

## REVIEW ARTICLE

# EFFECTS OF THE EASTERN MIND-BODY PRACTICES ON MENTAL HEALTH DURING THE COVID-19 PANDEMIC: WHEN EAST MEETS WEST

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## ABSTRACT

**The aim:** The paper aims at reviewing the recent studies on the impact of the Eastern mind-body practices on mental health during the COVID-19 pandemic.

**Materials and methods:** The recent studies (2020 – 2021) on the Eastern mind-body practices in combating the psychological impacts of the COVID-19 pandemic were identified in PubMed, Scopus, Google Scholar. Research papers were found by using the keywords “mental health”, “psychological impacts of the COVID-19 pandemic”, “Eastern mind-body practices”, “meditation”, “mindfulness”, “yoga”, “tai chi”, “qigong”. A total of 27 selected publications were analyzed based on our criteria. Given the relatively small number of relevant articles in recent years, we also examined papers published before 2020. Along with the aforementioned, the authors used integrative anthropological approach and interpretive research paradigm.

**Conclusions:** The Eastern mind-body practices are becoming increasingly popular, especially now when the outbreak of COVID-19 has created mental health concerns among the general population worldwide. They may prove an effective preventive or therapeutical intervention for mental health issues during and after the pandemic. However, the underlying mechanisms of these techniques are still insufficiently studied. Therefore, it is necessary to conduct a well-planned study and interpret it from multiply perspectives involving an interdisciplinary team of specialists.

**KEY WORDS:** mind-body medicine, mental health, COVID-19, meditation, mindfulness, yoga, tai chi, qigong, psycho spiritual approach

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## INTRODUCTION

Although it is too early to talk about a “new post-covid world”, more and more researchers warn us about the negative consequences of the COVID-19 pandemic and discuss the measures taken by the world community to cope with it. The new disease has caused physical health concerns and specific traumatic experiences. It affects mental health causing anxiety, depression, stress, fear, xenophobia, stigma, guilt, anger/frustration, sadness, loneliness [1–6]. Social isolation, uncertainty, social distrust, alienation, domestic violence, job insecurity, economic hardship, substance abuse are risk factors for impacting mental health across the world [7–9]. The extensive media coverage of the COVID-19 pandemic turned into “infodemic” that can lead to downstream effects on mental health [10–12]. Health professionals who treat patients with COVID-19 often face mental health problems, and therefore adequate responses to these problems should become an essential part of treatment and prevention measures [13].

Social distancing and a culture of “no touching” have become serious problems. Before quarantine and self-isolation, communication took place in a real environment, where, according to R.A. Wilson, humans play with their bodies, another’s bodies and the world around them; there was that playfulness which is a characteristic feature of all obviously healthy persons [14]. But the COVID-19 pandemic has completely changed our reality isolating people and depriving them of their usual contacts. This “forcible alienation” can cause higher levels of cortisol, weaker immune responses to pathogens, depression, anxiety, suicidal thoughts and other conditions [15]. As Jansson-Boyd emphasizes, “once the outbreak is over, one vital challenge will be to reset our thinking about touch, keeping in mind its importance. After all, a hug may be just what we need to move on from the traumatic experience of the coronavirus” [16].

The COVID-19 pandemic has had a dramatic impact on the world and our daily lives, “with seemingly low

capacity to respond, it is unclear how the world will deal with this looming mental health crisis" [17]. However, unprecedented upheavals like this pandemic could lead to the development of a new system of values that our world has long needed [18; 19]. Realizing the fragility of human life, instability of social structures under conditions of dramatic challenges and constant changes, humanity needs to return to the vertical principle that shapes deep meanings and enables to maintain physical, mental, and spiritual wellbeing.

## THE AIM

The paper aims at reviewing the recent studies on the impact of the Eastern mind-body practices on mental health during the COVID-19 pandemic.

## MATERIALS AND METHODS

### STUDY SELECTION

The recent studies (2015 – 2021) on the Eastern mind-body practices in combating the psychological impacts of the COVID-19 pandemic were identified in PubMed, Scopus, Google Scholar. Research papers were found by using the keywords "mental health", "psychological impacts of the COVID-19 pandemic", "eastern mind-body practices", "meditation", "mindfulness", "yoga", "tai chi", "qigong".

### STUDY SAMPLE AND METHOD

A total of 270 selected publications were analyzed based on our criteria. We used integrative anthropological approach and interpretive research paradigm.

## REVIEW AND DISCUSSION

Cartesian "mind – body" dualism had led to the collapse of the holistic phenomenon of a human being and eventually "the biological aspects of human illness assumed a predominant role in medical science and practice" [20]. However, within the context of the debate over the relationship between the mind and the brain, the "body – mind" opposition gradually disappears in the process of understanding that psychic phenomena have physical correlates [21]. The mind and the brain are not separate independent entities, but, conversely, represent different aspects of one reality. The aim of a new interpretation of a human is to reintegrate opposite poles and transcend them. The contemporary world demonstrates the urgent need for an integral, holistic paradigm of a human: "this holistic approach, according to which a human is an undivided, alive and organic, ideal and material being, may be seen as a launching pad for a new transdisciplinary paradigm" [22], when East meets West. A better understanding of integral human nature attracts the researchers' attention and expands the functional field of treatment methods for mental disorders and related psychosomatic diseases.

