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## Efficacy of mindfulness exercises in the management of borderline personality disorder

Mamta Trichal<sup>1\*</sup>, Pradeep Kumar<sup>2</sup>

### ABSTRACT

Psychiatric social work helps the emotionally disturbed people in managing their psychosocial problems. Borderline personality disorder is also distinguished by behavioral problems like by impulsive behaviors and intense reactions. The purpose of the concern study is to examine the effect of mindfulness practices in management of Borderline personality disorder incorporating with medication. A sample of 50 borderline old patients [clinical diagnosis having the Borderline Personality Disorder (BPD) severity score more than 20 points on BPDSI] was purposively selected for the study. The patients were given the medication incorporating the mindfulness exercises. After 6 months, the symptoms were checked through mental health checklist. A mental health checklist was administered through professional before and after incorporating the mindfulness with the medication. Study revealed that most commonly improved symptoms were affective instability, inappropriate anger, and feeling of emptiness. Kundalini Yoga (64%) and Sudarshan Kriya (58%) was proved mostly effective mindfulness practices in decreasing the symptoms of BPD. The study revealed that mindfulness practices have a vast impact in decreasing the symptoms of BPD, while incorporating with medications. In this concern author also discussed some mindfulness practices, proved more effective in reducing the symptoms and also want to make an appeal to include the mindfulness training in social work education. In modern treatment practices professionals are embodying mindfulness meditation trainings along with other treatments as it gives stability in mind and body.

**Keywords:** *Mental Health, Medication, Impulsive Behavior, Mindfulness, Meditation.*

**B**orderline personality disorder is a mental condition characterized by ambiguous perception of self (Dyck et al., 2009; Baer et al., 2012). The term 'borderline personality organization' was introduced by Otto Kornberg (1975) to refer a congenial way of working and interacting with others, identified by imbalanced and disturbed personality. These symptoms often lead to precipitative actions and problems in relationships. People with borderline personality disorder may experience severe episodes of anger, despair, and distress that can last in few minutes or sometimes it takes very long. They have indefinite goals of life, irregularities in mood, extreme sensitivity and confusions in various life

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situations. Once upset, it takes long to become normalize or stable. Their poor perception of self and others makes them sometimes very confused, a person who is in friendly relationship may be in next moment becomes an enemy. These unstable feelings can lead to unstable and unsettled relationships. The distinguished features of Borderline personality disorder (BPD) are- interpersonal dysfunction and problems, unstable relationships, emotional dysregulation, suicidal behavior, impulsive aggressions such as verbal outbursts, and quick switches between idealizing and devaluing relationships (American Psychiatric Association (APA), 2000; Lieb et al., 2004).

Psychodynamic theory explains the development of personality disorder through the analysis of the structure of mind. These structures of mind are the base of psychodynamic theory. Organized structures of mind lead to a balanced personality while the conflict in mental structure disturbs the whole personality. According to the theorist's psychological disorders develops through behavior observation, including personality traits, as well as the subjective disturbances like perceptual changes, auditory and visual disturbances, sleep disturbances in etc. These underlying structures are the focus of psychodynamic therapy, which aims to better understand and, over time, there is a change in mental structures creates difficulty and distress (Kernberg & Caligor, 2005, p. 114).

The assumptions of psychoanalytical theory guided the various approaches to working with specific mental disorders. These approaches of psychodynamic theory is distinguished by giving attention to aspects of feeling, interaction, adjustment and relationships. The object relational approach to understand the dynamics of personality helps to observe and analyze the personality. The object relations approach to personality disorders also focuses on "psychological structures". These "structures" are "stable patterns of psychological functioning (Fonagy & Gabbard, 2010, p. 7). Examples of these structures are interpersonal adjustment, inspiration and impulse control. Kernber, particularly worked on Narcissistic personality and found that attributing factors of developing the traits of such personality were the problem in regulating the self- esteem and consciousness of self- regard include motivation, ways of coping, interpersonal patterns, and affect and impulse regulation (Gabbard et,al, 2010). Object relational theory views that the interaction between infant and his mother sometimes arouse frustration and anger, it depends on type of interaction with mother like insecure, avoidant and dismissing during infancy threatens adulthood in failure of making secure and settled relationships.

The term 'real self' is referred for healthy personality in ego psychology and object relational theory both. It is used to make obvious that the representation of real self has an important function to provide a perfect way for self-activation and to increase the self-esteem. The term real self is also helpful to distinguish the false selves of the Borderline and Narcissistic patients. Metallization is not something inherited, in fact, it is a social phenomenon. As a part of this process, we summarize our ideas about the subjective psychological and emotional states of others. In turn, we influenced by our perception of other people's mental states (Bateman & Fonagy, 2013). It is, essentially, a kind of "reflective function" that "enables children to conceive of others' beliefs, feelings, attitudes, desires, hopes, knowledge, imagination, pretense, plans, and so on" (Fonagy, 2001, p. 165). Sometimes it occurs automatically or naturally or another in consciously planned way. It is firstly implemented through the Attachment theorists Batman and Fonagy. Now it has been become an important tool of controlling the emotions, one of the main characteristics of personality disorders.

