Buddhist Psychotherapeutic Approach to Depression in the Era of Economic Development

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ABSTRACT

An estimated twenty-five percent of individuals across the world develop one or more mental or behavioral disorders at some stage in life. Depressive illnesses have become one of the major such disorders in modern times. More than 120 million people currently suffer from depression. Although the economic cost for the treatment of this disorder is high, the cost in human suffering is even beyond estimation. Appropriate treatment, however, can help most of the patients with this disease.

A number of treatment modalities have been applied to the patients with depression and their efficacies have been extensively studied. It is now generally believed that antidepressant medications, short-term psychotherapies, especially cognitive-behavioral therapy and interpersonal therapy, and a combination of the two have proven effective for depression. The evidence regarding prevention of depression from happening or recurring, however, is less conclusive.

This paper will focus on the discussion of one psychotherapeutic approach that incorporates Buddhist mindfulness meditation in the treatment, namely the mindfulness-based cognitive therapy (MBCT). The paper will also propose a new model, named Buddhism-informed cognitive-behavioral therapy, which integrates other Buddhist concepts and practices into MBCT. It is my hope that this new psychotherapeutic approach will be effective not only in the treatment but also prevention of depression so that more human suffering can be alleviated.

Introduction

As economic development continues its progress into the 21st century, the cost for the treatment of mental disorders continues to consume the revenues generated from economic growth. Depression, a common form of mental disorders that is associated with depressed mood, loss of interest or pleasure in almost all activities, and an interruption to regular daily routines, has not only caused tremendous suffering to patients and their families but become a great burden to society as a result of the illness-associated disability that limits patients' productivity and participation in the work force.

Depressive disorders are the most common forms of mental disorders in community and health care settings (Weissman, Bland, Canino, et al., 1996). According to the Global Burden of Disease study conducted by the World Health Organization and the World Bank (Murray & Lopez, 1996), depression was the leading cause of years lived with a disability (YLDs) and the fourth leading contributor to the global burden of disease measured by disability-adjusted life years (DALYs). Disability associated with depression is greater than that

reported for other chronic diseases such as hypertension, diabetes, arthritis and back pain. Under the most conservative estimates, the burden of depressive disorders will increase by at least 50% by 2020 to become the second leading cause of disability measured by DALYs calculated for all ages and both sexes (Murray & Lopez, 1997; World Health Organization [WHO], 1999). For the age group of people 15-44 with both sexes combined, depression is already the second cause of DALYs.

The burden of depressive disorders on society can be further demonstrated by the figure of monetary cost for treating the diseases. In 1990, depression cost the United States 43 billion dollars in both direct costs, mainly the treatment costs, and indirect costs, such as lost productivity and absenteeism (Nitzkin & Smith, 2004). Major depression, one of the major types of depressive disorders, is regularly rated among the top five most expensive health problems. Judging from the burden depressive disorders imposed on both developed and developing countries, it is imperative for health care providers to develop programs for prevention and more cost-effective modalities for treatment.

This paper will first describe the most commonly observed types and symptoms of depression, followed by commonly known causes and prevalence of the disease. Several major treatment choices for depression, including evidence-based psychotherapies, will then be reviewed and discussed. A mindfulness-based cognitive therapy will be discussed in detail, including a brief discussion of its strengths and shortcomings. Finally, a psychotherapeutic approach to depression based on Buddhist teachings will be proposed as a modification to the mindfulness-based therapy. The paper will be concluded by summarizing the current understanding of the disease and proposing the future hope in its treatment.

Major Types and Symptoms of Depression

Depressive disorders are presented in several different forms, just as many other mental illnesses, such as anxiety disorders, or physiological illnesses, such as heart diseases. The following four types of depressive disorders and their associated symptoms are the most commonly identified ones (American Psychiatric Association, 2000):

(1) Major Depression: Also called "clinical depression," major depression is manifested by a combination of symptoms that have been persistent for at least two weeks and have shown to interfere with the patient's daily routine activities. In addition to a dysphoric mood or anhedonia, the patient usually experiences four or more of the following symptoms: significant weight change or change in appetite (increased or decreased); insomnia or hypersomnia; psychomotor agitation or retardation; fatigue or loss of energy; feelings of worthlessness; excessive or inappropriate

guilt; decreased concentration; indecisiveness; and suicidal ideation, plan or attempt.

(2) Bipolar Disorder: Also referred to as "manic-depressive disorder," bipolar disorder is characterized by cycling mood changes between severe highs (mania) and lows (depression) with normal mood in between. When in the depressive cycle, the patient may have any or all of the symptoms of major depression. When in the manic cycle, the patient may be overactive, over-talkative, and exhibiting a great deal of energy. Other commonly presented symptoms of mania include: inflated self-esteem or grandiosity; decreased need for sleep; racing thoughts; abnormal or excessive elation; distractibility; increase in goal-directed activity or psychomotor agitation; and excessive involvement in pleasurable activities that have a high potential for painful consequences (e.g., engaging in unrestrained buying sprees or foolish business investments). Although bipolar disorder is not as prevalent as major depression, the affected patients may worsen to a psychotic state if remaining untreated.

(3) Dysthymia: Dysthymia is a less severe type of major depression. It is characterized by long-term, chronic symptoms that do not interfere with daily routines but keep one from feeling good or functioning well. Many individuals with dysthymia also experience major depressive episodes in their lives (National Institute of Mental Health [NIMH], 2000).

(4) Cyclothymia: Cyclothymia is a less severe type of bipolar disorder that generally persists for at least two years (one year for children and adolescents). It is characterized by mood swings including periods of hypomania and depression. During the 2-year period, the patient has not been without the symptoms for more than two months at a time.

