Since the twilight of human civilization, human beings have wondered about one of the biggest issues “what makes a good life”. It is a subject of universal interest and utility, and the scientists who are engaged in the study of human behaviour believe that an indispensable ingredient of the good life is that the person himself likes his life. Because of prevailing stress in day-to-day life, the need for subjective well-being is being increasingly recognized nowadays, more so because of the hectic lifestyle and intense work pressure under which we live today, everyone seeks peace and harmony. Experts have also pointed out the inner conflicts that appear when old ways of life are replaced by new ones, and the individual, denied his habitual security and value bases, feels lost in a changing world (Johannisson, 2006). From time to time almost every person experiences such agitation, irritation, disharmony. Once upon a time, curative healthcare used to be the major focus of health professionals. Individuals too were only concerned about their health when something went wrong. Through the years, traditional psychology has focused on ways to help in making ill people better by finding clinically valid and empirically supported methods to help fix things that are wrong with them (Kauffman, 2006). Clinicians have a number of treatment options for dealing with the emotional ills of patients, including psycho-education, psychotherapy, and pharmacotherapy. The positive psychology movement has argued that it is necessary to consider well-being not only in terms of the absence of psychopathology, but also in terms of human strengths and potentials (Seligman & Csikzentmihalyi, 2000).

Recently psychologists have reached a consensus that research has seriously neglected the strengths of human behaviour (Taylor, 2001). Along with the growing attention devoted to well-being by psychologists in recent years, there has been a great deal of interest in the ability enhancement of individuals. Peterson and Park (2003) argue that psychology must pay as much attention to “fulfilling the lives of healthy people as to healing the wounds of the distressed”. Rightly so, the world has
enhanced its focus on promoting a healthy life for each and every individual and improving quality of life. As stated by Seligman (2010), there are two complementary strategies for improving the human condition. One is to relieve what is negative in life; the other is to strengthen what is positive. So, an understanding and enhancement of the individuals’ abilities, to improve their life is important. It is not only the basis of individual growth but it is infinitely more than that: it is the foundation of the growth of society as a whole. Having the ability to cope with difficult situations and being able to take decisions at the right time were considered important characteristics of mentally healthy individuals. Besides these, having a positive attitude towards life, being generous and happy were also signs of being mentally healthy (Maurya & Dixit, 2008). Kasser (2004) argues that although theorists differ in how they conceptualize and predict happiness and personal well-being, it is clear that variables such as life satisfaction, affective experience, good relationships, and feelings of meaning are among the momentous determinants. One of the branches of psychology, namely positive psychology, calls for as much focus on strength as on weakness, as much interest in building the best things in life as in mending the worst, and as much attention to fulfilling the lives of healthy people as to healing the wounds of the distressed (Seligman & Csikszentmihalyi, 2000). It is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions (Gable & Haidt, 2005). Positive psychologists seek “to find and nurture genius and talent”, and “to make normal life more fulfilling” (Compton, 2005). While there is no magic formula that will work in all situations, it is helpful to understand the abilities one has. If one understands these, his reactions will be wiser and it will be easier to create an environment that supports and nurtures well-being in individuals and communities. Positive psychologists do not claim to have invented the good life or to have ushered in its scientific study, but the value of the overarching term positive psychology is to unite what had been scattered and disparate lines of theory and research about what makes life worth living (Peterson & Park, 2003). So it can be said that the mission of positive psychology is to understand and foster the factors that allow individuals, communities, and societies to flourish (Seligman & Csikszentmihalyi, 2000). The ultimate goal of positive psychology is to make people happier by understanding and building positive emotions, gratification and meaning (Seligman, Parks, Steen, 2004). Furthermore, mindfulness has also been incorporated into positive psychology frameworks (e.g., Hamilton, Kitzman, & Guyotte, 2006) and the mounting evidence confirms the positive effects of these interventions on well-being. As cited by Hamilton et al., (2006) “Consistent with the positive psychology goal of promoting resilience, mindfulness includes goals such as enhancing well-being and awareness of the self and environment, along with disciplining the mind and emotions (Hanh, 1975; Levine, 2000). The principles and practice of mindfulness meditation also offer promise as an intervention that promotes positive psychology processes such as “flow” (Csikszentmihalyi, 1990), forgiveness (McCullough & Pargament, 2000), hope (Snyder, Rand, & Sigmon, 2002), and resilience (Masten, 2001)”.

Fries (2009) wrote three critical principles or beliefs that act as a foundation for the development of mindfulness and psychological well-being:

- One must come to the realization that “life is not fair”.
- One must face reality and deal with the truth, as it presents itself, in any situation.
- One is always free to choose one’s attitude no matter what the situation is.
Growing evidence suggests that, beyond making people feel good, the experience of positive emotions such as joy, happiness, and contentment holds numerous social, intellectual, and physical benefits for the individual (Fredrickson, 2001). Mindfulness refers to non-judgmental awareness of moment-to-moment experience. Through mindfulness practice, a person intentionally pays full attention to whatever is occurring at the present moment without judging it. Mindfulness practice cultivates concentration and insight, as well as physiological relaxation. Mindfulness is a skill, and like learning to play a musical instrument, is developed through repeated daily practice. An intended result of mindfulness practice is that a mental orientation of mindfulness will develop toward daily events, providing enhanced mental/emotional flexibility and clarity to deepening one’s enjoyment of life and making one more skilful in facing life’s challenges (Davis, Fleming, Bonus, Baker, 2007). By incorporating the basic factors of mindfulness of non-reactivity, observing, awareness and non-judging (Bear, Smith, Hopkins et al., 2006), one’s inner world can begin to change regardless of the external circumstances (Fries, 2009). Over the years, mindfulness has been accepted and successfully incorporated into many therapeutic interventions in both the medical and psychological fields. It has also become popular with psychotherapists using cognitive and behavioural therapies. One of the effective and widespread approaches where mindfulness is a key component is called mindfulness-based stress reduction (MBSR).

**Historical Background of MBSR**

Mindfulness-based Stress Reduction (MBSR) is a standardized meditation program developed by Jon Kabat-Zinn in 1979 at the University of Massachusetts Medical Center in Worcester, and formerly known as the stress reduction and relaxation program (SR-RP) (Kabat-Zinn, 1990). It was originally developed to relieve suffering among patient with chronic pain and to facilitate adaptation to medical illness that provides systematic training in mindfulness meditation as a self-regulation approach to stress reduction and emotion management (Kabat-Zinn, 1982). The mindfulness techniques used in MBSR derive from a Buddhist model of meditation with the objective to incorporate Buddhist mindfulness meditation with modern clinical and psychological practice (Kabat-Zinn, 1990, 2003b). The word “Mindfulness” is an English translation of Vipassana, which is a combination of two words Vi (in a special way) and Passanna (to see, to observe), thus implying, observing in a special way. So in this manner mindfulness refers to non-judgmental awareness of moment-to-moment experience and in the course of mindfulness practice, a person intentionally pays full attention to whatever is occurring in the present moment without judging it. In addition to Vipassana, Mindfulness meditation, also known as insight meditation, is not new but is an age-old form of meditation practices that derives from Theravada Buddhism (Gunaratna, 2002). It has been prevalent in India since ancient times as it was discovered by Gautama, the Buddha, more than 2,500 years ago at the time of His Supreme Enlightenment at Bodh Gaya (Ahir, 1999). Historically, mindfulness has been called “the heart” of Buddhist meditation (Thera, 1962), the Buddha taught it to his followers. Among his earliest teachings, he detailed the meditation instructions for mindfulness practice: the Anapanasati Sutra (Rosenberg, 1998) and the Satipatthana Sutra (Smith, 1999). The approach is rooted in the core Buddhist notion that all psychological sufferings are the result of the judgmental mind, dividing experiences into good and bad, which should be either strived for or avoided, inevitably leading to...
some level of frustration, distress, anxiety, and depression (Nyklíèek & Kuijpers, 2008). Although MBSR borrows from the instructions of Buddhist tradition and understanding for teaching and practicing mindfulness, it does not seek to be “Buddhist” or to convert anyone to that tradition so this program is viewed as non-religious and non-esoteric. MBSR is firmly rooted in principles of mind–body medicine, and offers itself to anyone who wishes to learn to enhance his or her own health (Kabat-Zinn, 1990). Grossman et al. (2004) cited the assumptions underlying this concept and approach as follows:

