Level of Depression among Family Members of Persons with Mental Illness: A Cross-Sectional Study

By

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The ethical issue of the study has been strictly considered and protected. In case of dissemination of the findings of this project for future publication, research supervisor will highly concern and it will be duly acknowledged as undergraduate thesis.

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Dedication

Dedicated to my beloved parents

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List of Abbreviations

BHPI	Bangladesh Health Professions Institute
CRP	Centre For the Rehabilitation of the Paralysed
ADLs	Activities of Daily Living
OT	Occupational Therapy
SPSS	Statistical Package of Social Science
SD	Standard deviation
WHO	World Health Organization
SMI	Severe Mental Illness

Abstract

Background: Depression is the most common disorder of family members of person with mental illness. Mental illness not only affects the individual diagnosed but also has a profound impact on their immediate family members. The psychological disturbance on family members emphasizes a critical aspect of the overall mental health scenery. This research explores the level of depression among family members of individuals with mental illness, shedding light on the multifaceted factors contributing to this phenomenon.

Aim: The aim of the study is to assess the level of depression and associated factors among primary caregivers of patients with mental illness.

Methods: This study was conducted by the quantitative research with a cross-sectional design and convenience sampling. Data was collected by using standard questionnaire (Zahir Depression Scale). Data was collected from NIMH and Mental Health Day Center. The number of participants of this study were 210.

Results: The result showed that socio-demographic characteristics like Age, Gender, Religion, Marital status, Occupation, and Monthly income. Out of 210 respondents, 77.6% (n=163) participants reported that they had suffering from mild depression, and only 22.4% (n=47) of participants reported that they had suffering from moderate types of depression and I didn't find any severe and profound types of depressive caregivers. I identified the mean difference between the level of depression and demographic characteristics of caregivers of Person with Mental Illness.

Conclusion: Finally, this study showed that family members of person with mental illness need psycho education and proper counseling to reduce their depression. It is necessary to ensure the effective treatment of depression of the caregivers of person with mental illness. Education and proper counseling help them to obtain the beneficial outcomes of their life.

Keywords: *Depression, Mental illness, level of depression, caregiving, Psychoeducation.*

CHAPTER I: INTRODUCTION

1.1 Background

The World Health Organization reported that depression affects 121 million people worldwide. In the 10 higher income countries surveyed, an average of nearly 15% of the population had suffered from minimum depression after in their lives. People living in low to middle income countries reported that 11% possibility of having had the disease. At 19.2%, the U.S. had the second highest lifetime rate of depression. Only France, at 21% had a greater rate of the disease. Among the high-incomecountries like Japan, Germany, Italy, and Israel reported that the smallest percentages,ranging from under 7% to 10%. Likewise, China (6.5%) and Mexico (8%) had the smallest percentage of lifetime prevalence of depression and only Brazil, at 18.4%, approached the level of depression in the U.S.A (Martin, 2011).

Depression is a severe condition that can impact every part of the life. It can affect social life, relationships, career, intelligence of self-confidence and purpose. Women in individual depression are common. In detail, according to the National Mental Health Association, about one in every eight women depressions at some fact during her lifetime. If the feeling sad, guilty, tired and just generally depressed in the tips may be suffering from major depression (Smith, 2014).

In Bangladesh, the prevalence of depression was found that the prevalence of depressive (57.9%), stress (59.7%) and anxiety (33.7%) symptoms in the adult population is now much higher. Another study found that 28.5%, 33.3% and 46.92% of students had stress, anxiety and depressive symptoms respectively. (Hassan *et al.* 2021).

Sintayehu *et al.* 2015 reported that Caregivers like family members or other relatives are central and provide not only practical help and personal care but also give emotional support, and they are suffering from plenty of challengeable tasks. These, eventually, cast out family caregivers into multidimensional problems prominently for mental distress like depression, anxiety, sleep problem and somatic disorder which are followed by physiologic changes and impaired health habits that ultimately lead to illness and possibly to death. Numerous studies demonstrate that mental distress of caregivers are two times compared to general populations.

The burden of mental health problems is increasing globally. It is gradually becoming recognized that mental disorders are a public health problem throughout the world. In 2001, mental disorders accounted for 13 % of the worlds burden of diseases and this figure is projected to increase to 15 % by the year 2020. Worldwide studies have shown that as many as 450 million people suffer from mental disorder and their disabling effect at individual and national levels to be quite significant. This had led to the recognition, by the member states of WHO in mental health care as one of the priorities and to its inclusion in the program of primary health care of WHO in mental health care as one of the priorities and to its inclusion in the program of primary health care.

Besides mental disorder, as defined according to diagnostic criteria, the wider concept of mental distress comprises mental disorder as well as other mental problems that may not fall in to standard diagnostic criteria. It refers to a lack of psychological wellbeing affecting a person's thoughts, feelings, behavior and functioning.

Numerous studies have demonstrated that family caregivers of patients with a severe mental illness suffer from mental distress (especially depression, insomnia,

anxiety, somatization, paranoia and obsessive behavior); and often receive inadequate assistance from mental health professionals. Research conducted in British (1992) reported that psychological distress (anxiety, depression, and insomnia) was twice as high as in the general population.

Other findings conducted in Latin America and KSA suggest that 40% of the caregivers compared to 13%–18% of general population and 23.33% of the caregiver's group versus 3.33% of the control group met the criterion for being at risk of depression, it measures in the CES-D 10 scale as they got 10 or greater score respectively.

Another study in Nigeria on caregivers of psychiatric out patients reveals almost half of the relatives had psychological distress (43.8%). (Sintayehu et al., 2015).

1.2 Justification of the Study

In the case of mental health illness with the patient the family members also suffered a lot in their personal, psychosocial and social life because of depression. In Bangladesh family members of a mentally ill persons didn't take much help from health care professionals to improve their productive life and quality of life.

With this study the collected data will immense to provide evidence-based information of depression of family members and also with the result of the study Mental health professionals can also more consistently refer families to occupational therapists where they can explore the manner in which they feel comfortable to advocate for themselves.

Occupational Therapist plays a significant role in psychosocial restoration, environmental, developmental, and emotional ailments of mental health of an

individual. An Occupational Therapist helps the client to achieve maximal independence through accurate evaluation, retraining, and adaptive techniques which may help to participate in any situations of life to maximize their functional and mental potential. This research will help occupational therapists to update, restructure, and expand the occupational therapy program in outpatient and community-based settings. This will be beneficial for the clients and for the occupational therapy profession. Thus, the goal of OT will be more realistic, which will ultimately lead to the benefit of patient's caregivers.

By utilizing this research study in Bangladesh, The OTs and the students of occupational therapy will be able to enrich their knowledge and resources. They will also establish different management strategies for the persons with mental illness and also their caregivers in their community.

1.3 Operational Definition

1.3.1 Depression

According to WHO, Depression is a common mental disorder that presents with depressed mood, loss of interestor pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. Moreover, depression often comes with symptoms of anxiety. These problems can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities. At its worst, depression can lead to suicide. Almost 1 million lives are lost yearly due to suicide, which translates to 3000 suicide deaths every day (WHO, 2022).

1.3.2 Mental Illness

According to WHO, A mental disorder is characterized by a clinically significant disturbance in an individual's condition, emotional regulation, or behavior. It is usually associated with distress or impairment in important areas of functioning. There are many different types of mental disorders. Mental disorders may also be referred to as mental health conditions. The latter is a broader term covering mental disorders, psychosocial disabilities and mental states associated with significant distress, impairment in functioning, or risk of self-harm. Some types of mental illness:

- Anxiety Disorders
- Depression
- Bipolar Disorder
- Post-Traumatic Stress Disorder (PTSD)
- Schizophrenia
- Neurodevelopmental disorders (WHO, 2022)

1.3.3 Family Members of Persons with Mental Illness

A first-degree family members is a person's parent (father or mother), full sibling (brother or sister) or offspring. It constitutes a category of family members that largely overlaps with the term nuclear family, but without spouses.

If the persons are related by blood, the first-degree relatives share approximately 50% of their genes. First-degree relatives are a common measure used to diagnose risks for common diseases by analyzing family history (Talley, Nicholas; 2007).

CHAPTER II: LITERATURE REVIEW

2.1. Mental Illness

A clinically significant disruption in an individual's behavior, emotion regulation, or thought processes is indicative of a mental disease. Usually, it is linked to distress or impairment in critical domains of functioning. Mental health issues are another name for mental disorders. 970 million individuals worldwide, or one in every eight people, suffered from a mental illness in 2019. Anxiety and depressive disorders were the most prevalent types. Due in large part to the COVID-19 epidemic, the number of individuals suffering from anxiety and depression illnesses increased dramatically in 2020. According to preliminary forecasts, anxiety and major depressive disorders would rise by 26% and 28%, respectively, in just a single year. Additionally, a lot of people deal with discrimination, stigma, and human rights violations (WHO, 2022).

The problems that impact your mood, thoughts, and behavior are referred to as mental illnesses. Anxiety disorders, eating disorders, schizophrenia, depression, and addictive behaviors are a few examples of mental illnesses. Many people occasionally experience mental health issues. However, persistent symptoms that lead to regular stress and interfere with functioning elevate a mental health problem to a mental disease (Scott C, 2022).

2.2. Types of Mental Illness

2.2.1 Anxiety Disorders

According to WHO, in 2019, 301 million people were living with an anxiety disorder including 58 million children and adolescents. Anxiety disorders are characterized by excessive fear and worry and related behavioral disturbances. Symptoms are severe enough to result in significant distress or significant impairment in functioning. There are several different kinds of anxiety disorders, such as: generalized anxiety disorder (characterized by excessive worry), panic disorder (characterized by panic attacks), social anxiety disorder (characterized by excessive fear and worry in social situations), separation anxiety disorder (characterized by excessive fear or anxiety about separation from those individuals to whom the person has a deep emotional bond), and others. Effective psychological treatment exists, and depending on the age and severity, medication may also be considered (WHO, 2022).

2.2.2 Depression

According to WHO, in 2019, 280 million people were living with depression, including 23 million children and adolescents. Depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. During a depressive episode, the person experiences depressed mood (feeling sad, irritable, empty) or a loss of pleasure or interest in activities for most of the day, nearly every day, for at least two weeks. Several other symptoms are also present, which may include poor concentration, feelings of excessive guilt or low self-worth, hopelessness about the future, thoughts about dying or suicide, disrupted sleep, changes in appetite or weight, and feeling especially tired or low in energy. People with depression are at an increased risk of suicide. Yet, effective psychological treatment exists, and depending on the age and severity, medication may also be considered (WHO, 2022).

2.2.3 Bipolar Mood Disorder

Bipolar disorder (formerly called manic-depressive illness or manic depression) is a mental illness that causes unusual shifts in a person's mood, energy, activity levels, and concentration. These shifts can make it difficult to carry out day-to-day tasks (Sachs, 1996). According to WHO, in 2019, 40 million people experienced bipolar disorder. People with bipolar disorder experience alternating depressive episodes with periods of manic symptoms. During a depressive episode, the person experiences depressed mood (feeling sad, irritable, empty) or a loss of pleasure or interest in activities, for most of the day, nearly every day. Manic symptoms may include euphoria or irritability, increased activity or energy, and other symptoms such as increased talkativeness, racing thoughts, increased self-esteem, decreased need for sleep, distractibility, and impulsive reckless behavior. People with bipolar disorder are at an increased risk of suicide. Yet effective treatment options exist including psychoeducation, reduction of stress and strengthening of social functioning, and medication (WHO, 2022).

2.2.4 Post-Traumatic Stress Disorder (PTSD)

TSD may develop following exposure to an extremely threatening or horrific event or series of events. It is characterized by all of the following: 1) re-experiencing the traumatic event or events in the present (intrusive memories, flashbacks, or nightmares); 2) avoidance of thoughts and memories of the event(s), or avoidance of activities, situations, or people reminiscent of the event(s); and 3) persistent perceptions of heightened current threat. These symptoms persist for at least several weeks and cause significant impairment in functioning. Effective psychological treatment exists (WHO, 2022).

2.2.5 Schizophrenia

Schizophrenia is a mental disorder characterized by disruptions in thought processes, perceptions, emotional responsiveness, and social interactions (Jansson, 2007). Schizophrenia affects approximately 24 million people or 1 in 300 people worldwide. People with schizophrenia have a life expectancy 10-20 years below that of the general population. Schizophrenia is characterized by significant impairments in perception and changes in behavior. Symptoms may include persistent delusions, hallucinations, disorganized thinking, highly disorganized behavior, or extreme agitation. People with schizophrenia may experience persistent difficulties with their cognitive functioning. Yet, a range of effective treatment options exist, including medication, psychoeducation, family interventions, and psychosocial rehabilitation (WHO, 2022).

2.2.6 Eating Disorders

Eating disorders involve abnormal eating and preoccupation with food as well as prominent body weight and shape concerns. The symptoms or behaviors result in significant risk or damage to health, significant distress, or significant impairment of functioning. Effective treatment options exist, including family-based treatment and cognitive-based therapy (CBT) (WHO, 2022).