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As such, the theoretical review represents a valuable theoretical concept to understand the people with psychological conditions. According to the psychoanalytic perspective, personality is a “stable way of thinking, feeling, behaving, and relating to others” (Psychodynamic Diagnostic Manual, 2006, p. 17) but which also includes “the ways in which we habitually try to accommodate the exigencies of life and to reduce anxiety, grief, and threats to self-esteem” (p. 18). Psychodynamic therapist utilizes the techniques of meditation that could lead to a development of positive qualities like empathy and compassion, and also the development of personality management skills like emotional regulation, controlling irrational thoughts. A systematic review of these tenets of Psychodynamic therapy will help to assess the effectiveness of techniques of mindfulness practice approach in treatment of BPD.

The developmental factors of borderline personality disorder are still not clear. However, through various researches it has been proved that the impact of hereditary features, changes in brain structure, environmental, cultural, and psychosocial factors can increase the risk of developing borderline personality disorder. There is a higher chances of developing the symptoms of Borderline disorder if People have a close family member, such as a parent or sibling with the disorder .Twin studies reveals that the heritability factor for borderline personality disorder is responsible for 0.69, but it is likely that traits related to precipitative agitation and fluctuation of mood only not totally establishing the relationship with particular personality disorder.

Structural and brain changes studies have also a greater contribution in finding out the causes of BPD. It has been widely accepted through studies that BPD is a psychological condition. It is a mental illness which affects the brain. A slight change in brain structure, limbic system, changes in hippocampus and amygdala volumes and cortical or subcortical irregularities in brain structure are accountable for developing BPD symptoms. Functional and structural brain studies have attributed greatly to our knowledge of the neurobiology of impulsivity and agitated aggression in BPD and also establish the relationship of these changes with childhood trauma, abuse or stress. But it is still not clear whether these irregularities are responsible for the disorder, or consequences of the disorder. It is also evident through studies that people with Borderline personality disorder may have certain changes in brain also. According to NHS, MRIs done on people with BPD indicate that their prefrontal cortex, which helps to regulate emotions, self-control, and behavior, may be smaller than normal or not as developed (Schmahel et al., 2003).

There are also the strong evidences of environmental accountabilities in developing BPD symptoms. Insecure and stressful environment of family like unstable relationships of parents, inappropriate ways of parenting, abandonment or adversity during childhood, distressing childhood experiences, particularly involving caregivers and child abuse may lead to the onset of borderline personality disorder. Unstable relationships are a main symptom of BPD, and children with traumatic backgrounds or the products of non-conducive family patterns may be more likely to experience the symptoms of BPD later in life. Recent evidence also suggests that neglect, including caregiving, and emotional disrespect by caregivers is lead to develop the symptoms. Prospective studies in children have shown that parental emotional under-involvement contributes to a child’s difficulties in socializing and perhaps to a risk for suicide attempts. A familial environment that discourages coherent discourse about a child’s perspective on the world contributes to a child’s difficulties in socializing and perhaps to a risk for suicide attempts. Thus, the studies that have examined the family context of childhood trauma in borderline personality

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disorder prone to see the unstable, non-nurturing family environment as the key social mediator of abuse and personality dysfunction (Lyons-Ruth et al., 2005; Fongy et al., 2003). The prevalence of borderline personality disorder (BPD) has been studied in various surveys and in clinical set ups. It is estimated that the point prevalence of BPD is 1.6 percent and the life time prevalence is 5.9 percent in general population (Lenzeweger et al., 2007; Grant et al., 2008). Accordingly, the clinical setting studies also revealing that BPD is present in 6.4 percent of urban primary care patients, 9.3 percent of psychiatric outpatients, and approximately 20 percent of psychiatric inpatients (Gameroff et al. 2002). These studies have shown that the prevalence rates for BPD vary between 0.5 % and 1.6 % of the total population. Studies, based on data from the National Epidemiologic Survey on Alcohol and Related Conditions (Grant et al. 2008), have found higher rates, of 2.7 % and 5.9 % respectively. An estimation regarding the prevalence rate of BPD is 1 %. Studies shows that Borderline personality disorder is manifested with other disorders also like substance abuse, eating disorders and obsessive-compulsive disorders etc. Borderline personality disorder is also more common in people presenting with chronic self-harming behavior (Reas 2015).

