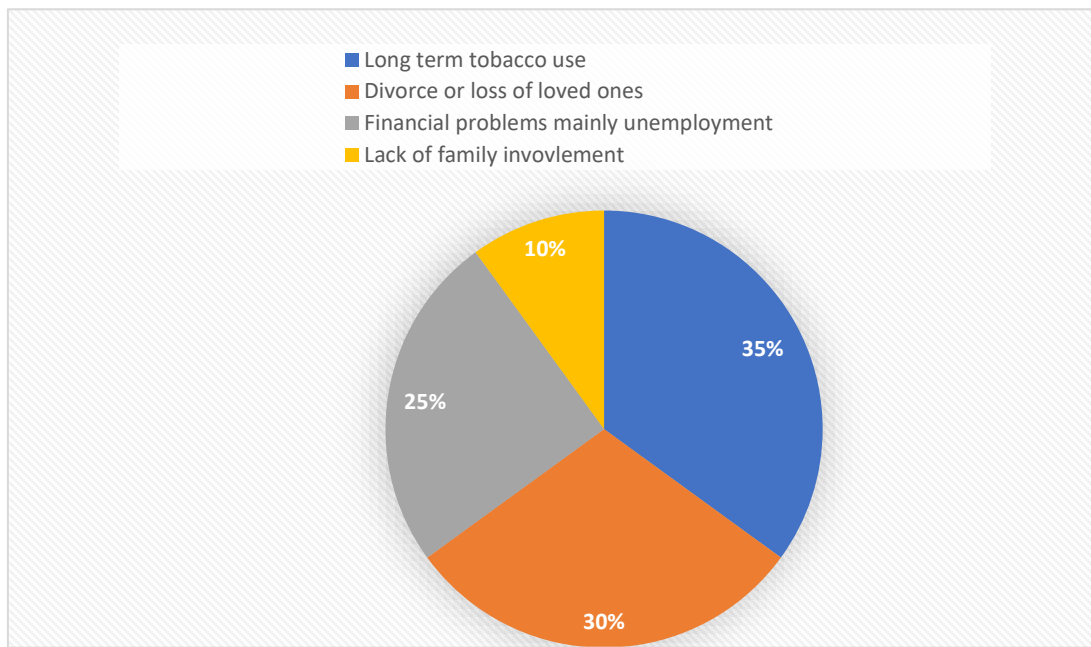


Fig 10: Pie chart of the cause of Narcotics Addiction

This survey found that 35% of drug addiction was caused by long-term tobacco use, 30% by a divorce or the death of a loved one, 25% by financial problems mainly unemployment and 10% by a lack of family involvement.

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5.7. Therapy for addiction

Table: Percentage of therapy for narcotics	
Psychotherapy	36
Cognitive behavioral therapy	20
Medicine	32
Combination of all	12

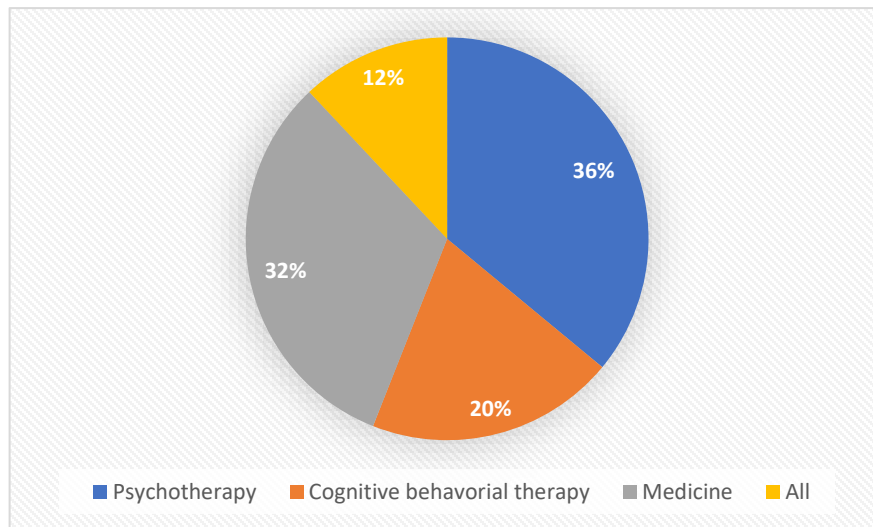


Fig 14: Pie chart of Psychotherapy for addiction

According to the findings of this study, the treatment for narcotics addiction in rehabilitation centers consists of 36% psychotherapy, 20% cognitive behavioral therapy, 32% medicine, and 12% of patients get all therapies combinedly.

