Substance Use Disorders and Related Morbidities in Ghaziabad District, Uttar Pradesh: An Anthropological Study of Rehabilitation Centres

A Dissertation Submitted

To

Sikkim University

In Partial Fulfilment of the Requirement for the

Degree of Master of Philosophy

By

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DECLARATION

I, **Shivani Ghosh**, hereby declare that the dissertation titled **'Substance Use Disorders and Related Morbidities in Ghaziabad District, Uttar Pradesh: An Anthropological Study of Rehabilitation Centres'** is an original research work carried out by me under the supervision of **Dr. Nitish Mondal**. The dissertation is submitted to the Sikkim University, Gangtok, as compulsory fulfilment of the requirement for the award of a Master of Philosophy (M.Phil.) in Anthropology.

To the best of my knowledge, this work has not been submitted for any other degree at any other University or Institute.

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2023

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seeking behavior of the affected individuals in Ghaziabad district

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List of Abbreviations

AUD	Alcohol use disorder
BC	Before Christ
CBD	Cannabidiol
CBT	Cognitive behavioral therapy
DBT	Dialectic behavioral therapy
DSM	Diagnostic and Statistical Manual of Mental Disorders
FDA	Food and Drug Administration
GHB	Gamma-hydroxybutyrate
GO	Governmental organization
HIV/AIDS	Human immunodeficiency virus infection and acquired immune deficiency syndrome
IPT	Interpersonal therapy
LSD	Lysergic acid diethylamide
MDMA	Methylenedioxymethamphetamine
MSJE	The ministry of social justice and empowerment
NCD	Non communicable disease
NFHS	National family health survey
NGO	Non governmental organization
NHS	National health survey
NSSO	National Sample Survey Organisation
NTD	Neglected tropical disease
PCP	Phencyclidine
POV	Point of view

PTSD	Post-traumatic stress disorder
SPSS	Statistical Package for Social Sciences
SSD	Somatic symptom disorder
ST	Schedules tribe
SUD	Substance use disorder
THC	Tetrahydrocannabinol
WHO	World health organization

Map

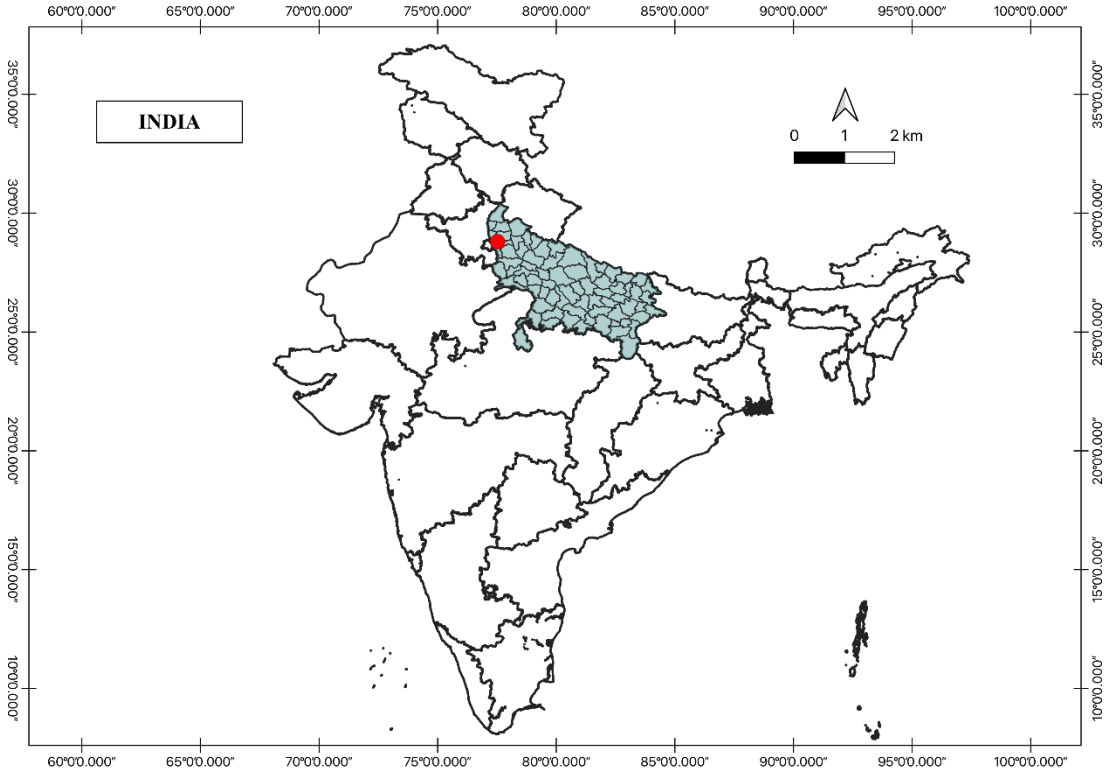

Plate 1: Ghaziabad district in map of India

Plate 2: Ghaziabad district in map of Uttar Pradesh

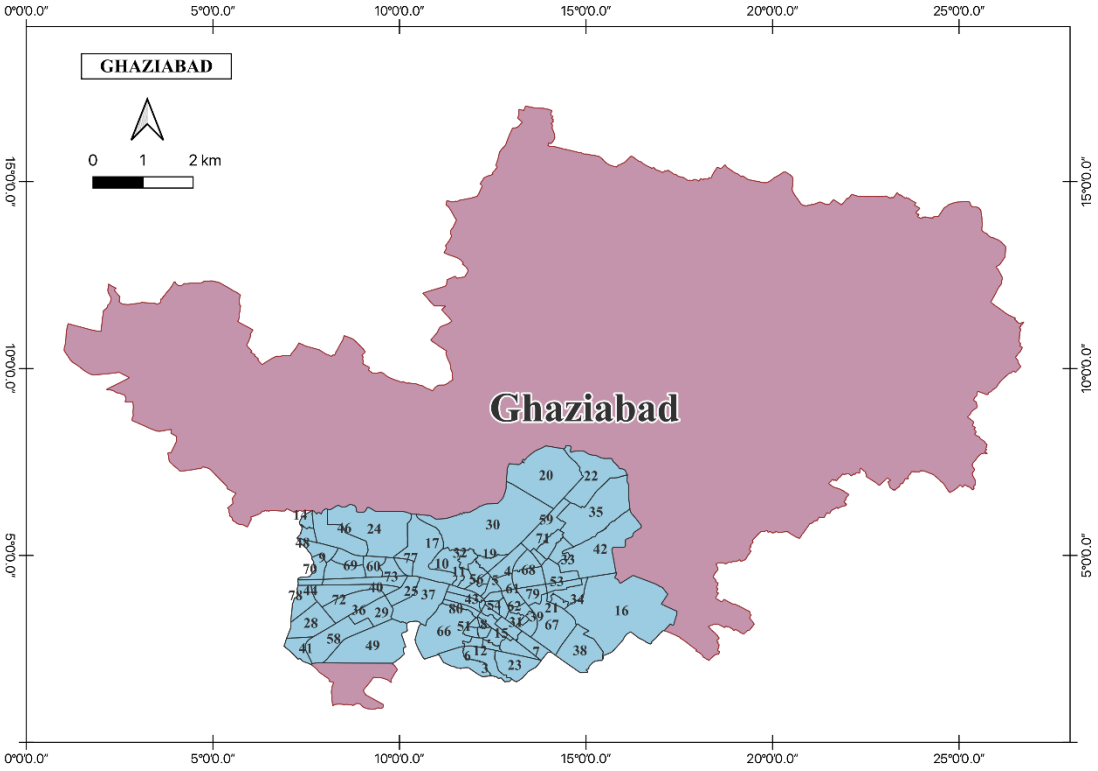

Plate 3: Sector division shown in Ghaziabad district

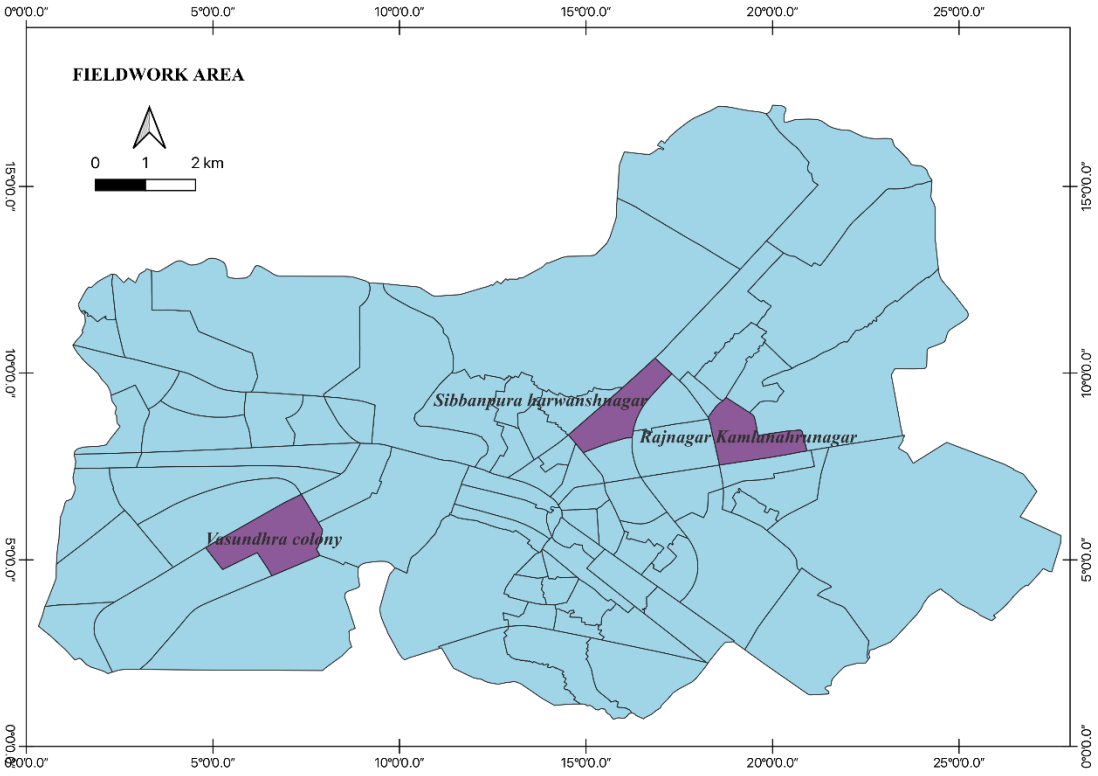

Plate 4: Location of the rehabilitation centres in Ghaziabad district

Chapter - I

Introduction

The discussion over substance use disorders has a long history, with interpretive or critical traditions regarding biological or clinical knowledge about addiction as rhetoric and a social phenomenon that should be viewed within the context of critical philosophy. However, there is a rise in the tendency among social scientists studying addiction and related fields to consider the materiality, embodiment, and biology of diseases linked to substances (Campbell, 2011; Courtwright, 2010; Fraser et al., 2014; Hansen & Roberts, 2012; Kaye, 2012; Kushner, 2010; Vrecko, 2010; Weinberg, 2011; Campbell, 2022). These recent endeavors showed a wide spectrum of philosophical and methodological approaches. Several studies that consider the breadth of it work with the material-semiotic as the basic idea, and other numerous methods are also taken into account for delving, nature and culture binaries through feminist and social conceptual frameworks (Barad, 2003; Cikara et al., 2022). In Spite of the evidence that several academics are concentrating more on the multidisciplinary traditions in anthropology and other related social sciences to bolster the biocultural account of morbidities and mortalities (Choudhary & Slaby, 2011; Wenceslau & Ortega, 2022; Downey & Lende, 2012). Early human records reveal the use of addictive psychoactive substances. In the Alps, the frozen remains of Ötzi, who lived around 3300 years ago, were found in 1991, together with a traveler's pharmacy that contained a polypore fungus with antibacterial and hemostatic qualities (Crocq, 2007; Dollar, 2022). During the vast history of human, addictive substances has been used for a variety of objectives, including ceremonial use, healing, and use for socially acceptable purposes (Robinson, 2022). One of these compounds was a key component of *Soma*, an alcoholic beverage that was considered sacred in ancient India; priests or shamans would usually approve of its use.

Anthropologists should record and handle it in a precise environment through which comprehensive research can be conducted due to the long history and acknowledgement of the use of addictive drugs throughout many cultures and societies. Various methods and frameworks have been used to examine "addiction" throughout the discourse. Some of these models include the family model and the cultural model; the former is more focused on the cultural customs and values that are present in a community. In the former, the relationship and path of addiction are traced through one's family line.

There are several ways to investigate substance use disorders (SUD) and their comorbidities, but the approach that focuses on drug syndemics is fundamental and absolutely important to comprehend both the immediate and long-term consequences of an individual with SUD. The consumption of both legal and illegal drugs, along with prescribed medications, is considered substance use. Long-term substance abuse has a negative impact on a person's physical and mental health. There has been a rise in the consumption of illegal and hazardous drugs, and SUD has become a threat on a global scale. The patient is more prone to have HIV and hepatitis C as repercussions of the problematic medicines. The addiction, being destructive to health at the same time, using illegal narcotics weakens the economies of low-income nations. Around 275 million people consumed drugs in the past year, an increase of 22% from 2010. According to demographic projections, the global drug use rate will increase by 11% by 2030 (World Drug Report, 2021).

Various psychiatric disorders like depression, anxiety, and others are the most typical comorbidities with SUD. Another form of morbidity connected to SUD is neglected tropical diseases (NTDs). The NTD and mental disorders are frequently co-occurring and highly interdependent (Bailey et al., 2019). The most common NTD has been observed in HIV/AIDS and skin-related diseases, which cause stigma and social

exclusion. The somatic disorder is classified primarily based on medically unexplained symptoms. Bearing the realization that some other mental disorders may begin with primarily somatic symptoms (e.g., major depressive disorder, panic disorder). These diagnoses may take place along with somatic symptoms disorders, or in conglomeration with one of the somatic symptoms.

Alcohol is a substance that is most commonly used in India, and it is almost legal in every state. The consumers of this substance are at a high risk of non-communicable diseases, and this puts a strain on the socioeconomic well-being of the nation along with that of the individuals (Sivapuram et al., 2020). The problem of SUDs has been going on for a long time in India, and there have been an extensive number of studies on the matter. The research work goes as far back as the mid-twentieth century in India (Murthy et al., 2010). But the most structured and widely distributed study was done in 2004. MSJE (The ministry of social justice and empowerment) carried out the national survey, which included 40,697 males between the ages of 12 and 60 as participants. Alcohol was the substance that was used the most frequently, with a prevalence rate of 21%, while all other substances combined made up 3.6%. 22.3% of consumers in this group used multiple drugs. This research also elucidates other facts, such as the low prevalence of drug usage among women in comparison to that among men. In accord with the study's findings, the three main drugs were alcohol, marijuana, and opiates.