Causes and Prevalence of Depression

Over the past 50 years, mental health and biological scientists have been trying to find explanations for the cause of depression. Despite this effort, there is still no agreement on the exact causes of depression and bipolar disorder. A group of experts on the biology of depression recently concluded: "We have not identified the genetic and neurobiological mechanisms underlying depression and mania, nor do we understand the mechanisms by which nongenetic factors influence these disorders" (Nestler et al., 2002). Despite this declaration, a number of factors have been identified through their association or joint association with depressive disorders (NIMH, 2001). These factors may be categorized as follows:

(1) Biological Factors: Major depression, as other mental disorders, is believed to be associated with changes in brain structures or functions (Alexopoulos, 2005; NIMH, 2000). Depressive disorders are also prevalent in different patterns for men and women and for different age populations. Major biological factors that have been studied in relation to depression include the following:

- Genetic Predisposition: Some types of depression pass down the generations in families, suggesting a likelihood of genetic predisposition for depression (NIMH, 2001). Research shows a 50% chance for an identical twin to develop depression sometime in life when the other identical twin has the same illness (Swartz, 2006). The genetic influence is especially evident with bipolar disorder. Studies of the risk factors of depressive disorders in identical versus fraternal twins have, however, found that the genetic makeup may manifest itself only when there is an interaction of multiple risk genes with specific environmental stressors or medical conditions that elicit the pathology. Examples of environmental factors could range from prenatal exposure to psychoactive substances, malnutrition, infections, to significant loss and trauma.

- Biochemical Imbalance: Research using brain imaging reveals that the regulation of critical neurotransmitters, chemical substances that transmit nerve impulses, is impaired in people of depressive disorders (Soares & Mann, 1997), especially the three neurotransmitters called serotonin, norepinephrine, and dopamine. Antidepressant medications are developed to influence the functioning of these three particular neurotransmitters. Studies also show that the hypothalamic-pituitary-adrenal axis, the hormonal system that regulates the body's response to stress, is overactive in many people with depression. Researchers believe that many hormonal factors likely contribute to the increased rate of depression in women over men (Blehar & Oren, 1997). Examples of hormonal factors include menstrual cycle changes, pregnancy, miscarriage, postpartum period, pre-menopause, and menopause.

- Medical Conditions: Patients with medical disorders can be susceptible to depression. Depression is common in survivors of stroke and heart attack, as well as among patients with cancer, Alzheimer's disease, Huntington's disease, Parkinson's disease, and hormonal disorders (NIMH, 2000; Olin, Schneider, Katz, et al., 2002). Researchers have found that about 50% of patients hospitalized with coronary artery disease develop some depressive symptoms, with up to 25% of them suffering from major depression (Carney & Freedland, 2003). Patients with illness-induced depression tend to become apathetic and unwilling to care for their physical needs, raising the risk of deterioration and death. A recent review of 22

studies confirmed that depression doubles the risk of dying after a hear attack (Bush, 2005). Depression in the elderly often arises in the context of medical comorbidity, and the greater the overall medical burden the higher the risk of depression (Alexopoulos, Buckwalter, Olin, et al., 2002; Luber, Meyers, Williams-Russo, et al., 2001).

- Side Effect of Medications: Prescription drugs can also cause depression and bipolar disorder (Swartz, 2006). Medications that are commonly used to treat Parkinson's disease, such as Parcopa, and attention deficit disorder, such as Ritalin, can trigger mania in bipolar disorder. Other drugs that are used to treat high blood pressure and cancer have been shown associated with depressive symptoms.

(2) Psychological Factors: Individual psychological attributes have also been found related to the development of depressive disorders. Research has shown that individuals who are prone to depression tend to have low self-esteem, a pessimistic view of their life and the world in general, and poor adaptive skills in coping with stressful life events. It is not clear, however, whether these attributes represent a psychological predisposition or consequence of depression (NIMH, 2000). A number of psychosocial factors have also been identified as associated with depression, including a serious loss in life, difficult relationship with others, financial difficulty, and stress at work or home.

(3) Social Factors: Changes in a society or an individual's environment may also contribute to the development of depression. Social factors such as urbanization, poverty, and technological change have been associated with incidents of mental and behavioral disorders (WHO, 2001).

- Urbanization: Modern urbanization may cast a negative influence on mental health through an increase in the number of stressors and adverse life events, such as overcrowded and polluted environments, poverty and dependence on a cash economy, high levels of violence, and reduced social support (Desjarlais, Eisenberg, Good, & Klainman, 1995). Not only urbanized areas are fraught with the problems that can trigger depression, rural life is also contaminated with difficulties threatening mental health. Isolation, lack of communication mechanisms, limited educational and economic opportunities, and a shortage of social resources, including mental health services, are common difficulties. Rates of depression among rural women have been reported to be more than twice those of estimates for women in general (Hauenstein & Boyd, 1994).

- Poverty: Statistics have shown a higher rate of mental disorders among the poor and the deprived (WHO, 2001). This higher prevalence is believed to be explainable both by higher causation of mental problems among the poor and by poverty as a consequence of the mental illness. The reciprocal effect of the two mechanisms renders the relationship between poverty and mental health rather complex and multidimensional. Poverty and associated factors such as unemployment, low education, lack of insurance coverage, and minority social status in terms of race, ethnicity, and language can create barriers to health care, which in turn impacts on economic productivity and further reduction in access to resources.