### **METHODOLOGY AND PROCEDURE**

The aim of the study was to examine the effectiveness of mindfulness practices while incorporating with medical treatment in management of Borderline Personality Disorder (BPD). The current study also emphasizes the efficacy of mindfulness based techniques with a focus on meditation, which leads to overall betterment in patients having BPD symptoms. As BPD is distinguished by unstable relationship, irregular moods and impulsiveness, mindfulness exercises can be helpful through increasing mental calmness, self-esteem and confidence. The view stroked in mind of author to address the treatment modalities of mindfulness exercises and with this aim 50 chronic BPD people were studied incorporating the mindfulness exercises with their regular medication.

The study sample was selected from the out-patient Department of Psychiatry, KGMC district, UP. The sample was purposively selected through the social workers, during the period of their placement services. 55 chronic BPD patients were screened during their visit in OPD. The criteria of the inclusion were that-(1) Patients aged between 18 to 65, having a diagnosis of (BPD), diagnosed with the Structural Clinical Interview for DSM IV.(2) They have a BPD severity score that is more than 20 points on the Borderline Personality Disorder Severity Index(BPDSI) attending OPD for more than 2 years.(3) Willing to participate in the study (informed consent) and are ready to remain in the study for six months and reliably participate in therapy. BPD patients having major psychotic disorder and acute severe substance dependency were excluded.

Participants were prior informed about the study and also given the written information. After the selection, BPD symptom checklist was administered to check the symptoms present in patients after a long medication. They were introduced the effective methods of mindful practices helpful in creating stability in mind in a traditional yoga center. They were also inspired to practice the mindful meditation along with the medications as they were taking. For the period of six months they were practiced with mindfulness practices (Kundalini yoga, sudarshan kriya and other mindful exercises). From the beginning, 55 patients started but unfortunately only 50 can continue. After six months, the BPD symptom checklist was again administered through trained professionals and the existence of symptoms was comparatively studied. Finally, a qualitative study was also conducted to understand patient's experiences about the mindfulness practices.

### *Treatments and Therapies*

It is somewhat difficult to treat the BPD but with the advancement of therapies, concerned researches made it possible in many ways to decrease the symptoms of disorder more or less. To find out the clear picture of symptoms in a person is not only a crucial task but also uncommon to see an individual with 'pure' BPD symptoms. Usually it appears with the manifestation of other disorders like obsessive compulsive, eating disorder, substance abuse etc. Due to this manifestation of symptoms the diagnosis and treatment of BPD sometimes become difficult for mental health professionals. For example, an extensively popular study by Mary Zanarini at McLean Hospital established that 53.8 percent of patients with BPD also have the symptoms of eating disorder (compared to 24.6 percent of patients with other personality disorders).

Treatment of BPD patient is difficult but nowadays it becomes easy with the advancement of new techniques and therapies in area of health promotion to reduce the symptoms of BPD. Few important treatment techniques are discussed here.

**Talking Therapies-** It is most commonly used therapy in cases of not only BPD yet other personality disorders also. We can say that it is usually first preferential choice of personality disorder treatment. The expression of feelings is necessary for a better personality because the bottled-up emotions and feelings can create problems in our personality, again the therapist can help people to teach them better ways to express their feelings and interacting with others. But the challenge in this technique is to build the trustworthy relationship with patients as the success of this is depends only on trustworthy relations. While, on other hand the foremost symptom of BPD patient is the unstable and unsettled relationship due to the irrational fear of others intention.

The two widely known techniques of talking therapy is –Dialectical Behavioral therapy (DBT) and Cognitive Behavioral Therapy. Dialectical behavior therapy (DBT) gives skill to the patients to cope with unhealthy behavior and changing patterns of life through teaching sessions, home assignments and diary writings. It is based on cognitive-behavioral principles developed by Dr Marsha Linehan in the early 1990s for the treatment of para suicidal behavior in women with borderline personality disorder (BPD) (Linehan et al., 2006). In cognitive behavior therapy therapist focuses on irrational thoughts of patient and try to change their unusual and disturbing thoughts.

**Medications-** In some cases, psychiatrists recommend medications to treat specific symptoms such as: mood swings, depression and other manifested mental disorders. The Four Classes of Medications are mostly used in reducing Specific Core Symptoms of Borderline Disorder Antipsychotic Agents, Mood Stabilizers, Antianxiety Agents and Nutraceuticals.