2.2.7 Disruptive behavior and dissocial disorders

This disorder also known as conduct disorder, is one of two disruptive behavior and dissocial disorders, the other is oppositional defiant disorder. Disruptive behavior and dissocial disorders are characterized by persistent behavior problems such as persistently defiant or disobedient to behaviors that persistently violate the basic rights of others or major age-appropriate societal norms, rules, or laws. Onset of disruptive

and dissocial disorders, is commonly, though not always, during childhood. Effective psychological treatments exist, often involving parents, caregivers, and teachers, cognitive problem-solving or social skills training (WHO, 2022).

2.2.8 Neurodevelopmental disorders

Neurodevelopmental disorders are behavioral and cognitive disorders, that arise during the developmental period, and involve significant difficulties in the acquisition and execution of specific intellectual, motor, language, or social functions. Neurodevelopmental disorders include disorders of intellectual development, autism spectrum disorder (ASD), and attention deficit hyperactivity disorder (ADHD) amongst others. ADHD is characterized by a persistent pattern of inattention and/or hyperactivity-impulsivity that has a direct negative impact on academic, occupational, or social functioning. Disorders of intellectual development are characterized by significant limitations in intellectual functioning and adaptive behavior, which refers to difficulties with everyday conceptual, social, and practical skills that are performed in daily life. Autism spectrum disorder (ASD) constitutes a diverse group of conditions characterized by some degree of difficulty with social communication and reciprocal social interaction, as well as persistent restricted, repetitive, and inflexible patterns of behavior, interests, or activities. Effective treatment options exist including psychosocial interventions, behavioral interventions, occupational and speech therapy. For certain diagnoses and age groups, medication may also be considered (WHO, 2022).

2.3. Causes and Factors associated with Mental Illness

The exact cause of most mental illnesses is not known but it is becoming clear through research that many of these conditions are caused by a combination of biological, psychological, and environmental factors. Many mental illnesses run in families. But that doesn't mean it will transmit through yours father and mother.

Some conditions involve circuits in your brain that are used in thinking, mood, and behavior. For instance, you may have too much, or not enough, activity of certain brain chemicals called neurotransmitters within those circuits. Brain injuries are also linked to some mental conditions (Poonam, 2023).

Some mental illnesses may be triggered or worsened by psychological trauma that happens when you're a child or teenager, such as:

- Severe emotional, physical, or sexual abuse
- A major loss, such as the death of a parent, early in your life
- Neglect from everywhere

Major sources of stress, such as a death or divorce, problems in family relationships, job loss, school, and substance abuse, can trigger or aggravate some mental disorders in some people. But not everyone who goes through those things gets a mental illness.

It's normal to have some grief, anger, and other emotions when you have a major setback in life. A mental illness is different from that. Some factors that may be involved in the development of mental illness include:

2.3.1 Biological Factors:

- Genetics (heredity)
- Brain injury

- Prenatal damage
- Substance abuse
- Poor nutrition and exposure to toxins

2.3.2 Psychological Factors:

- Severe psychological trauma suffered as a child, such as emotional, physical, or sexual abuse
- An important early loss, such as the loss of a parent
- Neglect
- Poor ability to relate to others

2.3.3 Environmental Factors:

- Death or divorce
- A dysfunctional family life
- Feelings of inadequacy, low self-esteem, anxiety, anger, or loneliness
- Changing worksite such as; jobs or schools
- Social or cultural expectations (For example, a society that associates beauty with thinness can be a factor in the development of eating disorders.
- Substance abuse by the person.

2.3.4 Socioeconomic Factors:

- Unemployment
- Low income
- Poverty
- Poor or unstable living conditions
- Lack of education

Socioeconomic factors are often connected to environmental factors.

2.4. Sign and Symptoms of Mental Illness

Signs and symptoms of mental illness can vary, depending on the disorder, circumstances and other factors. Mental illness symptoms can affect emotions, thoughts and behaviors. Examples of signs and symptoms include:

- Feeling sad or down
- Confused thinking or reduced ability to concentrate
- Excessive fears or worries, or extreme feelings of guilt
- Extreme mood changes of highs and lows
- Withdrawal from friends and activities
- Significant tiredness, low energy or problems sleeping
- Detachment from reality (delusions), paranoia or hallucinations
- Inability to cope with daily problems or stress
- Trouble understanding and decision making
- Problems with alcohol or drug use
- Major changes in sleeping and eating habits
- Sex drive changes
- Excessive anger, hostility or violence
- Suicidal thinking

Sometimes symptoms of a mental health disorder appear as physical problems, such as stomach pain, back pain, dizziness, headaches, or other unexplained aches and pains (Scott C, 2022)

2.5. Depression

Depression is one of the most common types of mental health conditions and often develops alongside anxiety. It can be mild and short-lived or severe and long-lasting. Some people are affected by depression only once, while others may experience it multiple times. Depression can be led to suicide, but this is treatable when appropriate support is provided (UNICEF, 2022).

Depression is a common mental disorder. Globally, it is estimated that 5% of adults suffer from the disorder. It is characterized by persistent sadness and a lack of interest or pleasure in previously rewarding or enjoyable activities. It can also disturb sleep and appetite. Tiredness and poor concentration are common (WHO, 2022).

2.5.1. Depression among Caregivers of Person with Mental Illness

Depression is a serious mental illness that affects patients treatment outcome and caregiver day to day life (Derajew et al., 2017). Depression is one of the most common psychological consequences of caregiving. Caring for patients with severe mental illness (SMI) adds significant challenges to family care givers mental health (Sun et al., 2019). Family members of persons with serious mental illness may endure considerable stress and burden that can compromise their own health and quality of life and impair the functioning of the family. However, if family members are resilient, they can overcome stress associated with providing care for a loved one with a mental illness, and preserve their own health and the health of their family members. This integrative review summarizes current research on resilience in adult family members who have a relative with a serious mental disorder, including major depressive disorder, bipolar disorder, schizophrenia, and panic disorder. Although some studies have

included children and young siblings providing care for a relative with a mental illness, this review focuses on family members who are adults (Zauszniewski et al., 2010).

2.5.2. Prevalence of Depression:

In a study of southwest, Ethiopia, we found that a cross-sectional study was conducted among primary caregivers of patients with severe mental illness and the overall prevalence of depression among primary caregivers of patients with mental illness was 19% (Derajew et al., 2017).

In another study of Sichuan, China, we found that out of 256 caregiver of mental illness patient, 53.5% of caregivers had depression (Sun et al., 2019).

In another study of India, A study was conducted with 200 caregivers of patients (Schizophrenic patients – 59 and patients with affective disorders - 141). Prevalence of Depression among caregivers of Mentally ill patients was 42.5% (Vijayalakshmi, 2016).

In another study of Ethiopia, A total of 178 relatives of individuals who were diagnosed as suffering from schizophrenia or major affective disorders. The result of the study was about 75% of the respondents perceived that they were stigmatized or had experienced some sort of stigma due to the presence of mental illness in the family, 42% were worried about being treated differently and 37% wanted to conceal the fact that a relative was ill (Shibre et al., 2001).

In one cross sectional study of India, 100 family caregivers of patient with schizophrenia and 100 family caregivers of patient with depressive disorders were recruited for the study. The result of the study was: Caregivers of patients with schizophrenia in comparison to depressive disorder has significantly increased mean FBIS (Family Burden Interview Schedule) score (Koujalgi et al., 2013).

2.5.3. Age range and Gender of patients:

In a study of southwest, Ethiopia, Primary caregivers who were more than 18 years were included in this study. Primary caregivers who were away from patients at least for a month in the past three months were excluded. The prevalence of depression among female caregivers was higher than that of the male caregivers (Derajew et al., 2017).

In another study of China, the primary family caregiver was defined as the family member who was more than 18 years, spent most of the time with the Mentally ill patient. (Sun et al., 2019).

In another study of India, Depressive scores were significantly higher in caregivers of female patients (Vijayalakshmi, 2016).

In a study of USA, we found that, the target population comprised of people aged 18 and above (Boyd et al., 2010).

In another study of Ethiopia, Caregiver more than 45 years were included and the prevalence of depression among male caregivers was higher than that of the female caregivers. The ratio is Male: Female= 2:1 (Shibre et al., 2001). In a study of India, the age range of the study was 18-45 years, and there is no information of gender variability (Koujalgi et al., 2013).

In another study of Tanzania, the age range of the study was 18-45 years. Five informants were men and nine were female. Five informants were housewives, that is, they were married and others hadn't described the actual relationship with the patients (Iseselo et al., 2016).

2.5.4. Social Support and other factors which are associated with depression:

In a study of southwest, Ethiopia, Depression among primary caregivers was associated with providing care for an increased number of hours per day; low perceived social support and the patient's suicidal attempts. Therefore, while caring for patients, screening primary caregivers of patients with mental illness and treating them accordingly, is crucial to decrease the incidence of depression (Derajew et al., 2017).

In another study of Sichuan, China, the results showed that insufficient social support and more care burden are predictors of higher depression of caregivers of Mental illness patients. In addition, social support exerts a significant influence on depression indirectly through the of care burden. The influence of social support on depression can be heightened further through lower care burden, so social support was essential to decrease depression (Sun et al., 2019).

In another study of India, Overall findings of the study indicate, nearly half of the caregivers of mentally ill patients themselves suffer from depression which is associated with various psycho social factors, reflecting the hugeness of the problem. Emotional impact of any psychiatric disorder on family or primary caregivers can vary from frustration, anxiety, fear, depression and guilt to grief (Vijayalakshmi, 2016).

In a study of USA, we found that respondents with contact felt less anger and blame toward the character, thought that the character had a more serious problem, and would want less social distance, including both casual and close aspects of social distance. Caregivers were not significantly different from the general population in the degree to which they expressed sympathy, thought the problem would last a lifetime. The result reflects the importance of the educated group as a resource in fighting stigma in society (Boyd et al., 2010).

In another study of Ethiopia, the study shows social implications, in that the stigma attached to mental illness is an issue of great concern to patients' families. Stigma can be a major obstacle to recovery and can limit opportunities of work and social functioning of patients and family members. So, relatives should concern when planning for intervention by mental health professionals (Shibre et al., 2001).

In a study of India, the study was conducted in two groups of people (family caregivers of patient with Schizophrenia and family caregivers of patient with depressive disorders). The schizophrenia group had significantly high impairment in family interaction than depressive group. Schizophrenia, which is a continuous relapsing disorder, family member requires somewhat different sort of adaptive skills. Relapsing disorder would need the role reallocation in the family system where as the episodic depressive disorder may be flexible and permit care giving arrangements. For Schizophrenia, it is more when a patient falls prey to poor sanitation, excessive smoking, and reversal of sleep. Such a sleeping habit may affect the family members need for rest and family system. Due to the illness the family may feel rejected by the extended family members, and this is often mixed with a feeling of anger, guilt, and hopelessness. There was no significant difference of effect on physical health of other family members between two groups. This study has shown that family members of patients with Schizophrenia experienced considerable high degree of family burden compared to depressive disorder group. So important implication for management of patient with the Schizophrenia is important (Koujalgi et al., 2013). In another study of Tanzania, the result shows financial constraints, lack of social support, disruption of family functioning, stigma, discrimination, and patients' disruptive behavior emerged as the main themes in this study. Family care giving for persons with mental illness has

multiple social and psychological challenges for both family caregivers and mental health professionals. Solving of these problems needs a collaborative approach between health care providers and the government so that the caregiver and the family in general can be benefited (Iseselo et al., 2016).

2.6. Causes of Depression

National Institute for Health Care Management (2010) mentioned the causes of depression.

- **Family History**: Depression of a family member immediately increases the risk ofdeveloping depression of the other member of the family.
- **Age:** Most of the people experience their first episode of depression between the ageranges of 18 to 40 years.
- **Gender**: It is estimated that 1 out of every 4 women and 1 out of every 10 men experience some type of depression during their lifetime. While women suffer from depression more often and attempt suicide more frequently.
- **Stress**: Negative life events, such as divorce, loss of closed person or loss of employment are associated with increased depression.
- **Residence**: Depression seems to be higher in urban residents than in rural residents.
- **Marital Status:** Depression is highest among divorced, separated persons. It is lowestamong single and married persons.
- **Work Status**: Research shows that people unemployed for six months or more in thelast five years had a rate of depression three times that of the general population in our countries perspective.

- **Physical Illness**: Certain physical illnesses are associated with depression such as thyroid disorder, hormonal imbalances and heart diseases.
- **Psychosocial Factors:** Several psychosocial factors such as having four or more children living in a single house, Isolation from social contacts, Poor relationship withpartner, Feelings of loneliness are related to the depression of mother (Lambrenos et al. 1996).

2.7. Types of Depression

2.7.1 Major depression:

Major depression is one of the most common forms of depression. He or she looks disinterested in becoming involved in regular activities and seems influenced that he or she will always be in this hopeless state. There is a lack of interest in sexual activity and in appetite and a weight loss.

2.7.2 Atypical depression:

Atypical depression is a variation of depression that is slightly different from major depression. The sufferer is sometimes able to experience happiness and moments of joy. Symptoms of atypical depression include fatigue, oversleeping, overeating and weight gain. People who suffer from atypical depression believe that outside events control their mood (i.e. success, attention and praise).