A multisite cross-sectional survey was carried out in four districts in Punjab in 2019, and it was discovered that the prevalence of alcohol use disorder was 7.90% and that of other (illicit) substance use disorders was 2.48%. 11.3% of people had any type of substance use issue (Chavan et al., 2019). Alcohol is socially accepted; therefore, its indulgences are frequently not scrutinized. Traditional offerings include drugs like betel nuts, tobacco, cigarettes, marijuana, and locally brewed booze. Adolescents are often

exposed to chemicals in their social surroundings (Kokiwar & Jogdand, 2011). A study conducted in Delhi in 2017 found that easy access to substances was a major factor in the rise of drug problems. Solvents such as dendrite, petrol, and nail polish were the most commonly used substances (Daniel et al., 2017).

1.1 Review of Literature

1.1.1 An Anthropological Perspective on Substance Use Disorders

Anthropology brought a distinct perspective to the understanding of substance use disorders and behavioral patterns. In 1958, Heath conducted an ethnographic study in Camba (eastern Bolivia), a horticultural society living in a tree covered area at the time. It was found in the study that the members of this community used to drink rum in large quantities and got intoxicated for several consecutive days, it took place for atleat twice a month. Their drinking habit was tied to a community festival, and it was socially valued (Heath, 1958). The most commonly associated notion with drinking is that it leads to antisocial behavior and the addicted person fails to manage a balanced life. but there were no signs of expressive aggression or sexual misconduct among the Camba. Instead, the consumption of alcohol in high doses, which can at times lead to unconsciousness, was promoted and believed to increase the social solidarity and group health in Camba community (Heath, 1958). Heath suggested the cultural model for further studies because it brings out some societal beliefs that were unheard of before (Heath, 1958). This study gained attention from anthropologists, and it led to the research including the factors such as physical, economic, psychological, or interpersonal through the scope of cultural models, not from the traditional view of pharmacology.

There was a great deal of opposition to the cultural model (Room et al., 1984). Robin Room was a pioneer in challenging the cultural model; in his view, different health and

social issues were often understated in ethnographic literature. He discovered a recurring trend of lowering the seriousness of situations. He voiced his concern over the ethnographic study where the idea of addiction was hazy and placed in a multicultural framework,along with the evidence that many drinking ethnographers were the offspring of a "wet generation" that was trained to perceive alcohol intake as normal (Room et al., 1984).

Heath noticed that the Camba's drinking habits were changing over time as conventional way of life became unsustainable due to the clearing of local trees for the global timber market (Heath, 2004). Several Camba were compelled to abandon their homes and conventional lifestyle as a result.

This study observes that substance use can be observed without any signs of addiction, despite the evidence that it is typically concentrated in traditional communities which have not been completely engulfed and uprooted by the intensity of capitalist globalization. Despite the cultural model's central position in their theoretical framework, anthropologists have not been oblivious to the disruptive, destructive, and crippling effects of drugs on modern society (Ames et al., 2007; Arias, 2009).

A clinically sophisticated anthropological approach was suggested as being more appropriate due to the growing demand for an interdisciplinary understanding (Spicer, 1997). Spicer came to this conclusion after a study based on interviews with 35 self-expressed Native Americans who have drinking problems and living in urban settings, which emphasizes that participants were profoundly ambivalent about their drinking, seeing it as both deeply embedded in significant social relationships and a barrier to the fulfillment of key social obligations. In recent years, ethnographers have studied addiction in terms of broader processes of globalism and the effects of neoliberal restructuring, cross-border labor migration, the worldwide flow of alcoholic

commodities, contextualized time, space, and social group configurations, and the role of drinking in disease risk behavior (Parson, 2022; Singer, 2012). Many models and methodologies have been used to study addiction and understand anthropology, including the cultural model, lifestyle model, and critical medical anthropology model. In the 1980s, with the emergence and quick rise in the implementation of the critical medical anthropology model, it has been the most frequently used to study substance use and abuse (Hunt & Baker, 2001; Marshall, 2001; Singer, 2012). Though, there are spattering drawbacks to this model, including its inability to examine issues at a macro level like the institution of social control and power relations. This model's two main focuses were self-medication and the social production of suffering. The new addition to this model is the drug syndemics approach, which is associated with the adverse interaction of diseases and punishing social conditions that advertise both disease aggregation in a population and the reduction in immune competency and bodily capacity to resist and overcome disease (e.g., anemia, malnutrition, stress, and infection) (Hunt & Baker, 2001; Marshall, 2001; Singer, 2012; Baer, 2013).

An in-depth examination also requires knowledge of people and communities. Understanding the narrative that is offered to the researcher and placing it in the proper framework for further analysis are crucial in order to add a qualitative component to such an inquiry. Like many ethnographies, "Addiction" examines issues from both the etic and emic points of view. There are several addiction subcultures that engage in indulgence on a regular basis (Moshier et al., 2012). Culture is created, not discovered, and the subjects she investigates and ethnography work together to create this culture, which is intersubjective rather than objective or subjective (Agar, 2011). The individual the ethnographer is interacting with is not just a straightforward representative of some single comprehensive and coherent culture but rather draws from a variety of identities,

from local to global, sometimes conflicting and contradictory, that one uses to craft different selves at different times (Agar, 1997).

1.1.2 Substance Use Disorders and Other Related Psychiatric Disorders

SUDs is often linked with numerous morbidities, especially those of a psychiatric nature such as depression, schizophrenia, bipolar disorder, and others. There has been an extensive research paper of this nature. However, somatic disorders are often neglected in these findings, as they are also a bit hard to address because there is a deficiency of firm concepts about them in the Diagnostic and Statistical Manual of Mental Disorders (DSM) (Cosci and Fava, 2013; Bailey et al., 2019). Severe psychiatric disorders such as schizophrenia, bipolar disorder, and depression have an increased prevalence, additionally with other issues related to lifestyle and physical health status. These are associated with poverty, the use of psychotropic medicine, smoking, addiction, a poor diet, and a lack of exercise (Creed, 2009; Testa et al., 2013). Mental health and psychosocial support include screening for depression and mood disorders, anxiety, substance use disorders, post-traumatic stress disorder, self-harm, and suicidal ideation (as appropriate and feasible), which are incoporated in the routine assessment. It also includes psychoeducation, self-care strategies, and psychosocial support for affected people and their careers, along with psychosocial support for families and communities (WHO, 2020). Other diseases, which include medically unexplained symptoms and somatic symptom disorders (SSDs), usually go undiagnosed and cannot be properly treated. Thus, during primary care, the costs rise independently of somatic and psychiatric comorbidities (Barsky et al., 2005; Chinneimawi et al., 2021; Le et al., 2022). It was estimated that around 20% of patients receiving primary care have somatic symptom disorders (Schaefert et al., 2012).

1.1.3 Prevalence of Substance Use Disorders and Non-Communicable Diseases

According to statistics gathered from the National Family Health Survey's (NFHS-5) fifth wave, which was performed in 2019–21, almost 38% of the sample population of 101,839 men used tobacco products of some kind, while 18.8% of the men in the sample were alcohol consumers. Previously, in the survey of NFHS-4, conducted in 2015–2016, men aged 50–54 who are illiterate, divorced, separated, or deserters from scheduled tribes and who live in poverty consumed significantly more drugs, according to data collected from a group of men aged 15–54 years. The survey's findings indicate that males who drink alcohol and use tobacco have a much higher risk of developing diabetes and cardiovascular disease. Men in the age range of 50 to 54 who are married, have greater educational attainments, and practice Christianity are much more probable to have diabetes or heart disease, due to the association between substance use and non-communicable diseases (Kumari and Salve, 2019).

The heritability of addictive disorders indicates genetic variation in the neurobiology of pathways for reward or reinforcement, leading some individuals to a pattern of increased craving and loss of control (Enoch & Goldman, 2001; Crabbe, 2008). The risk factor for non-communicable diseases (NCDs) is increasing in India, which was more epidemic-related in the past. Having prevention against these NCDs is a big strategic step in dealing with them. The categorical recognition of these diseases is essential. (WHO Report 2002; Anand et al. 2008). Numerous diseases that comes under the umbrella of NCDs, but on the spectrum of more serious ones include diabetes, cancer, heart disease, and chronic respiratory diseases. All the diseasess has its own specific etiology, and there are risk factors affiliated with it, including behavioral types such as unhealthy diet, lack of exercise, tobacco smoking, and alcohol use (Alwan, 2010; McGrady, 2011).There are over 7.2 million death every year due to tobacco, these

numbers also comprises the casualties caused by passive smoking and it estimated to rise in the upcoming years (WHO,2021). Excessive consumption of salt or sodium has been connected to 4.1 million deaths worldwide annually. Around 1.7 million death occurrs casused by the alcohol consumption are connected with NCDs such as cancer and 1.6 milliom death are linked to the absence of physical activity (WHO, 2021).

Alcohol consumption is related to eight different cancers, and the risk is increasing in proportion to its volume. Alcohol consumption is also linked to many cardiovascular diseases, including conditions such as hypertension, hemorrhagic stroke, and atrial fibrillation. Furthermore, it is also related to various kinds of liver diseases, including fatty liver, alcohol hepatitis, and pancreatitis. For diabetes, the relationship is also complex (Madero-Cabib & Bambs, 2021; Parry et al., 2011)

1.1.4 Literature Related to Neglected Tropical Diseases and Substance Use Disorders

Neglected tropical diseases (NTDs) are a broad group that includes a number of illnesses that impair physical and mental growth, result in early death, and cause disability. These diseases maintain the status quo by affecting those who reside in areas of deprivation and poverty. The fight to control malaria, TB, and AIDS has neglected the diseases themselves (Hopkins, 2013). Poor populations in tropical nations are at risk from a number of infectious diseases known as NTDs. The neglected tropical diseases of helminth, protozoan, bacterial, or viral, gensis are responsible for these diseases that thrive in these settings and harm the nervous system.

Although the neurological impacts of neglected tropical diseases have not yet been thoroughly studied, it is foreseen that they will perform a substantial role. However, as the "silent pandemic" of epilepsy demonstrates, it is difficult to fully estimate and acknowledge this condition (Matthias et al., 2018). As vaccines or chemotherapeutic

agents are readily available and can kill or neutralize the responsible agents, other tropical infections that affect the nervous system are supposedly treatable or preventable. However, they may be categorized as morbid when they have developed and cannot be treated. Lack of resources is likely to increase the likelihood of infectious diseases that are incurable and have the potential to progress into irreversible phases. Similar circumstances apply to neurological morbidity, which frequently causes long-term disability. Public health should investigate strategies to lessen the burden of tropical neurological diseases, the associated morbidity, and the impairment they cause (Quansah et al., 2016; Matthias et al., 2018; Jannin & Gabrielli, 2013).

1.1.5 Substance Use Disorders Associated with Socioeconomic Status, Demography, and Lifestyle Variables

Substance addiction is often related to the younger population, and it goes underdiagnosed among the older population. Many researchers have studied that alcohol and drug-related problems have a negative impact not only on the health and well-being of individuals but also on the social aspects of the community (Colliver et al., 2006; Le et al., 2017; Manning et al., 2013; Mitchell, 2011). And at the individual level, SUD may exaggerate the normal slowing of reaction time and other physical functions among older adults. Driving collisions could become more likely as a result.At the level of community level, health system, justice system and work effeciency due to the raise in drug addiction. The study and establishment of an evidence-based correlation between SUD and the geriatric studies is an important step toward understanding the socioeconomic variables associated.

From the gender differences investigation in studies related to SUDs has a steady conclusion that elderly females are less frequently diagnosed with AUD (alcohol use disorder) and illicit drug addiction than elderly males (Briggs et al., 2011; Cummings

et al., 2008; Nogueira et al., 2013; Outlaw et al., 2012). In comparison to men, who consume alcohol at a rate of 19%, women generally don't. However, compared to men, older women are frequently more prone to abusing prescription drugs (Briggs et al., 2011; Li and Jackson, 2016). Understanding the link between SUDs and behavioral patterns also involves the variable of education. 58 percent of females with no conventional education and 15 percent of females with less than five years of formal education smoke, according to the National Family Health Survey (NFHS-5), 2019-21 report. Both males' and females' tobacco use steadily and significantly decrease as education levels rise. Despite my opposition, the increase in wealth suggests a decrease in tobacco use. Males in the highest quintile of wealth are more likely to smoke (21%), compared to men in the lowest quintile, who are more likely to smoke (58%). Females in the quintile with the least wealth use tobacco at a rate of 17%. Scheduled tribe (ST) members are more likely to use tobacco than members of any other caste or tribe group, including females (19%) and males (51%). Drinking alcohol is more common among women from scheduled tribes (6%) than from any other caste or tribe group (NFHS-5, 2019–21).

1.1.6 Treatment-seeking behavior

Treatment-seeking behavior is strongly associated with stigma and a sense of disability in people suffering from mental disorders. Though with substance use disorder, the treatment seeking behavior is more prominent and has a higher range of reports (ten Have et al., 2013; Tan et al., 2022). In India, treatment-seeking behavior fluctuates a lot, depending on the nature of the substance. Treatment seeking for illicit drug use was more in the government-organized sector; injection use was more in non-government organizations, while alcohol and sedative or hypnotic use were more inclined in the private sector. Females were underrepresented in accessing treatment

services in all sectors (Dhawan et al., 2016; Karki and Rangaswamy, 2023). Researches has claimed that profit related treatment facilities are on the lower spectrum to serve poorer clients and to offer the significant transitional treatment than non-profit (McBride et al., 2012). The government sector has come up as an important service provider and the NGO sector is providing more flexible along with a more diverse space for vulnerable community.

