EFFECTIVENESS OF COGNITIVE BEHAVIOUR THERAPY FOR PERSONS WITH DEPRESSION

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Effectiveness of cognitive behaviour therapy for persons with depression

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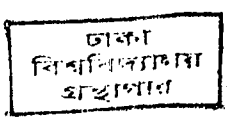

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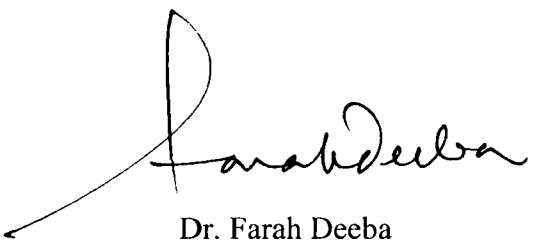
Dedication

I want to dedicate this dissertation to my family members. Without their support this dissertation would not be possible.

Approval Sheet

This is to certify that I have read the thesis entitled ' **Effectiveness of cognitive behaviour therapy for persons with depression ',** submitted by Jesan Ara in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in Clinical Psychology of the University of Dhaka, and that this is an original research carried out by her, under my supervision and guidance.



Dated: Dhaka
July, 2020

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ABSTRACT

The main purpose of this study was to determine the clinical effectiveness of cognitive behavior therapy (CBT) delivered for people with depression in Bangladesh. There were four phases in this study. To achieve this goal in the first two phases we had worked on adapting the standard protocol of CBT as practiced by mainstream practitioner and mental health professionals in the world. Information gathered from the first phase researcher write up the first draft of adapted CBT manual into Bengali. In the second phase the CBT manual was given to seven judges for evaluation according to their opinion and experiences. After synthesizing the judges' suggestions the draft of adapted Bengali CBT manual was finalized. In phase three, to evaluate the functional feasibility of the adapted Bengali CBT treatment manual we had conducted a pilot study on five diagnosed patients with depression referred by the psychiatrists. To meet the purpose of the study in the fourth phase a randomized clinical trial (RCT) was administered to determine the effectiveness of the adapted Bengali CBT manual. In this phase a total of 107 participants diagnosed with depression were randomly allocated into two groups (treatment group and wait list control group) for the sample in this study. The participants were collected from three different hospitals in Dhaka city. Treatment group was received allocated intervention and wait list control group was not received allocated intervention. We used several valid and reliable psychometric measurements to measure symptoms of depression and associated symptoms of anxiety, psychological distress and suicidal risk. Information about socio-demographic characteristics was collected through structured interview. Assessments were completed at baseline (pre-test), termination (post-test) and one-month after termination (follow up) of the clinical trial, using the specific scales. Results of descriptive statistics showed that there were no significant differences between two groups on participant's age, marital status, percentage on

family income, or educational status. There were also found no significant differences between two groups on baseline measures indicating successful randomization. Using the general linear model –repeated measures design via intention to treat (ITT) analysis outcome effectiveness was analyzed. Post-hoc analyses were conducted to see the differences among means in three-time periods (baseline, post intervention and follow up). To examine the impact of predicting variables stepwise multiple regressions were ran. Large treatment effects sizes at post-intervention and follow-up were achieved on most of the outcome measures following CBT for depression. This study suggests that participants who received the adapted Bengali CBT manual showed greater improvements and good response to the therapy and CBT should be considered a viable treatment option for depression. This study added a new step for initiating a much needed research for checking the effectiveness of CBT for the most common mental illness that is depression in Bangladesh. The current study will also help to reduce this evidence based knowledge gap related to depression and intervention in our own country. Recommendations for treatment implications, upcoming research, and study limits are considered.

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CHAPTER 1

INTRODUCTION

Depression is a multifaceted health issue among various other mental health problems that affect one in 20 people every year (American Psychiatric Association, APA, 2013; World Health Organization, WHO, 2012). The total estimated number of people living with depression increased by 18.4% between 2005 and 2015 that reflects the overall growth of the disorder in global population, as well as a proportionate increase in the age groups at which depression is more prevalent (Bromet et al., 2011; Global Burden of Disease, GBD, 2015). Estimated global prevalence of depressive episode in worldwide is 4.4% (WHO, 2017). Decades back it was expected to become the number one cause of the burden of diseases in developing countries (Abas & Broadhead, 1994). Eventually it has been found with different national and international surveys that clinical depression is the cause of disease burden for developing and under developed countries (Firoz et al., 2007; WHO, 2017). Overall prevalence of psychiatric disorders in Bangladesh is 16.50% and among them 4.60% - 8.00% suffers from depressive disorders (Chowdhury et al., 1981; Firoz et al., 2007; Hosain et al., 2007).

Depression is a mood disorder that can vary in severity from a fluctuation in normal mood to an extreme feeling of sadness, pessimism, and despondency (VandenBos, 2007). In another definition Vallejo et al. (2015) stated that the term depression is used in three different ways, i.e. symptoms, syndrome and disease. As a symptom, it can accompany other psychic disorders, as a syndrome, it groups processes characterized by sadness, inhibition, guilt, disability and loss of vital impulse, and as a disease, it is outlined as a disorder of biological origin in which an etiology, a clinic, a course, a prognosis and a specific treatment can be established. In clinical depression all have one common feature, namely the presence of sad, empty or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function (Diagnostic and Statistical Manual of Mental Disorders,

DSM-5, APA, 2013). Depression may feature sadness, difficulty in thinking and concentration and a significant increase or decrease in appetite and time spent sleeping (De Zwart et al., 2019). People experiencing depression may have feelings of unhappiness, hopelessness and, sometimes, suicidal thoughts and it can either be short-term or long-term. It is suggested that the majority of individuals experience depressive disorders as a group of conditions, as their major feature is disturbance of mood that causes significant clinical distress or impairment in functioning (De Zwart et al., 2019). To be diagnosed as depression, an adult person will have to experience symptoms clustered around three phenomena namely low mood, tiredness, and lack of interest or enjoyment in things (DSM-5; APA, 2013).

Depending on the number and severity of symptoms, a depressive episode can be categorized as mild, moderate, or severe (National Collaborating Centre for Mental Health, 2010). It may develop a serious health problem if it persists for long periods of time and occurs with a moderate-to-severe degree of intensity (WHO, 2012). An individual with a mild depressive episode will have some difficulty in ongoing everyday work and psycho-social activities, but will probably not finish functioning completely. Symptoms of depression can become chronic or recurrent and lead to substantial impairments in an individual's ability to take care of his or her everyday responsibilities (WHO, 2012). During a severe depressive episode, on the other hand, it is very unlikely that the sufferer will be able to stay with social, work, or domestic activities, except to a very limited extent (WHO, 2012). Depression is one of the most common psychiatric illnesses and often co-exists with other serious illnesses. Diagnosis of depressive disorder was mostly associated with a comorbid anxiety disorder (WHO, 2017). The comorbidity was also found with substance use disorders, somatoform disorders, personality

disorders, schizophrenia and dementia as well as medical conditions such as thyroid disease, cardiac disease, cancer and neurological diseases (Kessler et al., 1996; Kessler et al., 2005).

Depression has great impacts on people's everyday life and activities as affecting to individuals' loss of interest, efficiency, and social interactions and thereby impacts on social and global economy (WHO, 2019). Since depression impairs functioning in various domains such as everyday life, work, networks, friends and family rigorously to deal with the capacity for self-care and independent living in many cases. About 60% of individuals who meet criteria for depression reported severe impairment of functioning (Kessler et al., 2005). Depressed persons' educational achievements become lower; income levels become reduced, feel lack of interest in employments, and get decreased occupational status than non-depressed persons (Ayalon, 2012; Cheung et al., 2019). Almost all physical, psychological and social functioning of depressed individuals are often reduced, and they visit medical centers more often than people with other major chronic medical problems (Katon, 2011).

In addition, depression can coexist with almost every other mental health illness, aggravating the status of those who suffer the combination of both depression and the other mental illnesses (Miller et al., 1995). Notwithstanding to that depression is also found to be associated with stress related disorders (acute stress disorder or post-traumatic stress disorder) that is a serious global public-health issues worldwide (Kessler et al., 1996; Sinyor et al., 2016). Lower health status and loss of functioning has also been reported in depressed patients than in those without depression (Isacson et al., 2005; Katon et al., 1993; Kosloski et al., 2005). Impact of depression is also associated with long-lasting impairment and impairment caused by other common, chronic medical conditions such as diabetes, hypertension, heart attack, and congestive

heart failure (Murray et al., 1996). Depression can increase the risks for developing coronary artery disease, HIV, asthma and many other medical illnesses (Miller et al., 1995).

Depression brings grievous vulnerabilities to an individual's life that can increase the risk of harmful lifestyle with behaviors eventually leading to significant disabilities, psycho-social problems, ill health, and suicide. The vital concern of depression is suicide and increased risk of mortality (Choo et al., 2014; Cuijpers & Smit, 2002; Large, 2016; Lopez et al., 2006). It was observed that the most of the individuals who had committed suicide had major depressive disorders at the time of their death (Arsenault-Lapierre et al., 2004; Cavanagh et al., 2003). Suicide is a major public health problem in every country and every community worldwide (WHO, 2014). Almost 1 million lives are lost yearly due to suicide, which estimates to 3000 suicide deaths every day and every person died by suicide, 20 or more may attempt to end his or her life (WHO, 2012). In a research found that depression is strongly related to both suicidal ideation and suicidal attempt (Goldsmith et al., 2002). Studies also have suggested that in high-income countries over 90% of adult suicidal deaths are associated with psychiatric disorders, especially with depressive disorders (Conwell et al., 1996; Lesage et al., 1994; Wulsin et al., 1999; WHO, 2014).

Most of the studies find that gender, age, socioeconomic status and marital status are linked with depression. The lifetime prevalence of depression is found to vary widely across countries, with prevalence normally higher in high income versus low–middle income countries. It is associated with substantial disability and lifetime prevalence ranging from 2% to 15% (Ustun &Chatterji, 2001; Ustun et al., 2004). A subsequent cross-national comparison by Andrade et al. (2003) included 10 population-based studies found that the lifetime rates ranged

from 1.0% (Czech Republic) to 16.9% (US), with midpoints at 8.3% (Canada) and 9.0% (Chile). But the World Health Survey conducted in 2013 and found that the prevalence of depression for countries classified according to economic development was similar, with 6.0% in low-income countries, and 7.6% in upper-middle-income countries (Rai et al., 2013).

In a study Bromet et al. (2011) studied 89037 people from 18 countries and concluded that the average lifetime and 12-month prevalence estimates of major depression were 14.6% and 5.5% in high-income countries and 11.1% and 5.9% in low- to middle-income countries. In a published cross-national comparison study of major depression from 10 population-based surveys found that the lifetime prevalence ranged from 1.5% (Taiwan) to 19.0% (Beirut), with the midpoints at 9.2% (West Germany) and 9.6% (Canada) (Weissman et al., 1996). In another study Moussavi et al. (2007) summarized data on depressive episodes and found that the 1-year prevalence was 3.2% in participants without comorbid physical disease, and 9.3% to 23.0% in participants with chronic conditions.

Depression is anticipated to vary all over the life course, as ageing is a risk factor for the development of depression and symptoms of depression. In a study found that the highest rates of first onset of depression (1.4% - 9.1% of the population) occur among young adults (aged 12 to 24) and lower rates (1.3%-1.8%) occur among people 65 years of age or more (Patten, 2000). Prevalence rates vary by age, peaking in older adulthood (above 7.5% among females aged 55-74 years, and above 5.5% among males) (WHO, 2017). Akhtar and Ladeen (2007) reported that the highest prevalence rate of lifetime depression (14.3%) was in the age group between 20 and 24 years. In a study showed that the prevalence of depression and depressive symptoms peaked among individuals aged 30–40 years and 80–90 years (Mirowsky & Ross, 1992). In another

study showed that the proportion of depression was lowest (30.3%) among 18–29 years' and highest (43.2%) among 30–39 years' age group (Chaudhuri et al., 2017). Again, there was a gradual reduction in the proportion of depression after 39 years (Chaudhuri et al., 2017). Yang (2007) also showed that depression declined with age.

The proportion of depression is more among females than males. The point prevalence of major depression ranges from 2.6% to 5.5% among men and from 6.0% to 11.8% among women (Dubovsky & Dubovsky, 2008). The lifetime prevalence of depression ranges from 20% to 25% in women and 7% to 12% in men (WHO, 2012). Depression is more common among females (5.1%) than males (3.6%) (WHO, 2017). In a study Khan et al. (2020) aimed to assess the prevalence and socio-demographic correlates of depressive symptoms among 898 students, of the respondents, 25% reported depressive symptoms with prevalence more common among females than males (30% vs. 19%). Postpartum depression has been a common depressive mental disorder among the mothers in a low-income country. In a survey found that 11 to 20 percent of new mothers were affected by postpartum depression (Centers for Disease Control and Prevention, CDC, 2008). In another study Kessler et al. (2005) reported that, in general, prevalence rate of depressive disorder is much higher among single or divorced individuals than among married individuals. Women have a twofold increased risk of depression compared to men, people who are separated or divorced have significantly higher rates of depression than the currently married, and the rate of depression generally goes down with age (Weissman et al., 1996; Andrade et al., 2003).

It is impossible to point out only one cause of depression. However, there have potential causes of development of depression may be due to cognitive, biological, psycho-social, socio-

economical, political instability, malnutrition, stress, through the influence of the family or the environment influence and socio-cultural components (Huang & Zhao, 2020; Licinion & Wong, 2005; Moss et al., 2003).

The biological factors of depression of adults may vary, depending on several risk factors that cause or increase depression. Hormonal disturbances have been observed in major depressive disorders including low levels of melatonin, elevated glucocorticoid secretions, and blunted growth hormone and thyroid stimulating hormone (Moss et al., 2003). The neurobiological approaches to etiology of depressive disorders hypothesize change in monoamines receptors as well as in the concentration or the turnover of the amines and the patients of depression having no medications have irregularities in various aspects of monoamines functions (Mayou & Cowen, 2001). There may be abnormalities in the hypothalamic centers controlling the endocrine system found in patients of depressive disorders (Mayou & Cowen, 2001). Moreover, there is agreement among researchers that mood disorders are associated with the deregulation of biogenic amines, particularly norepinephrine and serotonin (Licinio & Wong, 2005; Mayou & Cowen, 2001). Research also showed that if a mother is depressed then their children are mostly affected, maternal depressive symptoms were associated with infants' length and low weight (Black et al., 2009; Nasreen et al., 2013).

Psycho-social risk factors include low socioeconomic status and lack of social support that have been reported to be associated with poor antidepressant treatment outcome (Licinion & Wong, 2005). There is an important relationship between life events and depressive disorders; instances of stressful life events include divorce, retirement, bereavement, and depression in childhood (Licinion & Wong, 2005; CDC, 2008). Thereby, life is particularly focused on the

family, family pressures could be intense, these pressures also involved trying to meet the financial demands of family than other countries, a psychosocial framework attributing the cause of thoughts and emotions related with depression, resulting from social causes (Lavender et al., 2006; Natasha et al., 2015; Selim, 2010). On the other hand, concerns about one's own health and that of their beloved ones, as well as uncertainty about the future, can generate or exacerbate fear, depression, and anxiety (Fiorillo & Gorwood, 2020).

People who have suffered from adverse life events are reasonable to develop depression. Researches also have shown that stressful life events such as job loss, financial worries, major changes in life circumstances, conflict in a relationship, physical illness, death of a loved one may build depression gradually (Lavender et al., 2006; Khan et al., 2020). Sometimes many situations come unexpectedly and it can become more difficult to cope-with these types of situations might create stress. Unpredictable situation, at the time of Coronavirus Disease 2019 (COVID-19) pandemic, people experienced stress, anxiety, fear, sadness and depression (Fiorillo & Gorwood, 2020). Because the pandemic has bought many changes in people's life and with it uncertainty, changes in daily routines, financial problems, social isolation and loneliness (Fiorillo & Gorwood, 2020; Huang & Zhao, 2020). In particular, the increased loneliness and reduced social interactions are well-known risk factors for several mental disorders, including schizophrenia and major depression (Fiorillo & Gorwood, 2020). Depression can, in turn, lead to more anxiety and dysfunctional behavior and deteriorate the affected person's life situation and depression itself (Khan et al., 2020).

Cognitive factors related to negative style of thinking directs one's interpretation, perception, and experiences, then constructing negatively predisposed explanation of one's

private world, and eventually, the beginning of depressive mood and symptoms (Beck & Beck, 2011). Negative early life events and childhood memories may be considered as predisposing factors or triggering factors that may influence the individual for depression. There is consistent evidence that depression is predicted by significant negative life events (Beck, 1995). Beck's cognitive theory (1995) hypothesized that people's explanation of negative life incidents have an important role in their depression experience. Beck (1995) assumed that depressed peoples had negative beliefs or schemas. The schemas are triggered by negative life incidents and create negative (or automatic thought) beliefs about the life events. In particular, depressed individuals have a negative belief about themselves (viewing themselves as deficient, inadequate, unlovable, and worthless), their environment (viewing it as devastating, filled with setbacks and barriers), and their future (viewing it as discouraging, hopeless, and failure) (Beck, 1995). Persons diagnosed with depression have multiple cognitive distortions and biases to negative thoughts to develop and maintain mild to moderate depression (Beck, 1995). Similar evidence has been found in Bangladesh with the patients of depression (Hossain et al., 2008; Siddika & Chowdhury, 2015). Overgeneralization, jumping to conclusion, personalization, labeling, and mental filter were prevalent in depression (Hossain et al., 2008). These types of distortions and negative thoughts make people more depressed and may lead to suicidal ideation.

Various types of treatments are available for depression and continuing research on depression found that early detection is an important step in primary prevention (Andrews, 2001; Solomon et al., 2000). Without treatment, depression has the predisposition to become a chronic condition, be persistent and to be associated with increasing disability (Andrews, 2001; Solomon et al., 2000). Community based multi-centric service oriented research on mental illness focused on awareness, prevalence, care, acceptance and follow-up in Bangladesh (Asghar et al., 2007;

Hossain et al., 2014; Rahman et al., 2003). The underlying reasons of severity of depression include the illness itself and the heavy medical cost, unsatisfactory medical care service and poor doctor–patient relationship (Ho et al., 2013; Wu et al., 2014). Many psychological treatments are available for depression; treatment of depression involves medication, electroconvulsive therapy, psychotherapeutic and psychosocial interventions (National Institute of Mental Health, NIMH, 1999).

Medications are the main physical treatments for depression and helpful for treating symptoms of depression in some people, particularly when their depression is severe. Research found that antidepressants are as effective as psychotherapy for major depression, and these findings also appropriate for both severe and mild forms of depression (Cuijpers et al., 2008; Imel et al., 2008). Antidepressants are medicines that treat depression such as selective serotonin reuptake inhibitors (SSRIs), tricyclics (TCAs) and irreversible monoamine oxidase inhibitors (MAOIs) are three similar classes of antidepressants (Anderson, 2000). Lithium has been used to supplement antidepressant therapy in those who have failed to respond to antidepressants alone (Bauer & Dopfmer, 1999). There is evidence a relatively mild side effect of antidepressants, emotional blunting, is confused with a symptom of depression itself (Anderson, 2000). For the medication side effects close monitoring is required. Electroconvulsive therapy (ECT) is another standard psychiatric treatment (Rudorfer et al., 2003) which is used for major depressive disorder (Beloucif, 2013) with informed consent. The acute effects of ECT can include amnesia, both retrograde and anterograde (Benbow, 2004).

Psychotherapy is often recommended as a principal choice of treatment especially for those with mild to moderate depression. Depression-focused psychotherapy is recommended as

an initial treatment choice for patients with mild to moderate depressive disorder. Considerations in the choice of a specific type of psychotherapy include the goals of treatment, talks about here and now, past positive response to a specific type of psychotherapy, patient preference, and the accessibility of clinicians skilled in the specific psychotherapeutic approach (Wampold, 2013). When determining the frequency of psychotherapy sessions for an individual patient, there should be considered multiple factors, including the specific type and goals of psychotherapy, symptom severity (including suicidal ideas), co-occurring disorders, collaboration with treatment, obtainability of social supports, and the frequency of visits necessary to create and maintain a therapeutic relationship, confirm treatment adherence, and monitor and address depressive symptoms and suicide risk (APA, 2009). There are many kinds of psychotherapeutic treatments that are aimed at helping individuals to overcome stress, relationship problems, negative habits and behavior, thought disorder and depression, etc. (Beck, 2011). Psychotherapy that are mainly used for depressive patients include psychodynamic therapy, cognitive behavior therapy (CBT) interpersonal therapy, dialectical behavior therapy, acceptance and commitment therapy, and mindfulness-based cognitive therapy.

In the practice of psychotherapy the psychodynamic understandings of depressive disorders were described by Sigmund Freud, Abraham A. Brill, and Melanie Klein in different times (Corsini et al., 2008). The principles of psychodynamics were introduced in the 1874 by Ernst Wilhelm von Brucke and later Freud used the term psychodynamics to define the processes of the mind (Bowlby, 1999). In psychodynamic and psychoanalytic approaches, there is a great importance on the role of unconscious processes in contributing to mental illness that can be traced back to Freud (1923). Later the concept and application of psychodynamics were further developed by Carl Jung, Alfred Adler and Melanie Klein (Hall, 2016). The term

"psychodynamic" itself refers to the conflict that arises when different forces within the mind are opposed or have competing interests (Freud, 1933).

On the other hand in the practice of psychotherapy CBT is regarded as a non-pharmacological intervention, based on social learning theory, which emphasizes how our thinking interacts with how we feel and what we do (Beck et al., 1979). The philosophical roots of CBT developed from Stoic philosophers, particularly Epictetus, believed that reasoning could be used to recognize and reject false beliefs that lead to unhelpful emotions, which has influenced the way modern cognitive-behavioral therapists detect cognitive distortions that contribute to depression (Mathews, 2015). The role of the unconscious is less prominent in the conceptualization of mental illness in CBT (Holyoak & Spellman, 1993). It is not that the unconscious is unclear; on the contrary, it has been widely accepted that many cognitive processes occur on an unconscious level (Holyoak & Spellman, 1993; Schacter, 1992). The modern roots of CBT can be traced to the development of behavior therapy in the early 20th century, the development of cognitive therapy in the 1960s, and the subsequent merging of the two (Trull, 2007).Grounding work of behaviorism originated with John B. Watson and Rosalie Rayner's studies of conditioning in 1920. These were the circumstances of the development of Joseph Wolpe's behavioral therapy in the 1950s (Plaud, 2003). It was the work of Wolpe and Watson, which was based on Ivan Pavlov's work on learning and conditioning, which influenced Hans Eysenck and Arnold Lazarus to develop new behavioral therapy techniques based on classical conditioning (Rachman, 1997). In Britain, Joseph Wolpe applied the findings of animal experiments to his method of systematic desensitization and applied behavioral research to the treatment of neurotic disorders (Jones, 1924). At the same time Eysenck's work, B. F. Skinner and his associates were starting their work on operant conditioning (Corsini et al., 2008). After

that in psychotherapy Alfred Adler was addressed cognition with his idea of 'basic mistakes' and how they contributed to creation of unnatural or useless behavioral and life goals (Mosak & Maniacci, 2008). Adler's work influenced the work of Albert Ellis and developed the earliest cognitive-based psychotherapy, known as rational emotive behavior therapy (REBT) (Mosak & Maniacci, 2008). Alternatively, Aaron T. Beck, in his psychoanalytic practice was conducting free association sessions (Oatley, 2004). During these sessions, Beck noticed that thoughts were not as unconscious as Freud had previously theorized, and that certain types of thinking may the cause of emotional distress and called these thoughts "automatic thoughts" (Oatley, 2004). It appears that as behavior therapy becomes more cognitive and as psycho-analytic therapists show interest in short-term therapies and object relations and interpersonal analytic models, the opportunity for rapprochement increases (Arkowitz & Hannah, 1989). Instead, more emphasis is placed upon identifying factors that are currently maintaining or prolonging symptoms that include environmental stimuli, thoughts, or behaviors (Beck & Beck, 2011). Over time, not only CBT was known as a therapy, it was used as an umbrella term for all cognitive-based psychotherapies as well (Wedding, 2007).

Therefore, interpersonal therapy (IPT) was developed by Gerald Klerman and Myrna Weissman for major depression in the 1970s is a systematic, time-limited, interpersonally focused, and psycho-dynamically informed psychotherapy (Stuart & Robertson, 2003). IPT was influenced by CBT as well as psychodynamic approaches (Weissman et al., 2000). The focus of therapeutic attention is to explore how events in a person's past have led to their current depression. It takes its structure from CBT in that it is time-limited, employs structured interviews and assessment tools (Weissman & Markowitz, 2007). Within IPT interpersonal relationships are the focus of therapeutic attention as the means to bring about change, with the

aim of helping patients to improve their interpersonal relationships or change their expectations about them (Wurm et al., 2008).

Dialectical behavior therapy (DBT) is a treatment approach emerged from attempts to apply standard behavior therapy and originally developed by Marsha M. Linehan (Dimeff & Koerner, 2007). DBT was as a modified form of CBT in the late 1980s and it adapts CBT to assist patients to deal with stress (Bass et al., 2014). It was originally developed from a trial-and-error clinical work grounded on the application of behavioral philosophies and social learning theory to suicidal behaviors (Linehan, 1981; Staats & Staats, 1963; Staats, 1975). "Dialectic" in the context of this therapeutic approach, means "weighing and integrating contradictory facts or ideas with a view to resolving apparent contradictions" (Linehan, 1993).