1. Humans are ordinarily largely unaware of their moment-to-moment experience, often operating in an “automatic pilot” mode;
2. they are capable of developing the ability to sustain attention to mental content;
3. development of this ability is gradual, progressive and requires regular practice;
4. moment-to moment awareness of experience will provide a richer and more vital sense of life, inasmuch as experience becomes more vivid and active mindful participation replaces unconscious reactivity;
5. such persistent, non-evaluative observation of mental content will gradually give rise to greater veridicality of perceptions; and
6. because more accurate perception of one’s own mental responses to external and internal stimuli is achieved, additional information is gathered that will enhance effective action in the world, and lead to a greater sense of control (Amawattana, Mandel, Ekstrand, 1994.; Brown, 1999; Bruckstein, 1999).

Kabat-Zinn, (2003a) described the two basic intentions behind the establishment of MBSR i.e. (1) the program intended to become an effective vehicle for relief of suffering, (2) MBSR was developed as a model approach that could be adapted in a variety of healthcare concerns in hospital and centres. Interest in MBSR has grown exponentially since its introduction and it has gradually gained recognition as an important means of teaching people how to live their lives fully (Speca, Carlson, Goodey, Angen, et al., 2000). The MBSR intervention is usually directed towards people with chronic physical and mental illnesses, but the aim of the interventions is not to replace medical treatment but to be used as a vital complement to it (Kabat-Zinn, 1990), to improve patients’ quality of life and to reduce psychological distress, which would ultimately improve clinical outcomes. In addition, it has been tried out on various nonclinical populations such as students, therapists, prison inmates and impoverished inner city dwellers (Grossman, Niemann, Schmidt, Walach, 2004). Recent years have witnessed an increasing trend to use MBSR program in different settings. There is no doubt to the fact that more and more people are relying on MBSR, as till 1998 an estimated 240 MBSR programs were established in North America and Europe. In a nutshell, it seems that this is the time when MBSR is considered to be an asset and new programs are being established each year (Kabat-Zinn, 1998). In the past few decades, rigorous scientific studies have demonstrated that meditation has a positive influence on the individual’s health, both mental and physical. The health promotion effects of MBSR appear to complement conventional biomedical treatment in a comprehensive, patient-centred approach for the healing and the alleviation of human suffering (Reibel, Greeson, Brainard, & Rosenzweig, 2001). MBSR, a popular form of mindfulness based intervention, is now widely used
with a range of mental health problems and can be adapted to various age groups including adult population as well as with children (Wall, 2005). The empirical basis of MBSR has been demonstrated through a number of studies that have resulted in a growing conviction amongst clinicians that MBSR is efficacious in diverse samples of patients and general population regarding a variety of psychological states, including reduction in mood disturbances (Brown, Ryan, 2003), general distress (Speca, Carlson, Goodey, Angen, 2000) worry, rumination, and anxiety (Jain, Shapiro, Swanick, 2007), pain (Kabat-Zinn, 1982), and improves sleep quality (Carlson, Garland, 2005), sense of well-being (Beddoe, Murphy, 2004) quality of life (Roth, Robbins, 2004).

Description of the MBSR Program

MBSR is a structural clinical program that has been reported as a psychological intervention/behavioural intervention/psycho-educational intervention by different experts in world literature. In short, it can be said that MBSR is an intensive structured training in mindfulness meditation that has proved its efficacy in different population in different parts of the world. Cohen-Katz et al, (2005) have described the procedure of MBSR program briefly in following lines: “The MBSR is taught as an 8-week program that meets approximately 2.5 hours a week and includes a 6-hour daylong retreat between the 6th and 7th weeks. Participants are asked to practice the mindfulness techniques 6 days a week as “homework” and given audiotapes to facilitate this. Group sessions include a combination of formal didactic instruction on topics such as communication skills, stress reactivity, and self-compassion and experiential exercises to help participants integrate these concepts. The program is described in detail in Kabat-Zinn’s textbook “Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain and Illness.” (Cohen-Katz et al, 2005). Participants commit themselves to spend at least 45 minutes daily, six days a week, conducting MBSR exercises during the training period. MBSR is a structured group program though there are examples where it was administered in individual settings (Weiss, Nordlie, Siegel, 2005; Nehra, 2011). MBSR utilizes stress-reduction skills including sitting meditation, hatha yoga, and a somatically focused technique called the body scan (Kabat-Zinn, 1982). Kabat-Zinn explains that the purpose of the 8-week programme is to teach participants how to ‘pay attention in a particular way: on purpose, in the present moment, and non-judgmentally’. By learning to cultivate present-moment awareness, practitioners are described as becoming more mindful of their thoughts, emotions, sensations and overall sense of self. The approach assumes that greater awareness will provide more veridical perception, reduce negative affect and improve vitality and coping (Grossman, Niemann, Schmidt, Walach, 2004). The MBSR program recommends using meditation, yoga, relaxation training as well as strategies to incorporate these practices into everyday life. A range of other mindfulness meditation techniques are taught: awareness of breathing, mindful walking, mindful eating, and mindful communication. In all of these practices, the participant is trained to pay full attention to present-moment experience, choosing to respond skilfully rather than react automatically to external events, thoughts, emotions, or sensations as they arise.

1. **Body scan**, MBSR’s most innovative technique is the body scan, which teaches patients to “re-establish contact with the body” through a “thorough and minute focus on the body” in a guided meditation in which patients lie supine and are verbally taken on a tour of the body,
focusing awareness sequentially on individual parts of the body. Patients become aware of where pain and stress are carried, where pain is centred—and where it doesn’t exist at all—as well as gaining a sense of how the body changes over time between scans (Kabat-Zinn, 1990). Body-Scan Meditation is the first formal mindfulness practice that patients engage in for a sustained period of time. It involves lying on your back and moving your mind through the different regions of your body. Transformation and change occurs by learning to be open and accepting whatever is present—good, bad, or neutral; to be intentional in the way we pay attention; to skilfully relate to difficulties, distractions, and the wanderings of the mind, and to be more compassionate and befriending of whatever arises.

2. **Sitting meditation**, “Sitting meditation” is called the heart of the formal meditation practice. Usually practice of the sitting meditation is done either on a chair or on the floor. In this technique, participants are instructed to sit in a relaxed, upright posture and to direct their full attention to the sensations of breathing. They are instructed to return their attention to the breath whenever it wanders (Jha, Krompinger, Baime, 2007). Further, participants are encouraged to observe their thoughts and emotions but to let them pass without judging them or becoming immersed in them (Praissman, 2008). This allows both positive and negative thoughts and emotions to pass quickly and can cultivate a greater awareness of the ways thoughts, feelings, and behaviours that affect emotional, mental, and physical health. This may also help reduce distracting or ruminative thoughts and assist practitioners in better noticing, understanding, and integrating their own perception of self and the environment (Jain, Shapiro, Swanick et al., 2007). After a period of systematic practice, participants begin to observe the impermanence of all thoughts. People start to notice that they can witness their own thoughts objectively without having to act on them. This is particularly helpful in working with impulse control when a craving arises. It is also possible to realize that the part observed is not in pain, confused, or damaged. This silent witnessing allows participants to see unanticipated possibilities in managing adversity. Transformation and change occur by learning to anchor awareness in the present moment and to live life in a curious interested way, instead of the usual “I like” or “I don’t like” mode.