1.2 Statement of the Problem

Multiple studies over the last decade have found a significant increase in the use of substances worldwide (Desai, 2006; Srivaastava et al., 2010; VanPraag, 1996). Substance use disorder is a multifaceted phenomenon with social, cultural, biological, geographical, historical, and economic dimensions. It has been linked to other morbidities that may be the root cause of SUDs primarily, including a wide range of diseases, the most common and well-known of which are NCDs, NTDs, and SSDs. Other mental disorders and socioeconomic status also play important roles. After the emergence of the still ongoing pandemic, a lot of new cases of recreational drugs and other substances have been recorded (Sivapuram et al., 2020). In the past 20 years or so, there have been numerous studies of comorbidity to understand its multifactorial complexity (Madero-Cabib and Bambs, 2021). It is important to present a comprehensive view of the area, events, people, and context in order to comprehend substance use disorders from the perspective of ethno-epidemiology. There is a pressing need to concentrate and gather the quantitative and qualitative data required to provide a comprehensive context for the occurrence. Given the population makeup and socioeconomic standing of this location, researches have been conducted over the past

decade, but there is still a dearth of substantial data in the Ghaziabad area. This makes it necessary to comprehend the current drug subculture and its epidemiology.

1.3 Objectives of The Present Study

1. To ascertain the prevalence of SUDs and related comorbidities among the population of Ghaziabad district, Uttar Pradesh.

2. To analyze the association between SUDs and socio-economic, demographic, lifestyle conditions, and comorbidities in the population of Ghaziabad district, Uttar Pradesh.

3. To assess the role of rehabilitation centers and non-government organizations to mitigate the issues related to substance use disorders among the population of Ghaziabad District, Uttar Pradesh.

CHAPTER - II

METHODOLOGY AND THE AREA OF STUDY

2.1 Area and People

Ghaziabad district covers 1034 square kilometers and has a population of 34,06,061 people, of whom 18,60,400 are male and 16,60,412 are female. The predominant language is Hindi, and there are 205 villages in the district. It is an industrial area, and majority of populations have migrated there. Ghaziabad City is the administrative headquarters of the Ghaziabad district and the largest city in western Uttar Pradesh. According to Census India's preliminary reports, there were 1,648,643 people living in Ghaziabad in 2011, of which 874,607 were male and 774,036 were female. Ghaziabad city has a population of 1,648,643; its urban/metropolitan population is 2,375,820 of which 1,263,392 are males and 1,112,428 are females. In the education section, the total literature in Ghaziabad city is 1,220,667 of which 681,195 are males and 539,472 are females. The average literacy rate of Ghaziabad city is 84.78 percent; male and female literacy were 89.54 and 79.45 percent, respectively. The sex ratio of Ghaziabad city is 885 per 1000 males. The child sex ratio for girls is 835 per 1000 boys. Hinduism is the majority religion in Ghaziabad city, with 82.50% followers. Islam is the second most popular religion in the city of Ghaziabad, with approximately 14.18% following it. Buddhism is practiced by 0.96% of the population in Ghaziabad, Sikhism by 0.96%, Jainism by 0.71%, and Christianity by 0.78%. About 0.01% mentioned other religions, about 0.71% mentioned "other Religion," and about 0.71% mentioned "No Particular Religion.".

Ghaziabad city was considered for its geo situation and socio-economic position as an industrial city, which brings opportunities for individuals coming from all different kinds of socio-cultural backgrounds. The city has a large number of individuals who

have migrated here; with migration, a peculiar sense of depravity about self and identity emerges. Meanwhile, economic and health issues associated with adjustment to a new environment concern the individual. Changing the health service system can introduce an individual to a new set of pharmaceutical drugs, and their careless or unmonitored use can pave the way to addiction. The stressful work environment of urban life emphasizes the consumption of alcohol as a stress reliever (Ma et al., 2022). There have been numerous studies on the correlation between alcohol consumption and work.

Despite these, the location of Ghaziabad makes it vulnerable and puts at risk contact with the emerging drugs on the market. This problem has been occurring for a long time because the route of drug trafficking via the golden crescent consists of these three countries: Pakistan, Afghanistan, and Iran (Patil & Pandey, 2022). A significant amount of research has been done in Punjab, which has suffered greatly due to these. Through this route, the heroin consignment mainly reaches Delhi, Jaipur, Amritsar, and further international places (Chauhan, 2021). District Ghaziabad is on the western edge of Uttar Pradesh, and its boundary is well connected with Delhi, which puts it at risk too.

At the same time, considering the sensitivity and the outcomes, gravitation toward how the enumerator conducts the field work. The understanding of local languages (slangs), people, and their manners is a significant factor to consider while choosing the place of data collection. Considering all these features and the time duration, this location was selected for this study to be conducted.

2.2 A Brief History of Ghaziabad District

India, as a nation and through geopolitical lenses, holds a monumental amount of significant history about human culture and ethos. Though somehow tracing the history of Ghaziabad has been a tremendous challenge, given the knowledge and evidence from the Mughal period. The knowledge before that time was almost nonexistent, with

almost no assured sources. The official website presents some insight into the history of this district. So should it be considered one of those places with no history? Does a place even exist without a historical background? No matter if they are migrants or claim to be locals, the residents have little knowledge of the past. A territory's culture is greatly influenced by the population that has migrated there, whether ostensibly for peaceful or hostile reasons. The appreciation of, or pressure to accept and be influenced by, other cultures has occupied an important role in the current cultures of diverse populations. These populations are primarily concentrated in industrial cities, which have been impacted by waves of immigration from various cultures. The article "Toronto Has No History!": Indigeneity, Settler Colonialism, and Historical Memory in Canada's Largest City, written by Victoria Freeman in 2010, draws attention to the recognition that the city is associated with the colonizers and that the indigenous group has been neglected due to political reasons. This article explains the current context. These two locations are supposed to bear comparison because they are both industrial complexes that are surrounded by large cities that cast a shadow over their respective stories. Ontario's 19th-century capital was Toronto, a railroad port and lakeside hub for industrialization. Similar to this, Ghaziabad is close to Delhi, which has served as the capital of numerous powerful kingdoms and has experienced numerous changes to its governing structures, dynasties, and rulers. Ghazibad has a history dating past to the times of the Mahabharata and the Ramayana, as per the official website of the Government of Uttar Pradesh. In the Ramayana era, this area was connected to the Lavanasura fort, and in the Mahabharata era, it was connected to the Ahar region. It was also mentioned that the mound of Kaseri found in excavation signifies the start of civilization around 2500 BC, near the Hindon River. In modern history, Ghaziabad

made a huge contribution to the first war of independence in 1857 and continued to play an impactful role in the independence of the country.

In today's scenario, Ghaziabad district a transitional location where most people live and travel to Delhi for their occupation, education, etc. reasons. From the prior comparison to Toronto, these two have their differences because, unlike the indigenous population of Red Indians who claim to be native to the land before the arrival of the European population there, it is almost impossible to trace a native population of Ghaziabad district. The history based on memory is fluctuating and contested in a place where newcomers live, and roughly half the population living there was born outside of here.

2.3 Methodology

2.3.1 Sample size estimation and sampling design

The data will be collected from the adult population admitted to the rehabilitation centers. There are 35 rehabilitation centers in the district of Ghaziabad, including both government and private ones. A purposive sampling method was used for choosing the rehabilitation centers to collect data, as there were some hindrances to collecting the data, such as unavailability of participation, the permission of local authority, etc. This study has been conducted in an urban setting. A census survey was used as the sampling design for collecting the data. The minimum number of research participants required for a reliable estimate of substance use disorders and related comorbidities was calculated using the standard sample size estimation method (Lwanga & Lemenshow, 1991). In this method, the anticipated population of 50%, absolute precision of 7%, and confidence interval of 95% are taken into consideration. The sample size was calculated to be 196 individuals; with further consideration of the refusal rate and participation rate of 10%, the sampling size was estimated to be 220 individuals. Purposive sampling

was used to have quasi-structured interviews with the primary caregivers, doctors, nurses, ex-addicts, and social workers. Due to the set-up in a clinical environment and various events that happened while conducting the data collection. The data was gathered from 107 participants and several other significant individuals (caretakers, nurses, family of the participants, ex-addicts, and social workers) during the fieldwork.

2.3.2 Inclusion criteria

(i) Both males and females, aged 15 and older, were included.

(ii) The individuals seeking treatment in the rehabilitation centers for SUDs were included.

2.3.3 Exclusion criteria

(i) An individual who is going through some rare and extreme congenital disease will be excluded.

(ii) An individual who has been suffering from SUDs for less than 12 months.

2.4 Methods of Data Collection

The data was collected via structured schedules and interview methods. Interviews were of both open-ended and closed-ended types, utilizing structured schedules. The majority of the interviews took place in a controlled environment; the schedule was presented in both English and Hindi. To take more precaution while collecting the data, the enumerator explained the questions and clinical terms to the participants and wrote the responses herself. Additionally, there were structured interviews with the primary caregivers, doctors, nurses, ex-addicts, and NGOs.

2.4.1 Collection of demographic and socio-economic variables

The demographic and socio-economic data, including age, sex, monthly family income, sanitation, occupation, education, dependent children, education, and house type, was collected utilizing a pre-structured schedule. The socioeconomic status and

demographic profile of the patients were analyzed on the ground of Kuppuswamy's SES scale (updated 2021) (Wani, 2019) (Oberoi et al., 2016). Kuppuswamy's scale determines the SES based on a score calculated from education, occupation, and monthly income.

2.4.2 Assessment of substance use disorders

The following criteria are given by DSM-5 (5th ed. 2013) (Crowley, 2006; Hasin, 2012) for the assessment of SUDs:

A. A concerning pattern of substance use that can lead to clinically important physical hindrance or distress, which is at least fulfills two of these given criteria, happening in 12 months period:
    1. The large intake of the substances or over a longer period than intended.
    2. The failure of cutting down or control the substance use.
    3. A large part of time is blown after the efforts to gain, use or overcome the substance effects
    4. An urge or craving to use substance.
    5. Failure at fulfilling the major obligation at work, school or home caused by the substance us.
    6. Continued substance use despite persistent or recurrent social or interpersonal problems caused by or exacerbated by the effects of substances.
    7. Important social, occupational, or recreational activities are given up or reduced because of substance use.
    8. Recurrent Substances are used in situations in which they are physically hazardous

9. Substance use is continued despite knowledge of a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by substances.
10. Bulit up tolerance; either a. A need for markedly increased amounts of Substances to achieve intoxication or desired effect; b. A markedly diminished effect with continued use of the same amount of substances.
11. Withdrawal can be built up by any of these criteria;
    a. The characteristic withdrawal syndrome for Substances
    b. Substances are taken to relieve or avoid withdrawal symptoms.

Specify if: In early remission: after words getting the criteria met for SUDs, none of them had been there for at least 3 months but for less than 12 months (exception is given to the A4 criteria which deals with craving which can be present there).

In sustained remission: after words getting the criteria met for suds, none of them had been there for a period of 12 months or longer (exception is given to the A4 criteria which deals with craving which can be present there).

Specify if: In a controlled environment: This specification is used if the individual in a space or facility where access to substance is restricted.

2.4.3 Collection of data related to non-communicable diseases, neglected tropical diseases and mental disorders

Keeping in view that the two main substances that gets reported more frequently and sought help for are alcohol and opium, the most common related comorbidities were chosen for further analysis. The other morbidities that are included in the analysis are the non-communicable diseases of nine types (Cardiovascular Disease, Diabetes, Cancer, Hypertension, Dyslipidemia, Chronic Respiratory Diseases, Obesity, Gastroenterological diseases, and Dermatological conditions) that are the most

commonly diagnosed in urban populations, and neglected tropical diseases of six categories were considered from both the old and new categorization given by WHO (HIV/AIDS, Tuberculosis, Leprosy, Trachoma, Lymphatic, and mycetoma). All these diseases were associated with substance use disorders and social exclusion. There are also psychiatric disorders linked with SUD, which are included in this study. There are nine types of mental disorders described in the paper: Anxiety, Depressive Disorders, Bipolar and Related Disorders, Trauma and Stressor-Related Disorders, Schizophrenia Spectrum Disorders, Feeding and Eating Disorders, Gender Dysphoria, Sleep-Wake Disorders, and Personality Disorders.

All these above-mentioned morbidities were categorized further in two different ways

a. Self-rated morbidities

b. Clinically diagnosed

The prolongation of these morbidities and the approach to treatment were analyzed; the NSSO (60th round) 30-day recall method has been used for this purpose.

Other than these above-mentioned disorders, a more significant illness that can be encountered by patients with SUDs is Somatic Symptom Disorders (SSDs).

2.4.4 Assessment of somatic symptom disorders

These criteria are given by DSM-5 (5th ed. 2013) for assessment of SSDs:

A. One or more somatic symptoms are distressing or result in significant disruption of daily life. (These somatic symptoms could be pain in any limbs, stomach pain, back pain, menstrual cramps, headaches, dizziness, heart racing, shortness of breath,chest pain, pain during intercourse, constipation or digestion, feeling tired, gas, indigestion, trouble sleeping.)

B. The behaviors, concerns and urging thoughts that are related to SSDs are addressed by at least one of these;

1. Persistent and disproportionate thoughts about the gravity of one's syndromes
2. A continous high level of anxiety about health.
3. A large portion of time and energy are futile afterwards the health system.

C. Hardly, there can be a single somatic symptom which may be continously present, though the state of being symptomatic is continous (often more than 6 months).

Specify if: Predominant pain; for the specifier if the individual whose symptoms involves predominantly pain.

Persistent; this is manifested with the conglomeration of severe symptoms, marked impairment for a longer duration (more than 6 months).

The current severity; specify;

Mild: Only one of the symptoms specified in Criteria B is fulfilled.

Moderate: Two or more of the symptoms specified in Criterion B are fulfilled.

Severe: Two or more of the symptoms specified in Criterion B are fulfilled, and also there are multiple somatic complaints (or one very severe somatic symptom).

2.5 Fieldwork

The anthropological perspective of SUD comes from a vast number of studies done in the cultural group where the substance is mostly locally produced fermented beer, which is the source of addiction. Carlson studied the community of the Haya people of Tanzania in East Africa. In these kinds of studies, the ethnographer can simply take part in the process of brewing and making the alcohol. But in the fieldwork that takes place in an urban area, or at least in a space that has an amalgamation of cultural practices and ethos, the participant observation is not followed; there's only observation done by the researchers.

In the clinical setting, the classical quest of anthropology to observe cultural interactions comes to a halt as the population group of the study is made up of heterogeneous cultural practices. Though the group has a common identification and purpose in mind to be present there. The role of addiction is reflected in affected individuals and others' interactions, such as negotiating their own will to participate in various activities in the routine. Their opinions about the rehabmates, staff, family members, their health, and the rehabilitation center were considered.

