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Review of the Effectiveness of Mindfulness-based Cognitive Therapy (MBCT) In Reducing Symptoms of Bulimia Nervosa

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Abstract: Bulimia nervosa is a serious disorder with limited intervention such as mindfulness-based cognitive therapy with relapsing bulimia nervosa for patients which is require, however, few studies focus on its use in patients with bulimia nervosa**.** Review and examine studies of Mindfulness-based cognitive therapy Cognitive-behavioural psychotherapy as treatment. A study by Sala et al. (2021) found that MBCT improved eating behaviours, while the results of a study by Juarascio et al. (2021) indicated that MBCT led to an improvement in symptoms for patients with bulimia nervosa **.**Using of mindfulness-based cognitive therapy with relapsing bulimia nervosa patients is needed. The need for Arab studies comparing the effectiveness of mindfulness-based cognitive therapy with other psychological treatments for relapsing bulimia patients.

Keywords: Mindfulness-based cognitive therapy, relapsing bulimia nervosa patients.

1 Introduction

Multiple factors cause bulimia nervosa, including biological variables, family and educational factors, and the quality of subjective perceptions (Archer & Cash, 1985). It can also occur after experiencing a severe or unpleasant negative emotional experience, such as exposure to violence, rejection, and life problems or pressures (Muuss, 1998). The bulimia nervosa outcomes are affected by various factors, and these also include multiple biological factors as well. There are various abnormalities that are biological in occurrence such as imbalance of body hormones and gene mutations, various psychological aspects such as body image dissatisfaction and depression, low self-satisfaction, difficulty dealing with emotions), and social factors (social stress, media influence that can induce binge eating) (Ferrante et al., 2002).

Patients with bulimia nervosa can manage highly complicated schedules for the accommodation of attacks of emptying as well as bulimia and frequent toilet visits are needed by such people. Repeated self-vomiting can contribute to parotitis, tooth discolouration, enamel erosion, or rough patches of skin on the hands (Harrington et al., 2015).

Overeating is understood to be a dysfunctional coping mechanism that overeating people use when facing negative emotions, to escape from these emotions (Baer et al., 2005), such as negative body image, which causes feelings of shame and self-criticism; as symptoms of the disorder (Pinto-Gouveia et al., 2019). Therefore, bulimia nervosa is a disease that requires self-management and regulation of emotions (Dreyfuss et al., 2017).

According to DSM 5 abbreviation of the fifth diagnostic and statistical manual of the mental disorders, the eating disorders are generally classified into 5 kinds, and these include, (bulimia nervosa, anorexia nervosa, binge eating, other eating or feeding disorders, and unspecified eating or feeding disorders) (American Psychiatric Association, 2013). Eating disorders can arise for many reasons, some of which are related to the social and cultural standards prevalent in the university environment (which may focus on thinness), body image (VanLone, 2002), the influence of university colleagues, attitudes towards eating (Jones et al., 2001), and attempts to cope with the stress of university life (Schwarz et al., 2005).

The excessive eating and consumption of large amount of food over a short time period is a condition that is called Bulimia nervosa (bingeing) (Dreyfuss et al., 2017; Sathyapriya, 2018), followed by deliberate vomiting by any means in order to counteract the weight gain. This has serious repercussions for the sufferer's physical and psychological health (Dakanalis et al., 2015). Mira Cooper et al. (1998) add that the binges can followed by feelings of guilt, low self-esteem, depression, self-hatred, low self-concept and related feelings of shame, rejection, and incompetence (Hall & Cohn, 1999).

The prevalence of bulimia nervosa in the existing human population these days is as much as women 5 percent while men 2.5 percent according to Hudson et al in 2007 with the prevalence being particularly high among university students, estimated at 6.07% (Bakr et al., 2021). In Saudi Arabia, the prevalence is approximately 2.7% in men and 3.8% in women

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(World-Health-Survey-Saudi-Arabia, 2019). The need is critical to treat the condition properly since it is considered to link with various medical and health complications, higher rates of mortality and higher physical impairment etc (Suokas et al., 2013; Mitchell, 2016).

2 Methods

A narrative review method (e.g., Green et al, 2006) has used with multiple sources, including identifying relevant studies via Scopus, Web of Science, PubMed, Google Scholar, and Psyc-info, which were searched using the following key words, individually and combined: 'Mindfulness-based cognitive therapy', 'relapsing bulimia nervosa patients.

3 Result and discussion

The main barrier to recovering from bulimia nervosa is quick as well as early relapses once the treatment is done and hence it is needed to be guaranteed that the specialist is provided to the patient that includes effective interventions for bulimia nervosa and strategies to prevent the risk of relapse, in order to improve long-term outcomes (Elisabeth et al., 2021). Even with the best treatments available, most people with bulimia nervosa still have symptoms at the end of treatment, and even those who have achieved stability have a high risk of relapse. Thus, there is a need for interventions focused on the prevention of relapse after treatment (Robinson et al., 2006).