Acceptance and commitment therapy (ACT) was developed by Steven C. Hayes in order to create a mixed approach which integrates both cognitive and behavioral therapy in 1982 (Kazantzis et al., 2010). It encourages the individual to accept and integrate into their lived experiences challenging affective responses and to recognize and eliminate the controlling dimensions that specific contextual situations exert upon them (Harris, 2006). The main purpose of ACT is to encourage individuals to respond to situations constructively, while simultaneously negotiating and accepting challenging cognitive events and corresponding feelings, rather than replacing them (Hayes, 2004).

Mindfulness-based cognitive therapy (MBCT) is a treatment approach to psychotherapy that uses CBT methods in collaboration with mindfulness meditative practices developed by Kabat-Zinn in 1990 and similar psychological strategies (Kabat-Zinn & Hanh 2009; Sipe &

Eisendrath, 2012). Individual who contributed on the development of mindfulness in the modern treatment approach include Thich Nhat Hạnh, Herbert Benson, Jon Kabat-Zinn and Richard J. Davidson (Davidson, 2005). Mindfulness is the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to things as they are (Teasdale & Segal, 2007). It incorporates elements of what is happening in the present on a moment by moment basis, without any judgment (Segal et al., 2002).

Therefore, CBT has components that act as a base for different other therapies and later evolved as an effective therapeutic approach. Cognitive theory does acknowledge that many processes of the mind do occur below a threshold of conscious awareness (Kihlstrom, 1990) but there is not a great emphasis placed on discovering material that is unknown to a patient. Although CBT have only recently become more intimate, psychodynamic and behavioral approaches might be characterized as having had a long history of casual affairs (Dawson & Moghaddam, 2015). CBT refers to a set of interventions that share the basic principle that psychological disorders and distress are maintained by cognitive factors (Hofmann et al., 2013; Lockwood et al., 2004). CBT for depression is aimed at symptoms reduction, through the identification and modification of negative automatic thought (NAT) and cognitive distortions. From this primary focus on depression, CBT has been extended to treat a wide range of disorders. In a word, CBT proposes that dysfunctional thought (which influence the clients' emotion, behavior and physiology) is common to depression. Essential components of CBT for depression include a focus on helping clients solve problems; become behaviorally activated; and identify, evaluate, and respond to their depressed thinking, especially to negative thinking about themselves, their worlds, and their future (Beck, 2011). When persons become competent in

identifying their thinking process and learn how cycle of depression work in a more realistic and adaptive way person will experience improvement in their emotional state and in their behavior.

Common principles and elements of this approach is that CBT is directive, time-limited, thought focused, present centered and structured approach used to treat a variety of mental health disorders (Friedman et al., 2016). The key elements of CBT may be grouped into those that help foster an environment of collaborative empiricism and those that support the structured, problem-orientated focus of CBT (Fenn & Byrne, 2013). CBT ultimately aims to teach patients to be their own therapist, by helping them to understand their current ways of thinking, emotion and behavior, and by training them with the both cognitive and behavioral techniques to change their maladaptive cognition and behavioral patterns. Beck et al. (1979) out-lined three levels of cognition- core beliefs, dysfunctional assumptions and negative automatic thoughts. Core beliefs, or schemas, are usually global, overgeneralized and absolute. These beliefs develop in childhood and gradually held negative core beliefs about self (I am unwanted), others (Other people are untrustworthy) and the world (The world is unfair). On the other hand, dysfunctional assumptions are negative in content, rigid rules, attitudes and assumptions that people adopt (Fenn & Byrne, 2013). These thoughts are irrational, self-defeating and individuals may or may not be conscious of their automatic thoughts. These thoughts are also conditional, unrealistic and therefore maladaptive that forms one's response to experiences and situations, e.g., "Unless I am loved, I cannot be happy". When dysfunctional assumptions are activated by stress, dysfunctional assumptions lead to cognitive errors, which lead to depression (Beck, 2011).

Cognitive errors or logical errors are the most evident inconsistency in depressed patients. Depressed people with negative core beliefs or self-schemas become predisposed to

making exaggerated, irrational thought or logical errors in their thinking process, and they focus on certain aspects of a condition selectively while ignoring equally relevant information (Oshio, 2012). Beck et al. (1979) identified a number of systematic negative bias in information processing known as logical errors or faulty thinking. These cognitive distortions are self-defeating, and can cause depression for the individual, for example, when people experience arbitrary inference they are drawing a negative conclusion even in absence of relevant supporting data (Beck & Beck, 2011). By selective abstraction people become focused on the worst aspects of any situation. By magnification and minimisation people tend to exaggerate the problems and if they have a solution they make it smaller. When people experience dichotomous thinking they see everything as black and white and there is no in between (Oshio, 2012). Such thoughts worsen, and are impaired by the cognitive triad. Beck (1995) believed these thoughts or this way of thinking at one point becomes automatic and predisposes to depressive disorders

The cognitive behavioral model of depression helps to clarify why the emotional experience of depressed patients create negative schema and incompetence to cope with life's demands (Whisman, 2008). Cognition or thought identification to the CBT is a central way of starting intervention. In CBT, the 'cognitive model' is used as a framework in which to understand a person's mental distress or presenting problem (Friedman et al., 2016). Formulations can be developed using different formats, represented by different ways of formulating depression. Beck et al. (1979) created a longitudinal formulation of depression. From the beginning the therapist starts formulation to conceptualize about the psychological mechanisms causing and maintaining the patient's problems. The therapist uses the formulation to describe patient's problems and develop a treatment plan and take informed consent to it from the patient's. Formulation helps the therapist and patient to recognize or identify how all the

patient's disorders and problems are related. The therapist uses the formulation to conceptualize the connection between NAT and deeper level of beliefs which finally guide intervention selection and other clinical decisions (Friedman et al., 2016). Within this formulation, early experiences (e.g. rejection by parents) contribute to the development of core beliefs, which lead to the development of dysfunctional assumptions (e.g. 'Unless I am loved I am worthless'), which are later activated following a critical incident (e.g. loss), leading to NATs and the symptoms of depression (Fenn & Byrne, 2013). After completion of formulation treatment planning, especially the process of setting goals, making decisions about which problems or disorders to tackle first, and identifying treatment targets, interventions is started.

CBT interventions for depression have been widely researched. A meta-analysis by Dobson (1989) concluded that in the treatment of depression cognitive therapy is superior to other forms of psychotherapy. In a study by Chen et al. (2006) compared the effectiveness of CBT on depression and self-esteem of CBT group with a control group. Results showed, one month after intervention, the depressive symptoms and self-esteem of the experimental group remained slightly but significantly better than those of the comparison group subject. Several meta-analyses also reported the longer-term effects of CBT that people who received CBT for depression had lower relapse rates after 1- and 2-year follow-up intervals than people with wait list or control condition (Vittengl et al., 2007; Dobson, 1989). But in other meta-analysis by Cuijpers et al. (2013) suggested that CBT may also be more efficacious than pharmacotherapy for long-term but not short-term outcomes, whereas this meta-analysis focused only on short-term. Therefore, another meta-analysis of effectiveness studies concluded that patients receiving CBT for depression in naturalistic settings do not benefit as much as those who receive it as part of a strictly controlled RCT (Hans & Hiller, 2013).

CBT has undergone extensive scientific examination through comparisons in RCTs, element analyses, and mediation analyses (Dobson, 1989; DeRubeis et al., 2005; Hofmann et al., 2013). CBT is a universally classified psychotherapeutic approach which seeks to solve psychological or neurotic disorders, behavior problems concerning dysfunctional emotions, and behavior and cognitions through a goal-oriented systematic procedure (Albano & DiBartolo, 2007). Research evidence suggests that CBT is an effective treatment for depression and is included in the National Treatment Guidelines in the UK and the USA (National Institute for Health and Clinical Excellence, NICE, 2004). Research findings also suggest that CBT might be as effective as medication in treating moderate to severe depressive illness, especially in the initial phases of depressive illness (DeRubeis et al., 2005). The evidence is strong for the use of CBT to treat moderate depression, it performs significantly better for moderate depression compared to remaining on a waiting list or receiving no treatment, and as well as or better than other behavioral or pharmacological therapies (Hofmann et al., 2012).

CBT has been shown to have a long-term positive effect for patients. International evidence suggests that CBT is cost-effective and it has long term effectiveness (Hollinghurst et al., 2010). Compared to pharmacological approaches, CBT and medication treatments had similar effects on chronic depressive symptoms, with effect sizes in the medium-large range (Vos et al., 2004). Other studies indicated that combination therapy of CBT with pharmacotherapy was more effective in comparison to CBT alone (Chan, 2006). In a randomised trial, Dobson et al. (2008) found that depressed patients who had previously been treated with anti-depressant medication had a greater chance of relapse through 1 year follow-up than patients who had previously received CBT. In fact, prior CBT had an enduring effect that was as strong as continuing patients on anti-depressant medication. In the study of Hamdan et al. (2009)

showed that participants had lower scores on perceived stress, lower depressive symptoms, less use of avoidance coping strategies, and more use of approach coping strategies after CBT intervention. The evidence for severe depression is mixed, studies suggest that CBT is just as effective as medication for severe depression (McMain et al., 2015).

There is also strong evidence found for the effectiveness of CBT in treatment and relapse prevention of depression (Dobson & Shaw, 1988; Dobson, 1989; Dimidjian & Goodman, 2009; Embling, 2002; Fava et al., 1998; Goodman & Garber, 2017). Studies found that CBT for depression was more effective than control conditions (waiting list or no treatment group) (Beltman et al., 2010; Dobson, 1989; Van Straten et al., 2010). Jorm et al. (2008) found CBT was superior to relaxation techniques at post-intervention. Additionally, Tolin (2010) showed that CBT is superior to psychodynamic therapy at both post-treatment and at 6 months follow-up, although this occurred when depression and anxiety symptoms were examined together. Studies also suggest that CBT (Dobson, 1989; Dimidjian & Goodman, 2009; Goodman & Garber, 2017; Hofmann et al., 2012) can be effective in treating depression among adults. Moreover, the results of several studies suggest that relapse rates after cognitive therapy are lower than with antidepressant medications (Dobson, 1989; McDonald & Gonzalez, 2006; Scorzelli & Scorzelli, 1994) and that cognitive therapy may have an effect in preventing the relapse of depression after the completion of treatment (Beck et al., 1979).

CBT is flexible and compatible that the therapist can find interventions as per the patients' needs. Strachowski et al. (2008) used CBT interventions to reduce depression in patients with elevated cardiovascular disease risk. Results showed, at post treatment, the CBT subjects were significantly less depressed than control group subjects. Research also suggests

that the psychological interventions of CBT is an effective treatment that is recommended for depressive disorder in adults of all ages and CBT is also associated with continued improvement over time; it is one of the most systematically researched psychosocial treatments for adult depression (Evans, 2007; Scogin, 2007). This evidence is supported by a good deal of evidence based randomized controlled trial studies, which have been summarized recently in large systematic reviews and meta-analyses (Cuijpers et al., 2008; Cuijpers et al., 2013). Overall, these reviews also suggest that CBT is effective for patients with depression.

However, CBT is the most researched form of psychotherapy (theoretical models/ mechanisms of change) (Gilbody et al., 2003). It has been also suggested that CBT is as value laden as any other psychotherapy (Hays & Iwamasa, 2006). In spite of this evidence in the Western countries, inadequate movement has been made in evaluating the effectiveness of CBT in low and middle income countries. There are however, some positive aspects of CBT which may assist in applying therapeutic principles to individuals from a range of cultures (Naeem, 2011). A collaborative approach can help therapists understand and adapt to the culture of the person, providing how to read cultural cues (Naeem, 2011). It has been suggested that Asian patients with depression prefer a more structured and directive approach (Hays & Iwamasa, 2006). In a study Sue (1990) has proposed that Asian clients find it helpful if the presenting problem is addressed directly and some progress is evident in the first session. Therefore, researchers suggest that any psychotherapeutic model developed in different context needs to be used in another context after some modification (Hays & Iwamasa, 2006; Scorzelli & Scorzelli, 1994). CBT involves assessment and attempts to modify core beliefs and negative automatic thoughts. Patients with depressive disorder generally have beliefs towards self, others and the world that are unsupportive. Actually, the experience of depressive illness is now considered to

be a common phenomenon, though the clinical features may vary significantly through different cultures.

It has been suggested that apart from various biological and individual's personal factors, various cognitive factors, for instance, cogitive errors, dysfunctional beliefs that are thought responsible for depression may be of different forms in different cultures (Department of Health and Human Services, 1999; Padesky & Greenberg, 1995). For example, in Korean immigrants in the USA it was found that they express emotions symbolically or physically (Pang, 1998). For instance, although low mood, insomnia, feeling of worthlessness, inappropriate guilt, "empty" mood are considered as primary symptoms of depression in developed countries like the USA (NIMH, 1999). Another study was conducted to identify terms and descriptions used for depressive illness, reported that natives of Dubai, like other Arab populations, are more probable than Western people to associate depressive illness with aches, pains and weakness (Sulaiman et al., 2001). Compared with patients referred to specialty mental health care, patients with depression in primary care sometimes have symptoms that are less severe and more somatic (NICE, 2004; Naeem et al., 2015). In Bangladesh, anthropological studies on the urban poor have described specific lay terms to describe depression, e.g., "worry illness" and it was associated with various physical, emotional complaints and existential conditions of the entire body (Rashid, 2007). Therefore, cultural factors should be taken into consideration, because culture is a complex phenomenon and a "dynamic process" rather than a static entity or event and our understanding of principles which might need consideration while adapting psychotherapy, particularly CBT (Naeem, 2011).

An important characteristic of CBT is that it is personalized to the individual's needs. In a study Hwang et al. (2015) adapted CBT manual and tested its effectiveness against non-adapted CBT for Chinese Americans with major depressive disorder; adapted CBT showed higher response rates than the comparison conditions. International literature also recommended the effectiveness of adapted CBT when working with American Indians, African Americans, in Iran and Pakistan (Faramarzi et al., 2008; Kelly, 2006; McDonald & Gonzalez, 2006; Naeem et al., 2011). Various cognitive therapists have described their experience of working with American Indians, Alaska native people, Latinos and Latinas, African Americans, Asian Americans, people of Arab heritage and Orthodox Jews after some adaptation (Hays & Iwamasa, 2006). In Pakistan CBT was adapted for depression and the effectiveness of CBT was found in primary care (Naeem et al., 2011). Vally and Maggott (2015) conducted a systematic review of all controlled studies of culturally-adapted CBT involving adults with depression resident in low- and middle-income countries. They found that treatments implemented with individuals were more successful than those administered to groups. Their results of meta-analysis were encouraging; they also found that the widespread adoption of CBT may potentially contribute to reducing the treatment gap for depression in low and middle income countries. Although like other low and middle income countries many people in Bangladesh are suffering from depressive disorder.

However, it can be said that like developed and developing countries a number of studies have been done in Bangladesh on depression. Overall it was found that female, lower income, older age, patients with combined insulin and oral therapy, co-morbid heart disease and a higher number of co-morbidities were associated with depression (Roy et al., 2012).

As expected, like any other countries females of Bangladesh experience depression more than males (Asghar et al., 2007; Rahman et al., 2003). Interestingly, in another study conducted with medical college students a significant level of distress was found on male respondents (73%) compared to female (56%) and the level of distress was moderate to severe (Mashreky et al., 2013). In a study done with rural population it was found that depression was higher in female 30.5% and 29% of male participants with diabetes (Asghar et al., 2007; Roy et al., 2012).

In a cross-sectional study with 483 Type-2 diabetes out-patients found that among them the depressive symptoms were 34% and 36% (Roy et al., 2012). In older adult's depression has been found highly co-morbid, for which they are prescribed with multiple medications and thereby 22% of geriatric patients contained antidepressants drugs (Edhborg et al., 2011). In a study it was reported that among 47% patients with stroke and 54% of cancer patients had multiple depressive episodes (Karim et al., 2001). There exists, moreover, a strong relationship between depression and non-adherence to treatment of such medical conditions as diabetes or coronary heart disease, treatment costs are higher for patients medical care than patients with medical conditions who are not depressed. The high rates of depression with diabetes and with other medical condition suggest that healthcare professionals should consider depression in diagnosis, for treatment of this may lead to improved outcomes (Asghar et al., 2007; Nasreen et al., 2011).

As the ultimate consequence of depression is suicide and in a study found that 78% of global suicides occurred in low- and middle income countries (GBD, 2015). Tendency to commit suicide for depression is also increasing in Bangladesh; when 7.3 in 1000,000 per year were in 2013, but the worrying fact is that in the rural population this rate is 17 times higher (Mashreky

et al., 2013). In a research found that currently this is the top most reason for Bangladeshi people to die of an injury 17.6% (Injury-related deaths, 2017). The findings in a cross-sectional survey on university students a positive correlation was found between scores on the suicidal ideation and depression (Pervin & Ferdowshi, 2016). It is more unfortunate that suicidal behavior due to depression is not taken seriously in our country even when there are high number of suicidal ideation and attempts to suicide, evident in young communities of our country (Begum et al., 2017). Another study identified a high positive correlation ($r = 0.82$) existing between suicidal ideation and depression in young adults (Sultana, 2014). On the other hand, a rural community based study reported that depression during pregnancy at 34–35 weeks was 33% and alarmingly they had thoughts of self-harm during this period (Gausia et al., 2009). It may well be that the cultural pressure on Bangladeshi people discourage them to report or seek help for depression (Selim, 2010). Help-seeking pattern and dissatisfaction about treatment can also maintain depression (Selim, 2010). These facts depict the dire situation in our country about negligence towards care for mental health problems.

Therefore, there is high prevalence of depression in Bangladesh like other developing countries (Firoz et al., 2007; Hosain et al., 2007; WHO, 2017). Depression has been studied very well in western culture but not in developing countries even when people there are suffering in disturbing ways due to the illness. Not enough attention has been paid to the assessment and management of depression yet. Most of the studies done on management of depression in Bangladesh were on psycho-affective drugs (Ahmed et al., 2011; Mohit et al., 2011). Even studies conducted by the psychiatrists emphasizes the importance of psychological management (Abbas et al., 2007; Nasreen et al., 2011). Though mental health professionals in Bangladesh are using CBT for treatment of depression but population-wise management is difficult because of

the limited number of trained therapists. Consequently, providing CBT is cost effective, time limited and less resource intensive is of great interest to treat symptoms of depression (Beck et al., 1979). But no research has been conducted to see the effectiveness of CBT on depressive disorder in Bangladesh yet. So, it is necessary to see the effectiveness of CBT in Bangladesh, which will add new knowledge to the mental health professionals who are using CBT as a treatment process for treating patients with depressive disorder.

Rationale of the Study

There are psychiatrists, clinical psychologists, psychologists, counselors and social workers in the treatment regimens of mental health intervention sector in Bangladesh. Like any other disorder they are to work in two broad areas for management of depression, a) assessment and b) intervention. Although there are known, effective treatments for mental disorders, between 76% and 85% of people in low- and middle-income countries receive no treatment for their disorder (Wang et al., 2007). There is widespread stigma against treatment of mental illness in our culture (Selim, 2010; WHO, 2017). Religion plays an important part in treating depression in Bangladeshi population. For instance, amongst the Bangladeshi immigrants, going to doctors in the United Kingdom was a substitute for lack of mullahs (Muslim priests) (Lavender et al., 2006). Barriers to effective treatment include lack of resources, lack of trained professionals and social stigma associated with mental disorders. Another obstacle to effective treatment is inaccurate assessment by health care providers. In Bangladesh, most of the people with depression are not properly diagnosed, and others who do not have the disorder are too often misdiagnosed and sometimes prescribed antidepressants. Cultural factors also affect assessment and treatment. In treatment process cultural factors should be taken into consideration because

the application of psychotherapy as beliefs about the nature of illness and the likely effectiveness of interventions may vary (Naeem et al., 2015). It is therefore believed that CBT might need adaptation before it can be used in the non Western cultures (Padesky & Greenberger, 1995). It is well known now that culture plays a significant role in developing depressive symptoms, for instance, in a study on Asian patients more somatic than depressive symptoms were found (from India, Pakistan, and Bangladesh; Farooq et al., 1995). A study from the Middle East exploring the detection of depressive illness in the United Arab Emirates found that Arab patients use a variety of somatic metaphors to describe depressive illness (Hamdi et al., 1997).

Several studies were carried out to see the effectiveness of CBT for the treatment of people with psychological problems in western countries. Although pharmacological treatments are available in Bangladesh, for the mental health problems of children, adolescents and adults psychological treatments are still rare. CBT has been recommended for treating depression as an effective treatment modality for a long time in the developed world (Embling, 2002; Garratt et al., 2007). But, there have been limited research that points towards effectiveness of treatment manuals based on basic CBT principles (Naeem et al., 2015; Rahman et al., 2008). CBT has been formally introduced as a choice of treatment in the mental health service in Bangladesh for more than two decades but no study has been conducted so far to test the effectiveness of the method in our country. As there is no standard format on the basis of testing, so our profession and quality of service is at risk. Psychologists and mental health professionals are taking trainings on various western psychological interventions in Bangladesh by various trainers from other cultures. However, these interventions are being conducted by the practitioners in their own ways. Sometimes there are great chances of varying the methods as there is no evidence on evidence-based information on the modification if required in sessions with clients of the

country, who are mostly illiterate and have no understanding of talking therapies. Since no base has ever been developed the variations are not known to us. There is no evidence-based finding on CBT, so we can not transfer it to the international forum. If we have standard services, it will help us to get benefits like the other countries in the world, such as- health insurance, health benefits, etc.

So, in this study the first attempt was to adapt a Bengali CBT manual for treating persons with depression in Bangladesh. Moreover, the study attempts to contribute to advancing psychological knowledge, especially the methods of CBT and processes of treating depressed individuals without only depending on Western scientific orientations and findings. To maintain the quality of the service we supposed to have similar session structure by mental health professionals. This study may provide some evidence for the importance of training assistant clinical psychologists on principle and techniques of CBT. As well as this study is also important because it can provide an understanding of the methods. Therefore, the techniques of CBT can provide vital resources for the treatment of Bangladeshi clients who are experiencing symptoms of depression. This study may help therapists and other professionals in the field of mental health to increase their knowledge, by understanding human behavior following the perspective of Bangladesh, and protect them from the risk of practicing beyond their competency. By this study we can also avoid inaccurate documentation and variation in providing service. To address this necessity this research is planned to see the effectiveness of CBT for persons with depression in Bangladesh.

Objectives of the Study

The main objective of the current study is to determine the clinical effectiveness of CBT delivered for people with depression. Along with this, some other specific objectives are also intended to be found, those are as follows,

a) To adapt a Bengali CBT manual for Bangladeshi population with depression.
b) To determine if there is any difference in depression before and after administering CBT for participants in the treatment group compared to wait list control group.
c) To determine whether improvements in depression will lead to improvements in anxiety, psychological distress and suicidal risk.
d) To determine if there is any predicting factors associated with depressive symptom reduction.

CHAPTER 2

METHODOLOGY

Participants

To meet the purpose of the study randomized controlled trial (RCT) design was used. The following formula (Charan & Biswas, 2013) was used to determine sample size for the randomized controlled trial-

$$ss = \frac{2SD^2 (Z_{\alpha/2} + Z_{\beta})^2}{d^2}$$

Where standard deviation (SD) = 1, $Z_{\alpha/2}$ ($Z_{0.05/2} = Z_{0.025}$) = 1.96 (from Z table) at type 1 error of 5%, Z_{β} (Z- value at 80% power) = .80, d (effect size) = 0.15. The sample size was determined to be 51 participants per group by using this formula, so a total of 102 participants were included in this study. This study is an intervention based research so there is a possibility of dropout. The possible attrition rate was considered to be 5%, and so 102±5 participants diagnosed with depression were recruited.

Diagnosed clients with depression with ages between 18 to 60 years, a total of 148 clients, referred from three different hospitals in Dhaka city, were assessed. The diagnosis of depression were confirmed by a psychiatrist and according to the criteria developed by DSM-V (APA, 2013). The exclusion criteria included clients who had active suicidal ideations or a history of attempted suicide, clients with serious health conditions, psychotic features, under medication for depression, and those who had intellectual disability or an inability to comprehend simple instructions as per psychiatrists' opinion. Following these inclusion and exclusion criteria finally a total of 107 referred patients (by sample size determination) diagnosed with depression were randomly allocated into two groups: treatment group (TG) and

wait list control group (WLG) for the sample in this study. Demographic characteristics of the participants are summarized in Table 1.

Table 1

Demographic characteristics of participants as a percentage of the sample

Variable		WLG	TG	Total
		(*N*= 53, 48.6%)	(*N*= 54, 49.5%)	(*N*= 107, 100%)
Gender	Female	41 (38.3%)	36 (33.6%)	77 (70.6%)
	Male	12 (11.2%)	18 (16.8%)	30 (27.5%)
Marital	Married	20 (18.7%)	37 (34.6%)	57 (52.3%)
status	Unmarried	32 (29.9%)	17 (15.9%)	49 (45%)
	Others	1(0.9%)	0 (0.0%)	1 (0.9%)
Number of	No child	36 (33.6%)	26 (24.3%)	62 (56.9%)
children	One to two	8 (7.4%)	19 (17.7%)	27 (24.7%)
	Three and above	9 (8.4%)	9 (8.4%)	18 (16.5%)
Types of	Nuclear	46 (43.0%)	45 (42.1%)	91 (83.5%)
family	Joint	7 (6.5%)	9 (8.4%)	16 (14.7%)
Religion	Islam	45 (42.1%)	47 (43.9%)	92 (84.4%)
	Others	8 (7.5%)	7 (6.5%)	15 (13.8%)

Note. TG = Treatment group, WLG = Wait list control group.