To collect the data and validate it, the participants were only approached when their initial detoxification was complete. This interval can vary from 12 to 21 days; by the termination of it, the withdrawal symptoms were manageable and the pain was tolerable. For further precision, the collected answers were verified more or less by the caretaker and rehabilitation centre manager. It was simple to obtain the verification because the patients at the private rehabilitation center were open to acknowledge that they had been receiving counseling for some time or that NGOs who were aware of their profiles had referred them. In the collection of data, there were no major hurdles; in the beginning, there was slow but steady progress taking place. For the unperturbed ongoing fieldwork, assistance was sought from a social worker, who helped to authenticate and verify the collected data to the best of our ability. After finishing, the collection of data from one rehab while preparing to gain access to another rehabilitation center, there has been news spreading in various media outlets about the *Kanjhawala Case.* Due to the factors regarding the location and reason for the crime (i.e., drug selling), the rehabilitation center located in Ghaziabad was reluctant to give access as they were petrified of gaining attention from the police and media. The crime was complicated and gained much attention for around two weeks. Later, during this period, a rehabilitation center agreed to give access but wished to remain anonymous.

Due to the strain on time and permission issues, data was gathered from this rehab while valuing their anonymity.

2.6 Statistical Analysis

The acquired data coded and compiled in MS Excel before being analyzed with SPSS (16.0). The categorical variables are represented by frequency distributions and percentages. For categorical variables, the Poisson distribution with 95% confidence intervals were also estimated. The chi-square analysis was used to determine the differences in determinant variables between disorder groups. A p-value <0.05 was considered to be statistically significant.

Chapter- III

The Demographic Profiles and Cultural Inferences

3.1 Syndemics Approach

Merrill Singer (2009) introduced this approach, stating that the syndemic word is a combination of synergy and epidemic to place concurrent epidemics in the proper context, which includes both disease and social hurdles such as a lack of education. Syndemic theory consists of these manifestations: a. two diseases 8 are clustered together in a particular population b. Contextual and other social phenomena such as patterned violence support and the conglomeration of diseases; c. the conglomeration of the diseases increases the potential of disease "burden on the impacted population beyond a simple comorbidity of two distinct maladies" (Mendenhalll, 2012).

This theory not only subscribes to the sum of two diseases but at the same time also evaluates its multiple interactions with each other and social elements. Theresore, promoting a more holistic view of the social, political, economic and psychological factore that associate with diseases. Syndemic theory has been cultivated to investigate the interactions between substance use disorder, gang activity, violence in low-income areas (Singer, 2009).

In this avant-grade approach, Singer (1996) proposed that inner city, AIDS epidemic was irretrievably connected to a social context bluntly by deprivation, low rates of employment, education and concurrent substance use disorders (majorly alcohol use). In Puerto-Rico, these situations leads to the youth participation in drug trade and violent acts and paved to conserve unstable life conditions that further on unveil them

to unprotected sexual activity, needle sharing and numerous disease such as HIV/AIDS.

Table 3.1: Frequency of substance use disorder and severity among the affected individuals in Ghaziabad district

Groups	Categories	N	Percentage	95% C.I.
Substances	Alcohol	105	98.1	85.88 to 127.11
	Cannabis	2	1.9	0.24 to 7.22
Severity	Mild to Moderate	57	53.3	43.17 to 73.85
	Severe	50	46.7	37.11 to 65.92

Table 3.1 depicts the types of substance use disorders: 98.1% of participants had AUS (alcohol use disorder), while 1.9% had cannabis use disorders. The severity of the disorder—mild and moderate, which are all combined under one category; Mild to moderate was 53.3%, and severe was 46.7%—was among the participants (Table 3.1). For further results and discussion, only the data collected from the alcohol use disorder was considered and further categorized according to socio-economic and demographic variables. So the sample size employed in the next table is 105 participants found to have used alcohol as a substance in the present research.

Table 3.2: Frequency of demographic profile of the affected individuals in Ghaziabad district

Variables	**Categories**	**N**	**Percentage**	**95% C.I.**
Age	15-24	8	7.6	3.45 to 15.76
	25-39	51	48.6	37.97 to 67.06
	40 & Above	46	43.8	33.68 to 61.36
Gender	Male	105	100	85.88 to 127.11
Religion	Hindu	105	100	85.88 to 127.11
Social Group	General	49	46.7	36.25 to 64.78
	OBC and SC	56	53.3	42.30 to 72.72
Marital Status	Married	66	62.9	51.04 to 83.97
	Separated	15	14.2	8.40 to 24.74
	unmarried	24	22.9	15.38 to 35.71
Educational Qualification	Primary	40	38.0	28.58 to 54.47
	High School	26	24.8	16.98 to 38.10
	Intermediate	20	19.1	12.22 to 30.89
	Graduate and above	19	18.1	11.44 to 29.67
Occupation	Business	24	22.9	15.38 to 35.71
	Small Business	15	14.3	8.40 to 24.74
	Private Job	30	28.6	20.24 to 42.83

	Government Service	12	11.4	6.20 to 20.96
	Student	12	11.4	6.20 to 20.96
	Others	12	11.4	6.20 to 20.96
Family Income	Under 3 Lakh	40	38.1	28.58 to 54.47
	3-5 Lakh	58	55.2	44.04 to 74.98
	6 Lakh and above	7	6.7	2.81 to 14.42
Number of earning members	1	40	38.1	28.58 to 54.47
	2	42	40	30.27 to 56.77
	3 and more	23	21.9	14.58 to 34.51
Residence	Own	63	60.0	48.41 to 80.60
	Rented	20	19.0	12.22 to 30.89
	Nuclear and separated	22	21.0	13.79 to 33.31
Type of residence	Pacca	105	100	85.88 to 127.11
Family	Joint	26	24.8	16.98 to 38.10
	Nuclear	79	75.2	62.54 to 98.46
Relationship with the family head	Unmarried Child	22	14.3	13.79 to 33.31
	Married Child	28	26.7	18.61 to 40.47
	Self	40	38.0	28.58 to 54.47
	Brother	15	21	8.40 to 24.74

Number of family members	Less than 5	51	48.6	37.97 to 67.06
	5 and more	54	51.4	40.57 to 70.46
Number of siblings	Less than 3	71	67.6	55.45 to 89.56
	3 and more	34	32.4	23.55 to 47.51
Safety in neighborhood	Yes	105	100	85.88 to 127.11
Immediate surroundings	Clean Both Inside and Outside	77	73.3	60.77 to 96.24
	Clean Inside Only	28	26.7	18.61 to 40.47

Table 3.2, which shows the frequency distribution of age, shows the present age of the admitted individual at the rehabilitation center. The age-group distribution indicated that the most frequent prevalence was observed among those between 25 and 39 years old (48.6%) and those between 40 and over (43.8%), while those between 15 and 24 years old had the least frequent prevalence (7.6%). All the participants were male, though the criteria for sampling were not exclusively based on the male population. Similar to this, the religion of the participants was Hindu (100%), and category-wise results showed that 46.7% of participants in the present research belonged to the general caste, while 53.3% belonged to the OBC and SC castes. Most of the participants, around 62.9%, were married, while 22.9% were unmarried, and the remaining 14.2% were separated. The education qualifications of the participants were 38.8% primary. Among the remaining, 24.8% were high school educated, 19.1% were of intermediate level, and the rest of 18.1% were graduates or above. Occupation was divided into various categories: business was 22.9%, small business was 14.3%,

private jobs were 28.6%, government service was 11.4%, students were 11.4%, and others were 11.4%.

Family income under 3 lakhs was 38.1%, 3-5 lakhs was 55.2%, and 6 lakhs and above were 6.7%. Number of earning heads in the family: 38.1% of participants had only single member who earned; similar to this, 40% of families had two members who earned, while 21.9% of families had three or more members who earned. Personal per capita income was below 2 lakhs for 61.0% of participants,and 2 lakhs and above for 39.0%. The resident ownership status was as follows: 60.0% of the participants owned their residents, 19.0% had rental residents, and 21.0% had nucleated and separated residents. The Types of residence occupied by the participants were 100% pacca. 24.8% of the participants had a joint family, and 75.2% had a nuclear family. Relationship with the family head, 14.3% were unmarried children, 26.7% were married children, 21.0% were brothers to the family head, and 38.0% were themselves the family head. The number of family members of the affected individual was 48.6% where the members were less than five, and 51.4% where the family members were five or more. The participants' siblings were divided into two groups: 67.6% had less than three siblings, and 32.4% had three or more siblings. 100% of the participants felt safe in their neighborhood. The cleanliness of the immediate surroundings of the participants: 77.3% of participants had clean surroundings both outside and inside their homes, while 26.7% of participants had clean surroundings only inside.

3.2 Process Addiction

Social support is a key facilitator of recovery from substance use. It refers to the care and value experienced by the individual, whether it is in the structure of tangible assistance or emotional validation (Friedman, 2011; Umberson & Donnelly,

2023). Individuals affected by SUDs obtain support from numerous sources, but the crucial ones are from their romantic partners, parents, and family members. Not only is the successful and complete treatment of the individual dependent on them, though their association also helps in the initial identification, outreach, and engagement. The family member can be an important factor in SUD treatment; the chances of them recognizing the warning signs of substance misuse are higher in comparison to the affected individual (Harkavy-Friedman et al., 1999; Sobell et al., 1993). Family members usually try to motivate themselves to seek treatment and typically want to help the affected individual minimize their addiction, improve the relationship, and also resolve the tension due to the substance use disorder.

Table 3.3: Association between severity of alcohol use disorders and the demographic profile of the affected individuals in Ghaziabad district

Variables	Categories	Moderate (N)	Severe (N)	$\chi 2$
Age	15-24	2 (1.9%)	6 (5.7)	2.819; df 2 P < 0.05
	25-39	28 (26.7%)	23 (21.9%)	
	40 and above	26 (24.8%)	20 (19.0%)	
Social Group	General	24 (22.9%)	25 (23.8%)	0.700; df 1 P < 0.05
	OBC and SC	32 (30.4%)	24 (22.9%)	
Maritial	Married	41 (39.0%)	25 (23.8%)	5.537; df 2 P < 0.05
	Unmarried	9 (8.6%)	15 (14.3%)	
	Separated	6 (5.7%)	9 (8.6%)	
Education	Primary	20 (19.0%)	20 (19.0%)	3.870; df 3

	High School	18 (17.1%)	8 (7.6%)	P < 0.05
	Intermediate	10 (9.5%)	10 (9.5%)	
	Graduate and above	8 (7.6%)	11 (10.5%)	
Occupation	Business	13 (12.4%)	11 (10.5%)	**12.22; df 5** **P > 0.05**
	Small Business	11 (10.5%)	4 (3.8%)	
	Private Job	18 (17.1%)	12 (11.4%)	
	Government Service	8 (7.6%)	4 (3.8%)	
	Student	4 (3.8%)	8 (7.6%)	
	Others	2 (1.9%)	10 (9.5%)	
Family Income	Under 3 lakhs	25 (23.8%)	15 (14.3%)	2.255; df 2 P < 0.05
	3-5 lakhs	28 (26.7%)	30 (28.6%)	
	6 lakhs and more	3 (2.8%)	4 (3.8%)	
Number of Earning Members	1	22 (21.0%)	18 (17.1%)	4.331; df 2 P < 0.05
	2	18 (17.1%)	24 (22.9%)	
	3 and more	16 (15.2%)	7 (6.7%)	
Personal per capita income	Below 2 lakhs	37 (35.2%)	27 (25.7%)	1.321; df 1 P < 0.05
	2 lakhs and more	19 (18.1%)	22 (21.0%)	
Residence	Own	34 (32.4%)	29 (27.6%)	2.468; df 2 P < 0.05
	Rented	13 (12.4%)	7 (6.7%)	
	Nuclear and separated	9 (8.6%)	13 (12.4%)	

Family	Joint	16 (15.2%)	10 (9.5%)	0.935; df 1 P < 0.05
	Nuclear	40 (38.1%)	39 (37.1%)	
Relationship with family head	Married child	13 (12.4%)	15 (14.3%)	5.504; df 3 P < 0.05
	Unmarried child	8 (7.6%)	14 (13.3%)	
	Brother	10 (9.5%)	5 (4.8%)	
	Self	25 (23.8%)	15 (14.3%)	
Number of family members	Less than 5	28 (26.7%)	23 (21.9%)	0.098; df 1 P < 0.05
	5 and more	28 (26.7%)	26 (24.7%)	
Number of siblings	Less than 3	36 (34.3%)	35 (33.3%)	0.609; df 1 P < 0.05
	3 and more	20 (19.0%)	14 (13.3%)	
Immediate surroundings	Clean both inside and outside	44 (41.9%)	33 (31.4%)	1.684; df 1 P < 0.05
	Clean inside only	12 (11.4%)	16 (15.2%)	

This table represents the association between aud and demographic profile, age group 15-24, the moderate is 1.9%, severe is 5.7% , 25-39 category has 26.7% moderate while the severe is 21.9% , 40 and above, category has 24.8% is moderate while 19.0% is severe suffering with AUD. In the social group category, general caste has 22.9% participants suffering with moderate and 23.8% with severe. While in OBC and SC category has 30.4% has moderate aud and 22.9% has severe aud. 39.0% of participants married has been suffering with moderate aud while 23.8% married participants had been suffering with severe. Unmarried participants, among them 8.6% has moderate and 14.3% has severe aud. In education category, primary level educated, 19.0% of the

participants have moderate and the same percentage have severe aud too. High school educated, 17.1% have moderate and 7.6% have severe aud. Intermediate edaucted in both the categories of moderate and severe, there were 9.5% of the participants. In graduate and above category, 7.6% had moderate and 10.5% had severe aud. In business category, business category had 12.4% in moderate and 10.5% in severe. While small business had 10.5% in moderate and 3.8% in severe. Private job had 17.1% in moderate and 11.4% in severe. Government service had 7.6% in moderate and 3.8% in severe. Student had 1.9% in moderate and 14.3% in severe aud category. The association between occupation and severity of aud is significant. Family income, under 3 lakhs category had 23.8% were in moderate and 14.3% were in severe aud. 3-5 lakhs category had 26.7% were in moderate and 28.6% were in severe. 6 lakhs and more had, 2.8% and 3.8% were respectively in moderate and severe aud category. Number of earning heads; in families where only 1 person earns had 21.0% in moderate and 17.1% in severe aud category, 2 earning member families has 17.1% in moderate and 22.9% in severe aud, while 3 and more had 15.2% in moderate and 6.7% in severe aud category. In personal per capita income, below 2 lakhs, 35.2% in moderate and 21.0% in severe aud category. Residence; own had 32.4% in moderate and 27.6% in severe aud category. Rented had 12.4% in moderate and 6.7% in severe, while nuclear and separated had 8.6% in moderate and 12.4% in severe aud category. Joint family had 15.2% in moderate and 9.5% in severe. Nuclear family had 38.1% in moderate and 37.1% in severe aud category. Relationship with family head; married child group had 12.4% in moderate and 14.3% in severe aud category, unmarried child group had 7.6% in moderate and 13.3% in severe aud category. Brother relationship group had 9.5% in moderate and 4.8% in severe aud category. Self, had 23.8% in moderate and 14.3% in severe aud category.

