Dissertation titled

"PREVALENCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI"

Submitted in partial fulfilment for

M.D. DEGREE EXAMINATION

BRANCH - XVIII (PSYCHIATRY)

Department of Psychiatry

Madras Medical College &

Rajiv Gandhi Government General Hospital

Chennai - 600 003

THE TAMIL NADU DR.MGR MEDICAL UNIVERSITY

CHENNAI

TAMIL NADU

MAY 2019

CERTIFICATE

This is to certify that the dissertation titled, **"PREVALENCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI"** is the bonafide work of **Dr.PERIYAR RANI.S**, submitted in partial fulfilment of the requirements for **M.D. Branch-XVIII [Psychiatry]** examination of The Tamil Nadu Dr.M.G.R. Medical University, to be held in May 2019.

The Director
Institute of mental health
Chennai-10.

The Dean
Madras Medical College,
Chennai-3.

CERTIFICATE OF GUIDE

This is to certify that the dissertation titled, **“PREVALENCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI"** is the bonafide work of **Dr. PERIYAR RANI.S,** done under my guidance submitted in partial fulfilment of the requirements for **M.D. Branch-XVIII [Psychiatry]** examination of the The Tamil Nadu Dr. M.G.R. Medical University, to be held in May, 2019.

Dr. V. SABITHA, M.D.
Associate professor,
Institute of Mental Health,
Chennai-10.

DECLARATION

I **Dr. PERIYAR RANI.S,** solemnly declare that the dissertation titled, **"PREVALENCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI "** is a bonafide work done by me at the Institute of Mental Health, Chennai, during the period from March 2018–August 2018 under the guidance and supervision of **Dr. Poorna Chandrika, DCH, M.D.,** Professor of psychiatry, Madras Medical College.

The dissertation is submitted to the The Tamil Nadu Dr. M.G.R. Medical University towards partial fulfilment of requirement for M.D. Branch XVIII [Psychiatry] examination.

Place :

Date : **Dr. PERIYAR RANI. S.**

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ABBREVIATIONS

MINI	–	Mini International Neuropsychiatric Interview
HAM-A	–	Hamilton Anxiety Rating Scale
HAM D	–	Hamilton rating scale for depression
HMI	–	Homeless Mentally Ill
FGD	–	Focused Group Discussion
WHO	–	World Health Organisation

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INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003

EC Reg.No.ECR/270/Inst./TN/2013
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To

Dr.Periyar Rani.S.
I Year PG in MD Psychiatry
Institute of Mental Health
Madras Medical College
Chennai 600 003

Dear Dr.Periyar Rani.S,

The Institutional Ethics Committee has considered your request and approved your study titled **"PREVALENCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI – A CROSS SECTIONAL STUDY" - NO.13042017**

The following members of Ethics Committee were present in the meeting hold on **04.04.2017** conducted at Madras Medical College, Chennai 3

1.Prof.Dr.C.Rajendran, MD., :Chairperson
2.Prof.K.Narayanasamy, MD.,DM.,Dean(FAC), MMC,Ch-3 :Deputy Chairperson
3.Prof.Sudha Seshayyan,MD., Vice Principal,MMC,Ch-3 :Member Secretary
4.Prof.B.Vasanthi,MD., Prof.of Pharmacology.,MMC,Ch-3 : Member
5.Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3 : Member
6.Prof.S.Mayilvahanan,MD,Director,Inst. of Int.Med,MMC, Ch-3 : Member
7.Tmt.J.Rajalakshmi, JAO,MMC, Ch-3 : Lay Person
8.Thiru S.Govindasamy, BA.,BL,High Court,Chennai : Lawyer
9.Tmt.Arnold Saulina, MA.,MSW., :Social Scientist

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary – Ethics Committee

MEMBER SECRETARY
INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE
CHENNAI-600 003

INTRODUCTION

Homelessness is a term used for various concepts like rooflessness (rough sleepers), living in an insecure place or in inadequate accommodation like overcrowded or substandard accommodations or living in temporary accommodation like night shelters.[1]

Persons do not have a house, either self-owned or rented, but instead

i. Live and sleep at pavements, parks, railway stations, bus stands and places of worship, outside shops and factories, at constructions sites, under bridges, in hume pipes and other places under the open sky or places unfit for human habitation;

ii. Spend their nights or days at shelters, transit homes, short stay homes, beggars' homes;

iii. Live in temporary structures without walls under plastic sheets or thatch roofs on pavements, parks and other common spaces.

Risk factors for becoming homeless[2,3] are disputes and relationship breakdown, financial issues, physical abuse, sexual abuse, unemployment, substance misuse, mental illness, contact with the criminal justice system, lack of social support[4], institutionalization or the death of parents during childhood[5]. As a consequence, they become increasingly vulnerable to mental, social and physical ill health.

Gender is known to play an important role in any discussion of health in general and mental health in particular owing to the bio psychosocial model of health. Women constitute one of the groups worst affected by homelessness among the most marginalized, ignored and discriminated homeless people. Women and children are the fastest growing segments of the homeless population.

Various causes for women to be homeless include gender based violence, forced migration from rural areas due to distress conditions, lack of affordable housing due to financial difficulties, slum demolitions and evictions without rehabilitation, domestic violence, breakdown of families, inequitable planning and land use, inadequacy of law. Others factors contributing are lack of secure tenure, lack of information about women's human rights, privatization, lack of access to credit and housing subsidies, poverty, unemployment and discriminatory cultural and traditional practices.

The interlink between homelessness and violence against women have been well established. The widespread prevalence of gender-based violence is one of the main reasons for human rights violations faced by women, including violations of the right to adequate housing and land.[6]

Homeless persons, especially women suffer from several diseases or illnesses due to inadequate living conditions and extreme weather conditions. Also they experience various psychological distresses being homeless and the problems faced by women are different from men. There are gender specific factors and social factors that determine the prevalence and course of mental

disorders in female sufferers. The homeless mentally ill often present with a complex combination of psychological, physical and social problems.

The government aims to provide shelter facilities under its social welfare schemes to homeless people, as per the official Census definition. The Corporation of Chennai is a pioneer in the Shelter for Homeless programme as it started the first shelter for homeless people in the year 1992 before the Hon' Supreme Court directions to all States.

The picture of the homeless population which is emerging from contemporary research on health and psychosocial aspects is of heterogeneous population with multiple mental health needs. Homelessness is an important area to explore the impact of gender combined with poverty and marginalization. The present study attempts to understand the socio demographic profile of homeless women, cause of homelessness, difficulties and problems faced by them with focus on psychosocial aspects and mental health. This is a preliminary effort to understand the relationship of homelessness and mental illnesses and psychological distress against the complex background of psychosocial adversities through woman's own perspective which is important for effective interventions and planning policies. It is hoped that this study will draw attention to the plight of one of our society's most marginalized constituencies and urge the government to take necessary action to protect their human rights and prevent further abuse and marginalization thus preventing psychiatric morbidity.

REVIEW OF LITERATURE

HOMELESSNESS

Homeless people have been often viewed as a deviant group and have been labeled by society as undeserving social inadequate rather than poor people in need of affordable housing. This historical perspective is important in understanding society's reaction to homeless people today.[7] Chadwick was the one who assessed the relationship between poverty and ill health for the first time in 1842[8]. Classification of homeless people is difficult due to heterogeneity and the 'street people' may be the most visible group but they represent only one component.

Conceptually, homelessness refers to the absence of a safe, clean and permanent habitation or home.[9] Such persons experience multiple deprivations and are susceptible to further vulnerabilities such as physical ill health, substance abuse, cognitive deficits, depression and the risk of committing suicide.[10]

The World Health Organization (WHO, 2010) describes this group as highly marginalized. In 1984, Arce et al, classified homeless as chronically homeless, episodically homeless and transiently homeless[11].

THEORY OF HOMELESSNESS

A home is not just a physical space with walls and roofs, it also has legal and social dimensions. A home provides roots, identity, a sense of belonging and a place of emotional wellbeing. Homelessness is about the loss of all of these and it is an isolating and destructive experience.

The two main causes of homelessness are poverty and failure of the housing supply system. The other causes are domestic violence, the erosion of family and social support, political, ethnic and social turmoil, natural disaster, physical and mental illness, the deinstitutionalizing of the patients with mental problems and disability.

Homeless people are those who lack fixed, regular, safe and adequate night time shelter and also one who has night time residence at a publicly supervised or privately operated shelter designed to provide temporary living accommodation. People living in substandard housing with inadequate facilities should also be included under homelessness. But in reality it is very difficult to capture the actual magnitude of homelessness as large section of this segment of the population remains invisible and it could be due to various reasons.

SITUATION IN INDIA:

Homelessness is a growing phenomenon in India. It is found that, the decadal growth rate of homeless population has increased by 20.5 per cent in urban areas. The probable reason behind this is that the rural poor migrate to urban areas in search of employment and better living condition and end up with a poorly paid job or remain unemployed. This jeopardizes their chance of affording a house hence they add to the number of houseless population in the urban areas. In India, about 32 per cent of the populations live in urban areas of which 26 percent live below official poverty line and 40 percent do not have proper housing (Banerjee - Guha, n.d.).[12,13]

It is difficult to estimate the number of homeless individuals in India due to heterogeneity of population, differences in methodologies by different researchers, different definitions used for homeless, policy differences among cities where estimates are recorded, and problems with counting, etc.

In India, 78 million population are homeless in 2003 according to Action Aid India report.[14] A study by Indo-Global Social Service Society (IGSSS) in 2008 counted 88,410 homeless citizens in the capital city of Delhi[15], 4.7 percent women are homeless among the total number of homeless counted in Delhi. A study conducted by Action aid International reported the number of homeless population as 40,533 in Chennai. (Menezes, 2010 as quoted in Banerjee-Guha n.d.)

According to the 2011 Census of India, there are 1.8 million homeless persons in India (Ministry of Home Affairs, Government of India, 2011). The National Advisory Council (NAC), 2012 estimates that 1% of urban population of India is homeless and homelessness is an issue of growing social concern.

According to UN-HABITAT, India is home to 63% of all slum dwellers in South Asia. This amounts to 170 million people, 17% of the world's slum dwellers. In the past two decades, the number of people living in slums in India has more than doubled.

WOMEN AND HOMELESSNESS:

Women are the fastest growing segments of the homeless population. In the absence of basic amenities like food, water, clothing, access to toilet facilities and healthy living conditions, combined with feelings of alienation, homeless females live on the margins of society. They have to pay for using public toilets, coupled with the lack of access to secure toilets and bathing areas. Around two-thirds of married women in India were victims of domestic violence, most of which are under reported.

Instances of rape, molestation, sexually trafficking are more common in women spending their nights in road especially women without family are more vulnerable to various kinds of violence such as rape, theft, murder, kidnapping, sexual exploitation.[16] It is reported that homeless women are 10 times more vulnerable than men to undergo various forms of abuse. Also report says that Indian city streets are extremely unsafe for women.

Psychological distress and psychiatric disorders among women are different from men. Internalizing disorders are common in women, while men show a higher level of externalizing disorders. Age of onset of psychological symptoms, clinical features, frequency of symptoms, course, social adjustment, coping skills and long-term outcome are different for men and women. Substance abuse are also common in homeless women and data shows that women who abuse alcohol or drugs are more likely to have a traumatic event or a stressor like sexual abuse or physically abuse than other women. There are gender specific factors and social factors that determine the prevalence and course of mental disorders in female sufferers.

VULNERABLE HOMELESS WOMEN:

Vulnerable women are

1. Women with disabilities
2. Mental health problems
3. Single women without family and social support
4. Women living with HIV/AIDS and other physical co morbidity
5. Financially dependent women
6. Victims of substance abuse
7. Pregnant and lactating women

CAUSES OF HOMELESSNESS FOR WOMEN:

1. **Breakdown of family:** Abandonment by family members, after death of family members especially parents, divorce or separation from husband. Some parents don't give right of property to their female children as a punishment for their misbehavior or heinous crime and some adolescents run away from their homes for not being able to adjust with the family or to live their life the way as they want. Such unhealthy relationships between young female and their parents or guardians result in homelessness. Single parent with dependent children are mostly at risk of homelessness.

2. **Forced migration from rural areas:** Women bear the worst forms of disasters such as flood and drought, industrialization. All these displace them from their native places and force them to move to cities with their families in search of employment and survival. Due to unemployment females are not able to afford a house or take a rented house leading to homelessness. This forced migration is an important causal factor.

3. **Lack of affordable housing:** Due to lack of public housing and low-cost housing schemes in cities and towns, poor people are forced to live on the streets. For a woman, it is even more difficult for accessing house. At the end of the Eleventh Five Year Plan, the urban housing shortage in India

was 26.53 million dwelling units, of which 99 per cent pertained to the Economically Weaker Sections and Low Income Groups.

4. **Slum demolitions:** Across India forced evictions of slum people with violence is very common. Women and children are the worst affected group in this eviction process. Thousands of people are rendered homeless and forced to manage living on the streets. These people who face such migration are often helpless, endure huge amount of stress and are at risk for various psychiatric morbidity. When the rehabilitation policies for displaced people are not followed properly, and that they are often compensated only monetarily without proper mechanisms for addressing their grievances or political support to improve their livelihoods, the risk is greater[17].Most of the resettlement sites are located on the peripheries of the city making it impossible for families to continue with their livelihoods.

5. **Political reasons:** Infrastructure projects for industries, irrigation, transport, power generation and for urbanization such as widening of roads, construction of flyovers are some of the developmental activities that lead to displacement of people from their native to urban places. These infrastructure projects are implemented by government for improving people's lives. But displacement without proper housing arrangements makes them susceptible to become street dwellers and cause major disruption in the lives of displaced people instead of improving

their lives. According to Bogumil Terminski[18] approximately 15 million people per year are displaced from their homes following big development projects (dams, irrigation projects, highways, urbanization, mining, conservation of nature, etc.).

6. **Domestic violence:** Many women who leave their home due to domestic violence become vulnerable to homelessness and suffer from further violence. Another important reason is lack of protection by law enforcement officials or by the legal system itself. Hagen (1987)[19] reported that women are more likely than men to experience homelessness due to domestic violence and eviction.

7. **Inequitable planning and land use:** Across urban India, land use planning is extremely inequitable and favours a development paradigm aimed at benefiting the upper classes. The failure to reserve land for low-cost housing and the increasing inequitable of land and property makes housing more unaffordable, contributing to homelessness.

8. **Inadequacy of the law:** The absence of strong legal protection for housing rights and women's rights, results in women becoming homeless. Though the Protection of Women from Domestic Violence Act 2005 contains a provision securing women's rights to remain in their place of domicile, as it is not implemented properly, women are being thrown out of their homes or being forced to leave situations of violence.

9. **Poverty:** Homelessness and poverty are attached together. Poor people are not in a position to pay for housing, food, child care, health care, and education. Researchers observed about 84 percents of homeless individuals are below 100 percent Federal Poverty Level, as compared to 50 percent of housed individuals. Roth, Toomey (1985) noted that economic and family problems are the central reason for homelessness in women[20]. Over 40 percent cited that economic factors such as unemployment, not able to pay rent, evictions from home and benefits being cut off are the primary reason for homelessness especially in women.

10. **Natural disaster:** Cyclone, Tsunami and other natural calamities totally destroy the region caused a lot of damage and thousands of people have to get settled at other places and they were left homeless by the natural disaster.

PROBLEMS FACED BY HOMELESS WOMEN:

1. **Physical abuse:** Across India, women encounter several kinds of physical abuse by partners, trespassers, police men and other men in streets. Repeated police harassment was also common.

2. **Sexual Violence and Exploitation:** Homeless women especially single and young women are more vulnerable to sexual exploitation like sexual trafficking, rape, molestation, etc. If the women do not succumb to these pressures there is a threat of putting their tents on fire or undergo

blackmails. Most commonly women are being forced by circumstances to take up sex work to survive.[21] They are often exploited sexually with promises of jobs. Adolescent girls are among the most vulnerable groups to sexual abuse and also face risks of being trafficked.

3. **Lack of Basic Services and Personal Safety:** Homeless people lack basic facilities such as toilets, bathrooms and water are not easily accessible. They need to be paid for it in cash as a result homeless women must relieve themselves in the open, bathe less frequently in open or behind plastic covers and access unclean water through public taps and leaking pipelines. The lack of a secure place to change clothes and bathing in public spaces also makes women vulnerable to gender-based violence. They have to sleep in places hidden from public view also they don't change sleeping places as they feel safer in known place than unknown place.

4. **Hunger as Violence:** Malnourishment and hunger among homeless women is common. In some cities in India, local police allow residents to cook only at night, which has significantly limited their food intake. If the women try to prepare a meal during the day, their utensils and food items are thrown away. As a result, families are able to eat only once daily at night. The next day, they eat the leftover food. However, they purchase food from the outside for their children, adding further economic difficulty.

5. **Health Issues:** Basic needs such as taking bath and sanitation are linked to the feeling of well-being and dignity. For homeless women even such basic requirements are not met. Taking bath in clean water itself is a great challenge. Many a times availability of drinking water is a problem and even when available it is not fit for drinking and make them exposed to contamination, diseases and infections. Due to inadequate living conditions, weather conditions, insufficient dress, blankets they are vulnerable to excess heat, rain and cold. The harsh living conditions make them vulnerable to develop medical illness. Malnutrition is a common problem among homeless women especially pregnant and lactating homeless women. Studies indicate a direct correlation between increase in psychiatric disorders among homeless women and those who are abandoned[22].

6. **Difficulties in accessing Healthcare:** Accessing health care in certain hospitals is a tremendous challenge for homeless people, especially women. Most hospitals refuse to admit homeless women. They have no access to any government schemes also.

7. **Destruction of Possessions:** The homeless people are among the poorest of the poor and own few possessions. Yet their possessions are routinely destroyed by the police. Their plastic sheets, dishes, food, and other properties are destroyed.[23]In some areas people find it difficult to go to work for fear that their meagre belongings will be stolen or destroyed.

8. **Arbitrary Arrests and Detention:** The Bombay Prevention of Begging Act 1959 (adopted in Delhi in 1961) is routinely used to criminalize and arrest the homeless. The Act defines beggars as anyone soliciting alms and who have 'no visible means of subsistence,' including those who sell small articles at places of traffic signals and other public places. Women who are arrested under the Act are often separated from their children, who are left on the streets to fend for themselves or taken to child welfare homes. The living conditions are deplorable, with no hygiene, sanitation, or adequate food. The detained homeless women have no access to legal remedy in the form of a lawyer or other judicial redress, and often ending up serving a sentence from anywhere between one to ten years.

9. **Death:** Aayushi Garg et al, 2016 stated that some homeless people's bodies remain unclaimed after death. Women are more vulnerable section. The major autopsy characteristics were reviewed and also found that their bodies remained unclaimed after death.[24]

HOMELESSNESS AND MENTAL ILLNESS

The relation of homelessness and mental health is bidirectional i.e., homelessness leads to deterioration of mental health and in turn mental illness can also lead to homelessness. It forms a vicious cycle from which escape of an individual becomes difficult. It is difficult to estimate the number of homeless population who also has mental illness, which is demonstrated through the variations in percentages reported in the literature.

Streets have become home to the mentally ill in India due to lack of social support and care. Statistics suggest that 25% of the mentally ill in India are homeless. Nimesh G.Desai, the director of Institute of Human Behavior and Allied Sciences (IHBAS) at Delhi, India suggested that "Homelessness among mentally ill is growing significantly—it has really become a major concern."

Mental illnesses bring a lot of challenges in the life of homeless people. Serious mental illnesses disrupt people's ability to carry out self care and household management and prevent them from forming and maintaining stable relationships. This often results in pushing away caregivers, family and friends. As a result of these factors, people with mental illness are more likely to become homeless than the general population. Patients with schizophrenia or bipolar disorder are particularly vulnerable to become homeless. The stigma attached to such illness has always been a serious issue in India.

Some mentally ill people self-medicate using street drugs, which can lead them to addictions. The combination of mental illness, substance abuse, and poor physical health makes it very difficult for people to obtain employment and residential stability.

Homelessness itself can be psychologically traumatic and become a risk factor for developing psychological disorders. Two common symptoms of trauma is social disaffiliation (e.g., isolation, distrust of others, and disruption of social bonds) and learned helplessness, which are common in homeless population.[25]

The sudden or gradual loss of one's home along with poor standard of living such as unstable, lack of safety, and revictimization by indulging in physical and or sexual abuse can produce symptoms of psychological trauma.

A study of homeless youth[26] found that trauma is both a cause and a consequence of being homeless. A majority of participants experienced a number of highly stressful events both before (e.g., bullying, family physical and sexual abuse) and during homelessness (e.g., street violence, muggings, fear of being killed, rape). Such trauma is also associated with a broad range of psychopathology,[27] including depression, psychosis, drug and alcohol problems and other psychological problems. Homelessness and mental ill health, both affect a person in various aspects but when they co-occur, can deprive an individual's ontological security, represented often by a sense of constancy, control, daily routine and privacy.[28]

GOVERNMENT'S INITIATIVE FOR HOMELESSNESS

As per official Census definition, the government aims to provide shelter facilities under its social welfare schemes to homeless population. The Corporation of Chennai is a pioneer in the Shelter for Homeless programme.

In 2010, through the intervention of special commissioners, the issue of homelessness was brought under the purview of the 'right to food' case (PUCL v. Union of India and Others) in the Supreme Court of India. The Court ordered that shelters must be sufficient to meet the needs of the homeless in the ratio of at least one shelter per 100,000 populations in every major urban

centre. It also stated that shelters should be functional throughout the year for 24 hours and not as a seasonal facility.

As per the directions of Supreme Court, the Corporation of Chennai initiated steps to provide services to urban homeless population. The Corporation Chennai started with 15 shelters in the year 2010, later expanded the services to 15 more shelters in 2013-14 for the services to urban homeless. These shelter homes are being run by the Non Governmental Organization with financial support from Corporation. The Public health Department geared to rehabilitate the homeless and the mentally ill living across Chennai residing in the streets. They were provided with nutritious food and shelter. In consultation with the Psychiatrists they were referred either to the Institute of Mental Health for further treatment after obtaining Magistrate's order.

PREVALENCE OF PSYCHIATRIC MORBIDITY AMONG HOMELESS POPULATION:

In a study by Nimesh G. Desai et al, in New Delhi reports that homeless people roughly represented 10-25% and it is found that 60% women are aged 16 to 30 years of age. Among homeless population, 50% are reported to have some form of mental disorder with 70-80% receiving lifetime diagnosis. The problems commonly encountered were substance abuse, severe mental illnesses like schizophrenia, depression, personality disorders and organic problems. It was also noted that mental illness tends to worsen as homelessness continues.

Among homeless women, the prevalence rates of mental disorders are 40-60%.[29]

Guru S Gowda et al, conducted a study in NIMHANS, Bangalore, India, among homeless mentally ill (HMI) patients to study the socio-demographic and clinical profiles of HMI patients admitted under psychiatry. Totally there were 53.8% females, 65.4% of them had schizophrenia and other psychotic disorders, 30.8% had mental retardation and 29.5% had a co morbid substance use disorder. This study shows that schizophrenia, mental retardation and substance use disorder are common causes of admission of HMI patients in psychiatry.[30]

A study conducted by Tripathi A et al, among 140 homeless persons admitted in department of psychiatry in north Indian medical university from February 2005 to July 2011, shows that one hundred and twenty-seven (90%) had psychiatric illness and six had only intellectual disabilities. 56% persons had more than one psychiatric diagnosis, 44% have co- morbid substance abuse, 39 % with intellectual disabilities and 76% have physical problems.[31]

Rajiv Gupta et al carried out a study at Haryana (India) homeless inmates indicate that the prevalence of depression and post traumatic stress disorder (PTSD) were higher followed by conversion disorder, mental retardation and panic disorder. The results also show that more than 60% of inmates met the criteria for at least one psychiatric disorder.[32]

Studies by O' Toole et al and Levitt et al indicate that at least 30 percent of persons experiencing homelessness suffer from serious mental illness, and that 50 percent or more are active substance abusers, with many having co morbid mental illness and substance abuse conditions.[33,34]

National Resource and Training Centre on Homelessness and Mental Illness estimated that 20-25% of nation's homeless population suffers from some form of severe and persistent mental illness.[35]

A study done by Johnson and Chamberlain in 2008[36] among 4,291 homeless persons in Australia found that 31% had mental illness. Of these, 15% had mental health problems prior to becoming homeless, while 63% developed mental health issues while homeless.

Halldin et al, 2001in a study of the mental health problems among homeless people in Sweden identified 3,000 homeless persons of whom 47% were affected with a mental health issue.[37]

Similarly McAuley and McKenna in 2008 reported that 1% of the Belfast population was estimated as being homeless, of whom 41% was affected with schizophrenia. Also suggests that the prevalence of depressive symptoms and disorder among homeless persons is higher than the approximately 10% prevalence in the general population.[38]

According to study of homeless persons in Germany by Langle et al, 26% were suffering from anxiety disorder, 15% from affective disorder, and 11 % from schizophrenia spectrum disorder. [39]

Studies suggest that prevalence of schizophrenia in homeless persons as 6-13%, compared to an estimated 1% in adult populations. As a result of severe mental disorder like schizophrenia, significant percentage of persons is homeless by Caton and Goldstein, 1984.[40]

Sandra C Anderson et al, 1988 conducted a study of 190 homeless women in Portland, oregon and found that most homeless women are young, have children and are mobile. Majority of them have a history of physical or sexual abuse, many are in poor health, 18 % have been in a mental hospital and one fourth are alcoholic.[41]

Jan L. Hagen et al 1988, a study of 55 homeless women in Albany, New York used in depth personal interviews to obtain data regarding demographic characteristics, concomitants of homelessness, source of income, support system, current problems are discussed. One third of women hospitalized for psychiatric reasons, one third reported history of suicide attempts, 49% reported low mood, 47% felt irritated or annoyed,43% felt lonely very often.[42]

In 1998, American Journal of Psychiatry published research that tracked patients after first hospitalization at ten out of twelve Long Island, New York hospitals. In this study, one in six patients with psychotic disorder either had been homeless or would become homeless in the following two years. In 2005 the journal published another study that analyzed the records of all patients treated in the public mental health system in San Diego over the course of one year. One in five patients diagnosed with schizophrenia was homeless at time

of contact. Both studies by the nature of their measurement and method undoubtedly underestimate the risk of periodic homelessness for those with schizophrenia or some other psychotic disorder.[43]

Vazquez and Munoz, 2001et al[44] conducted a research in Madrid, Spain, links the prevalence of a mental illness, substance use and stressful life events to homelessness. Homeless persons who have a mental illness are also far more likely to suffer from other problems including cognitive deficits and suicidal thoughts.[45]

AIMS AND OBJECTIVES

AIM:

To estimate the prevalence of psychiatric morbidity and to identify the factors associated with psychiatric morbidity among homeless females in suburbs of Chennai.

OBJECTIVES:

Primary objective:

To estimate the prevalence of psychiatric morbidity among homeless female population in Chennai.

Secondary objective:

1. To identify the factors pertaining to psychiatric morbidity among homeless female population.

2. To study the impact of homelessness in mental health.

3. To compare the prevalence and factors pertaining to psychiatric morbidity between homeless females in streets and homeless females in night shelters.

NULL HYPOTHESIS

There is no association between factors pertaining to homelessness and psychiatric morbidity in homeless female population.

METHODOLOGY

ETHICAL CONSIDERATION:

Institutional Ethical committee clearance was obtained for the study. Informed consent was obtained in their own language before collecting data in pro forma.

DESIGN OF THE STUDY:

Cross sectional community based descriptive study conducted in Chennai.

SETTING AND POPULATION OF STUDY:

The study was conducted in dense homeless zones of Chennai-Royapuram, Parrys and around Chennai Central Railway station. A recent study on the living conditions of the homeless in Chennai was conducted by the Indian Community Welfare Organisation (ICWO). It was found that almost 53% of homeless people are in Basin Bridge, Royapuram. So I have chosen that area, and other areas like Parrys and around Chennai Central railway station, where homeless population was dense and so these areas were chosen as my study population. Samples of homeless females residing in night shelters, Chennai were also taken up for the study.

SUBJECT SELECTION:

INCLUSION CRITERIA:

1) Homeless females living in streets and in night shelter homes, Chennai.
2) Age more than 18 years of age.
3) Giving informed consent

EXCLUSION CRITERIA:

1) People not giving informed consent.