3. **Mindful Hatha Yoga**: “Mindful Hatha Yoga” is the third major formal meditation technique along with body scan and sitting meditation. These exercises are the central part of the MBSR intervention. Gentle, often modified yoga stretches were practiced for approximately 30 minutes in each 90-minute session, with a focus on body awareness rather than form. The Hatha Yoga exercises are performed in a slow and mindful manner, keeping the mind focused on the parts of the body that are engaged in a particular exercise, and allowing the muscles that are not engaged to rest and relax (Vallejo & Amaro, 2009). The aim of the exercise is to notice the changing sensations, not necessarily to do the exercise perfectly. This attentive movement allows a discovery of the body’s ability to gradually surpass initial limits of stamina and flexibility (Vallejo & Amaro, 2009). It makes the body feel good; improves balance, flexibility of the joints and muscles; and relaxes stiff, tight muscles. Yoga also relieves stress, makes one more “mindful” and aware, helps improve concentration, and helps one feel more tranquil and calm.
In addition to the above mentioned formal techniques, there are some informal techniques (Mindful Walking; Mindful Eating etc.) that are also taught to the participants. The purpose is to make the participants to learn mindfulness skills that they will then put into practice in everyday life. So it can be said that MBSR is based on self-awareness notion and skills that are brought about by breath concentration in order to recover all living activities (Jam, Imani, Foroughi, Alinaghi, Koochak, Mohraz, 2010), which have demonstrated its applications to daily life (Biegel, Brown, Shapiro, Schubert, 2009). Together, this package of mindfulness practices (formal and informal) aims to enhance the ability to observe the immediate content of experience, specifically, the transient nature of thoughts, emotion, memories, mental images, and physical sensation (Goldin & Gross, 2010).

**Essential attitude for Mindfulness Practice**

Simply following the set of instructions mechanically is not enough to cultivate the healing power of mindfulness. But the attitude with which one undertakes the mindfulness practice is important, so Kabat-Zinn (1990) has written in his world famous book “Full Catastrophe Living Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness”, seven attitudinal foundations of mindfulness practice which are considered as pillars of mindfulness. These are:

1. **Non-Judging:** Almost everything we see is labelled and categorized by the mind as “good”/ “bad”/ “neutral”. The habit of mental categorization and judgment posits acts to restrain individuals’ growth via mechanical thoughts and behaviour that suspend the process of learning. Non-judging means to be an impartial witness to your own experience and, in the process, to notice the never-ending stream of evaluating and reacting to experiences that one engages in (Knowles, 2008). During meditation, people become aware of the fact that they are continuously immersed in an uninterrupted flow of thoughts that come regardless of our will to have them or not, one after the other, in very rapid succession. Through mindfulness practice, a person intentionally pays full attention to whatever is occurring at the present moment without judging it. This means not making a positive or negative evaluation of what is happening, just simply observing it, all that is needed is to watch what is happening…including how we habitually judge and react to our own experience. It requires that you become aware of the stream of judging and reacting to inner and outer experiences and step back from it.

2. **Patience:** One of mind’s favourite activities is to wander into the past and into the future and lose itself in thinking. Patience is the knowledge that things unfold in their own time. Practicing mindfulness gives one the chance to give time and space to one’s own unfolding. From this peace, one becomes more able to re-evaluate one’s relationship with the disturbance.

3. **Beginner’s Mind:** Too often we let our thinking and our beliefs about what we “know” prevent us from seeing things as they really are. Practicing mindfulness means to take the chance to see everything as if it was for the first time and not allow our illusion of knowing prevent us from being aware of the present experiences as no moment is the same as any other moment, a beginner’s mind helps one to stay alert to the unique possibilities that each moment presents.
4. **Trust:** Anybody who is imitating somebody else, no matter who it is, is heading in the wrong direction. Having trust in yourself, your intuition, and your abilities is the hallmarks of mindfulness practice. Trust means that you learn how to honour your own feelings rather than to distrust or suppress them. With this attitude, comes the knowledge of practicing progress toward one’s desired goals, as opposed to rigidity or perfection.

5. **Non-Striving:** “Almost everything we do, we do for a purpose, to get something or somewhere.” Actually this attitude can be a real obstacle in meditation. Although meditation takes a lot of work and energy, ultimately it is about non-doing. Mindfulness practice is a chance to try a profoundly different approach. It has no goal other than meditation itself. Non-Striving is the state of not doing anything, just simply accepting that things are happening in the moment just as they are supposed to.

6. **Acceptance:** In the course of our daily lives we often waste a lot of energy denying and resisting what is already a fact. This actually prevents positive change from occurring. Acceptance means completely accepting the thoughts, feelings, sensations, and beliefs that you have, and understanding that they are simply those things only. Acceptance is not a passive response to the conditions you encounter but a willingness to see things as they actually are, in that moment, not as you wish or expect them to be. Acceptance does not imply that you like the way things are. In Mindfulness practice, we cultivate acceptance by taking each moment and each aspect of our experience just as they come, focussing on the present and being receptive to the flow of all that comes to us and passes on. Denying and resisting uses up our energy in the struggle instead of using it for healing and change.

7. **Letting Go:** When we pay attention to our inner experience, we discover that there are certain thoughts, feelings and situations that the mind seems to want to hold on to. In mindfulness practice we just keep on acknowledging whatever arises, then letting it pass on when it will, making space for the next moment and the next experience. Letting go occurs when you neither try to hold on to nor to reject your experience. Let a thought or feeling come in and pass without connecting it to anything, observing them exactly as they are and allowing them to come and go.

In addition to above mentioned attitudinal foundations of mindfulness practice Alidina (2010) has also cited Kindness and Curiosity as other vital attitudinal foundations of mindfulness.

8. **Kindness:** Kindness is one of the most important of all attitudes one can bring to mindfulness practice. Mindfulness teaches and utilises non-judgemental observing of the arising and emergence of thoughts and feelings and also focuses on (re)directing attention, with a focus on trying to generate feelings of warmth, gentleness and kindness (Gilbert, 2000; Gilbert & Irons, 2005). Kindness involves understanding one’s difficulties and being kind and warm in the face of failure or setbacks rather than harshly judgemental and self-critical (Gilbert & Tirch, 2009). By bringing a sense of friendliness or kindness to experience, the experience, whether it’s pleasant, unpleasant or neutral, transforms (Alidina, 2010).

9. **Curiosity:** Curiosity is the basis of all true learning (Alidina, 2010). Segal et al. (2002) note that “in mindfulness practice, the focus of a person’s attention is opened to admit whatever enters experience, while at the same time, a stance of kindly curiosity allows the person to
investigate whatever appears, without falling prey to automatic judgments or reactivity” (p. 322–323). Applying curiosity to oneself requires courage, because seeing the world as it is means not seeing the world as one would like it to be. This tolerance of internal or external stimuli is described in many eastern languages as a general curiosity or openness, an “affectionate, compassionate quality within the attending person, a sense of openhearted, friendly presence and interest” (Kabat-Zinn, 2003). In this way a curious person is fully connected with one’s senses (Alidina, 2010) and to be connected with senses (present moments) are the basis of cultivating mindfulness.