Table 1

Demographic characteristics of participants as a percentage of the sample (continued)

Variable		WLG	TG	Total
		(*N*= 53, 48.6%)	(*N*= 54, 49.5%)	(*N*= 107, 100%)
Educational status	Below SSC	10 (9.3%)	12 (11.2%)	22 (20.2%)
	SSC to HSC	10 (9.3%)	13 (12.1%)	23 (21.1%)
	Higher studies	33 (30.8%)	29 (27.1%)	62 (56.9%)
Occupation	Service holder	22 (21.6%)	24 (22.4%)	46 (42.2%)
	Business	4 (3.9%)	3 (2.8%)	7 (6.4%)
	Unemployed	11 (10.8%)	9 (8.4%)	20 (18.3%)
	Others	16 (15.7%)	18 (16.8%)	34 (31.2%)
Monthly income	Below 20,000 BDT	23 (21.5%)	19 (17.8%)	42 (38.5%)
	20,000 to 50,000 BDT	21 (19.6%)	16 (15.0%)	37 (33.9%)
	50,000 BDT to above	9 (8.4%)	19 (17.8%)	28 (25.7%)

Note. TG = Treatment group, WLG = Wait list control group.

All participants in each group who gave consent to participate were included in the study. Those who had prior experience of having psychotherapy were also being excluded because it might influence the findings of the study. Intervention was given to the TG and the WLG was work as a control group. Measurement scales were applied on both of the groups before, after and in the follow up sessions of intervention. After completing data collection the wait-list control group was offered intervention according to their demand.

Measures

A demographic data collection questionnaire and four (depression, anxiety, psychological distress and suicidal ideation) psychiatric syndromes related self-rating measures were used for data collection in the study. The measures are described in the followings.

Demographic and personal information questionnaire. A demographic data collection form with questions on age, gender, marital status, number of children, educational status, occupation, income and religion was used to collect demographic characteristics of participants.

Depression Scale. To measure symptoms of depression, participants were given the Depression Scale (DS; Uddin & Rahman, 2005) to complete. This scale was developed to get an objective measure of the severity of depression in the context of Bangladesh. The scale is a frequently used one by the researchers and mental health professional for the research work (Imran et al., 2018; Kabir et al., 2018; Pervin & Ferdowshi, 2016). Uddin and Rahman (2005) devised the measure with 30 items with 5-point Likert-type scale format, where the points were labeled as 'not at all applicable', 'not applicable', 'uncertain', 'a bit applicable', and 'totally applicable'. Numerals (1, 2, 3, 4 and 5) were assigned to these responses respectively to indicate severity of a symptom with increased numbers. The highest possible score of 30 items of depression scale is 150 and the lowest possible score is 30. Higher score on the scale indicates high level of depression and lower score indicates low level of depression. The scale indicates that the minimal level of depression is (30 to 100), mild level of depression (101 to 114), moderate level of depression (115 to 123) and severe level of depression (123 to 150). The validity of this scale was proven satisfactory and the split-half reliability was found 0.76.

Construct validity of the scale was found satisfactory. Although there were no information found regarding sensitivity and specificity about the measure, however, various research works and literature related to clinical case management works established the measure's sensitivity to change in the severity of the symptoms of depression in Bangladeshi population (Kabir et al., 2018; Nahar, 2016; Pervin & Ferdowshi, 2016). In the present study, Cronbach alpha reliability was found 0.96 for the current sample.

Anxiety Scale. The symptoms of anxiety are the most common other symptoms found as co-morbid with depression (Spinhoven et al., 2011; Zhiguo & Yiru, 2014) and it has been found that once depression is treated the associated anxiety symptoms also disappears (Perinin et al., 2009; Saigo et al., 2018; Zhiguo & Yiru, 2014). Therefore we had decided to measure symptoms of anxiety in our participants with depression with the Anxiety Scale (AS; Deeba & Begum, 2004) developed for the Bangladeshi population. The scale is also a frequently used one by the researchers and mental health professionals for their research and clinical works (Nahar, 2016; Tany & Saha, 2017). This scale consists of a total of 36 items. All the items of the scale were positive and were compiled in Likert-type format with five options. For each response on items, a score of 0 was assigned for "never occurs", 1 for "mildly occurs", 2 for "moderately occurs", 3 for "severely occurs", and 4 for "profoundly occurs". Total anxiety score of any individual was obtained from the sum total of scores of all the 36 items. A larger total score indicates higher anxiety. The scale has sound psychometric properties. Split-half reliability of the scale was 0.92 and Cronbach alpha reliability was found to be 0.99 of the scale. Content and construct validity of the scale were found satisfactory. In the present study, Cronbach alpha reliability was found 0.92 for the current sample.

General Health Questionnaire. Participants completed the General Health Questionnaire (GHQ-28; Goldberg & Williams, 1988). This scale was used to measure the psychological distress of the participants. The GHQ-28 is self-report screening measure used to detect possible psychological distress. This 28-item checklist is specifically concerned with the psychological sickness and psychological health (Goldberg & Williams, 1988). The maximum possible score of this scale is 84. Each item consists of a question asking whether the respondent has recently experienced a particular symptom or item of behavior on a scale ranging from "0" to "3". Thus, the higher scores indicate the greater level of symptoms of psychological distress. This measure has been reported to have good psychometric properties. It has been shown to have test-retest reliability from 0.51 to 0.90 in different groups of sample and the split-half reliability was shown to be 0.95. GHQ-28 was shown to have construct, content and concurrent validity. GHQ-28 was translated into Bangla for the use of Bangladeshi population by Banoo (2001). The test-retest reliability was found to be 0.68 (Spearman's rho), which was significant at 0.01 level (Banoo, 2001). The Bengali GHQ-28 by Banoo (2001) is also frequently used in Bangladesh for many research works (for instance, Afroz, 2019; Ara & Chowdhury, 2014; Waheed eta al., 2017). For our current sample the Cronbach alpha reliability was found 0.90 for the measure.

Beck Scale for Suicidal Ideation. As the ultimate consequence of depression is suicide, therefore we had decided to measure symptoms of suicidal risk in our participants with depression. Beck Scale for Suicidal Ideation (BSS; Beck & Steer, 1991) was used to measure the risk of suicide in the participants. The Cronbach's alpha coefficients of the screening part and the whole scale was satisfactory (>0.8). Bangla BSS (Uddin et al., 2013) was adapted for using with Bangladeshi population. It consists of 21 groups of statements or items. Items were scored from 0 to 2, which were on a 3-point Likert type scale. The severity of suicidal ideation is calculated

by summing the ratings for the first 19 items. Items 20 and 21 are not included in the score. Cronbach alpha reliability of Bangla version of BSS was found to be 0.83. Five types of validity (content, concurrent, construct, discriminant and factorial) of the scale were found satisfactory. The BSS (Uddin et al., 2013) is also frequently used in Bangladesh for multiple research works (Akter, 2019; Rashid et al., 2018). For our current sample the Cronbach alpha reliability was 0.94.

Procedure

To meet the objectives of the study, we conducted the research in four phases. At first a Bengali manual for CBT with depressive clients was adapted and pilot study was carried out on five persons with depression. Then measurement tools were selected and permission was sought from all authors of the measures to use their tools. The researcher then collected ethical approval from Faculty of Biological Science (Ref-49/ Biol.Scs./ 2017-2018) and from Dept. of Clinical Psychology, University of Dhaka (Ref- PH180701). After that the researcher approached several hospitals in Dhaka city with permission letters, explaining ethical approval and consent forms to collect data. Four assistant clinical psychologists (ACP, completed MS in clinical psychology from Dhaka University) had been recruited as research assistants for this study. These ACPs had prior experience of assessment with psychological instruments and have received training on CBT from their respective educational institution to treat adult individuals with depression and other problems. Research assistants were given training on the adapted Bengali CBT manual (core component of CBT, session structure, formulation, home works and service information), research procedure, ethical issues, and sample selection, how to approach to each participant, consent form, referral note, assessment tools and risk assessment (suicidal assessment). No

decision on sample selection was made by the research assistants. They were introduced and instructed on when to refer a case for appropriate treatment.

All therapists were under continuous supervision throughout the study. Ethical issues were also closely monitored in supervision, such as- when meeting in groups no personal information that would lead to the identification of a case was discussed. Ethical guidelines for conducting the research were strictly maintained in the study. All participants identified as eligible in this study received a consent letter with information about the intervention research and they were also informed that they would be randomly assigned to an intervention group or a WLG condition. Randomizations were conducted using simple randomization (even – WLG, odd – TG (CBT), 1:1 allocation ratio) for this study by the researcher. Individual allocation was concealed in opaque closed envelopes. All participants were also informed about the objectives of the research, provision of the CBT, and administration of questionnaires. The procedures of the study were explained to the participants, including their right to refuse and withdrawal at any stage of the study. Participants were assured of voluntary participation and that all collected data would be kept confidential. Therefore, TG was received allocated intervention while WLG did not receive the allocated intervention. One week prior to the beginning of the first CBT session and following randomization, participants received initial practical information related to time schedules, research assistants and location. Those who were eligible and agreed to participate completed informed consent and responded to the questionnaires. The TG responded to the questionnaires before the beginning of the first CBT session and the WLG during the first week of CBT session. Participants were informed that they can withdraw themselves from the study any time. The intervention was conducted over six to ten weeks and questionnaires were completed by TG and WLG following completion of the intervention. Participants responded to

the questionnaires at the hospital setting. Four self-report scales were administered by the research assistants and it took approximately 20 min to answer. There were four phases for adaptation of CBT following the frame work of Barrera and Castro (2006):

First phase: Information gathering

A CBT manual for depressive clients was adapted in Bengali at the beginning following the internationally accepted current evidence-based psychological intervention. At first, the researcher communicated with Beck institution for standard CBT manual (M. Finkel, personal communication, Sep 18, 2016). According to Beck institution instructions the book titled "*Cognitive Therapy: Basics and Beyond*" is used for treatment of the patients with depression. The researcher then reviewed "*Cognitive Therapy: Basics and Beyond"* by Judith S. Beck (1995). After that the researcher reviewed manuals on CBT and psychological intervention which were available on multicultural community (Dai et al., 1999; Dwight-Johnson et al., 2011; Gater et al., 2010; Hamdan-Mansour et al., 2009; Kohn et al., 2002; Patel et al., 2003). The aim of these literature and manual reviews were to follow the steps of adaptation, the specific nature of adaptation and similarities or dissimilarities of psychological components for the tailoring of CBT as needed according to the cultural context. The researcher found that the main component of CBT was not changed in these manuals of CBT on multicultural community. However in some adaptations of psychological treatments certain cultural elements were added to enhance treatment effectiveness and acceptability. The researcher also reviewed the current literature on CBT adaptation and manual in developing countries for depressive illness (Hwang et al., 2015; Naeem et al., 2015; Wong, 2008). At the same time information was gathered from personal experiences of CBT of depressed patient (Ara, 2018). Evidence based information was also gathered about nature of depressive disorders, relevant demographics, assessment and

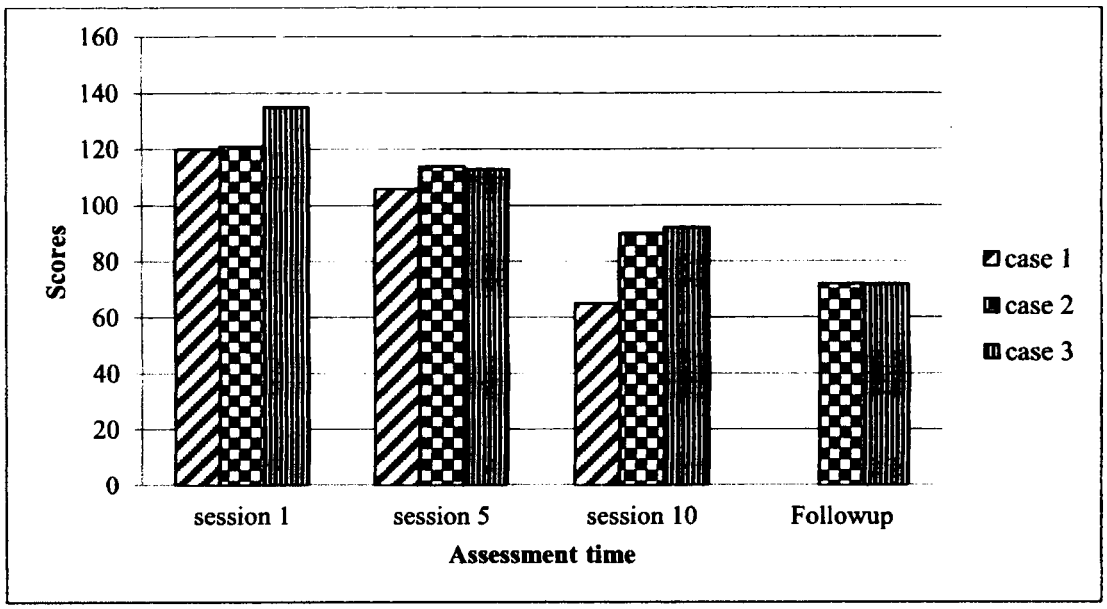
interventions in Bangladesh (Karim et al., 2001; Nasreen et al., 2013; Rashid et al., 2011; Roy et al., 2012).

Afterward a questionnaire survey was done on 40 CBT practitioners. Their feedback indicated a range of practice oriented, therapist and patient-centered factors, that were working as barriers for symptom reduction, including motivation, social system, and the psychotherapy relationship, in addition to specific problems with implementing CBT for the treatment of psychological disorders. To do this a questionnaire was developed consisting of items related to the application of CBT techniques, various attitudes and behavioral aspects of the therapist and client, and some potential cultural and societal contextual variables that assumed to undermine the effective use of CBT in reducing the symptoms of psychological disorder. The questionnaire provides the opportunity for therapist to share their clinical experiences about those variables they have found to limit the successful reduction of symptomatology by using CBT in treating mental health problems. The researcher found that there are some barriers to deliver CBT as an effective intervention in Bangladesh (Ara & Deeba, 2019).

After that, information was gathered of three depressed patients' on current symptoms and characteristics of depression and also found improvement of symptoms in treatment outcome for CBT by the researcher (Ara & Deeba, 2018). Here, three eligible participants with depression were included. In treatment session CBT based intervention was used. Researcher changed some language (used in western CBT) when needed in session. Following the initial assessment, the patient was assigned to treatment and evaluated by psychological measurement scales. Depression scale (Uddin & Rahman, 2005) and Anxiety scale (Deeba & Begum, 2004) were used as objective measures of improvement. Session wise scores of these scales are presented in Figure 1 and Figure 2.

Figure 1

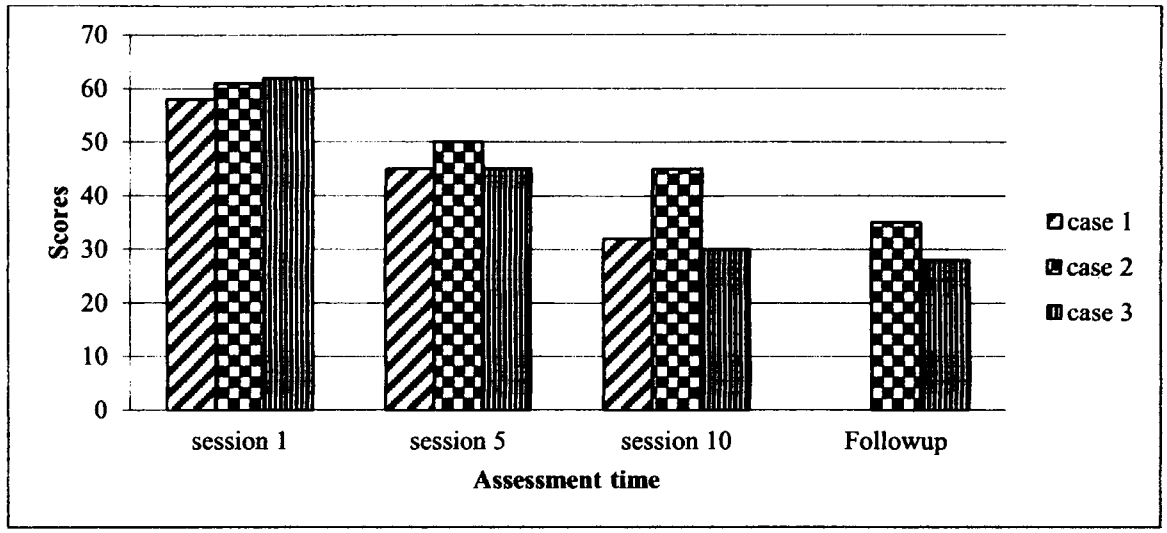
Scores on Depression scale of the participants



Result (Figure 1) showed that, scores obtained on depression scale on 1st , 5th , 10th and Follow-up (usually in 2-3 weeks) of first client were 120 (moderate), 106 (mild) and 65 (below cut off point), but the client didn't attend follow-up session. The second client's obtained scale scores were 121(moderate), 114(mild), 90 (below cut off point) and 72(below cut off point). The obtained scores on depression scale of third client were 135 (severe), 113(mild), 92 (below cut off point) and72 (below cut off point). Objective ratings of depression scale indicate that clients' improvement after CBT intervention was satisfactory.

Figure 2

Scores on Anxiety scale of the participants



Result (Figure 2) showed that, scores obtained on anxiety scale on 1st , 5th , 10th and Follow-up (usually in 2-3 weeks) first client were 58 (moderate), 45 (below cut off point) and 32 (below cut off point), but the client didn't attend follow-up session. In the second client obtained scale scores were 61(moderate), 50 (mild), 45 (below cut off point) and 35 (below cut off point). The obtained scores on anxiety scale of third client were 62 (moderate), 45 (below cut off point), 30 (below cut off point) and 28 (below cut off point). Objective ratings of depression and anxiety scales indicate that clients' improvement after CBT intervention was satisfactory.

Information gathered from the above elementary stages as well as personal experiences of therapy and clinical practices were organized to develop an adaptation structure that guided the CBT adaptation process. After that, the first draft of CBT manual was written into Bengali which

is based on the book by Judith S. Beck (1995) *"Cognitive Therapy: Basics and Beyond"* and psycho-education and motivational interviewing sections were added.

Second phase: Judge evaluation

The manual was given to seven judges for evaluation according to their opinion and experience. Clinical psychologists who had training, strong understanding of the mental health needs and experience delivering CBT in Bangladesh were included in this phase as the judges. From them in group-I there were two clinical psychologists (experience of CBT more than 15 years and they had taken training from British trainer), in group-II included three judges (experience of CBT for more than 1o years and they had taken training from first generation of CBT practitioner) and in group-III included two judges (experience of CBT more than 5 years and they had taken training from second generation of CBT practitioner). Thus, as per their suggestions, the final draft of the adapted Bengali CBT manual was prepared.

The process of the adaptation continued throughout the study. This work started in October, 2016 and we were able to finalize the manual on the basis of the following framework in 2018. This adapted CBT manual focuses on psycho- education, symptoms management, changing negative thinking, behavioral activation, problem solving and communication skills. The manual consists of details of therapy in 10 short chapters. At the end of the manual (session structure in Bengali) there are instructions of 6-10 sessions, comprising of formulation, samples of thought diaries and behavioral activity charts. Here Table 2 presents weekly session structure delivered during the cognitive behavioral intervention for depression

Table 2

'eekly session structure delivered during the CBT for depression

ession	Session content	Homework content
1	Introduction, assessment and eliciting the patient's expectation for therapy, educating the patient about the disorder, about the CBT model, and about the process of therapy, goal setting.	Mood monitoring
2	Information regarding depressive illness, identifying thought and emotion, use of behavioral methods for example, activity scheduling, goal setting.	Activity scheduling, plus previously presented skill
3	Identifying negative automatic thoughts, psycho-education (thought, mood, behavior, and physical symptoms), identifying core belief, intermediate belief, assumption and psycho-education, goal setting.	Identifying thoughts, plus previously presented skills
4	Cognitive distortion, distinguishing automatic thoughts from emotions, techniques to challenge negative automatic thoughts, relaxation technique, review goals	Thought challenge, plus previously presented skills

Table 2

Weekly session structure delivered during the CBT for depression(continued)

Session	Session content	Homework content
5	Problem solving, discussions of thoughts identified, challenging negative automatic thoughts (evidence that supports the thoughts and the evidence that does not support the thoughts), modifying beliefs, review goals	Cognitive restructuring, problem solving,
6-7	Motivating patients to use dysfunctional thought records, creating alternative thoughts, modifying core belief, prepare participant for termination of individual therapy	Thought diary, previously presented skills
8-9	Modifying core beliefs and strengthening new beliefs, guide to self-therapy session, review goals and skills, relapse prevention	previously presented skills
10	Follow up session	

Third phase: Preliminary test of the adapted treatment and adaptation refinement

From these two phases the adapted Bengali CBT manual was finalized. In phase three, the intervention was pilot-tested using pre-post test research design (Ara & Deeba, 2020). For the

current research a total number of five referred patients diagnosed with depression were included. The diagnosis of depression was confirmed by a psychiatrist and according to the criteria developed by DSM-V (APA, 2013). Written consent was taken prior to the study. Those with psychotic symptoms, intellectual disability and severe mental illness were excluded from the pilot study. CBT was provided by the researcher. One patient attended three sessions and the rest four attended 6 to 10 sessions. Mean scores of the participants pilot study is presented in Table 3.

Table 3

Mean scores of the participants on outcome measures after CBT intervention

Measures	*N* (5)		
	Pre-test	Post- test	Follow-up
DS	119.75	59.5	51.25
AS	53.25	40.75	22.5
GHQ-28	57.75	29	23.75
BSS	3.25	.75	.15

Note. DS= Depression Scale, AS= Anxiety Scale, GHQ-28= General Health Questionnaire, BSS= Bangla Beck Scale for Suicidal Ideation.

The intervention was delivered over 6–10 sessions and was found to be effective in this pilot study. Throughout the study, the researcher received weekly supervision from the supervisor on conducting the sessions according to the manual so that necessary modifications could be made as required, and if there were any difficulties to conduct sessions as per the manual developed. In this case no change was required in the manual and this was remaining the same.

Fourth phase: Clinical trial

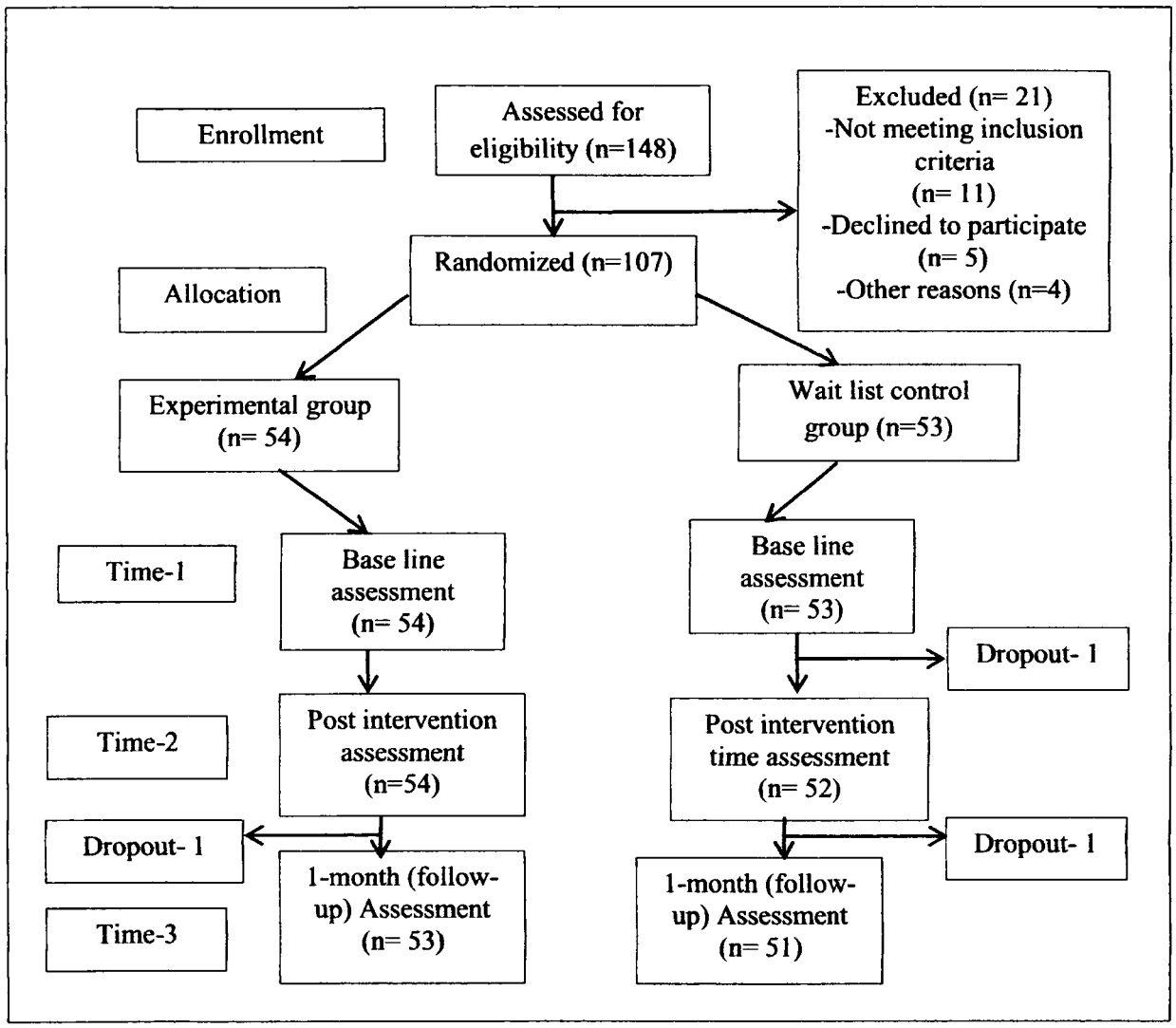
RCT is regarded as the most scientifically vigorous study design (Egbewale, 2014). It is widely believed that randomization offers a good technique of controlling bias (Egbewale, 2014), so that outcomes are measured with the same degree of accuracy and completeness in every participant. All eligible participants who consented (oral and written informed consent were sought) to participate were randomly allocated to one of the two groups, TG or WLG according to inclusion and exclusion criteria. In the TG, the patient was received 6-10 sessions of individual CBT for depression according to the manual that was adapted for this study. Consenting participants were invited to complete baseline assessments in the initial meeting or in an additional meeting. Assessments were completed at baseline (pre-test), termination (post-test) and three weeks after termination (follow up) using the specific scales. Outcomes on specific scales were evaluated. After completing data collection the WLG was offered intervention according to their demand.