Number of family members; less than 5 members had 26.7% in moderate and 21.9% in severe aud category. Number of siblings; less than 3, group had 34.3% in moderate and 33.3% in severe aud category while 3 and more group had 19.0% in moderate and 13.3% in severe aud category. Immediate surroundings; clean both inside and outside had 41.9% in moderate and 31.4% in severe aud category while clean inside only had 11.4% in moderate and 15.2% in severe aud category.

Table 3.4: Frequency of the process addictions and lifestyle of the affected individuals in Ghaziabad district

Variables	Categories	N	Percentage	95% CI
State of Economic Dependence	Fully dependent on others	12	11.4	6.20 to 20.96
	Partially dependent on others	59	56.2	44.91 to 76.11
	Not dependent on others	34	32.4	23.55 to 47.51
Stable Job	Yes	63	60	48.41 to 80.60
	No	42	40	30.27 to 56.77
Depending Children	0	54	51.4	40.57 to 70.46
	1	37	35.2	26.05 to 51.00
	2 and more	14	13.4	7.65 to 23.49
Loans	Yes	25	23.8	16.18 to 36.90
	No	80	76.2	63.43 to 99.57
Gambling on	Yes	16	15.2	9.15 to 25.98

Daily Basis	No	89	84.8	71.47 to 109.52
Land Owned by Family	Yes	55	52.4	41.43 to 71.59
	No	50	47.6	37.11 to 65.92
Sleep Duration	Less than 6 hours	60	57.1	45.79 to 77.23
	6 hours and more	45	42.9	32.82 to 60.21
Screen Time	Less than 6 hours	37	35.2	24.38 to 48.68
	6-7 hours	37	35.2	24.38 to 48.68
	8 hours and more	31	29.6	21.06 to 44.00
Exercise	Regular	3	2.9	0.62 to 8.77
	Sometimes	61	58.1	46.66 to 78.36
	Never	41	39.0	29.42 to 55.62
Junk Food	Regular	18	17.1	10.67 to 28.45
	Sometimes	72	68.6	56.34 to 90.67
	Never	15	14.3	8.40 to 24.74
Weight	Underweight	8	7.6	3.45 to 15.76
	Normal	78	74.3	61.66 to 97.35
	Overweight	19	18.1	11.44 to 29.67

In the present Table 3.4, the state of economic dependence shows that 11.4% of the participants are fully dependent on others, 56.2% are partially dependent, and 32.4%

are not dependent. Among the participants, 60.0% had a stable job, and 40.0% did not have a stable job. 13.4% of the participants had two or more dependent children, 35.2% had one dependent child, and 51.4% did not have any dependent children. 23.8% of the participants had taken loans, and 76.2% had not taken any loans. Gambling behavior among the participants: 15.2% gamble on a daily basis, and 84.8% do not participate in gambling. Among the participants, 52.4% of the individuals' families owned land, while 47.6% of the participants' families did not own any land.

On a daily basis, 57.1% of the participants were sleeping less than 6 hours, while 42.9% were sleeping for 6 or more hours. As per the hours spent on the screen among the participants, 35.2% have been using it for less than 4 hours, 35.2% exercise never, and 29.6% exercise daily. In terms of the consumption of junk food among the participants, 17.1% had been consuming it on a regular basis, 68.6% had been consuming it sometimes, and 14.3% had never consumed any junk food. According to their perception of their weight, 7.6% believed themselves to be underweight, 74.3% believed themselves to be normal, and 18.1% believed themselves to be overweight.

Table 3.5: Association between severity of alcohol use disorders and the process addiction, lifestyle of the affected individuals in Ghaziabad district

Variables	Categories	Moderate	Severe	$\chi 2$
State of Economic Dependence	Fully dependent on others	4 (3.8%)	8 (7.6%)	2.177; df 2 P < 0.05
	Partially dependent on others	33 (31.4%)	26 (24.8%)	

	Not dependent on others	19 (18.1%)	15 (14.0%)	
Stable Job	Yes	35 (33.3%)	28 (26.7%)	0.312; df 1 P < 0.05
	No	21 (20.0%)	21 (20.0%)	
Depending Children	0	25 (23.8%)	29 (27.6%)	3.090; df 2 P < 0.05
	1	21 (20.0%)	16 (15.2%)	
	2 & more	10 (9.5%)	4 (3.8%)	
Loans	Yes	16 (15.2%)	9 (8.6%)	1.500; df 1 P < 0.05
	No	40 (38.1%)	40 (38.1%)	
Gambling on Daily Basis	Yes	7 (6.7%)	9 (8.6%)	0.697; df 1 P < 0.05
	No	49 (46.7%)	40 (38.1%)	
Land Owned by Family	Yes	35 (33.3%)	20 (19.0%)	**4.926; df 1** **P > 0.05**
	No	21(20.0%)	29 (27.6%)	
Sleep Duration	Less than 6 hours	33 (31.4%)	27 (24.7%)	0.156; df 1 P < 0.05
	6 hours & more	23 (21.9%)	22 (21.0%)	
Screen Time	Less than 6 hours	23 (21.9%)	14 (13.3%)	1.790; df 2 P < 0.05
	6-7 hours	18 (17.1%)	19 (18.1%)	
	8 hours & more	15 (14.3%)	16 (15.2%)	
Exercise	Regular	2 (1.9%)	1 (0.9%)	0.235; df 2 P < 0.05
	Sometimes	32 (30.5%)	29 (27.6%)	
	Never	22 (21.0%)	19 (18.1%)	

Junk Food	Regular	9 (8.6%)	9 (8.6%)	2.812; df 2 P < 0.05
	Sometimes	36 (34.3%)	36 (34.3%)	
	Never	11 (10.5%)	4 (3.8%)	
Weight	Underweight	3 (2.8%)	5 (4.8%)	1.561; df 2 P < 0.05
	Normal	41 (39.0%)	37 (35.2%)	
	Overweight	12 (11.3%)	7 (6.7%)	

State of economic dependence- fully dependent on others had 3.8% in moderate and 7.6% in severe aud category. Partially dependent on others had 31.4% in moderate and 24.8% in severe aud category. Not depending on others had 18.1% in moderate and 14.0% in severe aud category. Stable job, 'yes' group 33.3% in moderate and 26.7% in severe aud category while 'no' group 20.0% was both in moderate and severe aud category. Depending children; among the participants had no child, 23.8% moderate and 27.6% severe aud category. Among the participants, who had 1 child; 20.0% moderate and 15.2% severe aud category. Among the participants who had 2 and more children were, 9.5% in moderate and in 3.8% severe aud category. Among the participants who took loan 15.2% in moderate and 8.6% in severe aud category. While who did not take any loan have equal distribution (38.1%) in both moderate and severe category. Gambling on daily basis- the participants who accepted to gamble, 6.7% had moderate and 8.6% had severe aud. While who declined the habit of gambling, 46.7% had moderate and 38.1% had severe aud. Land owned by family; participants who agreed, among them 33.3% had moderate and 19.0% had severe aud. The association between land owing and aud is significant.

Sleep duration; less than 6 hours had 31.4% had moderate and 24.7% had severe aud while 6 times and more had 21.9% in moderate and 21.0% in severe aud. Screen time,

less than 6 hours had 21.9% moderate and 13.3% severe aud, 6-7 hours had 17.1% in moderate and 18.1% in severe aud category. While 8 hours and more had 14.3% in moderate and 15.2% in severe aud category. The participants who exercises regularly are 1.9% moderate and 0.9% severe aud category, among the participants who exercises sometimes 30.5% had moderate and 27.6% had severe aud category. While the participants who never exercised had 21.0% in moderate while 18.1% in severe aud category. The participants who consumes junk food regularly had, 8.6% in moderate and 8.6% in severe aud category. The participants who sometime consumes junk food had similar (34.3%) in both moderate and severe aud category. The participants who never consumes junk food had 10.5% in moderate and 3.8% in severe aud category.

Table 3.6: Migration and social conditions of the affected individuals in Ghaziabad district

Variables	**Categories**	**N**	**Percentage**	**95%CI**
Migration	Yes	73	69.5	57.22 to 91.79
	No	32	30.5	21.89 to 45.17
Years	Not applicable	32	30.5	21.89 to 45.17
	Less than 15 years	15	14.3	8.40 to 24.74
	15 years and more	58	55.2	44.04 to 74.98
Reason	Not applicable	32	30.5	21.89 to 45.17
	Economic	52	49.5	38.84 to 68.19
	Health	8	7.6	3.45 to 15.76
	Education	6	4.7	2.20 to 13.06

	Others	7	5.7	2.81 to 14.42
Challenges	Not applicable	32	30.5	21.89 to 45.17
	Yes	69	65.7	53.69 to 87.32
	No	4	3.8	1.09 to 10.24
Socialize	Not applicable	32	30.5	21.89 to 45.17
	Yes	45	42.9	32.82 to 60.21
	No	28	27.6	18.61 to 40.47
Exhaustive	Not applicable	32	30.5	21.89 to 45.17
	Yes	34	32.4	23.55 to 47.51
	No	39	37.1	27.73 to 53.31

This data related to the migration indicated that a total of 69.5% of the population had migrated to Ghaziabad District, and the rest (30.5%) was the local population (Table 3.4). Other questions related to migration were not applicable to the local population of 30.5%, who did not experience any issues related to migration. All the further categories of data are only applicable to the rest of the 69.5%. Among the rest, 14.3% had migrated less than 15 years ago, while 55.2% had migrated 15 or more years ago. The reasons for migration among the 69.5% were economic opportunity, health purposes, education, and other miscellaneous activities, respectively 49.5%, 7.6%, 4.7%, and 5.7%. 65.7% of the population faces difficulties, while 3.8% say they have none. To socialize with others, 42.9% found it difficult, while 27.6% did not find it difficult. Among the population that migrated, 32.4% found it exhaustive, while 37.1% did not agree that it was an exhaustive experience.

Table 3.7: Association between severity of alcohol use disorders and the migration of the affected individuals in Ghaziabad district

Variables	Categories	Moderate (N)	Severe (N)	$\chi 2$
Migration	Yes	36 (34.3%)	37 (35.2%)	1.554; df 1 P < 0.05
	No	20 (19.0%)	12 (11.4%)	
Years	Not applicable	20 (19.0%)	12 (11.4%)	1.607; df 2 P < 0.05
	Less than 15 years	7 (6.7%)	8 (7.6%)	
	15 years and more	29 (27.6%)	29 (27.6%)	
Reason	Not applicable	20 (19.0%)	12 (11.4%)	2.856; df 4 P < 0.05
	Economic	26 (24.8%)	26 (24.8%)	
	Health	3 (2.9%)	5 (4.8%)	
	Education	4 (3.8%)	2 (1.9%)	
	Others	3 (2.9%)	4 (3.8%)	
Challenges	Not applicable	20 (19.0%)	12 (11.4%)	2.676; df 2 P < 0.05
	Yes	33 (31.4%)	36 (34.4%)	
	No	3 (2.9%)	1 (0.9%)	
Socialize	Not applicable	20 (19.0%)	12 (11.4%)	1.562; df 2 P < 0.05
	Yes	22 (20.9%)	23 (21.9%)	
	No	14 (13.3%)	14 (13.3%)	
Exhaustive	Not applicable	20 (19.0%)	12 (11.4%)	3.248; df 2 P < 0.05
	Yes	22 (20.9%)	23 (21.9%)	

	No	14 (13.3%)	14 (13.3%)	

This table represents the associated between aud severity and migration among the population in Ghaziabad district. The participants who agreed to being migrated, among them 34.3% had moderate and 35.2% had severe aud category. The participants claimed not to be migrated, among them 19.0% had moderate and 11.4% had severe aud. Years since the participants had migrated; to the participants who had negated, 19.0% had moderate and 11.4% had severe. Less than 15 years since migration, had 6.7% moderate and 7.6% severe aud. 15 years and more since migration had similar (27.6%) in both moderate and severe too. The participants have numerous reasons for migration, who accepted to migrate for economic reasons, among them the distribution was similar (24.8%) in both moderate and severe. For health reasons, 2.8% in moderate and 4.8% in severe aud category, for education reasons, 3.8% in moderate and 1..9% in severe aud category. While others reasons category was, 2.8% in moderate and 3.8% in severe aud category. The participants who accepted to face challenges due to migration, had 31.4% in moderate and 34.4% in severe aud category. While the participants who disagreed had 2.8% in moderate and 0.9% in severe aud category. The participants who agreed to find it grueling to socialize with others had, 20.9% in moderate and 21.9% in severe aud category. While who disagreed had similar distribution in both moderate and severe aud category. The participants who found the experience of migration exhaustive had 20.9% in moderate and 21.9% in severe aud category. While who had not a similar experience had the same distribution (13.3%) in both categories.

Chapter- IV

Substance Use Disorder and the Comorbidities

Since the dawn of civilization, there have been numerous written records of substances and the problematic use of psychotic drugs. In ancient Greece, excessive alcohol was treated by placing an eel at the bottom of a goblet of wine. It is important to note that various methods of removing problematic drinking have been used, such as being whipped, dunked, shocked, poisoned with potions, chained, terrorized, and drugged with hallucinogens, interferon, and forms of psychiatric medication (Khare, 2005; Miller & Carroll, 2006). A variety of techniques have been used in recent years to punish and terrorize users.

4.1 An Overview of Substance Use in the History of India

Alcohol is prohibited by Islamic law and numerous Brahmanical textual traditions. However, according to other texts, drinking was a common practice among Kshatriyas during the Ramayana and Mahabharata periods. The government regulated alcohol production and sales during the Mauryan era. Babur and Jahangir, two Mughal emperors, admit in their autobiographies to having "pangs of guilt about their drinking habit." Meera Khare has demonstrated that in Sufi mysticism, images of wine cups in Mughal paintings can represent a variety of spiritual-religious meanings (Khare, 2005). Locally brewed alcohol can be used for multifarious purposes, including as a digestive aid and, in an emergency, as a backup for both food and water. The fermented juice of palm trees is one of its most popular modern forms. The country liquor made from the Mahua flower was used to show guests that they were welcome when making decisions in Panchayati meetings. It was also highly regarded at various feasts and celebrations. It can be used for a wide range of noble purposes, such as acts of worship, displays of friendship, and expressions of solidarity.