Here is an important point to understand that above mentioned attitudes should not be seen as a separate quality, to be developed linearly, one at a time. In fact, one should consider them as fundamental of an interdependent whole.

![Figure 1. The tree of mindfulness.](image)

Reproduced with due acknowledge from: Mindfulness For Dummies by Shamash Alidina (2010).

**What Makes Mindfulness so Effective?**

The actual mechanism underlying the helpfulness of MBSR for a broad range of disorders is not well understood. However, in an attempt to understand how mindfulness meditation might be therapeutic,
researchers have examined its effect on a variety of clinical and non-clinical population and several explanations have been proposed to explain the processes by which mindfulness-based interventions put forth physical, psychological, and emotional effects. Some of the possible mechanisms which are proposed in world literature are *metacognitive awareness* (Teasdale et al. 2002), *decentering* (Fresco et al. 2007), *reperceiving* (Shapiro et al. 2006), and *decreased rumination* (Deyo et al. 2009). More recently Garland et al. (2009) have developed a mindful coping model that depicts how mindfulness creates positive result. The model suggests that to reconstrue an appraisal of a given event as positive, one must first disengage and withdraw from the initial, negative appraisal into a transitory metacognitive state that attenuates semantic evaluations associated with the event (Garland, Gaylord, Fredrickson, 2011).

Although a full review of the entire literature is beyond the scope of this article, a brief summary may be helpful in interpreting the possible mechanisms behind the usefulness of the Mindfulness based interventions. Baer (2003) and Ludwig and Kabat-Zinn (2008) did superb reviews of the literature on the use of mindfulness as a clinical intervention and a description of the applications of mindfulness to mental health problems is as follows:

Baer (2003) has reviewed several mechanisms that may explain how mindfulness skills can lead to stress reduction, behaviour and cognitive change.

1. *Exposure:* Through mindfulness practice, a person intentionally pays full attention to whatever is occurring in the present moment without judging it. So, MBSR teaches patients to change their relationship with thoughts and feelings by developing an objective, compassionate, and inquisitive approach to thoughts and feelings. This shift in perspective can lead to enhancement of self-regulation, cognitive and emotional flexibility, and decreased experiential avoidance (Ong, Shapiro, Manber, 2008). Kabat-Zinn, et al. (1992) described the mechanism for the potential effects of mindfulness training on anxiety and panic. Sustained, nonjudgmental observation of anxiety-related sensations, without attempts to escape or avoid them, may lead to re-educations in the emotional reactivity typically elicited by anxiety symptoms. Participants are instructed to observe these sensations non-judgmentally when they naturally arise. Thus, the practice of mindfulness skills may improve patients’ ability to tolerate negative emotional states and to cope with them effectively.

2. *Cognitive Change:* Mindfulness actually may lead to changes in thought patterns and the attitude of one’s thoughts: cognitive change. Kabat-Zinn (1990) suggests that this occurs through the practice of nonjudgmental thinking as well as the understanding that thoughts are not necessarily the reality or the truth.

3. *Self-Management:* Mindfulness practice, sitting and attending to one’s thought is in itself a self-management intervention. Again, the first stage in change is self-awareness of a problem or pattern. By sitting and using focused awareness on what’s happening at the moment the urges emerge; the triggers and stressors may also come into awareness and facilitate more active problem solving (Hooker & Fodor, 2008). Further, Mindfulness increases awareness which allows individuals to respond to the situation at hand, instead of automatically reacting to it on the basis of past experiences (Proulx, 2003).
4. **Relaxation**: Meditation often induces relaxation, which may contribute to the management of stress-related medical disorders (Kabat-Zinn & Chapman-Waldrop, 1988). Here, it is very important to understand that relaxation associated with mindfulness meditation is contrasted with behavioral relaxation techniques in that the goal of mindfulness meditation is not to induce relaxation of the body but rather to cultivate awareness and stay present with whatever thoughts or body sensation arise in the moment (Kabat-Zinn 1990). Moreover, a randomized controlled trial showed that while both mindfulness practice and relaxation training reduced distress and produced positive mood states, only mindfulness practice led to significant decreases in ruminative thoughts which partially mediated its therapeutic effect on distress (Jain et al., 2007).

5. **Acceptance**: Acceptance, the tendency to tolerate, or even approach, unwanted internal experiences rather than avoid them. It involves “experiencing events fully and without defense as they are” which include acceptance of pain, thoughts, feelings, urges, or other bodily, cognitive, and emotional phenomena, without trying to change, escape, or avoid them (Hayes, 1994). This can help an individual to accept reality and the present situation without reacting impulsively and engaging in maladaptive behaviors, in an attempt to alter the situation such as taking alcohol at times of anxiety arousing situations. In working with medical and clinical populations, mindfulness training includes an acceptance of pain, worries, thoughts, and emotions without trying to escape, avoid, or change them. By being willing to stay with the pain and negative emotions, researchers suggest, individuals may benefit through a greater sense of self-acceptance (Baer, 2003).

In addition to above mentioned mechanisms Ludwig & Kabat-Zinn (2008) have also suggested many ways that mindfulness might influence susceptibility to, or ability to recover from, disability and disease. These may include (1) decreased perception of pain severity; (2) increased ability to tolerate pain or disability; (3) reduced stress, anxiety, or depression; (4) diminished usage of, and thereby reduced adverse effects from analgesic, anxiolytic, or antidepressant medication; (5) enhanced ability to reflect on choices regarding medical treatments (e.g., decision to seek a second opinion); (6) improved adherence to medical treatments; (7) increased motivation for lifestyle changes involving diet, physical activity, smoking cessation, or other behaviors; (8) enriched interpersonal relationships and social connectedness; and (9) alterations in biological pathways affecting health, such as the autonomic nervous system, neuroendocrine function, and the immune system.