**Yoga -** Metallization based treatments (MBT) are developed by Bateman and Fonagy. It was first utilized in a partial hospital setting and it was found that those treated with MBT-informed partial hospital care had significantly better results in the areas of reduced self-mutilator and suicidal acts. These metallization-based treatments were especially made for the treatment of personality management. The main tools of the treatment are yoga and meditation. Yoga and meditation help to produce more oxygen in our body which is helpful to strengthen our immune system. The mental health benefits of yoga are remarkable including mental calmness, stress reduction, awareness about self and others, which lead to increase self- esteem and confidence. As defined by the Merriam-Webster dictionary,

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“yoga is a Hindu theistic philosophy teaching the suppression of all activity of body, mind, and will” The traditional practice of yoga has been shown to have psychological well-being for both healthy people and those with a mental illness, such as Borderline Personality Disorder (BPD). A 2010 Boston University School of Medicine study revealed that yoga may be more feasible to give desired effects than other forms of exercise establishing its positive effect on mood and anxiety. Yoga can be a great form of treatment for people with BPD because variations or frequent changes in mood are the common symptom of BPD. According to a recent study of Harvard Medical School published in 2009, the technique of Sudarshan Kriya yoga found most effective in reducing the symptoms of anxiety and depression. The method is inexpensive and risk-free and has favorable effects in connecting our mind and body. There are various techniques of yoga but the most commonly used yoga techniques which are helpful in managing personality disorders are Kundalini Yoga and Sudarshan Kriya.

While yoga has its benefits, we should not start practicing yoga at home in the absence of a trained supervisor.

**Meditation** –It is the traditional way of achieving mental peace and calm. It is also very while compared to other therapeutic techniques. Simply find the comfortable place and try to quiet the mind, get started with basic meditation like focusing on breath, feeling of body then exploring the different meditation techniques like spiritual meditation which includes chanting prayer, mindfulness meditation which include learning in rest through combining concentration with awareness, movement meditation etc.

Deep Breathing - Breathing deeply is one of the simplest relaxation methods. It can affect our immune system positively and increases our awareness of body. Focusing on the sound and rhythm of breath, especially when people upset, can have a soothing effect and help stay grounded in the current, using breathing exercises throughout the day.

Music therapy- It is a new branch of complementary medicine A certain type of music can make us happy, sad, energetic or relaxed. It has a unique impact on person’s mindset. Due to the innumerable impact of the music it has been recognized as a helpful treatment for people with personality disorders.

Observing Thoughts -The mindfulness exercise of observing our thoughts might be helpful in decreasing the symptoms of personality disorders. Instead of reacting against the voice, sitting back and "observing" thoughts, without being involving in them can be helpful achieving peace. It can be the best exercises to find the solutions of some hidden questions and in this way the stressful thoughts become less stressful. However, it is not so easy as it appears but the practice of observing the thoughts can make it easy and can be the best way to understand the thoughts rendering in mind.

Art Therapy-Like the music therapy, it is also the branch of complementary medicine and has been proved very effective in the course of BPD treatment. A therapist can help to explain the figures to learn more about self. Art therapy can also help to identify feelings, irregularities of moods and the patterns of unproductive behavior.

## **RESULTS AND DISCUSSION**

The results of the study were eye opening. Demographic profile is showing that a number of the respondents were belong to the age group of middle age [28-37], mostly were females,

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educated, and married followed by divorcee. Most of them were unemployed. [Table-1-5]. The data was compared by the frequency of the symptoms present before and after of the study. Study revealed that most commonly improved symptoms were affective instability, inappropriate anger, and feeling of emptiness followed by others. It was also noticed that after incorporating the mindfulness practices, respondents were feeling more secured, better and more confident.

**Table-1 Demographic Profile of BPD Patients. N-50**

Sl.No	Age	N	%
1	18-27	12	24
2	28-37	19	38
3	38-47	17	32
4	48-57	02	06
5	58 >	00	00
<b>Total</b>		<b>50</b>	<b>100</b>

**Table-2 Distribution of respondents by sex. N-50**

Sl.No	Sex	N	%
1	MALE	16	32
2	FEMALE	34	68
<b>Total</b>		<b>50</b>	<b>100</b>

**Table-3 Distribution of respondents by marital status. N-50**

Sl.No	Marital Status	N	%
1	UNMARRIED	09	18
2	MARRIED	23	46
3	DIVORCEE / SEPARATED	16	32
4	WIDOWE / WIDOWER	02	04
<b>Total</b>		<b>50</b>	<b>100</b>

**Table-4 Distribution of respondents by Educational status. N-50**

Sl.No	Educational status	N	%
1	ILLITERATE	00	00
2	UPTO PRIMARY	01	02
3	UPTO HS	11	22
4	OPTO SECONDARY	23	46
5	GRADUATE	12	24
6	POST – GRADUATE	03	06
7	ABOVE	00	00
<b>Total</b>		<b>50</b>	<b>100</b>

**Table-5 Distribution of respondents by occupational status. N-50**

Sl.No	Occupational Status	N	%
1	UNEMPLOYED	18	36
2	EMPLOYED	14	28
3	STUDENT	02	04
4	HOUSE WIFE	16	32
<b>Total</b>		<b>50</b>	<b>100</b>



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**Table-6 The presence of Symptoms in BPD patients before and after incorporating the mindfulness practices. N-50**