- Technological change: The extraordinary scale and rapidity of the development in information technology in the late 20th century have brought a revolutionary change in communications, broadcasting, scientific study, and even interpersonal relationships. The change, however, also influences levels of violence, sexual behavior, and interest in pornography. There is evidence to suggest that spending an excessive amount of time surfing the Internet increases feelings of isolation and loneliness and the possibility of developing depression.

Depression is pervasive in contemporary modern culture. The World Health Organization (2001) estimates that 121 million people around the world suffer from depression, and that 5.8% of men and 9.5% of women will experience a depressive episode in any given year. In the United States, an estimated 9.5% of American adults, or about 18.8 million people, in any given 1-year period suffer from depression. The prevalence rate is nearly twice as many for women (12%) as for men (7%) (NIMH, 2001). There is even an estimate that between 20-25% of women and 7-12% of men will develop a major depression during their lifetime (Consensus Development Panel, 1985). Depression can affect people of all ages, but there appear to be two peaks of prevalence across the life span: late adolescence or young adulthood and old age (Cross-National Collaborative Group, 1992; Fassler & Dumas, 1997; Sowdon, 2001).

Major Treatment Choices for Depression

Although many people with depressive disorders do not seek help, depression is in fact a treatable illness. Research has shown that more than 80 percent of people with depression improve when they receive appropriate treatment (NIMH, 2001). A variety of treatment modalities have proven effective for depression. The three major treatment choices are described below.

(1) Pharmacologic Treatment: There are more than thirty medications that are proved effective antidepressants and useful for treating depressed patients (Judd, 1999). These include the older classes of drugs such as tricyclic antidepressants (TCAs) and monoamine oxidase inhibitors

(MAOIs), and the newer classes of drugs such as selective serotonin reuptake inhibitors (SSRIs). The newer medications tend to have fewer side effects than the older drugs. Another class of antidepressant, lithium, has been discovered to be specifically effective in treating manic-depressive disorder. Studies have shown that antidepressants usually work effectively against depression of various degrees, and patients usually respond more quickly to drugs than psychotherapy (Swartz, 2006). The side effects of antidepressants, however, are a major concern in the prescription of this treatment. In addition, it may take some time to find the right medication at the right dose for an individual patient. Patients usually are advised to continue the medication for 4-9 months after feeling better to prevent a relapse or recurrence.

(2) Psychological Treatment: Psychotherapy is frequently used to treat people with depression, especially those with mild and moderate forms. As antidepressants do not treat unhappiness or negative thinking styles, psychotherapy comes in to compensate for the shortcomings of antidepressant medications. It has been proved effective when used in combination with medications to treat all degrees of depression, especially the severe form. There are a number of psychotherapeutic approaches used for treating depression, including behavior, cognitive-behavioral, interpersonal, self-control, social problem solving, and brief psychodynamic therapies. But cognitive-behavioral therapy (CBT) and interpersonal therapy (IPT) are the only two approaches that have been fairly extensively evaluated and shown efficacy as treatments for major depression (Chambless & Ollendick, 2001; NIMH, 2000). Both CBT and IPT are also included in the guidelines for the treatment of depression published by the Agency for Health Care and Policy Research (Depression Guidelines Panel, 1993). CBT focuses on helping patients change the negative styles of thinking (e.g., a belief that the patient is the cause of bad things happening in his/her life) and improve their behavioral skills (e.g., social skills). The goals of therapy are to identify, test, and correct cognitive distortions and the dysfunctional beliefs that underlie these distortions. IPT focuses on interpersonal difficulties that both cause and exacerbate the depression, such as role conflicts, major losses, lack of social skills, and life transitions. Both of these therapies are short-term (10-20 1-hour sessions), conducted over a period of 8-16 weeks. Research indicates that either therapy can work as effectively as antidepressant medications for mild to moderate depression. For severe depression, however, a combination of either therapy and medication appears more likely to be effective than medication or psychotherapy alone (Bannan, 2005; Hyman & Rudorfer, 2000).

(3) Electrical Treatment: For some treatment resistant cases where medication, psychotherapy, and the combination of the two prove ineffective, electroconvulsive therapy (ECT), transcranial magnetic stimulation (TMS), and vagus nerve stimulator (VNS) may be employed.

> In ECT, the patient is given electrical pulses through electrodes placed on two areas of the scalp while being put under general anesthesia and muscle relaxant. ECT is typically given 2-3 times a week for a total of 6-12 sessions. Research has shown a response rate of 50-60% of patients receiving ECT, a rate similar to that of antidepressant medications (Swartz, 2006). Both TMS and VNS are still in an experimental stage and are currently available only in clinical trials. These alternative treatments work well for severe depressive episodes (e.g., patients with intense suicidal thoughts or attempts), but there are fairly severe side effects and the rates of relapse following the treatments are fairly high. Physicians are usually advised to carefully review and discuss the potential benefits and risks of these interventions with patients and their families before reaching a decision.

Despite the belief that depression is a treatable illness with approximately 80% of those receiving proper treatment showing improvement, there are high rates of relapse (a continuation of the depressive episode before recovery) and recurrence (a new depressive episode after recovery). Research suggests that at least half the patients who recover from an initial episode of depression will experience at least one subsequent depressive episode, and those who have been depressed two or three times will have a 70-80% chance of recurrence in their lives (Consensus Development Panel, 1985; Paykel, Ramana, Cooper, Hayhurst, Kerr, & Barocka, 1995). Given this high relapse and recurrence rate, the treatment for depression is recommended to include three stages: (1) the initial acute treatment stage with the focus on immediately relieving symptoms and restoring the patient's ability to normal function; (2) the continuation treatment stage, with the focus on preventing a relapse, which lasts 4-9 months after an episode; and (3) the maintenance treatment stage, with the focus on preventing a recurrence, which lasts from one year to a lifetime. It is therefore strongly recommended that once an antidepressant medication is taken, it should be continued for at least 9-12 months or for the rest of the patient's life in the case of chronic depression (Depression, 2004).