SAMPLE SIZE:

The prevalence of psychiatric morbidity in homeless female population is 20.5%. When sample size is calculated considering the prevalence of 20.5% using SPSS 20.0 a sample size of 200 is required for statistical analysis. Hence the sample size for this study is set at 200.

The formula used for calculating sample size is as follows, $n = z^2 pq/d^2$, where 'p' is the prevalence, 'q' is the normal population, 'd' is the deviation assumed and z = 1.96 (normal value as per statistical table for 95% confidence value) n = 1.96 ×1.96×51.7 × 48.3 / 7.72× 7.72= 163. Including non response rate of 10%, n = 179

INSTRUMENT OF ASSESSMENT

- Study proforma
- Mini International Neuropsychiatric Interview (M.I.N.I)
- Hamilton Rating Scale for Depression (HAM-D)
- Hamilton Anxiety Rating Scale (HAM-A)

STUDY PROFORMA

- Social demographic data which includes age, educational status, marital status, occupation, job distance, per capita income per month, working hours per day, cost per day for transport, religion, socio-economic status, family type.
- Information on current living arrangements, reason for homelessness, duration of homelessness, current place stay, change in place for past one year, place to sleep, shelter home stay details, sexual abuse history, physical abuse history, drinking water source, electricity, toilet facility, menstrual hygiene, hospital access, medical expense per month were collected.
- Information regarding psychiatry history such as past history of psychiatric illness, family history of psychiatric illness, substance abuse history, suicide attempt history, family history of suicide were collected.
- Medical co morbidity details were noted.

All the samples were consecutively screened with Mini International Neuropsychiatric interview (MINI) to assess psychiatry disorders, International Classification of Diseases (ICD-10) criteria used for clinical diagnosis of psychiatric disorders, Hamilton rating scale for depression (HAM-D) to assess the severity of depression and Hamilton rating scale for Anxiety (HAM-A) to assess the severity of anxiety disorders.

MINI-INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW[46]:

It was developed by Sheehan et al in 1998. The instrument was designed to assess 17 DSM-IV Axis I diagnosis as well as Axis II antisocial personality disorder and suicidality. It is a comprehensive and brief screening tool for psychiatric conditions.

Interview:

Inform the patient that the clinical interview will be more structured than usual, with very precise questions about psychological problems and requires yes or no answer.

General format:

The M.I.N.I is divided into modules identified by letters, each corresponding to a diagnostic category. Beginning of each diagnostic module (except for psychotic disorders module), screening questions corresponding to the main criteria of the disorder are presented in a grey box. In the end of module, diagnostic boxes permit the clinician to indicate whether diagnostic criteria are met.

Conventions:

Sentences written in normal font should be read exactly as written to the patient in order to standardise the assessment of diagnostic criteria. Sentences written in capitals should not be read to the patient. They are instructions for the interviewer to assist in the scoring of the diagnostic algorithms. Sentences written in bold indicate the time frame being investigated. The interviewer should read them as often as necessary. Only symptoms occurring during the time frame indicated should be considered in scoring the responses. Answers with an arrow above them indicate that one of the criteria necessary for the diagnosis is not met. In this case, the interviewer should go to the end of the module, circle no in all the diagnostic boxes and move to the next module. When terms are separated by a slash (/) the interviewer should read only those symptoms known to be present in the patient. Phrases in parentheses are clinical examples of the symptom. These may be read to the patient to clarify the question.

Rating instructions:

All questions must be rated. The rating is done at the right of each question by circling either Yes or No. The clinician should be sure that each dimension of the question is taken into account by the patient (for example, time frame, frequency, severity, and/or alternatives). Symptoms better accounted for by an organic cause or by the use of alcohol or drugs should not be coded positive in the M.I.N.I.

HAMILTON DEPRESSION RATING SCALE[47] (HAM-D):

HAM-D was developed by Hamilton in 1960. It is a gold standard rating scale for depression. Severity of depression can be evaluated by HAM-D among depressive patients. Content: the 17 items version consists of depressed mood, feelings of guilt, suicide, insomnia (early, middle, late), work and activities, psychomotor retardation, agitation, anxiety, somatic symptoms, genital symptoms, hypochondriasis, loss of weight, insight.

Good internal consistency, inter rater reliability with values ranging from 0.8 to 0.98 and test-retest reliability with values ranging from 0.65 to 0.98. The original version contains 17 items, but four other questions are not added to the total score and are used to provide additional clinical information. Each item on the questionnaire is scored on a 3 or 5 point scale, depending on the item, and the total score is compared to the corresponding descriptor. Assessment time is estimated at 20 minutes.

Interpretation of scoring:

Score	Severity
0-7	Normal
8-13	Mild
14-18	Moderate
29-22	Severe
≥ 23	Very severe

HAMILTON ANXIETY RATING SCALE (HAM-A):[48]

HAM-A was one of the first rating scales developed to measure the severity of anxiety symptoms and it is still widely used today in both clinical and research settings. It is clinician based questionnaire and consists of 14 symptoms. The internal, inter-rater, and reliability estimates for the overall Hamilton anxiety rating scale are good. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress) and somatic anxiety (physical complaints related to anxiety). Criticism for the scale is that somatic symptoms were weighted. HAM-A is widely used as an outcome measure in clinical trials for anxiety symptoms.

Scoring: Each item is scored on a scale of 0 (not present) to 4 (severe), with a total score range of 0–56.

Interpretation of scoring:

Score	Severity
0-13	Normal
14-17	Mild
18-24	Mild to moderate
25-30	Moderate to severe

ANALYSIS OF DATA:

Collected data were entered and coded into excel sheet. Data distribution was examined using descriptive statistics such as frequencies and percentage. Statistical analysis was done using SPSS 22.0 version. Chi-square test was used for association and p-value less than 0.05 was considered significant.

SAMPLING TECHNIQUE:

Simple random sampling method was used.

DESIGN OF INSTRUMENTS

METHOD	PURPOSE
OBSERVATION	Demography of the area was observed and various facilities were noted.
IN DEPTH INTERVIEWS	To identify problems at individual level
FOCUSED GROUP DISCUSSIONS	To identify problems at individual and community level

DATA COLLECTION

Data collection from study subjects 1. Socio-demographic data 2. Data about homelessness 3. Clinical interview and diagnosis	1. To identify socio-demographic profile, reason for homelessness, duration of homelessness and difficulties related to it. 2. To study prevalence and factors associated with psychiatric morbidity.

OBSERVATION:

Areas like Royapuram, Parrys and areas around Chennai Central railway station, where homeless population was dense were observed. People stay in roadside along with families. They were found to be sleeping in road with plastic cover underneath. The place was very untidy and could see street dogs sleeping near them. They have utensils to cook and water from corporation tank was filled in cans for cooking, washing and other purposes. They use the public toilet and bathroom for toilet and for taking bath. During night time people stay under street lights. They eat food sitting in road and feed the children also in streets. There was also sewage water seen stagnant in some areas. Government specialty set ups are at a distance nearby. Private health care specialty set ups are available at a distance of around 5 kilometers.

SHELTER HOMES:

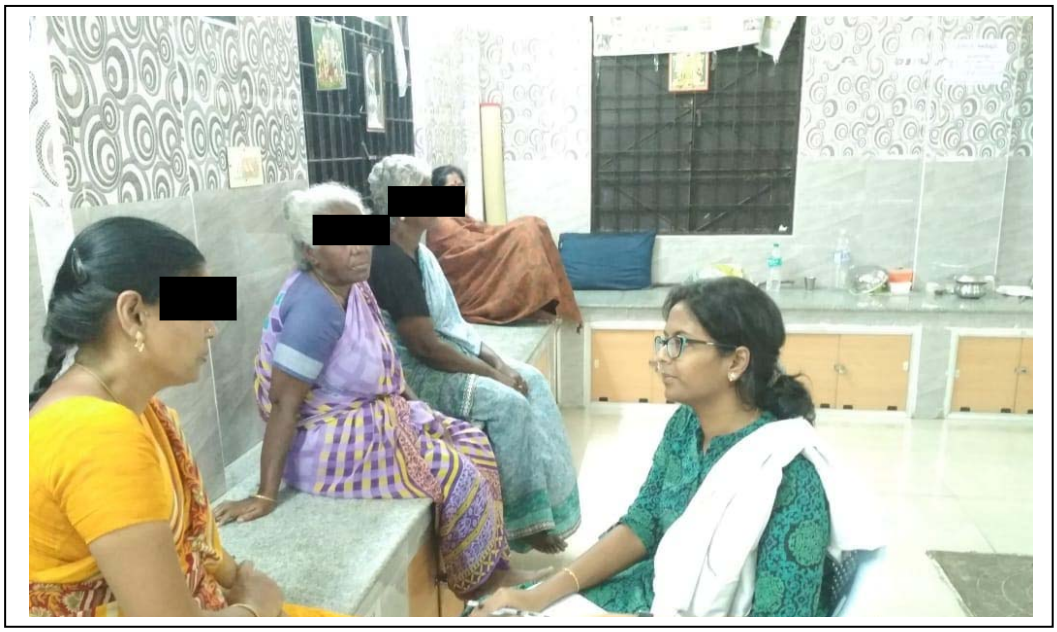
Shelter homes in Chennai were visited and found that most of them were aged above 40 years of age. Females staying in shelter homes go to work in the morning and return back to shelter homes at night for stay. They work in nearby locality like garland making, helper in nearby shops, etc. Women aged around 60 years stay at shelter homes and help in work like vegetable cutting, sweeping, cleaning, vessel washing, etc. Mattresses were provided to them for sleep, they have toilet facilities, tank water supply for drinking purpose, adequate light was there and hospital accessibility was nearby.

IN-DEPTH INTERVIEWS:

Initial in-depth interviews were conducted to find out the problems met by the people at individual level as a result of homelessness. Interviews were conducted whether the problems mentioned in the literature as a part of homelessness are applicable to this population and to find the problems that have been inherent to this population. Sample of the interviews have been mentioned below:

Mrs. S, a 45 year old female, who was residing in roadside area of Chennai Central, says that, “I had been working as a garland maker since childhood. I was born and brought up in Chennai. Since my birth I was homeless and staying in roadside, my parents and grandparents also stayed here for years. I made a livelihood in Central Chennai and the job opportunities were poor. I was able to make ends meet and not able to save money. The homelessness has been hard on us. I and my children stay under plastic covered roof made temporarily. My husband is alcoholic and doesn’t care about family

much. In case of emergency we find difficult to go to hospital. We cannot afford the private health care in the neighboring areas. It has been hard to live with economic difficulties".



In depth interview was conducted with females in shelter homes, Chennai and a 50 year old female Ms. K in shelter home says that, "I am staying in this home for 2 years. My husband died 2 years back and after that I was living alone in a rental kutcha roofed house. I have no children and my family members passed away when I was a child. I was staying in Royapuram and due to unemployment and lack of affordability to pay rent I stayed in roadside along with the people over there and came to know about the shelter home. Here I help in cooking, cleaning, etc. But often feel sad thinking about my fate".

FOCUSED GROUP DISCUSSIONS (FGD):

Focused group discussions were conducted to obtain the benefit of group processes in understanding the various problems faced by homeless females in streets and in shelter homes. The factors related to homelessness that have a possible association with the psychiatric morbidity could be identified and also it could be verified whether the problems related to homelessness mentioned in the research literature can be applied to this population. It is also economical and less time consuming. Focused Group Discussions were conducted with separate groups. Each group consisted of 5 to 7 individuals. Each session lasted approximately for half an hour to 1 hour. Each FGD was conducted under supervision and direction of the researcher who moderated the sessions, promoted discussion and ensured that the discussion was on the topic of research. The theme was based on the effects of homelessness. Semi-structured open ended questions were used by the researcher to promote discussion. Though the focus was on the topic, the discussions were flexible and were in conversational style.

In each group, researcher asked the participants to discuss about the problems they have met due to homelessness and to make a list of problems. They were also asked to group their problems into common themes if possible. They were also asked to give weight age for the problems if possible. The problems enlisted by the groups were mentioned below:

Problems enlisted in Focused Group Discussion by street dwelling females:

1. Occupation- Decreased job opportunities, increased time to reach work place, decreased pay.

2. Transport facilities- Cost of transport.

3. Health care- Health issues, Lack of affordability of health care.

4. Social resources- Difficulty in accessing community resources.

5. Economic conditions- Decreased family income.

6. Housing- Problems in sanitation, electricity and water supply.

Problems enlisted in Focused Group Discussion by shelter home dwelling females:

1. Social support - No relatives, poor social support, living alone.

2. Health care - Physical illness, lack of affordability of health care.

3. Economic conditions - Low income, unemployment.

RESULTS AND OBSERVATIONS

The results and observations are discussed under following headings:

I. Socio-demographic profile

II. Prevalence of psychiatric morbidity

III. Prevalence of Depression and factors associated with depression.

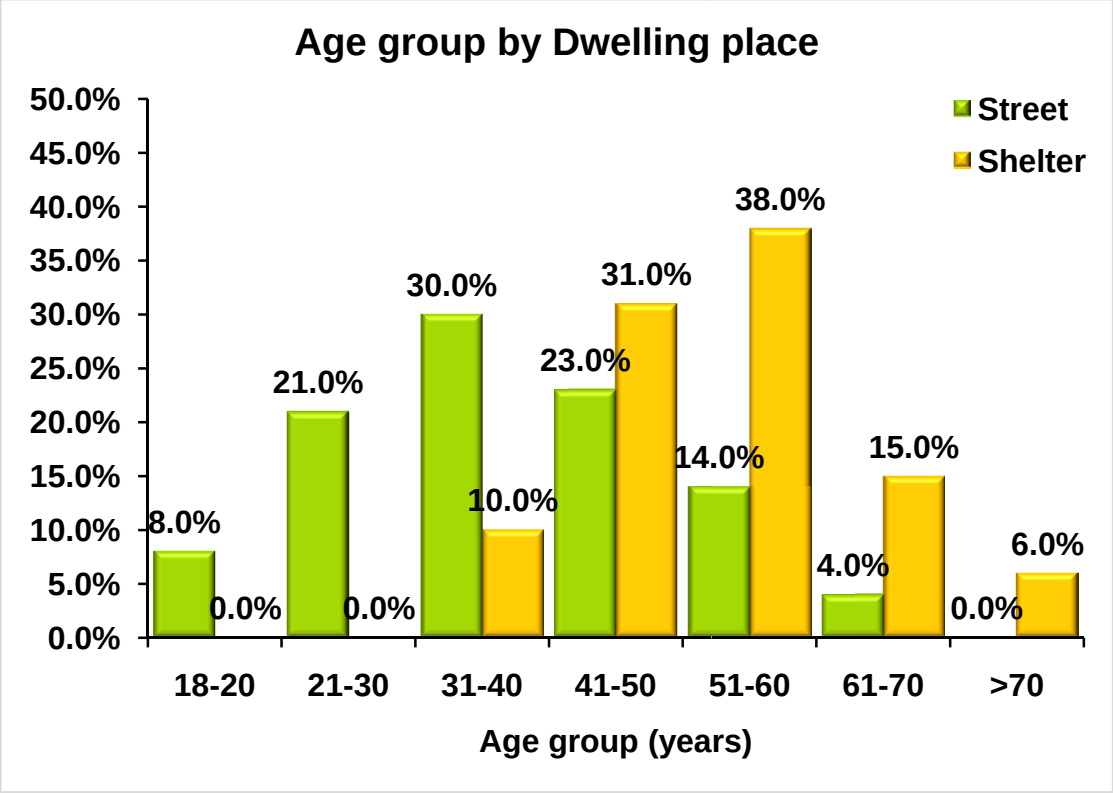
IV. Prevalence of Anxiety and factors associated with Anxiety.

I. SOCIO-DEMOGRAPHIC PROFILE

The sample size for this study was 200 (n=200). Among the sample size of 200 females, 100 samples were taken from street dwellers and 100 samples were taken from homeless females at night shelters. The socio- demographic profiles of the samples have been described in the following tables and charts.

AGE GROUP BY DWELLING PLACE:

Age group	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
18-20	8	8.0%	0	0.0%	8	4.0%
21-30	21	21.0%	0	0.0%	21	10.5%
31-40	30	30.0%	10	10.0%	40	20.0%
41-50	23	23.0%	31	31.0%	54	27.0%
51-60	14	14.0%	38	38.0%	52	26.0%
61-70	4	4.0%	15	15.0%	19	9.5%
>70	0	0.0%	6	6.0%	6	3.0%
Total	100	100.0%	100	100.0%	200	100.0%



Among the sample of 100 female street dwellers, 30 females were in age group of 31 to 40 years, 23 females between 41 to 50 years of age.

Among 100 homeless females in shelter homes, 31 females were between 41 to 50 years of age, 38 were in age group of 51 to 60, 15 females in 61 to 70 age group, 6 females were more than 70 years of age. Age group by dwelling place showed statistical significance with p value of <0.001

EDUCATIONAL STATUS:

Table 2

Education	Dwelling place		
	Street	Shelter	Total
	%	%	%
Graduate	2%	0%	1%
Post High school	4%	8%	6%
High school	29%	14%	21.5%
Middle	20%	28%	24%
Primary	17%	18%	17.5%
Illiterate	28%	32%	30%
Total	100%	100%	100%

Table 2 shows that 30% females were illiterates among 200 homeless females. 1% females studied up to graduate, 6% females up to post high school, 21% females' up to high school, 24% females up to middle school and 17.5% females up to primary school education.

MARITAL STATUS

Marital status	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Married	55	55.0%	17	17.0%	72	36.0%
Unmarried	10	10.0%	0	0.0%	10	5.0%
Divorced	6	6.0%	19	19.0%	25	12.5%
Loss of spouse	29	29.0%	64	64.0%	93	46.5%
Total	100	100.0%	100	100.0%	200	100.0%

Table 3 represents marital status by dwelling place. Among 100 female street dwellers, 55 were married, 2 were pregnant, 10 were unmarried, 6 were divorced and 29 were widows. Among 100 shelter home dwelling females, 17 were married, 19 divorced and 64 widows. There is statistical significance between marital status and dwelling place and p value is < 0.001

RELIGION:

Among the study sample of 200, there were 124 Hindus and 76 Christians.

OCCUPATION

Table 4

Occupation	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Unskilled	4	4.0%	18	18.0%	22	11.0%
Semi Skilled	70	70.0%	41	41.0%	111	55.5%
Skilled	2	2.0%	2	2.0%	4	2.0%
Unemployed	24	24.0%	39	39.0%	63	31.5%
Total	100	100.0%	100	100.0%	200	100.0%

Among 100 street dwellers, 24 were unemployed and few were begging in their locality, 4 were unskilled workers, 70 females were semi skilled workers, 2 were skilled workers.

Among 100 shelter home dwellers, 39 females were unemployed, 18 were unskilled workers, 41 were semiskilled workers and 2 were skilled workers. There is statistical significance between occupation and dwelling place and p value is <0.001

JOB DISTANCE:

Table 5

Job distance	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
<5 Km	54	54.0%	7	7.0%	61	30.5 %
5-10 Km	14	14.0%	0	0.0%	14	7.0%
10-20 km	2	2.0%	0	0.0%	2	1.0%
>20 km	0	0.0%	3	3.0%	3	1.5%
Work in shelter	0	0.0%	66	66.0 %	66	33.0 %
Nil occupation	30	30.0%	24	24.0 %	54	27.0 %
Total	100	100.0%	100	100. 0%	200	100. 0%

Table 5 shows that among 200 samples, travel distance for work was less than 10 kilometer (km) mostly for 75 females and 2 females were travelling around 10 to 20 km to work. Among 100 females in shelter homes 66 were working in shelter home itself. 3 females travel for more than 20 kilometers for work. There is statistical significance between occupation and dwelling place and p value is <0.001.

WORKING HOURS PER DAY:

Table 6

Working hours / day	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
<6 hrs	29	29.0%	68	68.0%	97	48.5%
7-8 hrs	24	24.0%	3	3.0%	27	13.5%
9-10 hrs	13	13.0%	0	0.0%	13	6.5%
10-12 hrs	10	10.0%	0	0.0%	10	5.0%
Nil working	24	24.0%	29	29.0%	53	26.5%
Total	100	100.0%	100	100.0%	200	100.0%

Table 6 shows that among 100 street dwellers, 13 females worked around 9 to 10 hours and 10 females worked for more than 11 hours among street dwellers. Among 100 shelter dwellers, 68 females worked for less than 6 hours and 3 females worked for 7 to 8 hours.

COST PER DAY FOR TRANSPORT:

Table 7

Cost/day for transport	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Rs. 10-50	61	61.0%	7	7.0%	68	34.0%
Rs. 51-100	9	9.0%	0	0.0%	9	4.5%
Nil	30	30.0%	93	93.0%	123	61.5%
Total	100	100.0%	100	100.0%	200	100.0%

Table 7 represents among 100 street dwellers, 61 of them spent nearly 10 to 50 rupees per day for travel to work, 9 women spent 51 to 100 rupees for transport, among 100 shelter home dwellers, 7 females spent 10 to 50 rupees for transport and others were working in nearby locality and travel by walking and some work in shelter home.

PER CAPITA INCOME PER MONTH:

Table 8

PER CAPITA INCOME PER MONTH	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
<100	2	2.0%	43	43.0%	45	22.5%
100-299	13	13.0%	18	18.0%	31	15.5%
300-499	22	22.0%	6	6.0%	28	14.0%
500-749	33	33.0%	0	0.0%	33	16.5%
750-999	22	22.0%	0	0.0%	22	11.0%
1000-1999	8	8.0%	11	11.0%	19	9.5%
Nil	0	0.0%	22	22.0%	22	11.0%
Total	100	100.0%	100	100.0%	200	100.0%

Among 100 street dwellers, 33 females' per capita income was around 500 rupees to 749 rupees per month, among 100 shelter home females, 43 females' per capita income was less than 100 rupees per month.

FAMILY TYPE:

Table 9

Family type	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Nuclear	62	62.0%	2	2.0%	64	32.0%
Joint	28	28.0%	0	0.0%	28	14.0%
Alone	10	10.0%	98	98.0%	108	54.0%
Total	100	100.0 %	100	100.0 %	200	100.0 %

Table 9 represents that among 100 street dwellers, 62 females were living in nuclear family and 28 were in joint family. Among 100 shelter home dwellers, 98 females were living alone.

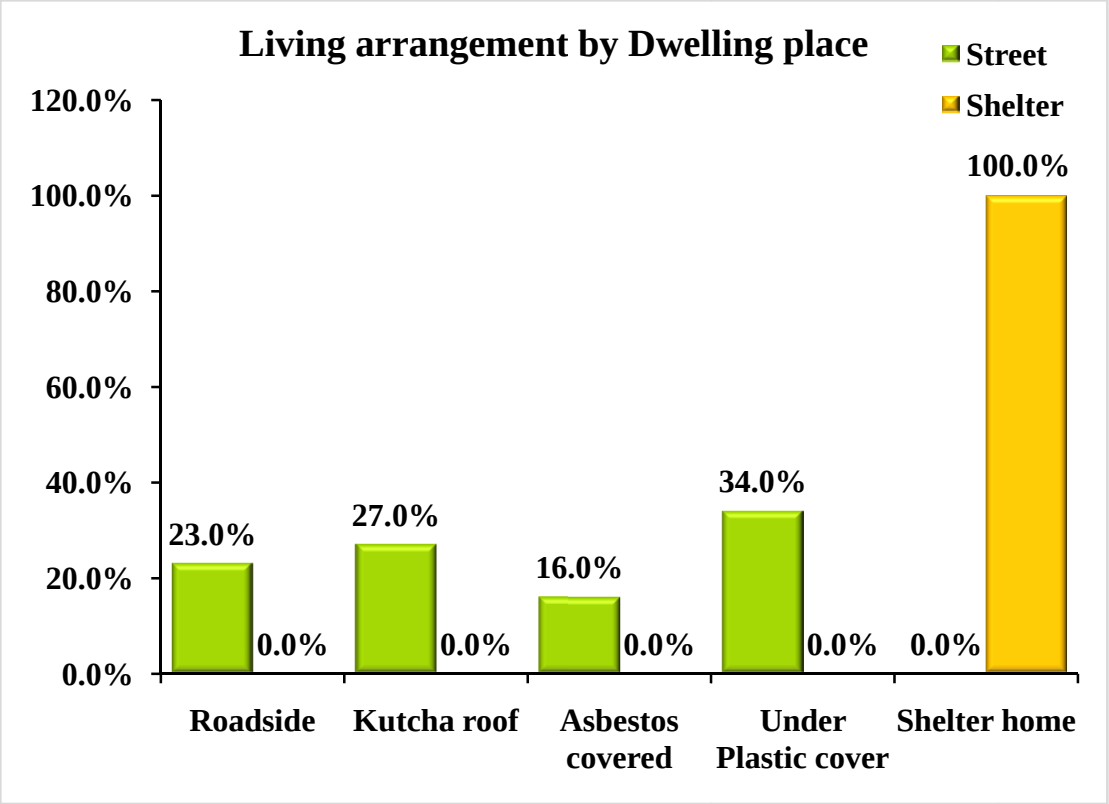
SOCIAL SUPPORT:

Table 10

Social support	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Good	73	73.0 %	0	0.0%	73	36.5 %
Poor	27	27.0 %	100	100. 0%	127	63.5 %
Total	100	100. 0%	100	100. 0%	200	100. 0%

Table 10 shows that among 100 street dwellers, 73 females were with good social support, wherein all 100 females in shelter homes had poor social support. This shows statistical significance between social support and dwelling place with p value of <0.001.

LIVING ARRANGEMENT:



Among 100 female street dwellers, 23 were living in road side pavements, 27 stayed under kutcha roof on roadside, 16 stayed under asbestos roof made temporarily in roadside, 34 females stayed under plastic covers. 100 samples of females were taken from shelter homes. The data showed statistical significance between living arrangement and dwelling place with p value of <0.001.

