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Mindfulness Meditation And Cannabis Use Disorder – A Holistic Approach In Improving Quality Of Life

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Abstract

Cannabis has become the second most abused substance worldwide. Treatment of cannabis use disorder among the youth is a challenging task. Cannabis abuse can lead to immediate and long term complications on health, personal and social life. While addressing the issues related to management of cannabis abuse, measures to improve quality of life also need to be considered. The health care professionals should bear in mind that, blaming the patients with cannabis abuse is of no use. Helping them to realize their present situation is very important. Meditation is one of the techniques which will help the individual to introspect into oneself. There is increased evidence showing that meditation can improve the joys of life, ability to cope with illness, and possibly improve physical and emotional health. Mindfulness meditation is a recently evolved meditation technique which will help an individual to understand and live in the present moment without judging the past or without being anxious about the future. This increased awareness can lead to improvement in subjective wellbeing and quality of life.

Key words: Mindfulness meditation, Cannabis use disorder.

Introduction

According to Global Burden of Diseases, Injuries, and Risk Factors Study (GBD) 2016, it was found that the most common drug use disorders were cannabis dependence (22·1 million cases; age-standardised prevalence 289·7 cases per 100 000 people, 95% UI 248·9-339·1)¹. Cannabis use can cause both long term and short term effects in individuals including cognitive decline, personality disintegration and ultimately reduces the quality of life.^{2:3,4,5,6} Medical management combined with measures to improve quality of life can demonstrate better treatment outcomes for patients with cannabis abuse. Quality of life is defined as an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.⁷ In order to improve the quality of life, one can adopt different non pharmacological measures including mindfulness meditation. Mindfulness meditation is an emerging meditation technique proved to improve the overall quality of life and psychological well-being of patients with various problems. Mindfulness is defined as "the awareness that emerges by way of paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment." It has two main components which are awareness and non-judgemental attitude which will help to deal with common psychological distress like fear, anxiety, rumination etc^{8,9,10}.

Origin of mindfulness

Mindfulness has its original roots in ancient cultures like Hinduism and Buddhism^{11,12} Even though the exact origin of mindfulness is not recorded in Hinduism, Bhagavad Gita and Vedic meditation describes about focussed meditation. Similarly Buddhism plays a great role in mindfulness. Buddhism and Hinduism have many common features, both originated in the Asian subcontinent and 'dharma' is the basic concept of both. This concept is very difficult to define or translate, yet includes a way of life influenced by the natural order of the universe. According to Buddhism, mindfulness (Sati) is considered to be the first step towards enlightenment.

Even though mindfulness has its roots in Buddhism, people are practicing mindfulness in the western countries based on the empirical evidences of its efficacy. Prof. John Kabat Zinn introduced mindfulness to the western society during 1970s¹³. He is the founder of Mindfulness Based Stress Reduction (MBSR), an eight weeks training session aimed at reducing the stress¹⁴ Later on several research studies proved its efficacy in

reducing distressing symptoms like depression, sleeplessness, anxiety as well as improving overall well- being and quality of life¹⁵.

Mindfulness can be cultivated by several disciplines and practices like yoga, tai chi and qigong, but most research studies have focused on mindfulness that is developed through mindfulness meditation. In short, mindfulness meditation can be regarded as those self-regulation practices that focus on training attention and awareness with a view to bring mental processes under greater voluntary control and thereby improve general mental well-being and development. It also help in improving capacities such as calmness, clarity and concentration^{16,17}.

Systematic reviews of meditation-based tools such as meditation using focused attention, Mindfulness Based Stress Reduction (MBSR) and Mindfulness Based Cognitive Therapy (MBCT) have shown reduced anxiety, depression and post-traumatic stress disorder, stress, blood pressure, cortisol levels and other physiologic markers of stress¹⁸⁻²¹. Having a regular meditation practice can benefit people working in the health service including patients with different mental disorders²². One of the major advantage of Meditation technique is, it is easy to learn. Even though learning in the present situation has shifted to online platforms, meditation can be taught and supported through online²³. It can be done as individual as well as group practice. Meditation techniques can be adapted for almost all age groups including, children, teens, adults and elderly. It is beneficial even for those with intellectual disabilities²⁴. More than this, mindfulness as a trait has been associated with higher levels of life satisfaction, agreeableness, self-esteem, empathy, conscientiousness, sense of autonomy, competence, optimism, vitality, and pleasant affect²⁵⁻²⁹.