Buddhist Psychotherapeutic Approach to Depression

With a tradition overwhelmingly concerned with human experience and alleviation of aversive experiences, Buddhism has presented itself as an empirical psychology. A number of researchers have already examined the psychotherapeutic applications of both Buddhist and Western psychology (e.g., Goleman, 1985; Loy, 1992; Mruk & Hartzell, 2003; Watts, 1961; Young-Eisendrath & Muramoto, 2003). The psychotherapies based on the philosophy and practices of the two traditions, however, demonstrate very different goals and approaches. Western psychotherapy is mainly aimed at providing healing services to people experiencing psychological or behavioral disorders, whereas Buddhist disciplines can be applied not only to those with abnormal development but also ordinary, healthy individuals in their daily lives. Moreover, the two

traditions also profoundly differ in the concept of ego, with Western psychotherapy emphasizing strengthening the ego of the patients whereas Buddhist doctrines promote the concept of egolessness or emptiness. This difference in the conception of the ego, or self, in Western and Buddhist psychology has clear implications for psychotherapy and everyday life. Despite the differences between the two traditions, an integration of Buddhist and Western psychotherapeutic approaches may be possible or even necessary for better therapeutic outcomes (Mruk & Hartzell, 2003; Young-Eisendrath & Muramoto, 2003). This section will review a few studies that have adopted some Buddhist concepts and practices in the treatment of depression. A theoretical model based on Buddhist teachings will also be presented as an alternative to the existing psychological treatment modalities.

Mindfulness-Based Therapies for Depression

Mindfulness is generally considered an enhanced attention to and moment-by-moment awareness of current experience or present reality (Brown & Ryan, 2003). Researchers have used a number of special characteristics to describe mindfulness, such as open or receptive awareness and attention (Deikman, 1982; Martin, 1997), nonjudgmental observation (Baer, 2003; Kabat-Zinn, 2003), awareness of present experience with acceptance (Germer, 2005), engaged equanimity (Morgan, 2005), attentional control (Teasdale, Segal, & Williams, 1995), and subtle, nonverbal experience (Gunaratana, 2002). Mindfulness can be practiced either as a Buddhist-style meditation (Vipassana) by sitting in a quiet place over sustained periods of time or as an everyday exercise to cultivate mindful moments in daily life. The latter form of practice is how mindfulness is commonly adopted in psychotherapy. Germer (2005) describes mindful moments as having the following common aspects regardless of the level or form of practice:

- Nonconceptual. Mindfulness is awareness without absorption in our thought processes.
- Present-centered. Mindfulness is always in the present moment. Thoughts about our experience are one step removed from the present moment.
- Nonjudgmental. Awareness cannot occur freely if we would like our experience to be other than it is.
- Intentional. Mindfulness always includes an intention to direct attention somewhere. Returning attention to the present moment gives mindfulness continuity over time.
- Participant observation. Mindfulness is not detached witnessing. It is experiencing the mind and body more intimately.
- Nonverbal. The experience of mindfulness cannot be captured in words, because awareness occurs before words arise in the mind.

- Exploratory. Mindful awareness is always investigating subtler levels of perception.
- Liberating. Every moment of mindful awareness provides freedom from conditioned suffering. (p.9)

Many Western therapists have adopted meditation or Buddhist philosophy as a way to cultivate their own mind and improve their own well-being before beginning their professional careers (Germer, 2005). In 1977, the American Psychiatric Association even called for an investigation of the clinical effectiveness of meditation. In 1979, Jon Kabat-Zinn established the Center for Mindfulness at the University of Massachusetts Medical School to treat individuals with chronic conditions for which their physicians could not offer further help. The Center has provided its mindfulness-based stress reduction (MBSR) program to over 15,000 patients, not including participants in over 250 MBSR programs around the world (Davidson & Kabat-Zinn, 2004).

A number of psychotherapists have also applied mindfulness to the treatment of depression and demonstrated its efficacy and effectiveness (e.g., Lynch, Morse, Mendelson, & Robins, 2003; Segal, Williams, & Teasdale, 2002). Mindfulness is a key component of acceptance and commitment therapy ([ACT] Hayes, Strosahl, & Wilson, 1999), which focuses on full acceptance of present experience and mindfully letting go of obstacles. Preliminary research using randomized, controlled trials shows evidence for the efficacy of this modality in treating depression (Zettle & Hayes, 1986; Zettle & Raines, 1989). The researchers believe that the efficacy of ACT is mainly attributable to a reduction in the believability, rather than the frequency, of negative thoughts (Zettle & Hayes, 1986).

Another treatment approach that uses mindfulness training, dialectical behavior therapy ([DBT] Linehan, 1993), is designed to train patients to regulate their emotions, including the emotions and behaviors associated with depression. DBT therapists use techniques to help patients accept their emotions and then to change their emotional experience. Mindfulness is the technique they use to reduce avoidance of negative emotions through awareness of their existence. Although DBT has scientifically demonstrated its efficacy in the treatment of borderline personality disorder, one study has also shown that DBT is effective for treating depression in old age (Lynch, Morse, Mendelson, & Robins, 2003).