Sl. No	SYMPTOMS	PRE- ASSESSMENT				Total		POST- ASSESSMENT				Total	
		YES (N)	%	NO (N)	%	N	%	YES (N)	%	NO (N)	%	N	%
1	Fears of Abandonment	45	90	05	10	50	100	32	64	18	36	50	100
2	Unstable and intense interpersonal relationship	40	80	10	10	50	100	33	66	17	34	50	100
3	Identity disturbances	39	78	11	22	50	100	31	62	19	38	50	100
4	Impulsivity in at least two areas that are potentially self-damaging [eating disorder, substance abuse, gambling and promiscuity]	38	76	12	24	50	100	27	54	23	46	50	100
5	Recurrent suicidal behavior [gestures, threats or self-mutilating behaviors]	37	74	13	26	50	100	26	52	24	48	50	100
6	Affective instability	42	84	8	16	50	100	26	52	24	48	50	100
7	Feeling of emptiness	43	86	07	14	50	100	29	58	21	49	50	100
8	Inappropriate anger or difficulty in controlling anger	46	92	4	8	50	100	28	56	22	44	50	100
9	Dissociative symptoms	32	64	18	36	50	100	30	60	20	40	50	100

**Table-7 Views of participants about the effectiveness of mindfulness meditations. (N-50)**

Sl.No	TYPE OF MINDFULNESS PRACTICES	Effective		Very Effective		Ineffective		Total	
		N	%	N	%	N	%	N	%
1	KUNDALINI YOGA	11	22	32	64	7	14	50	100
2	SUDARSHAN KRIYA	17	34	29	58	4	8	50	100
3	DEEP BREATHING	23	46	17	34	10	20	50	100
4	ART THERAPY	19	38	10	20	21	42	50	100

Kundalini yoga has been found to be quite effective in decreasing symptoms in people with Obsessive Compulsive Disorder and Bipolar Disorder, and is promising for helping to manage the symptoms of Borderline Personality Disorder. “Kundalini” refers a form of creative energy of the universe; it is a static energy that supports whole life. The yogic practices of chanting and devotion activates the naval, spine and focal point of pressing on meridians (energy points), are the focus of meditation in kundalini yoga. Energy is achieved through breathing (pranayama) and control of flow of kundalini. Simple breathing technique, alternate nostril breathing (left nostril, right nostril) is a best and commonly used

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technique of kundalini yoga. It awakens the soul and tends to calm the emotions and relieve stress (Greenwell, 2005)

Kundalini Yoga integrates movement in dynamic breathing techniques, meditation, and the chanting of mantras, such as *Sat Nam*, meaning "truth is my identity." The goal is to build physical strength and increase sensibility (David, 2004). Breathing practices are helpful to reduce the anxiety and stress from the system and bring clarity and focus to the mind. It can eliminate the emotional and physical contaminations in the body through the breathing. Sudarshan kriya combines yoga and breathing. Sudarshan Kriya is one of the scientific methods of ancient India to connect the body and mind in a proper way as the person can achieve the optimism and peace of mind. In a recent study, 63 percent of people with depression who practiced yogic breathing techniques of Sudarshan kriya for four weeks, found themselves in a state of joy and optimism. Kriya is an advanced form of breathing. It involves slow, medium and fast cycles. The breath in kriya must be rhythmic and the duration of inhalations is twice that of exhalations. It is very much helpful in creating stability in life (Brown & Gerbarg, 2005).

According to a national survey (Barnes et al., 2008), mindfulness practice increased from 7.6 percent in 2002 to 9.4 percent in 2007, as one of the most commonly used "alternative therapies." Because of it has a long lasting impact on functional and structural brain changes that lead to positive emotions and also reduces the emotional pain, that's why mindfulness is a particularly good fit for people with BPD. As exercise is healthy for the body, mindfulness helps to keep our brain focused, attentive, and aware. Almost all mindfulness practices strengthen the attentional circuits in our PFC and reduce the reactivity of our amygdala, meaning that we can choose which mindfulness practice suiting to our lifestyle, whether it be mindfulness meditation or transcendental meditation (Fredczynski-Lewis et al., 2007; Newberg et al., 2001; Newberg & Iversen, 2003). Research shows that if you have difficulty paying attention, high levels of stress, and a compromised immune system, mindfulness helps those too (Tang et al., 2007). It has also proved through studies that mindful meditation leads to a reduction in cortisol levels (Carlson et al., 2004; Sudsuang et al., 1991).