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5.8. Medications

Table: Percentage of mostly used medicines for addiction	
Buprenorphine	48
Disulfurium implants	8
Naltrexones	10
Mirtazapine	14
Topiramate	20

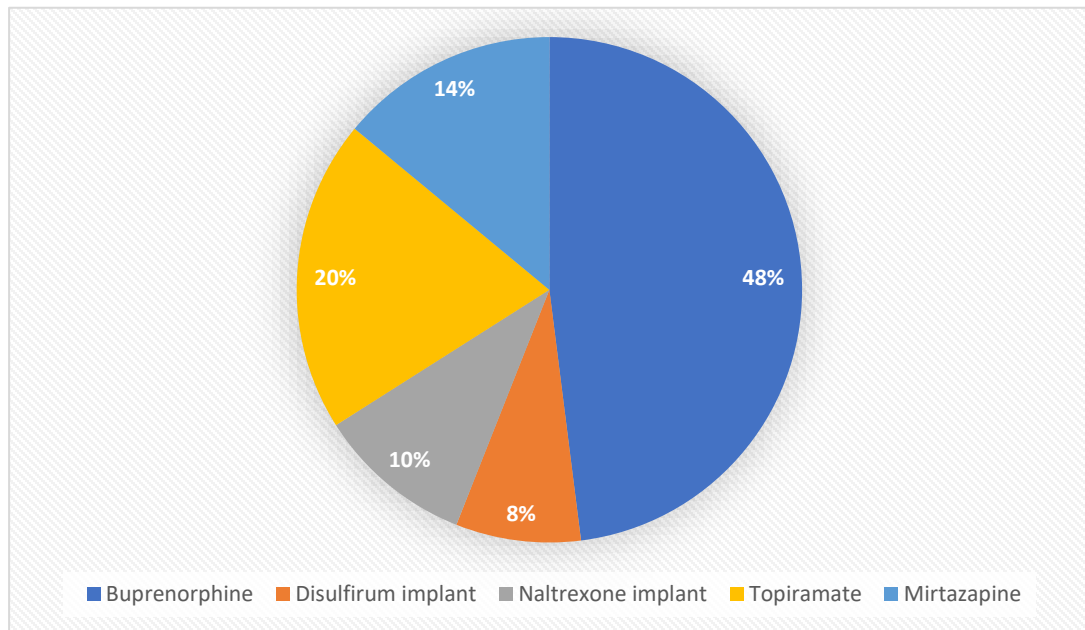


Fig 14: Pie chart of used medication for addiction

According to the findings of common medications, Buprenorphine is used 48%, Disulfurium implants are used 8%, Naltrexones are used around 10%, Topiramate is used approximately 20% and Mirtazapine is used 14%

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5.9. Side effects of narcotics on first time

Table: Percentage of side effects of narcotics	
Drowsiness	35
Slower respiration	24
Confusion	21
Euphoria	20

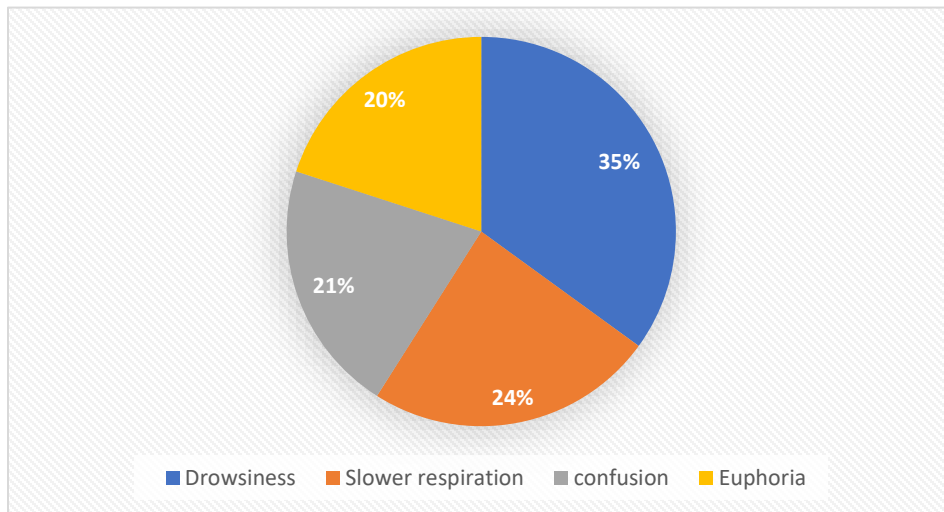


Fig 13: Pie chart of side effects of narcotics

Around 35% of individuals, according to the survey had drowsiness, 24% had slower respiration, 21% had confusion, and another 20% had euphoria.

