

DOI: 10.26693/jmbs05.01.304

UDC 57.084.1+599.323.45

Kyselova A. A.<sup>1</sup>, Kravtsova E. S.<sup>2</sup>,  
Mishchenko D. O.<sup>2</sup>, Chernishova E. R.<sup>2</sup>

## THE RELATIONSHIP BETWEEN MINDFULNESS MEDITATION AND DEPRESSION

<sup>1</sup>SWPS: UNIVERSITY OF SOCIAL SCIENCES AND HUMANITIES, WARSAW, POLAND

<sup>2</sup>Dnipropetrovsk State Medical Academy, Dnipro, Ukraine

akyselova@st.swps.edu.pl

Depression is one of the most common diagnoses which patients with mood disorders can hear every day. It is a serious condition which influences both physical and mental health. There are several causes of depression (for instance, abuse, certain medications, conflicts at home, work, school, university, etc). Basically, symptoms can vary from feelings of unhappiness and hopelessness to losing interest in activities which patients used to enjoy before and some somatic changes, such as losing or gaining weight, sleep disturbances, and so on.

Nowadays, treatment for depression is very variable, and involves changes in lifestyle (both behavioral and somatic, like eating and exercising), attending psychotherapy and medication. In addition, other alternative methods, such as mindfulness meditation, yoga, and so on, are becoming more and more popular at the moment, and scientists design more studies and experiments which focus on showing the effect of such methods on treatment depression. One of the most well-known tools which are used nowadays for treatment of depression and dealing effectively with its symptoms is mindfulness meditation.

*The purpose of this article* was to describe what depression and mindfulness meditation are, briefly present the modern therapy which is used for treatment of depression, and present the relationship between mindfulness meditation and depression.

*Material and methods.* We analyzed 15 native and foreign resources (Internet sources, chapters from books, scientific journals, etc.) connected with the main topic of the article.

*Results and discussion:* According to many studies it was concluded that mindfulness meditation can be used as an alternative therapy for the treatment of depression. The review of modern studies and research connected with the main topic was done, and based on this review we would like to say that using of mindfulness meditation can decrease the expression of symptoms which are associated with depression. In addition, there were noticed some changes linked to

brain wave activity. Unfortunately, scientists cannot say for sure that this technique is suitable for everybody, due to the fact that all these studies were not longitudinal, and there is a chance that other factors also could influence the final outcomes.

*Conclusion.* To sum up, we would like to say that mindfulness meditation can be used on a daily basis as a way to reduce stress, especially in cases of depression on early stages. In addition, we believe that it is highly recommended to conduct a long-term study which can show the effect of mindfulness meditation at different stages of development.

**Keywords:** depression, mindfulness meditation, anxiety, emotions, mood, alternative therapy.

**Introduction.** One of the biggest groups of psychological and psychiatric illnesses is mood disorders [1]. The main characteristic of this category is a disturbance in mood (for instance, inappropriate, exaggerated, or limited range of feelings). To be diagnosed with different mood disorders (e.g. depression or bipolar disorder) the patient must have two possible extreme types of mood:

- Dysphoric mood (an unpleasant mood like sadness, anxiety, irritability, etc), or
- Elevated mood (an exaggerated feeling of well-being).

Nowadays, the most popular diagnosis from this category is depression [2]. It is a mood disorder which causes a persistent feeling of sadness and loss of interest, and causes changes in how a person feels, thinks, and behaves.

Despite the fact that depression can occur only once in the life, typically patients have multiple episodes, in which the most common symptoms are [3, 4]:

- Feelings of sadness, tearfulness, emptiness or hopelessness
- Angry outbursts, irritability or frustration, even over small matters
- Loss of interest or pleasure in most or all normal activities, such as sex, hobbies or sports
- Sleep disturbances, including insomnia or sleeping too much

- Tiredness and lack of energy, so even small tasks take extra effort
- Reduced appetite and weight loss or increased cravings for food and weight gain
- Anxiety, agitation or restlessness
- Slowed thinking, speaking or body movements
- Feelings of worthlessness or guilt, fixating on past failures or self-blame
- Trouble thinking, concentrating, making decisions and remembering things
- Frequent or recurrent thoughts of death, suicidal thoughts, suicide attempts or suicide
- Unexplained physical problems, such as back pain or headaches

Today there are several types of treatment which can be used for the therapy of depression [5, 6]. They are:

- Psychotherapy, or so-called “talk therapy”, which includes:
  - Cognitive behavioral therapy (CBT);
  - Interpersonal therapy (IPT);
  - Psychodynamic therapy
- Medications which divides into several groups:
  - Selective serotonin reuptake inhibitors (SSRIs), like Prtozac, Zoloft, etc;
  - Serotonin and norepinephrine reuptake inhibitors (SNRIs), like Effexor, Cymbalta, etc;
  - Mirtazapine
  - Second-generation antipsychotics (SGAs);
  - Tricyclic antidepressants;
  - Monoamine oxidase inhibitors (MAOIs)
- Brain stimulation therapy:
  - Electroconvulsive therapy (ECT);
  - Repetitive transcranial magnetic stimulation (rTMS);
  - Vagus nerve stimulation (VNS)

Despite the fact that there are a lot of modern methods which can be used for the treatment of depression, scientists cannot say for sure what is the main cause of depression. There are some probable factors which can influence the development of this disorder:

- Biological differences, namely physical changes in the brains;
- Low level of neurotransmitters (namely, decreased level of serotonin);
- Inherited traits.