2.7.3 Psychotic depression:

Psychotic depression begins to hear and see imaginary thing such as sounds, voices and visuals that do not exist. These are referred to as hallucinations which are generally more common with someone suffering from schizophrenia. The sufferer of psychotic depression imagines frightening and negative sounds and images.

2.7.4 Dysthymia depression:

Many people just walk around seeming depressed simply sad, unhappy. They have been this way all of their lives. Dysthymia conditions people are not even aware of but just live with daily. They go through life feeling unimportant, dissatisfied, frightened and simply don't enjoy their lives.

2.7.5 Manic depression:

Manic depression can be defined as an emotional disorder characterized by changing mood shifts from depression to mania which can sometimes be quite rapid. People who suffer from manic depression have an extremely high rate of suicide (Behrman, 2014).

2.8. Symptoms of Depression

Not everyone who is depressed experiences every symptom. Some people experience a few symptoms, some many. Severity of symptoms varies with individuals and also differs over time. These are persistent sad, anxious or empty mood; feelings of hopelessness, pessimism; feelings of guilt, worthlessness, helplessness; loss of interest or pleasure in hobbies and activities that were once enjoyed including sex ;decreased energy, fatigue; difficulty concentrating, remembering or making decisions; insomnia, early-morning awakening or oversleeping; appetite, weight loss, overeating and weight gain; thoughts of death or suicide; suicide attempts; restlessness, irritability; persistent physical symptoms that do not respond to treatment, such as headaches, digestive disorders and chronic pain (Grohol, 2014).

American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) specified some depressive symptoms for diagnosis of depression such as depressed mood, loss of pleasure, apathy, low energy, sleep and appetite problems and negative views of oneself and about his future. In case

of some individual low self-esteem, low self-confidence, guilt, and pessimism are present (Khayatzadeh et al, 2003).

2.9. Risk factors of Depression

There are many risk factors for depression such as effects of illness; previous history of mood disorder; childhood experience of being parented; stressful life events; insufficient family or social supports; a child that is restless, difficult to settle or unwell; anxious worrier; socially avoidant; perfectionist; self-critical (Causes & risk factors, 2013).

2.10. Level of Depression

Tracy (2011) stated that dealing with straight major depression with no subtype consideration, there is still the question of depression severity. There are many classifications and severity evaluation scales used in psychiatry. These are generally used for diagnosis. There is much discussion over rating scales and their use but one thing is clear, depression isn't a single thing; it is many things combined.

2.11. Gaps of the study:

There is no literature founded in Bangladesh about level of depression among family members of person with mental illness.

There are several limitations in this research. Firstly, the sample was too small with few participants. This might have an effect in a normal interaction during the interview and consequently contributed to limited information. Secondly, the study conducted on heterogeneous group, which might have affected the freedom of expression among the participants. Thirdly, only one primary caregiver and who spent most of the time with the patient was recruited. There could be variety in the types of problems associated with care giving among different caregivers, due to different family roles and perceptions of care giving. Finally, the study was hospital-based which means the findings are not generalize able to a community-based sample (Iseselo et al., 2016).

The limitation of the study is that they cannot determine those who have experience with mental illness as either a consumer, friend, or relative who report fewer stigmatizing views held these views before the encounter. Thus, their data do not speak to the specific aspects of the relationships or experiences that are associated with stigma. Their sample size wasn't so large so sample size did not allow us to split the social distance data between respondents who were asked about the represented character and those who were asked about the character's sibling (Boyd et al., 2010).

CHAPTER III: METHODS

3.1 Study Question, Aim, Objectives

3.1.1 Study question

What is the level of Depression among Family Members of Persons with Mental Illness?

3.1.2 Aim

The aim of the study is to assess the level of depression and associated factors among primary caregivers of patients with mental illness

3.1.3 Objectives:

1. To identify the common socio-demographic pictures of the Family Members of Persons with Mental Illness.
2. To find out the level of depression among Family Members of Persons with Mental Illness.
3. To identify the mean difference between socio-demographic characteristics and level of depression among Family Members of Persons with Mental Illness.

3.2 Study Design (Method, Approach)

3.2.1 Method

Quantitative research method was carried out. The researcher used this method because Quantitative research methods measure the level of occurrences based on numeric descriptions and calculations. Moreover, the questions “How many?” and “How often?” are often asked in quantitative studies. It means testing objective theories by examining the relationship among variables. Numbered information can be analyzed through statistical procedures (Creswell, 2009).

3.2.2 Approach

A cross sectional survey design was used to meet the aims of the study to collect data as an effect way. Levin (2006) suggested that cross-sectional studies are carried out at one time point to or over a short period. Researcher usually conducted to estimate the rate of the outcome of interest for a given population and data can also be collected on individual characteristics. This study gave a snapshot of the level of depression and associated factors among the family members of person with mental illness. Since cross sectional studies is the best way to determine the level and are useful at identifying associations (Mann, 2003). On the other hand, the cross- sectional design is one of the most commonly used survey research designs. And also, the focus in a cross-sectional design is description- describing the characteristics of a population or the differences among two or more populations at a particular point in time (Shaughnessy *et al*. 2003).

3.3 Study Setting and Period (Study Setting and Period)

The data were collected from National Institute of Mental Health (NIMH) which is located at Sher-E-Bangla Nagar, Dhaka and Mental Health Day Center in Nabinagar, Savar, Dhaka. The study period of my study was from May 2023 to February 2024 and the data collection period was December 2023.

About National Institute of Mental Health: The National Institute of Mental Health (NIMH) is the lead state agency dedicated to the treatment of mental health problems along with mental health policy formation, research, and training of mental health professionals (nimh.gov.bd).

Objectives of NIMH:

- To expand the capacity of Inpatient and Outpatient Departments.
- To produce competent, independent practicing psychiatrists who have the ability to lead interdisciplinary teams in all clinical settings.
- Professional and allied health professional training in the field of psychiatry, clinical psychology, psychiatric social work and psychiatric nursing.
- To maintain a Psychiatric Central Electronic Register for the betterment of the patients.
- Expansion of mental health services at community level.
- Social and occupational rehabilitation of mental health patients.
- Research in behavioral sciences.

About Mental Health Day Center: CRP-Rabeya Noor Mental Health Day Center inaugurated its services in 12 August 2023 in Nabinagar, Savar. The existing 'Mental Health Day Center' facility of CRP Ganakbari has been shifted to Conforce Limited Company's premises as an outcome of partnership between CRP and Conforce. The service of Mental Health Day Center is developed and supported by the Kadoorie Charitable Foundation (KCF), Hongkong.

The facility provides day care services for people with mental health including psychosocial counseling, Occupational Therapy, Psycho education for caregivers and more. Additionally, the facility offers the patients a variety of day center activities.

Individual and group sessions for psychotherapy and occupational therapy are included as well as self-care education and practices like eating, washing and taking care of oneself.

Recreational activities like sports, drama, cultural events, movie day, and outing program are also included. Productive work like gardening and cooking skill training is also included, as is occupational therapy intervention like household activities and handcraft training.

Furthermore, the facility offers fifteen rooms to patients who utilize the day center and food facilities (Meaningful Social Access for Persons with Mental Health Needs Project, 2022).

Service available:

- Occupational Therapy
- Psychotherapy
- Psychiatric Consultancy
- Community Reintegration
- Life skill Training

3.4 Study Participants

3.4.1 Study Population:

The population of the study was First degree relative of person with mental illness. Apparent, sibling or child of an individual. And also, who met inclusion and exclusion criteria.

3.4.2 Sampling Techniques:

The study was conducted to select the sample by convenience sampling. This sampling method can be used in a study because of mostly easier, cheaper, quickly and it also might be used as for financial and temporal reasons (Bailey, 1997). On the other hand, the most common form of Nonprobability sampling is convenience sampling. It involves selecting respondents primarily on the basis of their availability and willingness to respond. It isresult in a biased sample unless have strong evidence confirming the representativeness of the sample (Shaughnessy *et al.* 2003). This type of sampling method takes short duration of time to select participants and it is very cost effective (Farrokhi and Mahmoudi, 2012). As the researcher is an undergraduate student and has time limitation to complete data collection so this method was appropriate for the researcher to collect more data conveniently within limited time.

3.4.3 Inclusion Criteria:

- ✓ Person who are 1st degree relative including spouse of Person with Mental Illness.
- ✓ Live in a same house where only one family member had a psychosis type of mental illness.
- ✓ Have no history of medical illness of the caregivers.
- ✓ Caregivers age between 16 years to 86 years (Cummings et al., 2014)

3.4.4 Exclusion Criteria:

- ✓ Family members with a chronic physical illness.
- ✓ Perso who have hearing impairment, speaking difficulty and having any sort of cognitive problem.

3.4.5 Sample Size:

The sample size must be sufficiently large to ensure that it reflects the large group or population from which it is resulting (Hicks, 2000). In cross-sectional research with a finite sample frame, the equation for the finite population correction is $n= Z^2 \times PQ/R^2 = (1.96)^2 \times .0.54 \times .0.46/(.05)^2 =$ **381** by using the standard formula of sample size calculation. Where, confidence level is 95%.

P= prevalence that is 54%= 0.54 (Hossain, 2014)

Z= constant number and that is 1.96

Q= (1-P) and that is 0.46

R= sampling errors and that is 5%= 0.05

That was too difficult to fulfill the participants within 1 month because there was a limited time for data collection. In this short period of time, it is impossible to cover this standard amount. And the researcher is under graduate and completed her research within a limited time so for the better work **210** participants were selected for the study.

3.5 Ethical Consideration

(The proposal will be submitted to the institutions review board of BHPI, through the Department of Occupational Therapy.)

I. Ethical clearance:

The ethics' clearance was sought from the institutional ethical review board of BHPI through dept of occupational therapy. The student researcher did not force any person to participate in the study against their interest. The personal information of the participants (Name, Age, Profession) was not expose in the study and the confidentiality was maintained. Biasness was avoided throughout the study process.

II. Inform consent:

Consent was taken verbally and written through consent form and information sheet. Withdrawal form also provided to the participants so that they can use it if they want to withdraw their data within a certain time.

III. Unequal relationship:

There was no unequal and power relationship between the participants and student researcher.

IV. Risk and beneficence:

There was no risk for the participants as there is no sensitive question in the questionnaire and also as a student researcher, I was not provided any financial beneficence to the participants.

V. Power Relationship:

There was no power relationship between the participants and student researcher.

VI. Confidentiality:

Confidentiality of personal information was strictly maintained.

3.6 Data Collection Process

3.6.1 Participant Recruitment Process:

After sought out the ethical consideration, Student researcher went to the National Institute of Mental Health and Mental Health Day Center. with the permission of the authority. After collecting information about the population, researcher invited the family members of person with mental illness for participating in the study. Researcher provided the information sheet, consent form and withdrawal form to the interested

population. At last, some participants were selected through purposive sampling and study data were collected from them. After completing of data collection researcher gave thanks to the participants.

3.6.2 Data Collection Method:

- ✓ Structured face to face interview through open ended questions.

3.6.3 Data collection instrument:

- ✓ **Socio-Demographic Questionnaire:** The Socio-demographic questionnaire was developed with inclusion and exclusion criteria which were set to meet the study purpose. It was used at the beginning of data selection. By this demographic questionnaire the researcher was collecting general demographic information about the participants to find out the level of depression among the participants.

- ✓ **Zahir Depression Scale:** Permission was taken to use the questionnaire Zahir Depression Scale. A short Bengali version of the Depression Scale was be used to measuring the level of depression of caregivers. The Depression Scale allows health professionals to measure the level of depression in a standardized way. The validity of the questionnaire is measured in different studies. The scale was prepared by Md. Zahir Uddin under supervision of Professor Md. Mahmudur Rahman as a part of the requirements of his M. Phil thesis in the year 2000 (updated in 2022) in clinical Psychology from University of Dhaka (Uddin and Rahman, 2022).

Other instruments:

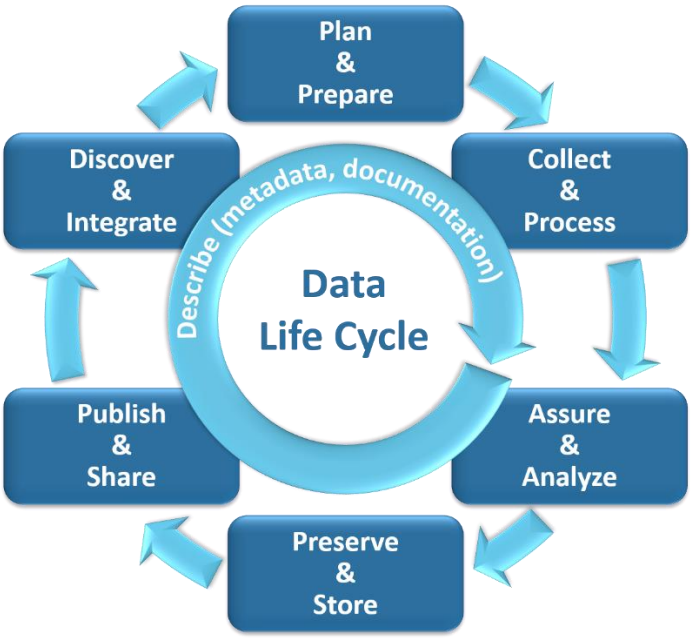
- ✓ Pen
- ✓ Pencil
- ✓ Eraser
- ✓ Consent form
- ✓ Information sheet
- ✓ Withdrawal form

3.6.4 Field Test:

The aim of the field test was to test the effectiveness of interviewing techniques and materials. In order to accomplish these aims of field test of the interview guideline of Zahir Depression Scale scoring form to measure the level of depression and demographic questionnaire was used before the actual data collection. Field testing was performed with 2 family members of person with mental illness who met the inclusion and exclusion criteria. The interview with those participants and record of the Scales scoring form were prepared. It was conducted to check the appropriateness of wording as well as ease of understanding.