Through the lens of "mind – body" integrity, mind-body practices strengthen the connections between our mental, emotional and physical aspects, build new neurological pathways, and induce the relaxation response. More and more people around the world are engaged in the practices that encompass a diverse group of psychological and/or physical approaches administered/taught by a trained practitioner/teacher [23]. Mind-body practices, or mind-body interventions, are the fruitful strategies of mind-body medicine, which "focuses on the interactions among the brain, mind, and behavior, and the powerful ways in which emotional, mental, social, spiritual, and behavioral factors can directly affect health" [24]. The Eastern physical, spiritual and intellectual practices such as Yoga, Tai Chi, Qigong, Meditation and Mindfulness are among them.

Mindfulness is a certain mental state and a therapeutic technique which is deeply rooted in the ancient times. It is an essential component of Buddhist and other Eastern spiritual teachings. Our conscious attention is focused on the present moment and perceives the world without any judgement. This calm awareness of our body, feelings and mind is the path to self-realization. Sometimes words "mindfulness" and "meditation" are used interchangeably, but it is a slight difference between the two. Meditation might be interpreted as a practice, while mindfulness (being an aspect of meditation) as a quality. Meditation might be interpreted as a method through which we learn to live mindfully, while mindfulness can be used in treatment that does not include meditation [25]. Mindfulness can be practiced both informally and formally and can be applied to any situation, while meditation is usually practiced for a specific amount of time and is commonly referred to as formal practice [26]. Meditation is about finding peace within. The practitioners get rid of the anxious mind experiencing a total cessation of the process of conscious thought – thought that Zen calls "wrong thought". "In zazen, you first learn how active your mind is. Then, after the shock wears off, by simply returning to the breath, you gradually strengthen your ability to put your mind where you want it, when you want it there, for as long as you want it there. This process of quieting and centering yourself continues for a while. You eventually reach a point where you slip into samadhi or single-pointedness of mind. The thoughts disappear for a short period of time and you enter into a state of mind where you're not processing anything. You're not letting go of anything. The watcher disappears. And then, in an instant, you're back again, aware of something" [27]. Both mindfulness and meditation rely on the ability to be focused on the present moment [28], "here and now". Z. Segal and M. Williams combined cognitive behavioral therapy with mindfulness-based stress reduction program elaborated by J. Kabat-Zinn that led to the development of mindfulness-based cognitive therapy [29].

The term yoga in a broad sense means a set of different spiritual, mental and physical practices aimed at managing the mental and physiological functions of the body in order to achieve an elevated state of mind. The purpose of yoga is personal self-improvement. Yoga includes psychophysical

training that helps to change the psyche through intense concentration. The practice of yoga uses various techniques such as breathing, asanas, meditation and contributes to positive mental health and wellbeing.

Tai Chi (Tai Chi Chuan) is a form of exercise that is based in martial arts and involves deep breathing and flowing movements to achieve mental and bodily relaxation [30]. Qigong is a spirit-mind-body practice for healing and preventing diseases and improving the quality of life [31]. The core of it is activation and application of “qi” (vital life energy) by integrating posture, movements, breathing, special sounds, focus intent.

Contemporary research on the Eastern mind-body practices for different conditions shows that they help to control pain, may reduce blood pressure [32], reduce stress and depression [33–38], lead to increases in regional brain gray matter density [39], may reduce age-related memory loss [40], enhance self-awareness [41], promote recovery from and treatment of addiction [33; 34], reduce feelings of loneliness and increase social contacts [42], improve sleep patterns [33–35], cultivate more creative problem-solving skills [43], have immediate and long-lasting effect on anxiety reduction [33; 34; 38; 44], enhance muscular strength and body flexibility, promote and improve respiratory and cardiovascular function [33], improve quality of life [34; 38].

During the COVID-19 pandemic, the Eastern mind-body practices can serve as helpful tools people can use to manage negative after-effects and strengthen their innate coping skills [45]. As C. Behan emphasizes, “crises such as the COVID-19 pandemic have shown that change is the only constant. Meditation and mindfulness can offer a helpful way to live with this constant change” [46].

In “Meditation and Yoga Practices as Potential Adjunctive Treatment of SARS-CoV-2 Infection and COVID-19: A Brief Overview of Key Subjects”, Bushell et al. conclude that “there is evidence of stress and inflammation modulation, and also preliminary evidence for possible forms of immune system enhancement, accompanying the practice of certain forms of meditation, yoga, and pranayama, along with potential implications for counteracting some forms of infectious challenges” [47].