Unfortunately, the majority of patients with depression have a very severe expression of symptoms which causes big disturbances in everyday life, for example, at work, school, university, etc. In addition, sometimes patients experience being unhappy and miserable without really knowing what the causes of such feelings is. And it is not a big surprise that nowadays there is more and more contribution to the development of modern tools for treatment of depression (both psychotherapeutic and pharmaceutical). In addition there are lots alternative ways which become very

popular nowadays. One of them is mindfulness meditation.

**The purpose of this article** was to present the relationship between mindfulness meditation and depression, and find out if this method is effective in the treatment of depression in comparison to other well-known tools, such as CBT, medications, etc.

**Material and methods.** To write this article we reviewed 15 native and foreign resources (Internet sources, chapters from books, scientific journals, etc.) which are linked to the main theme of this article.

**Results and discussion.** Mindfulness meditation is a special mental training practice which includes focusing mind on experiences and feelings, such as emotions, thoughts, and sensations, etc., which person experiences at the moment [7]. Usually, it involves breathing practice, mental imagery, awareness of the body and mind, muscle and body relaxation, and so on.

Scientists link mindfulness meditation with changes in resting-state brain activity. According to the study done by Nancy Aaron Jones and her colleagues patients who have taken part in this experiment have shown decreasing of the symptoms based on self-reported depression scores after the training program [8, 9]. These trainings included 10-week program which consisted of 15 minutes class every day. In addition, scientists used electroencephalogram (EEG) recording, and based on the data it was shown that there were changes in brain wave activity. For instance, the increase in EEG alpha wave coherence throughout the entire cortex was discovered. Scientists also observed increases in theta, alpha, and beta power in the central and frontal areas of the brain. Below we would like to present citation from Dr. Jones:

*“We hope that this study will shed light on the potential of mindfulness meditation to serve as a buffer against anxiety development in children by demonstrating that a daily mindfulness training program significantly altered neurophysiological characteristics that signify risk for anxiety and depression, namely frontal and central power as well as frontal and parietal coherence was increased following the training”*

Unfortunately, short-term experiments only can prove that mindfulness meditation and its variation can be used as a method to reduce stress, change some functions of the brain, etc. However, there were no results from any studies which proved the effectiveness of mindfulness meditation in the treatment of depression if it was used during a long period of time. We believe that it is highly recommendable to design a specific long-term study which focuses on finding out the real effect of this technique on treatment of depression.

**Conclusion.** To sum up, we would like to say that mindfulness meditation can be used on a daily basis as a way to reduce stress, especially in cases of depression on early stages. Unfortunately, we cannot say for sure that only this tool can be a very effective alternative method for treatment of depression, due to the fact that scientists did not include the effect from other factors.

In addition, we believe that it is highly recommended to conduct a long-term study which can show

the effect of mindfulness meditation at different stages of development.

**Prospects for further research.** The main purpose of mindfulness meditation is to increase of patients' cognitive control. That is why we think that in the future this tool will be modernized and can be used as an alternative treatment for many disorders, not just major depressive disorder.

## References

1. Barlow DH, Durand VM. *Abnormal Psychology. An integrative approach.* 7th ed. USA, CA: Cengage Learning; 2015. p. 242-48.
2. Kring AM, Johnson SL, Davison GC, Neale JM. *Abnormal Psychology.* 13th ed. USA: Wiley Custom; 2017. p. 152-62.
3. Depression (major depressive disorder) - Mayo Clinic [Internet]; 2019 [updated 2018 May, 25]. Available from: <https://www.mayoclinic.org/diseases-conditions/depression/symptoms-causes/syc-20356007>
4. What is Depression? [Internet]; 2019 [updated 2017 January 15]. Available from: <https://www.psychiatry.org/patients-families/depression/what-is-depression>
5. Clinical depression - NHS. [Internet]; 2019 [updated 2016 October 05]. Available from: <https://www.nhs.uk/conditions/clinical-depression/>
6. Depression / | NAMI: National Alliance on Mental Illness. [Internet]; 2019 [updated 2017 August 13]. Available from: <https://www.nami.org/Learn-More/Mental-Health-Conditions/Depression/Treatment>
7. Mindfulness Meditation - What It Is And How To Do It. [Internet]; 2019. Available from: <https://www.verywellmind.com/mindfulness-meditation-88369>
8. Mindfulness meditation intervention alters neurophysiological symptoms of anxiety and depression in preadolescents. - PsycNET. [Internet]; 2019 [updated 2019 July 15]. Available from: <https://psycnet.apa.org/record/2019-38081-001?doi=1>
9. Mindfulness meditation alters neurophysiological characteristics that are linked to anxiety and depression. [Internet]; 2019 [updated 2019 August 11]. Available from: <https://www.psypost.org/2019/08/mindfulness-meditation-alters-neurophysiological-characteristics-that-are-linked-to-anxiety-and-depression-54236>