Several studies have addressed the different psychological treatments for bulimia nervosa, such as two studies (Bernacchi, 2017) that used cognitive-behavioural therapy (CBT), and a study (Glisenti, et al., 2021) that used emotion-based therapy (EBT). In addition, Yaraghchi et al. (2019) and Khatabah (2021) studied acceptance and commitment therapy (ACT), Haynos, Forman, Butryn, and Lillis, (2016); Baer, Fischer, and Huss (2005). In the treatment of eating disorders, the mindfulness and acceptance are essential. In 2017, Ferrer Garcia used the therapy of virtual reality exposure.

Psychological interventions based on mindfulness are used to treat bulimia nervosa (Mace, 2008), and there is research-based evidence about its success in helping many to reconcile with themselves (Grow et al., 2015), relieving symptoms, and preventing relapse (Witkiewitz et al., 2012). Increasingly, more systematically controlled studies are being published (Goyal et al., 2014).

The cognitive therapy that is based mainly on mindfulness has increased in trend in the past few years especially in bulimia nervosa treatment (Pierick, 2021). It is an interesting complementary therapy that can be effective in influencing mediating factors by reducing the mental burden related to bulimia stimuli (Sala et al., 2021). Kristeller et al. (2014) compared the effectiveness of MBCT with CBT and found that MBCT is more effective in treating eating disorders.

The death rate from bulimia nervosa often associated with serious complications for the sufferer's physical and mental health that lead to hospitalization (Dakanalis et al., 2015; Bernacchi, 2017; Stoving et al., 2020). Bulimia nervosa is often a long-term condition, fluctuating over time (Zipfel, 2015); approximately 5% of patients have died at long-term follow-up (Fichter, 2017). In the treatment of Bulimia nervosa, there is a challenge that affects all the treatment settings and stages, it is the adherence to the treatment. The rate of discontinuation is 30 to 40 percent. (DeJong et al., 2012). After the termination of their treatment (Berends et al., 2018) due to interruption of care, as post-treatment and discharge from hospital is a critical transitional phase that is not well treated and managed (Zipfel, 2015).

Despite clinically significant positive results of people with CBT suffering from eating disorders nearly 50 percent of the people suffering from it are often symptomatic even after treatment (Linardon et al., 2017). Furthermore, rates of relapse after cognitive- behavioural therapy often appear to match the stabilization rates that occur in the period.

In between the post treatment as well as trials for follow up and often false impression is given that no relapse takes place when inferred statistically. On the closer examination, after mindfulness and cognitive therapy treatment, the relapse rate for such eating disorders is higher than 30 percent. (Södersten et al., 2017). It has been found in multiple studies that as much as 25 percent clinical trial participants for Cognitive-behavioural therapy for bulimia nervosa abstain from treatment (Agüera et al., 2017). Such findings point to a significant need to improve the efficacy and outcomes of cognitive-behavioural therapy in treating bulimia nervosa. The current study aims to summarize what has been previously published, avoiding duplications, and seeking new study areas not yet addressed such as mindfulness-based cognitive therapy with relapsing bulimia nervosa.

3-1 Mindfulness-based cognitive therapy and eating disorders:

The MBCT is an abbreviation of mindfulness based cognitive therapy. This is actually a group-based therapy combining various behavioral mindfulness elements and other trainings in mindfulness to allow patients dealing with complex emotions and stress. (Tickell et al., 2020). The patients are normally taught with the help of mediation and awareness training to determine the inside feelings and effective dealing with the most difficult emotions. (Courbasson et al., 2010). Zindel Segal, Mark Williams, and John Teasdale developed this therapy as a way to prepare the therapies of mindfulness with another effective program designed and formulated by Jon Kabat-Zinn in 1979, this therapy could be more effective (Mackenzie & Kocovski, 2016). Brown and Ryan (2007, p.823) define mindfulness as "objective, conscious attention in the present moment" while in 1994, Kabat Zinn worked and explained that the attention is always specific and can be used intentionally in the present moment without making any judgements. In 1999, Epstein observes that it is a potential to attend in a way that is non evaluative to various mental processes and physical traits of people, especially in performing everyday routines. Mindfulness is inherent in this way, but surely it is a modifiable trait and hence capacities of people are various, and they are often aware of the happenings in their surroundings and present (Brown & Ryan, 2007). Hassed (2016) adds that mindfulness is a general skill that has a wide range of applications, include boosting mental health, communication, sentiment, emotional growth, and improving physical health, learning, and performance.

Hasker (2010) considers that mindfulness consists of two main aspects: self-regulation of attention in the present moment; and openness, readiness, and awareness of experiences in the present moment. Maya Duerr (2008), Shapiro et al. (2005) and Cohen-Katz (2005) argue that mindfulness has both physiological benefits (reducing chronic pain, stimulating immune function, and improving sleep quality) and psychological benefits (reducing stress, burnout, anxiety, depression, and phobias, and improving attention, memory, compassion, empathy, and self-compassion). Mindfulness-based interventions emphasize the formal practice of mindfulness meditation to enhance attention skills and to develop a non-judgmental and self-compassionate attitude (Chiesa & Serretti, 2011) and mindfulness-based interventions have been used to complement psychotherapy and effectively target residual symptoms after exposure to mindfulness therapy (Key et al., 2017).