Segal, Williams, & Teasdale (2002) combined mindfulness practice with cognitive therapy to treat the individuals recently recovered from depression with a goal of preventing relapse. They designed an 8-session program, followed by four follow-up meetings in the year after the program. The first four sessions focus on intensive learning to pay close attention to sensory and perceptual environments, and the next four sessions focus on learning to handle mood shifts now or deal with them later by emphasizing a "breathing space" to dissolve unpleasant thoughts or feelings. When comparing the patients going through this

program with those in a "treatment as usual" control group, they found that in patients with three or more depression episodes, the mindfulness-based cognitive therapy (MBCT) significantly reduced relapse within the full 60-week study period by showing a 37% relapse of the experiment group whereas 66% of the control group relapsed. In patients with two or fewer previous depressive episodes, however, there was no significant treatment effect. As the intervention was delivered to a group of eight patients, the researchers claimed that MBCT demonstrates a more cost-effective benefit than conventional cognitive therapies, especially to those recurrent patients.

Buddhism-Informed Cognitive-Behavioral Therapy: A Proposed Model

Although various treatment interventions have proved effective in the treatment of depression, the relapse or recurrence rate is still a major concern for mental health care providers. The recurrence rate for those who recover from the first episode is about 35% within two years and 60% at twelve years, with an even higher rate for those aged 45 years or older (WHO, 2001). The figures estimated in the United States are even higher, suggesting that at least 50% of patients who recover from an initial episode of depression will have at least one subsequent depressive episode, and those with a history of multiple episodes will have a 70-80% likelihood of recurrence in their lives (Consensus Development Panel, 1985). In approximately 20% of depressive patients the illness develops into a chronic problem with no remission (Thornicroft & Sartorius, 1993). These statistics indicate that relapse and recurrence following successful treatment of depression are common, and, hence, more effective treatment modalities with long-term effect need to be developed. An alternative model of mindfulness-based treatment approaches is proposed below, which integrates insights derived from Buddhist philosophy and therapeutic applications with cognitive-behavioral interventions and psycho-educational concepts.

It is, however, not the intention of this paper to lay out a detailed, step-by-step procedure for implementing the model. Rather, only the major components with theoretical rationales for their inclusion will be illustrated. The model is not only designed for treating depressive patients but also patients with other psychological problems as well as normal healthy individuals, including therapists themselves.

Major components of this Buddhism-informed Cognitive-Behavioral Therapy (BCBT) consist of the following:

- Concentration Meditation: Meditation practiced by Buddhists can generally be classified into two categories: concentration (Samatha) and mindfulness (Vipassana, or insightfulness) meditation. Although the two are frequently practiced simultaneously or interchangeably, concentration meditation is usually considered the fundamental training for the practice of mindfulness meditation. It is through concentration meditation that the mind will become tamed and focused, based on which mindfulness will

become easy and manageable to practice. When mindfulness is applied in moment-to-moment daily life instead of in a sitting meditation, as adopted by all mindfulness-based psychotherapies, a focused mind is especially needed and functions as a prerequisite for an effective mindfulness practice. It is therefore suggested that at least two sessions devoted to teaching and practicing concentration meditation in a sitting position be incorporated into any BCBT. Counting one's own breath repeatedly from 1 to 10 is a recommended method for this training as it is a means neutral in religious affiliation. Patients should be encouraged to practice concentration meditation on a daily basis, starting from 10 minutes each time and gradually extending to at least 30 minutes. They should keep this practice even after they are taught to practice mindfulness. The purpose of this training is mainly to prepare patients for moment-to-moment mindfulness practice.

- Moment-to-Moment Mindfulness Practice: Mindfulness applied in every moment of daily life has been shown to be an effective means of treating depression. Mindfulness helps the depressed to be aware of their feelings, thoughts, and physical discomforts, and hence to come to terms with these states. With the preliminary training in concentration meditation, as described above, it is believed that mindfulness will be more effectively practiced by, and hence more beneficial to, the depressed. After the suggested two sessions on the instruction of concentration meditation, the training is recommended to be followed by at least two sessions on the training of mindfulness. The training can start with meditating in a sitting position (mindfulness meditation) by attentively observing breathing and other physical and mental experiences through the five sensory organs and the mind. Patients should be instructed to pay attention to the arisen feelings and thoughts but not to be "trapped" in these experiences nor critical or judgmental about the experiences. Their minds should focus on the here and now without ruminating over any arising thoughts. Other strategies used by mindfulness-based therapists, such as observing and tasting a raisin (Segal, Williams, & Teasdale, 2002), may also be adapted as initial training methods. After the two-session training in mindfulness meditation, patients are encouraged to practice mindfulness in their moment-to-moment daily life and share their experience either through writing or oral conversation with the therapist. The purpose of this training, as elaborated by other mindfulness-based therapists, is to focus the patient's mind on his/her present experience so that an authentic sense of reality may be developed and illusory thoughts can be avoided. There are, however, warnings by some practitioners who had a depressive experience against practicing either concentration or mindfulness meditation when the depression is too severe as the depressed may not be able to handle the strong destructing emotions, thoughts or traumatic experiences at the time (Moon, 2006; Tan, 2006).