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5.10. The response after taking narcotics for long time

Table: Percentage of responses of long term used of narcotics	
Unsocial	48
Frequent sleeping	40
Dry mouth	6
More hunger	6

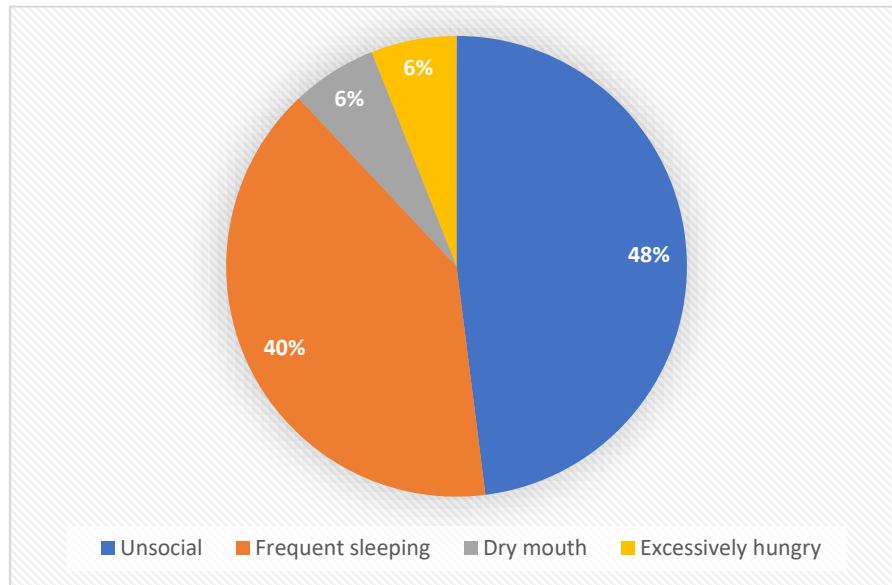


Fig 12: Pie chart of the response after taking narcotics for long time

According to this study, the individuals who used drugs for long time had the following side effects: 48% of them were unsociable, 40% slapped frequently, 6% had dry mouth, and 6% feel more hunger than usual.

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5.11. The response after being drug-free

Table: Percentage of response after drug free	
Irritable	50
Anxious	20
Irrational	15
Uneasy	15

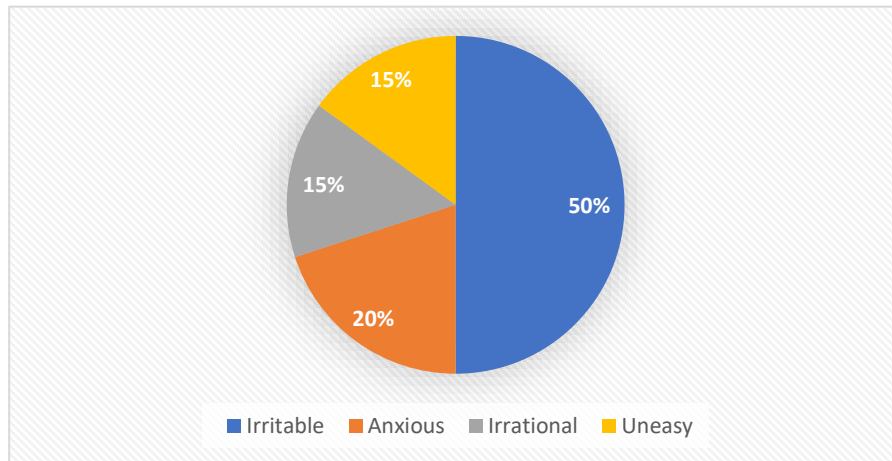


Fig 11: Pie chart of the response after being drug-free

According to this report, 50% of drug users who are absent for an extended period of time get irritable, 20% become anxious, 15% become irrational, and 15% feel uneasy.

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5.12. Follow up Doctor

Table: Percentage of patients who follow up doctors	
Follow up after being released	86
Doesn't follow up after being released	14