There is a perception of India in western countries where alcohol consumption is not common (Fisher-Tiné & Tschurenev, 2014). Contrary to popular belief, drinking is a common, if not undesirable, behavior. In the late nineteenth century, the writings of a diverse range of historical actors did not entirely produce the perception of India as a nation of abstinence. The Indian National Congress and Mahatma Gandhi portrayed themselves as a nation of teetotalers opposed to corrupt western nations, which contributed more to this image than anything else (Fahey & Manian, 2005).

As a result, nationalist supporters frequently downplay Indians' increasing alcohol consumption and associated problems as a consequence of European influence and issues caused by westernization, particularly among the educated class of Indians. These reductionist viewpoints were required by Indian nationalists to support the credibility of their nationalist ideology. Despite the fact that all of this propaganda was a major issue in the past, the middle-class population is growing today as a consequence of the political and economic modernaisation (liberalisation) that occurred after the 1980s. Alcohol abuse is no longer just a problem for the poor, as was once thought, even in medical literature until recently, and the addiction problem has now begun to interfere with India's perception as a nation with an abstinence culture. Along with these, Christian missionaries, followers of other Western esoteric movements, and reformist Hinduism in India popularized religious rhetorical criticism of addiction.

This group's representatives have focused on alcohol consumption for heterogeneity of reasons, claiming that, this is a byproduct of shallow materialism that predominated in the West and has nothing to do with spiritual India. Things were quite the opposite in India, ascribed to the use of unusual stimulants such as opium and cannabis. In a

multifariousness of colonial written accounts, opium use is portrayed as a universal and essentializing practice.

4.2 Legalization and the Morality Dispute

Alcohol use increased significantly in India during British rule, and it was cheap at the time. A quart of Mahua is only about half a penny. Later, the British taxed it, claiming that if the price was higher, consumption would be lower (Joseph & K, 2020). Though in his article in 1889, Bishop John F Hurst, pointed out that the true motive behind the British government in India was to "grind money out of a vice, and not to pulverize the vice." Later, from the beginning of the Civil Disobedience Movement in 1930 to the end of the Congress- led provincial government in 1939. The struggle over alcohol took the structure of a nationalist agenda.

Colvard (2013), in his paper, A *Drunkards beware!* Discusses the connection between anti- alcohol agitation and the nationalist movement. Tension increased dramatically between the nationalists devoted to the idea of abolishing alcohol drinking and the users of alcohol. This continuous tug between two parties led to the choice to either stop drinking alcohol to support the sentiment of Congress to free the nation or to implicitly support the colonizer government. Through the process, drinkers found themselves subjected to moral criticism from the nationalists and the Congress provincial government.

In the postcolonial era, independent India was adamant about abolishing the existence of the drink-producing industry. There are various complex religious, socio-economic, and political agendas behind the anti-alcohol discourse. It can be hypothesized that prohibition on alcohol has more to do with political statements than socio-cultural realities.

Article 47 of the Indian Constitution gives the states the authority to implement measures to impose bans on the use of all harmful intoxicating beverages and drugs, with the exception of those used for medical purposes. The Constituent Assembly of independent India endorsed this as a guiding principle of state policy.

Currently, there are 4 states—Gujrat, Bihar, Mizoram, and Nagaland—where alcohol is entirely banned, and 2 states—2019–21, Manipur, and Lakshadweep—where alcohol is partially banned. In NFHS-5, 2019–21, it was found that male alcohol consumers who are 15 years of age and older were respectively 5.8%, 15.5%, 23.8%, and 24.0% in the 4 complete dry states. Male alcohol consumers aged 15 or older made up 37.5% and 0.4% of the population in the two other states, respectively.

4.3 Terminology and its Significance

The terminology used to describe substance use disorders is one of the issues that frequently arises in the study of substance addiction. It is strongly advised and stressed to use the proper term because it can indicate a tone or manner of addressing someone who has SUDs. It can lead to discrimination and apathy toward them. Terminology regarding substance use should not be such as “abuse,", “drug dependence,", “substance abuse drug habit,", "vice," “prescription drug abuse’’, “strung out,", or “tweaking,” but the preferred term is “substance use disorder," “addiction,” “hazardous substance abuse," “nonmedical prescription drug use,” and “intoxicated” (Alinsky et al., 2022; van Boekel et al., 2013).

Similarly, terminology such as drug abuser, junkie, druggie, stoner, an alcoholic, drunk, heroin user, crackhead, injection drug user, pothead, a patient who failed treatment, and a person with multiple recurrences is discouraging for the person, whereas terms such as "a person with SUD," "a person who uses a specific

substance," "a patient in need of more support," and "a person with multiple recurrences" are soothing.

Throughout there has been a lot of progress in the field of treatment, but there have been fewer efforts to remove the stigma surrounding it. The need for a rigorous framework arises for academics and journalists, who have a major role in spreading the narration of phenomena. According to Kelly et al. (2010) and Atayde et al. (2021), the carelessly put to use the term "substance abuser" conveys the idea that the person with SUD is engaging in willful misconduct, is a disruption to society, and needs to be punished.

4.4 Type of Drugs and its Effects

The three major categories into which drugs can be divided are:

Depressants: These declines the function of the central nervous system. It affects the ability to concentrate and coordinate.

Hallucinogens: These substances can manipulate the sensory functions of the body. The user can hear, see, taste, feel things or smell that are not present there. It can also distort the thoughts and feelings of the consumer.

Stimulants: They can make the user's heart beat faster, their blood pressure go up, and their body temperature go up, leading to exhaustion or a heart attack. Associated other effects are reduced appetite, agitation, and insomnia.

Table 4.1: Various types of substances and their effects

TYPE	SUBSTANCES	EFFECTS
Depressants	· Alcohol · Benzodiazepines · Cannabis · GHB (gamma-hydroxybutyrate) Ketamine · Opioids (heroin, morphine, and codeine)	It can make you feel calm, less inhibited and relaxed. In larger quantities, they can cause sleepiness, vomiting, nausea, unconsciousness, and even death.
Hallucinogens	· Cannabis · Ketamine · LSD (lysergic acid diethylamide) · Psilocybin (magic mushrooms) · PCP (phencyclidine)	Sense of floating, numbness, confusion, disorientation, and dizziness. In larger quantities, it may cause hallucinations, memory loss, distress, anxiety, an increased heart rate, paranoia, panic, and aggression.

Stimulants	· Amphetamines (speed and ice) · Caffeine · Cocaine · Ecstasy (MDMA – methylenedioxymethamphetamine) · Nicotine (tobacco)	Increases alertness, confidence and energy level In larger quantities, it can cause anxiety, panic, seizures, stomach cramps, and paranoia.

4.4.1 Alcohol

According to the NHS (National Health Survey), alcohol is a chemical that can have a wide range of adverse effects on almost every part of one's body, including one's brain, bones, and heart. These are associated with alcohol misuse; many harms are related to the misuse of alcohol, whether they are long-term or short term. Long-term effects include compromising the user's immune system. It can increase the danger of high blood pressure, stroke, pancreatitis, certain types of cancer, dementia, depression, infertility, etc. Apart from health problems, it can also lead to socio-economic problems for the addicted, such as family disputes, domestic abuse, unemployment, and homelessness.

4.4.2 Cannabis

Cannabis is often known as marijuana, though both are not identical. Cannabis deal with all products gained from the plant *Cannabis sativa*, while marijuana refers to the parts of the product from the plant Cannabis sativa that contain considerable amounts

of tetrahydrocannabinol (THC). THC is the substance that significantly affects the user's mental conditions. Some cannabis plants contain little THC.

4.4.2.1 Method of use

It is used in hand-rolled cigarettes and water pipes; it is smoked in emptied cigars (blunts) that have been partly or completely filled with cannabis too. It is consumed through vaporizers, which use a liquid marijuana extract. It is used as an edible ingredient mixed into foods such as candy, tea, brownies, or cookies.

4.4.2.2 Therapeutic uses

Cannabis is used as a pain reliever and also shows favorable results when used with patients with anxiety, epilepsy, glaucoma, sclerosis, inflammatory bowel diseases, irritable bowel syndrome, PTSD, and sleep problems. It also helps decrease opioid use. Though the studies supporting these claims are fewer in number, more evidence-based studies are required to be more certain of these benefits. Besides these, CBD (cannabidiol) has harmful effects by decreasing alertness, mood swings, diarrhea, and appetite. It can also produce psychotic effects, liver injury, male reproductive harm, and a low birth rate in females.

4.4.3 Smack brown sugar

Besides the two substances mentioned, another major harmful substance that affects a large number of people is smack. Though in many rehabilitation centers, the patients affected by this addiction are few, As most of the rehabilitation centers are not equipped to handle the addict of smack, aside from alcohol and cannabis, which can be handled via talk therapy and anonymous meetings. It requires the aid of other pharmaceutical drugs such as buprenorphine and naloxone in the treatment, and the chances of seizure are high (Gondwal et al., 2023).

Due to these reasons, the individual affected has to be monitored regularly. Brown sugar is an adulterated form of heroin, a semi-synthetic opioid made from morphine extracted from poppy plants. It is a mixture of heroin and other chemicals in powder form, such as chalk powder, zinc oxide, etc. These impurities make it cheaper than other forms of opioids, but they also increase the chances of harm as the user doesn't realize the amount while consuming. The method of use for brown sugar varies by the level of its purity; it could be snorted in its pure form, though the impure form that is exposed in the majority burns at a lower temperature. So, the majority prefers smoking as a method of consumption. It doesn't mix well with water; it can dissolve in any citric acid component and then be injected. The use of brown sugar is rapidly increasing in India (Venkatesh, 2023).

Table 4.2: The frequency distribution of the non-communicable diseases of the affected individuals in Ghaziabad district

Disease	**N**	**Percentage**	**95 % CI**
None	32	30.5%	21.89 to 45.17
Dermatological conditions	8	7.6%	3.45 to 15.76
Metabolic diseases	58	55.2%	44.04 to 74.98
Pulmonary diseases	7	6.7%	2.81 to 14.42

This table represents the non-communicable diseases that are experienced by the participants. 30.5% of the participants have not admitted any kind of non communicable disease. 7.8% have reported dermatalogial conditions. 55.2% have reported metabolic diseases which includes diabetes, hypertension, obesity, gastroenterological diseases and (pancreatic) cancer. While 6.7% have reported

pulmonary diseases, which include cardiovascular disease and chronic respiratory disease.

Table 4.3: The frequency distribution of the neglected tropical diseases of the affected individuals in Ghaziabad district

Disease	N	Percentage	95% CI
None	71	67.7%	55.45 to 89.56
Lymphatic	14	13.3%	7.65 to 23.49
Trachoma	12	11.4%	6.20 to 20.96
Tuberculosis	8	7.6%	3.45 to 15.76

This table represents the frequency of neglected tropical disease among the individuals affected by the aud. 67.7% have not admitted any of the diseases. 13.3% have reported lymphatic 11.4% have admitted to having trachoma, while 7.6% have reported tuberculosis.

Table 4.3: The frequency distribution of the mental disorders of the affected individuals in Ghaziabad district

Disorders	N	Percentage	95% CI
Anxiety disorder	48	45.7%	35.39 to 63.64
Deperessive disorder	34	32.4%	23.55 to 47.51
Bipolar and other related disorders	4	3.8%	1.09 to 10.24
Trauma and stress related disorders	21	20.0%	13.00 to 32.10
Schizophrenia spectrum	2	1.9%	0.24 to 7.22
Feeding and eating disorders	21	20.0%	13.00 to 32.10

Sleep wake disorder	9	8.6%	4.12 to 17.08

This table represents the frequency of the mental disorders among the affected individuals. 45.7% reported anxiety disorder and 32.4% admitted of having depressive disorder. Bipolar and other related disorders have been reported by 3.8% of the affected individuals. 20.0% of the individuals admitted having trauma and other related disorders. 1.9% reported of having schizophrenia spectrum while 20.0% of the affected individual reported feeding and eating disorders. Sleep wake disorders have been reported by 8.6% individuals.

Table 4.4: The frequency distribution of the somatic symptom disorders of the affected individuals in Ghaziabad district

SSD	Categories	N	Percentage	95% CI
Persistent	Mild	29	27.6	19.42 to 41.65
	Moderate	14	13.3	7.65 to 23.49
	Severe	15	14.3%	8.40 to 24.74
Predominant	Mild	18	17.1%	10.67 to 28.45
	Moderate	9	8.6%	4.12 to 17.08
	Severe	11	10.5%	5.49 to 19.68
Predominant persistent	Mild	3	2.8%	0.62 to 8.77
	Moderate	2	1.9%	0.24 to 7.22
	Severe	5	4.8%	1.62 to 11.67

This table represents the data related to somatic symptom disorders, 27.6% of the participants are affected by mild persistent, 13.3% of the participants are affected by moderate persistent and 14.3% of the persistent are affected by severe persistent. 17.1% of the participants have reported predominant mild, 8.6% of the participants have reported predominant moderate and 10.5% of the participants have reported predominant severe. Other 9.5% of the participants have reported predominant persistent, among them 2.8% are mild, 1.9% are moderate and 4.8% are severe.

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Chapter-V

Role of Rehabilitation Centers and Non-Governmental Organizations

From the decision to join a rehabilitation center, either by peers or the affected individual himself, a new path is carved for the individual, who has to go through various uncomfortable or drastic majors to make a *constructive* choice in his life. Sometimes these changes are so uncomfortable that the individual wants to leave the treatment in between, but through the rigorous effort of the caretaker or the counselor present at the rehabilitation center, improvement is seen. Help or influence is often received by looking at the experiences of the other inmates, because each of them has a shared experience. The nature of *shared* experience could be the similarity between economic status, family circumstances, migration, etc.

The structure or routine that has been given by the rehabilitation center is a helpful device for practicing abstinence. The rehabs that were advanced towards for this study have a duration of treatment of 3 months and such. Sometimes the period is prolonged for more than 3 months, for a maximum of 6 months. The duration is maximized for the well-being of the inmates, as sometimes they receive negative circumstances outside the rehab. These circumstances can vary from the inmate being stigmatized or treated poorly by their family, which makes them imply as being unwanted. The dysfunctional family circumstances, such as the use of violence, threaten the well-being of the members, whether it be financially or physically. Before admitting the affected individuals, it leaves a lasting memory on the dependents and close relatives. Often, these become the major reasons for relapse.

