1

provided by ZENODO

Running Head: STRESS AND DEPRESSION

Stress and Depression

Part I: Stress and Depression

Relationship between Stress and Depression

Stress causes confusion in our minds and body. In particular, psychological stress is associated with a higher risk for diseases such as heart disease and depression. Stress is a regular psychological response to any external pressure. In situations when we face stress, our body responds by preparing itself to cope up with the challenges. This is mostly done by the release of chemicals such as adrenaline, neurotransmitters, and stress hormones. The release of chemicals works in our favor as a source of energy, in turn affecting all our organs. This affect can either be positive or result in problems such as depression (Gracely et.al, 2011).

Depression is the result of an imbalance of the neurotransmitters. Depression is a combination of factors that depends on the environment, illnesses and genetics. Depression leads to loss of energy, interest, loss of appetite, weight, sleep and occasionally loss of cognitive abilities that can last for weeks. Continuous stress potentially leads to depression (Gracely et.al, 2011).

Two Factors of Stress Response That Influence the Development of Depression

The first response that takes place in our body when we suffer stress is the change in the chemical balance. Chemicals and hormones influence our moods and alter the various emotions of our body. The second response is the alteration of neurotransmitters. The neurotransmitters have the ability to rapidly change moods and gradually develop towards depression.

Influence of Depression on the Immune and Inflammatory Response Systems

Depression is the root problem of several other diseases and complications. This occurs because of the chemical alterations that take place in the immune system. The lack of a strong immune system allows severe inflammatory complications (Lange et.al, 2010).

PART II: Depression and Chronic and Autoimmune Diseases

Introduction

Autoimmune diseases occur when an abnormal immune response of the body takes place against the substance and tissues in the body. Fibromyalgia is a condition develops in the human body and causes chronic, long lasting muscle pain. The root cause of the problem is not derived; however, it is known to create fatigue and the probable cause of this is emotional trauma.

Connection between Depression and Fibromyalgia

Fibromyalgia is an autoimmune disease that is often linked to depression. It is a condition that invokes muscular pain with stiffness at specific points of the body. Problems include joint pains, sleep deprivation and some complain that they also have difficulty in swallowing. Patients with Fibromyalgia are noticed to have depression three times more than an average human. Depression leads to changes in brain chemistry, which affects the nervous system. The abnormality leads to a release of substances that makes the body even more sensitive to the pain. This pain is known as Fibromyalgia with chronic pain and intense feelings of depression.

High Co-Occurrence with Depression

Sadness is a reaction to many occurrences in our lives such as loss of job, death, life's struggles, and depletion of self-esteem. Depression is the result of these events and is the next level of sadness. It affects our lives and individuals with depression frequently face low energy levels, guilt, thoughts of suicide and many more complications (Lange et.al, 2010). Depression

has a tendency of lasting for several weeks, which further becomes the cause of more complicated illnesses.

One such complicated illness is known as Fibromyalgia. Depression and Fibromyalgia work hand-in-hand; due to the chronic muscle pain from Fibromyalgia, patients are unable to have relaxed mobility which leads to restrictions. The patients feel withdrawn and go into further depression. Fibromyalgia and depression have the ability of greatly affecting your lifestyle; hence, it is important to openly consult a doctor and try finding the right medication (Lange et.al, 2010).

Role of Stress Hormones and Inflammation

Researchers have found that stress hormones play a vital role in controlling Fibromyalgia and depression. The Hypothalamus-Pituitary-Adrenal Gland (HAP) controls essential functions including sleep, response to stress and most importantly depression. Sudden change in the HAP levels are known to produce low levels of stress hormones; whereas, the level of stress hormones increases in depression. When the levels of stress hormones are low, it can lead to impairment of responses to the physical and psychological stress (Bohlmeijer et.al, 2010).