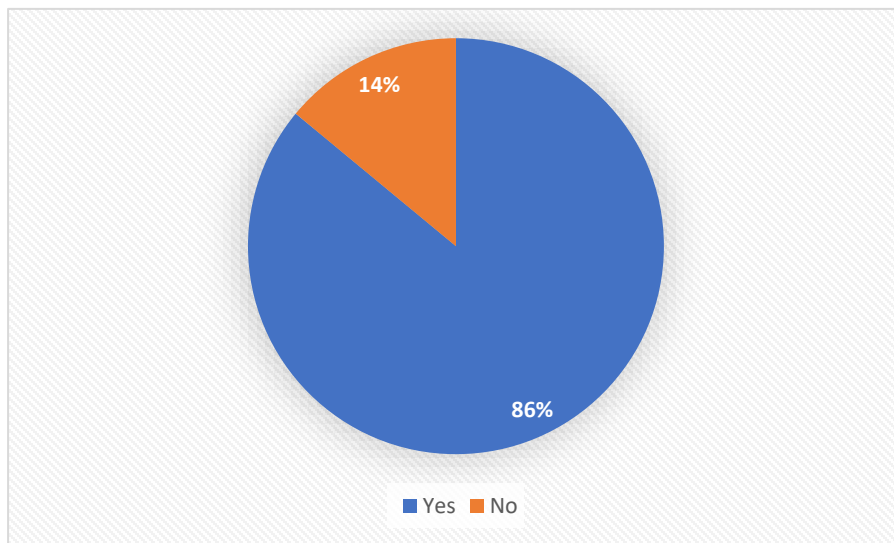


Fig 15: Pie chart of the percentage of patients who follow up doctor after release

In this survey, 86% patient follow up doctor regularly. Majority of them moved on in their lives and doesn't face much withdrawal problems. On the other hand, 14% people are not follow up doctor. These patients either are addicted or they feel completely cured from addiction but It's important to follow up doctor for a drug addicted people.

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5.13. Responses from surrounding people

Table: Percentage of bad responses from surrounding	
Family	3
Relatives	64
Neighbors	22
Friends	11

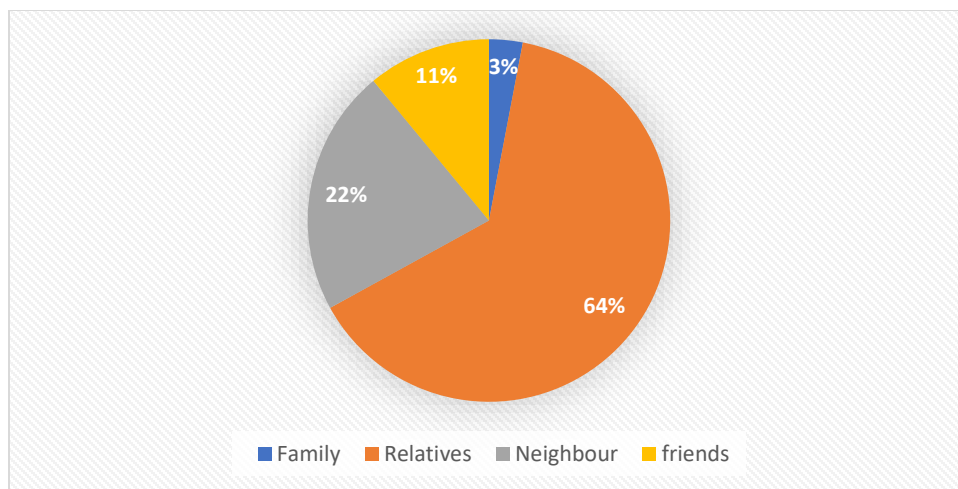


Fig 16: Pie chart of the released patients facing bad behavior from surrounded people

According to this survey, 3% faced bad behavior form their families. Around 64% patients face bad gestures from their relatives while 22% faces bad things from neighbors and 11% faces similar kind of behavior from friends.

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Chapter Six: Conclusion

6. Conclusion

narcotic, a substance that induces narcosis (a condition of stupor or sleep) as well as analgesia (the alleviation of pain) and addiction (physical dependence on the drug). Some users also experience exhilaration when under the influence of opioids (a feeling of great elation). Because the primary therapeutic function of opioids is to alleviate pain, another name for narcotics that is commonly used is narcotic analgesics. The most well-known classes of narcotics are the opiates, which are chemicals that may be found in opium or are produced from it. However, there are now many more forms of narcotics that are used to treat addiction, such as yaba, cannabis, LSD, and methyl crystal. Most common drug is used for addiction are buprenorphine which is a narcotic anaglegics, naltrexone and disulfium implants mainly for managing during and after treatment behavior, Mirtazapine is anti-depressant and topiramate is for treating migraine and epilepsy. Apart from medications, psychotherapies, behavioral treatments are equally important. Regular counselling, following up with doctors, specialists are necessary specially after detoxification. Many patients who don't paid regular visit to rehab are more likely to get back to their previous addiction. Many patients face brutal behavior from either neighbors or relatives or friends or in every area in the society after coming home from rehab centers. These causes lead some get back to addiction due to depression. People should welcome them with friendly gestures. It is estimated that around 6 million people are drug addict. According to the results of this poll, the majority of today's young people are likely to become drug addicts mainly 80% is adolescent which is a worrisome sign for the future.

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Chapter Seven: Reference

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