REASON FOR HOMELESSNESS:

Table 11

Reason for homelessness	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Lack of financial affordability	84	84.0%	30	30.0%	114	57.0%
Unemployment	10	10.0%	14	14.0%	24	12.0%
Forced eviction	4	4.0%	22	22.0%	26	13.0%
Breakdown of family	2	2.0%	30	30.0%	32	16.0%
Slum demolition	0	0.0%	4	4.0%	4	2.0%
Total	100	100.0%	100	100.0%	200	100.0%

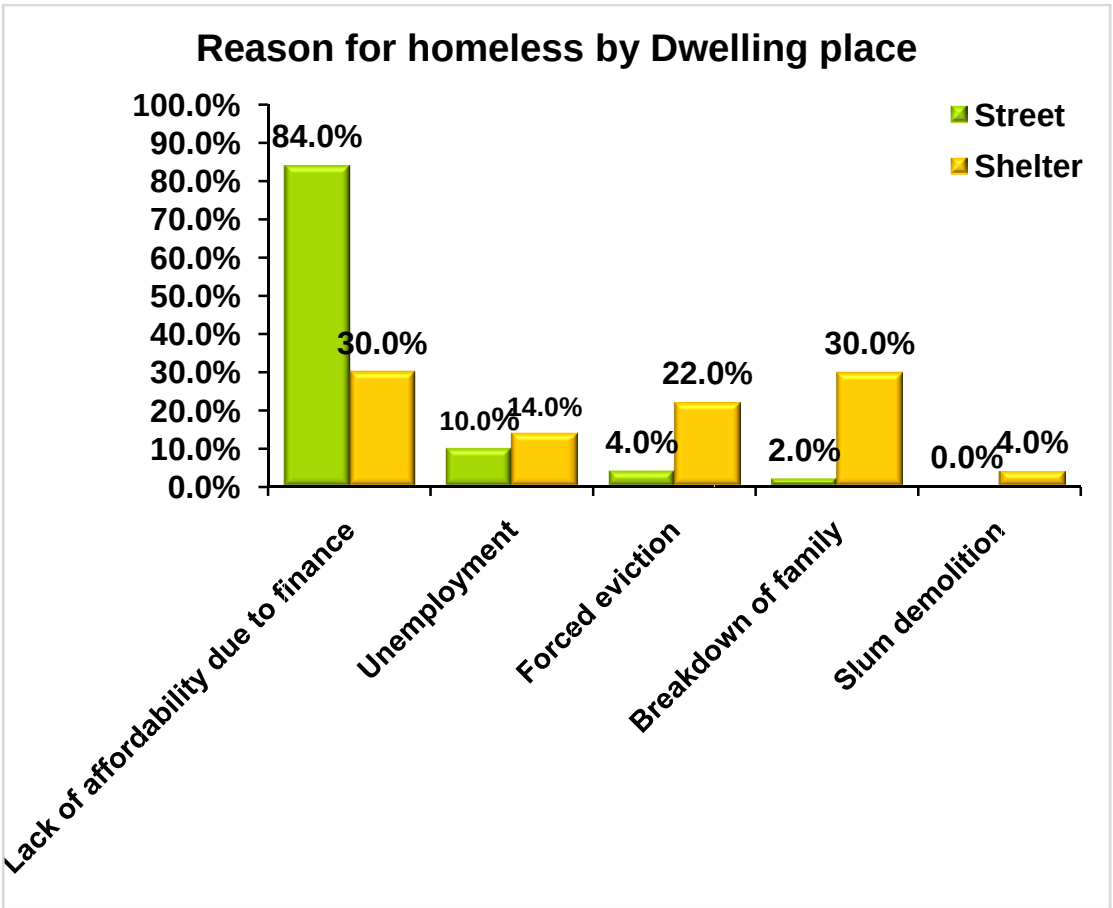


Table 11 represents among 200 homeless females, 114 females were homeless due to lack of financial affordability even to take a rental house, 32 became homeless due to breakdown of family, 26 females were forcefully evicted from their homes, 24 people became homeless due to unemployment and 4 people due to slum demolition. The results show statistical significance with p value < 0.001

DURATION OF HOMELESSNESS:

Table 12

Duration of homelessness	**Dwelling place**					
	Street		**Shelter**		**Total**	
	N	%	N	%	N	%
<1year	0	0%	46	46.0%	46	23.0%
2-5 years	2	2%	40	40.0%	42	21.0%
6-10 years	5	5%	4	4.0%	9	4.5%
11-30 years	12	12%	6	6.0%	18	9%
31-50 years	26	26%	4	4.0%	30	15.0%
>51 years	55	55%	0	0.0%	55	27.5%
Total	100	100%	100	100.0%	200	100.0%

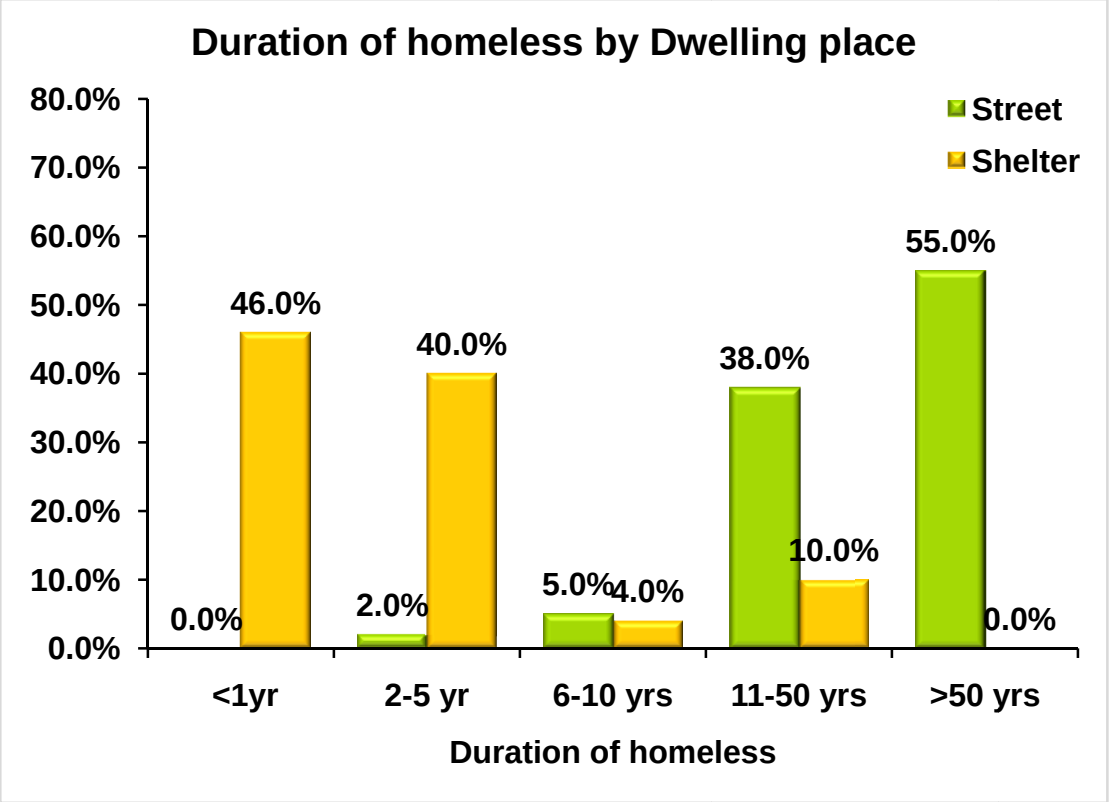


Table 12 shows that among 100 street dwellers, 55 were homeless for more than 50 years, 26 were homeless for duration between 31 years to 50 years. Among 100 homeless females in shelter homes, 46 females became homeless for less than 1 year, 40 were between 2 to 5 years.

WATER SOURCE AND ELECTRICITY:

Water source for homeless women was from corporation tank and they fill it using large cans and used for both drinking and other household purpose like cooking, cleaning, etc. For toilet and bathing, they use public toilets and public bathrooms. Street dwellers stay under street lights and also use artificial lamps, candles for light.

Shelter homes have tank water supply and they use it for drinking purpose. Toilet facilities available and adequate lighting facilities were available in shelter home.

MENSTRUAL HISTORY:

Table 13

Menstrual History	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Pad	56	56.0%	7	7.0%	63	31.5%
Cloth	10	10.0%	6	6.0%	16	8.0%
Menopause	30	30.0%	87	87.0%	117	58.5%
Hysterectomy	4	4.0%	0	0.0%	4	2.0%
Total	100	100.0%	100	100.0%	200	100.0%

Table 13 represents, among 100 homeless street dwellers, 56 women use pad during menstruation, 10 use cloth, 30 attained menopause, 4 underwent hysterectomy. Among 100 subjects in shelter homes, 7 use pad during menstruation, 6 women use cloth, 87 women attained menopause. The menstrual history by dwelling place showed statistical significance with p value of < 0.001.

PHYSICAL AND SEXUAL ABUSE:

Table 14

Physical abuse	Dwelling place		
	Street	Shelter	Total
	%	%	%
No	76%	80%	78%
Yes	24%	20%	22%
Total	100%	100%	100%

Table 14 shows that among 100 female street dwellers, 24 females faced physical abuse and among night shelter females 20 were physically abused before coming to shelter homes.

Table 15

Sexual abuse	Dwelling place		
	Street	Shelter	Total
	%	%	%
No	74%	89%	81.5%
Yes	14%	11%	12.5%
Not willing	12%	0%	6%
Total	100%	100%	100%

Table 15 shows that among 100 female street dwellers, 14 were sexually abused 12 were not willing to give details about sexual abuse history and among 100 night shelter staying females 11 were sexually abused before coming to shelter homes.

SUBSTANCE USE:

Table 16

Substance use	Dwelling place			
	Street		Shelter	
	N	%	N	%
No	82	82.0%	77	77.0%
Tobacco chewing	18	18.0%	23	23.0%
Alcohol	4	4.0%	0	0.0%
Smoking	2	2.0%	0	0.0%

Table 16 shows that among 200 homeless populations, 41 women chew tobacco daily, 4 street dwelling women consume alcohol in a weekly basis, 2 street dwelling female smoke cigarettes daily. Both in street dwellers and homeless women in shelter homes, tobacco chewing is high.

PHYSICAL ILLNESS:

Table 17

Physical illness	Dwelling place			
	Street		Shelter	
	N	%	N	%
Diabetes	21	21.0%	20	20.0%
Somatic c/o	12	12.0%	11	11.0%
Hypertension	6	6.0%	19	19.0%
Thyroid	4	4.0%	2	2.0%
TB	2	2.0%	0	0.0%
Heart disease	2	2.0%	0	0.0%
Knee pain	16	16.0%	31	31.0%
Lower back ache	10	10.0%	5	5.0%
Paralysis	1	1.0%	23	23.0%
Nil	38	38.0%	18	18.0%
Total	100		100	

Table 17 shows that among 200 homeless females, 47 women had knee pain, 41 women had diabetes and 22 were not on regular treatment, 25 were hypertensive, 24 had paralysis, 23 presented with somatic complaints, 15 women had lower back ache.

HOSPITAL ACCESS:

Table 18

Hospital access	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
1-2 km	73	73.0%	74	74.0%	147	73.5%
3-5 km	27	27.0%	26	26.0%	53	26.5%
Total	100	100.0%	100	100.0%	200	100.0%

Table 18 shows that hospital access was nearby and less than 5 kilometers (km) for street dwellers and shelter home females.

Table 19

Medical expense/month	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Rs. <100	80	80.0%	100	100.0%	180	90.0%
Rs. 100-500	16	16.0%	0	0.0%	16	8.0%
Rs. >500	4	4.0%	0	0.0%	4	2.0%
Total	100	100.0%	100	100.0%	200	100.0%

Table 19 shows that among 100 street dwellers, medical expense for 80 street dwelling females was less than 100 rupees, 16 females spent 100 to 500 rupees, 4 females spent more than 500 rupees per month. Medical expense for 100 shelter home females was less than 100 rupees.

II.PREVALENCE OF PSYCHIATRIC MORBIDITY

Table 20

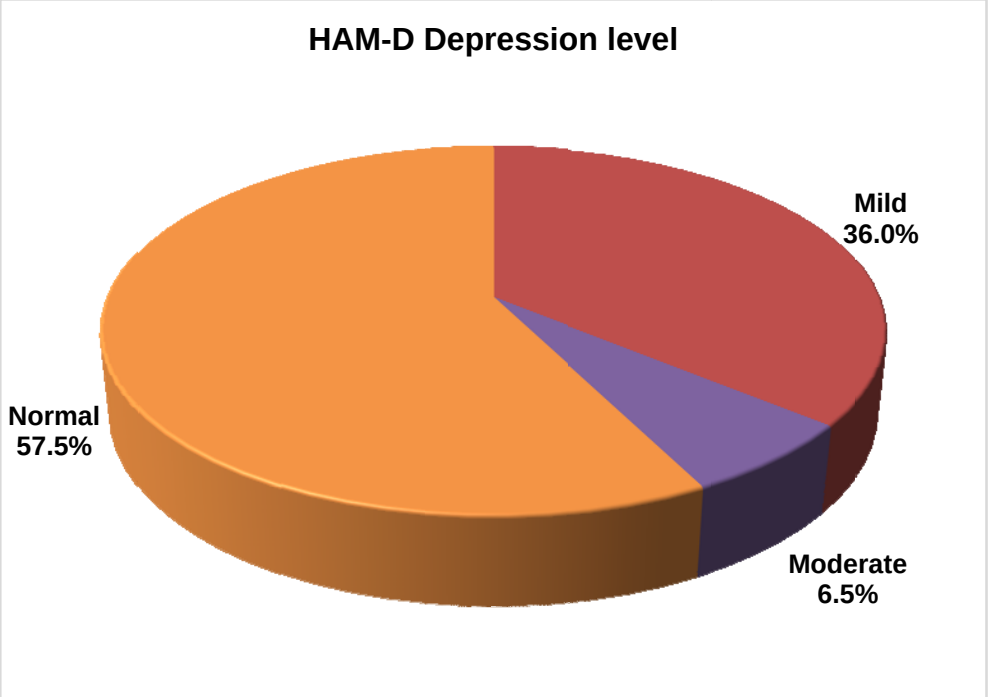
MINI	Dwelling place			
	Street		Shelter	
	N	%	N	%
Depression	39	39.0%	44	44.0%
Anxiety	25	25.0%	29	29.0%
Alcohol dependence	4	4.0%	0	0.0%
Psychotic disorder	2	2.0%	2	2.0%
Nil	53	53.0%	38	38.0%
Dementia	0	0.0%	5	5.0%
Total	100		100	

Table 20 shows that among 100 female street dwellers, 4 females had alcohol dependence syndrome, 39 females had depression, 25 had anxiety disorder, 2 had psychotic disorder.

Among 100 females in shelter homes, 44 people had depression, 29 had anxiety disorder, 2 had psychotic disorder, 5 had dementia.

III.PREVALENCE OF DEPRESSION AND ASSOCIATED FACTORS:

PREVALENCE OF DEPRESSION:



PREVALENCE OF DEPRESSION IN STREET DWELLERS AND SHELTER HOME DWELLERS:

Table 21

HAM-D	Dwelling place		
	Street	Shelter	Total
	%	%	%
Mild	35.0%	37.0%	36.0%
Moderate	4.0%	9.0%	6.5%
Severe	0.0%	0.0%	0.0%
Normal	61.0%	54.0%	57.5%
Total	100.0%	100.0%	100.0%

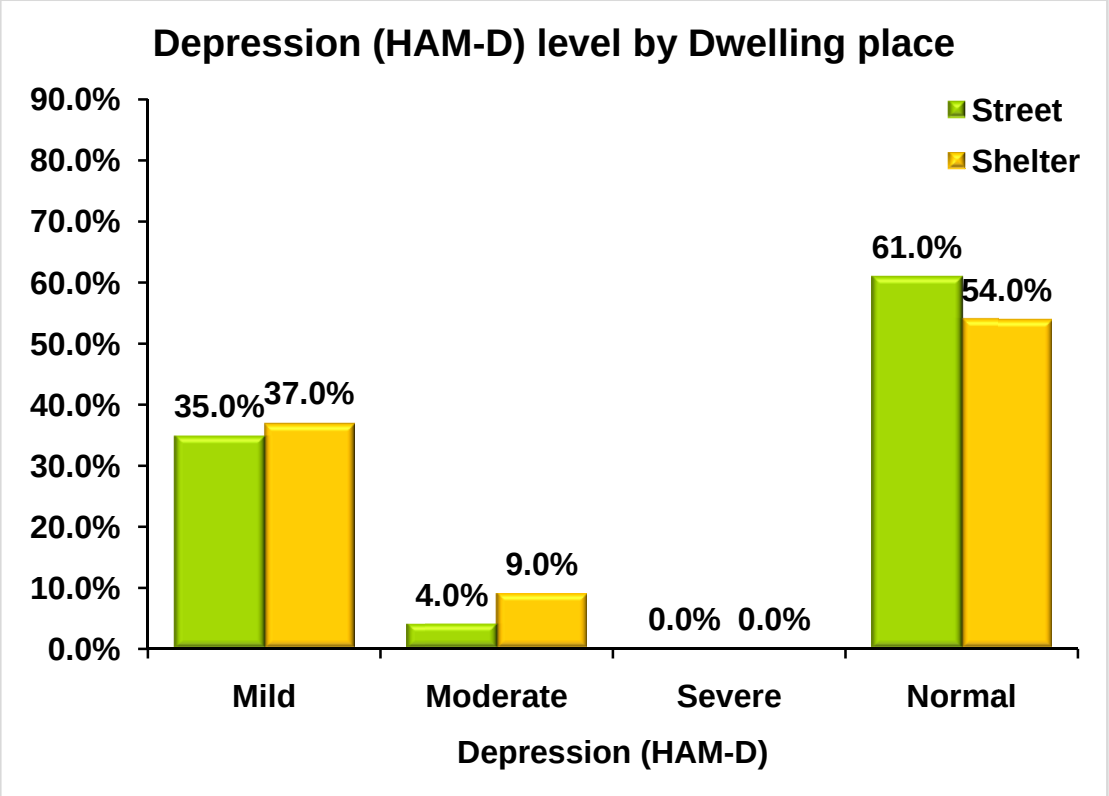


Table 21 shows that by using HAM-D scale, among 100 street dwelling females, 35% females had mild depression, 4% females had moderate depression, 61% females had no depression.

Among 100 shelter dwellers, 37% had mild depression, 9% had moderate depression, 54% females had no depression.

PREVALENCE OF DEPRESSION BY AGE GROUP:

Table 22

Age group	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
18-30	21	72.4%	8	27.6%	29	100.0%
31-40	33	82.5%	7	17.5%	40	100.0%
41-50	24	44.4%	30	55.6%	54	100.0%
51-60	28	53.8%	24	46.2%	52	100.0%
>60	9	36.0%	16	64.0%	25	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

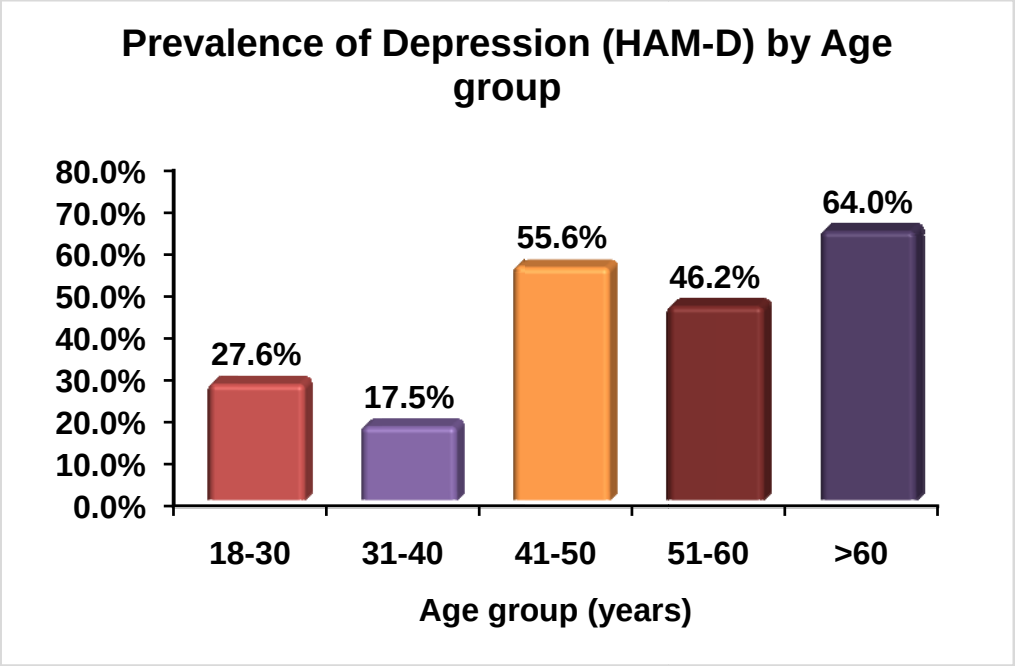


Table 22 shows that among 200 homeless females, 64% of women more than 60 years of age were found to have depression. This shows statistical significance between age group and depression with p value of < 0.001

PREVALENCE OF DEPRESSION BY EDUCATION:

Table 23

Education	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
Graduate	2	100.0%	0	0.0%	2	100.0%
Post high school	4	33.3%	16	66.7%	12	100.0%
High school	21	72.4%	8	27.6%	29	100.0%
Middle	31	64.6%	17	35.4%	48	100.0%
Primary	19	54.3%	16	45.7%	35	100.0%
Illiterate	32	53.3%	28	46.7%	60	100.0%

Table 23 shows that among 200 homeless females, 66.7% of women studied up to post high school was found to have depression but not statistically significant.

PREVALENCE OF DEPRESSION BY MARITAL STATUS:

Table 24

Marital status	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
Married	52	72.2%	20	27.8%	72	100.0%
Unmarried	10	100.0%	0	0.0%	10	100.0%
Divorced	8	32.0%	17	68.0%	25	100.0%
Loss of spouse	45	48.4%	48	51.6%	93	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 24 shows that among 200 homeless females, 68% of divorced females had depression, 51.6% of females who lost their spouse had depression. There is statistical significance between depression and marital status with p value of <0.001.

PREVALENCE OF DEPRESSION BY FAMILY TYPE:

Table 25

Family type	HAM - D			
	Normal		Depressed	
	N	%	N	%
Nuclear	38	59.4%	26	40.6%
Joint	15	53.6%	13	46.4%
Alone	62	57.4%	46	42.6%
Total	115	57.5%	85	42.5%

Table 25 shows that among 200 homeless females, 46.4 % of homeless females lived in joint family had depression. There is no statistical significance between prevalence of depression and family type with p value of 0.874

PREVALENCE OF DEPRESSION AND SOCIAL SUPPORT:

Table 26

Social support	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
Good	53	72.6%	20	27.4%	73	100.0 %
Poor	62	48.8%	65	51.2%	127	100.0 %
Total	115	57.5%	85	42.5%	200	100.0 %

Table 26 shows that among 200 homeless females, 51.2% females with poor social support had depression. There is statistical significance between depression and social support with p value of 0.001.

PREVALENCE OF DEPRESSION BY LIVING ARRANGEMENT:

Table 27

Living arrangement	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
Roadside	14	60.9%	9	39.1%	23	100.0%
Kutcha roof	14	51.9%	13	48.1%	27	100.0%
Asbestos covered	9	56.3%	7	43.8%	16	100.0%
Shelter home	54	54.0%	46	46.0%	100	100.0%
Under Plastic cover	24	70.6%	10	29.4%	34	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

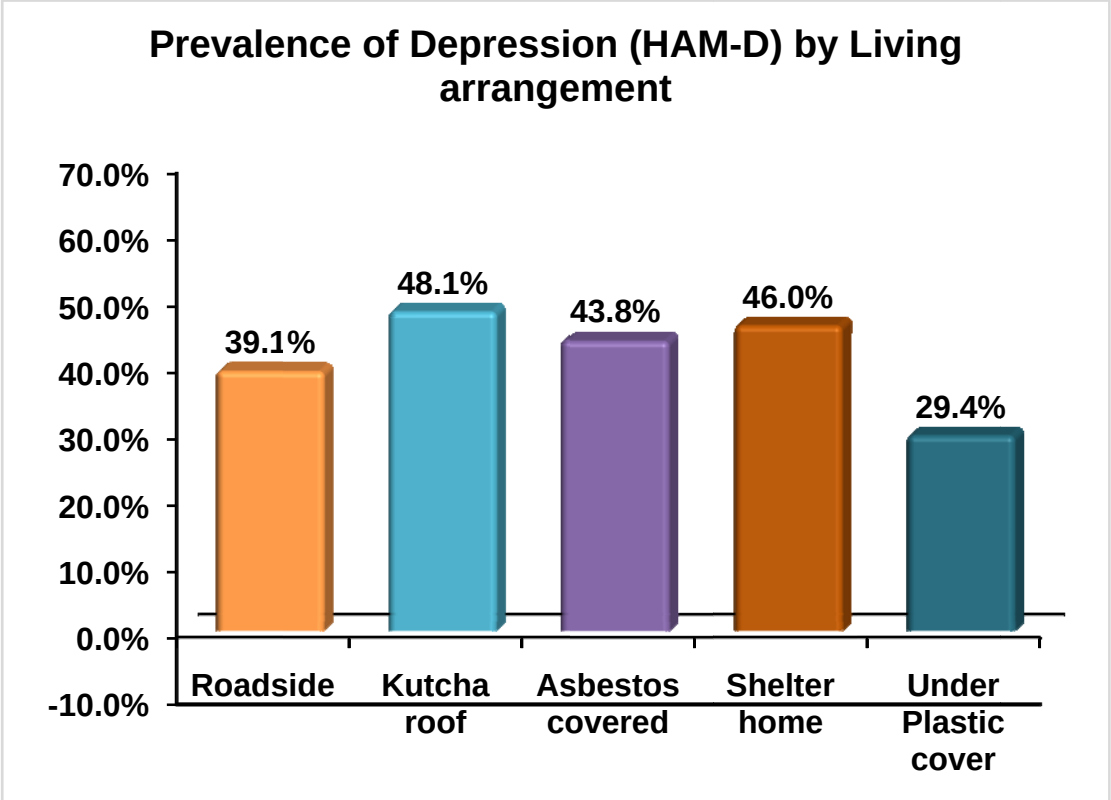


Table 27 shows that among 100 female street dwellers, 48.1 % of females living under kutcha roof were depressed and among shelter home dwellers 46% were depressed. There is no statistical significance for prevalence of depression by living arrangement and p value is 0.500

REASON FOR HOMELESSNESS AND DEPRESSION:

Table 28

Reason for homelessness	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
Lack of financial affordability	71	62.3%	43	37.7%	114	100.0%
Unemployment	15	62.5%	9	37.5%	24	100.0%
Forced eviction	9	34.6%	17	65.4%	26	100.0%
Breakdown of family	16	50.0%	16	50.0%	32	100.0%
Slum demolition	4	100.0%	0	0.0%	4	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

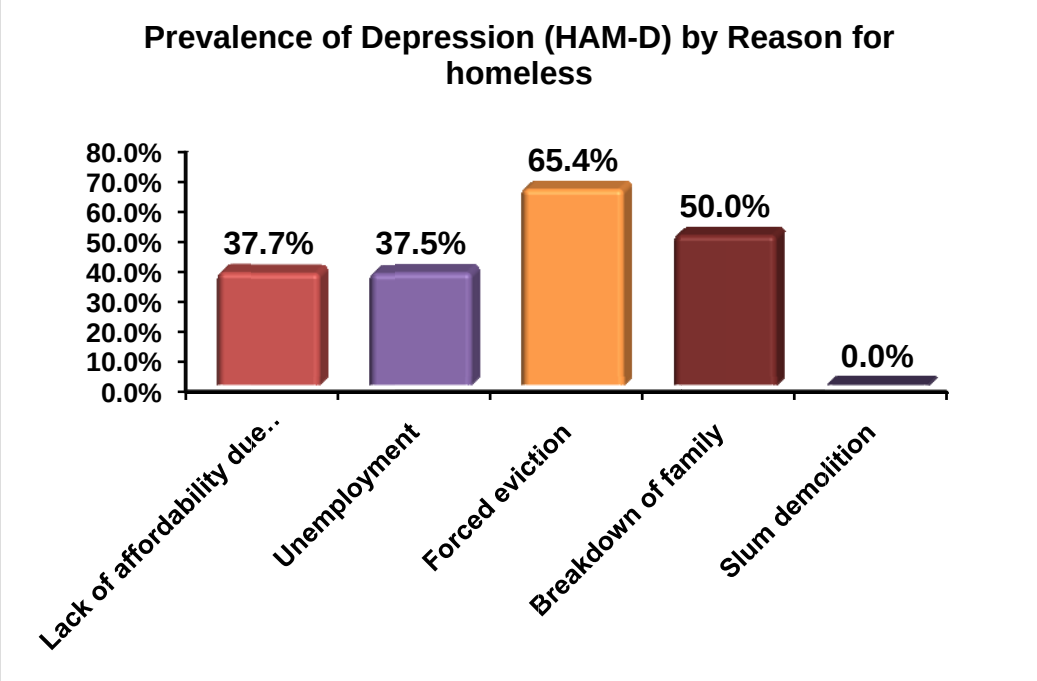
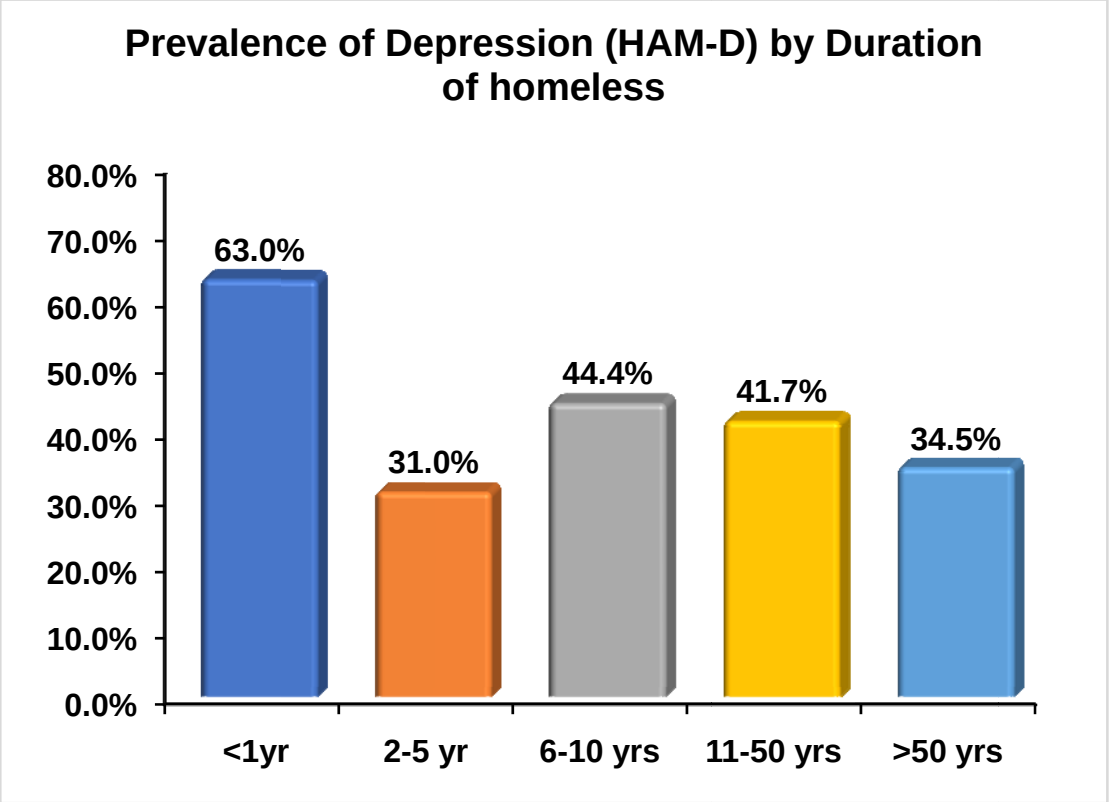


Table 28 shows among 200 homeless females, 65.4% females evicted from family were found to have depression, 50 % of females with broken family had depression, 37.7 % homeless females due to lack of financial affordability even for rental house had depression and 37.5% of unemployed females had depression. There is statistical significance between prevalence of depression and reason for homelessness and p value is 0.032.