- Mental Transformation: Many mindfulness-based therapies do not blend into their treatment a vigorous psycho-educational component with the goal of transforming the false reasoning and cognition to a rightful one. A cognitive domain is normally included in cognitive-behavioral therapies (CBTs) or cognitive therapies alone, which features a variety of cognitive restructuring techniques aimed at correcting patients' maladaptive cognitive patterns and negatively distorted thoughts (Sanderson & McGinn, 2001). These approaches, although usually incorporating an educational session to explain the rationale for a new technique, emphasize techniques for symptom alleviation rather than an education to guide the development of proper views of life and life-related issues that go beyond the immediate symptom-related problems. It is believed that the lack of this latter component in CBTs significantly limits the long-term effect of CBT in preventing depressive symptoms from relapse or recurrence, despite strong empirical evidence supporting its efficacy in treating initial depression. It is to correct this shortcoming of CBTs that the proposed BCBT incorporates the following concepts and techniques based on Buddhist teachings.

Concepts:

1) Everything is impermanent: Nothing in this world will exist forever without changes, including depressive states. Everything arises when the right causes and conditions are there; everything extinguishes when the causes and conditions that support its existence are not there any longer. This impermanent nature of existence applies to everything in our life and this world, including our body, mind, mental state, relationship with others, all of our material possessions, and everything in our environment. The nature of impermanence will not only bring hope to depressive patients about curing their illness, decrease their attachment to any adored things or persons, but also help them to accurately analyze their life and circumstances to prevent depression from relapse or recurrence. The understanding of impermanence will also facilitate the depressed to focus on the present moment, as nothing in the past or future can be adhered to, hence indirectly enhancing their mindfulness practice.

2) Every experience is pain (or suffering) in nature: Although some of our experiences in this life may feel joyful and enjoyable, they are subject to change. The cessation of these pleasant experiences will then bring us agony or miserable feelings. The Buddha did not deny that there is happiness in life, but he pointed out that happiness does not last forever and when one loses it, there is suffering. The suffering experiences are classified into eight categories: birth, old age, illness, death, being apart from those we love, being with those we dislike, not getting what we want, and the constant interaction between our body and mind.

The first four kinds of suffering pertain mainly to our physical experience, and the last four mainly to our mental experience. The teaching of this concept to the depressed will help them to face their own depressive feelings with a more peaceful mind after they understand life is pain in nature, and accept their feelings so that they will be capable of analyzing the causes of their suffering and working on ways to end it. According to the Buddha, the fundamental causes of suffering are ignorance, craving, and attachment. The depressive thoughts, which are derived from distorted reality, are ignorant. The excessive desire for food and sleep or the excessive desire to abandon food and sleep, as experienced by many depressed patients, are a kind of craving. The persistent stay in a dysphoric mood (e.g., sadness) or a loss of interest or pleasure in most activities is an attachment to depression. The ways to cease suffering, as taught by the Buddha, are to follow the steps of the Noble Eightfold Path, which will be discussed below.

3) Everything has no self nature: As everything is constantly changing, there is no permanent self nature that can be ascribed to, including self characteristics so frequently identified by the depressed as self-inadequacy, self-worthlessness and hopelessness. Nothing exists from beginningless time, nor does it stay forever without changes. Therefore, nothing can be considered as having a solid, permanent, and changeless self identity. The self is but a convenient name for a collection of factors. So long as we cling to this notion of an independent self and develop a strong self identity, we will always act to defend ourselves, including our opinions, preferences, prestige, possessions, and even our feelings and words. This self identity, or belief in a set of characteristics that we use to identify, imagine, or conceive of ourselves as a permanent entity, immediately separates ourselves from other human beings and our surrounding environment. It hinders our interactions and relationships with others, and becomes the source and cause of all suffering. Depressed patients have to realize this truth to be freed from their own symptoms and the traps for future recurrences. They need to understand that depressive thoughts and feelings are not something solid and cannot be penetrated, and that most likely those thoughts and feelings are but the creation of the mind of themselves. Depression, like all the other things with or without a substantial form, depends on many causing conditions to arise, such as those biological, psychological, and social factors mentioned above. Understanding the concept of selflessness, or emptiness as another frequently used name, will not only facilitate the recovery for the depressed but is also the path to enlightenment. The belief in a self is rooted in ignorance,

one of the three fundamental defilements according to Buddhist teachings. Contemplating on the true nature of no-self will, therefore, not only re-direct the depressed from their ruminated negative thoughts but guide them toward an enlightened state to end the haunting of depression in their lives.

4) Nothing ever happens to us without ourselves as a cause: This law of cause and effect, called karma, is another core concept in Buddhism. Karma refers to the total effect of a person's actions and conducts on his/her subsequent phases of existence. Karma, therefore, may be considered a counterpart in the moral sphere of conscious actions to Newton's physical law which states that every action must have an equal and opposite reaction. Buddhists believe that karma explains the differences between living beings and the circumstances living beings find themselves in. Our wholesome actions will produce wholesome karma (e.g., happiness), whereas our unwholesome actions will produce unwholesome karma (e.g., suffering). Buddhists especially emphasize the intention of an action, in stead of the consequence of an action, to determine whether it is wholesome or unwholesome. The notion of karma or the law of cause and effect helps refrain ourselves from unwholesome acts and stops us from blaming others for our own mistakes. This concept should also help the depressed closely watch their thoughts, cease those rootless ruminated ideas they have toward themselves or their circumstances, and develop positive, realistic, and rational thinking.