Stress and anxiety are the outcome of our modern life styles nowadays. Everyone is busy in achieving success in life through the healthy or unhealthy ways. In this fast speeding life they have no time for them and their family. Therefore, it is best to emphasize the natural healing methods of various cultural traditions as they have no side effects on our body and also not very expensive in comparison of other modalities. Breathing and meditation techniques utilize to treat BPD must effect our limbic system and can give the long lasting results. Through effecting prefrontal context, responsible for planning and organizing, emotional control, decision making, problem solving and other executive workings in our mind decrease the bodily ailments and disturbances like sleep disturbances and loss of appetite. It has been established through the researches that amygdala which is also known as our brain region, contains fearful and anxious emotions, with the decreasing of volume of brain cells mindfulness practices makes connectivity between areas related with brain functions and also strengthens the functions like concentration, attention and emotion control. It is also evident through the researches that different types of mindfulness actually boost the PFC in different ways, just as different types of physical exercises change our body in differently and also gives energy, in the same way when the PFC is activated, one of the chemicals it produces is  $\beta$ -endorphin, a pain reducing opiate. This attributes to both

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decrease in the sense of pain and also in breathing rate, by reducing the unusual fear increases the hope in life (Newberg & Iversen 2003).

Current study also establishing the fact that mindful meditation is effective in decreasing the symptoms of Borderline personality disorder (Table-6). The views regarding the effectiveness of mindfulness is revealing that all the techniques of mindful meditation are effective but the most effective technique is kundalini yoga (64%) followed by sudarshan kriya (58%) and deep breathing (34%), Table-7. Participants also suggested to establish a mindful meditation center in hospital premises as the in-patients also get treated and utilize their time in best possible way.

### CONCLUSION

The social worker requires a greater sense of understanding, goodwill, knowledge and skills with the patient of BPD, including with the development of certain personality traits and characteristics, like concern, insight. Patience, imagination, creativity, initiative and enthusiasm. Social worker requires a keen insight which gives them direction to deal the patient. Incorporating mindfulness exercises a social worker can do better. It requires endless patience for a social worker to listen and again to understand the problem. In dealing with so many intermingled problems of life, a social worker approaches with huge enthusiasm. Mindfulness is a unique tool for stress management and overall wellness because it can be used at virtually any time and can quickly bring amazing results. Social workers can also improve their own working utilizing these simple and unique practices. Research indicates that mindfulness and meditation can increase creativity in a variety of ways. A good example of that is the study carried out in 2012, addressed coherence between mindfulness exercises and creativity revealed that mindfulness training improves the skill of problem solving (Ostafin & Kassman, 2012).

Thus, it can be concluded that the training of mindfulness techniques is the best training for the students of social work who are interested to work in area of health care. It must be included in social work curriculum. Training of mindfulness/meditation is a requirement of social work practice nowadays. It could be valuable in social work education to explore their own thinking, to evaluate their own personality traits and behavioral patterns. These practices naturally enhance creativity and imagination. Thus, it is an appeal of the author to make the mindfulness practices as a part of social work education as social work profession concerned with helping the people to enhance their well-being. Mindfulness is an incredible tool for stress management and to achieve positivity in life.

### Limitations

First, the sample size is small and generalization of the present findings should take into consideration. We need a large sample to validate the findings of this study.

### REFERENCES

- American Psychiatric Association (APA). (2000). *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR*. Washington, DC: American Psychiatric Association.
- Ahmad, A., Ramoz, N., Thomas, P., Jardi, R. & Gorwood, P. (2014). Genetics of Borderline Personality Disorder: Systematic Review and Proposal of an Integrative Model. *Neuroscience and Biobehavioral Reviews*, 40:6-19.