PREVALENCE OF DEPRESSION BY DURATION OF HOMELESSNESS:



The prevalence of depression among homeless females with duration less than 1 year was 63%, 44.4% homeless females with duration of 6 to 10 years of homelessness had depression. There is statistical significance between prevalence of depression and duration of homeless and p value is 0.020.

PREVALENCE OF DEPRESSION BY CHANGE IN PLACE FOR PAST 1 YEAR:

Table 29

Change in place for past 1 yr	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	111	60.0 %	74	40.0 %	185	100. 0%
Yes	4	26.7 %	11	73.3 %	15	100. 0%
Total	115	57.5 %	85	42.5 %	200	100. 0%

Table 29 shows that 73.3% of homeless females with change in place for past one year showed depression. There is statistical significance between prevalence of depression and change in place for past 1 year with p value of 0.012

PREVALENCE OF DEPRESSION BY PHYSICAL ABUSE:

Table 30

Physical abuse	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	90	57.7%	66	42.3%	156	100.0%
Yes	25	56.8%	19	43.2%	44	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 30 shows that among 200 homeless females, 43.2% of physically abused homeless females were found to have depression. There is no statistical significance for prevalence of depression by physical abuse and p value is 0.917

PREVALENCE OF DEPRESSION BY SEXUAL ABUSE:

Table 31

Sexual abuse	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	96	58.9%	67	41.1%	163	100.0%
Yes	11	44.0%	14	56.0%	25	100.0%
Not willing	8	66.7%	4	33.3%	12	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 31 shows among 200 homeless females, 56% of sexually abused females were found to have depression. 33% women were not willing to give information regarding sexual abuse. With these data there is no statistical significance for prevalence of depression by sexual abuse and p value is 0.300

SUICIDE ATTEMPT AND PREVALENCE OF DEPRESSION:

Table 32

Suicide attempt	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	104	61.2%	66	38.8%	170	100.0%
Yes	11	36.7%	19	63.3%	30	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 32 shows that among 200 homeless females, 63.3% of females with previous history of suicidal attempt had depressive disorder. There is statistical significance between prevalence of depression and suicide attempt with p value of 0.012

PAST HISTORY OF PSYCHIATRIC ILLNESS AND DEPRESSION:

Table 33

Past psychiatric illness	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	109	62.6%	65	37.4%	174	100.0%
Yes	6	23.1%	20	76.9%	26	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 33 shows that among 200 homeless females, 76.9% of females with past history of psychiatric illness had depression. There is statistical significance between prevalence of depression and past history of psychiatric illness with p value of <0.001

FAMILY HISTORY OF PSYCHIATRIC ILLNESS AND DEPRESSION:

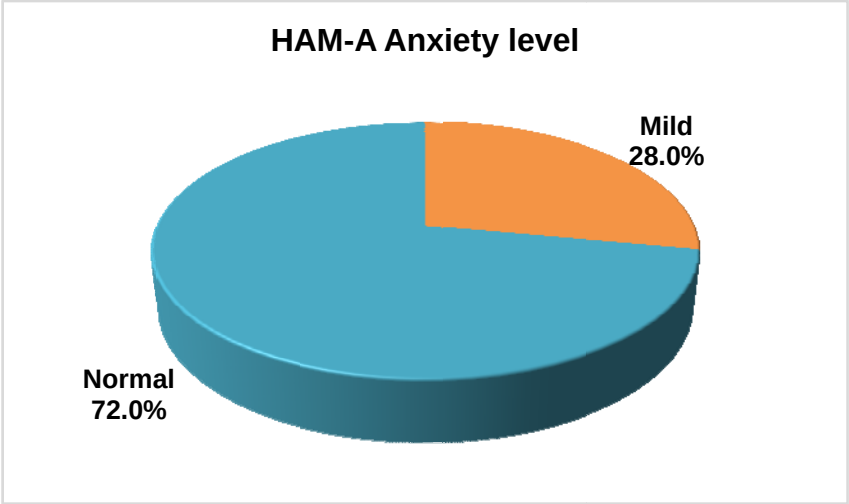
Table 34

Family history of psychiatric illness	HAM - D					
	Normal		Depressed		Total	
	N	%	N	%	N	%
No	108	58.4%	77	41.6%	185	100.0%
Yes	7	46.7%	8	53.3%	15	100.0%
Total	115	57.5%	85	42.5%	200	100.0%

Table 34 shows that among 200 homeless females, 53.3% of females with family history of psychiatric illness had depression. There is no statistical significance for prevalence of depression by family history of psychiatric illness and p value is 0.378

III.PREVALENCE OF ANXIETY DISORDER AND ASSOCIATED FACTORS:

PREVALENCE OF ANXIETY DISORDER:



PREVALENCE OF ANXIETY DISORDER BY DWELLING PLACE:

Table 35

HAM-A	Dwelling place					
	Street		Shelter		Total	
	N	%	N	%	N	%
Mild	25	25.0%	31	31.0%	56	28.0%
Moderate	0	0.0%	0	0.0%	0	0.0%
Severe	0	0.0%	0	0.0%	0	0.0%
Normal	75	75.0%	69	69.0%	144	72.0%
Total	100	100.0%	100	100.0%	200	100.0%

Table 35 shows that, among 100 female street dwellers, 25 females were found to have mild Anxiety, 75 females had no anxiety. Among 100 shelter home dwellers, 31 females had mild anxiety, 69 females were normal. There is no statistical significance for prevalence of anxiety by dwelling place and p value is 0.345

PREVALENCE OF ANXIETY BY AGE GROUP:

Table 36

Age group	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
18-30	22	75.9%	7	24.1%	29	100.0%
31-40	35	87.5%	5	12.5%	40	100.0%
41-50	31	57.4%	23	42.6%	54	100.0%
51-60	36	69.2%	16	30.8%	52	100.0%
>60	20	80.0%	5	20.0%	25	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

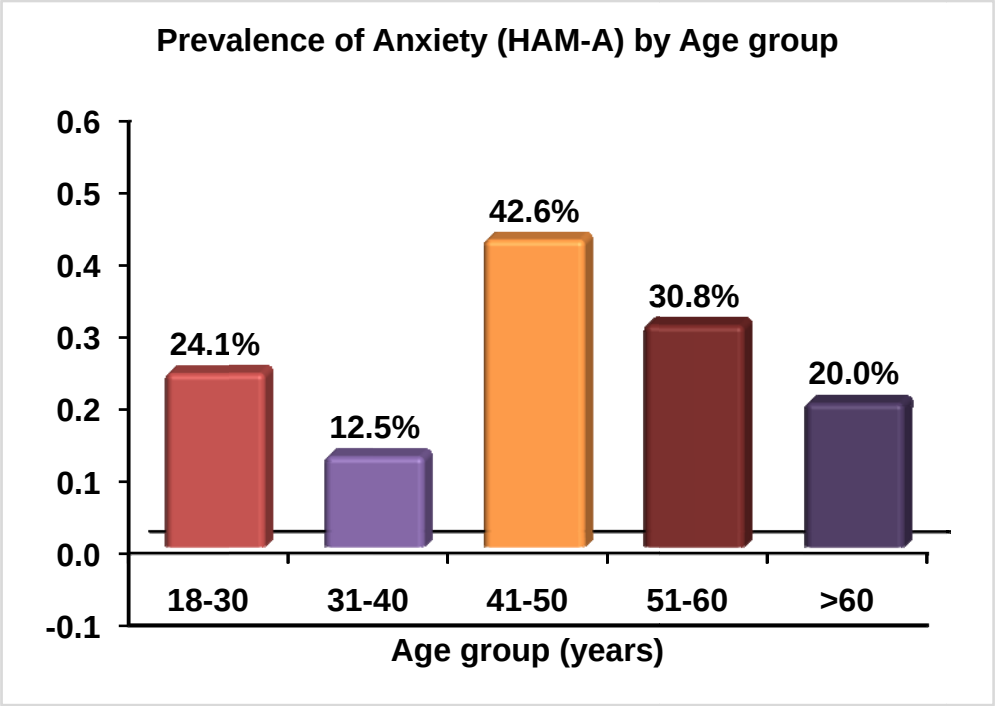


Table 36 shows that among 200 homeless females, 42.6% females between age group of 41 to 50 years of age were found to have Anxiety disorder. There is statistical significance between prevalence of anxiety disorder and age group with p value of 0.020.

PREVALENCE OF ANXIETY DISORDER BY EDUCATION:

Table 37

Education	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Graduate	2	100.0%	0	0.0%	2	100.0%
Post High school	12	100.0%	0	0.0%	12	100.0%
High school	21	72.4%	8	27.6%	29	100.0%
Middle	33	68.8%	15	31.3%	48	100.0%
Primary	25	71.4%	10	28.6%	35	100.0%
Illiterate	41	68.3%	19	31.7%	60	100.0%

Table 37 shows that among 200 homeless females, 31.7% of homeless females with no formal education had anxiety disorder. There is no statistical significance for prevalence of anxiety disorder by education and p value is 0.411

PREVALENCE OF ANXIETY BY MARITAL STATUS:

Table 38

Marital status	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Married	54	75.0%	18	25.0%	72	100.0%
Unmarried	8	80.0%	2	20.0%	10	100.0%
Divorced	15	60.0%	10	40.0%	25	100.0%
Loss of spouse	67	72.0%	26	28.0%	93	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 38 says that among 200 homeless females, 40% of homeless females who got divorced were found to have anxiety disorder. There is no statistical significance for prevalence of anxiety by marital status and p value is 0.522

PREVALENCE OF ANXIETY BY OCCUPATION:

Table 39

Occupation	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Unskilled	10	45.5%	12	54.5%	22	100.0%
Semi Skilled	83	74.8%	28	25.2%	111	100.0%
Skilled	4	100.0%	0	0.0%	4	100.0%
Unemployed	47	74.6%	16	25.4%	63	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 39 shows that among 200 homeless females, 54.5% of unskilled workers were found to have anxiety disorder. There is statistical significance between prevalence of anxiety and occupation with p value of 0.030

PREVALENCE OF ANXIETY BY FAMILY TYPE:

Table 40

Family type	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Nuclear	50	78.1%	14	21.9%	64	100.0%
Joint	18	64.3%	10	35.7%	28	100.0%
Alone	76	70.4%	32	29.6%	108	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 40 shows that among 200 study population, 35.7% of homeless females living in joint family were found to have anxiety disorder. There is no statistical significance for prevalence of anxiety by family type.

ANXIETY AND SOCIAL SUPPORT:

Table 41

Social support	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Good	64	87.7 %	9	12.3 %	73	100. 0%
Poor	80	63.0 %	47	37.0 %	127	100. 0%
Total	144	72.0 %	56	28.0 %	200	100. 0%

Table 41 shows that among 200 homeless females, 37% of females with poor social support were found to have anxiety disorder. There is a statistical significance between prevalence of anxiety and social support with p value of <0.001

PREVALENCE OF ANXETY DISORDER BY LIVING ARRANGEMENT:

Table 42

Living arrangement	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Roadside	16	69.6%	7	30.4%	23	100.0%
Kutcha roof	20	74.1%	7	25.9%	27	100.0%
Asbestos covered	9	56.3%	7	43.8%	16	100.0%
Shelter home	69	69.0%	31	31.0%	100	100.0%
Under Plastic cover	30	88.2%	4	11.8%	34	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 42 shows that 43.8 % of females living under Asbestos covered roof were having anxiety disorder and 31 % of shelter home dwellers had anxiety disorder. There is no statistical significance for prevalence of anxiety by living arrangement and p value is 0.114

REASON FOR HOMELESSNESS AND ANXIETY:

Table 43

Reason for homelessness	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
Lack of financial affordability	79	69.3%	35	30.7%	114	100.0%
Unemployment	18	75.0%	6	25.0%	24	100.0%
Forced eviction	21	80.8%	5	19.2%	26	100.0%
Breakdown of family	22	68.8%	10	31.3%	32	100.0%
Slum demolition	4	100.0%	0	0.0%	4	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

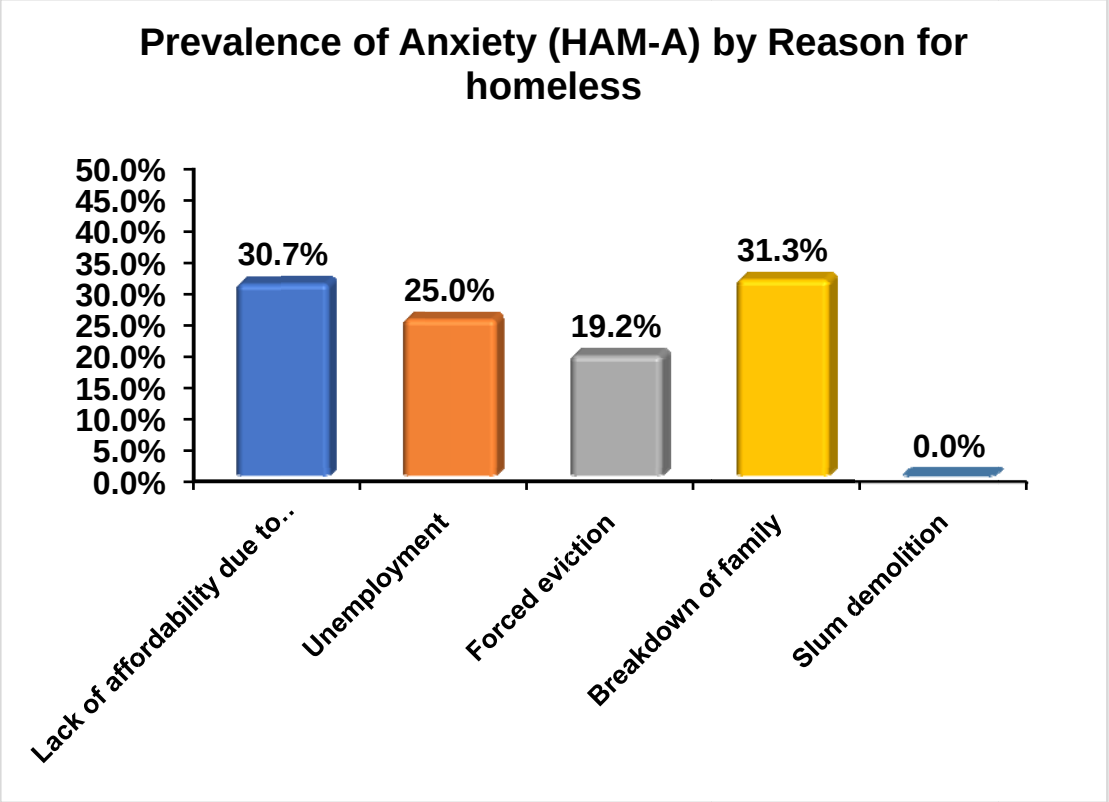


Table 43 shows that among 200 homeless females, 31.3 % of females with broken family had anxiety disorder, 30.7 % homeless females due to lack of financial affordability had anxiety and 25% of females with unemployment and 19.2% females evicted from family forcefully had anxiety disorder. There is no statistical significance for prevalence of anxiety disorder by reason for homeless and p value is 0.624.

DURATION OF HOMELESSNESS AND ANXIETY DISORDER:

Table 44

Duration of homelessness	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
<1yr	40	87.0%	6	13.0%	46	100.0%
2-5 yr	21	50.0%	21	50.0%	42	100.0%
6-10 yrs	4	44.4%	5	55.6%	9	100.0%
11-50 yrs	36	75.0%	12	25.0%	48	100.0%
>50 yrs	43	78.2%	12	21.8%	55	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

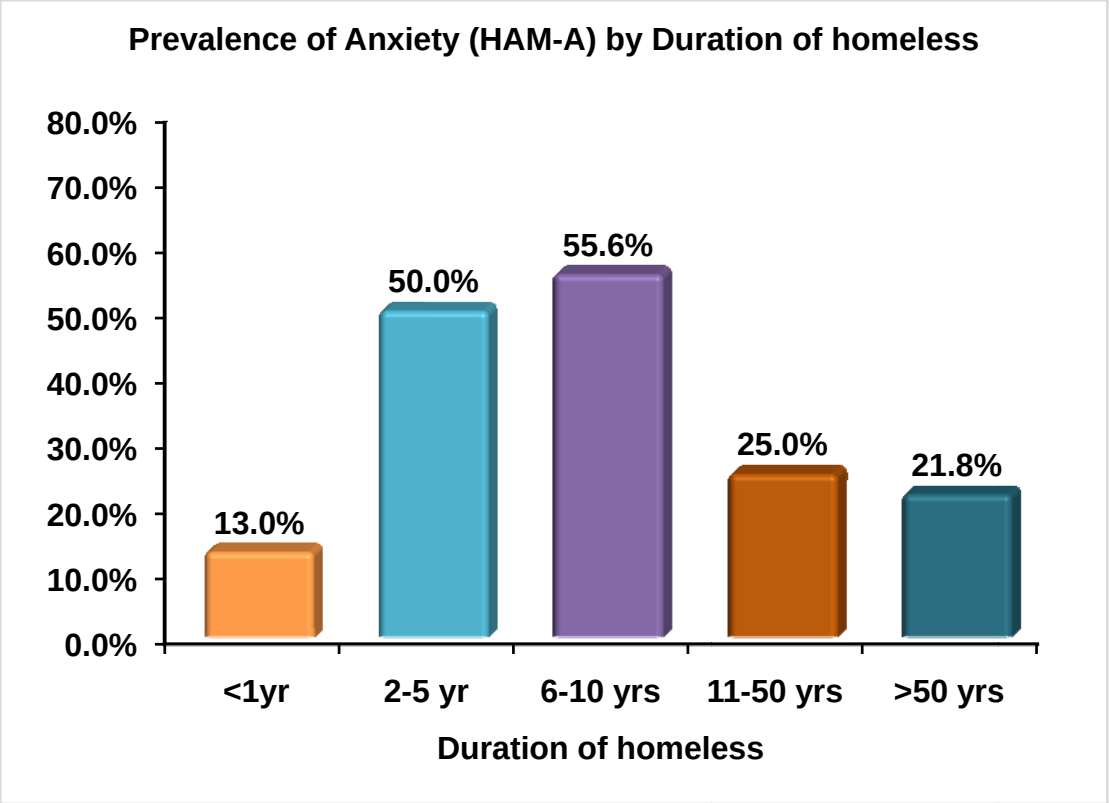


Table 44 shows that the prevalence of anxiety disorder in homeless females of 6 to 10 years duration of homelessness was 55.6% among 200 homeless females. There is statistical significance between prevalence of anxiety and duration of homelessness with p value of 0.001.

PREVALENCE OF ANXIETY BY CHANGE IN PLACE FOR PAST 1 YEAR:

Table 45

Change in place for past 1 year	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	137	74.1%	48	25.9%	185	100.0%
Yes	7	46.7%	8	53.3%	15	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 45 shows, among 200 homeless females, 53.3% of homeless females with change in place for past year had anxiety disorder. There is statistical significance between prevalence of anxiety disorder and change in place for past 1 year and p value is 0.034.

PREVALENCE OF ANXIETY BY PHYSICAL ABUSE:

Table 46

Physical abuse	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	109	69.9%	47	30.1%	156	100.0%
Yes	35	79.5%	9	20.5%	44	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 46 shows, among 200 homeless females, 20.5% of physically abused females had Anxiety disorder. There is no statistical significance for prevalence of anxiety by physical abuse and p value is 0.207

PREVALENCE OF ANXIETY BY SEXUAL ABUSE:

Table 47

Sexual abuse	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	117	71.8%	46	28.2%	163	100.0%
Yes	19	76.0%	6	24.0%	25	100.0%
Not willing	8	66.7%	4	33.3%	12	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 47 shows that among 200 homeless females, 24% of sexually abused females had anxiety disorder. 33% were not willing to give information regarding sexual abuse. There is no statistical significance for prevalence of anxiety by sexual abuse and p value is 0.822

SUICIDE ATTEMPT AND ANXIETY DISORDER:

Table 48

Suicide attempt	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	128	75.3%	42	24.7%	170	100.0%
Yes	16	53.3%	14	46.7%	30	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 48 shows, among 200 homeless females, 46.7% of females with previous suicide attempt history had anxiety disorder. There is statistical significance between prevalence of anxiety and suicide attempt and p value is 0.014

PAST HISTORY OF PSYCHIATRIC ILLNESS AND ANXIETY DISORDER:

Table 49

Past psychiatric illness	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	126	72.4%	48	27.6%	174	100.0%
Yes	18	69.2%	8	30.8%	26	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 49 shows, among 200 homeless females, 30.8% of females with past history of psychiatric illness had anxiety disorder. There is no statistical significance for prevalence of anxiety by past history of psychiatric illness and p value is 0.736

FAMILY HISTORY OF PSYCHIATRIC ILLNESS AND ANXIETY DISORDER:

Table 50

Family history of psychiatric illness	HAM - A					
	Normal		Anxiety		Total	
	N	%	N	%	N	%
No	134	72.4%	51	27.6%	185	100.0%
Yes	10	66.7%	5	33.3%	15	100.0%
Total	144	72.0%	56	28.0%	200	100.0%

Table 50 shows, among 200 homeless females, 33.3% of females with family history of psychiatric illness had anxiety disorder. There is no statistical significance for prevalence of anxiety by family history of psychiatric illness and p value is 0.765

Logistic regression analysis for HAM - D

Factors	Depressed		Odds Ratio	95% for OR		p-value
	N	%		LL	UL	
Age group						
18-30	8	27.6%	1.00			
31-40	7	17.5%	0.56	0.176	1.763	0.017
41-50	30	55.6%	3.28	1.237	8.702	0.105
51-60	24	46.2%	2.25	0.844	5.995	0.009
>60	16	64.0%	4.67	1.473	14.786	0.319
Social support						
Good	20	27.4%	1.00			
Poor	65	51.2%	2.778	1.493	5.170	0.001
Duration of homelessness						
<1yr	29	63.0%	3.23	1.428	7.316	0.005
2-5 yr	13	31.0%	0.85	0.360	2.004	0.709
6-10 yrs	4	44.4%	1.52	0.364	6.318	0.568
11-50 yrs	20	41.7%	1.35	0.609	3.009	0.458
>50 yrs	19	34.5%	1.00			
Change in place for past 1 yr						
No	74	40.0%	1.00			
Yes	11	73.3%	4.12	1.266	13.445	0.019
Place to sleep						
Road	8	21.1%	0.200	0.054	0.745	0.016
Under kutcha	11	44.0%	0.589	0.157	2.207	0.433
Asbestos	7	43.8%	0.583	0.137	2.481	0.466
Public place	5	71.4%	1.875	0.266	13.202	0.528
Shelter home	46	46.0%	0.639	0.207	1.976	0.437
Under Plastic covers	8	57.1%	1.00			

Past psychiatric illness						
No	65	37.4%	1.00			
Yes	20	76.9%	5.59	2.135	14.637	<0.001
Family history of psychiatric illness						
No	77	41.6%	1.00			
Yes	8	53.3%	2.72	1.218	6.082	0.015

When compared to homeless females between age group of 18-30, females between age group of 31 to 40 are 0.5 times more likely to have depression and female between 51 to 60 years of age are 2.2 times more likely to have depression and the data showed statistical significance with p value of 0.017 and 0.009 respectively.

When compared to homeless females with good social support, females with poor social support are 2.7 times more likely to have depression and the data showed statistical significance with p value of 0.001.

When compared to homeless females with duration of homelessness for more than 50 years of age, females with a duration of 1 year of homelessness are 3.2 times more likely to have depression and the data showed statistical significance with p value of 0.005.

When compared to homeless females with no change in place for past 1 year, females with change in place for past 1 year are 4.1 times more likely to have depression and the data showed statistical significance with p value of 0.019.

When compared to homeless females who sleep under plastic covers, females who sleep on roads are 0.2 times more likely to have depression and the data showed statistical significance with p value of 0.016.

When compared to homeless females with no past history of psychiatric illness, females with past history of psychiatric illness are 5.5 times more likely to have depression and the data showed statistical significance with p value of <0.001.

When compared to homeless females with no family history of psychiatric illness, females with family history of psychiatric illness are 2.7 times more likely to have depression and the data showed statistical significance with p value of 0.015.

Logistic regression analysis for HAM - A

Factors	Depressed		Odds Ratio	95% for OR		p-value
	N	%		LL	UL	
Age group						
18-30	7	24.1%	1.00			
31-40	5	12.5%	0.45	0.127	1.592	0.215
41-50	23	42.6%	2.33	0.852	6.384	0.099
51-60	16	30.8%	1.40	0.496	3.930	0.527
>60	5	20.0%	0.79	0.215	2.876	0.716
Per Capita income per month						
<100	14	31.1%	1.00			
100-299	7	22.6%	0.65	0.226	1.850	0.415
300-499	2	7.1%	0.17	0.035	0.819	0.027
500-749	7	21.2%	0.60	0.209	1.697	0.333
750-999	7	31.8%	1.03	0.345	3.095	0.953
1000-1999	9	47.4%	1.99	0.664	5.985	0.219
Nil	10	45.5%	1.84	0.646	5.273	0.253
Social support						
Good	9	12.3%	1.00			
Poor	47	37.0%	4.18	1.905	9.162	<0.001

Duration of homelessness						
<1yr	6	13.0%	1.00			
2-5 yr	21	50.0%	6.67	2.333	19.048	<0.001
6-10 yrs	5	55.6%	8.33	1.734	40.056	0.008
11-50 yrs	12	25.0%	2.22	0.756	6.534	0.147
>50 yrs	12	21.8%	1.86	0.638	5.426	0.256
Change in place for past 1 yr						
No	48	25.9%	1.00			
Yes	8	53.3%	3.26	1.123	9.475	0.030
Suicide attempt						
No	42	24.7%	1.00			
Yes	14	46.7%	2.67	1.201	5.920	0.016

When compared to homeless females between age group of 18-30, females between age group of 41 to 50 are 2.3 times more likely to have anxiety but the data showed no statistical significance with p value of 0.099.

When compared to homeless females with per capita income of less than 100 rupees per month, females with per capita income of 300 to 499 rupees per month are 0.17 times more likely to have anxiety and the data showed statistical significance with p value of 0.027.

When compared to homeless females with good social support, females with poor social support are 4.1 times more likely to have anxiety and the data showed statistical significance with p value of <0.001.

When compared to homeless females with duration of homelessness for less than 1 year, females who remained homeless for 2 to 5 years and 6 to 10 years are 6.6

times and 8.3 times more likely to have anxiety respectively and the data showed statistical significance with p value of <0.001 and 0.008 respectively.