**Neurobiological Correlates of MBSR**

Over the past decade, a growing body of evidence in the field of meditation-based interventions has emerged to provide evidence-based answers and to guide practitioners. The need for a biological perspective is self-evident that is the reason it is always a goal for any clinical investigator to identify neuro-biological changes after following a treatment. During most of the 20th century, the general consensus among neuroscientists was that brain structure is relatively permanent after a critical period during early childhood. This belief has been challenged by new findings, revealing that many aspects of the brain remain plastic even into adulthood (Rakic, 2002). Although the rate of change and development is especially prominent early life, altering the structure of the brain in response to
environmental factors remains a feature across the entire life (Higgins & Georage, 2007). Alidina (2010) claimed that mindfulness meditation does change the brain, and the more one practises, the greater the positive change within his brain. He cited two research examples to support his claim, in
the first he cited the study in which subjects were engaged in prolonged meditation for a minimum of 10,000 hours (not all in one go!) and in other research example the sample were engaged in short-term mindfulness meditation only. Alidina (2010) cited that Professor Richard Davidson scanned the brains of meditating monks who’d engaged in prolonged meditation. The monks’ brains totally changed through the practice of this meditation. The front left part of the brain (left prefrontal cortex if you’re really curious) associated with positivity was activated – in fact, it went off the scale! No scientist had ever seen so much positive effect in a human being before. The scientists found that the monks’ entire brains had been rewired to be more positive (Alidina, 2010). In the other study Alidina (2010) cited that scientists have also looked at short-term mindfulness meditation. People were randomly assigned to two groups. One group trained in cognitive behavioural therapy to show them how to see challenges in their lives with greater positivity. The other group was trained in metta (mindful loving kindness) meditation. Some of those in the metta group had greater activation in the brain region signifying positivity and also reported greater love for themselves, compared to the cognitive behavioural therapy group. Helpful changes did indeed happen within a fortnight of practice (Alidina, 2010). The arrivals of neuroimaging techniques make it possible to investigate the neurobiological consequences of psychological treatment. Such investigation is highly important, as a better understanding of the brain mechanisms underlying therapy can promote improvements in the therapeutic interventions as well as increase knowledge on the formation and maintenance of symptoms. Neuroimaging techniques such as positron emission tomography (PET) and functional magnetic resonance imaging (fMRI) provide the means to study the meditation related changes in humans. PET and fMRI assessments measure tonic and/or discrete event-related metabolic activity as varying within distinct regions of the brain across time, such as indexed by glucose metabolic rate (PET) or blood oxygenation of vessels within surrounding neural tissue (fMRI); such metabolic activity is understood to indirectly assess neural activity as neural firing regionally impacts glucose and oxygen metabolism. Such neuroimaging studies have identified specific brain structures active during meditation. Their findings show increased regional blood flow to the anterior cingulate cortex and dorsolateral prefrontal cortex during meditation (Cahn & Polich, 2006). Concerning meditation onset, some fMRI studies have employed short periods of meditation (∼1 min) that displayed increased activity of different frontal cortical areas including lateral prefrontal cortex (Farb et al. 2007), and increased involvement in viscerosomatic areas, including insula, secondary somatosensory and inferior parietal regions. Imaging studies have also shown increased gray matter, particularly in the prefrontal cortex, the right anterior insula, and the putamen, areas associated with attention, interoception, and sensory processing, with differences correlating with meditation experience, suggesting neural plasticity with meditation (Lazar, Kerr, Wasserman, et al., 2005; Pagnoni & Cekic, 2007). In addition to the functional neuroimaging studies mentioned earlier, a handful of studies have recently investigated the influence of meditation on brain anatomy by using methods such as voxel-based morphometry MRI (Ho’lzel et al. 2007). One of these studies (Ho’lzel et al. 2007) found an increased size of the right anterior insula in a meditation group compared to controls. They also both revealed increases in
structures of the left temporal cortex although not in the same exact structures. Mindfulness-based interventions have led to changes in brain electrical activity (Davidson, Kabat-Zinn, Schumacher, et al., 2003) (increased left-sided anterior activation), affective and cognitive changes (Chambers, & Allen, 2008; Arch & Craske, 2006; Ortner, Kilner, Zelazo, 2007). Goldin and Gross (2010) examined MBSR-related changes in the brain–behaviour indices of emotional reactivity and regulation of negative self-beliefs in patients with social anxiety disorder. Sixteen patients underwent functional MRI while reacting to negative self-beliefs and while regulating negative emotions using 2 types of attention deployment emotion regulation—breath-focused attention and distraction-focused attention. Post-MBSR, 14 patients completed neuroimaging assessments. Compared with baseline, MBSR completers showed improvement in anxiety and depression symptoms and self-esteem. During the breath-focused attention task (but not the distraction-focused attention task), they also showed (a) decreased negative emotion experience, (b) reduced amygdala activity, and (c) increased activity in brain regions implicated in attentional deployment.

A number of electroencephalogram (EEG) studies have also shown changes in EEG patterns and regional cerebral blood flow with meditation. Overall, these studies show theta, alpha, and gamma activation along with increased EEG coherence involving predominantly the anterior cingulated and frontal lobes in experienced meditators (Cahn, & Polich, 2006). In a more recent study, immediately after the training period and 4 months later, EEG monitoring of participants revealed that meditators showed increases in left-sided anterior brain activation, which has been repeatedly linked to greater positive, approach related emotions (Davidson, 2000; Davidson, Kabat-Zinn, Schumacher, et al., 2003).

It is a well known fact that emotional distress activates neuroendocrine stress response systems and increases stress hormone secretion (Chrousos, 2000). Stress hormones are well-known to alter immune function (Sanders & Kavelaars, 2007). In addition to the above mentioned positive changes, the practice of mindfulness meditation may have positive effects on the hypothalamic-pituitary-adrenal axis, and on various hormonal and immunological systems (O’Loughlin, & Zuckerman, 2008). In a 1995 study, Massion and colleagues (Massion, Hebert, Wertheimer, et al., 1995) tested the hypothesis that regular practice of mindfulness meditation is associated with increased physiological levels of the pineal hormone melatonin, which may be related to a variety of biological functions important in maintaining health and preventing disease. Solberg, Halvorsen, Sundgot-Borgen, et al., (1995) found that meditation may modify the suppressive influence of strenuous physical stress on the immune system in male athletes. Meditators also showed a more robust and effective immune response to an influenza vaccine administered at the end of the training period (Easterlin & Carden’a, 1998). In addition, the practice of meditation has been associated with enhanced immune response in healthy adults also (Rosenzweig, Reibel, Greeson, et al., 2003).

Groundbreaking research during the last decades by researchers such as Professor Richard Davidson has provided us with a better understanding of neurobiological mechanisms of meditation. On the basis of an extensive corpus of both animal and human data, Davidson and colleagues recently suggested (Davidson, Jackson, Kalin, 2000) that prefrontal activation asymmetries are plastic and could be shaped by training. The findings from their study are the first to suggest that meditation can
produce increases in relative left-sided anterior activation that are associated with reductions in anxiety and negative affect and increases in positive affect (Davidson, Kabat-Zinn, Schumacher, et al., 2003). So it can be said that the literature on neurobiological mechanism of MBSR is now beginning to emerge and biological methods are expected to answer other related important questions in the near future.

Effectiveness of MBSR in Healthy Population

A growing body of evidence demonstrates that MBSR produces reduction in stress and improves health in a variety of clinical populations by alleviating suffering associated with it. The approach assumes that greater awareness will provide more veridical perception, reduce negative affect and improve vitality and coping. In the last two decades, a number of research reports appeared that seem to support many of these claims. A smaller body of evidence suggests that these programs are also effective for nonclinical populations at risk of stress-related health problems. Recent meta-analysis literature on treatment outcomes of MBSR for a wide range of clinical populations (physical, psychosomatic and psychiatric disorders) and nonclinical populations (nurses, caregivers, students, medical professionals as well as HIV at-risk youth) is also accessible. It is a well accepted fact that MBSR has shown consistent efficacy for many mental and physical disorders but less attention has been given to the possible benefits that it may have in healthy subjects. By changing their perception of distressing events, MBSR helps people and gives them a better control over their life. So in the light of the fact that a plenty of literature is easily available regarding the efficacy of MBSR with clinical population, here we are providing an empirical status of MBSR in non-clinical population or healthy population.

Human immunodeficiency virus is a very distressing disease of present time and method to prevent it ferom spreading at high risk population has also been identified. Sibinga, Kerrigan, Stewart, Johnson, Magyari and Ellen (2011), conducted a study with the objectives of assessing potential effect of a MBSR program in urban youth (human immunodeficiency virus–infected and at-risk). Quantitative data shows that by following the MBSR program, participants had a significant reduction in hostility, general discomfort, and emotional discomfort. Qualitative data shows perceived improvements in interpersonal relationships (including less conflict), school achievement, physical health, and reduced stress. They further suggested that MBSR instruction for urban youth might have a positive effect in domains related to hostility, interpersonal relationships, school achievement, and physical health.

