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Mindfulness-Based Cognitive Therapy and Diabetes Management

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Over nine percent of the United States population has a chronic disease of type II Diabetes (Taylor, 2018). This substantial amount of people must manage their symptoms so the disorder does not get worse. Some symptoms of type II diabetes include, but are not limited to, fatigue/drowsiness, frequent urination, infection of the skin, intense itching and pain/cramps of legs, feet, and fingers (Taylor, 2018). These symptoms can progress with noncompliance to diabetes management problems. If the symptoms are not managed they can lead to amputations, kidney failure, liver failure, loss of eyesight, and even death (Taylor, 2018). Therefore, management programs are critical for the individual to maintain a longer, healthier life.

However, diabetes frequently has comorbidities of both physical and mental health complications, hindering management. Comorbid physical health problems can be hypertension, kidney damage, obesity and cardiovascular disease (Fugger et al., 2019). For the mental health comorbidities, 40% of individuals who have diabetes suffer from anxiety symptoms and 20-40% have depressive symptoms (Son et al., 2014). These mental health comorbidities, which are the focus of this paper, lower self-care behaviors, have an adverse impact on insulin, and lead to poor management of other comorbid health problems (Son et al., 2014). Decreases in mental health can lead to mismanagement of diabetes symptoms. This can happen by an individual having decreased physical activity or by having inadequate drug compliance, which can make stress more prominent, leading to further problems.

Diabetes Management

Diabetes management programs often require serious life changes. Some common life changes for this group of individuals include, but are not limited to, losing weight, managing stress, changing diet, and exercise (Taylor, 2018). Because many lifestyle choices lead to the

development of type II diabetes, management is difficult because individuals have to change their lifelong habits. Common changes individuals' should make to their lifestyles include refraining from indulging in sugary food and drink and adopting an exercise routine.

When insulin levels are not controlled, due to not following the recommended management plan, individuals are at higher risk for the development of depression (Fugger et al., 2019). This mental health complication can lead to added stress or non-compliance to the management program. When stress is increased, it elevates the levels of glucose in the system, which in turn worsens the symptoms of diabetes (Taylor, 2018). Stress management is addressed in diabetes management programs, but other mental health disorders frequently are not. Comorbid mental health disorders are depression and anxiety. These disorders can cause stress and noncompliance to diabetes management programs.

Diabetes and mental health

To begin, Fugger et al., (2019) noted that roughly 94,000 completed suicides happen worldwide each year within the diabetes population. This suggests the serious mental health problem that goes untreated in this population. This further supports the need for better mental health treatment to be implemented into diabetes management programs.

Research also suggested that mental health complications have been overlooked in clinical practice for diabetes and many individuals remain untreated (Son et al., 2012). Because mental health disorders are common among this population, the absence of mental health treatment can aggravate diabetes symptoms reducing the quality of life. This group of individuals is more likely to participate in adverse health behaviors such as smoking, physical inactivity, and poor diet (Fugger et al., 2019). Additionally, as an example of how depression can advance symptoms of diabetes, high blood pressure and heart disease are common among individuals

with advanced depression and comorbid diabetes (Fugger et al., 2019). Therefore, individuals suffer not only the common adverse health habits of depression that typically make diabetes symptoms worse, but also the comorbid physical health problems which advance their symptoms.

Some treatment options for mental health comorbidities are antidepressant medication including, selective serotonin reuptake inhibitors (SSRIs). This drug not only has a positive effect on depression, but also on blood glucose control (Fugger et al., 2019). This treatment option limits the adverse side effects of depression to give the individual the push to jump back into proper diabetes management.

The other positive side effect of SSRIs is that they lower blood glucose levels among some patients. This assists in keeping glucose levels low, which helps to reduce the adverse side effects of diabetes. The drawback of SSRIs is that there is poor drug adherence, with compliance rates varying from 38%-79% (Roohafza et al., 2016). Although SSRIs have promising results, many individuals do not benefit because they fail to take the drug.