Doctors believe that fibromyalgia is not like the typical inflammatory diseases. The joints do not appear to be swollen or inflamed. The tests which prove high inflammation in diseases such as Arthritis, very little elevations are noticed in Fibromyalgia. The illness requires treatment and it can occasionally become a problem when diagnosing the patient. Patients hide it from their families due to embarrassment and prolonging it only makes it worse (Bohlmeijer et.al, 2010).

Three Teaching Strategies That Might Reduce the Effects of Fibromyalgia

The first strategy that may reduce Fibromyalgia is opting for the medication option. Patients suffering from Fibromyalgia should consult doctors and receive appropriate medication for the right treatment (Murakami et.al, 2013). Doctors try to prescribe medicines that are aimed at reducing pain and fatigue. The intense pain leads to sleepless nights that may lead to depression. The responses of patients vary from one individual to another. Since the root cause of Fibromyalgia is unclear, the medications are provided on non-fixed basis (Murakami et.al, 2013).

The second strategy is the implementation of non-drug and alternative therapies.

Medications have the tendency of inflicting side effects. Due to these side effects, patients opt for nondrug therapies. Alternative approaches such as massages and movement therapies trigger the target points avoiding the intervention of medications (Murakami et.al, 2013).

The third strategy allows the patients to take control over the treatment. Patients do not have to rely on doctors or healthcare providers. The strategy included effective cost cutting and practicing the therapy at home reduces the muscle pain. A variety of self-help therapies on a regular basis will reduce the Fibromyalgia symptoms and gives a sense of control to the patient (Murakami et.al, 2013).

Methods Used To Encourage the Adoption These Strategies

Fibromyalgia is becoming a common problem due to the increasing rates of depression and stress. The three strategies implement treatments that are eligible of providing enough pain relief. Choosing the strategy depends on what the requirements of the patients are (Edwards et.al, 2011). If the patient wants to opt for a reasonable and cost effective strategy, the self-help

strategy should be opted. If a patient requires assistance from a doctor but does not want to take in medication, the other options of alternative therapies are a viable option (Edwards et.al, 2011).

Conclusion

Conclusively, we have learned that stress, depression, and Fibromyalgia are directly correlated. Due to the alteration of neurotransmitters and chemical imbalance, patients with Fibromyalgia suffer from chronic pain and complications. Abnormal reactions in the body make the patient more sensitive both physically and emotionally. In order to recover from Fibromyalgia, patients require some form of intervention from a specialized provider.

References

- Bohlmeijer, E., Prenger, R., Taal, E., & Cuijpers, P. (2010). The effects of mindfulness-based stress reduction therapy on mental health of adults with a chronic medical disease: a meta-analysis. *Journal of psychosomatic research*, 68(6), 539-544. Retrieved from http://www.sciencedirect.com/science/article/pii/S0022399909004152 on September 25, 2014.
- Edwards, R. R., Cahalan, C., Mensing, G., Smith, M., & Haythornthwaite, J. A. (2011). Pain, catastrophizing, and depression in the rheumatic diseases. *Nature Reviews Rheumatology*, 7(4), 216-224. Retrieved from http://www.nature.com/nrrheum/journal/v7/n4/abs/nrrheum.2011.2.html on September 25, 2014.
- Gracely, R. H., Ceko, M., & Bushnell, M. C. (2011). Fibromyalgia and depression. *Pain research and treatment*, 2012. Retrieved from http://www.hindawi.com/journals/prt/2012/486590/abs/ on September 25, 2014.
- Lange, M., & Petermann, F. (2010). [Influence of depression on fibromyalgia: A systematic review]. *Schmerz (Berlin, Germany)*, 24(4), 326-333. Retrieved from http://europepmc.org/abstract/MED/20602119 on September 25, 2014.
- Murakami, M., & Kim, W. (2013). Psychosomatic Aspects of Fibromyalgia. In *Somatization and Psychosomatic Symptoms* (pp. 165-174). Springer New York. Retrieved from http://link.springer.com/chapter/10.1007/978-1-4614-7119-6_13 on September 25, 2014.