Table 5.1: The frequency distribution of treatment seeking behavior of the affected individuals in Ghaziabad district

Variables	Categories	N	Percentage	95% C.I.
Preference	GO	23	21.9	14.58 to 34.51
	NGO	39	37.1	27.73 to 53.31
	Private	34	32.4	23.55 to 47.51
	Alternative Healing	9	8.6	4.12 to 17.08
Reason	Not applicable	23	21.9	14.58 to 34.51
	Crowded	38	36.2	26.89 to 52.16
	Lack of sanitation	23	21.9	14.58 to 34.51
	Unfamiliar	21	20	13.00 to 32.10
Therapy	Group therapy	77	73.3	60.77 to 96.24
	Talk therapy	28	26.7	18.61 to 40.47
Days admitted	Less than 6 weeks	40	38.1	28.58 to 54.47
	6 weeks and more	65	61.9	50.17 to 82.85
Frequency	Less than 3 times	37	35.2	26.05 to 51.00
	3-4 times	51	48.6	37.97 to 67.06
	5 times & more	17	16.2	9.90 to 27.22
Years	Less than 4 years	27	25.7	17.79 to 39.28

	4-5 years	31	29.5	21.06 to 44.00
	6 years and above	47	44.8	34.53 to 62.50
Admitted by	Family	68	64.8	52.81 to 86.21
	Friend	12	11.4	6.20 to 20.96
	Self	25	23.9	16.18 to 36.90
Outlook	Accepting	22	21.0	13.79 to 33.31
	Ashamed	35	33.33	24.38 to 48.68
	Guilt	41	39.0	29.42 to 55.62
	Unabashed	7	6.7	2.81 to 14.42
Health Care	Normal	23	21.9	14.58 to 34.51
	Good	77	73.3	60.77 to 96.24
	Excellent	5	4.8	1.62 to 11.67
Treatment	Normal	32	30.5	21.89 to 45.17
	Good	65	61.9	50.17 to 82.85
	Excellent	8	7.6	3.45 to 15.76

This table presents the data about the treatment- seeking behavior among the affected individuals and their attitude towards life in the rehabilitation center. The preference for treatment in government organizations was 21.9%, non-government organizations were 37.4%, private organizations were 32.4%, and alternative healing was 8.6%. The reason for not choosing the government organization was, being crowded (36.2%), lack of sanitization (21.9%), unfamiliarity (20%), and not being

applicable for 21.9%, as these participants chose the government organization as the preferred institution for treatment. Type of treatment received at the rehabilitation center: 73.3% of the participants had been treated through group therapy, and 26.7% were treated with the help of talk therapy. On the other hand, when data was collected from the participants, it was also recorded how long they had been living there: 38.1% had been staying there for less than 6 weeks,and 61.9% had been staying there for 6 weeks or more. The frequency with which the participants got admitted to rehab throughout their addiction was noted: 35.2% of the participants had been admitted less than three times, 48.6% had been admitted for 3-4 years, and 16.2% had been admitted five times or more. 25.7% of the participants less than 4 years, 29.5% for 3-5 years and 44.8% of the participants for 6 years had been affected by SUDs. 64.8% had been admitted by family, 11.4% by family and 23.9% had admitted themselves. Regarding the outlook for their actions and the trajectory of treatment, 21.0% felt accepting, 33.3% felt ashamed, 39.0% felt guilt and 6.7% felt unabashed among the participants. Their responses to the rehabilitation center's health care guidance were as follows: 21.9% rated it as normal, 73.3% rated it as good, and 4.8% rated it as excellent. Similarly, the doctor's explanation of the treatment was rated; 30.5% thought it was normal, 61.9% thought it was good, and 7.6% thought it was excellent.

Table 5.2: Association between severity of alcohol use disorders and treatment seeking behavior of the affected individuals in Ghaziabad district

Variables	**Categories**	**Moderate**	**Severe**	**$\chi 2$**
Preferences	GO	14 (13.3%)	9 (8.6%)	1.497; df 3 P < 0.05
	NGO	22 (20.9%)	17 (16.2%)	
	Private	16 (15.3%)	18 (17.1%)	

	Alternative Healing	4 (3.8%)	5 (4.8%)	
Reason	Not applicable	14 (13.3%)	9 (8.6%)	1.170; df 3 P < 0.05
	Crowded	18 (17.1%)	20 (19.0%)	
	Lack of sanitation	13 (12.4%)	10 (9.5%)	
	Unfamiliar	11 (10.5%)	10 (9.5%)	
Therapy	Group therapy	35 (33.3%)	42 (40%)	**7.202; df 1** **P > 0..01**
	Talk therapy	21 (20%)	7 (6.7%)	
Days admitted	Less than 6 weeks	17 (16.2%)	23 (21.9%)	3.047; df 1 P < 0.05
	6 weeks and more	39 (37.1%)	26 (24.8%)	
Frequency	Less than 3 times	14 (13.3%)	23 (21.9%)	**6.221; df 2** **P > 0.05**
	3-4 times	33 (31.4%)	18 (17.1%)	
	5 times & more	9 (8.6%)	8 (7.6%)	
Years	Less than 4 years	9 (8.6%)	18 (17.1%)	**6.448; df 2** **P > 0.05**
	4-5 years	17 (16.2%)	14 (13.3%)	
	6 years and above	30 (28.6%)	17 (16.2%)	
Admitted by	Family	33 (31.4%)	25 (23.8%)	**7.720; df 2** **P > 0.05**
	Friend	4 (3.8%)	8 (7.6%)	
	Self	19 (18.1%)	6 (5.7%)	
Outlook	Accepting	16 (15.2%)	6 (5.7%)	**11.08; df 3**

	Ashamed	14 (13.3%)	21 (20.0%)	**P > 0.05**
	Guilt	25 (23.8%)	16 (15.2%)	
	Unabashed	1 (0.9%)	6 (5.7%)	
Health Care	Normal	10 (9.5%)	13 (12.4%)	2.372; df 2 P < 0.05
	Good	42 (40%)	35 (33.3%)	
	Excellent	4 (3.8%)	1 (0.9%)	
Treatment	Normal	12 (11.4%)	20 (19.0%)	5.419; df 2 P < 0.05
	Good	38 (36.2%)	27 (25.7%)	
	Excellent	6 (5.7%)	2 (1.9%)	

This table represents the association between treatment seeking behavior and the severity of alcohol use disorder. Among those who opted for government organisation, 13.3% are moderate aud, 8.6% are severe aud and those who opted for non government organisation, 20.9% are moderate aud, 16.2% are severe aud. 15.3% are suffering with moderate aud and 17.1% are suffering with severe aud, among those who opted for private health services, and among those who opted for alternative healing, 3.8% are moderate aud, 4.8% are severe aud. The reason for not choosing the government organisation among the individuals are, it being crowded, lack of sanitization and unfamiliar. Being crowded is the reason for 17.1% with moderate aud and 19.0% with severe aud. While lack of sanitization is the reason for 12.4% with moderate aud and 9.5% with severe aud. Unfamiliarity was the reason for 10.5% with modrate aud and 9.5% with severe aud. Therapy received by the indiviuals were of two sorts; group therapy was joined by 33.3% with moderate aud and 40% with severe aud. Talk therapy was joined by 20% with moderate aud and 6.7 with moderate aud. At the time

when the data was collected from the participants, the number of days they stayed at the rehabilitation centre, less than 6 weeks category had, 16.2% with moderate aud and 21.9% with severe aud. More than 6 weeks category had 37.1% with moderate aud and 24.8% with severe aud. The frequency of getting admitted to the rehabilitation centre, less than 3 times had, 13.3% with moderate aud and 21.9% with severe aud. 3-4 times frequency had, 31.4% with moderate aud and 17.1% with severe aud. While 5 and more times had, 8.6% with moderate aud and 7.6% with severe aud. The individuals had been affected the years with aud are distributed in three categories. Less than 4 years, 8.6% had moderate aud and 17.1% had severe aud while the category of 4-5 years had, 16.2% with moderate aud and 13.3% with severe aud. 6 years and above has, 28.6% with moderate aud and 16.2% with severe aud. The outlook shared by the participants are categorised in four categories, accepting outlook had 15.2% with moderate aud and 5.7% with severe aud. With ashamed feeling the association of participants had 13.3% with moderate aud and 20.0% with severe aud. The emotion of guilt was reported by 23.8% with moderate aud and 15.2% with severe aud. The response of being unabashed was reported by participants with 0.9 moderate aud and 5.7% severe aud. Health care was reviewed by the participants in three categories, normal was reported by 9.5% with moderate aud and 12.4% with severe aud. Good was reported by 40% with moderate aud and 33.3% with severe aud. Excellent was respond by 3.8% with moderate aud and 0.9% with severe aud. Treatment was rated by the participants in three categories; normal was reported by 11.4% with moderate aud and 19.0% with severe aud. Good was reported by 36.2% with moderate aud and 25.7%with severe aud. Excellent was reported by 5.7% with moderate aud and 1.9% with severe aud.

5.1 Referral Patterns in Rehabilitation Centers and the Role of NGOs

In a 2013 study, the goals were to identify previous drug treatment, the setup of it, and whether or not any referrals were made, and if so, why. The findings were that most of the people who sought treatment did so on their.There were no referrals from non-governmental organizations. the other government centers, and two are private (Kattimani et al., 2013). The center that was opted for research in this research was where the referrals were sent for investigation, pharmacological management, or alcohol-associated medical problems.

The pattern observed in this study is slightly different because around 37.5% approached NGOs first or preferred to have them help them find a rehab suitable for their needs. Though the change in the treatment place and model was not observed that often. For example, if an affected individual has been reaching out to a specific rehab even after several relapses, they may choose to approach the same rehab. Also, 65.4% of the participant's family has chosen to admit them to the rehabilitation center, while only 23.4% have self-admitted themselves.

5.2 Dynamics Among the Inmates

Rehabilitation centers act as an intervention in the trajectory of addiction, whether the result of such an event is satisfactory or not for the addicted. The relationship built between the caretaker and nurses at the rehab plays a crucial role in the outcome of the treatment. Like any group, inmates of a rehab also cultivate a group of people who have a common purpose in attending the treatment.

The dynamics built inside the rehab are not based on the ascribed status of an individual, though they have been associated with self-control and the endurance of

pain. The period when the individual is kept isolated to deal with their withdrawal symptoms is considered a factor in determining whether they are doing well or not. Managing the symptoms, following the daily routine successfully, and having a cheerful conversation with others—these factors determine the level of respect and, at some level, a bit of authority over the other inmates.

5.3 Treatment Model

There are two types of treatment that are most popular for treating alcohol use disorders. Sometimes these three are combined for optimal results. Beside these treatments, the affected individual can recover naturally, and intervention may assist in recovery given that the severity of AUD is mild. Though the majority of cases of AUD with moderate to severe severity will require specialized treatment and attention to recover (Ray et al., 2019).

These two models are the pharmacological and behavioral treatment/psychotherapy models.

5.3.1 Pharmacological treatment

The pharmacological treatment method has been inadequate in treating AUD due to limited marketing efforts, patients refusing to participate, and a lack of doctors trained in addiction treatment. Some medications used in treatment are off-label, such as Nalmefene, Baclofen, etc., but on the other hand, there are also medications that are FDA-approved. Among the FDA-approved drugs, the most popular one is Naltrexone. Naltrexone is an opioid antagonist with the highest affinity for the mu-opioid receptor. The neurobiological basis for the use of naltrexone stems from the neurocircuitry through which alcohol exerts its effects.

5.3.2 Psychotherapy

This method is approached to deal with a wide multifariousness of mental illnesses and emotional issues. This can assist in controlling or removing the difficulties and symptoms, leading to a person’s well-being and healing.

5.3.2.1 Types of therapy

Health professionals and psychiatrists delve into various types of psychotherapy. The choice of therapy depends on the patient’s peculiar condition and circumstances. Sometimes the therapy is also a combination of elements taken from different methods to suit the needs of the person seeking treatment.

Cognitive-behavioral therapy (CBT): This approach helps people identify and address the cognitive-behavioral patterns that are damaging and incorporate poor decision-making and change them with more beneficial and functional behaviors. It boosts a person's capacity to focus on current problems and their solutions. It often supports developing and practicing a new skill that can be useful in the real world. CBT can be used to treat a variety of disorders, including depression, anxiety, trauma-related disorders, and eating disorders. It can help a person recognize their thought patterns and change the ones that are triggering their health issues.

Interpersonal therapy (IPT) is a short-term treatment. It helps the patients understand the dormant personal issues that are causing them worry: unresolved grief, changes in social or work roles, conflict with partners, and other issues. It helps people express their emotions in a healthy way and communicate well with others. This approach is often useful to treat depression.

Dialectical behavior therapy is a type of CBT that specifically helps with regulating emotion. It helps people with chronic suicidal thoughts, borderline personality disorder, and PTSD. It helps people learn the skills to take personal responsibility and make amends for their disruptive behavior. It can involve both individual and group therapy.

Psychodynamic therapy is believed to operate in a situation where behavior and mental health are a reflection of childhood experiences and inappropriate repetitive feelings that are unconscious (beyond a person's awareness). In this situation, a person works with the therapist to change old patterns and improve self-awareness.

Its more intensive form is psychoanalysis. A week's worth of sessions is more frequent. There are also multifarious other types of therapy, such as supportive therapy, animal-assisted therapy, play therapy, and creative art therapy.

Psychotherapy, also known as talk therapy, was observed as a preferred method in the rehabilitation centers that were opted for the study. As it is more accessible, other people, such as family members and other close peers, can join to provide support. Most of the time, sessions are held in group situations, and people talk about what is bothering them and express their worries. The coping methods that are taught in these sessions are beneficial for everyday situations, such as dealing with past trauma or the loss of loved ones. It helps to dissociate actions from harmful behavior patterns. This approach promotes a collaborative effort that is honest and follows up on an agreed-upon plan of treatment. A simple habit of journaling and taking small actions, which has been talked about in therapy, assists in managing the illness.

The most common form of psychotherapy practiced in rehabilitation centers is group therapy. It is a useful way to help people in group situations where they share a

common problem. They can share their experiences and give each other advice. In some instances, group therapy is better than individual therapy, as it reassures patients that they are not alone. Through this approach, they focus on how things are here and now. The object of group therapy is not to prevent pain and trouble in the future but to acquire a sense of resistance against the frustration that builds up. The period of the consultation is often around 60 to 90 minutes.