When compared to homeless females with no change in place for past 1 year, females with change in place for past 1 year are 3.2 times more likely to have anxiety and the data showed statistical significance with p value of 0.030.

When compared to homeless females with no previous suicide attempt history, females with previous attempts of suicide are 2.6 times more likely to have anxiety and the data showed statistical significance with p value of 0.016.

DISCUSSION

SOCIO-DEMOGRAPHIC PROFILE OF THE POPULATION:

In the present study, the sample population was from homeless females in Royapuram, Parrys, around Chennai Central railway station and from shelter homes in Chennai. In the sample population of 100 street dwellers, 30 percent were between 31 to 40 years of age which coincides with the study done by Nimesh G. Desai et al[29] among homeless women in Delhi, where most of them were young females. In the present study, among shelter home dwellers, most of them were elderly females.

55 percent of street dwelling females were married and lived with family, 64 percent of shelter home dwellers lost their spouse and because of poor social support came to shelter home. The marital status of homeless females was studied. Majority of homeless women were Hindu by religion.

71.5 percent of homeless females studied up to middle school education and 30 percent were illiterates. This result is high compared to study by Jan L.Hagen et al[49], where 51 percent of homeless females studied less than high school education. This high percentage of poor education might be due to homelessness. The low educational background act as a barrier to employment among homeless women. Being educated provides economic independence, awareness of rights and resources, the capability to fight exploitation and injustice.

24 percent of street dwelling females and 39 percent of shelter home dwellers were unemployed. They depend on others for financial assistance as they were not economically productive and have a considerable effect in the social and economic aspects of their life. Studies by Elliot and Krivo et al,Ferguson et al, Kertesz and

Weiner et al, North et al and Snow and Anderson et al reported that unemployment, job loss and lack of affordable housing are the major pathways to homelessness.[50,51,52,53,54,55]

Among street dwellers, 70 percent of females engaged in semi skilled works like helper in company work, garland making, selling mobile phone accessories, etc.[54] percent of the females work in nearby locality within a distance of 5 kilometres.10 percent of the street dwelling females work for more than 10 hours in a day.

62 percent of street dwelling females were living in nuclear family type, 10 percent of women live alone in streets. Women living with their families continued to manage living by dealing with the difficulties and problems in a situation of deprivation and marginalization. Whereas women living alone in streets have great difficulties in coping with problems of daily living and reported to be a continuous struggle and a huge burden. Studies say that women without family are more vulnerable to undergo various forms of abuse.

In the present study, the prevalence of diabetes and hypertension in homeless female population was found to be 20.5 percent and 12.5 percent respectively and majority of them were not on regular medication. In the present study, prevalence of hypertension among shelter home dwellers were 19%.A study done by Vigneswari et al among Urban Poor South Indian Population reported the prevalence of self-reported hypertension was 24%.[56]

Sedentary lifestyle coupled with unhealthy diet pattern is the major contributing factors for the higher prevalence of diabetes and hypertension in urban poor population. This represents the increased health care needs of the homeless population.

27 percent of street dwellers and 100 percent of shelter home dwellers had poor social support. Social support among females in shelter home was very poor compared to street dwelling females. Social support is a significant factor in life of homeless women as it helps them to meet the challenges in life more efficiently. Study done in Iran by Zahra Zare et al, represents strong correlation between social support and women's general ability for social communication. Social network of homeless people living in streets and public places without shelter are weak due to various reasons like poverty, addiction, immigration and family breakdown. Poor social support itself will lead to exposure of vulnerabilities like abuse.[57]

In our study, the major reason mentioned by shelter home dwellers for becoming homeless was the death of spouse and abandonment by children. This study result coincides with Snow and Anderson (1993)[58], who found that the lack of family support could be the pathway to homelessness.

In the present study among female street dwellers, 23 percent were living in road side pavements, 27 percent lived under kutcha roof on roadside, 16 percent lived under asbestos roof in roadside, 34 percent females lived under plastic covers made temporarily on roadside. The living conditions of homeless females were collected in detail in our study which can be an eye-opener for policy makers for better housing to this population.

38 percent of street dwellers sleep on road side, 7 percent sleep in public places like mandaps, railway station, in shop veranda, etc .It may represent the high risk of vulnerability to sexual predators and violent or abusive people, and also increase the risk of physical problems like communicable diseases, sexually transmitted diseases, etc.

In the present study, among street dwellers, 84 percent females were homeless due to lack of financial affordability even to pay rent for a house and also they have been staying in streets for generations and found difficult to manage even their basic needs in daily basis. Among shelter home dwellers, 30 percent were homeless due to family break down like death of spouse, abandonment by children, etc and 22 percent due to eviction from family. In a study by Van Laere, de Witt, and Kazlinga (2009)[59], found 38% became homeless due to eviction, 35% due to relationship conflict and 22% due to other miscellaneous reasons. The percentage of homeless due to eviction was high compared to our study and the reason was alcohol abuse in them that led to eviction.

55 percent of street dwelling females were living in streets for more than 50 years. It is noteworthy that for the large majority of homeless women in Chennai in search of livelihood and better prospects of living the course of their homelessness has ended up being long term and chronic. As such, while addition of newer homeless groups continues to occur, there is nearly no exit from the homeless populations, thus enlarging the total number continuously to generations. This coincides with the study done by Nimesh G. Desai et al[29] where the period of homelessness in majority of homeless women were generally of long duration.

In shelter homes 46 percent of homeless females were staying for less than 1 year and the main reason was loss of spouse and abandonment by family members.

Compared to shelter home dwellers,14 percent street dwellers had sexual abuse history and 12 percent were not willing to answer the questions related to sexual abuse due to cultural factors and shame. In shelter home dwellers, 11 percent reported of sexual abuse before coming to shelter home. The risk is high in street

dwellers and the factors which increase the risk could be absence of biological parents reported by Putnam et al[60], marital conflicts, substance dependence[61], length of time of homelessness and mental illness.

In the present study, most of the homeless women were exposed to sexual abuse around 10 to 18 years of age and the perpetrators were relatives, friends, unknown males, family members, neighbours. A survey by UNICEF between 2005- 2013 reported 10 % of Indian girls might have experienced sexual violence when they were 10-14 years, 30% during 15- 19 years of age, overall nearly 42% of Indian girls gave gone through the trauma of sexual violence before their teenage. Majority of the participants reported that they were abused during childhood or adolescence[62].It coincides with our study where most of them were sexually abused in adolescent period. By addressing the shortage of affordable housing, it would reduce not only the rate of homelessness but also sexual assault. Stable housing is important in preventing repeated offences.

In the present study, 24 percent of street dwelling females and 20 percent of shelter home dwellers were exposed to physical abuse and many women confessed that it was routine for them to get beaten up. This result coincides with the study by Jan L.Hagen et al[19], in which 20 percent of homeless women were exposed to domestic violence.

10 percent of the street dwellers were using cloth during menstruation, 56 percent of street dwellers were using pad during menstruation and this shows that these people were aware of using pad, but still menstrual hygiene was poor because the frequency of changing pad was low as they didn't have secure place to change.

Hospital access was less than 5 kilometers for homeless women and 90 percent of their medical expenses were less than 100 rupees per month. The utilization of health care services was poor due to mobility of the population, lack of perceived need for treatment due to the inadequate awareness or due the psychopathology.

Hence the socio-demographic profile represents the need of this population that has to be taken into account to prevent worsening of social determinants of health and need for further action.

PREVALENCE OF PSYCHIATRIC MORBIDITY:

Epidemiology of mental health in India shows that there is an increasing trend of mental health morbidities from 9.5 to 102.8 per 1000 persons, and the mental disorders are 2 to 3 times more common in females compared to males[63].

In the present study, prevalence of depression among homeless women was 41.5%, prevalence of anxiety disorder was 27%, Psychotic disorder was 2%, Alcohol dependence was 2% and Dementia was 2.5%.

Most of the studies conclusively report high mental morbidity in this homeless population. As many as 50% of the homeless population are reported to have some form of mental disorder with 70-80% receiving lifetime diagnosis.[64,65,66,67,68,69]

The prevalence of depression was 64 percent among homeless females more than 60 years of age and most them were street dwellers.23 percent of shelter dwellers use tobacco chewing. In a study by Tacchi and Scott 1996, older women had more mental illnesses and more problems with addiction[70].

63% of homeless females with less than 1 year duration of homelessness were found to have depression in the present study and the reason could be acute exposure to homelessness, a major life event faced by them, facing other problems like financial difficulties, lack of secure place to sleep, experiencing various forms of abuse, etc. might be the reason.

34.5 percent homeless females with duration of more than 50 years of homelessness had depression. Studies mentioned that the duration of homelessness was directly proportional to mental morbidity. Long working hours is also a risk factor for depression which coincides with a study by Marianna Virtanen et al, who reported the association between long working hours and onset of depressive symptoms in women.[71]

43.3 percent of physically abused homeless females and 56% of sexually abused females were found to have depression. The prevalence of depression among sexually abused females would have been higher but many women refused to give details.

In the present study, 76.9 percent of homeless females with past history of psychiatric illness had depression. When compared to homeless females with no past history of psychiatric illness, females with past history of psychiatric illness are 5.5 times more likely to have depression.

63.3 percent of homeless females with past history of suicide attempt had depression. When compared to homeless females with no previous suicide attempt history, females with previous attempts of suicide are 2.6 times more likely to have depression. The suicide attempters might have suffered from some form of depression previously also.

Many factors including predisposing genetic influences, disturbed family environment, low level of education, low income, childhood sexual abuse, parental loss, predisposing personality traits, exposure to traumatic events and major adversities, low social support, substance abuse, marital conflicts, previous history of psychiatric illness and recent stressful life events have all been considered to be contributors to the increased vulnerability of women to depression.

The prevalence of anxiety disorder among homeless females in Delhi was found to be 14% by Nimesh G. Desai et al, 2008[29]. In the present study, prevalence of anxiety among homeless females was 27 percent which is high compared to the above mentioned study. Females who were between 51 to 60 years of age, 40 percent of divorced or separated women, 54.5 percent of unskilled workers, females working for long hours [ref] had anxiety disorder. It could be due to maladaptive coping skills.

35.7 percent of homeless women living in joint family and 55.6 percent homeless females with duration of 6 to 10 years of homelessness had anxiety and the reason could be the fear of continuing the same life style for the rest of their life with no improvement in their living conditions and also their financial difficulties to take care of elderly family members with diseases or disabilities.

30.7 percent of homeless women living in roadside had anxiety and they had a fear that their properties might be stolen also and exposure to domestic and sexual violence could be the reason.31.3 percent of females became homeless due to family breakdown and 37 percent of females with poor social support had anxiety disorder. When compared to homeless females with good social support, females with poor social support were 4.1 times more likely to have anxiety.

20.5 percent of homeless females underwent physical abuse and 24 percent of them who underwent sexual abuse had anxiety disorder. The prevalence of anxiety disorder among sexually abused females would have been higher but many females refused to answer.46.7 percent homeless females with suicide attempt history had anxiety disorder.

In the study population, 2 percent of street dwelling females and 2 percent of shelter home dwellers had psychotic disorder but was not on regular medication. The relationship between psychosis and homelessness is obviously complex, one contributing to the other.

Jan L.Hagen[19], reported that chronic mental illness has been recognized as the contributor to homelessness. Both the well recognized patterns of psychiatric illnesses leading to homelessness as well as homelessness contributing to psychiatric illness are common. Homeless women with mental illness often reach extreme levels of marginalization and deprivation leading to a state of destitution. Many of these homeless mentally ill women do not receive treatment for their mental illness due to the procedural issues involved. The situation is much more alarming for those mentally ill women who do get treatment but end up being in a homeless situation or destitution owing to the gross inadequacy of rehabilitation services.

In a study by Nimesh G. Desai et al[29], patients with Severe Mental Illness were found to be low in this study as the relationship between severe mental illness such as schizophrenia and other psychosis is obviously complex and many of these patients could not be reached due to limitations of interview methods. This could be the reason for low prevalence of psychotic illness in our present study.

In the present study, 4 percent of street dwelling females were alcohol dependent. This could be the reason for homelessness as alcohol abusers were evicted from home more often. Studies say that the prevalence of alcohol use among women in India has consistently been estimated at less than 5 percent which coincides with our study[72].

In the present study, 20.5 percent of homeless women consume tobacco daily. This coincides with study by Turner et al, where substance abuse was more prevalent in homeless population.[73]

13 percent of homeless females had past history of psychiatric illness, 7.5 percent had family history of psychiatric illness but not on regular treatment. The reason could be majority of the homeless population were working as daily wagers and find it difficult to attend the outpatient services of the government funded hospitals in daytime thus opting for help from emergency services as and when required. This pattern leads to poor treatment compliance resulting in chronicity of the illnesses. This vicious cycle continues with the continued homelessness.

15 percent of homeless women had suicide attempt history and the reason most women said was due to family conflict, quarrel with husband. 5 persons had family history of suicide. A Study by chowdhary N, Patel et al reported that spousal violence has been found to be specifically associated as an independent risk factor for attempted suicide in women[74].A study reported that women with alcohol abusing spouses were significantly more likely to have faced violence than women (11%) with alcohol abstaining spouses.[75]

FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY:

Since homelessness is the factor that has affected the social determinants of health of this population, the analysis revealed homelessness had an association with the increased prevalence of psychiatric morbidity in this population.

When the factors affected by homelessness were analyzed individually we found that the job opportunities, increase in distance to work place, loss of job, increased cost of transportation, decreased frequency and difficulty in access to transport facilities, difficulty in access to recreational facilities, family disruption, decreased social and family gatherings, decreased monthly income and increased monthly expenses, loss of property and financial loss were associated with presence of psychiatric morbidity in homeless female population. This indicates that homelessness affects the social determinants of health and thus poses a risk for psychiatric morbidity.

CONCLUSION

Homelessness has been associated with the worsening of Social determinant of health and thus has been significantly associated with increased prevalence of psychiatric morbidity in the study population. This suggests a possible etiological significance.

The state should ensure access to affordable basic services such as water, electricity and heating, as well as access to education, employment and healthcare facilities. Adequate attention and efforts must be devoted to addressing the causes of homelessness.

The results indicate the need for shelters, increased health care facilities, increased job opportunities and appropriate working conditions, adequate economic compensation, provision of appropriate housing and social environment in the homeless community. A combination of a humanitarian and a human rights approach is needed to address both the immediate and the long-term needs of homeless women and communities. There is an urgent need to address multiple forms of discrimination that homeless women face.

Permanent shelter homes for homeless women need to be urgently set up in all cities and towns, as homelessness is a perennial year-round problem. Separate shelters should be created for single women, for women with children, for women with mental illness and disabilities, and for women and their families. These need to be long-stay homes with facilities for treatment and rehabilitation. The shelters should be based on human rights standards of adequate housing and should be set up close to sources of livelihood.

Provisions must be provided to access nearby hospitals, police station, ration shop, and all other available government schemes and services. Community Health Departments of hospitals also need to ensure that health care services are provided for homeless women.

Legislation against domestic violence must recognise the link with the right to adequate housing and contain legal protections for women to realise this right, while ensuring the provision of alternative adequate housing for victims of domestic violence and abuse. It should also protect women's right to be free from violent offenders. The government must introduce low-cost housing and public housing schemes for the poor with special incentives for women, including single women and women-headed households to access and own housing.

Interventions at various levels aiming at both individual women and women as a large section of the society are essential. It is essential to develop and adopt strategies that will improve the social status of women, remove gender disparities, provide economic and political power, increase awareness of their rights, and so on.

In summary, concerted efforts at social, political, economic, and legal levels can bring change in the lives of women in large and contribute to the improvement of the mental health of these women.It is the legal and moral responsibility of the Indian government to ensure that the human rights of all citizens, especially the most marginalised, of which homeless women constitute an important category.

STRENGHTS

1. This is the first study to address homeless women problems in spite of the odds.

2. The psychiatric morbidity in homeless women has been studied and this will lead to psychiatric health services to these marginalized women.

3. Overall this study might be an eye-opener to improve the quality of life in these women and deciding on the steps to be taken by the policy holders.

LIMITATIONS

Since it was a heterogeneous group, the data regarding the socio demographic distribution was not clear.

The past psychiatric illness was collected from the medical records and the history. Hence there may be possibility of recall bias.

Interviewer was the only person involved in data collection and hence there is a possibility of observer bias.

FUTURE DIRECTIONS

This study is an attempt to determine the prevalence of psychiatric morbidity in the homeless female population. Further studies in homeless community representing people from various places of Chennai are required with a large sample size and a control group.

In future, the effect of homelessness on various social determinants of health has to be taken into account and measures to be taken accordingly along with community participation in policy decisions and rehabilitative measures.

Psychiatric health care services should be established in the dense homeless population area and establishment of psychiatric health care services should be considered where social determinants of health are at risk.

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INFORMATION SHEET

- You are selected for this study

- We are conducting a study on prevalence and factors associated with psychiatric morbidity among females who are homeless living in suburbs of Chennai

- The purpose of this study is to assess the stressors and sociodemographic profile of homeless females associated with psychiatric morbidity

- We are to inform you that this study has no effect on the condition you are suffering from in any way and no change in treatment and this study is not going to alter your treatment at anytime during the course of your study

- The privacy of the patients in the research will be maintained throughout the study. In the event of any publication or presentation resulting from the research, no personally identifiable information will be shared.

- Taking part in the study is voluntary. You are free to decide whether to participate in this study or to withdraw at anytime, your decision will not result in any loss of benefits to which you are otherwise entitled.

- The results of the special study may be intimated to you at the end of the study period or during the study if anything is found abnormal which may aid in the management or treatment.

Signature of investigator

signature of participant

Signature of Witness

Date :

INFORMED CONSENT FORM

(This is only a guideline-Relavant changes to be made as per the study requirements)

Title : Prevalence and factors associated with psychiatric morbidity among homeless females in Chennai – A cross sectional study

Name of the Participant :

Name of Principal/Co-Investigator : Dr. PERIYAR RANI S

Name of Institution : INSTITUTE OF MENTAL HEALTH, MMC, Chennai

Name and address of the sponsor / agency (ies), if any: No

I _____(name of participant), have read the information in this form (or it has been read to me). I was free to ask any questions and they have been answered. I am exercising my free power of choice, hereby give my consent to be included as a participant in

"PREVALANCE AND FACTORS ASSOCIATED WITH PSYCHIATRIC MORBIDITY AMONG HOMELESS FEMALES IN CHENNAI- A CROSS SECTIONAL STUDY".

1) I have read and understood this consent form and the information provided to me.
2) I have had the consent document explained to me.
3) I have been explained about the nature of the study.
4) I have been explained about my rights and responsibilities by the investigator.
5) I have informed the investigator of all the treatments I am taking or have taken in the past, including any native (alternative) treatments.
6) I am aware of the fact that I can opt out of the study at any time without having to give any reason and this will not affect my future treatment in the hospital.
7) I hereby give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities, Government agencies, and ethics committee. I understand that they may inspect my original records.
8) I understand that my identity will be kept confidential if my data are publicly presented.
9) I have had my questions answered to my satisfaction.
10) I consent voluntarily to participate as a participant in the research study.

ஆய்வு ஒப்புதல் படிவம் :

ஆய்வின் தலைப்பு : சென்னை பகுதிகளில் வாழும் வீடற்ற பெண்களுக்கு ஏற்படும் மன நோய் தாக்கமும் அதன் காரணிகளும் குறித்து ஓர் ஆய்வு.

ஆய்வாளரின் பெயர் : மரு. பெரியார் ராணி. செ

மருத்துவ நிலையம் : அரசு மன நல காப்பகம், சென்னை

..... எனும் நான் எனக்கு கொடுக்கப்பட்ட தகவல் தாளினை படித்து புரிந்து கொண்டேன்.

நான் என்னுடைய சுய நினைவுடனும் மற்றும் முழு சுதந்திரத்துடனும் இந்த ஆய்வில் என்னை சேர்த்துக் கொள்ள சம்மதிக்கிறேன்.

நான் எனக்கு கொடுக்கப்பட்ட தகவல் தாளினை படித்து புரிந்து கொண்டேன்.

எனக்கு இந்த ஆய்வின் ஒப்புதல் படிவம் விளக்கப்பட்டது.

எனக்கு இந்த ஆய்வின் நோக்கமும் விவரங்களும் விளக்கப்பட்டது.

எனக்கு என்னுடைய உரிமைகளை பற்றி விளக்கப்பட்டது.

நான் இதற்கு முன்பு எடுத்துக்கொண்ட அனைத்து மருத்துவ முறைகளை பற்றி தெரிவித்திருக்கிறேன்.

இந்த ஆய்வில் இருந்து நான் எந்நேரமும் பின் வாங்கலாம் என்பதையும் அதனால் எந்த பாதிப்பும் ஏற்படாது என்பதையும் நான் புரிந்து கொண்டேன்.

என்னை பற்றிய எந்த தகவல்களும் அடையாளமும் வெளியிடப்படமாட்டாது என்பதை நான் புரிந்து கொண்டேன்.

என்னுடைய முழு சுதந்திரத்துடன் இந்த ஆய்வில் என்னை சேர்த்துக் கொள்ள சம்மதிக்கிறேன்.

பங்கேற்பாளர் பெயர் மற்றும் கையொப்பம்..... தேதி .....

நடுநிலைசாட்சியாளர் பெயர் மற்றும் கையொப்பம்..... தேதி .....

பாதுகாவலர் பெயர் மற்றும் கையொப்பம்..... தேதி .....

ஆய்வாளர் பெயர் மற்றும் கையொப்பம்..... தேதி .....

ஆய்வு ஒப்புதல் தாள் :

ஆய்வின் தலைப்பு : சென்னை பகுதிகளில் வாழும் வீடற்ற பெண்களுக்கு ஏற்படும் மன நோய் தாக்கமும் அதன் காரணிகளும் குறித்து ஓர் ஆய்வு.

ஆய்வாளரின் பெயர் : மரு. பெரியார் ராணி. செ

மருத்துவ நிலையம் : அரசு மன நல காப்பகம், சென்னை

ஆய்வின் நோக்கம்:

இந்த ஆய்வில், சென்னை பகுதியில் வாழும் வீடற்ற பெண்களுக்கு ஏற்படும் மன நோய் தாக்கமும் அதன் காரணிகளையும் குறித்து ஓர் ஆய்வு செய்யப்படுகிறது.

செய்முறை விளக்கம்:

இந்த ஆய்வு, சென்னை பகுதியில் வசிக்கும் வீடு இல்லாமல் தெரு ஓரங்களில் வாழும் பெண்களுக்கு நடத்தப்படுகிறது. இந்த ஆய்வு அப்பெண்களின் முழு சம்மதத்துடன் நடத்தப்படுகிறது. இவர்களுக்கு GHQ-12, HAMD, HAMA, SCAN ஆகிய கேள்வி தாள் மூலம் மதிப்பீடு செய்யப்படுகிறது. இரத்த பரிசோதனைகள் செய்யப்படமாட்டாது. மருந்துகள் எதுவும் வழங்கப்படமாட்டாது.

ஆய்வினால் தாங்கள் அடையும் பயன்கள்:

சுய தீங்கிற்கான ஆபத்து காரணிகள் தங்களிடம் கண்டறியப்பட்டால் அதற்குரிய சிகிச்சை தங்களுக்கு அளிக்கப்படும்.

தகவலின் இரகசிய தன்மை:

தங்களுடைய சுய விளக்கம் மருத்துவக் குறிப்புகள் மற்றும் மருத்துவ சோதனை அறிக்கை அனைத்தும் ரகசியமாக வைப்பதற்கு தனியுரிமை அளிக்கப்படும். இதன் முடிவுகளை வெளியிடும் போதோ அல்லது ஆய்வின் போதோ தங்களது பெயரையோ அடையாளங்களையோ வெளியிடமாட்டோம் என்பதையும் தெரிவித்துக் கொள்கிறோம்.

இந்த ஆய்வில் தாங்கள் பங்கேற்காவிட்டாலும் தங்களுடைய மருத்துவ உதவியில் எந்தவொரு பின்விளைவுகளும் ஏற்படாது.

இந்த ஆய்வில் பங்கேற்பது தங்களுடைய விருப்பத்தின் பேரில் தான் மேலும் நீங்கள் எந்நேரமும் இந்த ஆய்விலிருந்து பின்வாங்கலாம் என்பதையும் தெரிவித்துக் கொள்கிறேன்.

ஆய்வாளர் கையொப்பம் **பங்கேற்பாளர் கையொப்பம்**

நாள் நாள்

Table 1

A	**Serial no.**		
B	**Age**		
C	**Age group**	**1.18-20 2.21-30. 3.31-40, 4.41-50, 5.51-60, 6.61-70, 7.>70**	
D	**Education**	**1.Profession 2.Graduate, 3.post High school, 4.high school 5.middle 6.primary 7.illiterate**	
E	**Marital**	**1.married. 2.unmarried 3.Divorced 4.loss of spouse**	
F	**OCCUPATION**	**1.unskilled 2.semi Skilled 3.Skilled 4.Unemployed**	
G	**JOB DISTANCE**	**1.<5 Kms 2.5-10 Kms 3.10-20 kms 4.>20 kms. 5.work in shelter. 6.nil**	
H	**INCOME/month**	**1.<100 2.100-299 3.300-499 4.500-749 5.750-999 6.1000-1999**	

I	WORKING HOURS/DAY	1.<6 hrs 2.7-8 hrs 3.9-10. hrs 4.10-12 hrs 5.nil working	
J	cost/day for transport	1.10-50rs 2.51-100 rs 3.101-200 rs 4.>200 rs	
K	Religion	1.Hindu 2.Christian 3.Muslim 4.others	
L	Socio economic	1.lower 2.upper lower 3.lower middle	
M	Family type	1.Nuclear 2.Joint 3.Alone	
N	Social support	1.Good 2.Poor	
O	Living arangement	1.Roadside 2.Kutcha roof 3.Asbestos covered	
P	Reason for homeless	1.Lack of affordability due to finance 2.unemployment 3.Forced eviction 4.Breakdown of family 5.Slum demolition 6.Domestic violence 7.Inadequacy of law	
Q	Area from displacement		
R	Duration of homelessness	1. <1yr 2.2-5 yr 3.6-10 yrs 4.11-30 yrs 4.31-50 yrs 5.>51 yrs	

S	Current place year	1.<1 yr 2.2-5 yrs 3.6-10 yrs 4.>11 yrs	
T	Change in place fr past 1 yr	1.NO 2.Yes	
U	Place to sleep	1.Road 2.under kutcha 3.Asbestos 4.public place 5.Shelter home	
V	Shelter home stay	1.NO 2.Yes	
W	Sexual abuse	1.NO 2.Yes 3.Not willing	
X	Physical abuse	1.NO 2.Yes	
Y	Drinking water source	1.corporation water 2.Tank water	
Z	Electricity	1.Artificial lamp/ Street lamp 2.No facility	
AA	Toilet facility	1.public toilet 2.open defecation	
AB	Menstrual hygiene	1.Pad 2.cloth 3.others 4.Menopause 5.Hysterectomy	
AC	Hospital access	1)1-2 km 2)3-5 km 3)6-10 km	
AD	Medical expense/month	1.<100 rs 2.100-500 3.>500 rs	
AE	Past psy illness	1.NO 2.Yes	
AF	Family psy illness	1.NO 2.Yes	

AG	Substance H/O	1.NO 2.tobacco chewing 3.alcohol 4.smoking 5.cannabis 6.others	
AH	Suicide attempt	1.NO 2.Yes	
AI	Family H/O suicide	1.NO 2.Yes	
AJ	physical illness	1.Diabetes 2.somatic c/o 3.Hypertension 4.thyroid 5.TB 6.Heart disease 7.Knee pain 8.Lower back ache 9.Paralysis	
AK	MINI	1.Depression 2.Bipolar 3.Anxiety 4.OCD 5.alcohol dependence 6.Psychotic 7.Nil 8.Dementia 9.PTSD 10.Substance abuse 11.eating disorder 12.Antisocial	
AL	HAM-D	1.mild 2.Moderate 3.Severe	
AM	HAM-A	1.mild 2.Moderate 3.Severe	

ANNEXURE - III

SCALES

M.I.N.I.