However, additional drawbacks of psychopharmacological treatment are the side effects of the drug. About 30-50% of diabetic patients do not respond to antidepressant drug treatment, or relapse back into depressive symptoms (Son et al., 2012). Another complication with antidepressants are that individuals are noncompliant in taking them or some people take the drugs but do not find symptom relief, leaving them with their depressive symptoms. This leaves a need for a more effective mental health therapy that has long term, lasting effects for diabetic patients.

Mindfulness based Cognitive therapy (MBCT)

An alternative therapy, Mindfulness-based cognitive therapy (MBCT), has been implemented into some diabetes treatment plans. Traditionally developed as a treatment plan for individuals who have recurring depression, this therapy has been adapted into many new contexts (Alsubaie et al., 2017). MBCT focuses on mindfulness practices from yoga, by focusing on breath and the somatic sensations of the body at a given moment, while also implementing cognitive therapy. MBCT helps the individual recognize stressors that disrupt daily life, to stay mindful and think in the present.

The cognitive aspect helps in identifying the negative thinking patterns to not only stop them at that moment, but also rewire how the individual approaches those thoughts in the future. Some repetitive adverse thinking patterns are fear and denial (Alsubaie et al., 2017) about their diagnosis of diabetes; however, constantly thinking about these feelings will only cause stress. By reducing adverse thinking patterns, MBCT can help individuals accept their diagnosis, which helps in stress management, a part of their treatment regimen.

Lastly, focusing on the body centers attention inward to understand what is happening internally at the given moment. By paying attention to breathing, MBCT helps with stress and anxiety by bringing the autonomic nervous system back into a resting state. Even basic breathing techniques of extending the exhale have calming effects in the body. MBCT techniques have positive evidence for supporting mindfulness, a reduction in worry, and rumination (Alsubaie et al., 2017). This helps with stress management which is a key element to basic diabetes management programs.

MBCT and Diabetes

MBCT has evidence supporting the positive effects on decreasing depression, anxiety, and fatigue in individuals with diabetes (Alsubaie et al., 2017; Son et al., 2014; Son et al., 2012).

Additionally, research shows an increase in cognitive and emotional reactivity (Alsubaie et al., 2017). This means that diabetic patients who do MBCT have an increased ability to control their thoughts and emotional regulation.

Concerning the long term effects of MBCT, Son et al., (2014) found that compared to the control group, individuals who had MBCT maintained their gains from therapy for six months with little to no follow-up intervention (Son et al., 2014). Since the study was limited to only 6 months of follow up, the long lasting effects of MBCT are unknown. However, it illustrates that the benefits of MBCT are maintained over an extended period of time, which helps in lowering the rate of relapse for the mental health disorder.

However, the drawbacks of this therapy are that it is not multifaceted like psychopharmacological therapy. MBCT does not affect glycemic levels (Son et al., 2014; Son et al., 2012) as drug therapy did; however, it did show long term effects that drug therapy did not. Additionally, MBCT is not a universally consistent therapy, in that many programs differ in lengths and goals. Most of the research is goal directed to decrease depressive symptoms, and there is not much research on MBCT and anxiety (Alsubaie et al., 2017). However, this can be addressed with additional studies, with an improved universal approach MBCT and more research on its effects on anxiety management.

Conclusion

In conclusion, the implementation of more mental health programs among the at-risk diabetic population may reduce the suicide rate, along with improving the quality of their lives. Poor mental health can lead to poor self-care behavior, inadequate glycemic control, and higher mortality rates (Son et al., 2014). In turn, lowering the adherence to management programs and furthering the adverse symptoms of diabetes

Therefore, treatment of depression and other mental health-related disorders is necessary to have proper compliance in diabetes treatment. Mismanaging diabetes can lead to death or other severe life-debilitating side effects like liver and kidney failure, loss of limbs, etc. By implementing more mental health programs into management regimens, compliance will increase to managing symptoms, along with the increase in the quality of their lives.

It has been noted that self-efficacy and self-care greatly improve compliance with diabetes management programs (Taylor, 2018). By incorporating MBCT into diabetes management, we protect at-risk individuals and promote the characteristics of good compliance. MBCT shows promising results in reducing symptoms of anxiety and depression, while also increasing the quality of life. MBCT also supports control over negative thought rumination along with reducing stress. This makes it easier for individuals to have more control over their life, in turn, creating a better adherence to their diabetes regimen.

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