A total of 148 participants aged between eighteen to sixty years were assessed for eligibility and according to exclusion criteria 21 participants were excluded from the study.

Following our exclusion criteria from 21 participants, 12 participants were excluded due to not meeting the inclusion criteria, only five participants were declined to participate in RCT and four participants were excluded for their personal reasons. Finally a total of 107 participants were engaged in the study. Figure 1 describes the full design, participant flow and time-line for the study. Two participants from the WLG discontinued before the post-intervention and follow up-assessment: one participant was refused to complete questionnaires and one participant was sick. One participant from the TG discontinued before the follow up- assessment because of sickness. As can be seen in Table 3, there were no significant differences between the groups on participant's gender, age, no of family members, no of child, income, occupation and the educational qualification of the participant. The consort flow-diagram detailing the recruitment procedure of participants through the study is presented in Figure 3.

Figure 3

Consolidated standards of reporting trials (CONSORT) participants flow through the study timeline



Note. Participants flow through the study timeline.

Therapists were trained and instructed to follow the CBT manual for depression adapted by JA and FD. This manual is based on the book by Judith S. Beck (1995) "*Cognitive Therapy: Basics and Beyond*" with some adaptations. The participants were allocated to CBT and they received a sequence of 6-10 weekly sessions and each session was last approximately 50 min.

Research assistants were received an average of one hour per week supervision (combination of peer, individual and crisis support) facilitating discussion of therapeutic difficulties and impasses, providing skills acquisition, and peer support and interaction. To share good practice and highlight common issues within sessions, there were also be group supervision sessions. Assistant clinical psychologists were asked to make presentation regarding changes in the measuring instruments, session structure, treatment process, case formulation, and treatment planning. The frequency of these supervision sessions were agreed upon with the therapists based on need. Overview of the session structure is already shown in Table 2.

The intervention: The cognitive behavioral intervention used in this study is based on Beck's cognitive behavioral therapy (Beck, 1995) with some adaptation. The researcher of the current study adapted a Bengali manual based on Beck's CBT (Beck, 1995) and others manual from different multicultural community to see the differences (Dwight-Johnsona, 2011; Gater et al., 2010; Kohn et al., 2002). The researcher also searched research published in Asian countries (Hwang et al., 2015; Naeem et al., 2015; Wong, 2008) and added some informative materials. The manual was judged by seven professional clinical psychologists for evaluation. According to their opinions and experience, standardization and piloting study was done. The manual included comprehensive educational material and guidelines for each of the six to ten sessions as active involvement of participants was expected.

The therapists were master's-degree clinical psychologists with over five-year clinical experience and with experience in CBT. Use of this manual by assistant clinical psychologists ensured intervention fidelity. All participants and assistant clinical psychologists worked with the same materials and used guidelines to prepare sessions. The adapted Bengali CBT manual also

served as a reference for participant evaluation. The assistant clinical psychologist was monitored through biweekly supervision.

The aim of the adapted Bengali CBT manual is to improve the symptoms of depression and its management and, in so doing, strengthen coping mechanisms and resilience within other environment. There are a number of approaches to CBT for people diagnosed with depression, common principles include emphasizing on depressive symptoms as part of a total package of care, establishing working alliance with others, addressing negative automatic thoughts, setting reasonable and achievable goals, and focusing on maintaining gains. Core components of adapted Bengali CBT manual includes psycho-education, problem solving, cognitive appraisal, use of cognitive techniques, crisis management and encouraging individual to practice good self-care. Successful engagement with CBT is associated with a reduction in relapse, improvements in negative cognition, social functioning and quality of life. Lack of awareness or understanding of depression might reduce the likelihood of accessing this evidence-based treatment, particularly among people in Bangladesh. However, there is no research in Bangladesh to test the effectiveness of this evidence based intervention CBT for persons with depression. It remains unclear therefore whether the reported benefits of CBT are relevant for the generalizable to Bangladeshi population. The aim of this study was to test the effectiveness of delivering a novel, adapted and standardized psychological intervention CBT within a same group of population suffering from depressive disorders in order to improve symptoms and access to evidence-based intervention.

In every session, home-work assignments, such as thought records, activity diaries, and positive statements were reviewed and discussed. In the first session, basics of CBT were

explained and put in context with psychological distress; both depressive and anxiety symptoms. Participants practiced identifying thoughts, feelings, physical reactions, and behavior in relation to distressing situations. The concept of thought records was introduced and practiced with each participant in TG. The second session included a description of the concepts of depression and the third session included mastery in identifying negative automatic thought along with cognitive restructuring.

Other sessions included problem solving, distraction techniques and other CBT techniques to deal with depressive symptoms. Also, behavioral techniques including relaxation and controlled breathing were taught. Participants were asked to keep activity diaries to help them reflect on how they spent their time, how much pleasure they took in different activities, and how well they mastered them and identify possible stressors. Activity diaries were reviewed from the second session and participants were encouraged to add activities to their schedules, where appropriate, to enhance a sense of mastery and pleasure. The concept of negative automatic thought, symptoms of depression were discussed along with helpful cognitive and behavioral ways. Patients were also provided with psycho-education to enhance self-esteem and a sense of mastery which involved within the session. The last and final session included a review of the intervention and summarization of educational topics from previous sessions. Participants' experiences from working with thought records, activity diaries, relaxation training, and the practice of using positive affirmations were reviewed and discussed.

Data analysis

For analyzing demographic data descriptive statistics were used, t-tests were conducted to examine for baseline comparison. Categorical variables (for example, gender) were compared using Chi Square test. Analysis of the data for the effect of intervention was carried out on intention-to-treat basis. In intent-to-treat (ITT) analyses included all randomized patients in the groups to which they were randomly assigned, regardless of their adherence with the entry criteria, regardless of the treatment they actually received. It ignores noncompliance, protocol deviations, withdrawal, and anything that happens after randomization. It uses every subject who was randomized according to randomized treatment assignment. Continuous measures were analysed using mixed model ANOVA (IBM SPSS Statistics 20.0) and for assessing effects on all variables (Hussey & Hughes, 2007). Then the main purpose of the study was to see the effectiveness of the intervention and thereby analyses were made on participants who had completed all assessments and intervention initially (completers) and then with all the participants who enrolled in the study (intention to treat). Last observation carried forward (LOCF) was used to handle missing data. Estimation methods were also used and restricted to maximum likelihood (REML). Results of analyses of data based on the intention -to-treat sample using mixed model ANOVA procedures were almost identical to results of analyses on both the observed data and the intent-to-treat sample with data imputed according to the Expectation–Maximization (EM) algorithm, hence only ITT analyses are reported here (Dempster et al., 1977). Differences at two months (post-treatment) and three months (one month follow-up) from baseline were used as repeated measures. Here, results on intervention (TG X WLG), time (Time 1 X Time 2 X Time 3) and interaction of intervention and time (Group X Time) were checked. In the model, group was a fixed factor, time (3 levels) was included as a repeated measure and

covariates were unstructured. To denote the variances between groups within each time point differences was assessed using the Eta-squared statistic, effect sizes are presented as partial $\eta 2$. Here, effect sizes of 0.01, 0.06, and 0.14 are considered small, medium, and large respectively (Cohen, 1988).

All post-hoc analyses were done using simple comparison tests. Post-hoc analyses are conducted to specify where statistically significant differences exist. Here, post hoc tests were used to see the differences among means in three time period (base line-post intervention- follow up) and it was needed to provide specific information on which means were significantly different from each other (Time1 to Time2 and Time 2 to Time3). In order to measure the extent to which change in symptoms of depression was associated with the three process mechanisms assessed in the study, separate stepwise multiple regressions (controlling for demographic covariates) were ran, with the differences of the outcome measures at pre-intervention to post-intervention and post-intervention to follow-up assessment points as the dependent variables.

CHAPTER 3

RESULTS

Descriptive statistics

From three different hospitals, 148 patients were assessed and only about 3.38% of participants declined to participate in RCT of this intervention (see Figure 3). Following the inclusion and exclusion criteria stated above 107 patients were selected and randomized in two groups. There were no significant differences in the two groups on demographic variables (all *ps* >.05, see Table 4). They were well homogenous and randomized for the experimental study. After baseline assessment only one participant dropped out and before follow-up two more participants dropped out. To understand the baseline nature of the 107 participants, 53 were assigned to the WLG and 54 were allocated to the TG. We compared the groups on all demographic variables and initial baseline assessment on the measures of psychopathology used in this study. Demographic data is presented in Table 4.

Table 4

Demographics differences at the baseline level

Characteristic		Group (N = 107)		Statistics
		NLG (N= 53)	TG (N= 54)	
Age in years	(Mean, SD)	28.75(7.83)	32.67 (7.04)	t (105, N=107) = -2.72, p = 0.16
		(N, % in total)	**(N, % in total)**	
Gender	Female	41 38.3%)	36 (33.6%)	χ^2(1, N=107) =1.51, p = 0.22
	Male	12 11.2%)	18 (16.8%)	
Number of children	No child	36 33.6%)	26 (24.3%)	χ^2(2, N=107) = 7.42 p = 0.06
	One to two	8 7.4%)	19 (17.7%)	
	Three and above	9 8.4%)	9 (8.4%)	
Types of family	Nuclear	46 43.0%)	45 (42.1%)	χ^2(1, N=107) = 0.25, p = 0.62
	Joint	7 (6.5%)	9 (8.4%)	

Table 4

Demographics differences at the baseline level(continued)

Characteristic		Group (N = 107)		Statistics
		WLG (N = 53)	TG (N= 54)	
Religion	Islam	45 (42.1%)	47 (43.9%)	$\chi^2(1, N=107) = 0.10, p = 0.75$
	Others	8 (7.5%)	7 (6.5%)	
Educational status	Below SSC	10 (9.3%)	12 (11.2%)	$\chi^2(2, N=107) = 0.82, p = 0.09$
	SSC to HSC	10 (9.3%)	13 (12.1%)	
	Graduate	33 (30.8%)	29 (27.1%)	
Occupation	Service holder	22 (21.6%)	24 (22.4%)	$\chi^2(3, N=107) = 0.54, p = 0.91$
	Business	4 (3.9%)	3 (2.8%)	
	Unemployed	11 (10.8%)	9 (8.4%)	
	Others	16 (15.7%)	18 (16.8%)	
Monthly income	Below 20,000 BDT	23 (21.5%)	19 (17.8%)	$\chi^2(2, N=107) = 4.62, p = 0.10$
	20,000 to 50,000 BDT	21 (19.6%)	16 (15.0%)	
	50,000 BDT to above	9 (8.4%)	19 (17.8%)	

Note. TG = Treatment group, WLG = Wait list control group.

A series of *t*-tests were run for comparing the two groups on the standard measures and revealed that there were no significant differences between WLG compared to the TG in baseline measures (all *p*s >.05, see Table 5) indicating successful randomization.

Table 5

Baseline comparison between TG (N=54) and WLG (N=53)

Measure		*N* (107) Mean (*SD*)		Statistics
DS	WLG	121.25	(8.64)	
	TG	120.99	(8.70)	$t(105) = 0.18, p = 0.85$
AS	WLG	52.59	(9.31)	
	TG	51.44	(8.90)	$t(105) = 0.71, p = 0.16$
GHQ-28	WLG	54.41	(7.09)	
	TG	55.13	(8.064)	$t(105) = -0.53, p = 0.60$
BSS	WLG	6.83	(7.36)	
	TG	6.64	(6.24)	$t(105) = 0.15, p = 0.11$

Note. DS = Depression Scale, AS = Anxiety Scale, GHQ-28 = General Health Questionnaire, BSS = Bangla Beck Scale for Suicidal Ideation, TG = Treatment group, WLG = Wait list control group.

Comparison of TG and WLG over pre-, post- and follow-up assessments

Mixed model ANOVA was used to compare the two groups for baseline (Time 1), post intervention (Time 2) and follow-up assessments (Time 3) after one-month on measures used in

the study. Estimated marginal means and standard deviations of depression scale are presented in Table 6.

Symptoms of Depression

Here, Table 6 presents the measure of depression for the effect of the treatment at baseline, post-test and follow-up in the intervention group compared to the WLG, which did not receive the treatment, in the post-intervention. When comparing the groups on symptoms of depression measured with the DS (see Table 6) at post-intervention and follow-up, there was found significant main effect for intervention or time.

Table 6

Statistics of Mixed Model ANOVA for Depression by DS

Measure		Pre-test	Post-test	Follow up	Treatment Effect		Between-Subjects Effects
		Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Time	Time * Group	
DS	TG	120.99 (8.70)	62.23 (11.77)	46.66 (10.71)	$F(2, 105) = 1145.52$, $p<.001$, $\eta_p^2 = 0.95$	$F(2, 105) = 819.39$, $p<.001$, $\eta_p^2 = 0.93$	$F(1, 105) = 819.39$, $p<.001$, $\eta_p^2 = 0.93$
	WLG	119.25 (8.64)	115.62 (9.71)	112.81 (11.32)			

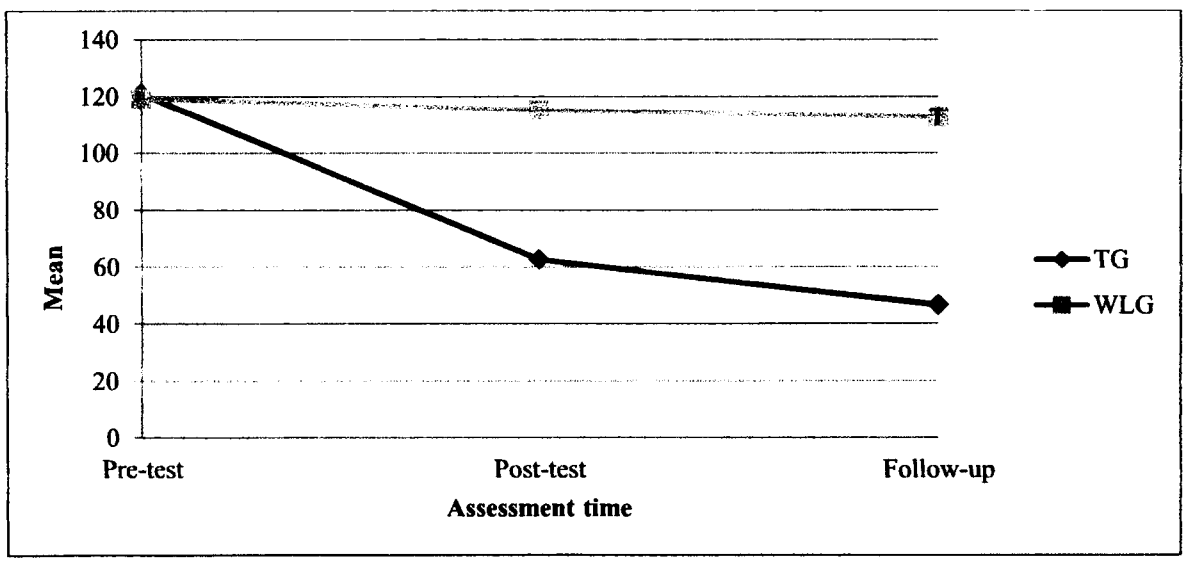
Note. DS = Depression scale, TG = Treatment group, WLG = Wait list control group.

There were statistically significant effects of time for the outcome measures of DS between pre-treatment to post-treatment and post-treatment to follow-up. The within-group

effect sizes were large and significant. For symptoms of depression assessed by the DS, there was a significant main effect difference found for intervention, $F(2, 105) = 819.39$, $p<.001$, the effect size for this analysis was $\eta_p^2 = 0.93$. And within-group comparisons for the CBT group revealed large effect sizes on the DS and there was a significant main effect reduction over time, $F(2, 105) = 1145.52$, $p<.001$, the effect size for this analysis was $\eta_p^2 = 0.95$. However there was a significant time by group interaction, $F(1, 105) = 819.39$, $p<.001$, the effect size for this analysis was $\eta_p^2 = 0.93$. Mean and standard deviation showed that TG improved over the three months period compared to WLG. At post-intervention and follow-up the levels of depressive symptoms had decreased in WLG but the changes were significantly greater among the TG (see Table 7 and Figure 4).

Figure 4

Differences of scores on Depression scale between TG and WLG



Note. TG = Treatment group, WLG = Wait list control group

The result (see figure 4) suggests that there were significant differences in depressive symptoms over the three time period (pre, post and follow up) between TG and WLG for CBT intervention.

Table 7

Post-hoc analysis for comparing the within group scores of Depression by DS

Measure		Time (mean)			
		1 to 2	*t*	2 to 3	*t*
DS	TG	58.75	$t(53) = 38.41$, $p<.001$	15.58	$t(53) = 13.99$, $p<.001$
	WLG	3.63	$t(52) = 5.31$, $p = .12$	2.81	$t(52) = 4.39$, $p = .19$

Note. DS = Depression scale, TG = Treatment group, WLG = Wait list control group.

Post-hoc pairwise comparisons revealed significant differences between the TG and the WLG ($p<.001$). Post-hoc analyses showed that mean scores on the DS obtained by participants in the WLG group were higher than the TG and mean scores of WLG on the DS failed to change significantly between Time 1 and Time 2, $t(52) = 5.31, p = .12$, and between Time 2 and Time 3, $t(52) = 4.39, p = .19$. But there was a significant reduction of depressive symptoms between baseline to post-intervention in the TG, $t(53) = 38.41, p< 0.001$ and there was also a significant decrease in scores from post-intervention to follow-up assessment $t(53) = 13.99, p<.001$.

Symptoms of Anxiety

When comparing the groups on symptoms of anxiety measured with the AS, there was found significant main effect for intervention or time. Here, baseline assessment, post-test and follow-up findings for both groups as well as the comparisons between groups are presented in Table 8.

Table 8

Statistics of Mixed Model ANOVA for Anxiety by AS

Measure		Pre-test	Post-test	Follow up	Treatment Effect		Between-Subjects Effects
		Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Time	Time * Group	
AS	TG	51.44 (8.90)	31.56 (8.33)	23.72 (4.42)	$F(2, 105) = 238.87$, $p<.001$, $\eta_p^2 = 0.79$	$F(2, 105) = 123.48$, $p<.001$, $\eta_p^2 = 0.67$	$F(1, 105) = 115.14$, $p<.001$, $\eta_p^2 = 0.48$
	WLG	52.59 (9.31)	49.31 (9.42)	48.06 (10.05)			

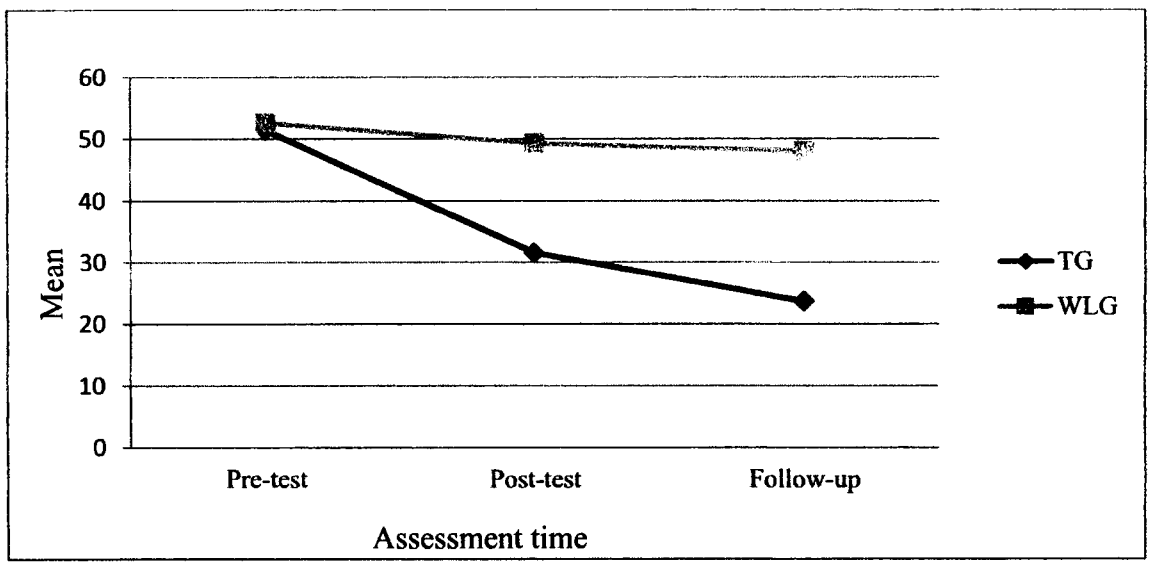
Note. AS = Anxiety scale, TG = Treatment group, WLG = Wait list control group.

Post-test and follow-up anxiety scores among the intervention group decreased significantly ($p< .001$) in comparison to the WLG showing an interaction effect. The differential changes in symptom scores between the groups pre, post and follow-up were significant on scale scores ($p< .001$) with the AS. According to scores on the AS there was a significant main effect

difference found for intervention group, $F(2, 105) = 123.48$, $p<.001$ and the effect size for this analysis was $\eta_p^2 = 0.67$. Moreover, there was a significant main effect reduction in symptoms of anxiety over time, $F(2, 105) = 238.87$, $p<.001$ and the effect size for this analysis was $\eta_p^2 = 0.79$, which were qualified with a significant interaction between time and group, $F(1, 105) = 115.14$, $p<.001$, $\eta_p^2 = 0.48$. Anxiety developed differently in the WLG, showing almost no change in the level of symptoms according to the AS. The changes observed were also greater among the participants who completed treatment in TG (see Figure 5).

Figure 5

Differences of scores on Anxiety scale between TG and WLG



Note. TG = Treatment group, WLG = Wait list control group

The results indicated (see Table 8 and Figure 5) that significant differences were found for participants reported symptoms of anxiety between TG and WLG for the CBT based intervention. The results also suggest that there were significant differences in anxiety symptoms

(see Table 9) over the three time periods (pre, post and follow up) between TG and WLG for CBT intervention.

Table 9

Post-hoc analysis for comparing the within group scores of Anxiety

Measure		Time (mean)			
		1 to 2	*t*	2 to 3	*t*
AS	TG	19.88	$t(53) = 18.46$, $p<.001$	7.84	$t(53) = 8.42$ $p<.001$
	WLG	3.27	$t(52) = 3.77$, $p = .29$	1.25	$t(52) = 1.69$, $p = .13$

Note. AS = Anxiety scale, TG = Treatment group, WLG = Wait list control group.

Post-hoc pairwise comparisons revealed significant differences between the TG and the WLG ($p<.001$). Participants' in the WLG failed to change their scores on AS significantly compared to TG. Post-hoc analyses showed that mean scores on the AS obtained by participants in the WLG group were higher than the treatment group and mean scores on the AS did not change significantly from Time 1 to Time 2, $t(52) = 3.77$, $p = .29$, and from Time 2 to Time 3, $t(52) = 1.69$, $p = .13$. But there was a significant reduction on mean scores of anxiety symptoms from baseline to post-intervention in the TG, $t(53) = 18.46$, $p< 0.001$ and there was also a significant decrease in scores from post-intervention to follow-up $t(53) = 8.42$, $p<.001$.

Symptoms of Psychological Distress

Participants showed a significant decrease over time in psychological distress, as measured by the GHQ-28 from baseline through follow-up in TG. When comparing the groups on symptoms of psychological distress measured with the GHQ-28, there was found significant main effect for intervention or time. Here, baseline assessment, post-test and follow-up findings for both groups as well as the comparisons between groups are presented in Table 10.