MINI INTERNATIONAL NEUROPSYCHIATRIC INTERVIEW

English Version 6.0.0

DSM-IV

USA: **D. Sheehan[1], J. Janavs, K. Harnett-Sheehan, M. Sheehan, C. Gray.**
[1]University of South Florida College of Medicine- Tampa, USA

EU: **Y. Lecrubier[2], E. Weiller, T. Hergueta, C. Allgulander, N. Kadri, D. Baldwin, C. Even.**
[2]Centre Hospitalier Sainte-Anne – Paris, France

DISCLAIMER

Our aim is to assist in the assessment and tracking of patients with greater efficiency and accuracy. Before action is taken on any data collected and processed by this program, it should be reviewed and interpreted by a licensed clinician.

This program is not designed or intended to be used in the place of a full medical and psychiatric evaluation by a qualified licensed physician – psychiatrist. It is intended only as a tool to facilitate accurate data collection and processing of symptoms elicited by trained personnel.

M.I.N.I. 6.0.0 (January 1, 2010)

Patient Name:		*Patient Number:*	
Date of Birth:		*Time Interview Began:*	
Interviewer's Name:		*Time Interview Ended:*	
ate of Interview:		*Total Time:*	

	MODULES	TIME FRAME	MEETS CRITERIA	DSM-IV-TR	ICD-10	PRIMARY DIAGNOSIS
A	MAJOR DEPRESSIVE EPISODE	Current (2 weeks)	☐			
		Past	☐			
		Recurrent	☐			
	MAJOR DEPRESSIVE DISORDER	Current (2 weeks)	☐	296.20-296.26 Single	F32.x	☐
		Past	☐	296.20-296.26 Single	F32.x	☐
		Recurrent	☐	296.30-296.36 Recurrent	F33.x	☐
B	SUICIDALITY	Current (Past Month) ☐ Low ☐ Moderate ☐ High	☐			
C	MANIC EPISODE	Current	☐			
		Past	☐			
	HYPOMANIC EPISODE	Current	☐			
		Past	☐	☐ Not Explored		
	BIPOLAR I DISORDER	Current	☐	296.0x-296.6x	F30.x- F31.9	☐
		Past	☐	296.0x-296.6x	F30.x- F31.9	☐
	BIPOLAR II DISORDER	Current	☐	296.89	F31.8	☐
		Past	☐	296.89	F31.8	☐
	BIPOLAR DISORDER NOS	Current	☐	296.80	F31.9	☐
		Past	☐	296.80	F31.9	☐
D	PANIC DISORDER	Current (Past Month)	☐	300.01/300.21	F40.01-F41.0	☐
		Lifetime	☐			
E	AGORAPHOBIA	Current	☐	300.22	F40.00	☐
	SOCIAL PHOBIA (Social Anxiety Disorder)	Current (Past Month)				
		Generalized	☐	300.23	F40.1	☐
		Non-Generalized	☐	300.23	F40.1	☐
G	OBSESSIVE-COMPULSIVE DISORDER	Current (Past Month)	☐	300.3	F42.8	☐
H	POSTTRAUMATIC STRESS DISORDER	Current (Past Month)	☐	309.81	F43.1	☐
I	ALCOHOL DEPENDENCE	Past 12 Months	☐	303.9	F10.2x	☐
	ALCOHOL ABUSE	Past 12 Months	☐	305.00	F10.1	☐
J	SUBSTANCE DEPENDENCE (Non-alcohol)	Past 12 Months	☐	304.00-.90/305.20-.90	F11.1-F19.1	☐
	SUBSTANCE ABUSE (Non-alcohol)	Past 12 Months	☐	304.00-.90/305.20-.90	F11.1-F19.1	☐
K	PSYCHOTIC DISORDERS	Lifetime	☐	295.10-295.90/297.1/	F20.xx-F29	☐
		Current	☐	297.3/293.81/293.82/	293.89/298.8/298.9	
	MOOD DISORDER WITH	Lifetime	☐	296.24/296.34/296.44	F32.3/F33.3/	☐
	PSYCHOTIC FEATURES	Current	☐	296.24/296.34/296.44	F30.2/F31.2/F31.5 F31.8/F31.9/F39	☐
L	ANOREXIA NERVOSA	Current (Past 3 Months)	☐	307.1	F50.0	☐
M	BULIMIA NERVOSA	Current (Past 3 Months)	☐	307.51	F50.2	☐
	ANOREXIA NERVOSA, BINGE EATING/PURGING TYPE	Current	☐	307.1	F50.0	☐
N	GENERALIZED ANXIETY DISORDER	Current (Past 6 Months)	☐	300.02	F41.1	☐
O	MEDICAL, ORGANIC, DRUG CAUSE RULED OUT		☐ No	☐ Yes ☐ Uncertain		
P	ANTISOCIAL PERSONALITY DISORDER	Lifetime	☐	301.7	F60.2	☐

IDENTIFY THE PRIMARY DIAGNOSIS BY CHECKING THE APPROPRIATE CHECK BOX.
(Which problem troubles you the most or dominates the others or came first in the natural history?)

The translation from DSM-IV-TR to ICD-10 coding is not always exact. For more information on this topic see Schulte-Markwort. Crosswalks ICD-10/DSM-IV-TR. Hogrefe & Huber Publishers 2006.

GENERAL INSTRUCTIONS

The M.I.N.I. was designed as a brief structured interview for the major Axis I psychiatric disorders in DSM-IV and ICD-10. Validation and reliability studies have been done comparing the M.I.N.I. to the SCID-P for DSM-III-R and the CIDI (a structured interview developed by the World Health Organization). The results of these studies show that the M.I.N.I. has similar reliability and validity properties, but can be administered in a much shorter period of time (mean 18.7 ± 11.6 minutes, median 15 minutes) than the above referenced instruments. It can be used by clinicians, after a brief training session. Lay interviewers require more extensive training.

INTERVIEW:

In order to keep the interview as brief as possible, inform the patient that you will conduct a clinical interview that is more structured than usual, with very precise questions about psychological problems which require a yes or no answer.

GENERAL FORMAT:

The M.I.N.I. is divided into **modules** identified by letters, each corresponding to a diagnostic category.

- At the beginning of each diagnostic module (except for psychotic disorders module), screening question(s) corresponding to the main criteria of the disorder are presented in a **gray box**.
- At the end of each module, diagnostic box(es) permit the clinician to indicate whether diagnostic criteria are met.

CONVENTIONS:

Sentences written in « normal font » should be read exactly as written to the patient in order to standardize the assessment of diagnostic criteria.

Sentences written in « CAPITALS » should not be read to the patient. They are instructions for the interviewer to assist in the scoring of the diagnostic algorithms.

Sentences written in « **bold** » indicate the time frame being investigated. The interviewer should read them as often as necessary. Only symptoms occurring during the time frame indicated should be considered in scoring the responses.

Answers with an arrow above them (↓) indicate that one of the criteria necessary for the diagnosis(es) is not met. In this case, the interviewer should go to the end of the module, circle « **NO** » in all the diagnostic boxes and move to the next module.

When terms are separated by a *slash (/)* the interviewer should read only those symptoms known to be present in the patient (for example, question G6).

Phrases in (parentheses) are clinical examples of the symptom. These may be read to the patient to clarify the question.

RATING INSTRUCTIONS:

All questions must be rated. The rating is done at the right of each question by circling either Yes or No. Clinical judgment by the rater should be used in coding the responses. Interviewers need to be sensitive to the diversity of cultural beliefs in their administration of questions and rating of responses. The rater should ask for examples when necessary, to ensure accurate coding. The patient should be encouraged to ask for clarification on any question that is not absolutely clear.
The clinician should be sure that each dimension of the question is taken into account by the patient (for example, time frame, frequency, severity, and/or alternatives).
Symptoms better accounted for by an organic cause or by the use of alcohol or drugs should not be coded positive in the M.I.N.I. The M.I.N.I. Plus has questions that investigate these issues.

For any questions, suggestions, need for a training session or information about updates of the M.I.N.I., please contact:
David V Sheehan, M.D., M.B.A.
University of South Florida College of Medicine
3515 East Fletcher Ave, Tampa, FL USA 33613-4706
tel : +1 813 974 4544; fax : +1 813 974 4575
e-mail : dsheehan@health.usf.edu

Yves Lecrubier, M.D. / Christian Even, M.D.
Centre Hospitalier Sainte-Anne
Clinique des Maladies Mentales de l'Encéphale
100 rue de la Santé, 75674 Paris Cedex 14, France
tel : +33 (0) 1 53 80 49 41; fax : +33 (0) 1 45 65 88 54
e-mail: ylecrubier@noos.fr or even-sainteanne@orange.fr

A. MAJOR DEPRESSIVE EPISODE

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

A1	a	Were you ever depressed or down, most of the day, nearly every day, for two weeks?	NO	YES
		IF NO, CODE NO TO **A1b**: IF YES ASK:		
	b	For the past two weeks, were you depressed or down, most of the day, nearly every day?	NO	YES
A2	a	Were you ever much less interested in most things or much less able to enjoy the things you used to enjoy most of the time, for two weeks?	NO	YES
		IF NO, CODE NO TO **A2b**: IF YES ASK:		
	b	In the past two weeks, were you much less interested in most things or much less able to enjoy the things you used to enjoy, most of the time?	NO	YES
			\	
		IS **A1a** OR **A2a** CODED YES?	NO	YES

A3 IF **A1b** OR **A2b** = YES: EXPLORE THE CURRENT AND THE MOST SYMPTOMATIC PAST EPISODE, OTHERWISE
IF **A1b** AND **A2b** = NO: EXPLORE ONLY THE MOST SYMPTOMATIC PAST EPISODE

Over that two week period, when you felt depressed or uninterested:

		Past 2 Weeks		Past Episode	
a	Was your appetite decreased or increased nearly every day? Did your weight decrease or increase without trying intentionally (i.e., by ±5% of body weight or ±8 lb or ± 3.5 kg, for a 160 lb/70 kg person in a month)? IF YES TO EITHER, CODE YES.	NO	YES	NO	YES
b	Did you have trouble sleeping nearly every night (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)?	NO	YES	NO	YES
c	Did you talk or move more slowly than normal or were you fidgety, restless or having trouble sitting still almost every day?	NO	YES	NO	YES
d	Did you feel tired or without energy almost every day?	NO	YES	NO	YES
e	Did you feel worthless or guilty almost every day?	NO	YES	NO	YES
	IF YES, ASK FOR EXAMPLES. THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA. Current Episode ⓪ No ⓪ Yes; Past Episode ⓪ No ⓪ Yes				
f	Did you have difficulty concentrating or making decisions almost every day?	NO	YES	NO	YES
g	Did you repeatedly consider hurting yourself, feel suicidal, or wish that you were dead? Did you attempt suicide or plan a suicide? IF YES TO EITHER, CODE YES.	NO	YES	NO	YES
A4	Did these symptoms cause significant problems at home, at work, socially, at school or in some other important way?	NO	YES	NO	YES

A5 In between 2 episodes of depression, did you ever have an interval of at least 2 months, without any significant depression or any significant loss of interest? NO YES

ARE **5** OR MORE ANSWERS (**A1-A3**) CODED YES AND IS **A4** CODED YES FOR THAT TIME FRAME?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **A5** IS CODED YES, CODE YES FOR RECURRENT.

NO	YES
MAJOR DEPRESSIVE EPISODE	
CURRENT	⑦
PAST	⑦
RECURRENT	⑦

A6 a How many episodes of depression did you have in your lifetime? _____

Between each episode there must be at least 2 months without any significant depression.

B. SUICIDALITY

				Points
	In the past month did you:			
B1	Suffer any accident? This includes taking too much of your medication accidentally. IF NO TO B1, SKIP TO B2; IF YES, ASK B1a:	NO	YES	0
B1a	Plan or intend to hurt yourself in any accident either actively or passively (e.g. by not avoiding a risk)? IF NO TO B1a, SKIP TO B2; IF YES, ASK B1b:	NO	YES	0
B1b	Intend to die as a result of any accident?	NO	YES	0
B2	Feel hopeless?	NO	YES	1
B3	Think that you would be better off dead or wish you were dead?	NO	YES	1
B4	Think about hurting or injuring yourself or have mental images of harming yourself, with at least some intent or awareness that you might die as a result? How many times? _____	NO	YES	4
B5	Think about suicide (killing yourself)? How many times? _____ IF NO TO B5, SKIP TO B7. OTHERWISE ASK:	NO	YES	6

Frequency / Intensity

Frequency		Intensity	
Occasionally	⑦	Mild	⑦
Often	⑦	Moderate	⑦
Very often	⑦	Severe	⑦

B6	Feel unable to control these impulses?	NO	YES	8
B7	Have a suicide method or plan in mind (e.g. how, when or where)? IF NO TO B7, SKIP TO B9.	NO	YES	8
B8	Intend to follow through on a suicide plan?	NO	YES	8
B9	Intend to die as a result of a suicidal act?	NO	YES	8
B10	Take any active steps to prepare to injure yourself or to prepare for a suicide attempt in which you expected or intended to die? How many times? _____	NO	YES	9
B11	Injure yourself on purpose without intending to kill yourself?	NO	YES	4
B12	Attempt suicide (to kill yourself)? A suicide attempt means you did something where you could possibly be injured, with at least a slight intent to die. IF NO, SKIP TO B13: How many times? _____ Hope to be rescued / survive ⑦ Expected / intended to die ⑦	NO	YES	9
	In your lifetime:			
B13	Did you ever make a suicide attempt (try to kill yourself)?	NO	YES	4

"A suicide attempt is any self injurious behavior, with at least some intent (> 0) to die as a result or if intent can be inferred, e.g. if it is clearly not an accident or the individual thinks the act could be lethal, even though denying intent."
(C-CASA definition) - Posner K et al. Am J Psychiatry 164:7, July 2007.

IS AT LEAST 1 OF THE ABOVE (EXCEPT B1) CODED YES?

NO YES

SUICIDALITY CURRENT

1-8 points	Low	⑦
9-16 points	Moderate	⑦
≥ 17 points	High	⑦

IF YES, ADD THE TOTAL POINTS FOR THE ANSWERS (B1-B13) CHECKED 'YES' AND SPECIFY THE SUICIDALITY SCORE AS INDICATED IN THE DIAGNOSTIC BOX:

MAKE ANY ADDITIONAL COMMENTS ABOUT YOUR ASSESSMENT OF THIS PATIENT'S CURENT AND NEAR FUTURE SUICIDALITY IN THE SPACE BELOW:

C. MANIC AND HYPOMANIC EPISODES

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN MANIC AND HYPOMANIC DIAGNOSTIC BOXES, AND MOVE TO NEXT MODULE)

Do you have any family history of manic depressive illness or bipolar disorder, or any family member who had mood swings treated with a medication like lithium, sodium valproate (Depakote) or lamotrigine (Lamictal)? NO YES

THIS QUESTION IS NOT A CRITERION FOR BIPOLAR DISORDER, BUT IS ASKED TO INCREASE THE CLINICIAN'S VIGILANCE ABOUT THE RISK FOR BIPOLAR DISORDER .

IF YES, PLEASE SPECIFY WHO:_____

C1 a Have you **ever** had a period of time when you were feeling 'up' or 'high' or 'hyper' or so full of energy or full of yourself that you got into trouble, - or that other people thought you were not your usual self? (Do not consider times when you were intoxicated on drugs or alcohol.) NO YES

IF PATIENT IS PUZZLED OR UNCLEAR ABOUT WHAT YOU MEAN BY 'UP' OR 'HIGH' OR 'HYPER', CLARIFY AS FOLLOWS: By 'up' or 'high' or 'hyper' I mean: having elated mood; increased energy; needing less sleep; having rapid thoughts; being full of ideas; having an increase in productivity, motivation, creativity, or impulsive behavior; phoning or working excessively or spending more money.

IF NO, CODE NO TO **C1b**: IF YES ASK:

b Are you currently feeling 'up' or 'high' or 'hyper' or full of energy? NO YES

C2 a Have you **ever** been persistently irritable, for several days, so that you had arguments or verbal or physical fights, or shouted at people outside your family? Have you or others noticed that you have been more irritable or over reacted, compared to other people, even in situations that you felt were justified? NO YES

IF NO, CODE NO TO **C2b**: IF YES ASK:

b Are you currently feeling persistently irritable? NO YES

\

IS **C1a** OR **C2a** CODED YES? NO YES

C3 IF **C1b** OR **C2b** = YES: EXPLORE THE CURRENT AND THE MOST SYMPTOMATIC **PAST** EPISODE, OTHERWISE
IF **C1b** AND **C2b** = NO: EXPLORE ONLY THE MOST SYMPTOMATIC PAST EPISODE

During the times when you felt high, full of energy, or irritable did you:

		Current Episode		Past Episode	
a	Feel that you could do things others couldn't do, or that you were an especially important person? IF YES, ASK FOR EXAMPLES. THE EXAMPLES ARE CONSISTENT WITH A DELUSIONAL IDEA. Current Episode ⑦ No ⑦ Yes Past Episode ⑦ No ⑦ Yes	NO	YES	NO	YES
b	Need less sleep (for example, feel rested after only a few hours sleep)?	NO	YES	NO	YES
c	Talk too much without stopping, or so fast that people had difficulty understanding?	NO	YES	NO	YES
d	Have racing thoughts?	NO	YES	NO	YES

		Current Episode		Past Episode	
e	Become easily distracted so that any little interruption could distract you?	NO	YES	NO	YES
f	Have a significant increase in your activity or drive, at work, at school, socially or sexually or did you become physically or mentally restless?	NO	YES	NO	YES
g	Want so much to engage in pleasurable activities that you ignored the risks or consequences (for example, spending sprees, reckless driving, or sexual indiscretions)?	NO	YES	NO	YES

C3 SUMMARY: WHEN RATING CURRENT EPISODE: NO YES NO YES

IF C1b IS NO, ARE 4 OR MORE C3 ANSWERS CODED YES?
IF C1b IS YES, ARE 3 OR MORE C3 ANSWERS CODED YES?

WHEN RATING PAST EPISODE:
IF C1a IS NO, ARE 4 OR MORE C3 ANSWERS CODED YES?
IF C1a IS YES, ARE 3 OR MORE C3 ANSWERS CODED YES?

CODE YES ONLY IF THE ABOVE 3 OR 4 SYMPTOMS OCCURRED DURING THE SAME TIME PERIOD.

RULE: ELATION/EXPANSIVENESS REQUIRES ONLY THREE C3 SYMPTOMS, WHILE IRRITABLE MOOD ALONE REQUIRES 4 OF THE C3 SYMPTOMS.

C4 What is the longest time these symptoms lasted?

a)	3 days or less	⑦		⑦
b)	4 to 6 days	⑦		⑦
c)	7 days or more	⑦		⑦

C5 Were you hospitalized for these problems? NO YES NO YES

IF YES, STOP HERE AND CIRCLE YES IN MANIC EPISODE FOR THAT TIME FRAME.

C6 Did these symptoms cause significant problems at home, at work, socially in your relationships with others, at school or in some other important way? NO YES NO YES

ARE **C3** SUMMARY AND **C5** AND **C6** CODED YES?

OR

ARE **C3** SUMMARY AND **C4c** AND **C6** CODED YES AND IS **C5** CODED NO?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

NO	YES
MANIC EPISODE	
CURRENT	⑦
PAST	⑦

IS C3 SUMMARY CODED **YES** AND ARE **C5** AND **C6** CODED NO AND IS EITHER **C4b** OR **C4c** CODED YES?

OR

ARE **C3** SUMMARY AND **C4b** AND **C6** CODED YES AND IS **C5** CODED NO?

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **YES** TO CURRENT MANIC EPISODE, THEN CODE CURRENT HYPOMANIC EPISODE AS **NO.**

IF YES TO PAST MANIC EPISODE, THEN CODE PAST HYPOMANIC EPISODE AS **NOT EXPLORED.**

HYPOMANIC EPISODE

CURRENT ⑦ **NO**
⑦ **YES**
PAST ⑦ **NO**
⑦ **YES**
⑦ **NOT EXPLORED**

ARE **C3** SUMMARY AND **C4a** CODED YES AND IS **C5** CODED NO?

HYPOMANIC SYMPTOMS

SPECIFY IF THE EPISODE IS CURRENT AND / OR PAST.

IF **YES** TO CURRENT MANIC EPISODE OR HYPOMANIC EPISODE, THEN CODE CURRENT HYPOMANIC SYMPTOMS AS **NO.**

IF **YES** TO PAST MANIC EPISODE OR YES TO PAST HYPOMANIC EPISODE, THEN CODE PAST HYPOMANIC SYMPTOMS AS **NOT EXPLORED.**

CURRENT ⑦ **NO**
⑦ **YES**
PAST ⑦ **NO**
⑦ **YES**
⑦ **NOT EXPLORED**

C7 a) IF MANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK:
Did you have 2 or more of these (manic) episodes lasting 7 days or more (**C4c**) in your lifetime (including the current episode if present)? NO YES

b) IF MANIC OR HYPOMANIC EPISODE IS POSITIVE FOR EITHER CURRENT OR PAST ASK:
Did you have 2 or more of these (hypomanic) episodes lasting just 4 to 6 days (**C4b**) in your lifetime (including the current episode)? NO YES

c) IF THE PAST "HYPOMANIC SYMPTOMS" CATEGORY IS CODED POSITIVE ASK:
Did you have these hypomanic symptoms lasting only 1 to 3 days (**C4a**) 2 or more times in your lifetime, (including the current episode if present)? NO YES

D. PANIC DISORDER

(\ MEANS : CIRCLE NO IN D5, D6 AND D7 AND SKIP TO E1)

D1	a	Have you, on more than one occasion, had spells or attacks when you **suddenly** felt anxious, frightened, uncomfortable or uneasy, even in situations where most people would not feel that way?	\ NO	YES
	b	Did the spells surge to a peak within 10 minutes of starting?	\ NO	YES
D2		At any time in the past, did any of those spells or attacks come on unexpectedly or occur in an unpredictable or unprovoked manner?	\ NO	YES
D3		Have you ever had one such attack followed by a month or more of persistent concern about having another attack, or worries about the consequences of the attack - or did you make a significant change in your behavior because of the attacks (e.g., shopping only with a companion, not wanting to leave your house, visiting the emergency room repeatedly, or seeing your doctor more frequently because of the symptoms)?	NO	YES
D4		**During the worst attack that you can remember:**		
	a	Did you have skipping, racing or pounding of your heart?	NO	YES
	b	Did you have sweating or clammy hands?	NO	YES
	c	Were you trembling or shaking?	NO	YES
	d	Did you have shortness of breath or difficulty breathing?	NO	YES
	e	Did you have a choking sensation or a lump in your throat?	NO	YES
	f	Did you have chest pain, pressure or discomfort?	NO	YES
	g	Did you have nausea, stomach problems or sudden diarrhea?	NO	YES
	h	Did you feel dizzy, unsteady, lightheaded or faint?	NO	YES
	i	Did things around you feel strange, unreal, detached or unfamiliar, or did you feel outside of or detached from part or all of your body?	NO	YES
	j	Did you fear that you were losing control or going crazy?	NO	YES
	k	Did you fear that you were dying?	NO	YES
	l	Did you have tingling or numbness in parts of your body?	NO	YES
	m	Did you have hot flushes or chills?	NO	YES
D5		ARE BOTH **D3**, AND **4** OR MORE **D4** ANSWERS, CODED YES? IF YES TO D5, SKIP TO D7.	NO	YES *PANIC DISORDER LIFETIME*
D6		IF **D5** = NO, ARE ANY D4 ANSWERS CODED YES? THEN SKIP TO **E1**.	NO	YES *LIMITED SYMPTOM ATTACKS LIFETIME*

D7 In the past month, did you have such attacks repeatedly (2 or more), and did you have persistent concern about having another attack, or worry about the consequences of the attacks, or did you change your behavior in any way because of the attacks?

NO YES

PANIC DISORDER CURRENT

E. AGORAPHOBIA

E1 Do you feel anxious or uneasy in places or situations where help might not be available or escape might be difficult, like being in a crowd, standing in a line (queue), when you are alone away from home or alone at home, or when crossing a bridge, or traveling in a bus, train or car or where you might have a panic attack or the panic-like symptoms we just spoke about?

NO YES

IF **E1** = NO, CIRCLE NO IN **E2**.

E2 Do you fear these situations so much that you avoid them, or suffer through them, or need a companion to face them?

NO YES

AGORAPHOBIA CURRENT

IS **E2** (CURRENT AGORAPHOBIA) CODED YES

and

IS **D7** (CURRENT PANIC DISORDER) CODED YES?

NO YES

PANIC DISORDER with Agoraphobia CURRENT

IS **E2** (CURRENT AGORAPHOBIA) CODED NO

and

IS **D7** (CURRENT PANIC DISORDER) CODED YES?

NO YES

PANIC DISORDER without Agoraphobia CURRENT

IS **E2** (CURRENT AGORAPHOBIA) CODED YES

and

IS **D5** (PANIC DISORDER LIFETIME) CODED NO?

NO YES

AGORAPHOBIA, CURRENT without history of Panic Disorder

F. SOCIAL PHOBIA (Social Anxiety Disorder)

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

F1 In the past month, did you have persistent fear and significant anxiety at being watched, being the focus of attention, or of being humiliated or embarrassed? This includes things like speaking in public, eating in public or with others, writing while someone watches, or being in social situations. \ NO YES

F2 Is this social fear excessive or unreasonable and does it almost always make you anxious? \ NO YES

F3 Do you fear these social situations so much that you avoid them or suffer through them most of the time? \ NO YES

F4 Do these social fears disrupt your normal work, school or social functioning or cause you significant distress? NO YES

SUBTYPES

Do you fear and avoid 4 or more social situations?

If YES Generalized social phobia (social anxiety disorder)

If NO Non-generalized social phobia (social anxiety disorder)

EXAMPLES OF SUCH SOCIAL SITUATIONS TYPICALLY INCLUDE

- INITIATING OR MAINTAINING A CONVERSATION,
- PARTICIPATING IN SMALL GROUPS,
- DATING,
- SPEAKING TO AUTHORITY FIGURES,
- ATTENDING PARTIES,
- PUBLIC SPEAKING,
- EATING IN FRONT OF OTHERS,
- URINATING IN A PUBLIC WASHROOM, ETC.

NOTE TO INTERVIEWER: PLEASE ASSESS WHETHER THE SUBJECT'S FEARS ARE RESTRICTED TO NON-GENERALIZED ("ONLY 1 OR SEVERAL") SOCIAL SITUATIONS OR EXTEND TO GENERALIZED ("MOST") SOCIAL SITUATIONS. "MOST" SOCIAL SITUATIONS IS USUALLY OPERATIONALIZED TO MEAN 4 OR MORE SOCIAL SITUATIONS, ALTHOUGH THE DSM-IV DOES NOT EXPLICITLY STATE THIS.

SOCIAL PHOBIA
(Social Anxiety Disorder)
CURRENT

GENERALIZED ⑦

NON-GENERALIZED ⑦

G. OBSESSIVE-COMPULSIVE DISORDER

(\ MEANS: GO TO THE DIAGNOSTIC BOX, CIRCLE NO AND MOVE TO THE NEXT MODULE)

G1 In the past month, have you been bothered by recurrent thoughts, impulses, or images that were unwanted, distasteful, inappropriate, intrusive, or distressing? - (For example, the idea that you were dirty, contaminated or had germs, or fear of contaminating others, or fear of harming someone even though it disturbs or distresses you, or fear you would act on some impulse, or fear or superstitions that you would be responsible for things going wrong, or obsessions with sexual thoughts, images or impulses, or hoarding, collecting, or religious obsessions.)

(DO NOT INCLUDE SIMPLY EXCESSIVE WORRIES ABOUT REAL LIFE PROBLEMS. DO NOT INCLUDE OBSESSIONS DIRECTLY RELATED TO EATING DISORDERS, SEXUAL DEVIATIONS, PATHOLOGICAL GAMBLING, OR ALCOHOL OR DRUG ABUSE BECAUSE THE PATIENT MAY DERIVE PLEASURE FROM THE ACTIVITY AND MAY WANT TO RESIST IT ONLY BECAUSE OF ITS NEGATIVE CONSEQUENCES.)

NO YES
↓
SKIP TO G4

G2 Did they keep coming back into your mind even when you tried to ignore or get rid of them?

NO YES
↓
SKIP TO G4

G3 Do you think that these obsessions are the product of your own mind and that they are not imposed from the outside?