УДК 57.084.1+599.323.45

### ЗВ'ЯЗОК МІЖ МЕДИТАЦІЄЮ ТА ДЕПРЕСІЄЮ

*Кисельова А. А., Кравцова Є. С., Міщенко Д. О., Чернишова К. Р.*

**Резюме.** Депресія є одним з найпоширеніших діагнозів, який пацієнти з порушеннями настрою можуть озвучити щодня. Це серйозний стан, який впливає як на фізичне, так і на психічне здоров'я. Існує декілька причин депресії (наприклад, зловживання, певні ліки, конфлікти вдома, на роботі, у школі, в університеті тощо).

В основному симптоми можуть змінюватись від почуття нещастя та безнадії до втрати інтересу до діяльності, якою пацієнти займалися раніше, і деяких соматичних змін, таких як втрата або набір ваги, порушення сну тощо. В даний час лікування депресії багатогранне, і включає зміни в способі життя (як поведінкові, так і соматичні, в їжі та фізичних вправах), отримання психотерапії та медикаментів.

Крім того, в даний час все більш популярними стають інші альтернативні методи лікування, такі як медитація, йога тощо, і вчені проводять більше досліджень та експериментів, спрямованих на показ впливу таких методів на лікування депресії. Одним з найвідоміших засобів, який сьогодні застосовується для лікування депресії та ефективного боротьби з її симптомами, є медитація.

*Метою даної роботи* було представити взаємозв'язок між медитацією і депресією; коротко представити сучасну терапію, яка застосовується для лікування депресії.

На основі багатьох досліджень був зроблений висновок про те, що медитацію можна використовувати в якості альтернативної терапії для лікування депресії. Був зроблений огляд сучасних досліджень і експериментів, пов'язаних з основною темою, і на підставі цього огляду можна зробити висновок, що використання медитації може зменшити експресію симптомів, характерних для клінічної депресії. Крім того, були відзначені деякі зміни, пов'язані з активністю мозкових хвиль. На жаль, вчені не можуть з упевненістю сказати, що цей метод підходить всім, оскільки дані дослідження не були проведені протягом декількох років, і є ймовірність того, що інші чинники також можуть вплинути на зменшення прояви депресії

**Ключові слова:** депресія, медитація усвідомленості, тривога, емоції, настрої, альтернативна терапія.

УДК 57.084.1+599.323.45

## ВЗАИМОСВЯЗЬ МЕЖДУ МЕДИТАЦИЕЙ И ДЕПРЕССИЕЙ

*Киселева А. А., Кравцова Е. С., Мищенко Д. О., Чернышова Е. Р.*

**Резюме.** Депрессия является одним из самых распространенных диагнозов, который пациенты с нарушениями настроения могут озвучить каждый день. Это серьезное состояние, влияющее как на физическое, так и на психическое здоровье. Существует несколько причин депрессии (злоупотребление, лекарства, конфликты дома, на работе, в школе, в университете и т.д.). В основном симптомы могут варьироваться от чувства несчастья и отчаяния до потери интереса к деятельности, которой пациенты занимались ранее, и некоторых соматических изменений, таких как потеря или набор веса, нарушение сна и тому подобное.

В настоящее время лечение депрессии очень многогранное и включает изменения в образе жизни (как поведенческие, так и соматические, в пище и физических упражнениях), получение психотерапии и медикаментов. Кроме того, в настоящее время все более популярными становятся другие альтернативные методы лечения, такие как медитация, йога и т.д. В настоящее время ряд ученых проводят исследования и эксперименты, направленные на изучение влияния таких методов для лечения депрессии. Одним из самых известных средств, который сегодня применяется для лечения депрессии и эффективной борьбы с ее симптомами, является медитация.

*Цель данной работы* - представление взаимосвязи между медитацией и депрессией, краткое представление современной терапии, применяемой для лечения депрессии,.

Согласно данным многих исследований, был сделан вывод о том, что медитацию можно использовать в качестве альтернативной терапии для лечения депрессии. Был сделан обзор современных исследований и экспериментов, связанных с основной темой, и на основании этого обзора можно сделать вывод, что использование медитации может уменьшить экспрессию симптомов, характерных для клинической депрессии. Кроме того, были отмечены некоторые изменения, связанные с активностью мозговых волн.

К сожалению, ученые не могут с уверенностью сказать, что этот метод подходит всем, поскольку данные исследования не были проведены в течение нескольких лет, и есть вероятность того, что другие факторы также могут повлиять на уменьшение проявления депрессии.

**Ключевые слова:** депрессия, медитация осознанности, тревога, эмоции, настроение, альтернативная терапия.

*The authors of this study confirm that the research and publication of the results were not associated with any conflicts regarding commercial or financial relations, relations with organizations and/or individuals who may have been related to the study, and interrelations of coauthors of the article.*

Стаття надійшла 01.08.2019 р.

Рекомендована до друку на засіданні редакційної колегії після рецензування