Table 10

Statistics of Mixed Model ANOVA for Psychological Distress by GHQ-28

Measure		Pre-test	Post-test	Follow up	Treatment Effect		Between-Subjects Effects
		Mean (SD)	Mean (SD)	Mean (SD)	Time	Time * Group	
GHQ - 28	TG	55.13 (8.06)	29.55 (7.24)	21.52 (5.65)	$F(2, 105) = 494.49$, $p<.001$, $\eta_p^2 = 0.89$	$F(2, 105) = 375.82$, $p<.001$, $\eta_p^2 = 0.86$	$F(1, 105) = 235.26$, $p<.001$, $\eta_p^2 = 0.65$
	WLG	54.41 (7.09)	51.67 (7.27)	49.11 (7.92)			

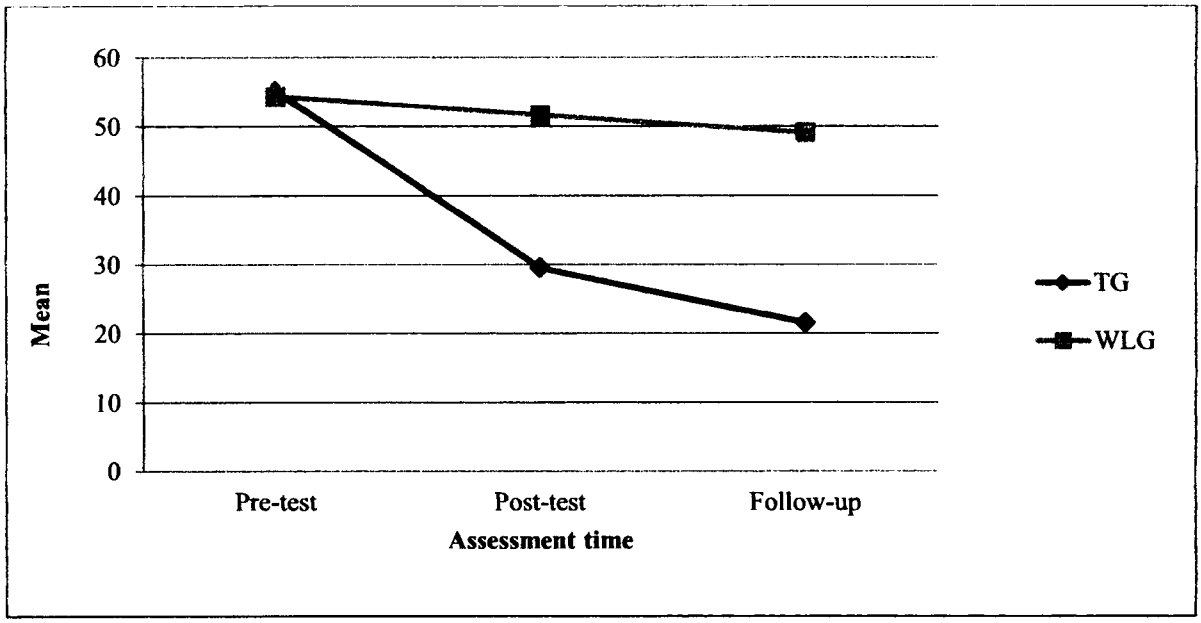
Note. GHQ-28 = General health questionnaire-28, TG = Treatment group, WLG = Wait list control group.

The mean scores of the TG and WLG differed among pre- test, post-test and follow-up even with application of randomization. The WLG reported more psychological distress at pre-

test compared to the TG, although the difference was not statistically significant. Post-test and follow-up scores of psychological distress among the TG decreased significantly ($p < .001$) in comparison to the WLG showing an interaction effect. The differential changes in symptom scores between the groups pre, post and follow-up were significant on scale scores ($p < .001$) with the GHQ-28. On the GHQ-28 there was a significant main effect difference found for TG, $F(2, 105) = 375.82, p<.001$, the greatest effect size was found $\eta_p^2 = 0.86$ or there was a significant main effect reduction over time, $F(2, 105) = 494.49, p<.001$, the effect size for this analysis was $\eta_p^2 = 0.89$, which was qualified by a significant interaction between time and group, $F(1, 105) = 235.26, p<.001, \eta_p^2 = 0.65$. Psychological distress developed differently by scale in the WLG, showing almost no change in the level of symptoms according to the GHQ-28. The changes also observed were greater among the participants who completed treatment in TG (see Figure 6).

Figure 6

Differences of scores on GHQ-28 between TG and WLG



Note. TG = Treatment group, WLG = Wait list control group

The result indicates (see Table 10 and Figure 6) that significant difference was found for participants reported symptoms of psychological distress between TG and WLG for the CBT based intervention. The result also suggest that there were significant differences in symptoms (see Table 11) over the three time period (pre, post, follow up) between TG and WLG for CBT intervention measured by GHQ-28.

Table 11

Post-hoc analysis for comparing the within group scores of Psychological Distress by GHQ-28

Measure		Time (mean)			
		1 to 2	*t*	2 to 3	*t*
GHQ-28	TG	15.58	$t(53) = 28.43$, $p<.001$	8.031	$t(53) = 11.45$, $p<.001$
	WLG	2.74	$t(52) = 3.62$, $p = .16$	2.56	$t(52) = 1.92$, $p = .09$

Note. GHQ-28 = General health questionnaire-28, TG = Treatment group, WLG = Wait list control group.

Post-hoc analyses showed that the scores of GHQ-28 for the participants in the TG changed significantly compared to WLG. Post-hoc analyses showed that mean scores of WLG on the GHQ-28 did not change significantly from Time 1 to Time 2, $t(52) = 3.62$, $p = .16$ and from Time 2 to Time 3, $t(52) = 1.92$, $p = .09$. However, within the TG there was a significant reduction of psychological distressing symptoms from baseline to post-intervention on the GHQ-28 mean scores $t(53) = 28.43$, $p< 0.001$ and from post-intervention to follow-up $t(53) = 11.45$, $p<.001$.

Symptoms for Suicidal risk

Participants showed a significant decrease over time in suicidal risk, as measured by the BSS from baseline through follow-up. Here, Table 12 presents the measures of suicidal risk for the effect of the treatment in the TG compared to the WLG, which did not receive the treatment in the post-intervention.

Table 12

Statistics of Mixed Model ANOVA for Suicidal risk by BSS

Measure		Pre-test	Post-test	Follow up	Treatment Effect		Between-Subjects Effects
		Mean (*SD*)	Mean (*SD*)	Mean (*SD*)	Time	Time * Group	
BSS	TG	6.64 (6.24)	1.84 (2.95)	0.61 (1.24)	$F(2, 105) = 40.50$, $p<.001$, $\eta_p^2 = 0.40$	$F(2, 105) = 24.42$, $p<.001$, $\eta_p^2 = 0.28$	$F(1, 105) = 12.20$, $p<.01$, $\eta_p^2 = 0.09$
	WLG	6.83 (7.36)	6.19 (6.50)	5.94 (6.32)			

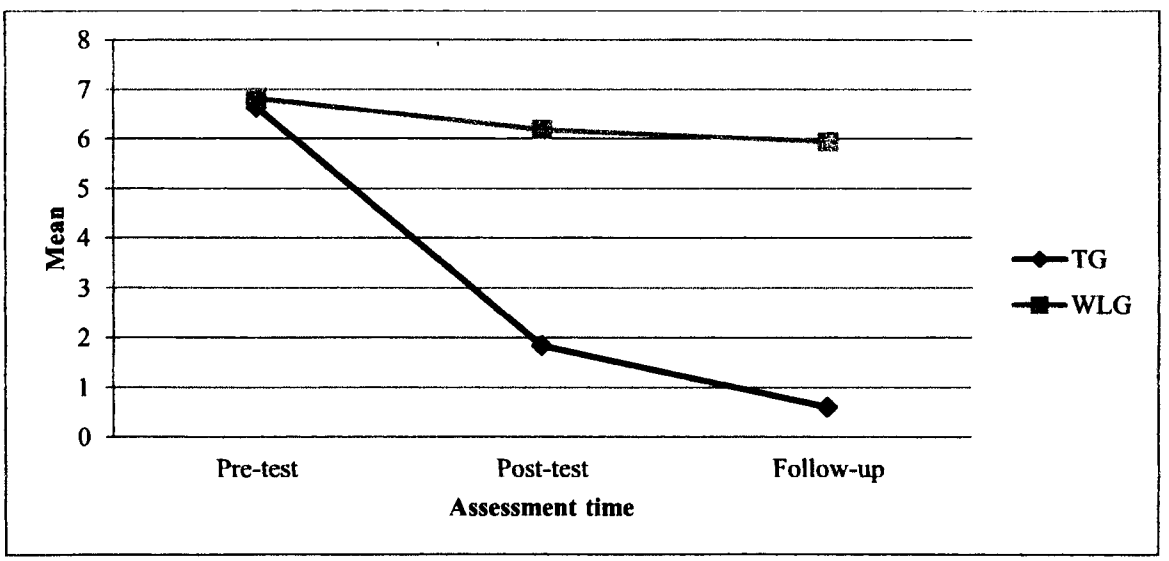
Note. BSS= Beck scale for suicidal ideation, TG = Treatment group, WLG = Wait list control group.

Post-test and follow-up scores of BSS among the intervention group decreased significantly ($p< .001$) showing an interaction effect. The differential changes in symptom scores

between the groups pre, post and follow-up was significant on scale scores ($p< .01$) with the BSS. When comparing the baseline to post-intervention and post-intervention to follow-up, there was a significant increase in the score of BSS in the TG. On the BSS there was a significant main effect difference found for intervention, $F(2, 105) = 24.42$, $p<.001$, $\eta_p^2 = 0.28$. The BSS showed a significant main effect reduction over time from baseline to follow-up, $F(2, 105) = 40.50$, $p<.001$, the effect size for this analysis was $\eta_p^2 = 0.40$. However there was a significant time by group interaction, $F(1, 105) = 12.20$, $p<.01$, the effect size for this analysis was $\eta_p^2= 0.09$. Suicidal ideation developed differently by this scale in the WLG, showing almost no change in the level of symptoms according to the BSS. The changes also observed were greater among the participants who completed treatment in TG (see Figure 7).

Figure 7

Differences of scores on BSS between TG and WLG



Note. TG= Treatment group, WLG= Wait list control group

The result indicates (see Table 12 and Figure 7) that significant difference was found for participants reported symptoms of suicidal risk between TG and WLG for the CBT based intervention. The results also suggest that there were significant differences in symptoms measured by BSS over the three time period (pre, post and follow up) between TG and WLG (see Table 13).

Table 13

Post-hoc analysis for comparing the within group scores of Suicidal risk by BSS

Measure		Time (mean)			
		1 to 2	*t*	2 to 3	*t*
BSS	TG	4.80	$t(53) = 7.66$, $p<.001$	1.23	$t(53) = 4.59$, $p<.001$
	WLG	0.63	$t(52) = 1.92$, $p = .08$	0.25	$t(52) = 1.45$, $p = .55$

Note. BSS= Beck scale for suicidal ideation, TG= Treatment group, WLG= Wait list control group.

Post-hoc analyses showed that participants in the WLG failed to change significantly than TG. Mean scores of WLG on the BSS did not change significantly from Time 1 to Time 2, $t(52) = 1.92, p = .08$ and from Time 2 to Time 3, $t(52) = 1.45, p = .55$. But there was a significant reduction of symptoms in BSS scores from Time 1 to Time 2 in the TG, $t(53) = 7.66, p<.001$ and from Time 2 to Time 3, $t(53) = 4.59, p<.001$.

Factors predicting depressive symptom reduction

Three process mechanisms were used in this study that are,- use of behavioral component, use of cognitive activities, and use of home-work. These were assessed by several research assistants following the CBT intervention. To examine differences in utilisation of these processes in intervention, scores were compared between the two groups using t-tests. Utilisation of all three process mechanisms was significantly higher in the TG compared to the WLG and there were significant differences between two groups: use of the cognitive activities, $t(105) = -21.72, p<.001$, use of the behavioral component, $t(105) = -22.19, p<.001$ and the use of home-work, $t(105) = -17.98, p<.001$.

In order to measure how much the change in depressive symptoms was associated with the three process mechanisms assessed in the study, we ran separate hierarchical multiple regressions (controlling for demographic covariates). The three process mechanisms were entered into the model simultaneously.

The regression analysis reveals that the model includes four statistically significant independent variables of predicted change on the symptoms of depression from pre-intervention to post-intervention. Entering the demographic covariates and process variables as a single block resulted in a significant model with an adjusted R^2 of .17, $F(1, 106) = 1.80, p<.05$. At step 1 of the analysis the significant predictor was age ($\beta = .41, t = -1.82, p<.05$). Among the three processes predictor mentioned before, at step 2 of the analysis the use of cognitive activities was significant ($\beta = .84, t = -15.98, p<.001$), at step 3 of the analysis the use of behavioral component

(β = -.42, t =-3.81, p<.05) and at step 4 of the analysis the use of home-work (β = -.24, t =-2.49, p<.05).

For the predicted change on the symptoms of depression from post-intervention to follow-up the model includes three statistically significant independent variables. The overall model was significant with an adjusted R^2 of .09, $F(2, 105)$ =1.78, p<.05. At step 1 of the analysis the strongest predictor was education (β= .21, t =-1.86, p<.05). For step 2 of the analysis the use of cognitive activities (β = -.41, t =-3.98, p<.01) and for step 3 of the analysis the use of behavioral component (β = -.86, t =-3.42, p<.05), while the use of home-work was not a strong predictor at step 4 of the analysis (β = -.27, t =-3.05, p=.08).

CHAPTER 4

DISCUSSION

"In a nutshell, the cognitive model proposes that dysfunctional thinking (which influences the patient's mood and behavior) is common to all psychological disturbances. When people learn to evaluate their thinking is a more realistic and adaptive way, they experience improvement in their emotional state and in their behavior." (Beck, 2011, p.3). CBT can help an individual learn the skills to monitor own thoughts and can change behaviors accordingly. However, as this most experiment psychological intervention was not tested methodologically in our country therefore, the main purpose of this study was to determine the clinical effectiveness of CBT delivered for people with depression in Bangladeshi cultural context. To achieve this goal we adapted a CBT manual following some step-wise phases of adaption of a psychological intervention developed in different cultural context (e.g. Naeem et al., 2015; Padesky & Greenberger, 1995).

There were four-step phases in this study. The protocol for the CBT used was based on the model suggested by Judith S. Beck (1995) as described in her book, *"Cognitive Therapy: Basics and Beyond"*. Based on studies done on effectiveness of CBT with depressed clients in non-western countries (e.g. Hwang et al., 2015; Naeem et al., 2015) it was decided to adapt the protocol of CBT as described by Beck (1995) and carefully including the cultural issues, psycho-education and motivational interviewing related to depression for preparing them to work collaboratively in a psychotherapeutic alliance. Secondly, the manual was given to seven judges for evaluation. In the third phase a pilot-study of the final draft of the Bengali CBT manual was done and in the final and fourth phase a RCT was conducted administering the manual on the persons with depression in experimental group. Our results on statistical analysis of RCT supported the effectiveness of CBT intervention and also showed that one-month after the intervention CBT-participants had improved significantly in depression.

In the first three phases we had worked on adapting the standard protocol of CBT as practiced by most mainstream practitioner mental health professionals in the world. As discussed in the methodology that the researchers explored the most used standard method for identifying the most used protocol of CBT we communicated with Beck institution for standard CBT manual (M. Finkel, personal communication, Sep 18, 2016). According to Beck institution replied that they use the book titled "*Cognitive Therapy: Basics and Beyond*" as standard for treatment of patients with depression. So, in the first phase the researcher reviewed the book "*Cognitive Therapy: Basics and Beyond"* by Judith S. Beck (1995). After that the researcher reviewed manuals on CBT and psychological intervention which were available on multicultural community (e.g. in China, Hwang et al., 2015; in Pakistan, Naeem et al., 2015). Then a questionnaire survey was done on 40, CBT practitioners to identify their clinical experiences about those variables they had found to enhance and limit the successful reduction of symptomatology by using CBT for treating mental health problems (Ara & Deeba, 2019). Subsequently, information was gathered on three depressed patients' on current symptoms and characteristics of depression and also found improvement of symptoms in treatment outcome for CBT by the researcher (Ara & Deeba, 2018). Information gathered by these elementary stages the first draft of the Bengali CBT manual was adapted. Then the adapted Bengali CBT manual was prepared for the scrutiny of experts' evaluation.

In the second phase the manual was given to seven judges for evaluation according to their opinion and experience. After that synthesizing the judges' suggestions the draft of the adapted Bengali CBT manual was finalised. In phase three, to evaluate the functional feasibility of the adapted Bengali CBT treatment manual we had conducted a pilot study on five diagnosed patients with depression referred by psychiatrists. In this case no change was required in the

manual and content of the manual was remaining the same. Thereby, we had prepared the draft of the Bengali CBT manual to examine its effectiveness through a randomized controlled trial. We have followed all standard steps and systematic framework for adapting evidence-based treatment described by Barrera and Castro (2006). By these we had completed developing a Bengali CBT manual most coherent with the epistemological and ethnological ground.

Finally, the fourth phase consisted of the RCT to determine the effectiveness of adapted Bengali CBT manual that was already tested in a pilot study (Ara & Deeba, 2020). According to ITT analyses the results of the RCT indicated that the adapted Bengali CBT manual could guide the therapists to conduct effective therapeutic work to alleviate the symptoms of depression in the participants. The findings of how effective this intervention for depression are similar to those studies done in different other cultures (Hwang et al., 2015; Naeem et al., 2015), which implies the external validity. The current trial demonstrated that no significant improvement, with regard to the primary outcome, occurred for participants in WLG compared to those on the TG. However, participants in the TG continued to show improvement from pre-intervention to post-intervention and post-intervention to follow-up on every outcome measure. Findings of our study match with the studies conducted in other non–western countries (Beltman et al., 2010; Cuijpers, et al., 2013).

As observed in the findings of the study provided support for CBT based psychological interventions in treating individual with depression in Bangladesh. This approach was acceptable to participants, as only about 3.38% of the sample declined to take part into the RCT and only about 2.8% withdrew once the treatment had actually begun where there were no dropout before the post-treatment assessment. Favorable outcomes were demonstrated low dropout rate, and

improvement in pervasive outcome measures (Gaffan et al., 1995; Gortner et al., 1998; Stuart & Bowers, 1995; Scott, 2001). The findings are consistent with other studies, in most randomized, controlled trials of the treatment of depressive disorders and CBT is found to be effective (Beltman et al., 2010; Cuijpers, et al., 2013; Dimidjian et al., 2006; Dimidjian & Goodman, 2009; Dobson, 1989; Embling, 2002; Fava et al., 1998; McMain et al., 2015; Van Straten et al., 2010).

Additionally, our investigation indicated substantial effect sizes (see Table 6) for improvements in measures of depression following the CBT intervention. Since every participant experienced depression for a period of time and there were no significant differences in the start of treatment between two groups (see Table 5). But the mean difference(s) between two groups were significant after intervention in each assessment point. Findings of the current trial is comparable even with the previous studies conducted with (Chen et al., 2006; Dimidjian & Goodman, 2009; Dobson, 1989; Dobson et al., 2008; Goodman & Garber, 2017; Gortner et al., 1998; Jasmine, 2010; Newby et al., 2013; Strachowski et al., 2008) and supports the efficacy of CBT in reducing depression. Previous research also showed that in depressive disorder lead to significant clinical improvement and symptom reduction, relative to other forms of psychotherapy when delivered standard form of CBT (Beidel et al., 2000; Bond & Dryden, 2005; Gortner et al., 1998; Newby et al., 2013; Strachowski et al., 2008). Since all individuals in this research had included only those participants who didn't take medication and these participants were providing CBT intervention as soon as possible for individuals with mild to severe depression, this suggests that there may be an advantage in providing treatment as soon as possible (Lopez & Basco, 2015). Besides, it may be that the monitoring and delivery of treatment was best done by trainee clinical psychologist which was shown in treatment outcome. Recent

reviews support the contribution and importance of the background of the mental health professionals (Bower et al., 2001; Gilbody et al., 2003). In other words, CBT for depression may be effective when used appropriately, but it may not be effective because of limits in people's capability or preparedness to implement it. These findings were similar to those of Perini et al. (2009) which examined the effectiveness of CBT on depressive symptoms.

CBT as a wide method to psychotherapy has become the most commonly utilized and researched of all psychotherapeutic methods (Lopez & Basco, 2015). This study applied adapted Bengali CBT manual and provided depressive patients with the skills to adjust their thoughts to assist adaptive coping to manage their emotions, distress and symptoms of depression that are common among patients with depression. In a study of depressed individuals undergoing 12 weeks of cognitive therapy, Barber and DeRubeis (2001) found that depressive symptoms improved over the 12-week period and that patients showed significant cognitive improvement. Mainly CBT focuses on identification and modification of distorted thinking patterns associated with depressed mood which may reduce symptoms of depression. It may be that the cognitive triad forces the depressed individual to deal with irrational negative thoughts that are acceptable to him/her over and are always about topics such as hopelessness, low self-esteem or suicide; which help participants to deal with depression and in long run reduced mean scores on measurement scales of the treatment group (Lehner-Adam & Dudas, 2013).

In accordance to our current results a good percentage of co-morbid anxiety (85.6%) with primary depression was found and there were significant reduction in depression as well as in the co-morbid difficulties that were secondary to depression. Overall, the results indicate that relative to the passage of time; all the participants were improved on anxiety through the use of

adapted Bengali CBT manual (see Table 8). It is consistent with other research findings where found that CBT is an empirically based psychotherapy with robust evidence for the treatment of adult anxiety and depression (Butler et al., 2006; Cuijpers et al., 2013). In general, the pattern of CBT is based on identifying and shifting clients' dysfunctional cognitions and behaviors to reduce maladaptive emotions (Beck, & Beck, 2011). It has been also shown that when symptoms of depression improved at the same period of time symptoms of anxiety also significantly improved following CBT (Newby et al., 2013; Perini et al., 2009; Saigo et al., 2018).

In accordance to our current result mean scores of depression as well as psychological distress decreased significantly immediately after post intervention and one-month after the post-intervention. From the current trial it can be indicated that CBT group showed significant reduction in measures of psychological distress in patients with depression indicated large effect size (see Table 10). There is important evidence that CBT may improve health-promoting behaviors, such as changing patterns of risky lifestyle and habits, and modify dysfunctional attitudes and behaviors (Menutti et al., 2006). These findings add to a great body of literature indicating that CBT is an effective tool to improve depression as well as psychological distress (Beltman et al., 2010; Cuijpers et al., 2013; Embling, 2002; Van Straten et al., 2010).

Although significant changes in suicidal risk were found in CBT group compared to WLG. Medium effect size ($.06 < \eta^2 < 0.14$, see Table 12) was found across between subject effect for the outcome measure on suicidal risk, where large effect size was found for other symptoms (Cohen, 1988). The reason behind is that the primary focus of Judith Beck's cognitive behavior theory (1995) is based on people's explanation of negative life incidents and its impact on their experience of depression. This adapted Bengali CBT manual is most commonly operationalised

for meeting these criteria for a principal diagnosis of depressive disorder. Additionally, depressive disorder and depressive symptoms are risk factors for suicide in Bangladesh is a common cause of unnatural death (Mashreky et al., 2013). Of all the people reported due to injury related death in Bangladeshi on an average, 30 people kill themselves every day (Suicide on the rise, 2018). So, treating for suicidal risk by the adapted CBT program may need to add component which is related to suicidal ideation. In respect of all variables, therefore, the efficacy of the intervention was greater in patients with depression and this therapy appears to be appropriate to patients across the whole range of clinical severity come across in general practice.

In general, common mental errors like blaming, rationalizing, black and white thinking or emotional reasoning have significant contributors to depression (Beck, 1995). By learning cognitive techniques helped the patient replace dysfunctional cognitions with ways of thinking appropriate for a particular situation and use the central role of cognition for adjusting emotions (Goodman & Garber, 2017; Lehner-Adam & Dudas, 2013; Rnic et al., 2016). In a study Oei and Sullivan (1999) assessed changes in cognitions for 67 patients and found that patients who recovered showed a greater rate of reduction in automatic thoughts and greater change in dysfunctional attitudes than patients who did not recover. Similarly, other research also showed similar findings that therapy was mainly associated with a reduction in automatic thoughts early in treatment, which was in turn linked to both a reduction in depressive symptoms and the skills people learn through CBT such as- the searching, questioning and modifying of automatic thoughts last long after the treatment ends (Kwon & Oei, 2003; King et al., 2000; Meichenbaum & Goodman, 1971). Another research has suggested that during the middle portion of treatment, CBT was associated with a reduction in dysfunctional attitudes that preceded a reduction in

automatic thoughts and that was tied to a reduction in depressive symptoms (Kwon & Oei, 2003). These results are consistent with proposals that the initial phases of CBT involve assessing, monitoring and challenging automatic thoughts, but that as CBT continues the focus of treatment turns to identifying and modifying underlying cognitive structures (Beck, 1995). Overall, these findings are consistent with other research suggesting a benefit that relatively CBT treatment programs can be effective for many persons with depression (Cuijpers et al., 2013; Dimidjian & Goodman, 2009; Dobson, 1989; Dobson et al., 2007; Goodman & Garber, 2017; McMain et al., 2015; Van Straten et al., 2010). These findings indicated a reduction of symptoms of depression as well other symptoms following adapted Bengali CBT manual.