Mindfulness-based therapy helps individuals learn how to pay attention to their feelings and sense of the reality around them, and to see themselves as separate entities from their thoughts and emotions, meaning that the thoughts and emotions that they experience are not necessarily permanent facts that define their identity, but rather temporary states that they can be aware of and overcome without negative judgment or self-criticism. This allows the individual to be liberated from repeated negative thinking patterns and substitute them with positive thoughts. The treatment for mindfulness-based therapy is applied as a weekly group treatment programme over a period of 8 weeks, at a rate of one two-hour session per week, ending with homework assigned to patients for a period of 45 minutes on weekdays. The group sessions may include activities and exercises such as listening to recordings and practising mindfulness-based meditation, in addition to breathing exercises in what is known as "breathing space" and using these exercises regularly in their daily lives (Good Therapy, 2018).

Mindfulness-based therapy has been used to treat various types of eating disorders, with the rationale being based on the Emotion Dysregulation Model presented by Monell et al. (2015), who confirmed that overeating individuals have a reduced ability to describe and identify emotions and tend to use impulse dysregulation strategies more than others. Pinto-Gouveia et al. (2019) applied a group intervention programme for binge eating disorder (BED) using the experimental method and a sample of 31 overweight and obese women suffering from BED. Repeated psychological measures were applied to analyses variation, with the group programme consisted of 12 sessions in which the techniques of psychological education, mindfulness, compassion and values-based actions were used. Follow-up measurements of psychological illness, feelings of shame, self-criticism, psychological inflexibility, increased self-pity and participation in values-based actions and cognitive integration of body image at 3 and 6 months post-application of the collective program, showed the preservation of programme results in the sample. The Nina Pierick 2021 reference study examined the literature on mindfulness-based psychotherapy and binge-eating disorder, identifying relevant studies via Scopus, Web of Science, PubMed, Google Scholar, and following PRISMA guidelines. The examination included a review of 10 studies reporting experimental data and information related to mindfulness-based mental therapy as a therapeutic approach with clinical or quasi-clinical samples; the most important results concluded that mindfulness-based therapy is a promising method for treating BED. The 10 studies included an experimental study using randomized control and a control group, a study that used a one-case approach, and eight model studies that used small samples. Improve with the help of mindfulness-based therapy: patients' depression scores decreased, and the results showed stability across follow-up measurements and an improvement in depression scores. Surprisingly, participants were not able to lose weight with a mindfulness-based approach, as had been expected, and one study that directly compared MBCT to CBT showed that mindfulness-based therapy was more effective in the treatment of binge eating disorders.

3-2 Studies that examine the use of MBCT for bulimia nervosa

A study by Sala et al. (2021) aimed to investigate the effectiveness of MBCT as a complementary approach for patients with bulimia nervosa and BED to reduce the mental burden of words related to body shape, weight, and food. The study used an experimental method, with 88 male and female participants. The participants were subjected to evaluation before undergoing the treatment programme, which consisted of eight weeks of mindfulness-based cognitive therapy; this also involved an assessment of their cognitive skills. The Three-Factor Eating Questionnaire (TFEQ: Anglé et al., 2009) factors and accompanying disorders (depression, trait, and anxiety state scale), and the mental burden of words were evaluated using a modified version of the Strobe colour-naming test (Scarpina, &Tagini, , 2017). Most importantly, the study concluded that reasoning skills improved after the programme, and improved eating behaviours were associated with a decrease in depression and anxiety and an improvement in performance on the Strobe scale.

Juarascio et al. (2021) studied the efficacy of mindfulness- and acceptance-based treatments (MABTs) compared to traditional mindfulness-based behavioural therapy for bulimia nervosa patients. Scales were used to measure binge eating episodes, the severity of bulimia nervosa, symptoms of depression, quality of life, emotional awareness, stress tolerance, and value-based decision-making. The results showed that the differences between therapy types were small, with both showing significant changes and improvements in symptoms for patients; consequently, the study recommended further research to evaluate the effectiveness of therapies based on acceptance reasoning.

This integrative review is the new paper to explore the effectiveness of mindfulness-based cognitive therapy (MBCT) in reducing symptoms of bulimia nervosa. The purpose of the current review was to examine the existing literature A study by Sala et al. (2021) found that MBCT improved eating behaviours, while the results of a study by Juarascio et al. (2021) indicated that MBCT led to an improvement in symptoms for patients with bulimia nervosa. Both studies used an experimental method and depended on samples of bulimia nervosa patients of both sexes, applying diagnostic tools used for bulimia nervosa (Sala et al., 2021; Juarascio et al., 2021).

4 Summary

Using of mindfulness-based cognitive therapy with relapsing bulimia nervosa patients is needed. The need for Arab studies comparing the effectiveness of mindfulness-based cognitive therapy with other psychological treatments for relapsing bulimia patients.

Conflict of interest

The authors declare that there is no conflict regarding the publication of this paper.

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