

## Role of Acceptance and Commitment Therapy in Reducing Emotional State among persons with Multiple Sclerosis

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### ABSTRACT

Emotional state is common in patients with multiple sclerosis (MS). Depression and anxiety are dimensions of emotional state that adversely affect quality of life and medication adherence. Recent investigations indicate that psychosocial interventions, such as acceptance and commitment therapy (ACT), could improve quality of life, depression and anxiety in MS patients. The objective of this article is to investigate the results of various studies, for identifying the potential efficacy of ACT as it could be applied as useful method of intervention for improving psychological symptoms in patients with Multiple Sclerosis. The result of several researches has shown that ACT could potentially be highly appropriate intervention for different type of problems associated with this disease.

**Keywords:** *Acceptance and Commitment Therapy, Emotional State, Multiple Sclerosis.*

Multiple sclerosis (MS) is a chronic and unpredictable inflammatory demyelinating disease of the central nervous system (CNS). It is the most common disabling neurological disease of young people, afflicts millions of people all over the world. The National Multiple Sclerosis Society announced that more than 2.1 million people were suffering from this disease worldwide (Moss-Morris & et al, 2012; Ghaffar & Feinstein, 2007). Consistent with variations in the distribution of pathological white matter lesions in the CNS, the most common MS symptoms include: poor vision, weakness, muscle spasms, sensory disturbances (including pain and tingling), lack of coordination, abnormal walking, bowel and bladder dysfunction (Compston et al. 2006), sleep disorders, depression and cognitive weakness (Gelfand, 2014). Chronic diseases such as multiple sclerosis, in addition to physical disability, affects several functional domains (e.g., psychological, emotional, and behavioral), as well as overall quality of life (QOL). Emotional state is extremely common in MS compared to both healthy populations and other chronic diseases (Ghaffari, Ahmadi, Nabavi & Memarian, 2008). Depression and anxiety are dimensions of emotional state. The empirical literature attests to elevated rates of depression and distress (Janssens et al., 2003),

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increased anxiety (Zorzon et al., 2001). Depression and anxiety in multiple sclerosis patients are related to lower quality of life, cognitive dysfunction, elevated suicide risk and working problems (Goldman Consensus Group 2005; Fruehwald, Loeffler-Stastka, Eher, Saletu & Baumhackl 2001). As there is no curative treatment for MS, research attention has been focused on alleviating psychological problems and improving QOL for patients. Acceptance and Commitment Therapy is a newer third-generation behavior therapy that uses metaphors, experiential exercises (e.g., mindfulness and acceptance practices, values clarification, cognitive diffusion exercises), and traditional behavioral techniques (e.g., exposure) to combat unhelpful emotion-regulatory processes while fostering a balance between acceptance and value-based behavioral change strategies (Hayes, Strosahl & Wilson, 1999). In short, ACT teaches skills to help individuals let go of unnecessary struggle, accept themselves and others as they are, choose valued directions for their lives, and commit to actions that lead in those directions (Eifert & Forsyth, 2005). Recent investigations indicate that psychotherapeutic interventions, such as acceptance and commitment therapy (ACT), could improve quality of life, depression, anxiety, and fatigue in MS patients.

The objective of this article is to review the current evidence of psychosocial interventions, including ACT for reducing emotional state such as anxiety and depression, and its beneficial effects on MS patients.

### **EVIDENCE ON EMOTIONAL STATE IN MS**

As discussed earlier, the disabling nature of the disease typically causes higher levels of depression and anxiety in people with MS (Jean, Paul, & Beatty, 1999; Ron, 1986). Depression and anxiety could be natural reactions to the unpredictable course of a disabling and chronic disease. Further, MS patients could be predisposed for depression or anxiety by several psychosocial risk factors such as inadequate coping or insufficient social support, or by MS-related biological processes such as changes in brain structure or in immunological and inflammatory pathways (Feinstein 2011; Feinstein, Roy, Lobaugh, Feinstein & O'Connor, 2004). Depression is considered to be the most common psychiatric disorder manifested in people with MS and the life prevalence approaches 50% in several studies, which comparison with the general population and other chronic illnesses have been exhaustively reported (Sadovnik, Remick, Allen, Swartz, Yee, Eisen, et al., 1996). It affects quality of life of patients, exerts a deleterious effect on their cognition, adherence to treatments and also a reaction to a progressively disabling disease and frequent in the secondary progressive form of multiplesclerosis. (Shen, Bai, Gao, Cui, Tan, Tao, et al., 2014). Joffe and his colleagues (1987), in a systematic psychiatric evaluation on 100 consecutive patients with multiple sclerosis reported that Forty-two percent of the patients had lifetime history of depression (Joffe, Lippert, Gray, Sawa& Horvath., 1987). Biscay et al. (2008), in their study of Evaluating depression in patients with MS found that 31.4% of patients reported symptoms of depression. The study revealed that the depression symptoms occur almost twice more among the patients with multiple sclerosis compared with the general population in Norway (Beiske, et al).