3.7 Data Management and Analysis

3.7.1 Management:



Managing your research data makes it easier to share quality data and metadata. Other benefits include:

- organization - managing your data makes it easier to work with
- time saving - having well organized data saves you time in the long run and allows for more time to be spent on analysis
- compliance - many funding agencies require researchers to make their data available

In summary, data management makes it possible to reproduce work, preserve work, and often times, data management is a part of being compliant with research funding agencies (Library, 2018).

3.7.2: Analysis:

Data entry and analysis was performed by using the Statistical Package for Social Science (SPSS), Inc. version 20, according to the category. The Zahir Depression Scale was used to measure the level of depression of family members of person with mental illness and Bengali demographic questionnaire was used to identify demographic characteristics of depression of family members of person with mental illness. Data were analyzed by descriptive statistics and calculated as percentages and presented by using table, bar graph, pie charts etc. Microsoft office Excel was used to decorating the bar graph and pie charts. The results of this study were consisted of quantitative data. By this study a lot of information was collected.

3.8 Quality Control and Quality Assurance

The proper quality of data was assured and managed by the student researcher. Firstly, data was recorded in a excel spreadsheet. Then the data were input in the SPSS version 20. Missing data was checked properly. All the data were input properly and assured by the student researcher. The student researcher also checked the data with his responsible supervisor.

CHAPTER IV: RESULTS

4.1 Socio demographic information:

Variables	Frequency (n)	Percent (%)
Age group		
16-31 years	34	16.2
32-47 years	95	45.2
48-63 years	71	33.8
64-79 years	10	4.8
Gender		
Male	47	22.4
Female	163	77.6
Marital Status		
Married	195	92.9
Unmarried	15	7.1
Educational Qualifications		
Illiterate	70	33.3
Primary	64	30.5
Secondary	38	18.1
Higher Secondary	27	12.9
Graduate	5	2.4
Postgraduate and above	6	2.9
Participant's Occupation		
Farmer	7	3.3
Garments worker	3	1.4
Day labor	9	4.3
Service holder	14	6.7
Businessman	10	4.8
Retired	4	1.9
Student	12	5.7
House wife	138	65.7
Others	13	6.2
Monthly income		
Below 10000	74	35.2
10001-20000	54	25.7
20001-30000	39	18.6
30001-40000	13	6.2
40001-50000	10	4.8
Above 50000	20	9.5

There were 210 participants in this study. Mean age among them was 43.47. Participant's minimum was 16 and maximum was 73. Among them most of the participants 45.2% (n=95) were in between the age of 32-47 years and 33.8% (n=71) were in between 48-63 years, 16.2% (n=34) were in between 16-31 years and 4.8% (n=10) were in between 64-79 years.

Among 210 participants most of them were female which is 77.6% (n=163) and only 22.4% (n=47) participants were male.

94.8% participants were Muslim (n=199) and only few 5.2% participants were Hindu (n=11).

Out of 210 participants 92.9% are married (n=195) and only few 7.1% are unmarried (n=15).

Findings on education level shows that most of the participants 33.3% (n=70) were illiterate, 30.5% (n=64) had education up to primary level and 18.1 % (n=38) had education up to secondary level and 12.9% (n=27) had education up to higher secondary level. The graduation and post-graduation participants recorded respectively percentages 2.4% (n=5) and 2.9% (n=6).

Among the 210 participants, 65.7% (n=138) participants were housewives and 6.7% (n=14) participants were service holder. There were 5.7% (n=12) participants were students. There were a little number of participants which is 3.3% (n=7) were farmer. Some of the participants 6.2% (n=13) were driver and teacher. They are counted under others.

Most of the participants 35.2% (n=74) were having below 10000 taka monthly income. 54 participants which is 25.7% having monthly income in between 10001 to 20000 taka and only some participants (n=20) which is 9.5% have monthly income more than 50000 taka.

4.2 Zahir Depression Scale

4.2.1 Level of Depression Analysis

S. N	Items	Mild (0)	Moderate (1)	Severe (2)	Profound (3)
1.	Upset	1%	21.9%	**73.8%**	3.3%
2.	Lack of joy	1.4%	28.6%	**69.5%**	0.5%
3.	To cry	1.4%	**65.7%**	32.9%	0%
4.	Lack of peace	1.4%	**52.4%**	45.7%	0.5%
5.	Lack of interest	3.8%	33.3%	**62.9%**	0%
6.	Thoughts of insignificance or worthlessness	10%	**64.8%**	25.2%	0%
7.	Hopelessness	10%	**80%**	8.6%	1.4%
8.	Wish to die	**98.1%**	1.9%	0%	0%
9.	Suicide plan	**98.6%**	1%	0.4%	0%
10.	A sense of loss	5.2%	40.5%	**53.8%**	0.5%
11.	The pain of not getting	5.7%	**45.7%**	47.6%	1%
12.	Incompetence and failure	9%	**64.8%**	25.7%	0.5%
13.	Guilt	16.2%	**63.8%**	20%	0%
14.	Self-confidence inferiority	9%	**59.5%**	31.4%	0%
15.	A feeling of emptiness	5.2%	**50%**	44.8%	0%
16.	Attention deficit	3.3%	39.5%	**55.7%**	1.4%
17.	Thoughts and decision taking problem	2.4%	**79.5%**	18.1%	0%
18.	Decreased activity	3.3%	**53.3%**	43.3%	0%
19.	Lack of interest in social interaction	11.9%	**69%**	17.6%	1.4%
20.	Weakness and fatigue	2.9%	**61.4%**	35.7%	0%
21.	Changes in appetite	16.2%	**80.5%**	3.3%	0%
22.	Weight change (without trying to control weight)	12.4%	**86.2%**	1.4%	0%
23.	Sleep changes	6.7%	**53.3%**	40%	0%
24.	Lack of sexual interest	3.3%	11%	**67.1%**	18.6%

- **Overall Level of Depression level according to Zahir Depression Scale scoring criteria**

  Out of 210 respondents, 77.6% (n=163) participants reported that they had suffering from mild depression because of their family members mental illness. And only 22.4% (n=47) of participants reported that they had suffering from moderate types of depression because of their family members mental illness issue. And I didn't find any severe and profound types of depressive patients.

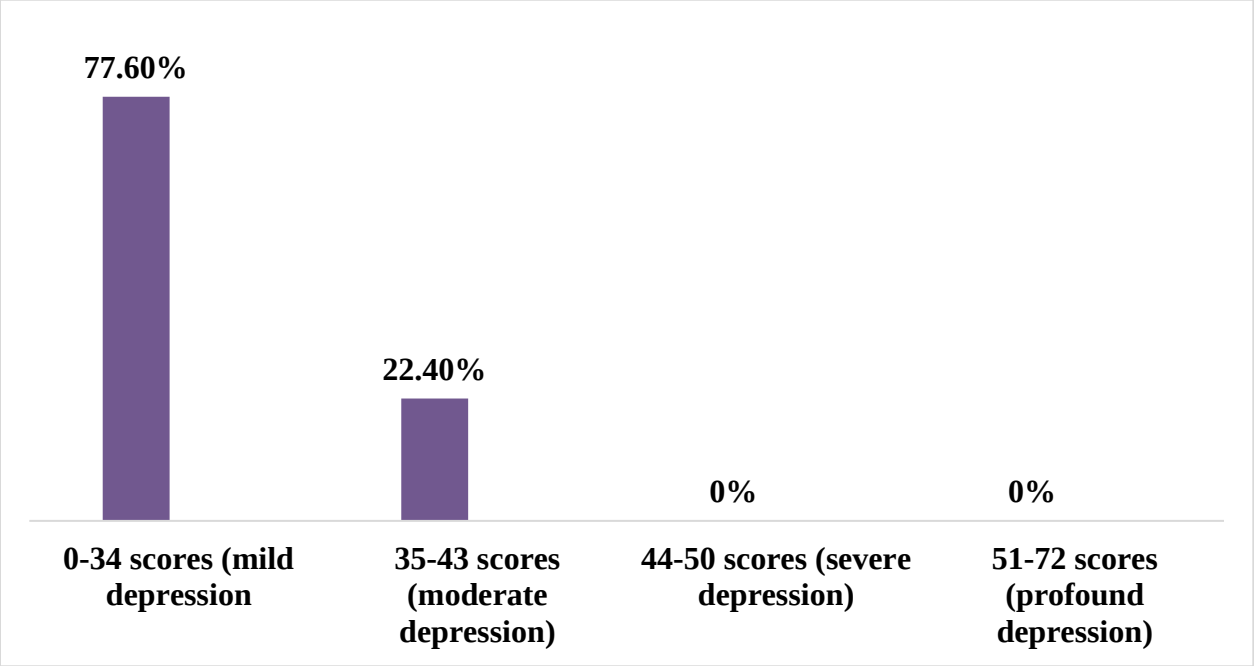


Figure-: Overall Level of Depression among caregivers

4.2.2 To identify the mean difference between the level of depression and demographic characteristics of caregivers of Person with Mental Illness. (Kruskal Wallis Test)

Variables	Category	Frequency (n)	Mean Rank	P value
Age range	16-31 years	34	70.87	0.004
	32-47 years	95	112.72	
	48-63 years	71	110.13	
	64-79 years	10	121.80	
Participants educational qualification	Illiterate	70	125.38	0.002
	Primary	64	101.69	
	Secondary	38	108.18	
	Higher secondary	27	70.78	
	Graduation	5	88.30	
	Post-graduation and above	6	67.83	
Participants Occupation	Farmers	7	71.93	0.000
	Garments workers	3	116.33	
	Day labor	9	114.39	
	Service holder	14	50.86	
	Businessman	10	34.45	
	Retired	4	103.50	
	Student	12	83.83	
	House wife	138	109.74	
Monthly family income of Caregiver	Below 10000 BDT	74	126.99	0.000
	10001-20000 BDT	54	119.22	
	20001- 30000 BDT	39	87.96	
	30001- 40000 BDT	13	72.50	
	40001- 50000 BDT	10	61.25	
	More than 50000 BDT	20	66.70	

According to 95% confidential interval, statistically significant when p-value< 0.05 and esthetically not significant when p-value>0.05.

According to Kruskal Wallis test results presented in above table, participants age shows there is significant differences among different age groups (where P-value<0.05). Findings shows that older people had a higher level of depression (mean rank 121.8) compared to others age group and younger people had low level of depression (mean rank 70.87) as we can see in the mean rank of above table 4.2.2. As the older people suffer much because they have to think about themselves and the patients as well.

Educational qualification of the participants has a significant difference with the depression level (P-value<0.05). In this study most of the participants were illiterate and the depression level is higher among them (mean rank 125.38). Meanwhile the lowest number of participants were graduated and post-graduated in this study and the depression level among them is particularly lower (mean rank 67.30). This might be possible because of their literacy and education level.

In the scenery of participants occupation, there is also significant difference among participants occupation and level of depression (P-value<0.05). Garments worker and housewife had higher depression level (mean rank 116.33 and 109.74) compared to others occupations. This is because most of the participants were female (housewife) in this study and they had to stay a long period of time with the patients. So that's might be the reason of their high level of depression. Depression level lower among businessman and service

holders (mean rank 34.45 and 50.86). As most of them are male participants and they have to busy at work in their respective work sites.

As we can see the monthly family income of participants, there is also high level of significant difference among participants monthly family income and level of depression (P-value<0.05). In this study most of the participants had family income less than 10000 taka and the depression level is quite higher among them (mean rank 126.99). Family members already faced barrier to manage and run their family due to their low family income. Depression level is particularly lower among the participants whose monthly income is 40000-50000 and above taka. The depression level gradually decreases with the increasing of family's monthly income (mean rank of the table 4.2.2).

CHAPTER V: DISCUSSION

The main objective of this study is to find out the level of depression among family members of person with mental illness. This study shows that total 210 caregivers participated in this study in which most of the participants 45.2% were in between the age of 32-47 years, 33.8% were in between 48-63 years, 16.2% were in between 16-31 years and very few 4.8% in between 64-79 years. Mean age among them was 43.47. Age range from minimum was 16 and maximum was 73. According to Derajew et al. (2017) an Ethiopian study found that the mean age of the patients was 30.5+ SD 9.81 years, with ages ranging from 11 to 62 years. The highest percentage of patients 44%, were between the age of 18 to 27 years. Another Ethiopian study indicates that participants age > 44 reported higher level of mental distress than in the age interval of 18–24 years old (Sintayehu et al., 2015). Findings of my study result shows that in Bangladesh perspective the participants age range is higher than other countries research participants.