The COVID-19 pandemic brought uncertainty, anxiety, fear into our lives. According to a Yale internist A.H. Fortin VI, “mindfulness is really important in time like this” [48], when we try to cope with our stresses and maintain mental wellbeing. Mindfulness-based approaches are useful tools to deal with contemporary challenges that help us to accept our painful experiences without judgement until we are ready to let them go and to open ourselves to new experiential and behavioral possibilities [49]. During this extremely uncertain time when we have no idea what will happen, when we feel we are falling apart, it is very important to learn how to tolerate this frightening uncertainty, and “practicing mindfulness helps bring us back to the present, and away from the brink” [50].

A promising study, especially during quarantine and self-isolation, is presented by Farris et al. [51]. Being in-

spired by a program “Mindfulness for Milan”, this clinical trial examined usefulness and potency of a single virtual mindfulness session aimed at reducing stress, anxiety and concerns about pandemic in patients with migraine, healthcare personnel and the general public, as well as identified modalities of service to others and evaluated different facets of online mindfulness resources. Most participants evaluated the session as helpful (89%, 95% CI: [82 to 93%]) and considered the electronic platform to be an effective tool for mindfulness practice (89% [82 to 93%]) [51]. After the session, 76% demonstrated decreased anxiety; 80% decreased stress; 55% decreased COVID-19 concern; 92% were satisfied with the experience; 65% demonstrated their interest in learning more about mindfulness; 69% would participate again; 74% would recommend to friends/family [51]. Participants reported about a sense of unity and desire to help others, especially most vulnerable groups; demonstrated engagement with the other humans and altruistic behavior; described the importance of a positive attitude and self-compassion [51]. Insofar as this study covered one mindfulness session, the researchers emphasize that for more reliable conclusions a further longitudinal study is required.

The research conducted by Matiz et al. [52] was aimed at studying the phenomenon of resilience in emergencies like COVID-19 among Italian teachers. The researchers delivered 8-week Mindfulness-Oriented Meditation course (2 face-to face meetings and 6 video-lessons). Though primarily this course was not intended at reducing the level of distress caused by the pandemic, it was demonstrated that mindfulness meditation increased resilience and improved the well-being during critical events such as the lockdown due to the COVID-19 pandemic [52]. Mindfulness-based interventions improve emotional self-regulation that is at the core of resilience against stress, anxiety and depression during the pandemic [53; 54].

Contemporary research supports the fact that yoga is an effective way to manage stress-related problems and maintain psychological wellbeing during the COVID-19 lockdown [55]. Kulkarni et al. [56] have come to the conclusion that practicing yoga is beneficial for health during the COVID-19 pandemic. However, due to the complex nature of mental health problems caused by the pandemic, it is quite difficult to propose the only one type of yoga practice that fits for all and “it needs to be customized depending on the age, gender, physical constitution, and psychological symptoms” [56]. Yoga practices release stress, anxiety and depression and prevent immune suppression during the pandemic [57; 58]; maintain respiratory health and improve immunity; serve as a supplementary or alternative intervention for COVID-19 related mental health issues [59] and effective method for post-covid rehabilitation [60]. As a component of integrative therapy, yoga may offer an effective treatment option for COVID-19 patients [61]. Tillu et al. considered yoga as an add-on therapy and a useful home-based practice for the prevention and post-recovery management of COVID-19 [62]. Examining the role of yoga in working from home during the lock-

down, Kanupriya et al. stated that yoga could “provide the necessary tool for risk reduction, amelioration of stress and anxiety and strengthening of the immune function” [63].

The outbreak of the COVID-19 pandemic has caused serious psychological and physical problems to the senior citizens. One of the effective tools to prevent and tackle these problems is Tai Chi Chuan – a gem of traditional Chinese culture that promotes all systems of the human body, develops combat and self-defense skills, improves well-being. Tai Chi has a potential impact on the prevention, treatment and rehabilitation of COVID-19 patients reducing stress, anxiety, depression, enhancing immunity, pulmonary and cardiovascular function, and improving quality of life [38]. Tai Chi practice is safe and effective on elderly COVID-19 patients during the recovery period [64]. The practice of Tai Chi helps to better the health status and reduce health problems that heighten COVID-19 risk [65] and can be delivered under pandemic conditions to improve physical and mental function in the seniors [66].

Qigong may be potentially useful in the prevention, treatment and rehabilitation of COVID-19 patients too. It helps to reduce stress and inflammation, regulate emotions, strengthen respiratory muscles, boost immune system [67], restore the physiology of the lungs [68]. In Wuhan’s hospitals, patients with COVID-19 were encouraged to practice Qigong. As an integrative and complementary practice for health, Qigong may be effective during the COVID-19 pandemic being learned through classes (including online) and being used as a home rehabilitation program [69].

## CONCLUSIONS

The Eastern mind-body practices are becoming increasingly popular, especially now when the outbreak of COVID-19 has created mental health concerns among the general population worldwide. They may prove an effective preventive or therapeutical intervention for mental health issues during and after the pandemic. However, the underlying mechanisms of these techniques are still insufficiently studied. Therefore, it is necessary to conduct a well-planned study and interpret it from multiply perspectives involving an interdisciplinary team of specialists.

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