Benefits of mindfulness

There are many benefits for mindfulness. The most important one is, it is a cost effective method and can be practiced without the help of some equipment. The most relevant benefit of mindfulness is psychological well-being. According to the principles of mindfulness, the elements namely awareness and non-judgmental acceptance of one's moment-to-moment experience, are potentially effective against common forms of psychological distress like rumination, anxiety, worry, fear, anger, and so on. Most of these feelings are associated with maladaptive tendencies to avoid, suppress, or over-engage with one's distressing thoughts and emotions³⁰. The benefits of mindfulness can be broadly classified as

- Reduce rumination
- Reduce stress
- Increase positive affect
- Boosts the working memory
- Help to improve focus
- Less emotional reactivity
- More cognitive flexibility
- Improve the quality of life

Reduce rumination: Rumination is wandering of thoughts. Even though it causes distress to an individual, he may not be able to control it. Regular practice of mindfulness help individuals to reduce rumination. There are many research studies which proved that mindfulness practices can reduce rumination in variety of conditions like ADHD, Anxiety disorders, substance use disorders and so on ³¹.

Improve affective and cognitive responses: Many studies show that practicing mindfulness reduces stress. In 2010, Hoffman et al. conducted a meta-analysis of 39 studies that explored the use of mindfulness-based stress reduction and mindfulness-based cognitive therapy. The researchers concluded that mindfulness-based therapy may be useful in altering affective and cognitive processes that underlie multiple clinical issues³².

Boosts the working memory. Improvements to working memory appear to be another benefit of mindfulness. A study conducted in 2010 documented the benefits of mindfulness meditation among a military group who participated in an eight-week mindfulness training, a non-meditating military group and a group of non-meditating civilians. Both military groups were in a highly stressful period before deployment. The researchers found that the non-meditating military group had decreased working memory capacity over time, whereas working memory capacity among non-meditating civilians was stable across time. Within the meditating military group, however, working memory capacity increased with meditation practice³⁴.

Focus. Mindfulness is found to have the power to improve the focus of attention among different category of people who regularly practice mindfulness. In a study the researchers compared a group of experienced mindfulness meditators with a control group that had no meditation experience. They found that the meditation group had significantly better performance on all measures of attention and had higher self-reported mindfulness.³⁵

Less emotional reactivity. There are empirical evidences to prove that mindfulness meditation decreases emotional reactivity. In a study of people who had anywhere from one month to 29 years of mindfulness meditation practice, researchers found that mindfulness meditation practice helped people disengage from emotionally upsetting pictures and enabled them to focus better on a cognitive task as compared with people who saw the pictures but did not meditate³⁶.

More cognitive flexibility. Many researchers found that mindfulness not only help the people to be less reactive, but also boost greater cognitive flexibility. One study found that people who practice mindfulness meditation appear to develop the skill of self-observation, which neurologically disengages the automatic pathways that were created by prior learning and enables present-moment input to be integrated in a new way. Meditation also activates the brain region associated with more adaptive responses to stressful or negative situations. Activation of this region corresponds with faster recovery to baseline after being negatively provoked^{37,38}.

Relationship satisfaction. Several studies find that a person's ability to be mindful can help predict relationship satisfaction — the ability to respond well to relationship stress and the skill in communicating one's emotions to a partner³⁹.

Structural changes observed while performing mindfulness meditation

There are many empirical evidence which proved that people who have meditated over the long-term show changes in areas of the brain concerned with stress and anxiety. The prefrontal cortex, the cingulate cortex and the hippocampus show increased activity, and the amygdala shows decreased activity consistent with improved emotional regulation^{41,42,43}.

Improve psychological well-being and quality of life

Many researchers identified the efficacy of mindfulness meditation in improving the psychological well-being and quality of life. This is achieved through one's ability to focus on present moment without any judgement as well as increased awareness about oneself.

Process of mindfulness meditation

There are many interventions based on mindfulness like mindfulness meditation (MM), mindfulness based cognitive therapy (MBCT), mindfulness based stress reduction (MBSR) etc. The steps of these interventions may have variations. But the basic principle is mindfulness. In mindfulness meditation, the person will be taught about meditation by a trained therapist. Outcome is measured using different instruments. Mindfulness Attention and Awareness scale (MASS) and quality of life scale are some of the instruments used to measure the efficacy of mindfulness.

Conclusion

Quality of life is related to one of the basic human desires, which is to live well and feel good. Substance use causes problems related to increased mortality and morbidity and contributes to various forms of mental illness and social complications. Cannabis use may be a risk factor which will affect the neurological development, cognitive function, emotional well-being and quality of life adversely. Along with the pharmacological treatment, it is the prime responsibility of the health care professionals to address the issues related to Quality of life and implement non pharmacological interventions to improve the quality of life of patients with cannabis abuse.

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