Therefore, present investigation aimed to determine the predicting factors associated with depressive symptom reduction and three process mechanisms were used, that are, -use of behavioral component, use of cognitive activities, and use of home-work. Analyses on treatment improvement revealed significant associations among clinical outcomes and the use of behavioral component, the use of cognitive activities, and use of home-work. The literature on the predictors of treatment effectiveness with CBT is mixed, with most predictors showing a relationship in some studies and not others (Nemade et al., 2007). Consequently, results found the use of cognitive activities to predict greater response to CBT and also associated with better clinical outcomes. A probability explanation for these findings is that all the participants in the intervention group had received this type of intervention for the first time in their life, and it is evident that they had significantly improved because of externalizing the inner problems and receiving some effective strategies to change (D'zurilla & Goldfried, 1971; Lehner-Adam & Dudas, 2013). With CBT, participants were taught to monitor, record and challenge their negative thoughts and cognitive restructuring is often seen as the important element of CBT

(Beck, 1995). So, special emphasis was put on negative automatic thoughts, recurrent thoughts that may came into their mind as if by pattern rather than as a specific response to what was currently going on (Beck, 1995).

By learning techniques of CBT, participants were able to identify these automatic thoughts when they occurred. In their original paper Nemade et al. (2007) suggested that though every client's automatic thoughts are unique, there are also clear patterns of depressive automatic thoughts that are formed are common across many depressed people's minds. Hence, it was also possible that the adapted Bengali CBT manual added psycho-education section which helped the participants to identify how they evaluate situations negatively and thoughts, emotions and behavior generate a chain reaction. Problem-solving techniques helped participants to identify and name their problems, develop alternatives for problem solving, make decisions and to correspondingly decrease their feeling of hopelessness and at the same time increase self-efficacy which may improve symptoms of depression (D'zurilla & Goldfried, 1971; Lehner-Adam & Dudas, 2013). These techniques used by the participants took the form of adaptations to reduce practical barriers and improve access, enhance possibility and acceptability; for example, maintaining sessions schedule, delivering the treatment in a convenient setting, and presence of family members if requested by the participant.

Sprry (2003) stated that identifying why a situation is problematic, generating possible solutions, making effective decisions and delineating realistic personal goals will help both clinical and nonclinical group to effectively overcome their depressive symptoms. Similarly, other research has suggested that therapy need to be based on the assessment, identification and symptom reduction of disorder-triggering and disorder-maintaining factors in the patient's

behavior or cognition (Goodman & Garber, 2017; Lehner-Adam & Dudas, 2013). Psycho-education also teaches the participants about the symptoms of depression that they are experiencing (Lehner-Adam & Dudas, 2013). In this current study psycho-education may be provided participants as a helpful tool that enable them to better understand, accept, and cope with negative thoughts which may contribute to reduce symptoms of depression, associated with better clinical outcomes and it maintained up over time.

Interestingly, uses of behavioral components were higher in the CBT group reflecting better clinical outcomes. Lack of knowledge about how to manage the time and maintaining a balanced activity level is another major factor of depression (Thase et al., 1995). Therefore, targeting learning about the connection between maintaining a balanced activity level, the participant may become conscious of the relationship between activity/passivity and mood which improved their activity level and isolated behavior. Behavioral activation produces symptomatic improvement in depressive patients and found effective outcome (Sherril & Kovacs, 2002; Thase et al., 1995). Similarly, other research findings has suggested that interventions for participants with depressive symptoms could focus on lifestyle practices such as weight management, personal safety, sleep hygiene and healthy eating (Khan et al., 2020). The component of CBT behavioral activation is theoretically based on behavioral models of depression, where in it is recommended that depression is triggered or maintained by a lack of experiencing positive reinforcement from the environment (Lewinsohn, 1974). This may occur because people with depression lack the social skills required to produce rewarding interactions with others and often show avoidant behavior (Lewinsohn, 1974).

The result found from the use of home-work predicted change on the symptoms of depression from pre-intervention to post-intervention and also associated with better clinical outcomes but not in post-intervention to follow-up. A probability explanation for these findings is that participants in this study were engaged in homework at the end of each session with regard to the particular homework assignments of that session. During the sessions, the therapists used motivational interviewing which may motivates participants while working on home-work assignments and overcome troubleshooting possible barriers if necessary (Hayasaka et al., 2015). In other words, therapists attempted to enhance the participant's interest for homework regardless of the initial symptoms of depression. Research findings showed that CBT usually involves homework, the completion of which is a known predictor of a positive outcome (Hayasaka et al., 2015). In another research found that homework compliance has usually been assessed either post-hoc after the treatment is over, thus risking the recall bias , or only once out of the 10 or more sessions of the program, thus possibly not reflecting the overall compliance (Startup & Edmonds 1994).

In this study, age showed predicted change to CBT and also associated with better clinical outcomes. Although, previous research has suggested that CBT is not effective for older adults (Catarino et al., 2018; Gould et al., 2012). However, it is important to note that in the present study the mean age of the participant was 30 years, whereas previous research on the effects of CBT on older adults focused on adults over the age of 55 (Gould et al., 2012). A possible explanation of current findings is that adult does not share more likely to be affected by age-related cognitive decline and physical comorbidities than older people that may directly influence CBT outcomes. But Donker et al. (2013) found dissimilar results in a sample with a broader age range, whereas other studies have not replicated this finding. Age itself did not

significantly predict result in these studies, with the concession of Donker et al. (2013) in which age was found that older adults responded more favorably to CBT. Similarly, in the current trial education also showed a better response to CBT and it was another factor that differentially predicted treatment outcomes. This effect was found directly at post-intervention and sustain up to follow-up. In their original paper, Tovote et al. (2017) suggested that education was the only factor that differentially predicted to decrease the symptoms of depression directly after the interventions.

Most of the studies have investigated predictors grouped in four different domains, namely demographics, clinical characteristics, personality dimensions, and disease related characteristics in patient with depression. Demographic characteristics and clinical characteristics as predictor for CBT outcome have widely been studied and some study results are inadequate as to which characteristics are influential (Tovote et al., 2017). Whereas some studies identified education, age, gender, as demographic predictors, other studies failed to show or identify any demographic predictors (Cuijpers et al., 2014; Fournier et al., 2009; Spek et al., 2008; Thase et al., 1997). The results support the view that it is important to consider the interaction among patient characteristics, treatment characteristics and treatment modality when comparing the effectiveness of treatments in the research context and when assigning clients to control group (Addis & Jacobson, 1996; Beutler, 1991; Shoham-Salomon & Hannah, 1991). In particular, it is essential to mentioned that overall, the regression models only described a small amount of variance based on demographic variables in symptom reduction and later it is clear that a number of relevant variables are need to be assessed.

The results of the current study will hopefully generalizable to other settings. Through the result of this evidence-based treatment will helpful to improve of patients who have depressive symptoms. It is also vital that this adapted Bengali CBT manual was compared and protocols were developed to use this intervention in accordance with the available evidence-based resources. In addition, adaptation of a psychological intervention attempts to maintain fidelity to the core elements of the psychological therapies while adding certain elements to enhance its acceptability and effectiveness (Barrera et al., 2013; Falicov, 2009). Adapting evidence-based psychological intervention to incorporate elements that are contextually relevant and meaningful in the culture in which they are being delivered is recognized as an important step to increasing acceptability of the treatment, patient satisfaction and, ultimately, their effectiveness (Bernal & Scharrón-del-Río, 2001; Castro et al., 2010; Sue, 2003). Study findings show that it is possible to offer this adapted Bengali CBT for patients with depression who can attend the service regularly. The assessments, enrollment and maintenance of this RCT were outstanding. It lends support to sustainability and acceptability of CBT to the participants. RCTs are the gold standard for assessing the effectiveness of any intervention (Sully et al., 2013). To date, clinical trials of CBT for depression among Asian population have been only occasionally reported; therefore, our study provides useful informative findings in this issue. Our findings support the applicability of CBT for various cultures, consistent with findings in non-western studies from Hong Kong (Wong, 2008), Korea (Kwon & Oei, 2003) and Pakistan (Naeem et al., 2015).

Limitations

Although this study was carefully designed, several limitations need to be acknowledged. First, most importantly, design of the present research includes firm conclusions about the

specific effects of the treatments due to the presence of a control condition. Also, all the participants were collected from Dhaka city which reduced the diversity of the participant group. An additional limitation is the fact that participants of WLG were waited for research purpose and an only one month follow-up analysis was taken for assessing the maintenance effect. Long-term follow-up of approximately six months to one year is also suggested evaluating long-term effectiveness. In this investigation only face-to-face therapist support was provided. Other methods of providing support (e.g., telephone, texts, e-mail) may be beneficial, and better use of these methods could further reduce barriers to receiving CBT.

With these limitations, the study also has some impact and strength. Here, strength that there was no difference between the two groups on baseline measures indicating successful randomization. The intervention delivered by research assistants who were clinical psychology graduates provided with training and close supervision. Increased cost-effectiveness could make treatment accessible to more individuals in need of assistance. Patients enjoy rapid treatment gains, and this may also improve the credibility of the treatment and increase the motivation for further change (Bond & Dryden, 2005). There was no CBT manual in Bengali, by this research researcher adapted Bengali CBT manual and provided session according to the manual in a planned, structured way which helped to implement treatment on TG properly. The inclusion of WLG helped to compare the result in a more accurate way. Even then because of conducting RCT from representative hospitals of the country and random allocation of participants made the study more reliable and representative for the Bangladeshi population.

Recommendations

These findings have implications for both clinical practice and future research. This research added a new step for initiating much-needed research for checking the effectiveness of psychological treatments for the most common mental illness that is depression in Bangladesh. The findings helped to reduce this evidence-based knowledge-gap related to depression and intervention in our own country. The participants were benefited with this psychological intervention. Some awareness is made in the professionals and clients while conducting the research. The study will be helpful to assist mental health professionals to use the internationally recognized psychological approach with great confidence in their practice.

This is the first RCT to evaluate the efficacy of CBT for persons with depression in the country. In Future researchers can conduct more studies (including RCT based studies) and extend these findings. Future studies can be conducted with this manual for other disorder(s), for instance, PTSD, personality disorder, sleep disorders, substance dependency, relationship problems, somatic problems or other modalities than in our study, such as the internet, computer-based programs, and other technical communication channels (Buchanan, 2012; Cukrowicz & Joiner, 2007). Overall, studies with diverse populations should be conducted to evaluate the exportability and generalizability of currently available internationally recognized therapeutic interventions. The findings did not provide exact information about the most beneficial mechanisms of the CBT. Therefore, a qualitative study is suggested to acquire knowledge about participants' experiences and what components may contribute to beneficial outcomes. These findings of the research suggest that participant's characteristics can create a strong contribution to treatment outcome and CBT intervention is effective for individuals with different

characteristics. Future research could consider the contribution of other possible predictive factors, or plan differences in the therapeutic process, to further advance this research understanding of differential response to CBT.

Conclusion

The study provides research-based evidence of the effectiveness of using adapted Bengali CBT for persons with depression. Results indicated that participants with depression in Bangladesh were benefited from CBT and that systematic cultural adaptations helped to retain patients with depression in treatment and improved rates of symptom reduction. The outcome of the current trial also suggest that the adapted Bengali CBT is a favorable intervention that can be delivered to a number of participants using structured resources, minimum costs with capable and skilled expertise. There is no doubt that in developing country such as Bangladesh the resources are limited, but there is needed this adapted and effective interventions. The results are strongly indicated that a larger scale RCT of a culturally adapted intervention in depressive disorder was warranted. In addition, the trial with sufficient sample size showed that such an intervention could potentially improve clinical outcomes on all measuring variables in Bangladeshi patients suffering from depression. Therefore, CBT is considered as an effective intervention to develop skills to cope with depression. Finally, future studies would benefit from inclusion of a broader and more representative RCT of participants and hopefully this initial positive outcome will stimulate larger replications.

CHAPTER 5

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CHAPTER 6

APPENDICES

চিকিৎসা মনোবিজ্ঞান বিভাগ
ঢাকা বিশ্ববিদ্যালয়
কলা ভবন (৫ম তলা)
ঢাকা-১০০০, বাংলাদেশ

DEPARTMENT OF CLINICAL PSYCHOLOGY
UNIVERSITY OF DHAKA
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Tel: 9661900-73, Ext. 7801, Fax: 880-2-8615583, E-mail: clinpsy@du.ac.bd

Certificate of Ethical Approval

Project Number : **PH180701**

Project Title : **Effectiveness of cognitive behaviour therapy for persons with depression**

Investigators : **Jesan Ara and Dr. Farah Deeba**

Approval Period : **11 December 2018 to 10 December 2022**

Terms of Approval

1. Any changes made to the details submitted for ethical approval should be notified and sought approval by the investigator(s) to the Department of Clinical Psychology Ethics Committee before incorporating the change.
2. The investigator(s) should inform the committee immediately in case of occurrence of any adverse unexpected events that hampers wellbeing of the participants or affect the ethical acceptability of the research.
3. The research project is subject to monitoring or audit by the Department of Clinical Psychology Ethics Committee.
4. The committee can cancel approval if ethical conduction of the research is found to be compromised.
5. If the research cannot be completed within the approved period, the investigator must submit application for an extension.
6. The investigator must submit a research completion report.

Chairperson
Ethics Committee
Department of Clinical Psychology
University of Dhaka

Instruction for Judge Evaluation

জনাব,

আমি পিএইচ.ডি গবেষনার অংশ হিসাবে বাংলাদেশে বিষন্নতার জন্য জ্ঞানীয় থেরাপি ম্যানুয়াল অভিযোজন করছি। আমার পিএইচডি গবেষনা ডঃ ফারাহ দীবা, সহযোগী অধ্যাপক, চিকিৎসা মনোবিজ্ঞান বিভাগ, ঢাকা বিশ্ববিদ্যালয়-এর তত্ত্বাবধায়নে পরিচালিত হচ্ছে।

ম্যানুয়াল অভিযোজনের উদ্দেশ্যে আমি Beck Institution-এ অনুমতি চেয়ে ইমেল পাঠিয়েছিলাম। Beck Institution থেকে জানানো হয়েছে তারা ক্লায়েন্ট দেখার জন্য Judith S. Beck-এর "Cognitive therapy: Basics and Beyond" বইটিকে অনুসরন করে। যেহেতু আমাদের দেশেও Judith S. Beck-এর "Cognitive therapy: Basics and Beyond" বইটিকে মানদন্ড ধরে সেই অনুযায়ী ক্লায়েন্টকে থেরাপি দেয়া হয়। তাই এই বইটিকে মানদন্ড ধরে বর্তমান ম্যানুয়ালটি তৈরী করা হয়েছে। এছাড়াও দক্ষিণ-পূর্ব উন্নয়নশীল দেশগুলির অভিযোজিত জ্ঞানীয় থেরাপি ম্যানুয়াল (যেমনঃ ফারুক নাইম-এর পাকিস্তানে অভিযোজিত জ্ঞানীয় থেরাপি ম্যানুয়াল) এই ম্যানুয়লের গঠন তৈরী করতে অনুসরন করা হয়েছে। ক্লায়েন্টের সাথে কাজের অভিজ্ঞতা এই ম্যানুয়াল তৈরীর জন্য ব্যবহার করা হয়েছে।

এখন ম্যানুয়ালটি অভিযোজনের জন্য প্রথম খসড়া সম্পূর্ন করার জন্য আপনার মূল্যবান মন্তব্যের প্রয়োজন। ম্যানুয়লের প্রত্যেকটি পৃষ্ঠার ডান দিকে আপনার মন্তব্যের জন্য ফাকা রাখা হয়েছে। যদি আপনি মনে করেন কোন ভাষা পরিবর্তন করতে হবে, কোন বিষয় উপযুক্ত নয়, পুনরাবৃত্তি করা হয়েছে তাহলে তা অনুগ্রহ করে মন্তব্যের স্থানে লিখুন। যদি আপনি মনে করেন নতুন কোন বিষয় যুক্ত করতে হবে তাহলে তা শেষে পরামর্শ পৃষ্ঠায় লিখুন। অনুগ্রহ করে সম্পূর্ণ ম্যানুয়ালটি পড়ুন এবং আপনার যথাযথ মন্তব্য দিন। আপনার একান্ত সহযোগিতার জন্য ধন্যবাদ।

জেসান আরা

পিএইচডি গবেষক

চিকিৎসা মনোবিজ্ঞান বিভাগ

ঢাকা বিশ্ববিদ্যালয়

Permission letter

Date:

To

The Chairman
Department of Psychiatry

Subject: Request for assistance and cooperation for research on effectiveness of cognitive behavior therapy for persons with depression.

Dear Sir,
With due respect to state that I am a PhD researcher of Dhaka University under the supervision of Dr. Farah Deeba, Associate Professor, Department of Clinical Psychology, University of Dhaka. As a mental health professional you know that 4.6-8% people is suffering from depression in Bangladesh. In this situation it is our duty to provide all type of mental health services to this group of people for the betterment of our country. As part of my PhD degree I am doing a research entitled "Effectiveness of cognitive behavior therapy for persons with depression". The sample in this study is the person with depressive disorder.

Therefore I request you to assist me in helping depressive patient in Bangladesh. By this research awareness can be made which will help to overcome depression through this widely used psychological intervention. It will be very helpful for me if you give permission to work with the depressive clients, coming for mental health services in your renowned institution. Your guidance, technical support and assistance would be very useful for the successful completion of the study and contribute to the development of better mental health service in our country.

Thank you for your cooperation.

Sincerely yours

Jesan Ara
PhD fellow
Department of Clinical Psychology
University of Dhaka

Recommended by

Signature of the Supervisor

গবেষণায় অংশগ্রহনে সম্মতিপত্র

সম্মানিত অংশগ্রহণকারী,

আমি ঢাকা বিশ্ববিদ্যালয়ের চিকিৎসা মনোবিজ্ঞান বিভাগে একজন পিএইচ.ডি গবেষক। পাঠ্যক্রমের অংশ হিসাবে আমি বিষন্নতার রোগীদের মানসিক স্বাস্থ্যের উপর একটি গবেষনা করছি। আমার গবেষণার শিরোনাম "Effectiveness of cognitive behaviour therapy for persons with depression"। এ উদ্দেশ্যে আপনার মানসিক স্বাস্থ্য অবস্থার উন্নতির জন্য গবেষণার অংশ হিসাবে আমি আপনাকে মনোবৈজ্ঞানিক সেবা প্রদান করতে আগ্রহী। সেবাটি আপনার মানসিক সুস্থতায় সহায়ক হবে। এই গবেষনায় অংশগ্রহনের মাধ্যমে আপনি বাংলাদেশের একটি যথার্থ ও নির্ভরযোগ্য চিকিৎসা সেবার কার্যকারিতা প্রতিষ্ঠা করার ক্ষেত্রে অবদান রাখতে পারবেন।

আপনার দেওয়া তথ্যগুলো শুধুমাত্র গবেষণার কাজে ব্যবহার করা হবে এবং ব্যক্তিগত সকল তথ্য সম্পূর্নভাবে গোপন রাখা হবে (গবেষণার পদ্ধতিটি ঢাকা বিশ্ববিদ্যালয়, জীব বিজ্ঞান অনুষদের নৈতিকতা কমিটি এবং ঢাকা বিশ্ববিদ্যালয়, চিকিৎসা মনোবিজ্ঞান বিভাগের নৈতিকতা কমিটি দ্বারা পরীক্ষা করে দেখা হয়েছে)। তবে গবেষণায় অংশগ্রহন করা বা না করা একান্তই আপনার ইচ্ছার উপর নির্ভরশীল। আপনি ইচ্ছুক হলে আমি আপনার মানসিক স্বাস্থ্য সেবা প্রদানের কাজটি শুরু করতে পারি। এক্ষেত্রে যদি অন্যান্য চিকিৎসা সেবার প্রয়োজন হয় (সাইকিয়াট্রিক অথবা দলীয় চিকিৎসা সেবা, সাইকিয়াট্রিক মূল্যায়ন) তাহলে আপনাকে যথাযথ সেবার জন্য রেফার করা হবে। এজন্য নিম্নে আপনার স্বাক্ষর অথবা মৌখিক অনুমতি প্রয়োজন।

আপনার সহযোগিতার জন্য ধন্যবাদ।

অনুমতি প্রদান করা হয়েছে / হয়নি

স্বাক্ষর (গবেষণায় অংশগ্রহণকারী)

স্বাক্ষর (গবেষক)

জেসান আরা
পিএইচ.ডি গবেষক
চিকিৎসা মনোবিজ্ঞান বিভাগ
ঢাকা বিশ্ববিদ্যালয়

ব্যক্তিগত তথ্যাবলী

১। নামঃ ২। বয়সঃ

৩। ডায়াগনোসিসঃ

৪। রেফারেলঃ

৫। লিঙ্গঃ ☐ ছেলে ☐ মেয়ে ☐ অন্যান্য

৬। ধর্মঃ

৭। শিক্ষাগত যোগ্যতাঃ ☐ আক্ষরিক জ্ঞান সম্পন্ন নয় ☐ এস.এস.সি এর নিচে ☐ এস.এস.সি-এইচ.এস.সি ☐ অনার্স ☐ মাষ্টার্স ☐ উচ্চতর ডিগ্রী

৮। পেশাঃ

৯। মাসিক আয়ঃ ☐ ৫,০০০ এর কম ☐ ৫,০০০-১৫,০০০ ☐ ১৫,০০০০-৩০,০০০০ ☐ ৩০,০০০-৫০,০০০☐ ৫০,০০০ এর উপরে

১০। পরিবারের সদস্য সংখ্যাঃ

১১। জন্মক্রমঃ

১২। পরিবারের ধরনঃ ☐ যৌথ পরিবার ☐ একক পরিবার

১৩। বৈবাহিক অবস্থাঃ ☐ বিবাহিত ☐ অবিবাহিত ☐ অন্যান্য

১৪। সন্তানের সংখ্যাঃ

১৫। কতদিন যাবৎ বিষন্নতায় ভুগছেনঃ

১৬। আপনি কি এখন বিষণ্নতার জন্য ঔষধ গ্রহন করছেনঃ ☐ হ্যাঁ ☐ না

১৭। পূর্বে কখনো মানসিক সমস্যার সম্মুখীন হয়েছিলেন ঃ ☐ হ্যাঁ ☐ না

উত্তর হ্যাঁ হলে, কখনো মানসিক স্বাস্থ্য সেবা নিয়েছিলেন কিঃ ☐ হ্যাঁ ☐ না

উত্তর হ্যাঁ হলে, কার কাছে চিকিৎসা নিয়েছিলেনঃ ☐ মনোচিকিৎসক ☐ কাউন্সেলর ☐ মনোবিজ্ঞানী ☐ অন্যান্য

বিষন্নতা পরিমাপক

নিচের বিবৃতি গুলো পড়ে গত এক সপ্তাহের মধ্যে এই বিবৃতি গুলো আপনার ক্ষেত্রে কতটা প্রযোজ্য তা বিবৃতির পার্শ্বের সম্ভাব্য পাঁচটি উত্তরের যেটি প্রযোজ্য সেটির ঘরে টিক(√) চিহ্ন দিয়ে নির্দেশ করুন। আপনাকে সম্ভাব্য এই পাঁচটি উত্তর থেকে যে কোন একটিকে বেছে নিতে হবে এবং সবগুলো প্রশ্নের উত্তর দিতে হবে। অনুগ্রহ করে লক্ষ্য করুন সবগুলো বিবৃতির উত্তর দিয়েছেন কি না।

বিবৃতিসমূহ	একেবারেই প্রযোজ্য নয়	প্রযোজ্য নয়	মাঝামাঝি	কিছুটা প্রযোজ্য	পুরোপুরি প্রযোজ্য
১. আমার অশান্তি লাগে।					
২. ইদানিং আমি মনমরা থাকি।					
৩. আমার ভবিষ্যত অন্ধকার।					
৪. ভবিষ্যতে আমার অবস্থা দিন দিন আরো খারাপ হবে।					
৫. আমার সব শেষ হয়ে গেছে।					
৬. আমি মনে করি যে, জীবনটা বর্তমানে খুব বেশী কষ্টকর।					
৭. বর্তমানে আমি অনুভব করি যে মানুষ হিসাবে আমি সম্পূর্ণ ব্যর্থ					
৮. আমি কোথাও আনন্দ-ফুর্তি পাই না।					
৯. নিজেকে খুব ছোট মনে হয়।					
১০.সবকিছুতে আমার আত্মবিশ্বাস কমে গেছে।					
১১.আমার মনে হয় মানুষ আমাকে করুণা করে।					
১২.জীবনটা অর্থহীন।					
১৩.প্রায়ই আমার কান্না পায়।					
১৪.আমি প্রায়ই বিরক্ত বোধ করি।					
১৫.আমি কোন কিছুতেই আগ্রহ পাই না।					
১৬.আমি ইদানিং চিন্তা করতে ও সিদ্ধান্ত নিতে পারি না।					
১৭.আমি আজকাল অনেক কিছুতেই মনোযোগ দিতে পারি না।					
১৮.আমি আগের মতো মনে রাখতে পারি না।					
১৯.আমি দূর্বল বোধ করি এবং অল্পতেই ক্লান্ত হয়ে পড়ি।					
২০.আমি এখন কম ঘুমাই।					
২১.আমি এখন বেশী ঘুমাই।					
২২.আমার মেজাজ খিটখিটে হয়ে গেছে।					
২৩.আমার ক্ষুধা কমে গেছে।					
২৪.আমার ক্ষুধা বেড়ে গেছে।					
২৫.আমার ওজন কমে গেছে (ইচ্ছাকৃতভাবে ওজন নিয়ন্ত্রণের চেষ্টা করার ফলে নয়)।					
২৬.আমার মনে হয় যে আমার কাজকর্মের গতি কমে গেছে।					
২৭.হাসির কোন ঘটনা ঘটলেও আমি আর হাসতে পারি না।					
২৮.যৌন বিষয়ে আমার আগ্রহ কমে গেছে।					
২৯.সামাজিক কাজকর্মে আগের মতো অংশগ্রহণ করতে পারি না।					
৩০.শিক্ষা বা পেশাগত কাজকর্ম আগের মতো করতে পারি না।					
Total					