Given the demands of caring for chronically ill children, it is not surprising that caregivers often experience high levels of chronic stress. MBSR program may offer relief to these caregivers by providing tools for self-care and heath promotion that otherwise may be lacking. Minor, Carlson, Mackenzie, Jones (2006) conducted a study on forty-four caregivers who participated in one of the seven group MBSR sessions, most of them were mothers of children with special needs and various chronic conditions, who had been diagnosed an average of 7 years previous. Prior to the intervention, caregivers reported very high levels of stress and mood disturbance. These decreased substantially over the 8-week program, with an overall reduction in stress symptoms by 32%, and in total mood
disturbance by 56%. The brief MBSR program for caregivers of chronically ill children was successful in significantly decreasing substantial stress symptoms and mood disturbance.

Demands faced by healthcare professionals include heavy caseloads, limited control over the work environment, long hours, as well as organizational structures and systems in transition. Such conditions have been directly linked to increased stress and symptoms of burnout, which in turn, have adverse consequences for clinicians and the quality of care that is provided to patients. Consequently, there exists an impetus for the development of curriculum aimed at fostering wellness and the necessary self-care skills for clinicians. Irving, Dobkin, Park (2009), reviewed empirical studies to examine the potential benefits of MBSR programs aimed at enhancing well-being and coping with stress in this population. They found that empirical evidence indicates that participation in MBSR yields benefits for clinicians in the domains of physical and mental health. Mackenzie, Poulin, Seidman-Carlson (2006), conducted a study that involved the development and evaluation of a brief 4-week mindfulness intervention for one such group—nurses and nurse aides. In comparison with 14 wait-list control participants, 16 participants in the mindfulness intervention experienced significant improvements in burnout symptoms, relaxation, and life satisfaction. The results of their pilot study, together with a natural fit between mindfulness philosophy and nursing practice theory, suggest that mindfulness training is a promising method for helping those in the nursing profession in managing stress, even when provided in a brief format.

Research has found that therapists are at risk of occupationally related psychological problems. It follows that self-care may be a useful complement to the professional training of future therapists. Shapiro, Brown, Biegel (2007) conducted a study to examine the effects of one approach to self-care, Mindfulness-Based Stress Reduction (MBSR), for therapists in training. Using a prospective, cohort-controlled design, the study found participants in the MBSR program reported significant declines in stress, negative affect, rumination, state and trait anxiety, and significant increases in positive affect and self-compassion. Further, MBSR participation was associated with increases in mindfulness, and this enhancement was related to several of the beneficial effects of MBSR participation. In addition to above mentioned studies, a semi-experimental study by Martín-Asuero & García-Banda in 2010 also examined how Mindfulness facilitates a distress reduction in a group of health professionals. The sample comprises 29 professionals (of whom 83% were women, 76% were healthcare professionals (doctors, nurses, and psychologists), and the other 24% were educational professionals or service industry employees.) seeking stress reduction who undertook an 8 weeks psycho-educative intervention, involving 28 hours of class, based on a program called Mindfulness-based Stress Reduction or MBSR. Results show a 35% reduction of distress, from percentile 75 to 45, combined with a 30% reduction in rumination and a 20% decrease in negative effect. These benefits lasted during the 3 months of the follow up period. The correlation analysis indicates that the decrease in distress is significantly related to the other two variables (Martín-Asuero & García-Banda, 2010).

Medical students confront significant academic, psychosocial, and existential stressors throughout their training. Mindfulness-based stress reduction (MBSR) is an educational intervention designed to improve coping skills and reduce emotional distress. Rosenzweig, Reibel, Greeson, Brainard, Hojat (2003), conducted a study with the purpose of examining the effectiveness of the MBSR intervention
in a prospective, nonrandomized, cohort-controlled study. Second-year students (n = 140) elected to participate in a 10-week MBSR seminar. Controls (n = 162) participated in a didactic seminar on complementary medicine. Profile of Mood States (POMS) was administered preintervention and postintervention. Baseline total mood disturbance (TMD) was greater in the MBSR group compared with controls. Despite this initial difference, the MBSR group scored significantly lower in TMD at the completion of the intervention period. Significant effects were also observed on Tension–Anxiety, Confusion–Bewilderment, Fatigue–Inertia, and Vigor–Activity subscales. In the end authors concluded that MBSR may be an effective stress management intervention for medical students. Soons, Brouwers, Tomic (2010) conducted a study with the aim of investigated the effects of participation in a MBSR program on symptoms of stress, social anxiety, self-acceptance, emotional empathy, personal growth, and self-transcendence in highly sensitive persons (HSPs). They concluded that MBSR program has the capacity to help HSPs to deal with stress and social anxiety, as well as to develop their assumed greater capabilities for empathy, personal growth, and self-transcendence. MBSR could offer a meaningful supplement to therapies for HSPs. One pilot study tested the feasibility of using MBSR with minor modifications as a smoking intervention. MBSR instructors provided instructions in mindfulness in eight weekly group sessions and subjects attempted smoking cessation during week seven without pharmacotherapy. Smoking abstinence was tested six weeks after the smoking quit day with carbon monoxide breath test and 7-day smoking calendars. The results of this study suggest that mindfulness training may show promise for smoking cessation and warrants additional study in a larger comparative trial (Davis, Fleming, Bonus, and Baker, 2007). Grossman, Niemann, Schmidt, Walach in 2004, performed a comprehensive review and meta-analysis of published and unpublished studies of health-related studies related to MBSR. Acceptable studies covered a wide spectrum of clinical populations (e.g., pain, cancer, heart disease, depression, and anxiety), as well as stressed nonclinical groups. They concluded that although derived from a relatively small number of studies, these results suggest that MBSR may help a broad range of individuals to cope with their clinical and nonclinical problems. Chiesa & Serretti (2009) presented a review and meta-analysis with the aim to better investigate current evidence about the efficacy of MBSR in healthy subjects, with a particular focus on its benefits for stress reduction. They found that MBSR showed a nonspecific effect on stress reduction in comparison to an inactive control, both in reducing stress and in enhancing spirituality values, and a possible specific effect compared to an intervention designed to be structurally equivalent to the meditation program. A direct comparison study between MBSR and standard relaxation training found that both treatments were equally able to reduce stress. Furthermore, MBSR was found to be able to reduce ruminative thinking and trait anxiety, as well as to increase empathy and self-compassion. In the end they concluded that MBSR is able to reduce stress levels in healthy people.

These results confirm the effectiveness of MBSR to decrease distress and its applicability in training programs for health professionals. However, important limitations of the included studies as well as the paucity of evidence about possible specific effects of MBSR in comparison to other nonspecific treatments underline the necessity of further research. Discussion highlights the potential for future research addressing the mental health needs of therapists and therapist trainees.
Is there Really a Need for MBSR?