NO YES
obsessions

G4 In the past month, did you do something repeatedly without being able to resist doing it, like washing or cleaning excessively, counting or checking things over and over, or repeating, collecting, arranging things, or other superstitious rituals?

NO YES
compulsions

IS **G3** OR **G4** CODED YES?

\
NO YES

G5 At any point, did you recognize that either these obsessive thoughts or these compulsive behaviors were excessive or unreasonable?

\
NO YES

G6 In the past month, did these obsessive thoughts and/or compulsive behaviors significantly interfere with your normal routine, your work or school, your usual social activities, or relationships, or did they take more than one hour a day?

NO YES

O.C.D. CURRENT

H. POSTTRAUMATIC STRESS DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

H1	Have you ever experienced or witnessed or had to deal with an extremely traumatic event that included actual or threatened death or serious injury to you or someone else? EXAMPLES OF TRAUMATIC EVENTS INCLUDE: SERIOUS ACCIDENTS, SEXUAL OR PHYSICAL ASSAULT, A TERRORIST ATTACK, BEING HELD HOSTAGE, KIDNAPPING, FIRE, DISCOVERING A BODY, WAR, OR NATURAL DISASTER, WITNESSING THE VIOLENT OR SUDDEN DEATH OF SOMEONE CLOSE TO YOU, OR A LIFE THREATENING ILLNESS.	\ NO	YES
H2	Did you respond with intense fear, helplessness or horror?	\ NO	YES
H3	During the past month, have you re-experienced the event in a distressing way (such as in dreams, intense recollections, flashbacks or physical reactions) or did you have intense distress when you were reminded about the event or exposed to a similar event?	\ NO	YES

H4	**In the past month:**			
	a	Have you avoided thinking about or talking about the event ?	NO	YES
	b	Have you avoided activities, places or people that remind you of the event?	NO	YES
	c	Have you had trouble recalling some important part of what happened?	NO	YES
	d	Have you become much less interested in hobbies or social activities?	NO	YES
	e	Have you felt detached or estranged from others?	NO	YES
	f	Have you noticed that your feelings are numbed?	NO	YES
	g	Have you felt that your life will be shortened or that you will die sooner than other people?	NO	YES
		ARE **3** OR MORE **H4** ANSWERS CODED YES?	\ NO	YES
H5	**In the past month:**			
	a	Have you had difficulty sleeping?	NO	YES
	b	Were you especially irritable or did you have outbursts of anger?	NO	YES
	c	Have you had difficulty concentrating?	NO	YES
	d	Were you nervous or constantly on your guard?	NO	YES
	e	Were you easily startled?	NO	YES
		ARE **2** OR MORE **H5** ANSWERS CODED YES?	\ NO	YES

H6	During the past month, have these problems significantly interfered with your work, school or social activities, or caused significant distress?	NO YES ***POSTTRAUMATIC STRESS DISORDER CURRENT***

I. ALCOHOL DEPENDENCE / ABUSE

(\ MEANS: GO TO DIAGNOSTIC BOXES, CIRCLE NO IN BOTH AND MOVE TO THE NEXT MODULE)

I1	**In the past 12 months,** have you had 3 or more alcoholic drinks, - within a 3 hour period, - on 3 or more occasions?	NO	YES

I2 **In the past 12 months:**

a	Did you need to drink a lot more in order to get the same effect that you got when you first started drinking or did you get much less effect with continued use of the same amount?	NO	YES
b	When you cut down on drinking did your hands shake, did you sweat or feel agitated? Did you drink to avoid these symptoms (for example, "the shakes", sweating or agitation) or to avoid being hungover? IF YES TO ANY, CODE YES.	NO	YES
c	During the times when you drank alcohol, did you end up drinking more than you planned when you started?	NO	YES
d	Have you tried to reduce or stop drinking alcohol but failed?	NO	YES
e	On the days that you drank, did you spend substantial time obtaining alcohol, drinking, or recovering from the effects of alcohol?	NO	YES
f	Did you spend less time working, enjoying hobbies, or being with others because of your drinking?	NO	YES
g	If your drinking caused you health or mental problems, did you still keep on drinking?	NO	YES

ARE 3 OR MORE I2 ANSWERS CODED YES?

NO YES*

* IF YES, SKIP I3 QUESTIONS AND GO TO NEXT MODULE. "DEPENDENCE PREEMPTS ABUSE" IN DSM IV TR.

ALCOHOL DEPENDENCE
CURRENT

I3 **In the past 12 months:**

a	Have you been intoxicated, high, or hungover more than once when you had other responsibilities at school, at work, or at home? Did this cause any problems? (CODE YES ONLY IF THIS CAUSED PROBLEMS.)	NO	YES
b	Were you intoxicated more than once in any situation where you were physically at risk, for example, driving a car, riding a motorbike, using machinery, boating, etc.?	NO	YES
c	Did you have legal problems more than once because of your drinking, for example, an arrest or disorderly conduct?	NO	YES
d	If your drinking caused problems with your family or other people, did you still keep on drinking?	NO	YES

J. SUBSTANCE DEPENDENCE / ABUSE (NON-ALCOHOL)

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE **NO** IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

Now I am going to show you / read to you a list of street drugs or medicines.

			NO	YES
J1	a	**In the past 12 months**, did you take any of these drugs more than once, to get high, to feel elated, to get "a buzz" or to change your mood?		

CIRCLE EACH DRUG TAKEN:

Stimulants: amphetamines, "speed", crystal meth, "crank", "rush", Dexedrine, Ritalin, diet pills.

Cocaine: snorting, IV, freebase, crack, "speedball".

Narcotics: heroin, morphine, Dilaudid, opium, Demerol, methadone, Darvon, codeine, Percodan, Vicodin, OxyContin.

Hallucinogens: LSD ("acid"), mescaline, peyote, psilocybin, STP, "mushrooms", "ecstasy", MDA, MDMA.

Phencyclidine: PCP ("Angel Dust", "Peace Pill", "Tranq", "Hog"), or ketamine ("Special K").

Inhalants: "glue", ethyl chloride, "rush", nitrous oxide ("laughing gas"), amyl or butyl nitrate ("poppers").

Cannabis: marijuana, hashish ("hash"), THC, "pot", "grass", "weed", "reefer".

Tranquilizers: Quaalude, Seconal ("reds"), Valium, Xanax, Librium, Ativan, Dalmane, Halcion, barbiturates, Miltown, GHB, Roofinol, "Roofies".

Miscellaneous: steroids, nonprescription sleep or diet pills. Cough Medicine? Any others?

SPECIFY THE MOST USED DRUG(S): _____

WHICH DRUG(S) CAUSE THE BIGGEST PROBLEMS?: _____

FIRST EXPLORE THE DRUG CAUSING THE BIGGEST PROBLEMS AND MOST LIKELY TO MEET DEPENDENCE / ABUSE CRITERIA.

IF MEETS CRITERIA FOR ABUSE OR DEPENDENCE, SKIP TO THE NEXT MODULE. OTHERWISE, EXPLORE THE NEXT MOST PROBLEMATIC DRUG.

J2 **Considering your use of (NAME THE DRUG / DRUG CLASS SELECTED), in the past 12 months:**

			NO	YES
	a	Have you found that you needed to use much more (NAME OF DRUG / DRUG CLASS SELECTED) to get the same effect that you did when you first started taking it?		
	b	When you reduced or stopped using (NAME OF DRUG / DRUG CLASS SELECTED), did you have withdrawal symptoms (aches, shaking, fever, weakness, diarrhea, nausea, sweating, heart pounding, difficulty sleeping, or feeling agitated, anxious, irritable, or depressed)? Did you use any drug(s) to keep yourself from getting sick (withdrawal symptoms) or so that you would feel better?		
		IF YES TO EITHER, CODE YES.		
	c	Have you often found that when you used (NAME OF DRUG / DRUG CLASS SELECTED), you ended up taking more than you thought you would?		
	d	Have you tried to reduce or stop taking (NAME OF DRUG / DRUG CLASS SELECTED) but failed?		
	e	On the days that you used (NAME OF DRUG / DRUG CLASS SELECTED), did you spend substantial time (>2 HOURS), obtaining, using or recovering from the drug, or thinking about the drug?		
	f	Did you spend less time working, enjoying hobbies, or being with family or friends because of your drug use?		
	g	If (NAME OF DRUG / DRUG CLASS SELECTED) caused you health or mental problems, did you still keep on using it?		

ARE **3** OR MORE **J2** ANSWERS CODED YES?

SPECIFY DRUG(S): _____

* IF YES, SKIP J3 QUESTIONS, MOVE TO NEXT DISORDER.
"DEPENDENCE PREEMPTS ABUSE" IN DSM IV TR.

NO	YES *
SUBSTANCE DEPENDENCE CURRENT	

Considering your use of (NAME THE DRUG CLASS SELECTED), in the past 12 months:

J3 a Have you been intoxicated, high, or hungover from (NAME OF DRUG / DRUG CLASS SELECTED) more than once, when you had other responsibilities at school, at work, or at home? Did this cause any problem? NO YES

(CODE YES ONLY IF THIS CAUSED PROBLEMS.)

b Have you been high or intoxicated from (NAME OF DRUG / DRUG CLASS SELECTED) more than once in any situation where you were physically at risk (for example, driving a car, riding a motorbike, using machinery, boating, etc.)? NO YES

c Did you have legal problems more than once because of your drug use, for example, an arrest or disorderly conduct? NO YES

d If (NAME OF DRUG / DRUG CLASS SELECTED) caused problems with your family or other people, did you still keep on using it? NO YES

ARE **1** OR MORE **J3** ANSWERS CODED YES?

SPECIFY DRUG(S): _____

NO	YES
SUBSTANCE ABUSE CURRENT	

K. PSYCHOTIC DISORDERS AND MOOD DISORDER WITH PSYCHOTIC FEATURES

ASK FOR AN EXAMPLE OF EACH QUESTION ANSWERED POSITIVELY. CODE YES ONLY IF THE EXAMPLES CLEARLY SHOW A DISTORTION OF THOUGHT OR OF PERCEPTION OR IF THEY ARE NOT JLTURALLY APPROPRIATE. BEFORE CODING, INVESTIGATE WHETHER DELUSIONS QUALIFY AS "BIZARRE".

DELUSIONS ARE "BIZARRE" IF: CLEARLY IMPLAUSIBLE, ABSURD, NOT UNDERSTANDABLE, AND CANNOT DERIVE FROM ORDINARY IIFE EXPERIENCE.
HALLUCINATIONS ARE SCORED "BIZARRE" IF: A VOICE COMMENTS ON THE PERSON'S THOUGHTS OR BEHAVIOR, OR WHEN TWO OR MORE VOICES ARE CONVERSING WITH EACH OTHER.
THE PURPOSE OF THIS MODULE IS TO EXCLUDE PATIENTS WITH PSYCHOTIC DISORDERS. THIS MODULE NEEDS EXPERIENCE.

					BIZARRE
		Now I am going to ask you about unusual experiences that some people have.			
K1	a	Have you ever believed that people were spying on you, or that someone was plotting against you, or trying to hurt you? NOTE: ASK FOR EXAMPLES TO RULE OUT ACTUAL STALKING.	NO	YES	YES
	b	IF YES OR YES BIZARRE: do you currently believe these things?	NO	YES	YES ↳ K6
K2	a	Have you ever believed that someone was reading your mind or could hear your thoughts, or that you could actually read someone's mind or hear what another person was thinking?	NO	YES	YES
	b	IF YES OR YES BIZARRE: do you currently believe these things?	NO	YES	YES ↳ K6
K3	a	Have you ever believed that someone or some force outside of yourself put thoughts in your mind that were not your own, or made you act in a way that was not your usual self? Have you ever felt that you were possessed? CLINICIAN: ASK FOR EXAMPLES AND DISCOUNT ANY THAT ARE NOT PSYCHOTIC.	NO	YES	YES
	b	IF YES OR YES BIZARRE: do you currently believe these things?	NO	YES	YES ↳ K6
K4	a	Have you ever believed that you were being sent special messages through the TV, radio, internet, newspapers, books, or magazines or that a person you did not personally know was particularly interested in you?	NO	YES	YES
	b	IF YES OR YES BIZARRE: do you currently believe these things?	NO	YES	YES ↳ K6
K5	a	Have your relatives or friends ever considered any of your beliefs odd or unusual? INTERVIEWER: ASK FOR EXAMPLES. ONLY CODE YES IF THE EXAMPLES ARE CLEARLY DELUSIONAL IDEAS NOT EXPLORED IN QUESTIONS K1 TO K4, FOR EXAMPLE, SOMATIC OR RELIGIOUS DELUSIONS OR DELUSIONS OF GRANDIOSITY, JEALOUSY, GUILT, RUIN OR DESTITUTION, ETC.	NO	YES	YES
	b	IF YES OR YES BIZARRE: do they currently consider your beliefs strange?	NO	YES	YES
K6	a	Have you ever heard things other people couldn't hear, such as voices?	NO	YES	
		IF YES TO VOICE HALLUCINATION: Was the voice commenting on your thoughts or behavior or did you hear two or more voices talking to each other?	NO		YES
	b	IF YES OR YES BIZARRE TO K6a: have you heard sounds / voices in the past month?	NO	YES	
		IF YES TO VOICE HALLUCINATION: Was the voice commenting on your thoughts or behavior or did you hear two or more voices talking to each other?	NO		YES ↳ K8b

K7 a Have you ever had visions when you were awake or have you ever seen things other people couldn't see? NO YES

CLINICIAN: CHECK TO SEE IF THESE ARE CULTURALLY INAPPROPRIATE.

b IF YES: have you seen these things in the past month? NO YES

CLINICIAN'S JUDGMENT

K8 b IS THE PATIENT CURRENTLY EXHIBITING INCOHERENCE, DISORGANIZED SPEECH, OR MARKED LOOSENING OF ASSOCIATIONS? NO YES

K9 b IS THE PATIENT CURRENTLY EXHIBITING DISORGANIZED OR CATATONIC BEHAVIOR? NO YES

K10 b ARE NEGATIVE SYMPTOMS OF SCHIZOPHRENIA, E.G. SIGNIFICANT AFFECTIVE FLATTENING, POVERTY OF SPEECH (ALOGIA) OR AN INABILITY TO INITIATE OR PERSIST IN GOAL-DIRECTED ACTIVITIES (AVOLITION), PROMINENT DURING THE INTERVIEW? NO YES

K11 a ARE 1 OR MORE « a » QUESTIONS FROM K1a TO K7a CODED **YES OR YES BIZARRE** AND IS EITHER:

MAJOR DEPRESSIVE EPISODE, (CURRENT, RECURRENT OR PAST)
OR
MANIC OR HYPOMANIC EPISODE, (CURRENT OR PAST) CODED **YES?** NO YES
↳ **K13**

IF NO TO K11 a, CIRCLE NO IN BOTH 'MOOD DISORDER WITH PSYCHOTIC FEATURES' DIAGNOSTIC BOXES AND MOVE TO K13.

b You told me earlier that you had period(s) when you felt (depressed/high/persistently irritable).

Were the beliefs and experiences you just described (SYMPTOMS CODED YES FROM **K1a** TO **K7a**) restricted exclusively to times when you were feeling depressed/high/irritable?

IF THE PATIENT EVER HAD A PERIOD OF AT LEAST 2 WEEKS OF HAVING THESE BELIEFS OR EXPERIENCES (PSYCHOTIC SYMPTOMS) WHEN THEY WERE NOT DEPRESSED/HIGH/IRRITABLE, CODE NO TO THIS DISORDER.

IF THE ANSWER IS NO TO THIS DISORDER, ALSO CIRCLE NO TO K12 AND MOVE TO K13

NO **YES**

MOOD DISORDER WITH PSYCHOTIC FEATURES

LIFETIME

K12 a ARE 1 OR MORE « b » QUESTIONS FROM K1b TO K7b CODED **YES OR YES BIZARRE** AND IS EITHER:

MAJOR DEPRESSIVE EPISODE, (CURRENT)
OR
MANIC OR HYPOMANIC EPISODE, (CURRENT) CODED **YES?**

IF THE ANSWER IS YES TO THIS DISORDER (LIFETIME OR CURRENT), CIRCLE NO TO K13 AND K14 AND MOVE TO THE NEXT MODULE.

NO **YES**

MOOD DISORDER WITH PSYCHOTIC FEATURES

CURRENT

K13 ARE 1 OR MORE « b » QUESTIONS FROM K1b TO K6b, CODED YES BIZARRE?

OR

ARE 2 OR MORE « b » QUESTIONS FROM K1b TO K10b, CODED YES (RATHER THAN YES BIZARRE)?

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1 MONTH PERIOD?

NO YES

PSYCHOTIC DISORDER
CURRENT

K14 IS K13 CODED YES

OR

ARE 1 OR MORE « a » QUESTIONS FROM K1a TO K6a, CODED YES BIZARRE?

OR

ARE 2 OR MORE « a » QUESTIONS FROM K1a TO K7a, CODED YES (RATHER THAN YES BIZARRE)

AND DID AT LEAST TWO OF THE PSYCHOTIC SYMPTOMS OCCUR DURING THE SAME 1 MONTH PERIOD?

NO YES

PSYCHOTIC DISORDER
LIFETIME

L. ANOREXIA NERVOSA

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

L1	a	How tall are you?	⑥ ft ⑥⑥ in. ⑥ ⑥⑥ cm
	b.	What was your lowest weight in the past 3 months?	⑥ ⑥⑥ lb ⑥ ⑥⑥ kg
	c	IS PATIENT'S WEIGHT EQUAL TO OR BELOW THE THRESHOLD CORRESPONDING TO HIS / HER HEIGHT? (SEE TABLE BELOW)	\ NO YES

In the past 3 months:

L2		In spite of this low weight, have you tried not to gain weight?	\ NO YES
L3		Have you intensely feared gaining weight or becoming fat, even though you were underweight?	\ NO YES
L4	a	Have you considered yourself too big / fat or that part of your body was too big / fat?	NO YES
	b	Has your body weight or shape greatly influenced how you felt about yourself?	NO YES
	c	Have you thought that your current low body weight was normal or excessive?	NO YES
L5		ARE 1 OR MORE ITEMS FROM L4 CODED YES?	\ NO YES
L6		FOR WOMEN ONLY: During the last 3 months, did you miss all your menstrual periods when they were expected to occur (when you were not pregnant)?	\ NO YES

FOR WOMEN: ARE L5 AND L6 CODED YES?

FOR MEN: IS L5 CODED YES?

NO	YES
ANOREXIA NERVOSA CURRENT	

HEIGHT / WEIGHT TABLE CORRESPONDING TO A **BMI THRESHOLD** OF **17.5** KG/M^2

Height/Weight														
ft/in	4'9	4'10	4'11	5'0	5'1	5'2	5'3	5'4	5'5	5'6	5'7	5'8	5'9	5'10
lb	81	84	87	89	92	96	99	102	105	108	112	115	118	122
cm	145	147	150	152	155	158	160	163	165	168	170	173	175	178
kg	37	38	39	41	42	43	45	46	48	49	51	52	54	55

Height/Weight					
ft/in	5'11	6'0	6'1	6'2	6'3
lb	125	129	132	136	140
cm	180	183	185	188	191
kg	57	59	60	62	64

The weight thresholds above are calculated using a body mass index (BMI) equal to or below 17.5 kg/m^2 for the patient's height. This is the threshold guideline below which a person is deemed underweight by the DSM-IV and the ICD-10 Diagnostic Criteria for Research for Anorexia Nervosa.

M. BULIMIA NERVOSA

(\ MEANS : GO TO THE DIAGNOSTIC BOXES, CIRCLE NO IN ALL DIAGNOSTIC BOXES, AND MOVE TO THE NEXT MODULE)

M1	In the past three months, did you have eating binges or times when you ate a very large amount of food within a 2-hour period?	\ NO YES
M2	In the last 3 months, did you have eating binges as often as twice a week?	\ NO YES
M3	During these binges, did you feel that your eating was out of control?	\ NO YES
M4	Did you do anything to compensate for, or to prevent a weight gain from these binges, like vomiting, fasting, exercising or taking laxatives, enemas, diuretics (fluid pills), or other medications?	\ NO YES
M5	Does your body weight or shape greatly influence how you feel about yourself?	\ NO YES
M6	DO THE PATIENT'S SYMPTOMS MEET CRITERIA FOR ANOREXIA NERVOSA?	NO YES ↓ Skip to M8
M7	Do these binges occur only when you are under (____lb/kg)? INTERVIEWER: WRITE IN THE ABOVE PARENTHESIS THE THRESHOLD WEIGHT FOR THIS PATIENT'S HEIGHT FROM THE HEIGHT / WEIGHT TABLE IN THE ANOREXIA NERVOSA MODULE.	NO YES
M8	IS **M5** CODED YES AND IS EITHER **M6** OR **M7** CODED NO?	NO YES *BULIMIA NERVOSA* CURRENT
	IS **M7** CODED YES?	NO YES *ANOREXIA NERVOSA* *Binge Eating/Purging Type* CURRENT

N. GENERALIZED ANXIETY DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOX, CIRCLE NO, AND MOVE TO THE NEXT MODULE)

N1	a	Were you excessively anxious or worried about several routine things, over the past 6 months? IN ENGLISH, IF THE PATIENT IS UNCLEAR ABOUT WHAT YOU MEAN, PROBE BY ASKING (Do others think that you are a "worry wart"?) AND GET EXAMPLES.	NO	YES
	b	Are these anxieties and worries present most days?	NO	YES
		ARE THE PATIENT'S ANXIETY AND WORRIES RESTRICTED EXCLUSIVELY TO, OR BETTER EXPLAINED BY, ANY DISORDER PRIOR TO THIS POINT?	NO	YES
N2		Do you find it difficult to control the worries?	NO	YES
N3		FOR THE FOLLOWING, CODE NO IF THE SYMPTOMS ARE CONFINED TO FEATURES OF ANY DISORDER EXPLORED PRIOR TO THIS POINT.		
		When you were anxious over the past 6 months, did you, most of the time:		
	a	Feel restless, keyed up or on edge?	NO	YES
	b	Have muscle tension?	NO	YES
	c	Feel tired, weak or exhausted easily?	NO	YES
	d	Have difficulty concentrating or find your mind going blank?	NO	YES
	e	Feel irritable?	NO	YES
	f	Have difficulty sleeping (difficulty falling asleep, waking up in the middle of the night, early morning wakening or sleeping excessively)?	NO	YES
		ARE 3 OR MORE N3 ANSWERS CODED YES?	NO	YES
N4		Do these anxieties and worries disrupt your normal work, school or social functioning or cause you significant distress?	NO	YES

GENERALIZED ANXIETY DISORDER
CURRENT

O. RULE OUT MEDICAL, ORGANIC OR DRUG CAUSES FOR ALL DISORDERS

IF THE PATIENT CODES POSITIVE FOR ANY CURRENT DISORDER ASK:

Just before these symptoms began:

O1a	Were you taking any drugs or medicines?	⑦ No	⑦ Yes	⑦ Uncertain
O1b	Did you have any medical illness?	⑦ No	⑦ Yes	⑦ Uncertain
	IN THE CLINICIAN'S JUDGMENT: ARE EITHER OF THESE LIKELY TO BE DIRECT CAUSES OF THE PATIENT'S DISORDER? IF NECESSARY ASK ADDITIONAL OPEN-ENDED QUESTIONS.			
O2	SUMMARY: HAS AN ORGANIC CAUSE BEEN RULED OUT?	⑦ No	⑦ Yes	⑦ Uncertain

P. ANTISOCIAL PERSONALITY DISORDER

(\ MEANS : GO TO THE DIAGNOSTIC BOX AND CIRCLE NO)

P1 **Before you were 15 years old, did you:**

a	repeatedly skip school or run away from home overnight?	NO	YES
b	repeatedly lie, cheat, "con" others, or steal?	NO	YES
c	start fights or bully, threaten, or intimidate others?	NO	YES
d	deliberately destroy things or start fires?	NO	YES
e	deliberately hurt animals or people?	NO	YES
f	force someone to have sex with you?	NO	YES
	ARE **2** OR MORE **P1** ANSWERS CODED YES?	NO \	YES

DO NOT CODE YES TO THE BEHAVIORS BELOW IF THEY ARE EXCLUSIVELY POLITICALLY OR RELIGIOUSLY MOTIVATED.

P2 **Since you were 15 years old, have you:**

a	repeatedly behaved in a way that others would consider irresponsible, like failing to pay for things you owed, deliberately being impulsive or deliberately not working to support yourself?	NO	YES
b	done things that are illegal even if you didn't get caught (for example, destroying property, shoplifting, stealing, selling drugs, or committing a felony)?	NO	YES
c	been in physical fights repeatedly (including physical fights with your spouse or children)?	NO	YES
d	often lied or "conned" other people to get money or pleasure, or lied just for fun?	NO	YES
e	exposed others to danger without caring?	NO	YES
f	felt no guilt after hurting, mistreating, lying to, or stealing from others, or after damaging property?	NO	YES

ARE **3** OR MORE **P2** QUESTIONS CODED YES?

NO	YES
	ANTISOCIAL PERSONALITY DISORDER **LIFETIME**

THIS CONCLUDES THE INTERVIEW

HAMILTON RATING SCALE FOR DEPRESSION

1. Depressed mood (sadness, hopeless, helpless, worthless)

   0= Absent

   1= These feeling states indicated only on questioning

   2= These feeling states spontaneously reported verbally

   3= Communicates feeling states non-verbally- i.e. through facial expression, posture, voice and tendency to weep

   4= Patient reports Virtually only these feeling states in his spontaneous verbal and non-verbal communication

2. Feelings of Guilt

   0= Absent

   1= Self reproach, feels he has let people down

   2= Ideas of guilt or rumination over past errors or sinful deeds

   3= Present illness is a punishment. Delusions of guilt

   4= Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations

3. Suicide

   0= Absent

   1= Feels life is not worth living

   2= Wishes he were dead or any thoughts of possible death to self

   3= Suicidal ideas or gesture

   4= Attempts at suicide (any serious attempts) (rates 4)

4. Insomnia early

   0= No difficulty falling asleep

   1= Complaints of occasional difficulty falling asleep i.e. more than half an hour

   2= Complaints of nightly difficulty falling asleep

5. Insomnia middle

   0= No difficulty

   1= Patient complaints of being restless and disturbed during the night

   2= Waking during the night- any getting out of bed rates 2 (except for purposes of voiding)

6. Insomnia Late

0= No difficulty

1= Waking in early hours of the morning but goes back to sleep

2= Unable to fall asleep again if he gets out of bed

7. Work and activities

   0= No difficulty

   1= Thoughts and feelings of incapacity, fatigue or weakness related to activities, work or hobbies

   2=Loss of interest in activity, hobbies or work- either directly reported by patient, or indirect in listlessness, indecision and vacillation (feels he has to push self to work or activities)

   3=Decrease in actual time spent in activities or decrease in productivity

   4= Stopped working because of present illness

8. Retardation: Psychomotor (slowness of thought and speech; impaired ability to concentrate; decreased motor activity)

   0= Normal speech and thought

   1= Slight retardation at interview

   2= Obvious retardation at interview

   3= Interview difficult

   4= Complete stupor

9. Agitation

   0= None

   1= Fidgetiness

   2= Playing with hands, hair etc.,

   3= Moving about, can’t sit still

   4= Hand wringing, nail biting, hair pulling, biting of lips

10. Anxiety (Psychological)

    0= No difficulty

    1= Subjective tension and irritability

    2= Worrying about minor matters

    3= Apprehensive attitude apparent in face or speech

    4= Fears expressed without questioning

11. Anxiety Somatic: Physiological concomitants of anxiety (effects of autonomic overactivity, butterflies, indigestion, stomach cramps, belching, diarrhoea,

palpitation, hyperventilation, paraesthesia, sweating, flushing, tremor, headache, urinary frequency). Avoid asking about possible medication side effects (dry mouth, constipation).

0= Absent

1= Mild

2= Moderate

3= Severe

4= Incapacitating

12. Somatic symptoms (gastrointestinal)

0= None

1= Loss of appetite but eating without encouragement from others. Food intake about normal

2= Difficulty eating without urging from others. Marked reduction of appetite and food intake

13. Somatic symptoms general

0= None

1= Heaviness in limbs, back or head. Backache, headache, muscle ache. Loss of energy and fatiguability.