In this study most of the participants were female which is 77.6% and only few participants were male which is 22.4% in between 210 participants. Derajew et al. (2017) found that in between 284 participants more than half (56.3%) of the primary caregivers were females. Out of the total primary caregivers, 35.6% and 20.4% were parents and children of the patients respectively. Another study in China we found that over half (54.3%) of the caregivers were female among 256 participants (Sun et al., 2019).

Cummings et al (2014) said that female caregivers and those caring for older SMI men had higher levels of depression. From finding of this result, we can see that in Bangladesh and global perspective the female participants are more depressed than male.

Here 210 participants 94.8% were Muslim and only few 5.2% were Hindu. The religion can't be compared or connected to other countries perspective because their religious point of view varied from country to country.

Among 210 participants 92.9% are married and only few 7.1% are unmarried. Derajew et al. (2017) reported that nearly two-third of the primary caregivers (63.2%) were married. But Cummings et al. (2014) said that less than half of participants were currently married. Most were married (81.6%) among 256 participants (Sun et al., 2019). We can say that in Bangladesh and global perspective most of the participants are married.

In this study findings, education level shows that most of the participants 33.3% were illiterate, 30.5% had education up to primary level and 18.1% had education up to secondary level and 12.9% had education up to higher secondary level. The graduation and post-graduation participants recorded respectively percentages 2.4% and 2.9%. Derajew et al. (2017) stated that most of the participants were semi-illiterate (can read but hardly write) which is 38%, illiterate was 22.9% and primary, secondary, tertiary respectively was 20.4%, 14.8% and 13.9%. According to Sun et al. (2019) most of the participants had education up to primary level which is 41.4%. Cummings et al. (2014) stated that Over half had completed high school which is 42.1%, 28.4% studying at high school and 29.5% in primary level. We can say that in Bangladesh educational status among caregivers are slightly poor compared to other countries. They are quite educated.

In my study among the 210 participants, 65.7% participants were housewives (as most of them are female participants) and 6.7% participants were service holder. There were 5.7% participants were students. There were a little number of participants which is

3.3% were farmer. Derajew et al. (2017) reported that most of the participants were farmer which is 26.1%, Govt. employee 17.6%, Business 17.6% and Housewives 14.8%. Iseselo et al. (2016) said that out of 14 participants 8 participants were self-employed, 5 were not employed and only 1 was employed. So, we can say that in Bangladesh most of the participants are housewives but in foreign countries most of the participants did productive works like Farming, Business, Service holder etc.

In my study most of the participants 35.2% were having below 10000 taka monthly income. 25.7% having monthly income in between 10001 to 20000 taka. And 18.6% having monthly income in between 20001-30000 taka and only some rich participants which is 9.5% having monthly income more than 50000 taka. In an Indian study we found that Patients with low socio-economic status (Monthly family income < 10000/) had more depression than other group of people (Vijayalakshmi, 2016). According to Sun et al. (2019) the majority of the caregivers were currently employed (48.8%), had an individual annual income less than $750 (45.3%) and had a per head annual income of household less than $750 (45.3%). In another study of Tanzania, it has been found that people with mental illness are often unable to generate income and that they often have to rely on the financial support of family members to meet basic living needs and to pay for any health expenditure associated with mental illness (Iseselo et al., 2016). According to Derajew et al. (2017) most of the participants had low socio-economic status. Those who reported lower income levels were more depressed than those who had higher income levels, which is consistent with other research (Thompson, 2007; Van der Voort et al., 2007). Findings of this study reported that people from low socio-economic status had suffer much in depression in Bangladesh and other foreign country as well.

In this study out of 210 respondents, 77.6% participants reported that they had suffering from mild depression because of their family members mental illness. And only 22.4% of participants reported that they had suffering from moderate types of depression because of their family members mental illness issue. And I didn't find any severe and profound types of depressive patients according to my scales scoring criteria. In a cross-sectional survey of primary caregivers of patients with mental illness in Southwest Ethiopia, nearly one-fifth (19%) had depression. The prevalence of depression in their study (19%) was lower than the prevalence reported from India (27.5%), Sri Lanka (37.5%), California USA (40%), and Rhode Island USA (75%). The inconsistency between our findings and that of these four studies may be due to the difference between screening tools (Derajew et al., 2017). While I used Zahir Depression Scale in our study, studies conducted in California and Sri Lanka used the CES-D; and the Indian study used the MADRS. So, the findings may vary because of using different assessment tools/scales. Shibre et al. (2001) stated that the fact that family members who reside in town showed more concern about stigma or worried significantly more than the rural people may be due to a less favorable family and social support and a less traditional society in town. According to Sun et al. (2019) the results revealed that caregivers of SMI patients reported a moderate burden which is lower than that of caregivers of schizophrenia patients in China. In a study of India in terms of factors associated with depression among caregivers, findings revealed that, Depressive scores were significantly higher in caregivers of female patients, Patients with low socio-economic status (Monthly family income < 10000 Rs), patients from rural background. It is true that in our family system, invariably women take care of the whole family responsibilities and related tasks. When they suffer from illness

and unable to fulfil their roles, whole family suffer and caregivers feel frustrated which ultimately results in depression. Higher depressive scores are also found among illiterate caregivers, Caregivers of patients from rural background, low socio-economic status and illiterate caregivers. It may be associated with the fact that illiterates are likely to come from rural background and low socio-economic status which might be further confounded with stigma and misconceptions about mental illness which might spill over the family ass well resulting in higher level of depression (Vijayalakshmi, 2016).

Overall, all study findings indicate that mental illness has negative impact on family dynamics, causing stress and depression, even though intensity of distress may vary from person to person based on various psycho social factors including personality of the patient, caregiver and nature of illness.

The third objective of this study is to identify the mean difference between socio-demographic characteristics and level of depression among Family Members of Persons with Mental Illness. According to my study, there is high level of significant differences among participants different age groups, educational qualification, occupations and monthly family income as per p-value<0.05. One of the studies in China, Care burden mediated the relationship between social support and depression. For the socio-demographic variables, gender, education level and per head annual income of household had significant correlations with level of depression where $p < 0.05$ (Sun et al., 2019). In a study of Ethiopia, the demographic characteristic of the caregiver showed that there was a statistically significant association between female gender and risk of mental distress. It was shown that marital status, relationship with the patients and educational status were significantly

associated with mental distress, statistically significant higher rate of mental distress was seen among female caregivers compared to male caregivers and Caregivers who were employed appeared to have a decreased risk of mental distress compared to those who were farmers where the risk of mental distress was doubled which is statistically significant (Sintayehu et al., 2015). Another study of USA, Caregiver income (< $30,000), and marital status (married) were also significantly associated with higher levels of depression, but caregiver race, age, and educational status were not (Cummings et al., 2014).

CHAPTER VI: CONCLUSION

6.1. Strength and Limitations

6.1.1 Strength of this study:

- ✓ It was the first study in Bangladesh among the Family Members of Persons with Mental Illness.
- ✓ Build up rapport with the client through face-to-face interview
- ✓ Data cycle management had been followed in this study
- ✓ The data collection from participants and data entry process was non-biased
- ✓ All the data was used as it is. No modification or explanation was done.

6.1.2 Limitation of this study:

This study was about the level of Depression among Family Members of Persons with Mental Illness. There were some limitations that the student researcher had faced. About these limitations researcher considering prepared this thesis paper. The limitations are: Only two hundred and ten (210) participants actively participate in this study. So, this may not enough to generalize and give the proper result. Because researcher couldn't collect more data lack of enough time for data collection. And also, researcher faced difficulties of data collection because some participants didn't give data in spite of researcher gave him/her consent form and information sheet. Also, some related articles were found but they were from different countries. So, it was so difficult to present any information in the context of Bangladesh perspective. The study was hospital-based which means the findings are not generalize able to a community-based sample (Iseselo et al., 2016). Study was conducted in hospital setting, which reflects the crisis time in the life of a caregiver. Hence there is a possibility of over reporting of depressive symptoms.

6.2. Practice Implication (recommendation for future practice and research)

Depression is an inevitable consequence and has negative impact on daily, physical, cognitive functioning among caregivers of person with mental illness. For implementation to prevent the depression among the caregivers of person with mental illness, it is necessary to ensure the effective treatment of depression of the caregivers of person with mental illness. Education and proper counseling to help them to obtain the beneficial and effective outcomes and avoid the negative outcomes that is possible. It is also needed to document all information safely for future use. Interventions could be developed that have a focus on the health and well-being of the caregivers for instance, interventions that focus on stress reduction and health promotion activities.

6.2.1 Recommendation for future practice:

1. Scheduled and ongoing psycho-education and mutual support programmed could be implemented and strengthened that helps to cope stress, empowering caregivers with knowledge and develop their competence in handling illness of care recipient and enhance their chance of living a life that is as normal as possible. Because this psychoeducation and mutual support may compensate for deficiencies in people's natural support networks.

6.2.2 Recommendation for future research:

1. Future similar research will need to be conducted in the area with large number of sample size and also need for more research on the psychosocial well-being of the caregivers of person with mental illness.
2. Continued studies need to be conducted with this group of care providers because this group is underrepresented in research on caregiving.

6.3. Conclusion

The main goal of my study was to see the level of depression among Family Members of Persons with Mental Illness. In my study, the level of depression among primary caregivers was mostly in mild level. This may have its own impact on the treatment outcome and prognosis of patients with mental illness. In addition, the level of depression among female caregivers was higher than that of the male caregivers. Depression among primary caregivers was associated with providing care for a large period of time per day with the patient. This study results also suggest that researchers and mental health professionals should attend to the special needs of caregivers who are female, housewives, have lower levels of education and low socio-economic status. Although caregiving, in general, is a demanding role, caring for an older adult with mental illness has unique challenges. As this study indicates, caregivers experience depression, and often have support. Because this group is underrepresented in research on caregiving, continued studies need to be conducted with this group of care providers.

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APPENDICES

Appendix A
Approval/Permission letter for conducting study

বাংলাদেশ হেল্‌থ প্রফেশন্স ইনস্টিটিউট (বিএইচপিআই)
Bangladesh Health Professions Institute (BHPI)
(The Academic Institute of CRP)

BANGLADESH HEALTH PROFESSIONS INSTITUTE

Ref: CRP-BHPI/IRB/10/2023/765

Date: 18/10/2023

To
Sadman Sakib
4th Year B.Sc. in Occupational Therapy
Session: 2018-2019 Student ID:122180311
Department of Occupational Therapy
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

Subject: Approval of the thesis proposal **"Level of Depression among Family Members of Persons with Mental Illness: A Cross-Sectional study"** by ethics committee.

Dear Sadman Sakib,
Congratulations.
The Institutional Review Board (IRB) of BHPI has reviewed and discussed your application to conduct the above mentioned dissertation, with yourself, as the principal investigator and Md. Habibur Rahman as thesis supervisor. The Following documents have been reviewed and approved:

Sr. No.	Name of the Documents
1	Dissertation/thesis/research Proposal
2	Questionnaire (English & / or Bengali version)
3	Information sheet & consent form.

The purpose of the study is to assess the level of depression and associated factors among primary caregivers of patients with mental illness. The study involves use of Zahir Depression scale is to measure the level of depression of caregivers that may take about 10 to 15minutes to fill in the questionnaire for collection of specimen and there is no likelihood of any harm to the participants and no economical benefits for the participants. The members of the Ethics committee have approved the study to be conducted in the presented form at the meeting held at 8.30 AM on 23rd September 2023 at BHPI 38th IRB Meeting.

The institutional Ethics committee expects to be informed about the progress of the study, any changes occurring in the course of the study, any revision in the protocol and patient information or informed consent and ask to be provided a copy of the final report. This Ethics committee is working accordance to Nuremberg Code 1947, World Medical Association Declaration of Helsinki, 1964 - 2013 and other applicable regulation.