5.3.2.2 Consultation period

Before the start of the group therapy, individuals are provided with two weeks of individual counseling, which helps them to register their particular condition and also allows the counselor to set a course of action that will be necessary for the individual to complete his journey of abstinence. This can be called brief psychotherapy, which is provided to every admitted individual.

5.3.2.3 Sessions

In group therapy, each individual is central to their own and other members' treatment. The participants also bond during their experience and understand each other's personal situations and thought processes. Among the many elements of group behavior, the most significant one is that being understood is also beneficial for the individual. Through others' POVs and different thought processes, an individual gets the exposure to learn from others.

The situation that is created with the other group members and therapist also helps the individual learn how to share the counselor with others, as is done with other problems in life. Sometimes the group situation can feel a bit overwhelming and intimidating at first, but after overcoming these situations, it becomes beneficial for the people in

terms of improving their understanding of their personal boundaries and behavior with others.

5.3.2.4 Risks and side effects

The process of dealing with emotional problems such as thinking and talking about these issues. Due to this reason some individual can feel worse before feeling better. In psychotherapy, the main goal is to manage the strong emotional reaction. Some individuals feel more uncomfortable than other individual in a group session as these sessions can make them feel angry and also make them feel more depressed. Because there can be awareness of getting criticised by other group members. Sometimes it can be really painful to face the past events and memories truthfully, but this has an end also. Eventually therapy can help.

In India, approaches such as psychotherapy have entered a new phase after an evidence-based study started to emerge in 1959. More than 450 different type of therapies have been instigated, but only the major and most popular approaches have been introduced in this section. Some Indian psychiatrists believe that this method can only be beneficial in cosmopolitan cities, as practiced in the West.

Some of the issues that are present in the Indian context are the patient being more dependent, unlike the western patient, and the tendency for disassociation between thinking, feeling, and acting, which may retaliate against the process of psychotherapy (Surya & Jayaram, 1996).

Beside this, the issues of confidentiality and privacy are prominent in the success of psychotherapy, and these don’t even exist in the Indian language, in the socio-cultural context (Neki, 1992). The dynamic bond or link between the therapist and the patient

is not constructed on equality, so the dyadic relationship is not maintained. The concept of karma and suffering, which is ingrained in religious belief, is also a challenge to make people believe in the therapy process by contrasting their thinking patterns.

Chapter-VI

Discussion and Conclusion

India is dealing with a multi-epidemic problem, with infectious diseases on one edge to the spectrum and lifestyle-related diseases on the other. The remnants of the spectrum is made up of diseases affecting psychiatric health, comprising substance abuse disorders. Each participant who attended the rehabilitation centers in the current study were men. Males have easier access to illicit substances than the females because of their positions of being largely confined indoors. The lack of female patients at de-addiction centers can also be attributed to females' poor health seeking pattern and behavior, which originates from the embarrassment and shame they may feel if they reveal their behavior to their families and society. Males majority and predominance have also been observed in studies conducted in Southeast Asia.

A previous study in Ghaziabad concentrated on a single rehabilitation center. Counseling was discovered to be the most frequently used form of treatment for these patients (89.2%), followed by detoxification (44.6%) and behavioral therapy (10.8%). The majority of patients (79.5%) were accompanied by family and friends to the rehabilitation centers, while 19.3% sought treatment by themselves (Singh et al., 2006). SUDs were not always thought to be mental illnesses. There is much debate about the nature of addiction—whether it is hedonistic, a choice, or a debauched person's habit.

Several researchers have searched mythical tales and legends from various cultural and social groups for the first experirnce with alcohol. The story is told in the 'Jataka,' a primordial collection of Buddhist tales; Sura, a forester, used to visit the Himalayas in search of commodities to deal with. He discovered a tree with a large hollow filled with rainwater. Two Myrobalan plants and a pepper shrub grew around it, and their ripe

fruits dropped from the hollow of that tree. Nearby, the tree was a wild rice field. Birds would twang rice from the tree and eat it while sitting on it. When the water was mixed with the fruits, the rice fermented and transited into a blood-red color. During the summer, flocks of thirsty birds quench their thrust from it and became inebriated. After a short nap, they fell to the ground at the root of the tree. They fly away, chirping. It was the same for the wild animals and any other creatures who drank from the hollow.

Sura notices this and says, "If it had been poison these birds might have been dead by now, but if they roused after a nap and were the same as before, then it must not be poison." and then he drank from the crack in the tree. He felt compelled to eat meat after drinking. Then, after lighting a fire, he cooked a roosters and partridges and gobbled them. He stayed for one or two days, finding contentment in the food, and there was a hermit named Varuna not far from here. He often visited him and now thought to himself that he wanted to drink with the hermit. He went to the hermit and offered him the drink with roasted meat. This drink was named surā and vāruṇī later on because it was discovered by Sura and Varuna. Further, the story develops with the narration of them offering it to other people and the king. Later on, the situation turns out to be bad when the king gets addicted to it. The kingdom suffered, and once the abundance that filled the land disappeared. The subjects of the king followed their king in misery In the end, Buddha had to intervene to teach the king the lesson of abstinence.

This story reflects the general understanding of addiction and how it progresses. From curiosity, it begins to lead to one sin after another (such as drinking, which brought the desire to have meat and later on led to the king becoming addicted, as a consequence of which the kingdom suffered). With this story, the question rises that, does it always start with innocent mistakes and a desire to indulge in hedonism?

The other connotation is also present in this tale, it shows how a common man for the attainment of an easy though not for a simple life, choses to appease the spiritual and material realm. First by appeasing the hermit and then later on by appeasing the king, the man was trying to gain a sense of fulfilment. This drive for attaining a prosperous life leads to a never-ending strife.

In the Indian context, SUDs are conceptualized in the context of morality, and there is a lack of a syndemic approach to these. The discussion, before this, has projected syndemics as a theory that shows the co-affliction of two or more diseases while also considering social adversities. The interaction required to manifest these may vary and often does not require direct physical interaction. There have been very few reports associating two diseases or a dual diagnosis in rehabilitation centers in India. In future, more studies should be recommended which captures the syndemic approach.

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Appendix 1

Plate 5: Rehabilitation centre no. 1

Plate 6: Rehabilitation centre no. 2

Plate 7: Routine followed in rehabilitation centre

Appendix 2

Participant no. **Centre:**

- ## Demographic Profile

1. ***Name:*** 2. ***Age:***

3. ***Gender:***

4. ***Religion:***

5. ***Social group:***

6. ***Marital status:***

7. ***Educational Qualification:***

8. ***Occupation:***

9. ***Family Income:***

10. ***Number of earning heads:***

11. ***Personnel Per Capita Income:***

- ## Social Environment:

12. ***Residence*****:** Own /Rented/Separated/Nucleated/Others

13. ***Type of residence*****:** Kacca/ Pacca/ Semi-pacca

14. ***Family*****:** Joint/Nuclear

15. ***Relationship with the family head:*** self/ spouse of head/ married child/ spouse of married child/ unmarried child/ grandchild/ father/ mother/ father-in-law/ mother-in-law/ brother/ sister/ brother-in-law/ sister-in-law/ other relatives, servant/ employees/ other non-relatives

16. ***The number of family members*****:**

17. ***Number of siblings:***

18. ***Do you feel safe in your neighbourhood***: yes/no

19. ***Immediate surroundings****:* clean inside only/ clean outside only/ clean both inside and outside

- **Economic:**

19. ***State of economic dependence***: not depending on others/ partially dependent on others /fully dependent on others

20. ***Do you have a stable job***: yes/no

21. ***Numbers of depending children:***

22. ***Have you taken any loans*****:** yes/no

23. ***Do you gamble on a daily basis*****:** yes/no

24. ***Does your family own a land:*** yes/no

- **Lifestyle:**

25. ***How many hours of sleep do you take on a regular basis:***

26. ***How many hours of screen time do you consume regularly:***

27. ***How often do you exercise in a week:*** never/sometimes/regularly

28. ***How often do you intake soft drinks and junk food:*** never/sometimes/regularly

29. ***How would you consider your weight****:* underweight/ normal/overweight

- **Migration:**

30. ***Have you migrated to Ghaziabad District****:* yes/no

31. ***How long has been since you migrated to Ghaziabad District****:*

32. ***The reason for migration:*** education/ economic/ health service/ others

33. ***Have you faced any issues due to migration:*** yes/ no

34. ***Did you find it hard to socialise with others:*** yes/ no

35. ***Do you believe that migration was an exhaustive experience for you:*** yes/no

- **Rehabilitation centre environment:**

36. ***Which was the preference for treatment-seeking:*** NGO/ GO/ private/ alternative healing

37. ***If not Government centre, the reason:***

38. ***Type of institution:***

39. ***How long have you been staying****:*

40. ***Frequency of visit:***

41. ***History of use disorder:***

42. ***Who brought you to the institute:***

43. ***What is the outlook toward their use disorder:*** Unabashed/ Ashamed/Guilt/ Accepting

44. ***Guidance in health care:*** bad/ poor/normal/good/ excellent

45. ***How was the explanation of treatment/procedure by the doctor:*** bad/ poor/normal/good/ excellent

46. **Substance Abuse Disorder Assessment:**

A pattern of substance use leading to clinically significant impairment or distress as manifested by at least 2 of the following occurring within a 12-month period:			
Met	Symptom	Substance(s)	When Symptoms were experienced
• ☐	1. The substance is often taken in larger amounts or over a longer period than was intended.		
• ☐	0. There is a persistent desire or unsuccessful efforts to cut down or control substance use.		
• ☐	0. A great deal of time is spent in activities necessary to obtain the substance, use the substance, or recover from its effects.		
• ☐	0. Craving, or a strong desire or urge to use substances		

• 	0. Recurrent substance use results in a failure to fulfil major role obligations at work, school, or home.		
• 	0. Continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of substance		
• 	0. Important social, occupational, or recreational activities are given up or reduced because of substance use		
• 	0. Recurrent substance use in situations in which it is physically hazardous		
• 	0. Substance use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by substance		
• 	**0. Tolerance, as defined by either of the following:** . A need for markedly increased amounts of the substance to achieve intoxication or desired effect. a. A markedly diminished effect with continued use of the same amount of substance.		
• 	**11. Withdrawal, as manifested by either of the following:** . The characteristic withdrawal syndrome for substance). a. substance (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms.		

• ☐	**Mild:** Presence of 2–3 symptoms	Substance(s)
• ☐	**Moderate**: Presence of 4–5 symptoms	Substance(s)
• ☐	**Severe**: Presence of 6 or more symptoms	Substance(s)
• ☐	**In early remission:** (no symptoms except for a craving for 3 to under 12 months)	Substance(s)
• ☐	**In sustained remission:** (no symptom except for a craving for more than 12 months)	Substance(s)
• ☐	In controlled environment:	
• ☐	On maintenance therapy (if taking a prescribed agonist medication and none of the criteria has been met for the agonist medication except symptom 10 and 11)	Medication:

47. **Non-Communicable Disease**

	Name of the disease	SRM met	How long have you been suffering from this disease (15 days)	Have you consulted physician
1.	Cardiovascular Disease	• ☐		• ☐

2.	Cancer	• 		• 
3.	Chronic respiratory Diseases	• 		• 
4.	Diabetes	• 		• 
5.	Hypertension	• 		• 
6.	Dyslipidemia	• 		• 
7.	Obesity	• 		• 
8.	Gastroenterological diseases	• 		• 
9.	Dermatological conditions	• 		• 

48. **Neglected Tropical diseases**

	Name of the disease	SRM Met	How long have you been suffering from this disease (15 days)	Have you consulted a physician

1.	HIV/AIDS	. ☐		. ☐
2.	Tuberculosis	. ☐		. ☐
3.	Leprosy	. ☐		. ☐
4.	Trachoma	. ☐		. ☐
5.	Lymphatic	. ☐		. ☐
6.	Mycetoma	. ☐		. ☐

49. **Mental Disorder**

	Name of the disease	SRM Met	How long have you been suffering from this disease (15 days)	Have you consulted a psychiatrist
1.	Anxiety Disorders	. ☐		. ☐

2.	Depressive Disorders	• ☐		• ☐
3.	Bipolar and Related Disorders	• ☐		• ☐
4.	Trauma and Stressor Related Disorders	• ☐		• ☐
5.	Schizophrenia Spectrum	• ☐		• ☐
6.	Feeding and Eating Disorders	• ☐		• ☐
7.	Gender Dysphoria	• ☐		• ☐
8.	Sleep-Wake Disorders	• ☐		• ☐
9.	Personality Disorders	• ☐		• ☐

50. **Somatic Symptom Disorder**

A. One or more somatic symptoms are distressing or result in significant disruption of daily life.

	Symptoms	**Met**	**If the duration of symptoms is more than 6 months**
1.	Stomach pain	• ☐	• ☐

2.	Back pain	• ☐	• ☐
3.	Pain in limbs	• ☐	• ☐
4.	Menstrual cramp	• ☐	• ☐
5.	Headaches	• ☐	• ☐
6.	Chest Pain	• ☐	• ☐
7.	Dizziness	• ☐	• ☐
8.	Heart Racing	• ☐	• ☐
9.	Shortness of Breath	• ☐	• ☐
10.	Constipation	• ☐	• ☐
11.	Feeling tired	• ☐	• ☐

12.	Gas	☐	☐
13.	Indigestion	☐	☐
14.	Vomiting	☐	☐

B. Excessive thoughts, feelings, or behaviors related to the somatic symptoms or associated health concerns as manifested by at least one of the following:

	Somatic symptoms that are associated health concerns	**Met**	**If the duration of symptoms is more than 6 months**
1.	Disproportionate and persistent thoughts about the seriousness of one's symptoms.	☐	☐
2.	Persistently high level of anxiety about health or symptoms.	☐	☐
3.	Excessive time and energy are devoted to these symptoms or health concerns.	☐	☐
	Specification of somatic symptoms on the basis of table A		**Met**
1.	Predominant Pain		☐
2.	Persistent pain		☐

	Severity categorised by the specification given in criteria B	• ☐
	Mild: Only one of the symptoms specified in Criterion B is fulfilled.	• ☐
	Moderate: Two or more of the symptoms specified in Criterion B are fulfilled.	• ☐
	Severe: Two or more of the symptoms specified in Criterion B are fulfilled, plus there are multiple somatic complaints (or one very severe somatic symptom).	• ☐