The human race has progressed with passing ages, but not without a cost. Each era of development has seen man being burdened with stresses and traumas, and consequently their repercussions. Stress is an unavoidable part of life as grief, pain, disappointment, heartache, heartbreak, trials, and tribulations often occur in lives. Exposure to a variety of traumatic stressors has become almost a daily affair for majority of the population; the psychological impact of such a situation is likely to be experienced in several ways. Individuals may suffer from various psychiatric ailments and physical illnesses. The consequences of chronic disorder are wide-ranging, often long-lasting, and sometimes profound. They fall not only upon the people with the disorder but also upon their families and - to a much lesser degree - upon the wider society. A caregiver can be a father, mother, spouse, child, grandchild or anyone who has a responsibility for caring for someone with a chronic illness or disability. In addition to taking on the household chores, shopping, transportation, and personal care caregivers have to involve in giving medications, injections, and medical treatments to the person for whom they are providing care. Burden is chiefly felt in four principal areas; financial burden, disruption of family routine, disruption of family leisure and family interactions. Psychological impact of caregiver’s burden gives rise to a number of stress related reactions and some psychiatric disorders at the individual level. Sometimes life can seem terribly painful and unfair, yet somehow one manage to struggle on, day after day, hoping and praying that things will soon get better. But-day-by-day the world is becoming a crazier and more uncertain place to live in, not to mention stressful. Millions of people are in record levels of debt. Many are losing their jobs, their homes, their health and sometimes even their sanity. When people reach out for help, they are often dealing with circumstances, situations, and stressors in their lives that leave them feeling emotionally and physically overwhelmed. Many people feel that they have very little resources or skills to deal with the high levels of stress they are experiencing under constant deadlines or have too much to handle. Multiple stress factors visiting all at once may disrupt the balance of health and the body’s ability to maintain wellness. Stress is not something to be avoided as it is a part of life and human existence. The pioneer in stress research Selye reported that “Complete freedom from stress is death” (Selye, 1974). In short it can be said that modern life is full of hassles, deadlines, frustrations, and demands and it affects everyone, even children. A renowned clinical psychologist Siegel stated that “as a clinical psychologist, I’ve had a window into the lives of many other people, and they all find life to be difficult. Of course, my patients might be an unusual lot. After all, aren’t people with problems the ones that seek psychotherapy? While there is some truth to this, I suspect that most of them are actually in no more distress than people who are not in therapy—they’re just more motivated and able to do something about it. On top of this, every friend, colleague, and family member that I’ve ever known well— whether or not they’ve been in therapy—seems to find life emotionally challenging too” (Siegel, 2010). Irony is that even mental health professionals who help patients to get rid of stress are also burdened with stress. Although healthy nonclinical populations have received relatively little attention in the literature, the potential detriment of hectic life style for mental health professional has been raised recently. Over the last few decades, a growing body of evidence has suggested that mental health professionals and nurses (McVicar, 2003), caring for those who are emotionally
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stressed or distressed is often itself stressful. Therapists commonly experience “compassion fatigue” (Weiss, 2004), due to the emotional labour that is often a part of therapeutic work (Mann, 2004). It is the chronic or long term stress response that can be dangerous to one’s health (Beatty, 2001). The easiest way to relieve stress is by mindful meditation. The approach is rooted in the core Buddhist notion that all psychological sufferings are the result of the judgmental mind, dividing experiences into good and bad, which should be either strived for or avoided, inevitably leading to some level of frustration, distress, anxiety, and depression (Nykliëek & Kuijpers, 2008). An intended result of mindfulness practice is that a mental orientation of mindfulness will develop toward daily events providing enhanced mental/emotional flexibility and clarity to deepening one’s enjoyment of life and making one more adept in facing life’s challenges (Davis, Fleming, Bonus, Baker, 2007). Mindfulness practice cultivates concentration, insight as well as physiologic relaxation. Therefore, mindfulness training may allow for reductions in stress even when changes in the organizational environment are impossible or not practical (Hayes, et al, 2006). Mindfulness-Based Stress Reduction (MBSR) has gradually gained recognition as an important means of teaching people how to live their lives fully whether they are patients with chronic illness (Speca, Carlson, Goodey, Angen, 2000), health professionals (Shapiro, Astin, Bishop, Cordova, 2005), community members dealing with the stressors inherent in life (Davidson, Kabat-Zinn, Schumacher, et al., 2003), students (Astin, 1997), prisoners, or priests (Dobkin, 2008). Mindfulness meditation elicits more positive emotions, (Siegel, 2007), and optimism has been found positively correlated with physical health, effective coping strategies, successful recovery from diseases, and longevity (Scheier & Carver, 1985, 2001). Both theoretical and empirical works indicate that positive emotions promote flexibility in thinking and problem solving (Fredrickson & Branigan, 2005), counteract the physiological effects of negative emotions (Ong & Allaire, 2005), facilitate adaptive coping (Folkman & Moskowitz, 2004), build enduring social resources (Fredrickson & Branigan, 2001), and spark upward spirals of enhanced well-being (Fredrickson & Joiner, 2002).

Beneficial effects have been reported in diverse samples of patients and general population regarding a variety of psychological states, including symptoms of general distress (Speca, Carlson, Goodey, Angen, 2000), worry, rumination, and anxiety (Jain, Shapiro, Swanick, et al., 2007), depressive symptoms (Speca, Carlson, Goodey, Angen, 2000), sleep quality (Carlson, Garland, 2005), pain (Kabat-Zinn, 1982), and quality of life (Roth, Robbins, 2004).

What the Future may Hold for MBSR?

Mindfulness has its modern origins in the late 1970s with the work of Jon Kabat-Zinn, who introduced MBSR to the psychological field. By the late 1990s, over 240 hospitals in the United States and Europe offered MBSR programs (Salmon, Santorelli, & Kabat-Zinn, 1998). This great emergence of MBSR within a comparative short span of time could be attributed to several important reasons. First, there is substantial evidence supporting the efficacy of MBSR in reducing anxiety, depression, and somatization while enhancing participants’ overall sense of well-being (Astin, 1997). Second, MBSR has profound relevance for our present-day lives as it teaches a broad skill set of formal and informal techniques that can be readily applied within the course of a typical workday (Rosenzweig, Reibel, Greeson, et al., 2003). Third, although MBSR is based on the teaching of Buddhism yet this
program is not spiritually based, it has nothing to do with Buddhism per se or with becoming a
Buddhist, but it has everything to do with waking up and living in harmony with oneself and with the
world. Fourth, MBSR is practiced by those old and young, sick and healthy, professional and monks
alike and is therefore, open to everyone no matter what life circumstances they are in; fifth, the other
distinctive characteristic of Mindfulness is that it can be practised at anytime and anywhere. At any
moment a person can pause and institute mindful awareness of whatever one is doing, saying or
thinking. Be it a thought, a mental state or a physical action, one or other of these states could be
observed at any moment.

The numbers of patients with chronic disease are increasing (Rosamond, Flegal, Furie et al.,
2008) and psychosocial factors are now recognized as playing a significant and independent role in
the development of physical disorders and its complications. Although, these psychosocial factors
appear to be outside the immediate realm of medicine, they have a profound impact on the patient’s
quality of life, symptoms severity, disability level (Saravay, 1996), and survival (Krumholz. Butler,
Miller et al., 1998). Co-existence of physical and psychiatric disorders makes the situation more
dreadful. As a result, there has been a great deal of interest in potential treatments of these factors in
chronic disease patients, with the hope that successful mental health treatment may also have a
favourable effect on physical health outcomes. It is plausible that when one develops chronic and life
threatening illness, like CHD, they usually experience negative emotions. The experience of physical
disease seems to contribute to risk for numerous psychiatric problems, especially depression, anxiety,
and cognitive disorders (Shapiro, 2005). In addition, patient also experiences increasing concerns
about survival, wellbeing, effects on social roles/relationships/loved ones and concerns about
dependency, autonomy along with inciting fears about vitality, sexuality, and mortality. So the recovery
from emotional challenge and increased tolerance of negative affect are both hallmarks of holistic
(mental and physical) health. MBSR has emerged as a ray of hope to help patients to recover from
bad conditions as it has been found efficacious in both kinds of the conditions.