Best regards,
Hillathossain
MD. HAMMAD HILLAT HOSSAIN
Associate Professor, Project & Course Coordinator, MRS
Member Secretary, Institutional Review Board (IRB)
BHPI, CRP, Savar, Dhaka-1343, Bangladesh

সিআরপি-চাপাইন, সাভার, ঢাকা-১৩৪৩, বাংলাদেশ। ফোন: +৮৮ ০২ ২২৪৪৪৫৪৬৪-৫, +৮৮ ০২ ২২৪৪৪১৪০৪, মোবাইল: +৮৮ ০১৭৩০ ০৫৯৬৪৭
CRP-Chapain, Savar, Dhaka-1343, Bangladesh. Tel: +88 02 224445464-5, +88 02 224441404, Mobile: +88 01730059647
E-mail : principal-bhpi@crp-bangladesh.org, Web: bhpi.edu.bd

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পরিচালক ও অধ্যাপকের কার্যালয়
জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট ও হাসপাতাল
শেরে বাংলা নগর, ঢাকা- ১২০৭

স্মারকনং-এনআইএমএইচ/প্রশাঃ/২০২২/ ২৬৬৭ তারিখঃ ২৬/১০/২৩

বরাবর

এস. কে মনিরুজ্জামান
সহযোগী অধ্যাপক ও বিভাগীয় প্রধান
অকুপেশনাল থেরাপি বিভাগ
বিএইচপিআই, সিআরপি
সাভার, ঢাকা।

বিষয়ঃ গবেষনা সংক্রান্ত তথ্য সংগ্রহের অনুমতি প্রদান প্রসঙ্গে।

উপরোক্ত বিষয়ের আলোকে পঙ্গুত্বাক্রান্তদের পুনর্বাসন কেন্দ্র-সিআরপি'র শিক্ষা প্রতিষ্ঠান বাংলাদেশ হেলথ্ প্রফেশনস্ ইনষ্টিটিউট (বিএইচপিআই) ঢাকা এর বিএইচপিআই'র ৪র্থ বর্ষ বিএসসি ইন অকুপেশনাল থেরাপির ০১(এক) জন শিক্ষার্থীকে জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, শেরে বাংলা নগর, ঢাকায় ২৬/১০/২০২৩ ইং হতে ৩০/১২/২০২৩ ইং পর্যন্ত গবেষনা সংক্রান্ত তথ্য সংগ্রহের জন্য অনুমতি প্রদান করা হলো।

শিক্ষার্থীদের নামঃ

১। সাদমান সাকিব

(অধ্যাপক ডাঃ অভ্র দাশ ভৌমিক)
পরিচালক
জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।

স্মারক নং-এনআইএমএইচ/প্রশাঃ/২০২২/ তারিখঃ

অনুলিপি অবগতি ও প্রয়োজনীয় ব্যবস্থা গ্রহনের জন্য প্রেরণ করা হইল ঃ-

১। বিভাগীয় প্রধান (সকল), এনআইএমএইচ, ঢাকা।
২। উপ-পরিচালক, জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।
৩। জনাব মোঃ জহির উদ্দিন, সহকারী অধ্যাপক, ক্লিনিক্যাল সাইকোলজি, এনআইএমএইচ, ঢাকা।
৪। রেসিডেন্ট সাইকিয়াট্রিস্ট, এনআইএমএইচ, ঢাকা।
৫। মোঃ জামাল হোসেন, সাইকিয়াট্রিক সোশাল ওয়ার্কার, জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।
৬। প্রশাসনিক কর্মকর্তা, জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।
৭। অকুপেশনাল থেরাপিস্ট, জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।
৮। পরিচালক মহোদয়ের ব্যক্তিগত সহকারী, জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।
৯। অফিস নথি।

(অধ্যাপক ডাঃ অভ্র দাশ ভৌমিক)
পরিচালক
জাতীয় মানসিক স্বাস্থ্য ইনস্টিটিউট, ঢাকা।

Date: 21.10.2023

Project Manager

Mental Health Project

CRP, Savar, Dhaka-1343.

Subject: Prayer for seeking permission to collect data from Mental Health Day Center.

Sir,

With due respect and humble submission, I beg to state that I am a student of 4th year Occupational Therapy at BHPI which is an academic institute of Centre for the Rehabilitation of the Paralysed (CRP), affiliated to Faculty of Medicine, University of Dhaka. I am interested to conduct a quantitative study on family members of Persons with Mental Illness. My research title is **"Prevalence of Depression among Family Members of Persons with Mental Illness: A Cross-Sectional study".** The purpose of the study is to assess prevalence of depression and associated factors among primary caregivers of patients with mental illness. To find out their depression, I am using Zahir Depression Scale. **For this reason, I need some information from the primary caregivers about their depression level. Now, I am looking for your kind approval to get data of my participants from your organization.**

I, therefore, pray and hope that you would be kind enough to grant me the permission for data collection and oblige thereby.

Sincerely Yours,
Sadman Sakib
4th year B.Sc. in Occupational Therapy
Session: 2018-19; Student ID: 122180311
BHPI, CRP, Savar, Dhaka-1343.

Signature and comments of project Manager of Mental Health Day Center

Md Mohsiur Rahman
Project Manager
Mental Health Project
CRP, Savar, Dhaka-1343.

Approved

Appendix B

Information Sheet & Consent Form

Consent Form

Respected Participants

Assalamu Alikum,

The researcher Sadman Sakib is a 4th year B.Sc. student in Occupational Therapy department of Bangladesh Health Professions Institute (BHPI), want to conduct research about the level of Depression among Family Members of Persons with Mental Illness: A Cross-Sectional study

The aim of the study is assessing the level of depression and associated factors among primary caregivers of patients with mental illness. The maximum data collection time on this study will be 15- 20 minutes.

I want to inform you that, this research will not be used for any other purpose. The information will not be shared with others. Participants name and other information will not publish. Participant of the study will not financially benefit from this study. They are free to decline answering any question during interview. All the information that is collected from the interview would be kept safely and maintained confidentiality. Participant can withdraw information from the study at any time.

In this study I am……a participant and I have been clearly known about the purpose of the study. I am willing to participate in this study and I will have the right to refuse in taking part any time at any stage of the study. For this reason, I will not be bounded to answer anybody. The researcher will be able available to answer any study related question or inquiry to the participant. So, with my best knowledge I agree to participate willingly with my full satisfaction in this study.

Participant Name and Date Participants Signature Researcher Signature

সম্মতিপত্র

সম্মানিত অংশগ্রহণকারীরা
আসসালামুয়ালাইকুম / নমস্কার,

আমি সাদমান সাকিব ঢাকা বিশ্ববিদ্যালয়ের অধিভুক্ত চিকিৎসা অনুষদের অধীনে পরিচালিত বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউটের (বিএইচপিআই) অকুপেশনাল থেরাপি বিভাগের ৪র্থ বর্ষের (সেশন ২০১৮-১৯) শিক্ষার্থী। আমি "মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্যদের মধ্যে বিষণ্নতার প্রবণতা" নিয়ে একটি গবেষণা পরিচালনা করতে চাই। অধ্যয়নের লক্ষ্য হল মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্যদের বিষণ্নতার প্রবণতা অন্বেষণ করা। এই গবেষণায় সর্বাধিক তথ্য সংগ্রহের সময় হবে ১৫-২০ মিনিট।
আমি আপনাকে জানাতে চাই যে, এই গবেষণা অন্য কোন উদ্দেশ্যে ব্যবহার করা হবে না। এই তথ্যসমূহ অন্যদের সাথে শেয়ার করা হবে না, অংশগ্রহণকারীদের নাম এবং অন্যান্য তথ্য প্রকাশ করা হবে না। অধ্যয়নের অংশগ্রহণকারীরা এই গবেষণা থেকে আর্থিকভাবে উপকৃত হবে না। সাক্ষাৎকারের সময় তারা যে কোনও প্রশ্নের উত্তর দিতে অস্বীকার করতে পারেন। সাক্ষাৎকার থেকে সংগৃহীত সমস্ত তথ্য নিরাপদে রাখা হবে এবং গোপনীয়তা বজায় রাখা হবে। অংশগ্রহণকারী যেকোনো সময় গবেষণা থেকে তথ্য প্রত্যাহার করতে পারেন।

এই গবেষণায় আমি ..... একজন অংশগ্রহণকারী এবং আমাকে অধ্যয়নের উদ্দেশ্য সম্পর্কে স্পষ্টভাবে অবহিত করা হয়েছে। আমি এই অধ্যয়নে অংশগ্রহণ করতে ইচ্ছুক এবং অধ্যয়নের যে কোন পর্যায়ে যে কোন সময় অংশ নিতে অস্বীকার করার অধিকার আমার থাকবে। এই কারণে, আমি কাউকে উত্তর দিতে বাধ্য হব না। গবেষক অংশগ্রহণকারীর কাছে অধ্যয়ন সম্পর্কিত যেকোনো প্রশ্ন বা অনুসন্ধানের উত্তর দিতে সক্ষম হবেন। তাই, আমার সর্বোত্তম জ্ঞানের সাথে আমি এই গবেষণায় আমার সম্পূর্ণ সন্তুষ্টির সাথে স্বেচ্ছায় অংশগ্রহণ করতে সম্মত।

অংশগ্রহণকারীর নাম এবং তারিখ :
অংশগ্রহণকারীর স্বাক্ষর :
গবেষকের স্বাক্ষর :

Information Sheet

Title of the study: Level of Depression among Family Members of Persons with Mental Illness: A Cross-Sectional study

I would like to invite you to take part in a research study. Before you decide you need to understand why the research is being done and what it would involve for you. Please take time to read the following information carefully. Ask questions if anything you read is not clear or if you would like more information. Take time to decide whether or not to take part.

WHO I AM AND WHAT THIS STUDY IS ABOUT?

I am Sadman Sakib, a 4th year B.Sc. student in Occupational Therapy department of Bangladesh Health Professions Institute (BHPI), want to conduct research about the level of depression in Caregivers of Individuals with Mental illness. The aim of the study is assessing depression among primary caregivers of patients with mental illness.

WHAT WILL TAKING PART INVOLVE?

I will conduct a 15-20 minutes interview with you which related to your father/child/brother (person with mental illness). I will conduct the interview with their permission.

WHY HAVE YOU BEEN INVITED TO TAKE PART?

As you are a family member of person with mental illness you have been invited to take part in the study. You have met the inclusion and exclusion criteria. I added the inclusion and exclusion criteria in below.

- **Inclusion Criteria:**

✓ Person who are 1st degree relative including spouse of Person with Mental Illness.

✓ Live in a same house where only one family member had a psychosis type of mental illness.

✓ Have no history of medical illness of the caregivers.

✓ Caregivers age between 16 years to 86 years (Cummings et al., 2014).

- **Exclusion Criteria:**

✓ Family member with a chronic physical illness.

✓ Perso who have hearing impairment, speaking difficulty and having any sort of cognitive problem.

DO YOU HAVE TO TAKE PART?

It is up to you to decide whether or not to take part. If you do decide to take part you will be able to keep a copy of this information sheet and you have to give consent through a consent form. You can still withdraw your information at any time through the withdrawal for. You do not have to give a reason.

WHAT ARE THE POSSIBLE RISKS AND BENEFITS OF TAKING PART?

Participating in the research is not anticipated to cause you any disturbance or discomfort. There is no financial benefit for you for taking part in the study.

WILL TAKING PART BE CONFIDENTIAL?

The information will not be shared with others. Your name and other information will not come out during the study. All the information that is collected from the interview would be kept safely and maintained confidentiality.

WHO SHOULD YOU CONTACT FOR FURTHER INFORMATION?

You can conduct with me for further information.

Sadman Sakib

4th year student, Occupational therapy, BHPI, CRP Phone: 01785969908

Email: sadmansakib489@gmail.com

You can also contact with my supervisor.

Md. Habibur Rahman

Assistant Professor, Occupational Therapy Department, BHPI, CRP

Phone: +8801670896325

তথ্য পত্র

অধ্যয়নের শিরোনাম: মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্যদের মধ্যে বিষণ্নতার প্রবণতা।

আমি আপনাকে একটি গবেষণা গবেষণায় অংশ নিতে আমন্ত্রণ জানাতে চাই। আপনি সিদ্ধান্ত নেওয়ার আগে আপনাকে বুঝতে হবে কেন গবেষণাটি করা হচ্ছে এবং এটি আপনার সাথে কেন জড়িত। নিম্নলিখিত তথ্য মনোযোগ দিয়ে পড়ার জন্য সময় নিন দয়া করে. আপনার পড়া কিছু পরিষ্কার না হলে বা আপনি আরও তথ্য চাইলে প্রশ্ন জিজ্ঞাসা করুন। অংশ নেবেন কি না সিদ্ধান্ত নিতে সময় নিন।

আমি কে এবং এই স্টাডিটি কি সম্পর্কে?
আমি সাদমান সাকিব, ৪র্থ বর্ষের বি.এসসি. বাংলাদেশ হেলথ প্রফেশনাল ইনস্টিটিউটে(বিএইচপিআই) পেশাগত থেরাপি বিভাগের শিক্ষার্থী "মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্যদের মধ্যে বিষণ্নতার প্রবণতা" নিয়ে গবেষণা করতে চাই। অধ্যয়নের লক্ষ্য হল মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্যদের বিষণ্নতার প্রবণতা অন্বেষণ করা।

অংশগ্রহণ করার পর কি কি বিষয় থাকবে?
আমি আপনার সাথে ১৫-২০ মিনিটের একটি সাক্ষাৎকার নেব যা আপনার পিতা/সন্তান/ভাই (মানসিক অসুস্থ ব্যক্তি) সম্পর্কিত। আমি আপনার অনুমতি নিয়ে সাক্ষাৎকার নেব।