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- Arntz, A., Hoorn, M. van den, Cornelis, J., Verheul, R., Bosch, W. M. C. van den & Boer, S. F. de. (2003). Reliability and Validity of the Borderline Personality Disorder Severity Index. *Journal of Personality Disorders*, 17, 45–59.
- Arens, E.A., Stopsack, M., Spitzer, C., Appel, K., Dudeck, M. & Völzke, H. (2013). Borderline Personality Disorder in four Different Age Groups: A Cross-Sectional Study of Community Residents in Germany. *Journal of Personality Disorders*, 27:196–207. doi:10.1521/pedi\_2013\_27\_072.
- Bateman, A. & Fonagy, P. (2004). *Psychotherapy for Borderline Personality Disorder: Mentalization-based Treatment*. Oxford University Press; New York.
- Bateman, A.W. & Fonagy, P. (1999). The Effectiveness of Partial Hospitalization in the Treatment of Borderline Personality Disorder: A Randomized Controlled Trial. *American Journal of Psychiatry*, 156:1563–1569.
- Bender, D.S., Dolan, R.T., & Skodol, A.E. (2001). Treatment Utilization by Patients with Personality Disorders. *American Journal of Psychiatry*, 158:295.
- Baer, R.A., Peters J.R., Eisenlohr-Moul, T. A., Geiger, P.J., & Sauer, S.E. (2012). Emotion-Related Cognitive Processes in Borderline Personality Disorder: A Review of the Empirical Literature. *Clinical Psychology Review*. 32 359–369. 10.1016/j.cpr.2012.03.002
- Coid, J., Yang, M., Tyrer, P., Roberts, A., & Ullrich, S. (2006). Prevalence and correlates of personality disorder in Great Britain. *British Journal Psychiatry*, 188:423–431. doi: 10.1192/bjp.188.5.423.
- Carlson, L.E., Speca, M., Patel, K.D., & Goodey, E. (2004). Mindfulness-Based Stress Reduction in Relation to Quality of Life, Mood, Symptoms of Stress, and Levels of Cortisol, Dehydroepiandrosterone Sulfate (DHEAS), and Melatonin in Breast and Prostate Cancer Outpatients. *Psychoneuroendocrinology*, 29(4): 448–74.
- Carmody, J., & Baer, R.A. (2008). Relationships between Mindfulness Practice and Levels of Mindfulness, Medical and Psychological Symptoms, and Well-Being in a Mindfulness-Based Stress Reduction Program. *Journal of Behavioral Medicine* 31(1): 23–33.
- Chiesa, A., & Serretti, A. (2009). Mindfulness-Based Stress Reduction for Stress Management in Healthy People: A Review and Meta-Analysis. *Journal of Alternative and Complementary Medicine*, 15(5): 593-600.
- Distel, M.A., Trull, T.J., Derom, C.A., Thiery, E.W., Grimmer, M.A....& Martin, N.G. (2008). Heritability of Borderline Personality Disorder Features is Similar across Three Countries. *Psychological Medicine*, 38, 1219-1229.
- Domes, G., Schulge, L., & Herpertz, S.C. (2009). Emotion Recognition in Borderline Personality Disorder-A Review of Literature. *Journal of Personality Disorders*, 23(1):6-9. doi;10.1529.
- Dyck, M., Habel, U., Slodczyk, J., Schlummer, J., Backes, V., Schneider F., et al. (2009). Negative Bias in Fast Emotion Discrimination in Borderline Personality Disorder. *Psychological Medicine*. 39 855–864. 10.1017/S0033291708004273.
- Epstein, M. (1988). The Deconstruction of the Self: Ego and “Egolessness” in Buddhist Insight Meditation. *The Journal of Transpersonal Psychology*, 21(1): 61-71.
- Frankenburg, F.R., & Zanarini, M.C. (2004). The Association between Borderline Personality Disorder and Chronic Medical Illnesses, Poor Health-Related Lifestyle Choices, and Costly Forms of Health Care Utilization. *Journal of Clinical Psychiatry*, 65(12): 1660–65.
- Rant, B.F., Chou, S.P., Goldstein, R.B., Huang, B., Stinson, F.S., & Saha, T.D. (2008). Prevalence, Correlates, Disability, and Comorbidity of DSM-IV Borderline Personality Disorder: Results from the Wave 2 National Epidemiologic Survey on