Techniques:

1) Positive Thinking: The cognitive therapy is based on the premise that an individual's perception of the self and life experience determines his/her emotional states, physical conditions, and behaviors (A. T. Beck, et al., 1979; J. S. Beck, 1995). This conceptual framework is adopted by BCBT as it is also taught in Buddhism, especially the Yogacara, or Mind-Only, School of Buddhism. As a major symptom of depressed patients is a negative view of themselves (worthless, inadequate, unlovable, deficient), their environment (overwhelming, filled with obstacles and failure), and their futures (hopeless, impossible to change) (A. T. Beck, 1983), it is imperative to educate patients to think positively and realistically. Patients need to know that there is always an alternative way of perceiving things. For example, depression may not be a pleasant experience, but it is a way of purifying negative karma, according to the Buddhist concept of the law of cause and effect. Depression can also enrich our life experience and enable us to help those who are in a depressive

state. Through positive thinking, patients will be able to keep their mind in a state of calmness, and the suffering they experience from depression may be transformed into happiness.

2) Compassionate Thoughts toward Others: The thoughts and emotional states that depressed patients experience tend to be narcissistic in nature; that is, they are self-centered, self-cherished, and exclusive from outside reality. Self-obsession smothers consideration for the needs of others and withdraws patients into their own world. Therefore, one way to transform this narcissism is to switch the focus of attention to others by attending to others' experiences and needs and helping them to solve their problems. In Buddhism, bringing others happiness is called loving kindness, whereas alleviating suffering from others is called compassion. Encouraging the depressed to cultivate compassion and loving kindness may make them realize that there are people who are even more unfortunate than they and that they could be very valuable to those in need of help. Several techniques may be used to instruct depressed patients how to cultivate compassion, such as (1) including good wishes to others in their mind or daily prayer; (2) always returning merits of their wholesome conduct to others, especially those in pain; and (3) keeping a record that shows daily compassionate actions, including thoughts, conducted toward others.

3) Thinking from Others' Perspectives: Compassionate thoughts and actions can be deepened and expanded if one can think from the perspectives of those who are suffering. As the causes of depression are frequently rooted in interpersonal relationships, the development of an other-centered thinking style will help improve the relationships with others and stop one from pointing the finger of blame at others. Through the practice of thinking from others' perspectives, the depressed may eventually realize the cause of depression is in their own mind, and hence the cure is also embedded in their own mind.

- Behavioral Self-Regulation: Following the Buddhist tradition that emphasizes both cognitive understanding and physical practice in an effort to alleviate suffering, the Buddhist-informed Cognitive-Behavioral Therapy is also comprised of both aspects of cognitive control and transformation as well as behavioral restriction. To achieve the latter goal, the following two approaches are proposed.

1) Observing the Five Precepts: As described above in the concept of karma, everything that we experience in our life has its causes rooted in our own conduct. To prevent unwholesome karma from negatively affecting our life, we will need to actively

cultivate our mind and regulate our behavior. To Buddhists, observing the five precepts, or the rules of good conduct, is the fundamental practice for monitoring their behavior against offending others and producing unwholesome karma. The five precepts include no killing, no stealing, no sexual misconduct, no lying, and no use of intoxicants to maintain careful consciousness. The five precepts are considered five gifts which bring freedom from oppression to the one observing them and to limitless numbers of beings this person interacts with (Access to Insight, 2005). It should be noted that the rule of no intoxicants can be extended to no unrealistic negative thoughts as these thoughts also pollute the mind and prevent it from staying in the state of careful consciousness. Through observing the five precepts to control their behavior, depressed patients will not only be freed from their own mental oppression but also avoid unwholesome conduct triggering future recurrence.

2) Following the Noble Eightfold Path: The Noble Eightfold Path is an extension of the five precepts as the former encompasses the latter. The Noble Eightfold Path depicts eight steps in the path that will lead to liberation from the suffering of human beings. The path can be divided into three divisions of practice, including the ones to cultivate our morality, meditation, and wisdom.

Morality: Bearing the same principle and similar content as the five precepts, the following three steps of the Eightfold Path help us monitor our conduct and form a foundation for further progress to enlightenment.

- Right Speech: Right speech refers to saying what needs to be said and in a genuine way; that is, avoiding lying, slander, harsh speech, and idle talk. We should also actively say kind, compassionate, and helpful words to others to bring them happiness. As speech is a very powerful weapon that can easily hurt others, we have to exercise control over our faculty of speech.

- Right Action: Right action refers to the action that entails respect for others, respect for life, respect for property, respect for the environment, and respect for personal relationships. Right action prevents harms to other beings and everything in our living environment; it also prevents unwholesome karma from causing suffering to ourselves.

- Right Livelihood: Right livelihood refers to the right way of making a living in a society. Following the same

principle under right speech and right action, we ought not to earn a living in such a way that will bring harm to other beings, property, or our environment. There are five kinds of livelihood that are specifically discouraged for Buddhists, including trading in animals for slaughter, dealing in slaves, dealing in weapons, dealing in poisons, and dealing in intoxicants.

Meditation: The following two steps of the Eightfold Path have already been discussed above under the first two components of BCBT. Practicing the two enables one to become attentive and calm, advance one's mental development, and build a foundation for developing insight and wisdom.

- Right Mindfulness: Tight mindfulness refers to the right way of being aware of our thoughts, feelings, and actions at every moment in our daily life. Keeping mindful of everything we engage in will help reduce mistakes or accidents and increase our efficiency and productivity.

- Right Concentration: Right concentration refers to focusing the mind single-pointedly upon one thought or object at a time. When total single-pointedness of the mind upon a single object is achieved through concentration, the mind is totally absorbed in the object to the exclusion of all distractions, rumination, agitation, or drowsiness. Right concentration leads to mental and physical well-being, comfort, and tranquility. It also transforms the mind to be capable of perceiving things as they really are. This single-pointed concentration also builds the foundation for effectively practicing mindfulness.