94+ = Depressed; 30-100 = Minimal; 101-114 = Mild; 115-123 = Moderate; 124-150 = Severe

উদ্বেগ বা Anxiety পরিমাপনের মানক

এই বিবৃতিগুলো আপনার ক্ষেত্রে প্রযোজ্য কি না যাচাই করাই আমাদের উদ্দেশ্য। লক্ষ্য কর"ন প্রতিটি বিবৃতির পাশেই সম্ভাব্য পাঁচ ধরণের উত্তর দেয়া আছে। এগুলো হলো-' **একেবারেই হয় না','খুব সামান্য হয়', 'মোটামুটি হয়', অনেক বেশী হয়'। প্রশ্নমালায় প্রদত্ত বামপার্শ্বের** বিবৃতিগুলো পড়ে গত এক মাসের মধ্যে এই বিবৃতি গুলো আপনার ক্ষেত্রে কতটা প্রযোজ্য তা বিবৃতির ডানপার্শ্বের সম্ভাব্য পাঁচটি উত্তরের যেটি প্রযোজ্য সেটির ঘরে টিক (√) চিহ্ন দিয়ে নির্দেশ কর"ন। এই পাঁচটি উত্তরের থেকে যে কোন একটিকে বেছে নিন এবং সবগুলো প্রশ্নের উত্তর দিন। অনুগ্রহ করে লক্ষ্য কর"ন সবগুলো বিবৃতির উত্তর দিয়েছেন কি না। আপনার সহযোগীতার জন্য ধন্যবাদ।

বিবৃতিসমূহ	একেবারেই হয় না	খুব সামান্য হয়	মোটামুটি হয়	বেশী হয়	অনেক বেশী হয়
১. আমার ঘনঘন শ্বাস পড়ে					
২. আমার দমবন্ধবোধ হয়					
৩. আমার বুক ভার ভার লাগে					
৪. আমার বুক ধড়ফড় করে					
৫. আমি বুকে ব্যথা অনুভব করি					
৬. আমার গা/হাত-পা শিরশির করে					
৭. আমার হাত/পা কাঁপে					
৮. আমার হাত/পা অবশ লাগে					
৯. আমার হাত-পা জ্বালাপোড়া করে					
১০. আমার মাথা ঝিমঝিম করে					
১১. আমার মাথা ঘোরে					
১২. আমার মাথা ব্যথা করে					
১৩. আমার মাথা থেকে গরম ভাপ ওঠে					
১৪. আমার গলা শুকিয়ে যায় ও পিপাসা লাগে					
১৫. আমি অসুস্থ হয়ে যাবো এমন মনে হয়					
১৬. আমি আমার স্বাস্থ্য নিয়ে চিন্তিত থাকি					
১৭. আমি দুর্বলবোধ করি					

বিবৃতিসমূহ	একেবারেই হয় না	খুব সামান্য হয়	মোটামুটি হয়	বেশী হয়	অনেক বেশী হয়
১৮. আমার হজমে অসুবিধা হয়					
১৯. আমার পেটে অস্বস্থি লাগে					
২০. আমার বমি বমি লাগে					
২১. আমার খুব ঘাম হয় (গরমের জন্য নয়)					
২২. আমি আরাম করতে পারি না					
২৩. আমার সামাজিক পরিবেশে কথা বলতে অসুবিধা হয়					
২৪. একই বিষয় নিয়ে আমার বারবার চিন্তা হয়					
২৫. আমার খুব খারাপ কিছু ঘটবে বলে আশংকা হয়					
২৬. আমি প্রায়ই দুঃশ্চিন্তাগ্রস্থ থাকি					
২৭. আমি প্রায়ই চমকে ওঠি					
২৮. আমি বিচলিত ও সন্ত্রস্তবোধ করি					
২৯. আমার আত্মনিয়ন্ত্রণ হারাবার ভয় হয়					
৩০. আমি এত নার্ভাস বা উত্তেজিত বোধ করি যে মনে হয় আমার সবকিছু এলোমেলো হয়ে যাচ্ছে					
৩১. আমি ধৈর্য ধরতে পারি না					
৩২. আমি সিদ্ধান্তহীনতায় ভুগি					
৩৩. আমার আত্মবিশ্বাসের অভাববোধ হয়					
৩৪. একটা বিষয়ের প্রতি মনোযোগ দিয়ে রাখা আমার জন্য বেশ কষ্টকর					
৩৫. আমার মনে হয় আমি এখনই মারা যাচ্ছি					
৩৬. আমার মৃত্যু ভয় হয়					

54 & less = Mild; 55 to 66= Moderate; 67 to 77= Severe; 78 to 135 & above= Profound.
Cut off point =47.5

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Bengali translated version of General Health Questionnaire, GHQ-28

গত কয়েক সপ্তাহে আপনার কি কোন শারীরিক অভিযোগ ছিল? গত কয়েক সপ্তাহ ধরে আপনার স্বাস্থ্য মোটামুটি ভাবে কেমন ছিল তা জানতে আমরা আগ্রহী। অনুগ্রহ করে পরবর্তী সকল প্রশ্নের উত্তর দিন। যে উত্তরটি আপনার কাছে সবচেয়ে বেশী গ্রহণযোগ্য তা নিশ্চিত করুন। মনে রাখবেন যে, আমরা আপনার বর্তমান অর্থাৎ এখনকার অভিযোগ সম্পর্কে জানতে আগ্রহী, যা আগে ছিল সেগুলো নয়। সবগুলো প্রশ্নের উত্তর দিন।

	আপনি কি আজকাল				
A_1	সম্পূর্ণ ভালো এবং সুন্দর স্বাস্থ্য অনুভব করেছেন?	সচরাচরের চেয়ে ভালো	সচরাচরের মতো	সচরাচরের চেয়ে খারাপ	সচরাচরের চেয়ে অধিক খারাপ
A_2	ভালো টনিক খাওয়ার দরকার মনে করেছেন?	একবারেই না	সচরাচরের চেয়ে বেশী না	সচরাচরের চেয়ে বেশী	সচরাচরের চেয়ে অধিক বেশী
A_3	ক্লান্ড় এবং কিছু ভালো লাগছেনা এমন অনুভব করেছেন?	ঐ	ঐ	ঐ	ঐ
A_4	আপনি কি অসুস্থবোধ করেছেন?	ঐ	ঐ	ঐ	ঐ
A_5	মাথায় কোন ব্যথা অনুভব করেছেন?	ঐ	ঐ	ঐ	ঐ
A_6	আপনার মাথায় আটসাট অথবা চাপ অনুভব করেছেন?	ঐ	ঐ	ঐ	ঐ
A_7	হঠাৎ হঠাৎ কিছু সময়ের জন্য গরম ভাব বা ঠান্ডাবোধ করেছেন?	ঐ	ঐ	ঐ	ঐ
	আপনি কি আজকাল				
B_1	দুশ্চিন্তার কারণে নিদ্রাহীনতায় ভুগছেন?	ঐ	ঐ	ঐ	ঐ
B_2	অবসরে ঘুমিয়ে থাকতে অসুবিধা হয়েছে?	ঐ	ঐ	ঐ	ঐ
B_3	অবিরত মানসিক চাপ অনুভব করছেন?	ঐ	ঐ	ঐ	ঐ
B_4	খিটখিটে বা বদমেজাজী হয়ে যাচ্ছেন?	ঐ	ঐ	ঐ	ঐ
B_5	কোন উপযুক্ত কারণ ছাড়াই ভয়ে চমকে উঠছেন বা আতঙ্কিত হচ্ছেন?	ঐ	ঐ	ঐ	ঐ
B_6	লক্ষ্য করেছেন যে, সবকিছুই আপনার সাধ্যের বাইরে চলে যাচ্ছে?	ঐ	ঐ	ঐ	ঐ
B_7	সহজেই ভীত বা আবদ্ধ অনুভব করছেন?	ঐ	ঐ	ঐ	ঐ
C_1	নিজেকে ব্যস্ত রাখতে এবং কাজে ডুবে থাকতে পারছেন?	সচরাচরের চেয়ে অনেক বেশী	সচরাচরের মতো	সচরাচরের চেয়ে কম	সচরাচরের চেয়ে অনেক কম
C_2	আপনি যা করেন তা করতে	সচরাচরের	সচরাচরের মতো	সচরাচরের	সচরাচরের চেয়ে

	অপেক্ষাকৃত বেশী সময় লাগাচ্ছেন?	চেয়ে তাড়াতাড়ি		চেয়ে বেশী	অনেক বেশী
C_3	সবমিলিয়ে এটি অনুভব করছেন যে আপনি ঠিকমতো কাজ করছেন?	সচরাচরের চেয়ে ভালো	একই রকম	সচরাচরের চেয়ে কম ভালো	সচরাচরের চেয়ে অনেক কম ভালো
C_4	আপনার কাজ যে ভাবে করছেন তাতে সন্তুষ্ট হচ্ছেন?	অনেক সন্তুষ্ট	সচরাচরের মতো একই রকম	সচরাচরের চেয়ে কম সন্তুষ্ট	অনেক কম সন্তুষ্ট
C_5	বিভিন্ন ব্যাপারে আপনি মুল্যবান ভূমিকা রাখছেন বলে আপনার মনে হয়েছে?	সচরাচরের চেয়ে বেশী	সচরাচরের মতো	সচরাচরের চেয়ে কম	সচরাচরের চেয়ে অনেক কম
C_6	বিভিন্ন বিষয়ে সিদ্ধান্ত নেয়ার ক্ষমতা আছে বলে অনুভব করেছেন?	ঐ	ঐ	ঐ	ঐ
C_7	আপনার প্রতিদিনের স্বাভাবিক কাজ-কর্ম উপভোগ করতে সক্ষম হচ্ছেন?	ঐ	ঐ	ঐ	ঐ
D_1	নিজেকে একজন অপদার্থ ব্যক্তি হিসাবে ভাবছেন?	একেবারেই না	সচরাচরের চেয়ে বেশী না	সচরাচরের চেয়ে বেশী	সচরাচরের চেয়ে অধিক বেশী
D_2	অনুভব করছেন যে, জীবন সম্পূর্ণ রূপে নৈরাশ্যজনক?	ঐ	ঐ	ঐ	ঐ
D_3	অনুভব করছেন যে, বেঁচে থেকে লাভ নেই?	ঐ	ঐ	ঐ	ঐ
D_4	এমন সম্ভাবনার কথা কি ভেবেছেন যে, আপনি নিজেকে মেরে ফেলতেও পারেন?	নিশ্চয়ই না	আমি এমনটি ভাবিনা	এটা আমার মনে দাগ কেটেছে	নিশ্চয়ই হ্যাঁ
D_5	মাঝে-মধ্যে এমনকি মনে হচ্ছে যে, আপনার স্নায়ু (নার্ভ) খুবই দূর্বল বলে কিছুই করতে পারছেননা?	মোটেও না	সচরাচরের চেয়ে বেশী না	বরং সচরাচরের চেয়ে বেশী	সচরাচরের চেয়ে অধিক বেশী
D_6	এমন ভাবছেন যে, আপনি যদি মরে যেতে পারতেন এবং সবকিছু থেকে দূরে চলে যেতেন	ঐ	ঐ	ঐ	ঐ
D_7	নিজের জীবন শেষ করে ফেলার চিন্তা আপনার মনের মধ্যে অবিরত আসছে?	নিশ্চয়ই না	আমি এমনটি ভাবিনা	এটা আমার মনে দাগ কেটেছে	নিশ্চয়ই হ্যাঁ

A ☐ B ☐ C ☐ D ☐ Total ☐

A-Somatic, B-Anxiety & Sleep Problem, C-Social Functioning, D-Depression. Cutoff Score-39. Translated by Nafisa Banoo, Department of Clinical Psychology, University of Dhaka.

Beck Scale for Suicidal Ideation (BSS)

অনুগ্রহ করে সতর্কতার সাথে প্রত্যেকটি গ্রুপের উক্তিগুলো পড়ুন। যে উক্তিটি আপনার গত এক সপ্তাহের (আজকের দিনসহ) অনুভূতিকে সবচেয়ে ভালোভাবে বর্ণনা করে, প্রতি গ্রুপ থেকে শুধু সেই উক্তিটি বৃত্তাকার চিহ্ন দ্বারা শনাক্ত করুন।		
১	০	আমার বাঁচার মোটামুটি প্রবল ইচ্ছে আছে।
	১	আমার বাঁচার সামান্য ইচ্ছে আছে।
	২	আমার বাঁচার কোন ইচ্ছে নেই।
২	০	আমার মরার কোন ইচ্ছে নেই।
	১	আমার মরার সামান্য ইচ্ছে আছে।
	২	আমার মরার মোটামুটি প্রবল ইচ্ছে আছে।
৩	০	আমার বেঁচে থাকার কারণগুলো মরে যাবার কারণগুলোর চেয়ে অধিকতর জোরালো।
	১	আমার বেঁচে থাকার কারণগুলো এবং মরে যাবার কারণগুলো প্রায় সমান জোরালো।
	২	আমার মরে যাবার কারণগুলো বেঁচে থাকার কারণগুলোর চেয়ে অধিকতর জোরালো।
৪	০	আমার আত্মহত্যা করার কোন ইচ্ছে নেই।
	১	আমার আত্মহত্যা করার সামান্য ইচ্ছে আছে।
	২	আমার আত্মহত্যা করার মোটামুটি প্রবল ইচ্ছে আছে।
৫	০	জীবননাশক পরিস্থিতিতে পড়লে আমি জীবন বাঁচানোর চেষ্টা করব।
	১	জীবননাশক পরিস্থিতিতে পড়লে বাঁচা মরা আমি ভাগ্যের উপর ছেড়ে দিব।
	২	জীবননাশক পরিস্থিতিতে পড়লে আমি মৃত্যুকে এড়ানোর চেষ্টা করব না।
যদি আপনি ৪ ও ৫ নং উভয় গ্রুপ থেকে ক নং বাক্য পছন্দ করে থাকেন তাহলে সরাসরি ২০ নং বাক্যে চলে যান। আর যদি ৪নং ও ৫নং থেকে খ অথবা গ নং বাক্য পছন্দ করে থাকেন তবে ৬নং থেকে শুরু করুন এবং এগিয়ে যান।		
৬	০	আমার আত্মহত্যার চিন্তা ক্ষণস্থায়ী।

	১	আমার আত্মহত্যার চিন্তা কিছুটা স্থায়ী।
	২	আমার আত্মহত্যার চিন্তা দীর্ঘস্থায়ী।
৭	০	কদাচিৎ অথবা অকস্মাৎ আমি আত্মহত্যার চিন্তা করি।
	১	আমি প্রায়ই আত্মহত্যার চিন্তা করি।
	২	আমি অবিরত আত্মহত্যার চিন্তা করি।
৮	০	আত্মহত্যার ধারণাটি আমার নিকট গ্রহণীয় নয়।
	১	আত্মহত্যার ধারণাটি আমার নিকট গ্রহণীয়ও নয় বর্জনীয়ও নয়।
	২	আত্মহত্যার ধারণাটি আমার নিকট গ্রহণীয়।
৯	০	আমি আত্মহত্যা করা থেকে নিজেকে সরিয়ে রাখতে পারব।
	১	আমি আত্মহত্যা করা থেকে নিজেকে সরিয়ে রাখতে পারব কিনা এ ব্যাপারে আমি সন্দিহান।
	২	আমি আত্মহত্যা না করে পারব না।
১০	০	আমার পরিবার, বন্ধু বান্ধব, ধর্ম এবং আত্মহত্যার ব্যর্থ প্রচেষ্টাপ্রসূত সম্ভাব্য ক্ষত বা পীড়া ইত্যাদির বিবেচনায় আমি আত্মহত্যা করব না।
	১	আমার পরিবার, বন্ধু বান্ধব, ধর্ম এবং আত্মহত্যার ব্যর্থ প্রচেষ্টাপ্রসূত সম্ভাব্য ক্ষত বা পীড়া ইত্যাদির বিবেচনায় আমি আত্মহত্যার ব্যাপারে কিছুটা উদ্বিগ্ন।
	২	আমার পরিবার, বন্ধু বান্ধব, ধর্ম এবং আত্মহত্যার ব্যর্থ প্রচেষ্টাপ্রসূত সম্ভাব্য ক্ষত বা পীড়া ইত্যাদির বিবেচনায় আমি আত্মহত্যার ব্যাপারে উদ্বিগ্ন নই।
১১	০	আমার আত্মহত্যা করতে চাওয়ার মূল কারণগুলো অন্যকে প্রভাবিত করা যেমন, কারো উপর প্রতিশোধ নেয়া, কাউকে অধিকতর সুখি করা, আমার প্রতি অন্যদের মনোযোগ আকর্ষণ করা ইত্যাদি।
	১	আমার আত্মহত্যা করতে চাওয়ার কারণ শুধু অন্যকে প্রভাবিত করা নয়; আমার সমস্যাগুলোর সমাধান করাও বটে।
	২	আমার আত্মহত্যা করতে চাওয়ার কারণ মূলত আমার সমস্যাগুলো থেকে মুক্তি পাওয়া।
১২	০	কীভাবে আমি আত্মহত্যা করব সে ব্যাপারে আমার সুনির্দিষ্ট কোন পরিকল্পনা নেই।

	১	কীভাবে আমি আত্মহত্যা করব সে ব্যাপারে মনোযোগের সাথে ভেবেছি কিন্তু এখনও বিস্তারিত কাজ করিনি।
	২	কীভাবে আমি আত্মহত্যা করব সে ব্যাপারে আমার নির্দিষ্ট একটি পরিকল্পনা আছে।
১৩	০	আমার আত্মহত্যা করার সুযোগ নেই বা আত্মহত্যার পদ্ধতি নাগালে নেই।
	১	আমি যে পদ্ধতিতে আত্মহত্যা করব তা সময় সাপেক্ষ এবং বস্তুত সে পদ্ধতি আমার ব্যবহারের সুযোগ নেই।
	২	আমি যে পদ্ধতিতে আত্মহত্যা করব সে পদ্ধতি আমার নাগালে আছে কিংবা থাকবে এবং তা ব্যবহারের সুযোগ আছে কিংবা থাকবে।
১৪	০	আমার আত্মহত্যা করার সাহস কিংবা দক্ষতা নেই।
	১	আমার আত্মহত্যা করার সাহস কিংবা দক্ষতার ব্যাপারে আমি সন্দিহান।
	২	আমার আত্মহত্যা করার সাহস এবং দক্ষতা আছে।
১৫	০	আমি আত্মহত্যার চেষ্টা করব এটা প্রত্যাশা করি না।
	১	আমি আত্মহত্যার চেষ্টা করব কিনা এ ব্যাপারে আমি সন্দিহান।
	২	আমি যে আত্মহত্যার চেষ্টা করব সে ব্যাপারে আমি নিশ্চিত।
১৬	০	আমি আত্মহত্যা করার কোন প্রস্তুতি নেইনি।
	১	আমি আত্মহত্যা করার কিছু প্রস্তুত নিয়েছি।
	২	আমি আত্মহত্যা করার প্রস্তুতি প্রায় অথবা সম্পূর্ণ শেষ করেছি।
১৭	০	আমি আত্মহত্যা পূর্ব চিরকুট এখনও লিখিনি।
	১	আমি আত্মহত্যা পূর্ব চিরকুট লিখার কথা ভেবেছি অথবা লিখা শুরু করেছি কিন্তু এখনও শেষ করিনি।
	২	আমি আত্মহত্যা পূর্ব চিরকুট লিখে ফেলেছি।
১৮	০	আত্মহত্যা করার পর কি ঘটবে সে ব্যাপারে আমি কোন ব্যবস্থা নেইনি।
	১	আত্মহত্যা করার পর কি ঘটবে সে ব্যাপারে আমি কিছু ব্যবস্থা নেয়ার কথা ভেবেছি।
	২	আত্মহত্যা করার পর কি ঘটবে সে ব্যাপারে আমি নির্দিষ্ট কিছু ব্যবস্থা নিয়েছি।

১৯	০	আমি আমার আত্মহত্যা করার ইচ্ছা লোকজনের কাছে লুকোইনি।
	১	আমি আমার আত্মহত্যার ইচ্ছার কথা লোকজনকে বলব কিনা সে ব্যাপারে ইতস্তত বোধ করছি।
	২	আমি আমার আত্মহত্যা করার ইচ্ছা লোকজনের কাছ থেকে লুকিয়ে রেখেছি।
২০	০	আমি কখনও আত্মহত্যার চেষ্টা করিনি।
	১	আমি একবার আত্মহত্যার চেষ্টা করেছি।
	২	আমি দুই বা ততোধিক বার আত্মহত্যার চেষ্টা করেছি।
যদি আপনি পূর্বে আত্মহত্যার প্রচেষ্টা করে থাকেন তবে পরবর্তী বাক্যগুলো থেকে ১টি বাক্য পছন্দ করুন।		
২১	০	শেষবার আত্মহত্যা- প্রচেষ্টার সময় আমার মৃত্যুর ইচ্ছে কম ছিল।
	১	শেষবার আত্মহত্যা- প্রচেষ্টার সময় আমার মৃত্যুর ইচ্ছে মাঝারি ধরণের ছিল।
	২	শেষবার আত্মহত্যা- প্রচেষ্টার সময় আমার মৃত্যুর ইচ্ছে প্রবল ছিল।

সেশন কাঠামো (Bengali session structure)

সেশন ১

১. প্রথমত নিজের পেশাগত পরিচয় দিনঃ

- নাম, নিজের পেশাগত অবস্থান এবং প্রয়োজনে শিক্ষাগত যোগ্যতা উল্লেখ করুন।

২. থেরাপির নিয়ম কানুন, দিন এবং সময় নির্ধারন করুনঃ

- নির্দিষ্ট সময়ে সেশনে আসা এবং প্রতি সপ্তাহে সেশনে আসার গুরুত্ব উল্লেখ করুন।
- শুধুমাত্র গুরুত্বপূর্ণ প্রয়োজনে সেশন বাতিল হতে পারে এবং সম্ভব হলে এক দিন পূর্বে জানাতে বলুন।
- এই চিকিৎসার শিক্ষামূলক দিক এবং দক্ষতা শেখার জন্য ধারাবাহিকতা বজায় রাখতে হয়। সপ্তাহে কোন একদিন না আসলে অথবা দেরি করে আসলে কিভাবে এই চিকিৎসায় প্রভাব ফেলবে তা ব্যাখ্যা করুন।
- ফোন বন্ধ অথবা নিরব অবস্থায় রাখতে বলুন, যাতে থেরাপি সেশন বাধাগ্রস্থ না হয় (একই নিয়ম থেরাপিস্টের ক্ষেত্রেও প্রযোজ্য। যদি প্রয়োজনীয় কোন বিষয় থাকে সেক্ষেত্রে ক্লায়েন্টের অনুমতি নিয়ে সেশনে কোন ধরুন এবং এটি ক্লায়েন্টের ক্ষেত্রেও প্রযোজ্য)।

৩. ব্যক্তিগত তথ্যাবলী গোপন রাখা হবে সেই বিষয়টি খুলে বলুনঃ

- ক্লায়েন্টের তথ্যের গোপনীয়তা রক্ষা করবেন তা ব্যাখ্যা করুন।
- ক্লায়েন্টের সমস্যার সাথে সম্পর্কিত এমন কোন বিষয় পরিবারের সদস্যদের জানানোর প্রয়োজন হলে সেক্ষেত্রে তার অনুমতি নিয়ে বিষয়টি আলোচনা করা হবে।

৪. ক্লায়েন্টের ব্যক্তিগত তথ্য নিনঃ

- জন্মস্থান এবং বড় হবার তথ্য নিন।
- পরিবারে কে কে আছেন এবং তাদের সম্পর্কে তথ্য নিন।
- তার স্কুল জীবণ সম্পর্কে তথ্য নিন।
- কি কি বিষয়ে আগ্রহ বোধ করে (লক্ষ্য কি, পছন্দ এবং অপছন্দ, শখ)।

৫. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং কি কারণে আলোচ্য বিষয়সূচি নির্ধারন করা হচ্ছে সেটার যৌক্তিকতা দিনঃ

- মানসিক স্বাস্থ্য সমস্যা পরীক্ষা করুন (মনোবৈজ্ঞানিক পরিমাপনের মাধ্যমে)।
- বর্তমানে কি সমস্যার জন্য ক্লায়েন্ট এসেছে সেই তথ্য নিন।
- ক্লায়েন্ট কে বিষন্নতা সম্পর্কে শিক্ষা দিন।
- জ্ঞানীয় থেরাপির প্রকৃতি সম্পর্কে শিক্ষা দিন।