কেন আপনাকে অংশ নিতে আমন্ত্রণ জানানো হয়েছে?
যেহেতু আপনি মানসিক রোগে আক্রান্ত ব্যক্তির পরিবারের সদস্য তাই আপনাকে অধ্যয়নে অংশ নিতে আমন্ত্রণ জানানো হয়েছে। আপনি অন্তর্ভুক্তি এবং বর্জনের মানদণ্ড পূরণ করেছেন। আমি নীচে অন্তর্ভুক্তি এবং বর্জনের মানদণ্ড যোগ করেছি।

• অন্তর্ভুক্তির মানদণ্ড:
⎪ যে ব্যক্তি মানসিক রোগে আক্রান্ত ব্যক্তির ১ম ডিগ্রি আত্মীয়।
⎪ নিজের কোন মানসিক রোগের ইতিহাস নেই।
⎪ এমন একটি পরিবারে বাস করুন যেখানে পরিবারের শুধুমাত্র একজন সদস্যের সাইকোসিস ধরনের মানসিক রোগ ছিল।
⎪ বয়স ১৬ বছর থেকে ৮৬ বছরের মধ্যে।

• বর্জনের মানদণ্ড:
⎪ দীর্ঘস্থায়ী শারীরিক অসুস্থতায় পরিবারের সদস্য।
⎪ কথা বলতে অসুবিধা এবং ভাষার সমস্যা আছে।

আপনাকে কি অংশ নিতে হবে?
অংশগ্রহণ করা বা না করার সিদ্ধান্ত আপনার উপর নির্ভর করে। আপনি যদি অংশ নেওয়ার সিদ্ধান্ত নেন তবে আপনি এই তথ্য পত্রের একটি অনুলিপি রাখতে সক্ষম হবেন এবং আপনাকে একটি সম্মতি পত্রের মাধ্যমে সম্মতি দিতে হবে। আপনি এখনও যে কোনো সময় আপনার তথ্য প্রত্যাহার করতে পারেন। আপনি কোন কারণ দিতে হবে না।

অংশ নেওয়ার সম্ভাব্য ঝুঁকি এবং সুবিধাগুলি কী কী?
গবেষণায় অংশগ্রহণের ফলে আপনার কোনো অশান্তি বা অস্বস্তি হবে বলে প্রত্যাশিত নয়। অধ্যয়নে অংশ নেওয়ার জন্য আপনার জন্য কোন আর্থিক সুবিধা নেই।

অংশ নেওয়ার পর তথ্য কি গোপনীয় রাখা হবে?
তথ্য অন্যদের সাথে শেয়ার করা হবে না. অধ্যয়নের সময় আপনার নাম এবং অন্যান্য তথ্য বেরিয়ে আসবে না। সাক্ষাৎকার থেকে সংগৃহীত সমস্ত তথ্য নিরাপদে রাখা হবে এবং গোপনীয়তা বজায় রাখা হবে।

আরও তথ্যের জন্য আপনার কার সাথে যোগাযোগ করা উচিত?
আপনি আরও তথ্যের জন্য আমার সাথে যোগাযোগ করতে পারেন।
সাদমান সাকিব
৪র্থ বর্ষ, অকুপেশনাল থেরাপি, বিএইচপিআই, সিআরপি
ফোন: ০১৭৮৫৯৬৯৯০৮
ইমেইল: sadmansakib489@gmail.com

আপনি আমার সুপারভাইজার এর সাথেও যোগাযোগ করতে পারেন।

মোহাম্মদ হাবিবুর রাহমান
সহকারী অধ্যাপক, বিএইচপিআই, সিআরপি
ফোন: ০১৬৭০৮৯৬৩২৫

ধন্যবাদ

Appendix C
Questionnaire

Socio demographic questionnaire

Question	Answer
1. Participant's Name	
2. Age	
3. Address	
4. Religion	
5. Marital Status	1= Married 2= Unmarried
6. Educational Qualifications	1= Illiterate 2= Primary 3= Secondary 4= Higher secondary 5= Graduation 6= Post graduation and above
7. Occupation	1=Farmers 2=Garments workers 3= Driver 4= Day Labor 5= Service Holder 6= Businessman 5= Retired 5=Student 6=House wife 7=others
8. Monthly Income	1= Below 10000 BDT 2= 10001-20000 BDT 3= 20001- 30000 BDT 4= 30001- 40000 BDT 5= 40001- 50000 BDT 6= More than 50000 BDT

Zahir Depression Scale

Number	Items	The answers
1	Upset	0: I don't feel very sad
		1: Feeling upset is a problem for me
		2: I feel sad for the most of the time in a day
		3: I feel so sad all day that is unbearable
2	Lack of joy	0: I have joy in my mind as before
		1: I don't feel happy like before
		2: Lack of joy makes me very sad
		3: Life has become completely joyless
3	To cry	0: The feeling of crying is normal to me
		1: Lately I cry a lot
		2: I cry a lot more than before
		3: For no reason, tears come out of me
4	Lack of peace	0: I don't like disturbance
		1: I feel restless
		2: Most of the time I feel bad
		3: I feel so much unrest that I can't bear
5	Lack of interest	0: I have no shortage of interest
		1: I have less interest than before
		2: Not interested in anything anymore
		3: My interest has decreased so much that I can't even forcefully maintain interest
6	Thoughts of insignificance or worthlessness	0: I see my importance or value
		1: I have doubts about my own importance or worth these
		2: I often feel insignificance or worthless
		3: It seems that my life has no value anymore
7	Hopelessness	0: I am not pessimistic about the failure
		1: I feel hopeless
		2: I have no hope of anything better
		3: I feel so hopeless that I can't think about the failure
8	Wish to die	0: I have no wish to die
		1: I think it would be better to die
		2: Sometimes I want to die
		3: I often have suicidal thoughts
9	Suicide plan	0: I have no plan to commit suicide
		1: I have suicide plan
		2: I made a detailed plan to commit suicide
		3: I have recently attempt suicide (not on impulse)
10	A sense of loss	0: I don't have much sense of loss
		1: I feel like I am slowly losing what I had
		2: What I have lost keeps coming to my mind

		3: The thoughts that I am all over always torments me
11	The pain of not getting	0: I don't think much about the demands of life
		1: Sometimes the regret of not getting in the mind comes
		2: It often seems as if I got nothing in my life
		3: The pain of not getting the life keep moving in the mind all the time
12	Incompetence and failure	0: I have confidence in my ability
		1: It seems that I am an unworthy person
		2: Sometimes it seems that nothing can be done by me
		3: I am convinced that I am an incompetent and failed human being
13	Guilt	0: I don't feel that guilty
		1: Sometimes I feel guilty
		2: I often feel guilty and blame myself
		3: It seems that I am responsible for everything and that is why I find peace
14	Self-confidence inferiority	0: My confidence is the same as ever
		1: My confidence has decreased compared to before
		2: I feel my lack of confidence in everything
		3: Confidence is so low that I don't have the courage to do anything
15	A feeling of emptiness	0: I don't feel empty or empty inside
		1: Sometimes I feel empty or empty inside
		2: A sense of emptiness works within me all the time
		3: There is such an unbearable emptiness inside me that I have to convince someone not possible
16	Attention deficit	0: I don't have any problem with attention
		1: I have been having trouble concentrating lately
		2: I can't concentrate on many things these days
		3: Lack of attention is a problem in almost every aspect of my life making
17	Thoughts and decision taking problem	0: I have the ability to think or make decisions naturally
		1: Lately I feel like I can't think or make decisions like I used
		2: I have a lot of trouble thinking or making decision
		3: I have completely lost the ability to think or make decisions
18	Decreased activity	0: I can continue my work normally
		1: My work has slowed down
		2: Others also talk about me not being able to work like before saying
		3: Lately it has become impossible for me to do any work

19	Lack of interest in social interaction	0: I don't mind mixing or talking with people
		1: I am not so good at socializing or talking with people
		2: I don't really like to socialize or talk to people these days
		3: I find it difficult to socialize or talk with people, I have almost stopped them
20	Weakness and fatigue	0: I have no problems with weakness and fatigue
		1: I get weak or tired easily
		2: It is difficult for me to do my work due to weakness or being fatigue
		3: I am too weak or tired to do anything
21	Changes in appetite	0: My appetite is normal
		1: My appetite has decreased or increased slightly compared to before
		2: My appetite has decreased or increased much more than before
		3: My appetite has decreased or increased so much that I can concerned about it or others are worried
22	Weight change (without trying to control weight)	0: weight is the same
		1: My weight has decreased or increased slightly compared to before
		2: I have lost or gained so much weight that others have too noticing or saying
		3: I have lost or gained so much weight that it poses a risk to my health
23	Sleep changes	0: I have no problem with sleep
		1: My sleep has decreased or increased slightly compared to before
		2: My sleep has decreased or increased more than before
		3: My sleep has decreased or increased so much that it is seriously affecting my daily life
24	Lack of sexual interest	0: My interest in sex is normal
		1: Less interest in sex than before
		2: I am worried about loss of interest in sex
		3: I don't feel any interest in sex these days

Zahir Depression Scale has twenty-four items and has four-point anchored response options (score ranged 0-3 for each item). Lowest possible score is 0 and highest possible score is 72 in this scale. For scoring, the assessor needs to add obtained score and then consult severity and screening norm.

Severity Norm:

Percentiles	Corresponding scores on Depression Scale	Severity of Depression
25	0-34	Mild depression
50	35-43	Moderate depression
75	44-50	Severe depression
100	51 and above	Profound depression

Screening Norm:

The optimal cut off score is 25 with best combination of sensitivity (89%) and specificity (88%).

Note: For patients with depression diagnosis, severity norm can be administered. But for individual without diagnosis of depression, at first screening norm need to be applied and if she or he gets score 25 or more in the scale, then only severity norm can be administered (Uddin and Rahman, 2022).

Interview questionnaires Bangla

সামাজিক জনসংখ্যা সংক্রান্ত প্রশ্নাবলী

প্রশ্নাবলী	উত্তর
১. অংশগ্রহণকারীর নাম	
২. বয়স	
৩. ঠিকানা	
৪. ধর্মবলম্বী	
৫. বৈবাহিক অবস্থা	১=বিবাহিত ২=অবিবাহিত
৬. শিক্ষাগত যোগ্যতা	১=অশিক্ষিত ২=প্রাথমিক ৩=মাধ্যমিক ৪=উচ্চ মাধ্যমিক ৫=স্নাতক ৬=স্নাতকোত্তর

৭. পেশা	১= কৃষক ২= গার্মেন্টস কর্মী ৩= গাড়ি চালক ৪= দিনমজুর ৫= চাকুরীজীবী ৬= ব্যবসায়ী ৭= অবসরপ্রাপ্ত ৮= শিক্ষার্থী ৯= গৃহিণী ১০= অন্যান্য
৮. মাসিক আয়	১= ১০০০০ টাকার নিচে ২= ১০০০১ টাকা থেকে ২০০০০ টাকা ৩= ২০০০১ টাকা থেকে ৩০০০০ টাকা ৪= ৩০০০১ টাকা থেকে ৪০০০০ টাকা ৫= ৪০০০১ টাকা থেকে ৫০০০০ টাকা ৬= ৫০০০০ টাকার উপরে

জহির ডিপ্রেশন স্কেল

স্কেলের নির্দেশনা:

এখানে বিষন্নতা পরিমাণের জন্য ২৪ টি পদ বাক্য দেওয়া আছে। নিচের পথ এবং সম্ভাব্য উত্তরগুলো মনোযোগ দিয়ে পড়ুন এবং আজকের দিনটি সহ গত সাত দিনের অবস্থা মাথায় রেখে এগুলো আপনার ক্ষেত্রে কতটা প্রয়োজন বা মিলে যায় তা ভাবুন। এবার প্রতিটি পদের ডানে প্রদত্ত সম্ভাব্য চারটি উত্তরের মধ্যে যেটি আপনার ক্ষেত্রে সবচেয়ে বেশি প্রয়োজন সেটিতে গোল চিহ্ন (০) দিয়ে নির্দেশ করুন। যদি একাধিক উত্তর আপনার সাথে মিলে যায়, সে ক্ষেত্রে এদের মধ্যে যেটি সবচেয়ে বেশি নম্বর যুক্ত বা উচ্চতর মাত্রা নির্দেশ করে সেটিতে গোল চিহ্ন দিন। সবগুলো পদের উত্তর দিয়েছেন কিনা লক্ষ্য করুন।