2= Any clear cut symptom rates 2

14. Genital symptoms (symptoms such as: loss of libido; impaired sexual performance; menstrual disturbance)

0= Absent

1= Mild

2= Severe

15. Hypochondriasis

0= Not present

1= Self-absorption (bodily)

2= Preoccupation with health

3= Frequent complaints, request for help etc.,

4= Hypochondriacal delusions

16. Loss of weight

A. When rating by history

0= No weight loss

1= Probably weight loss associated with present illness

2= Definite (according to patient) weight loss

3= Not assessed

17. Insight

    0= Acknowledges being depressed and ill

    1= Acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest etc.,

    2= Denies being ill at all

18. Diurnal variation

    A: Note whether symptoms are worse in morning or evening. If no diurnal variation, mark none.

    0= No variation

    1= Worse in A.M.

    2= Worse in P.M.

    B: When present, mark the severity of the variation. Mark none, if no variation.

    0= None

    1= Mild

    2= Severe

19. Depersonalisation and derealisation (such as feelings of unreality: nihilistic ideas)

    0= Absent

    1= Mild

    2= Moderate

    3= Severe

    4= Incapacitating

20. Paranoid symptoms

    0= None

    1= Suspicious

    2= Ideas of reference

    3= Delusions of reference and persecution

21. Obsessional and compulsions

    0= Absent

    1= Mild

    2= Severe

HAMILTON ANXIETY RATING SCALE (HAM-A)

0 = Not present, 1 = Mild, 2 = Moderate, 3 = Severe, 4 = Very severe.

1 Anxious mood [0] [1] [2] [3] [4]

Worries, anticipation of the worst, fearful anticipation, irritability.

2 Tension [0] [1] [2] [3] [4]

Feelings of tension, fatigability, startle response, moved to tears easily, trembling, feelings of restlessness, inability to relax.

3 Fears [0] [1] [2] [3] [4]

Of dark, of strangers, of being left alone, of animals, of traffic, of crowds.

4 Insomnia [0] [1] [2] [3] [4]

Difficulty in falling asleep, broken sleep, unsatisfying sleep and fatigue on waking, dreams, nightmares, night terrors.

5 Intellectual [0] [1] [2] [3] [4]

Difficulty in concentration, poor memory.

6 Depressed mood [0] [1] [2] [3] [4]

Loss of interest, lack of pleasure in hobbies, depression, early waking, diurnal swing.

7 Somatic (muscular) [0] [1] [2] [3] [4]

Pains and aches, twitching, stiffness, myoclonic jerks, grinding of teeth, unsteady voice, increased muscular tone.

8 Somatic (sensory) [0] [1] [2] [3] [4]

Tinnitus, blurring of vision, hot and cold flushes, feelings of weakness, pricking sensation.

9 Cardiovascular symptoms [0] [1] [2] [3] [4]

Tachycardia, palpitations, pain in chest, throbbing of vessels, fainting feelings, missing beat.

10 Respiratory symptoms [0] [1] [2] [3] [4]

Pressure or constriction in chest, choking feelings, sighing, dyspnea.

11 Gastrointestinal symptoms [0] [1] [2] [3] [4]

Difficulty in swallowing, wind abdominal pain, burning sensations, abdominal fullness, nausea, vomiting, borborygmi, looseness of bowels, loss of weight, constipation.

12 Genitourinary symptoms [0] [1] [2] [3] [4]

Frequency of micturition, urgency of micturition, amenorrhea, menorrhagia, development of frigidity, premature ejaculation, loss of libido, impotence.

13 Autonomic symptoms [0] [1] [2] [3] [4]

Dry mouth, flushing, pallor, tendency to sweat, giddiness, tension headache, raising of hair.

14 Behavior at interview [0] [1] [2] [3] [4]

Fidgeting, restlessness or pacing, tremor of hands, furrowed brow, strained face, sighing or rapid respiration, facial pallor, swallowing, etc.

Serial no	Age	age group	Education	marital	Occup	Job dis	inc/mnth	Working hrs/day	cost/day-transport	religion	socio-eco	family type	social support	Living arrange	Reason fr hm	Area from displace	Duration of homelessness	Current place year	Change in place fr past 1 yr	Sleep	Shelter	Sexual abuse	Physical	Drinking water	Electricity	Toilet	Menstrual	Hosp access	Med expense	Past pSy ill	Family psy	Substance	Suicide attempt	Family suicide	phy illness	MINI	HAM-D	HAM-A
1	63	6	5	4	2	5	6	1	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	1,3	7	4	4
2	53	5	5	3	4	5	1	5	5	2	1	3	2	4	3		1	1	1	5	2	1	2	2	1	3	4	2	1	1	1	1	1	1	9	1	1	4
3	60	5	4	4	1	5	1	1	5	2	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	1	1	1,3	7	4	4
4	52	5	6	3	2	1	6	1	1	1	1	3	2	4	4		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	1	1	10	1,3	2	1
5	51	5	7	4	4	5	1	5	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	9	1	2	4
6	52	5	7	4	4	5	1	5	5	2	1	3	2	4	4		2	1	1	5	2	1	1	2	1	3	4	2	1	1	1	1	1	1	10	7	4	4
7	61	6	1	4	2	1	2	1	5	2	1	3	2	4	3		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	7	1	2	4
8	63	6	6	4	4	6	1	5	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	7	1	2	4
9	71	7	3	4	2	5	1	1	1	1	1	3	2	4	3		1	1	1	5	2	2	2	2	1	3	4	1	1	1	1	1	1	1	10	1	1	4
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11	58	5	5	4	2	5	6	1	5	1	1	3	2	4	1		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	1,3	7	4	4
12	48	4	7	4	2	5	6	1	5	1	1	3	2	4	2		2	2	1	5	2	1	1	2	1	3	4	1	1	1	2	2	1	1	9	1	1	4
13	50	4	3	4	3	5	1	1	5	1	1	3	2	4	3		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	7	1	1	4
14	52	5	7	4	2	5	1	1	5	1	1	3	2	4	1		3	2	1	5	2	1	1	2	1	3	4	2	1	1	2	1	1	1	1,2,7	7	4	4
15	40	3	7	4	1	1	6	1	5	2	1	3	2	4	1		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	1	1	7,8	3	4	1
16	47	4	7	4	4	5	1	1	5	2	1	3	2	4	3		1	1	1	5	2	2	1	2	1	3	4	1	1	1	1	1	1	1	9	7	4	4
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18	51	5	4	4	2	5	2	1	5	1	1	3	2	4	1		4	1	1	5	2	1	2	2	1	3	4	2	1	1	1	1	2	1	7	7	4	4
19	43	4	7	3	2	5	2	1	5	1	1	3	2	4	1		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	3	1	1	4
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22	51	5	5	4	1	5	1	1	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	1,3	7	4	4

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48	54	5	6	3	2	1	6	1	1	1	1	3	2	4	4		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	1	1	10	1,3	2	1
49	51	5	7	4	4	5	1	5	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	9	1	2	4
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53	71	7	3	4	2	5	1	1	1	1	1	3	2	4	3		1	1	1	5	2	2	2	2	1	3	4	1	1	1	1	1	1	1	10	1	1	4
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60	47	4	7	4	4	5	1	1	5	2	1	3	2	4	3		1	1	1	5	2	2	1	2	1	3	4	1	1	1	1	1	1	1	9	7	4	4
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62	51	5	4	4	2	5	2	1	5	1	1	3	2	4	1		4	1	1	5	2	1	2	2	1	3	4	2	1	1	1	1	2	1	7	7	4	4
63	43	4	7	3	2	5	2	1	5	1	1	3	2	4	1		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	3	1	1	4
64	45	4	5	1	4	5	3	1	5	1	1	3	2	4	2		2	1	1	5	2	1	1	2	1	3	1	1	1	1	1	1	1	1	10	7	4	4
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69	53	5	6	3	4	6	7	5	5	1	1	3	2	4	4		2	1	2	5	2	1	1	2	1	3	4	2	1	1	1	2	2	1	10	1,3	1	1
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71	50	4	7	4	4	6	7	5	5	2	1	3	2	4	4		2	1	1	5	2	1	1	2	1	3	4	2	1	1	1	1	1	1	10	7	4	4
72	61	6	1	4	4	6	7	5	5	2	1	3	2	4	3		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	7	1	1	4
73	68	6	6	4	4	6	7	5	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	2	1	1	1	1	1	1	7	1	1	4
74	58	5	3	4	4	6	7	5	5	1	1	3	2	4	3		1	1	1	5	2	2	2	2	1	3	4	2	1	2	1	1	1	1	10	1,6	1	4
75	39	3	5	4	4	6	7	5	5	1	1	3	2	4	4		2	1	2	5	2	2	2	2	1	3	1	1	1	2	1	1	2	2	2	1,3,8	2	1
76	41	4	5	3	1	5	1	1	5	1	1	1	2	4	1		2	1	1	5	2	1	1	2	1	3	1	1	1	1	1	1	1	1	1,4	7	1	1
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78	61	6	5	4	2	5	2	1	5	1	1	3	2	4	1		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	1,3	7	4	4
79	64	6	7	4	2	5	2	1	5	1	1	3	2	4	2		2	2	1	5	2	1	1	2	1	3	4	1	1	2	2	2	1	1	9	1,3	1	1
80	71	7	3	4	2	5	2	1	5	1	1	3	2	4	3		1	1	1	5	2	1	1	2	1	3	4	1	1	2	2	2	1	1	7	1	1	4
81	58	5	7	4	2	5	2	1	5	1	1	3	2	4	1		3	2	1	5	2	1	1	2	1	3	4	1	1	2	2	1	1	1	1,2,7	3	4	1

82	45	4	6	1	2	5	1	1	5	2	1	3	2	4	2		4	1	1	5	2	1	1	2	1	3	2	1	1	1	1	1	2	1	7	1,3	1	1
83	59	5	4	4	2	5	2	1	5	1	1	3	2	4	1		4	1	1	5	2	1	2	2	1	3	4	1	1	1	1	1	2	1	7	1	1	4
84	52	5	7	3	2	5	1	1	5	1	1	3	2	4	1		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	3	7	4	4
85	46	4	5	1	4	6	7	1	5	1	1	3	2	4	2		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	10	7	4	4
86	48	4	5	1	4	6	7	1	5	1	1	3	2	4	1		2	2	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	2	3	4	1
87	71	7	7	4	1	5	1	1	5	2	1	3	2	4	1		2	1	1	5	2	1	2	2	1	3	4	1	1	1	1	1	1	1	7,8	3	4	1
88	66	6	7	4	4	6	7	5	5	2	1	3	2	4	3		1	1	1	5	2	2	2	2	1	3	4	1	1	1	1	1	1	1	9	7	4	4
89	40	3	7	4	1	1	6	1	5	2	1	3	2	4	1		2	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	1	1	7,8	3	4	1
90	47	4	7	4	4	5	1	1	5	2	1	3	2	4	3		1	1	1	5	2	2	1	2	1	3	4	1	1	1	1	1	1	1	9	7	4	4
91	40	3	6	1	2	5	3	2	1	1	1	3	2	4	2		4	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	2	1	7	8	4	4
92	51	5	4	4	2	5	2	1	5	1	1	3	2	4	1		4	1	1	5	2	1	2	2	1	3	4	2	1	1	1	1	2	1	7	7	4	4
93	43	4	7	3	2	5	2	1	5	1	1	3	2	4	1		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	3	1	1	4
94	45	4	5	1	4	5	3	1	5	1	1	3	2	4	2		2	1	1	5	2	1	1	2	1	3	1	1	1	1	1	1	1	1	10	7	4	4
95	46	4	5	1	4	4	1	5	5	1	1	3	2	4	1		2	2	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	2	3	4	1
96	51	5	5	4	1	5	1	1	5	1	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	1	1	1	1,3	7	4	4
97	46	4	5	3	4	6	7	5	5	2	1	3	2	4	3		1	1	2	5	2	1	2	2	1	3	4	2	1	1	1	1	1	1	9	1,3	1	1
98	56	5	4	4	1	5	1	1	5	2	1	3	2	4	4		1	1	1	5	2	1	1	2	1	3	4	1	1	1	1	2	2	1	1,3	3	4	1
99	53	5	6	3	4	6	7	5	5	1	1	3	2	4	4		2	1	2	5	2	1	1	2	1	3	4	2	1	1	1	2	2	1	10	1,3	1	1
100	51	5	7	4	1	5	1	1	5	1	1	3	2	4	4		1	1	2	5	2	1	1	2	1	3	4	2	1	1	1	1	1	1	9	1	1	4

Table 1

Serial no	Age	age group	Education	marital	Occup	Job dis	inc/mnth	Working hrs/day	cost/day-transport	religion	socio-eco	family type	social support	Living arrange	Reason fr hm	Area from displace	Duration of homelessness	Current place year	Change in place fr past 1 yr	Sleep	Shelter	Sexual abuse	Physical	Drinking water	Electricity	Toilet	Menstrual	Hosp access	Med expense	Past pSy ill	Family psy	Substance	Suicide attempt	Family suicide	phy illness	MINI	HAM-D	HAM-A
1	28	2	4	1	2	2	2	3	1	1	1	1	1	2	1		3	3	1	2	1	1	1	1	1	1	1	2	1	1	2	1	1	1	1	3	4	1
2	27	2	4	1	4	6	5	5	5	1	1	2	1	5	4		4	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4
3	41	4	5	1	2	1	5	1	1	2	1	1	1	5	1		4	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4
4	35	3	6	1	3	1	4	2	2	2	1	1	1	2	1		4	4	1	2	1	1	1	1	1	1	5	2	2	1	1	1	1	1	1	7	4	4
5	52	5	4	4	2	1	6	3	1	2	1	2	1	2	1		4	4	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1,3	1	1
6	27	2	4	1	2	1	5	1	1	2	1	1	1	5	1		3	3	1	2	1	3	1	1	1	1	1	2	1	1	1	1	2	2	1	1	1	4
7	38	3	4	1	4	6	4	5	5	2	1	2	1	2	1		4	4	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	7	4	4
8	45	4	5	1	4	6	6	5	5	1	1	1	1	1	1		4	4	1	1	1	1	1	1	1	1	4	2	1	1	1	1	2	2	2	1	1	4
9	70	6	6	4	4	6	5	5	5	2	1	2	1	5	1		5	5	1	1	1	1	1	1	1	1	4	2	1	1	1	2	1	1	2	7	4	4
10	34	3	7	1	4	6	4	5	5	2	1	2	1	2	2		5	5	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	7	4	4
11	53	5	7	1	2	2	6	1	1	2	1	2	1	3	1		5	5	1	3	1	1	1	1	1	1	4	2	1	1	1	2	1	1	7	7	4	4
12	31	3	7	1	2	2	4	2	1	2	1	1	2	2	2		4	4	1	2	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	7	4	4
13	68	6	5	4	4	6	5	5	5	2	1	3	2	3	1		5	5	1	3	1	1	1	1	1	1	4	1	1	1	1	1	1	1	7	1	1	4
14	55	5	6	1	4	6	6	5	5	1	1	2	1	3	2		3	3	1	3	1	2	1	1	1	1	4	1	2	1	1	1	1	1	7	1,3	1	1
15	30	2	5	1	2	2	2	4	1	1	1	1	1	2	1		4	4	1	2	1	1	1	1	1	1	2	2	2	1	1	1	2	1	1	1,3	2	1
16	42	4	7	1	2	1	5	2	1	1	1	2	2	3	1		4	4	1	3	1	1	1	1	1	1	1	2	1	1	1	2	1	1	8	1,3	1	1
17	39	3	7	1	4	6	5	5	5	2	1	1	1	2	3		4	4	1	2	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4
18	29	2	4	3	2	1	4	4	1	2	1	1	2	2	1		4	4	1	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1	4
19	56	5	7	4	1	2	5	4	2	1	1	2	2	3	1		5	4	1	3	1	1	1	1	1	1	4	1	2	1	1	1	1	1	6	1,3	1	1
20	38	3	7	4	2	1	3	2	1	1	1	2	2	1	1		5	4	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	7	1	1	4
21	29	2	7	1	2	1	4	4	1	1	1	1	2	1	1		5	5	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	10	3	4	1
22	18	1	4	2	2	1	5	3	1	1	1	1	2	1	1		5	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	3	4	1
23	18	1	5	2	2	1	3	3	1	1	1	1	1	1	1		5	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	8	7	4	4
24	38	3	7	1	2	1	2	2	2	1	1	1	1	1	1		5	4	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
25	42	4	7	4	2	2	4	2	1	1	1	2	2	1	1		4	4	1	1	1	2	2	1	1	1	4	2	1	1	1	2,3,4	2	2	10	1,3,5	1	1
26	29	2	3	1	2	1	5	2	1	2	1	2	1	3	1		2	2	1	3	1	2	2	1	2	1	1	1	1	1	1	1	1	1	10	7	4	4
27	50	4	6	1	2	1	3	2	1	1	1	1	1	5	1		5	4	1	6	1	1	1	1	1	1	5	1	3	2	1	1	1	1	3,1,7,8	1	2	4
28	36	3	6	3	4	1	4	2	1	1	1	1	1	1	1		4	4	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	4	7	4	4
29	26	2	4	1	4	6	3	5	5	1	1	1	1	1	2		5	4	1	1	1	1	2	1	2	1	1	1	1	1	2	1	1	1	10	7	4	4
30	28	2	5	1	2	6	2	1	5	1	1	1	1	1	1		5	4	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	10	7	4	4

31	37	3	7	1	2	1	4	1	1	1	1	1	1	1	1		5	4	1	1	1	2	2	1	2	1	1	1	1	2	1	2	1	1	10	1	1	4
32	55	5	7	4	2	1	2	1	1	1	1	2	1	5	1		5	4	1	6	1	1	1	1	1	1	4	1	1	1	2	2	1	1	7,8	1	1	4
33	31	3	4	3	4	1	4	5	1	2	1	3	1	5	1		5	4	1	6	1	2	2	1	1	1	1	1	1	2	1	1	1	1	4	7	4	4
34	20	1	3	1	2	6	3	1	5	1	1	2	1	5	1		5	4	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
35	50	4	7	4	2	3	5	1	1	2	1	1	2	5	1		4	4	1	6	1	1	1	1	2	1	4	1	1	2	1	1	1	1	10	1	1	4
36	35	3	4	4	2	1	4	2	1	2	1	1	1	5	1		5	4	1	6	1	1	1	1	2	1	1	1	1	2	1	1	1	1	7	7	4	4
37	50	4	7	1	2	1	4	1	1	2	1	1	2	5	1		4	4	1	6	1	1	1	1	1	1	4	1	1	2	1	1	1	1	2,8,7	1,3	1	1
38	32	3	6	1	2	1	4	2	1	1	1	1	1	2	1		4	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
39	55	5	1	4	2	1	3	2	1	1	1	1	1	2	1		4	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
40	45	4	1	4	2	1	3	1	1	1	1	1	1	2	1		5	4	1	4	1	1	1	1	1	1	4	1	1	1	1	1	1	1	3	1,3	1	1
41	46	4	1	4	2	1	4	1	1	1	1	1	2	2	1		5	4	1	2	1	1	1	1	1	1	4	1	1	1	1	2	1	1	10	1	1	4
42	20	1	5	2	2	1	4	3	1	1	1	1	1	3	1		4	4	1	3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
43	35	3	6	1	1	1	3	3	1	2	1	1	1	5	1		5	4	1	1	1	3	1	1	2	1	2	1	1	1	1	2,3	1	1	10	7	4	4
44	44	4	1	4	2	6	1	5	5	2	1	3	2	5	3		5	4	1	1	1	3	1	1	2	1	4	1	1	1	1	1	1	1	2	3,5,6	4	1
45	58	5	1	4	2	1	2	1	2	1	1	1	1	5	1		5	4	1	1	1	1	2	1	2	1	4	1	1	1	1	1	2	1	10	7	4	4
46	33	3	5	2	2	6	3	1	5	1	1	1	1	5	1		5	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	5	7	4	4
47	27	2	5	1	2	1	4	3	1	2	1	1	1	2	1		5	4	1	2	1	2	2	1	1	1	1	1	1	1	1	2	2	2	11	1	1	4
48	21	2	2	2	4	6	2	5	5	2	1	1	1	3	1		4	4	1	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
49	41	4	6	1	2	6	3	1	5	1	1	3	1	5	2		5	4	1	1	1	3	2	1	2	1	4	1	1	1	1	1	1	1	10	7	4	4
50	32	3	5	1	2	2	3	4	1	1	1	3	1	5	1		5	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	7	4	4
51	46	4	6	4	2	2	4	1	2	1	1	1	2	1	1		5	4	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	9	1,3	1	1
52	27	2	4	1	4	6	5	5	5	1	1	2	1	5	4		4	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4
53	41	4	5	1	2	1	5	1	1	2	1	1	1	5	1		4	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4
54	35	3	6	1	3	1	4	2	2	2	1	1	1	2	1		4	4	1	2	1	1	1	1	1	1	5	2	2	1	1	1	1	1	1	7	4	4
55	52	5	4	4	2	1	6	3	1	2	1	2	1	2	1		4	4	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	2	1,3	1	1
56	27	2	4	1	2	1	5	1	1	2	1	1	1	5	1		3	3	1	2	1	3	1	1	1	1	1	2	1	1	1	1	2	2	1	1	1	4
57	38	3	4	1	4	6	4	5	5	2	1	2	1	2	1		4	4	1	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	7	4	4
58	45	4	5	1	4	6	6	5	5	1	1	1	1	1	1		4	4	1	1	1	1	1	1	1	1	4	2	1	1	1	1	2	2	2	1	1	4
59	70	6	6	4	4	6	5	5	5	2	1	2	1	5	1		5	5	1	1	1	1	1	1	1	1	4	2	1	1	1	2	1	1	2	7	4	4
60	34	3	7	1	4	6	4	5	5	2	1	2	1	2	2		5	5	1	2	1	1	1	1	1	1	1	2	2	1	1	1	1	1	1	7	4	4
61	53	5	7	1	2	2	6	1	1	2	1	2	1	3	1		5	5	1	3	1	1	1	1	1	1	4	2	1	1	1	2	1	1	7	7	4	4
62	31	3	7	1	2	2	4	2	1	2	1	1	2	2	2		4	4	1	2	1	1	1	1	1	1	2	2	2	1	1	1	1	1	1	1	1	4
63	68	6	5	4	4	6	5	5	5	2	1	3	2	3	1		5	5	1	3	1	1	1	1	1	1	4	1	1	1	1	1	1	1	7	1,3	1	1
64	55	5	6	1	4	6	6	5	5	1	1	2	1	3	2		3	3	1	3	1	2	1	1	1	1	4	1	2	1	1	1	1	1	7	1,3	2	1
65	30	2	5	1	2	2	2	4	1	1	1	1	1	2	1		4	4	1	2	1	1	1	1	1	1	2	2	2	1	1	1	2	1	1	1,3	1	1
66	42	4	7	1	2	1	5	2	1	1	1	2	2	3	1		4	4	1	3	1	1	1	1	1	1	1	2	1	1	1	2	1	1	8	3	4	1
67	39	3	7	1	4	6	5	5	5	2	1	1	1	2	3		4	4	1	2	1	1	2	1	1	1	1	2	1	1	1	1	1	1	1	7	4	4

68	29	2	4	3	2	1	4	4	1	2	1	1	2	2	1		4	4	1	4	1	1	1	1	1	1	1	1	1	2	1	1	1	1	3	1	1	4
69	56	5	7	4	1	2	5	4	2	1	1	2	2	3	1		5	4	1	3	1	1	1	1	1	1	4	1	2	1	1	1	1	1	6	1,3	1	1
70	38	3	7	4	2	1	3	2	1	1	1	2	2	1	1		5	4	1	1	1	1	1	1	1	1	1	1	2	2	1	1	1	1	7	1	1	4
71	29	2	7	1	2	1	4	4	1	1	1	1	2	1	1		5	5	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1	1	10	3	4	1
72	18	1	4	2	2	1	5	3	1	1	1	1	2	1	1		5	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	3	4	1
73	18	1	5	2	2	1	3	3	1	1	1	1	1	1	1		5	4	1	1	1	1	1	1	1	1	1	1	2	1	1	1	1	1	8	7	4	4
74	38	3	7	1	2	1	2	2	2	1	1	1	1	1	1		5	4	1	4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
75	42	4	7	4	2	2	4	2	1	1	1	2	2	1	1		4	4	1	1	1	2	2	1	1	1	4	2	1	1	1	2,3,4	2	2	10	1,3,5	1	1
76	29	2	3	1	2	1	5	2	1	2	1	2	1	3	1		2	2	1	3	1	2	2	1	2	1	1	1	1	1	1	1	1	1	10	7	4	4
77	50	4	6	1	2	1	3	2	1	1	1	1	1	5	1		5	4	1	6	1	1	1	1	1	1	5	1	3	2	1	1	1	1	3,1,7,[illegible]	1	2	4
78	36	3	6	3	4	1	4	2	1	1	1	1	1	1	1		4	4	1	1	1	1	1	1	1	1	3	1	1	1	1	1	1	1	4	7	4	4
79	26	2	4	1	4	6	3	5	5	1	1	1	1	1	2		5	4	1	1	1	1	2	1	2	1	1	1	1	1	2	1	1	1	10	7	4	4
80	28	2	5	1	2	6	2	1	5	1	1	1	1	1	1		5	4	1	1	1	1	1	1	1	1	1	1	3	1	1	1	1	1	10	7	4	4
81	37	3	7	1	2	1	4	1	1	1	1	1	1	1	1		5	4	1	1	1	2	2	1	2	1	1	1	1	2	1	2	1	1	10	1	1	4
82	55	5	7	4	2	1	2	1	1	1	1	2	1	5	1		5	4	1	6	1	1	1	1	1	1	4	1	1	1	2	2	1	1	7,8	1	1	4
83	31	3	4	3	4	1	4	5	1	2	1	3	1	5	1		5	4	1	6	1	2	2	1	1	1	1	1	1	2	1	1	1	1	4	7	4	4
84	20	1	3	1	2	6	3	1	5	1	1	2	1	5	1		5	4	1	6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
85	50	4	7	4	2	3	5	1	1	2	1	1	2	5	1		4	4	1	6	1	1	1	1	2	1	4	1	1	2	1	1	1	1	10	1	1	4
86	35	3	4	4	2	1	4	2	1	2	1	1	1	5	1		5	4	1	6	1	1	1	1	2	1	1	1	1	2	1	1	1	1	7	7	4	4
87	50	4	7	1	2	1	4	1	1	2	1	1	2	5	1		4	4	1	6	1	1	1	1	1	1	4	1	1	2	1	1	1	1	2,8,7	1,3	1	1
88	32	3	6	1	2	1	4	2	1	1	1	1	1	2	1		4	1	1	2	1	3	1	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
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90	45	4	1	4	2	1	3	1	1	1	1	1	1	2	1		5	4	1	4	1	1	1	1	1	1	4	1	1	1	1	1	1	1	3	1,3	1	1
91	46	4	1	4	2	1	4	1	1	1	1	1	2	2	1		5	4	1	2	1	1	1	1	1	1	4	1	1	1	1	2	1	1	10	1	1	4
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94	44	4	1	4	2	6	1	5	5	2	1	3	2	5	3		5	4	1	1	1	3	1	1	2	1	4	1	1	1	1	1	1	1	2	3,5,6	4	1
95	58	5	1	4	2	1	2	1	2	1	1	1	1	5	1		5	4	1	1	1	1	2	1	2	1	4	1	1	1	1	1	2	1	10	7	4	4
96	33	3	5	2	2	6	3	1	5	1	1	1	1	5	1		5	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	5	7	4	4
97	27	2	5	1	2	1	4	3	1	2	1	1	1	2	1		5	4	1	2	1	2	2	1	1	1	1	1	1	1	1	2	2	2	11	1	1	4
98	21	2	2	2	4	6	2	5	5	2	1	1	1	3	1		4	4	1	3	1	2	2	1	1	1	1	1	1	1	1	1	1	1	10	7	4	4
99	41	4	6	1	2	6	3	1	5	1	1	3	1	5	2		5	4	1	1	1	3	2	1	2	1	4	1	1	1	1	1	1	1	10	7	4	4
100	32	3	5	1	2	2	3	4	1	1	1	3	1	5	1		5	4	1	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	2	7	4	4