৬. আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা কবুনঃ

ক) নিম্নোক্ত ক্ষেত্রে সমস্যা হচ্ছে কিনা তা বের করুনঃ

- জ্ঞানীয়/চিন্তাঃ মনোযোগে সমস্যা, আত্মহত্যার প্রবনতা, সিদ্ধান্তহীনতায় ভোগা, দৈনন্দিন কাজে আগ্রহহীনতা, নিম্ন আত্মমর্যাদাবোধ, পরিস্থিতি সম্পর্কে নেতিবাচক চিন্তা।
- আবেগঃ মন খারাপ, দুঃখ অনুভব করা, উদ্বিগ্ন, রাগ, ভয়, দোষী, খিটখিটে, আশাহীন অনুভব করা।
- শারীরিকঃ ঘুমের সমস্যা, ক্ষুধা কমে যাওয়া, ওজনের হ্রাস অথবা বৃদ্ধি, মাথা ব্যাথা, শরীরের বিভিন্ন অংশে ব্যাথা, কাঁপতে থাকা, বুক ধড়ফড় করা, ক্লান্ত লাগা, নিশ্চুপ থাকা, শক্তি কম অনুভব করা।
- পেশাগতঃ পেশা সংক্রান্ত তথ্যাবলী, যেমনঃ অফিসে না যাওয়া, অফিসের সহকর্মীদের এড়িয়ে চলা, ঠিক মতো কাজ করতে না পারা, কাজ করার গতি কমে যাওয়া।
- আচরনগতঃ নিজেকে আঘাত করা, কান্না করা, বন্ধু/আত্মীয়স্বজনকে এড়িয়ে চলা, আক্রমনাত্মক আচরণ করা।

খ) ক্লায়েন্ট কে তার বিষন্নতা সম্পর্কে শিক্ষা দিন এবং আশা স্থাপন করুনঃ বিষন্নতা কি এবং বিষন্নতার অর্থ কি, বিষন্নতার উপসর্গ ও লক্ষন সমূহ (অনুভূতি, মেজাজ,আবেগীয় পরিবর্তন এবং স্থায়িত্ব) ।বিষন্নতার সাথে সম্পৃক্ত সমস্যা সমূহ বিশ্লেষণ করুন (কতটা মাত্রায় বিষন্ন, লক্ষন সমূহ) এবং লক্ষ্য নির্ধারণে এই তথ্য ব্যবহার করুন।

গ) জ্ঞানীয় থেরাপির প্রকৃতি সম্পর্কে শিক্ষা দিন।

ঘ) চিন্তা কিভাবে আমাদের অনুভূতিতে প্রভাব ফেলে, এই ধারনার সাথে পরিচয় করিয়ে দিনঃ স্বংয়ক্রিয় চিন্তা সম্পর্কে ধারনা দিন। চিন্তা কি এবং কি কি ধরনের চিন্তার ফলে বিষন্ন বোধ হয়। চিন্তা কিভাবে আমাদের অনুভূতি,আচরন ও শারিরীক পরিবর্তনে প্রভাব বিস্তার করে তা সংক্ষেপে ব্যাখ্যা করুন।

৭. লক্ষ্য নির্ধারণ করুনঃ

ক) দীর্ঘ মেয়াদী লক্ষ্য নির্ধারণঃ ক্লায়েন্টের সাথে আলোচনার মাধ্যমে লক্ষ্য নির্ধারণ করুন, যেমনঃ-

- বিষন্ন মনের ভাব দূর করা এবং পূর্বের মতো সক্রিয় হওয়া।
- বিষন্নতার অনুভূতি কে সনাক্ত করতে শেখা এবং তা মোকাবেলা করার দক্ষতা অর্জন করা।
- বিষন্নতার লক্ষণ সমূহ দূর করার জন্য নিজের এবং পৃথিবী সম্পর্কে যৌক্তিক বিশ্বাস স্থাপন এবং নেতিবাচক চিন্তার উন্নতি করা।
- বিষন্নতাকে প্রতিরোধ করার জন্য স্বাস্থ্যকর জীবন যাপন অনুশীলন করা।

৮. থেরাপি থেকে ক্লায়েন্ট এর প্রত্যাশা কি তা বলতে বলুন।

৯. সেশনের শেষে কি কাজ করা হলো তার সংক্ষিপ্ত সারমর্ম প্রদান করুন এবং

১০. বাড়ির কাজ নির্ধারণ করুনঃ বাড়ির কাজ করতে না চাওয়া একটি বড় সমস্যা। অনেকেই পরিবারের প্রতি অতিরিক্ত ভাবে নির্ভরশীল থাকে, যার ফলে তাদের কে বাড়ির কাজ দিলেও তা নিজে নিজে ঠিক ভাবে করতে চায় না। আবার কেউ কেউ বিষন্নতার কারনেও বাড়ির কাজ করতে পারে না। এদের জন্য বাড়ির কাজ প্রতিটা সেশনে মনে করিয়ে দিন, কম করে লেখার কাজ দিন, প্রয়োজনে বাড়ির সদস্যদের সাহায্য নিন।

১১. সেশন সম্পর্কে মতামত নিন।

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১. প্রথম সেশনের প্রভাব সম্পর্কে জিজ্ঞেস করুন।

২. নিম্নোক্ত আলোচ্য বিষয়সূচি সমূহ নির্ধারন করুন এবং অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক) মনোবৈজ্ঞানিক পরিমাপন প্রয়োগ করুন।

খ) বাড়ির কাজ পর্যালোচনা করুন।

গ) বর্তমানের মানসিক সমস্যা নিয়ে আলোচনা করুন।

ঘ) ইতিহাস নিনঃ

- বর্তমান রোগের ইতিহাসঃ রোগের সূত্রপাত, কোন ঘটনার মাধ্যমে সমস্যার তীব্রতা বেড়ে গেলো, বিরক্তিকর এবং সাহায্যকারী বিষয় সমূহ, সমস্যার স্থায়িত্ব ও কাজকর্মের গতি।
- ব্যক্তিগত ইতিহাসঃ জন্মের ইতিহাস, শৈশবকাল, স্কুল এবং শিক্ষা, অভ্যাস (ধূমপান/ এ্যালকোহল/ ড্রাগ অপব্যবহার)। এছাড়াও সামাজিক অবস্থা, পেশাগত ইতিহাস, বৈবাহিক ইতিহাস, যৌন ইতিহাস, বাচ্চা/ছেলে-মেয়ে, পরিবারের ধরন এবং পরিবেশ, বন্ধু-বান্ধবের সংখ্যা।
- পূর্বের রোগর ইতিহাসঃ শারিরীক অথবা মানসিক বড় কোন অসুখ (হয়ে থাকলে সেটা কি রোগ এবং কি চিকিৎসা নিয়েছে ও ফলাফল কি)।
- পারিবারিক ইতিহাসঃ বাবা, মা, ভাই-বোন পরিবারের সদস্যদের সাথে সম্পর্ক, পরিবারের সামাজিক অবস্থান।পরিবারের সদস্যদের মানসিক অসুস্থতা (যদি থাকে, কি রোগ এবং কি চিকিৎসা নিয়েছে, ফলাফল কি)। পরিবারের সদস্য সংখ্যা, পরিবারের সদস্যদের মধ্যে কয়জন আয় করে এবং পরিবার থেকে কি কি ধরনের সমর্থন পায়।
- পূর্বের জীবনের ইতিহাসঃ ছোট বেলার অভিজ্ঞতা যা বর্তমানের সমস্যা বজায় রাখছে,ছোট বেলার রাগ, লজ্জা, কষ্টের অভিজ্ঞতা যা বর্তমানের বিষন্ন অবস্থার সাথে সংযুক্ত।
- তীব্র শোকঃ অমিমাংসিত তীব্র শোক সম্পর্কে তথ্য নিন এবং এটি ব্যক্তির বর্তমানের বিষন্ন অবস্থার সাথে কিভাবে সংযুক্ত তা ব্যাখ্যা করুন।

ঙ) আত্মহত্যার প্রবনতা বা চেষ্টাঃ মনোবৈজ্ঞানিক পরিমাপন ব্যবহার করুন। নিজেকে আঘাত করার প্রবনতা বা চিন্তা আছে কিনা তা সনাক্ত করুন। বর্তমানে আত্মহত্যার ইচ্ছা বা পূর্বে আত্মহত্যার চেষ্টা ছিলো কিনা তা বের করুন। যদি প্রয়োজন হয় (ক্লায়েন্ট নিজেকে আঘাত করতে পারে বা আত্মহত্যার চেষ্টা করতে পারে সেক্ষেত্রে) হাসপাতালে রেফার করুন।

চ) চিন্তা চিহ্নিত করনঃ

- চিন্তা কি এবং কিভাবে চিন্তা আমাদের অনুভূতি কে প্রভাবিত করে।
- বেশীর ভাগ বিষন্ন মানুষ যেভাবে চিন্তা করে (ইতিবাচক চিন্তা- আমি দিন দিন উন্নতি করছি, নেতিবাচক চিন্তা- আমি সব সময় বিষন্ন বোধ করি অথবা আমি একজন অপদার্থ)।

- যেসব মানুষ বিষন্ন নয় তারা যেভাবে চিন্তা করে (কোন বিষয়ের ইতিবাচক দিকটি প্রত্যক্ষণ করে, ভুলের মাধ্যমে নিজেকে সংজ্ঞায়িত করেনা বরং ভুল থেকে শিক্ষা নেয়, নিজের পরিবর্তনের জন্য আশা রাখে)।

ছ) পাঁচটি দিকের সমস্যা বিশ্লেষণকরুন: পরিস্থিতি, চিন্তা, আবেগ, আচরন ও শারিরীক পরিবর্তন।

জ) জ্ঞানীয় মডেল সম্পর্কে ক্লায়েন্ট কে শিক্ষা দিনঃ সমস্যা সনাক্ত করার জন্য জ্ঞানীয়মডেল সম্পর্কে শিক্ষা দিন

পরিস্থিতি	চিন্তা	আবেগ
(পূর্বের পারিবারিক জীবন মনে করা)	(আমি আমার পরিবারের জন্য কিছুই করিনা)	(হতাশাগ্রস্থ, আশাহীনতা)

ঝ) নেতিবাচক স্বংয়ক্রিয় চিন্তা চিহ্নিতকরন যা বিষন্নতা বজায় রাখতে সাহায্য করে

ঞ) বিষন্নতার চিহ্ন ও লক্ষণ সমূহ বর্ণনা করুনঃ প্রতিদিনের জীবনযাপনে কিভাবে বিষন্নতার অভিজ্ঞতা হচ্ছে তা বিশ্লেষণ করুন। বিষন্ন মেজাজের উৎস সনাক্ত করার চেষ্টা করুন এবং বিষন্নতার অনুভূতি শেয়ার করার জন্য উৎসাহ দিন।

ট) আবেগ চিহ্নিত করনঃ

- ক্লায়েন্টকে প্রতিদিনের বিভিন্ন পরিস্থিতির একটি তালিকা তৈরী করতে সাহায্য করুন যা বিষন্ন আবেগীয় অবস্থার সাথে সংযুক্ত।
- রাগ, লজ্জা, কষ্টের অনুভূতি প্রকাশ করার জন্য উৎসাহ দিন। কি কি পরিস্থিতিতে তার বিষন্ন অনুভূতি তৈরী হয় সে সম্পর্কে তথ্য নিন, এর মাধ্যমে বিষন্নতার কারণ সম্পর্কে ধারনা পাওয়া যাবে।
- পূর্বের কোন অপ্রত্যাশিত ঘটনার ফলে রাগ অথবা অসহায় বোধের অনুভূতি এবং এটি কিভাবে বর্তমান বিষন্ন আবেগীয় অবস্থার সাথে সংযুক্ত তা ব্যাখ্যা করুন।
- এছাড়াও আবেগের তালিকা ব্যবহার করুন।

৩. নতুন বাড়ির কাজনির্ধারন করুনঃ কি কি বিষয়ে ব্যক্তি বিষন্ন বোধ করে সেটার একটি তালিকা তৈরী করতে দিন এবং কার্যক্রমের তালিকা দিন।

৪. সারমর্ম করুন এবং

৫. সেশন সম্পর্কে মতামত নিন।

সেশন ৩

১. পূর্বের সেশনের প্রভাব সম্পর্কে জিজ্ঞেস করুন।

২. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক) বাড়ির কাজ পর্যালোচনা করুন।

খ) কিভাবে নেতিবাচক স্বংয়ক্রিয় চিন্তা বাস্তব জীবনে প্রভাব বিস্তার করে এবং কিভাবে বিষন্নতার লক্ষণের সাথে সম্পৃক্ত তা ব্যাখ্যা করুনঃ সাইকোএডুকেশন দেখুন

গ) চিন্তা,আবেগ এবং আচরনের মধ্যে সম্পর্ক ব্যাখ্যা করুন।

ঘ) মূল বিশ্বাস, মধ্যবর্তী বিশ্বাস, নিয়ম এবং অনুমান সম্পর্কে ধারণা দিনঃপৃষ্ঠা তে দেখুন

ঙ) মূল বিশ্বাস ও মধ্যবর্তী বিশ্বাস সনাক্ত করুন

- স্বয়ংক্রিয় চিন্তা হিসাবে যে বিশ্বাসটি প্রকাশিত হয় সেটিকে শনাক্ত করা।
- অনুমানের আলোকে শর্তের ধারা প্রদান করে প্রশ্ন করুন এবং রোগীকে এটি সম্পূর্ন করতে বলুন (যদি---)।
- সরাসরি ভাবে মনোভাব বা নিয়ম শনাক্ত করা।
- নিম্নমুখি কৌশলব্যবহার করা।
- রোগীর স্বয়ংক্রিয় চিন্তা গুলি পরীক্ষা করা এবং সেগুলোর সাথে সাধারন বিষয়টি খুজে বের করা।

চ) ক্ষতিপূরণের কৌশল সমূহ সনাক্ত করুন

ছ) সমস্যা মূলক পরিস্থিতি চিহ্নিত করুন

জ) নতুন বাড়ির কাজনির্ধারন করুনঃ কার্যক্রমের তালিকা দিন

ঝ) সেশনের সারমর্ম করতে বলুন এবং

ঞ) সেশন সম্পর্কে মতামত নিন।

চতুর্থ সেশন

১. পূর্বের সেশনের প্রভাব সম্পর্কে জিজ্ঞেস করুন।

৩. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক) বাড়ির কাজ পর্যালোচনা করুন।

খ) যৌক্তিক ভ্রান্তি সনাক্ত করুনঃ মনোবৈজ্ঞানিক পরিমাপন ব্যবহার করুন

গ) যৌক্তিক ভ্রান্তি কি কি ঘটে থাকে সে সম্পর্কে ধারনা দিনঃ বিভিন্ন ধরণের ক্ষতিকারক চিন্তা সম্পর্কে শিক্ষা দিন(ম্যানুয়ালে বর্ণিত ত্রুটিপূর্ণ চিন্তা সমূহ)।

ঘ) ক্লায়েন্টের জ্ঞানীয় ধারনার নকশা আলোচনা করুনঃ কিভাবে সমস্যা শুরু হয়েছে এবং সমস্যাটি কিভাবে তার বর্তমান জীবনে প্রভাব ফেলছে তা জ্ঞানীয় মডেলের মাধ্যমে ব্যাখ্যা করুন।

ঙ) জ্ঞানীয় ধারনার নকশার উপর ভিত্তি করে চিকিৎসার লক্ষ্য নির্ধারন করুন

চ) চিকিৎসার পরিকল্পনা করুন

ছ) নেতিবাচক স্বংয়ক্রিয় চিন্তা চিহ্নিতকরন বজায় রাখুন

জ) স্বয়ংক্রিয় চিন্তা সম্পর্কে আলোচনা ও পর্যালোচনা করুন (কখন স্বয়ংক্রিয় চিন্তার উপর দৃষ্টি দিতে হবে তা আলোচনা করুন)

ঝ) তিন কলাম বিশিষ্ট চিন্তার তালিকা সম্পর্কে ধারনা দিন

ঞ) চিন্তা এবং আবেগের মধ্যে পার্থক্য করণ

ট) নেতিবাচক স্বয়ংক্রিয় চিন্তা চ্যালেঞ্জ করার উপায়সমূহ সম্পর্কে আলোচনা করুন।

- স্বয়ংক্রিয় চিন্তার প্রতি যৌক্তিক প্রতিক্রিয়া করতে শেখানঃ

১. একটি নির্দিষ্ট পরিস্থিতিতে ক্লায়েন্ট এর মনে যে নেতিবাচক স্বয়ংক্রিয় চিন্তা অথবা অনুমান এসেছিল তা বলতে অথবা লিখতে বলুন।

২. এই চিন্তাটি ০-১০০ স্কেলের মধ্যে কতটুকু মাত্রায়/পরিমানে সেবিশ্বাস করে তা তাকে জিজ্ঞেস করুন।

৩. এরপর ক্লায়েন্ট কে এই চিন্তা অনুযায়ী যে আবেগ অনুভব করেছিল তা বর্ণনা করতে অথবা লিখতে বলুন। এই আবেগে মাত্রা কি পরিমানে ছিল তা ০-১০০ মাত্রার স্কেলে লিপিবদ্ধ করতে বলুন।

৪. এরপর ক্লায়েন্ট কে প্রশ্ন করুন "এই বিশ্বাসের পক্ষে কি কি প্রমান আছে" অথবা "এই বিশ্বাসের যথার্থতা কতটুকু সে সম্পর্কে একটা পরীক্ষা করা।"

৫. এরপর ক্লায়েন্ট কে বলুন তার ঐ নেতিবাচক স্বয়ংক্রিয় চিন্তার পরিবর্তে একটি সামঞ্জস্যপূর্ণ বিকল্প বিশ্বাস অথবা অনুমান লিখতে।

৬. নতুন বিশ্বাস বর্ণনা বা লেখার পর ক্লায়েন্টকে বলুন যে সে ঐ বিশ্বাসটি ০-১০০ মাত্রার স্কেলে লিপিবদ্ধ করতে।

৭. নতুন বিশ্বাসের ফলে ক্লায়েন্ট যে আবেগ অনুভব করেছে সেটাও বলতে অথবা লিখতে হবে এবং এটাও ০-১০০ মাত্রার স্কেলে রেট করতে বলুন। সর্বশেষে ক্লায়েন্ট এর আবেগীয় পরিস্থিতির যদি কোন উন্নতি হয়ে থাকে সে সম্পর্কে একটি নোট দিতে বলুন। উপরোক্ত সাত কলাম বিশিষ্ট চিন্তার তালিকা সম্পর্কে আলোচনা করুন এবং সেশনে অনুশীলন করুন।

২. বাড়ির কাজনির্ধারন করুনঃ এই সপ্তাহে তিন কলাম বিশিষ্ট চিন্তার তালিকা ও কার্যক্রমের তালিকা বাড়ির কাজের জন্য দিন।

৩. সারমর্ম করুন এবং

৪. সেশন সম্পর্কে মতামত নিন।

সেশন ৫-৬

১. থেরাপিতে উন্নতি সম্পর্কে জিজ্ঞেস করুন এবং আলোচনা করুন

২. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক) বাড়ির কাজ পর্যালোচনা করুনঃ কার্যক্রমের তালিকা পর্যালোচনা করুন (আনন্দদায়ক ঘটনা এবং দক্ষতার ভিত্তিতে) এবং চিন্তার তালিকায় নেতিবাচক চিন্তা ও পরিস্থিতি পর্যালোচনা করুন

খ) বর্তমানের কর্মক্ষমতা মূল্যায়ন করুন।

গ) শারিরীক এবং আনন্দদায়ক কাজে সম্পৃক্ত করুন যার মাধ্যমে আগ্রহ এবং কর্মশক্তি বাড়বেঃ বিষন্ন অনুভূতি কমানোর জন্য আনন্দদায়ক কাজের একটি পরিকল্পনা করুন, নিজের সম্পর্কে নেতিবাচক চিন্তার প্রতি কম মনোযোগ দিতে বলুন, নির্ভরযোগ্য ব্যক্তির সাথে মনের কথা খুলে বলুন এবং অন্যান্যদের সাথে যোগাযোগ বাড়াতে বলুন (পরিবারের সদস্য অথবা যাকে ব্যক্তি নির্ভরযোগ্য মনে করে), নিজের চাহিদার প্রতি সচেতন হতে বলুন।

ঘ) লক্ষ্য অনুযায়ী জ্ঞানীয় থেরাপির কৌশল ব্যবহার করুনঃ

- প্রমানের জন্য জিজ্ঞাসাবাদ
- সমস্যা সমধানের কৌশল

ক) সামাজিক যোগাযোগ বৃদ্ধি এবং নিজের প্রয়োজনীয়তা ও মতামত প্রদান করাঃ সামাজিক পরিবেশে সম্পৃক্ত হতে বলুন। নিজের অনুভূতি, প্রয়োজনীয়তা ও মতামত প্রদান করার জন্য প্রশংসা করুন।

খ) ইতিবাচক স্ব-বিবৃতি তালিকাঃ

- ভবিষ্যত সম্পর্কে আশাবাদী এবং ইতিবাচক বিবৃতির তালিকা তৈরী করতে বলুন।
- আত্মবিশ্বাস ও কাজকর্মের গতি বৃদ্ধির জন্য ইতিবাচক এবং বাস্তবসম্মত চিন্তাকে পুরস্কৃত করুন। নিজের সম্পর্কে প্রতিদিন অন্তত একটি করে ইতিবাচক বিবৃতি লিখতে বলুন।
- বিষন্নতা সম্পর্কে আরো তথ্য দিন এবং কিছু দুঃখানুভূতিকে জীবনের পরিবর্তনের অংশ হিসাবে গ্রহন করতে সাহায্য করুন।

৩. বাড়ির কাজ নির্ধারন করুনঃ এই সপ্তাহে তিন কলাম বিশিষ্ট চিন্তার তালিকা বাড়ির কাজের জন্য দিন

৪. সেশনের সারমর্ম করতে বলুন এবং

৫. সেশন সম্পর্কে মতামত নিন।

সেশন ৭-৮

১. পূর্বের সেশনের প্রভাব সম্পর্কে জিজ্ঞেস করুন।

২. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক. চিকিৎসা নেবার ফলে কি কি উন্নতি হয়েছে তা পর্যালোচনা করুন।

খ. বর্তমানের কর্মক্ষমতা মূল্যায়ন করুন

গ. বাড়ির কাজ পর্যালোচনা করুন।

ঘ. লক্ষ্য অনুযায়ী জ্ঞানীয় কৌশল নির্ধারন করুন ও প্রয়োগ করুন

ঙ. মূল বিশ্বাস সনাক্তকরনঃ মধ্যবর্তী বিশ্বাস সনাক্তকরনের জন্য যে কৌশল ব্যবহার করেছিলেন সেই কৌশলগুলিই ব্যবহার করুন ও মূল বিশ্বাসের তালিকা ব্যবহার করুন

চ. মূল বিশ্বাস সম্পর্কে শিক্ষা দিন এবং তাদের কার্যাবলী পর্যবেক্ষন করুন

ছ. মূল বিশ্বাস পরিবর্তনের কৌশল প্রয়োগ করুন এবং নতুন কার্যকরী বিশ্বাস স্থাপন করুনঃ মধ্যবর্তী বিশ্বাস পরিবর্তনের জন্য যে কৌশল ব্যবহার করেছিলেন সেই কৌশলগুলিই ব্যবহার করুন, এছাড়াও-

- মূল বিশ্বাসের ওয়ার্কসীট
- ইতিহাস পর্যালোচনা করা
- পূর্বের ধারনা সংগঠিত করা
- অভিযোজন কার্ড

ক) সেশনে যে কৌশল শেখানো হয়েছে তা ব্যবহারের জন্য উৎসাহ দিন

জ. বাড়ির কাজনির্ধারন করুনঃ সাত কলাম বিশিষ্ট চিন্তার তালিকা বাড়ির কাজের জন্য দিন

ঝ. সারমর্ম করুন এবং

ঞ. সেশন সম্পর্কে মতামত নিন।

সেশন ৯(পরিসমাপ্তি)

১. আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

২. মেজাজ চেক করুন (মনোবৈজ্ঞানিক পরিমাপনের মাধ্যমে)।

৩. চিকিৎসা নেবার ফলে কি কি উন্নতি হয়েছে তা পর্যালোচনা করুন।

৪. বাড়ির কাজ পর্যালোচনা করুন।

৫. সেশনেরপরিসমাপ্তি

- সম্পূর্ণ থেরাপিতে ক্লায়েন্টের অংশগ্রহণের ফলে যে উন্নতি হয়েছে তা বলতে বলুন
- সেশনে যে কৌশল শেখানো হয়েছে সেগুলো পর্যালোচনা করুন
- সেশন শেষ হবার পর বাধা আসলে তা মোকাবেলা করার পরিকল্পনা করুন
- সমস্যাটি পুনরায় হলে তা মোকাবেলা করার কৌশলসমূহ আলোচনা করুন

৬. সেশনের সারমর্ম করতে বলুন

৭. সেশন সম্পর্কে মতামত নিন এবং সেশন শেষ করুন।

সেশন ১০

ফলোআপ সেশন(তিন সপ্তাহ পরে)

আলোচ্য বিষয়সূচি নির্ধারন করুন এবং আলোচ্য বিষয়সূচির অন্তর্ভুক্ত বিষয় সমূহ আলোচনা করুনঃ

ক. মেজাজ চেক করুন (মনোবৈজ্ঞানিক পরিমাপনের মাধ্যমে)

খ. চিকিৎসা নেবার ফলে কি উন্নতি হয়েছে তা পর্যালোচনা করুন।

(We only add session structure in appendix. As we are working on manuscript in press, it will be available in request).