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Anxiety is also a common emotional disorder that people experience when diagnosed with MS. Numerous studies show that anxiety is almost as common as depression in persons with MS (Korostil and Feinstein, 2007; Beiske et al., 2008; Marrie et al., 2013). The life prevalence of anxiety disorders in MS patients is as high as 21.9% (Marrie et al., 2015). Individuals with anxiety disorder are more likely to be female, have a history of depression, drink excessively, have higher levels of social stress and contemplated suicide (Korostil & Feinstein., 2007). Many studies found that cognitive dysfunction (deficits in thinking, remembering, and reasoning) was significantly correlated with increased anxiety. It is amongst the most important factors to investigate for PwMS as, if untreated, it can significantly impact quality of life (Dubayova et al., 2013), physical disability (Jones et al., 2014), sleep quality (Vitkova et al., 2014), treatment adherence and symptoms (Mohr & Cox, 2001) in MS. Beiske and colleagues (2008) in their study of 140 MS patients found that 19.3% of the MS patients reported anxiety. The result showed that anxiety was associated with fatigue, pain, younger age at onset and lower disability.

It has been suggested that certain MS-related physical symptoms influence the level of anxiety and distress experienced. It is generally considered that having unrelenting chronic pain and level of disability may influence the level of anxiety experienced by those with MS (Kerns, 2000). Noy et al. (1995), in their research found that there is a positive association between anxiety levels and the number of exacerbations in people with MS.

### **EVIDENCE FOR ACT ON EMOTIONAL STATE IN MS**

Acceptance and commitment therapy (ACT; Hayes, Strosahl, & Wilson, 1999) is an acceptance and mindfulness based approach that can be applied to many problems and disorders, including MS. It appears to be a powerful therapeutic intervention that can reduce depression, anxiety and enhance quality of life of people with MS. ACT emphasizes observing thoughts and feelings as they are, without trying to change them, and behaving in ways consistent with valued goals and life directions. ACT has shown promising results in several recent studies (Bach & Hayes, 2000; Bond & Bunce, 2000; Dahl, Wilson & Nilsson, in press; McCracken, Vowles & Eccleston, 2004; Zettle, 2003). The aim of ACT in the treatment of depression and anxiety in MS is to help the client to develop greater psychological flexibility in the presence of thoughts, feelings, and behaviors associated with the disease. One of the main problems of chronic patients, especially patients with Multiple Sclerosis (MS), is negative emotions. studies revealed that the depression symptoms and anxiety symptoms respectively occur almost twice and three times more among the patients with multiple sclerosis compared with the general population (Beiske et al, 2008). Depression and anxiety in multiple sclerosis (MS) have been linked to a more severe course of the disease and higher numbers of relapses. Many researchers have shown that ACT, could improve quality of life, depression and anxiety in MS patients. ACT's effectiveness in increasing psychological flexibility and reduce mood disorders that supported by Luciano, Guallar, Aguado, López-del-Hoyo et al. (2013). Zamani and colleagues (2017), evaluated the effectiveness of ACT on depression in patients with Multiple Sclerosis (MS). Results showed

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a significant reduction in depression. Rajabi & Yazdkhasti (2014), evaluated the effectiveness of ACT group therapy on anxiety and depression in women with MS. The results showed that anxiety and depression scores of experimental group significantly decreased. Sheppard and colleagues (2010), investigated the effectiveness of a half-day ACT workshop focused on teaching mindful acceptance, cognitive diffusion, and value-guided action strategies to 15 people with MS. The result showed a significant improvements in the areas of depression. Ayatollahi et.al (2013) reported that the ACT could lessen obsession, depression, and anxiety in patients suffering from MS.

### CONCLUSION

MS is a chronic disease with a negative effect on quality of life. Studies have shown that anxiety and depression can affect the progression of the disease. Psychosocial interventions, particularly ACT that aim to help the client to develop greater psychological flexibility in the presence of thoughts, feelings, and behaviors, may be beneficial for patients with MS. They are associated with improvements on measures of quality of life, depression, and anxiety. Multiple studies examined the effectiveness of acceptance and commitment therapy on emotional state in persons with MS. Results showed that ACT could alleviate depression, and anxiety, and improve quality of life in patients suffering from MS (Sheppard *et al.*, 2010, Izadi et al., 2013). Future research should assess the cost-effectiveness of such integrated approaches, which are anticipated to promote improved symptomatic and functional outcomes among comorbid patients at lower costs.

### REFERENCES

- Beiske, A. G., Svensson, E., Sandanger, I., Czujko, B., Pedersen, E. D., Aarseth, J. H., & Myhr, K. M. (2008a). Depression and anxiety amongst multiple sclerosis patients. *European Journal of Neurology*, *15*(3), 239–245.
- Beiske, A. G., Svensson, E., Sandanger, I., Czujko, B., Pedersen, E. D., Aarseth, J. H., & Myhr, K. M. (2008b). Depression and anxiety amongst multiple sclerosis patients. *European Journal of Neurology*, *15*(3), 239–245.
- Compston, A., Confavreux, C., Lassmann, H. & et al. (2006). McAlpine's multiple sclerosis. 4th edn. Churchill Livingstone, London. In M.J. AMINOFF, F. BOLLER, D.F. SWAAB, (Eds.), *Handbook of Clinical Neurology*. The Netherlands: Elsevier.
- Eifert, G. H., & Forsyth, J. P. (2005). *Acceptance and commitment therapy for anxiety disorders: A practitioner's treatment guide to using mindfulness, acceptance, and values-based behavior change*. New Harbinger Publications.
- Feinstein, A. (2011). Multiple sclerosis and depression, *Mult. Scler.*, *17*, 1276–1281. <http://dx.doi.org/10.1177/1352458511417835>.
- Feinstein, A., Roy, P., Lobaugh, N., Feinstein, K., O'connor, P., & Black, S. (2004). Structural brain abnormalities in multiple sclerosis patients with major depression. *Neurology*, *62*, 586–590.