In MBSR program, participant learns how to take care of themselves and discovers a deeper
sense of ease and tranquillity of mind as well as actively engage in own health and well-being. By
focusing on the present, rather than ruminating on the past or worrying about the future, patients can
more effectively deal with life stressors that frequently lead to feelings of anxiety and depression
(Kabat-Zinn, 2003). Non-judgmental observation allows people to experience phenomena with a novel
openness that invites more objective emotional and behavioural reactions (Brown et al., 2007). One of
the most valuable teachings and principles that mindfulness-based programmes are based on (e.g.,
MBSR, Kabat-Zinn, 1990, and MBCT, Segal, Williams & Teasdale, 2002) the idea of not being your
own thoughts. It was found that the patients with chronic illnesses, who had become disillusioned
with the slow progress or no program in their symptoms were helped with MBSR by decreasing
distress and enhancing self-reported well-being. They started believing that the problem is not to
eliminate the distressing thoughts that are generated, but rather to dis-identify themselves from their
thoughts. In this regard, Mindfulness based interventions are believed to counter experiential avoidance
strategies that maintain and exacerbate emotional disorders, in part by teaching patients to respond
reflectively rather than reflexively to stressful situations and negative emotions (Bishop, Lau, Shapiro,
et al., 2004). There is one point to remember that the aim of these psychological interventions is not
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to replace medical treatment but to be used as a essential complement to it, to improve patients’ quality of life and to reduce psychological distress, which in theory would ultimately improve clinical outcomes (Kabat-Zinn, 1990). MBSR has also been associated with increase in self-reported well-being (see Grossman, Niemann, Schmidt, & Walach, 2004, for a metaanalysis). Majumdar et al. (2002) conducted a brief telephone interview with patients and described similar themes, e.g., an enhanced sense of their responsibility towards their own health and disease.

MBSR is one of the most extensively researched psychological approaches and is increasingly being recognized as the gold standard for many psychological and physical disorders. Although early implementations of MBSR were largely indicated for physical disorders, more recent clinical and research efforts have begun to apply MBSR for wider range of problems (psychiatric too) as well as with healthy people, health professionals, student. So it is appropriate to say that in future also MBSR will be regarded as the most preferred psychological treatment for many disorders as well a structured program to diminish distress and to add to well-being in normal people too.

CONCLUSION

Suffering and Happiness are universal human experiences and alleviating suffering and achieving greater happiness is a central ambition for many people around the world. Throughout history, human beings have sought to discover the means to alleviate the undesirable (suffering) and achieve desired (Happiness). MBSR aims at relieving suffering and improving health and well-being. Although “Mindfulness” is deceptively simple, yet a powerful form of meditation training, this approach has been used successfully with patients with chronic diseases as well as with the population who are at especially high risk of developing stress-related problems such as caregivers of chronic disease patients. From several studies around the world, a long list of physical and mental disorders that can be well managed with MBSR and a large number of MBSR-induced benefits have been recognized, and new disorders and benefits are periodically added to the list as the comprehension of the MBSR process grows.

The core of MBSR involves training in mindfulness meditation, a practice of self-regulating attention that lowers reactivity to stress triggers (Kabat- Zinn, 1990). Mindful meditation also decreases physical symptoms of distress by balancing sympathetic and parasympathetic responses (Kabat-Zinn, 2003). It teaches people how to live their lives fully even if they are patients with chronic illness (Speca, Carlson, Goodey, Angen, et al., 2000). By inculcating the basic factors of mindfulness of non-reactivity, observing, awareness and non-judging (Bear, Smith, Hopkins et al., 2006), one’s inner world can begin to change regardless of the external circumstances (Fries, 2009). Regular practice of mindfulness leads one to taking care of health and emotional needs that ultimately lead to positive emotions and happiness. The fact is that the meditator can take better care of themselves (physically and emotionally) and choose to feel calm even when things aren’t wonderful. Regular mindful practice decreases the risk of developing distress that leads a person to take responsibility of his health and he begins to have a yearning to lead a healthy lifestyle and increases the chances of living to a ripe old age.

MBSR is an impressive human endeavour towards observing the reality of the present moment including internal psychological states and processes (thoughts, feelings, images, etc.), proprioceptive
information from the body as well as external stimuli entering the senses. It improves emotional well-being by increasing awareness of how automatic behavioural and cognitive reactions to thoughts, sensations, and emotions can cause emotional distress. Patients are encouraged to gently acknowledge and accept their thoughts, sensations, feelings, and surroundings with an open and curious mindset. Regular practice of MBSR can diminish human sufferings and bring us a higher standard of living by realizing that not everything can be controlled but accepting them non-judgmentally can reduce the distress whatever may be the condition. Alidina (2010) has mentioned ten ways in which mindfulness can really help. These are (1) Training the Brain (2) Improving Relationships (3) Boosting Creativity (4) Reducing Depression (5) Reducing Chronic Pain (6) Giving Deeper Meaning to Life (7) Reducing Stress (8) Combating Anxiety (9) Regulating Eating Habits (10) Increasing Your Happiness. Our views are in keeping with the popular statement of Hans Selye that “I cannot and should not be cured of my stress, but merely taught to enjoy it.” Reinforcing the above statement, Kabat-Zinn (1990) has also argued that the purpose of mindfulness is not to point out what is wrong, but to help people find what is right. But this is only one side of the coin. The other side of the coin shows that most of the efficacious research has been done in Western setting and only few meta-analyses have been done to this point. Although MBSR has taken its rightful place as the gold standard of psychological program for various psychological disorders, many questions remain unanswered. In addition to taking stock in what we do know about MBSR and its efficacy across various disorders, there is a need to begin to formulate an empirical agenda for how MBSR can be advanced in future research. In spite of this speculation, it comes as no surprise that MBSR leads to many positive changes in mental and somatic patients as well as healthy individuals. There are a growing number of studies that indicate a positive effect of mindfulness intervention on several different disorders. Literature could go on and on to show the efficacy of MBSR. However, much of what participants learn is subtle and cannot be conveyed through words. If anyone wants to know about MBSR, one really has to ‘do to understand’ for the fullness of each moment of life.

**Directions for Future Research:**

The significant rise in the number of senior citizens and the need for proper healthcare and privileges for them, are matters of great concern and challenge before the nations all over the world. In addition to patients, healthy people are also pursued for well-being, happiness, and the good life. Growing evidence suggests that beyond making people feel good, the experience of positive emotions such as joy, happiness, and contentment holds numerous social, intellectual, and physical benefits for the individual (Lyubomirsky, King, & Diener, 2005). In spite of its ample empirical support and wide-spread use, an important limitation of existing data is that only few numbers of studies tell about the mechanism through which MBSR help the practitioners. Time has finally arrived to re-think that psychology is not just the study of pathology, weakness and damage it is also the study of strength and virtue too. Treatment is not just fixing what is broken; it is nurturing what is best. Psychology is not a branch of medicine concerned with illness or health, it is much larger. Research generally supports the conclusion that MBSR is an effective program for patients. However, further research is warranted to develop specific and unambiguous recommendations for how to help patients using MBSR principles. Ongoing research is needed to identify specific elements of MBSR that contribute
to positive patient outcomes, as well as to common therapeutic factors that appear in MBSR and other mindfulness based approaches. Given that MBSR has been proven effective in lists of studies, we believe that MBSR is well positioned to become a dominant approach in health care market that will be increasingly shaped by accountability and cost-effectiveness considerations. We hope that these trends, along with an increased emphasis on mechanism research, will be nurtured and pursued further as we believe them to be necessary for MBSR to realize its full potential.

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