নম্বর	পদ	উত্তর
১	মন খারাপ	০: আমার খুব একটা মন খারাপ লাগে না
		১: মন খারাপ লাগা আমার জন্য একটি সমস্যা
		২: দিনের বেশিরভাগ সময় আমার মন খারাপ লাগে
		৩: সারাদিন আমার এত বেশি মন খারাপ লাগে যা সহ্য করার মত না
২	আনন্দের অভাব	০: আমার মনে আগের মতই আনন্দ আছে
		১: মনে আর আগের মত আনন্দ পাই না
		২: আনন্দের ঘাটতি আমাকে বেশ কষ্ট দেয়
		৩: জীবনটা একেবারেই আনন্দহীন হয়ে গেছে
৩	কান্না পাওয়া	০: কানা অনুভূতি আমার মধ্যে স্বাভাবিকের মতোই আছে
		১: ইদানিং আমার বেশ কান্না পায়
		২: আগের তুলনায় আমার অনেক বেশি কান্না পায়
		৩: কারণে-অকারণে আমার ভেতর থেকে কান্না উঠে আসে
৪	অশান্তি	০: আমার অশান্তি লাগেনা
		১: আমার অশান্তি লাগে
		২: আমার বেশিরভাগ সময় অশান্তি লাগে
		৩: আমার এত বেশি অশান্তি লাগে যা সহ্য করার মতো না
৫	আগ্রহীনতা	০: আমার আগ্রহের কোন ঘাটতি নেই
		১: আগে তুলনায় আমার আগ্রহ কমে গেছে
		২: আমি কোন কিছুতে আর আগ্রহ পাই না
		৩: আমার আগ্রহের এতটাই কমে গেছে যে আমি জোর করে আগ্রহ ধরে রাখতে পারছি না
৬	তুচ্ছ বা মূল্যহীনতা ভাবনা	০: আমি আমার গুরুত্ব বা মূল্য দেখতে পাই
		১: আজকাল নিজের গুরুত্ব বা মূল্য নিয়ে আমার মধ্যে সন্দেহ তৈরি হয়েছে
		২: প্রায় সময় আমার নিজেকে তুচ্ছ বা মূল্যহীন লাগে
		৩: মনে হয় আমার জীবনে আর কোনই মূল্য নেই

৭	আশাহীনতা	০: আমি ভবিষ্যৎ নিয়ে নিরাশ নই
		১: আমার আশাহীন লাগে
		২: আমার আর ভালো কিছু হওয়ার আশা নেই
		৩: আমার এত বেশি আশা হীন লাগে যে ভবিষ্যৎ নিয়ে আমি কিছুই ভাবতে পারি না
৮	মরে যাওয়ার ইচ্ছা	০: আমার মরে যাওয়ার কোন ইচ্ছা নাই
		১: মনে হয় মরে গেলে ভালো হতো
		২: মাঝে মাঝে আমার মরে যাওয়ার ইচ্ছা হয়
		৩: প্রায়ই আমার মধ্যে আত্মহত্যার ইচ্ছা করে
৯	আত্মহত্যা পরিকল্পনা	০: আমার আত্মহত্যার কোন পরিকল্পনা নেই
		১: আমার আত্মহত্যার পরিকল্পনা আছে
		২: আত্মহত্যা করার জন্য আমি বিস্তারিত পরিকল্পনা করেছি
		৩: সম্পত্তি আমি আত্মহত্যা চেষ্টা করেছি (ঝোঁকের বসে নয়)
১০	হারানোর অনুভূতি	০: হারানো অনুভূতি আমার মধ্যে তেমন একটা নেই
		১: আমার যা যা ছিল মনে হয় সেগুলো ধীরে ধীরে হারিয়ে ফেলেছি
		২: যা যা হারিয়েছি সারাক্ষণ সেগুলো মনের মধ্যে আসতে থাকে
		৩: আমার সব শেষ হয়ে গেছে এই ভাবনা আমাকে সব সময় কষ্ট দেয়
১১	না পাওয়ার কষ্ট	০: জীবনে চাওয়া-পাওয়া নিয়ে আমি খুব একটা ভাবি না
		১: কখনো কখনো মনের মধ্যে না পাওয়ার আফসোস আছে
		২: প্রায়ই মনে হয় জীবনে যেন কিছুই পেলাম না
		৩: জীবনের না পাওয়া কষ্টগুলো সারাক্ষণই মনের মধ্যে ঘুরতে থাকে
১২	অপরাধবোধ	০: আমার তেমন কোন অপরাধ বোধ নেই
		১: মাঝে মাঝে আমার মধ্যে অপরাধবোধ কাজ করে
		২: আমি প্রায় সময় অপরাধবোধে ভুগি এবং নিজেকে দোষ দেই
		৩: মনে হয় সবকিছুর জন্য আমি দায়ী এবং তার জন্য আমি শাস্তি পাচ্ছি
১৩	অযোগ্য ও ব্যর্থতা	০: আমার যোগ্যতার ওপর আমার আস্থা আছে
		১: মনে হয় আমি একজন অযোগ্য মানুষ
		২: মাঝে মাঝেই মনে হয় আমার দ্বারা কিছু হবে না
		৩: আমি নিশ্চিত যে আমি একজন অযোগ্য ও ব্যর্থ মানুষ
১৪	আত্মবিশ্বাসীনতা	০: আমার আত্মবিশ্বাস সব সময়ের মতোই আছে
		১: আগে তুলনায় আমার আত্মবিশ্বাস কমে গেছে
		২: সবকিছুই আমি আমার আত্মবিশ্বাসের অভাব টের পাই
		৩: আমার আত্মবিশ্বাস এতই কমে গেছে যে কোন কিছু করতে সাহস পাই না
১৫	শূন্যতা অনুভূতি	০: আমার মধ্যে শূন্যতা ফাঁকা বা খালি খালি লাগে না
		১: মাঝে মাঝে আমার ভেতরটা শূন্য বা খালি খালি লাগে
		২: শূন্যতা অনুভূতি আমার ভেতরে সব সময় কাজ করে
		৩: আমার ভেতরের এ মন অসহ শূন্যতা কাজ করে যা কাউকে বোঝানো সম্ভব না

১৬	মনোযোগে ঘাটতি	০: আমার মনোযোগে তেমন কোন সমস্যা নাই
		১: ইদানিং আমার মনোযোগে দিয়ে সমস্যা হচ্ছে
		২: আমি আজকাল অনেক কিছুতেই মনোযোগ দিতে পারছিনা
		৩: মনোযোগের ঘাটতি আমার জীবন যাপনে প্রায় সব ক্ষেত্রে অসুবিধা তৈরি করছে
১৭	চিন্তা ও সিদ্ধান্ত নেওয়া সমস্যা	০: চিন্তা করা বা সিদ্ধান্ত নেওয়ার ক্ষমতা আমার স্বাভাবিক এই আছে
		১: ইদানিং মনে হচ্ছে আমি আর আগের মত চিন্তা করতে বা সিদ্ধান্ত নিতে পারছি না
		২: চিন্তা করা বা সিদ্ধান্ত নেওয়ার ক্ষেত্রে আমার অনেক সমস্যা হচ্ছে
		৩: আমি চিন্তা করার বা সিদ্ধান্ত নেওয়ার ক্ষমতা একেবারেই হারিয়ে ফেলেছি
১৮	কাজকর্মের গতি কমে যাওয়া	০: আমি স্বাভাবিকভাবেই আমার কাজকর্ম চালিয়ে নিতে পারছি
		১: আমার কার্যক্রমের গতি কমে গেছে
		২: আমি যে আগের মত কাজ করতে পারছিনা তা নিয়ে অন্যায়ও কথা বলছে
		৩: ইদানিং কোন কাজ করার নেই আমার পক্ষে অসম্ভব হয়ে দাঁড়িয়েছে
১৯	সামাজিক মেলামেশার অনাগ্রহ	০: মানুষের সাথে মিশতে বা কথা বলতে আমার খারাপ লাগে না
		১: মানুষের সাথে মিশতে বা কথা বলতে আমার আর তেমন ভালো লাগেনা
		২: আজকাল মানুষের সাথে মিশতে বা কথা বলতে আমার একেবারেই ভালো লাগেনা
		৩: মানুষের সাথে মিশতে বা কথা বলতে আমার এমন কষ্ট হয় যে আমি এগুলো প্রায়ই বন্ধই করে দিয়েছি
২০	দুর্বলতা ও ক্লান্তি	০: দুর্বলতা বা ক্লান্তি নিয়ে আমার কোন সমস্যা নেই
		১: আমি অল্পতেই দুর্বল আক্রান্ত হয়ে পড়েছি
		২: দুর্বলতা বা ক্লান্তির কারণে আমার কাজকর্ম করতে বেশ অসুবিধা হয়েছে
		৩: আমি এত বেশি দুর্বল বা ক্লান্ত থাকি যে কিছুই করতে পারিনা
২১	ক্ষুধার পরিবর্তন	০: আমার খাওয়ার আগ্রহ স্বাভাবিক আছে
		১: আগে তুলনায় আমার ক্ষুধা কিছুটা কমে গেছে বা বেড়ে গেছে
		২: আগে তুলনা আমার খোদা অনেক কমে গেছে বা বেড়ে গেছে
		৩: আমার খোদা এতটাই কমে গেছে যে বা বেড়ে গেছে যে এটা নিয়ে আমি বা অন্যরা চিন্তা পড়ে গেছে
২২	ওজন পরিবর্তন (ওজন নিয়ন্ত্রণের চেষ্টা ছাড়া)	০: আমার ওজন আগের মতই আছে
		১: আগে তুলনায় আমার ওজন কিছুটা কমে গেছে বা বেড়ে গেছে
		২: আমার ওজন এতটাই কমে গেছে বা বেড়ে গেছে যে তা অন্যেরাও লক্ষ্য করেছে বা বলেছে
		৩: আমার ওজন এতটাই কমে গেছে বা বেড়ে গেছে যে এটি আমার সবচেয়ে জন্য ঝুঁকি তৈরি করেছে
২৩	ঘুমের পরিবর্তন	০: আমার ঘুম নিয়ে কোন সমস্যা নেই
		১: আগের তুলনায় আমার ঘুম কিছুটা কমে গেছে বা বেড়ে গেছে
		২: আগে তুলনায় আমার ঘুম অনেক কমে গেছে বা বেড়ে গেছে

		৩: আমার ঘুম এতটাই কমে গেছে বা বেড়ে গেছে যে আমি আমার দৈনন্দিন জীবন যাত্রাকে মারাত্মকভাবে ক্ষতিগ্রস্ত করছে
২৪	যৌন (সেক্স) আগ্রহ ঘাটতি	০: যৌন (সেক্স) বিষয়ে আমার আগ্রহ স্বাভাবিক মাত্রায় আছে
		১: আগের তুলনা যৌন বিষয়ে আমার আগ্রহ কমে গেছে
		২: জৈন বিষয়ে আগ্রহ কমে যাওয়া নিয়ে আমি চিন্তিত হয়ে পড়েছি
		৩: আজকাল যৌন বিষয়ে আমি আর কোন আগ্রহই টের পাইনা

Appendix C
Supervision record sheet

Bangladesh Health Professions Institute
Department of Occupational Therapy
4th Year B. Sc in Occupational Therapy
OT 401 Research Project

Thesis Supervisor- Student Contact; face to face or electronic and guidance record

Title of thesis: ~~prevalence~~ level of depression among the family members of person with Mental Illness.

Name of student: Sadman Sakib

Name and designation of thesis supervisor: Md. Habibur Rahman
Assistant professor, Department of Occupational Therapy,
Bangladesh Health Professions Institute (BHPI)

Appointment No	Date	Place	Topic of discussion	Duration (Minutes/ Hours)	Comments of student	Student's signature	Thesis supervisor signature
1	7.8.23	BHPI Library	overview of research and guideline	1 hour	Get sufficient feedback		
2	10.9.23	OT dept.	Discussion on methodology design and approach	1 hour	cleared all confusion		
3	17.9.23	OT dept.	overview and overall guideline about research proposal	2 hour	quite helpful for proposal presentation.		

4	22.9.23	OT dept.	Title, aim, objectives and participants checklist	1 hour	constructed understanding		
5	30.9.23	OT dept.	Discussion of literature review	1 hour	clear understanding about the topic		
6	7.10.23	OT dept.	Guideline for data collection and interview scale	2 hour	specific problems identified and correction		
7	21.10.23	OT dept.	Information sheet, consent form and withdrawl form check	2 hours	comprehensive session		
8	20.12.23	OT dept.	Discussion of participants recruitment process	1 hour	clear learning about the topic		
9	11.1.24	OT dept.	Result discussion and feedback	1 hour	clear the confusion and successfully revised		
10	18.1.24	OT dept.	Guideline about first draft submission	1 hour	A helpful discussion about the topic		
11	29.1.24	OT dept.	Feedback on first draft and correction	3 hours	Revision and specific correction with helpful feedback		
12	6.2.24	OT dept.	Instruction on discussion write up	2 hours	Discussion on specific write up		
13	15.2.24	OT dept.	overall result review and correction	1 hour	Helpful for learning		
14	19.2.24	In patient unit	Review and correction about data analysis	5 hours	Impressive changing in thought and correction		

15	22.2.24	In patient Unit	Methodology re-check and and result correction	4 hours	valuable Feedback on over all result and discussion		
16	19.3.24	In patient Unit	overall thesis write up, feedback and discussion	2 hours	The session was valuable and helpful for my learning		
17	6.9.24	OT dept.	Thesis presentation correction and feedback	3 hours	Got correction and clear some confusions		
18	25.9.24	OT dept.	Some corrections after the thesis presentation	1 hour	The session was really helpful for future work.		
19							
20							

Note:

1. *Appointment number will cover at least a total of 40 hours;* applicable only for face to face contact with the supervisors.
2. Students will require submitting this completed record during submission your final thesis.