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- Fruewald, S., Loeffler-Stastka, H., Eher, R., Saletu, B., & Baumhacki, U. (2001). Depression and quality of life in multiple sclerosis. *Acta Neurologica Scandinavica*, 104(5), 257–261.
- Gelfand, J. M. (2014). Multiple sclerosis: diagnosis, differential diagnosis, and clinical presentation. In *Handbook of clinical neurology* (Vol. 122, pp. 269–290). Elsevier.
- Ghaffar, O., & Feinstein, A. (2007). The neuropsychiatry of multiple sclerosis: a review of recent developments. *Current Opinion in Psychiatry*, 20(3), 278–285.
- Ghaffari, S., Ahmadi, F., Nabavi, M., & Memarian, R. (2008). The effect of progressive muscle relaxation on depression, anxiety and stress in patients with multiple sclerosis. *ShahidBeheshti University Journal Research Medical Sciences*, 32, 45–53.
- Group, G. C. (2005). The Goldman Consensus statement on depression in multiple sclerosis. *Multiple Sclerosis Journal*, 11(3), 328–337.
- Izadi, R., Asgari, K., Neshatdust, H., & Abedi, M. (2012). The Effect of Acceptance and Commitment Therapy on the Frequency and Severity of Symptoms of Obsessive Compulsive Disorder. *Zahedan J Res Med Sci*, 14(22), 20–26.
- Janssens, A. C., Van Doorn, P. A., De Boer, J. B., Kalkers, N. F., van der Meché, F. G., Passchier, J., & Hintzen, R. Q. (2003). Anxiety and depression influence the relation between disability status and quality of life in multiple sclerosis. *Multiple Sclerosis Journal*, 9(4), 397–403.
- Jean, V. M., Paul, R. H., & Beatty, W. W. (1999). Psychological and neuropsychological predictors of coping patterns by patients with multiple sclerosis. *Journal of Clinical Psychology*, 55(1), 21–26.
- Joffe, R. T., Lippert, G. P., Gray, T. A., Sawa, G., & Horvath, Z. (1987). Mood disorder and multiple sclerosis. *Archives of Neurology*, 44(4), 376–378.
- Kerns, R. (2000). Psychosocial aspects of pain. *International Journal of MS Care*, 2, 5.
- Marrie, R. A., Fisk, J. D., Yu, B. N., Leung, S., Elliott, L., Caetano, P., ... Svenson, L. W. (2013). Mental comorbidity and multiple sclerosis: validating administrative data to support population-based surveillance. *BMC Neurology*, 13(1), 16.
- Mohr, D. C., & Cox, D. (2001). Multiple sclerosis: empirical literature for the clinical health psychologist. *Journal of Clinical Psychology*, 57(4), 479–499.
- Rajabi, S., & Yazdkhasti, F. (2014). The Effectiveness of Acceptance and Commitment Group Therapy on Anxiety and Depression in Women with MS Who Were Referred to the MS Association. *Journal of Clinical Psychology*, 21(1), 29–38.
- Ron, M. A. (1986). Multiple sclerosis: psychiatric and psychometric abnormalities. *Journal of Psychosomatic Research*, 30(1), 3–11.
- Sadovnick, A. D., Remick, R. A., Allen, J., Swartz, E., Yee, I. M. L., Eisen, K., ... Kastrukoff, L. F. (1996). Depression and multiple sclerosis. *Neurology*, 46(3), 628–632.
- Shen, Y., Bai, L., Gao, Y., Cui, F., Tan, Z., Tao, Y., ... Zhou, L. (2014). Depressive symptoms in multiple sclerosis from an in vivo study with TBSS. *BioMed Research International*, 2014.

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- Strosahl, K., & Wilson, K. G. (1999). *Acceptance and commitment therapy: an experiential approach to behavior change*. New York: Guilford Press.
- Vitkova, M., Gdovinova, Z., Rosenberger, J., Szilasiova, J., Nagyová, I., Mikula, P., ... van Dijk, J. P. (2014). Factors associated with poor sleep quality in patients with multiple sclerosis differ by disease duration. *Disability and Health Journal*, 7(4), 466–471.
- Zamani, E., Moatamedy, A., & Bakhtiari, M. (2017). The Effectiveness of Acceptance and Commitment Therapy on Depression in Multiple Sclerosis. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 3, 53–58.

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### **Conflict of Interest**

There is no conflict of interest.

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