Wisdom

- Right View: Right view refers to the right way to view the world; that is, seeing things simply as they really are, instead of as what they appear to be or are perceived or expected to be by the individual. The core Buddhist concepts described above, including the notions that everything is impermanent, every experience is pain (or suffering) in nature, everything has no self nature, and nothing ever happens to us without ourselves as a cause, are all right understanding of the world.

- Right Thought: Right thought refers to the thought produced by a pure mind; that is, thinking things without

desire, ill-will, and ignorance. Right view removes ignorance, whereas right thought removes desire and ill-will. The two practices therefore work to remove the cause of suffering and lead to enlightenment.

Overall: One of the eight steps, Right Effort, needs to accompany all the other steps. That is, when one practices the other seven steps of the Eightfold Path, one needs to apply right effort to each one of them so that the practice may be conducted fully and accurately.

- Right Effort: Right Effort is defined fourfold, including the effort to prevent unwholesome thoughts and actions from arising, the effort to eliminate unwholesome thoughts and actions that have arisen, the effort to cultivate wholesome thoughts and actions that have not yet arisen, and the effort to maintain wholesome thoughts and actions that have arisen. To every step of the Eightfold Path, this effort should always be applied. For example, for Right View, one needs to apply effort to cultivate and maintain all wholesome views while avoiding or ridding oneself of all unwholesome views.

Through observing the five precepts and practicing the eight steps of the Noble Eightfold Path in daily life, depressed patients will be engaged in moral conduct, stay in a calm and clear mind, and develop realistic and positive thoughts and ideas about their life. These qualities will ensure them a life free of depression.

There is no firm timetable proposed for the model. The implementation of each component mainly depends on the progress of each patient. Nonetheless, a sequential process with a rough timeline may be suggested as follows, assuming a total of 10 1-hour sessions:

- Begin the treatment with two sessions on the instruction and practice of concentration meditation;
- Follow by two sessions on the instruction and practice of mindfulness and mindfulness meditation;
- Use one session each to teach the four Buddhist concepts; in the meantime, introduce the three thinking techniques using examples that correspond with each concept;
- Use one session each to teach the two approaches to behavioral self-regulation.

Each of the treatment session should be followed by sitting meditation and mindfulness practice at home. A report, written or oral, should be required to be due at the next session about practicing experience and reflection on the learned concepts. The therapy may be conducted either in a group or individually.

Summary and Conclusion

The review of the literature shows an increasing prevalence of depressive disorders across the world. The treatment of the illness and the loss in the workforce and personal life as a result of this illness has become a substantial economic burden for humankind. A variety of treatment modalities has demonstrated that the illness is treatable, and the psychotherapy focusing on cognitive-behavioral changes or interpersonal relationship improvement is as effective as medication for at least those patients with a mild or moderate degree of severity. All the existing treatment approaches, however, still cannot effectively and completely prevent the illness from relapse or recurrence.

A cognitive-behavioral psychotherapeutic model based on Buddhist concepts and practices, named Buddhism-informed Cognitive-Behavioral Therapy (BCBT), is proposed. The model is designed based on several hypotheses: (1) a treatment of depression as symptom management is not enough; (2) an effort on transforming the patient's mind is necessary for preventing relapse or recurrence of depression; and (3) a few sessions of education and practice based on Buddhist teachings should be incorporated into psychotherapy for the purposes of inducing mental transformation and long-term treatment effect.

The proposed BCBT consists of the following components: (1) concentration meditation; (2) moment-to-moment mindfulness practice in daily life; (3) mental transformation – through the teaching of Buddhist concepts of the three characteristics of existence (impermanence, suffering, and selflessness) and the law of cause and effect, as well as using the techniques of positive thinking, compassionate thoughts towards others, and thinking from others' perspectives; (4) behavioral self-regulation – through observing the five precepts (no killing, no stealing, no sexual misconduct, no lying, and no intoxicants) and following the eight steps of the Noble Eightfold Path (right view, right thought, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration). As mindfulness has been proven effective in treating depression and is originated in Buddhism, it is also included in the BCBT model. Concentration meditation can help facilitate and enhance the practice of mindfulness. The introduction of both concentration meditation and mindfulness into the treatment course should be monitored closely. Literature has shown that if depression is too strong or involves traumatic experiences, meditation may be detrimental to the patient. Lack of mental transformation in patients is believed to be the major reason for relapse and recurrence. Many Buddhist concepts challenge and contradict ordinary beliefs and thoughts, and are therefore useful

for educating the depressed to perceive things differently. The four concepts included in the model are the core Buddhist teachings and are believed to be particularly helpful for treating the depressed mind. The proposed three techniques for changing thinking style and content are designed to accompany the teaching of the Buddhist concepts so that mental transformation may be strengthened. As the name of the model indicates, solely managing the cognitive domain is not enough for treating patients and developing a long-term treatment effect. Depressed patients also need to regulate their actions to both correct their past mistakes and prevent new mistakes from being produced again. Observing the five precepts will passively prevent wrongful actions, whereas practicing the eight steps of the Noble Eightfold Path will actively produce wholesome actions and thoughts. The behavioral component itself is also an application of the learned concepts in daily life. By understanding the Buddhist teachings and practicing them in daily life, depressed patients are expected to be mentally and behaviorally transformed.

The proposed model is subject to modifications after implementation and scientific examination. It is, however, proposed in the hope that by adding the component of Buddhist teachings to the traditional cognitive-behavioral therapies, the problem of relapse and recurrence in the treatment of depression can be eliminated and prevention of depression may be strengthened. Above all, BCBT is expected to help depressed patients live a depression-free life and enjoy psychological well-being.

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