## Efficacy of mindfulness exercises in the management of borderline personality disorder

- Alcohol and Related Conditions. *J Clin Psychiatry*, 69, 533–545. doi: 10.4088/JCP.v69n0404.
- Greenwell, B. (1995). *Energies of Transformation: A guide to the Kundalini Process*. Cupertino, CA: Shakti River Press.
- Gunderson, J.G., Zanarini, M.C., Choi-Kain, L.W., Mithell, K.S., Jang, K.L. & Hudson, J.I. (2011). Family Study of Borderline Personality Disorder and Its Sectors of Psychopathology. *Arch Gen Psychiatry*, 68(7):753-762. doi:10.1001/archgenpsychiatry.2011.65.
- Gross, R., Olfson, M., & Gameroff, M. (2005). Borderline Personality Disorder in Primary Care. *Arch Intern Med*, 2002, 162:53.
- KabatZinn, J., A. O. Massion., J. Kristeller, L. G., Peterson, K. E., Fletcher, L., Pbert, W. R. Lenderking., & Santorelli, S.F. (1992). Effectiveness of a Meditation-Based Stress Reduction Program in the Treatment of Anxiety Disorders. *American Journal of Psychiatry*, 149(7): 936–43.
- Khoury, B., Sharma, M., Rush, S.E., Fournier, C. (2015). Mindfulness-Based Stress Reduction for Healthy Individuals: A Meta-Analysis. *Journal of Psychosomatic Research*, 78(6): 519-528. doi: 10.1016/j.jpsychores.2015.03.009.
- Kernberg, O. (1984). *Severe personality Disorders*. New Haven: Yale University Press.
- Kiemin-yobas, P., Cho, M.A. & Creedy, D. (2012). Efficacy of Mindfulness-Based Interventions on Depressive Symptoms among People with Mental Disorders: A Meta-Analysis. *International Journal of Nursing Studies*, 109-21.310.
- Lyons-Ruth, K. & Block, D. (1996). The Disturbed Caregiving System: Relations among Childhood Trauma, Maternal Caregiving, and Infant Affect and Attachment. *Infant Mental Health Journal*, 17, 257–2.
- Lyons-Ruth., K, Yellin, C., Melnick, S. & Atwood., G. (2005). Expanding the concept of unresolved mental states: Hostile/Helpless states on the AAI are associated with atypical maternal behavior and infant disorganization. *Development & Psychopathology*. 17:1,
- Linehan, M.M., Comtois, K.A., & Murray, A.M. (2006). Two-Year Randomized Controlled Trial and Follow-up of Dialectical Behavioral Therapy Vs Therapy by Experts for Suicidal Behaviors and Borderline Personality Disorder. *Archives General Psychiatry*, 63, 757–766.
- Linehan, M.M., Armstrong, H.E., & Suarez, A. (1991). Cognitive-Behavioral Treatment of Chronically Parasuicidal Borderline Patients. *Archives General Psychiatry*, 48, 1060–1064.
- Miller, J.J., Fletcher., Kabat, J. (1995). Three-Year Follow-Up and Clinical Implications of a Mindfulness Meditation–Based Stress Reduction Intervention in the Treatment of Anxiety Disorders. *General Hospital Psychiatry*, 17(3): 192–200.
- Ma, S. H. & Teasdale, J. D. (2004). Mindfulness-Based Cognitive Therapy for Depression: Replication and Exploration of Differential Relapse Prevention Effects. *Journal of Consulting and Clinical Psychology*, 72(1): 31–40.
- Newberg, A., Alavi, A., Baime, M., Pourdehnad, Santanna, J., & Aquili, E.D. (2001). The Measurement of Regional Cerebral Blood Flow during the Complex Cognitive Task of Meditation: A Preliminary SPECT Study. *Psychiatry Research*, 106(2): 113–22.
- Newberg, A.B., & Iversen, J. (2003). The Neural Basis of the Complex Mental Task of Meditation: Neurotransmitter and Neurochemical Considerations. *Medical Hypotheses*, 61(2): 282–91.
- Perreau-Linck, E., Beauregard, M., Gravel, P., Paquette, V., Soucy, J.P., Diksic, M., & Benkelfat, C. (2007). In Vivo Measurements of Brain Trapping of 11C-Labelledβ-

## Efficacy of mindfulness exercises in the management of borderline personality disorder

- Methyl-L-Tryptophan during Acute Changes in Mood States. *Journal of Psychiatry and Neuroscience*, 32(6): 430–34.
- Oswald, A.J., Proto, E., & Sgroi, D. (2015). Happiness and Productivity. *Journal of Labor Economics*, 33(4): 789-822.
- Sudsuang, R., Chentanez, V., & Veluvan. K. (1991). Effect of Buddhist Meditation on Serum Cortisol and Total Protein Levels, Blood Pressure, Pulse Rate, Lung Volume, and Reaction Time. *Physiology and Behavior*, 50(3): 543–48.
- Schwartz, J. M. & Begley, S. (2002). *The Mind and the Brain: Neuroplasticity and the Power of Mental Force*. New York, US: Regan Books/Harper Collins Publishers.
- Soloff, P.H. (2005). Risk Factors for Suicidal Behavior in Borderline Personality Disorder: A Review and Update. In: Zanarini, M.C. (Ed.), *Borderline Personality Disorder* (pp. 333-365). Boca Raton: Taylor and Francis Group LLC.
- Tomko, R.L., Trull, T.J., Wood, P.K., & Sher, K.J. (2014). Characteristics of Borderline Personality Disorder in a Community Sample: Comorbidity, Treatment Utilization, and General Functioning. *Journal Personal Disord*, 28, 734–750. doi: 10.1521/pedi\_2012\_26\_093.
- Teasdale, J.D., Segal, Z.V., Williams, J.M.G., Ridgeway, V.A., Soulsby, J.M., & Lau, M.A. (2000). Prevention of Relapse/Recurrence in Major Depression by Mindfulness-Based Cognitive Therapy. *Journal of Consulting and Clinical Psychology*, 68(4): 615–23.
- White, C.N., Gunderson, J.G., Zanarini, M.C., & Hudson, J.I. (2003). Family Studies of Borderline Personality Disorder: A Review. *Harvard Review of Psychiatry*, 11, 8–19.
- Zanarini, M.C., Frankenburg, F.R., Yong, L., Raviola, G., Reich, D.B.... & Hennen, J. (2004). Borderline Psychopathology in the First-degree Relatives of Borderline and Axis II Comparison Probands. *Journal of Personality Disorder*, 18(5): 449-447.
- Zimmerman, M., Rothschild, L., & Chelminski, I. (2005). The Prevalence of DSM-IV Personality Disorders in Psychiatric Outpatients. *American Journal Psychiatry*, 162:1911.

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