



Depression Levels in Yoga Practice: A Comparative Study of two Experiencing Practicing Yoga Groups During the Covid-19 Pandemic in Bali

I Wayan Mahaksa Kumaratungga¹, Ketut Suparna², Made Kurnia Widiastuti Giri³

1-Faculty of Medicine, Universitas Pendidikan Ganesha, Singaraja, Bali Indonesia

2-Study Program of Medicine, Faculty of Medicine, Ganesha University of Education, Singaraja, Bali, Indonesia.

3-Study Program of Medicine, Faculty of Medicine, Ganesha University of Education, Singaraja, Bali, Indonesia.

Article Info

Article history:

Received on: 10-11-2022

Accepted on: 23-12-2022

Available online: 31-12-2022

Corresponding author-

I Wayan Mahaksa Kumaratungga,
Faculty of Medicine, Universitas
Pendidikan Ganesha, Singaraja, Bali
Indonesia

Email_mahaksa@undiksha.ac.id

ABSTRACT:

Introduction: Depression is a serious problem that emerged during the Covid-19 pandemic. Many people experience depression, especially those who test positive for Covid-19. The purpose of this study was to determine the difference in the level of depression in yoga practitioners with experience different durations of practicing yoga in *SegerOger* yoga practitioners during the Covid-19 outbreak.

Methods: This research is an observational study with a cross-sectional study design. Seventy-eight respondents aged between 30 and 72 years were divided into two, namely yoga practice experience of fewer than two years and more than 2 years. Depression scores were assessed using the DASS 21. Data were analyzed using the Mann-Whitney test.

Result: The results of the research on the influence of the duration of yoga practice on depression showed that the average ranking data for the group of practitioners less than 2 years was 42.32 and for the group of practitioners more than 2 years, namely 36.95. Based on the results of the statistical test, it was found that the Asymp. The Sig. (2-tailed) value of 0.164 was greater than the probability value of 0.05. Therefore, according to the decision-making basis for the Mann-Whitney U test, it can be concluded that there is no significant difference in the level of depression in yoga practitioners less than 2 years compared to more than 2 years.

Conclusion: Based on the results of the study it was concluded that the duration of yoga experience does not affect the level of depression in *Seger Oger* Yoga practitioners.

Keywords: covid-19, depression, pandemic, yoga

INTRODUCTION

The COVID-19 pandemic is a major health crisis that has changed the lives of millions of people globally¹. Covid 19 disease not only causes physical health problems but also causes many people to experience mental health problems². Various psychological disorders have been observed during the COVID-19 outbreak, in people in different parts

of the world. In society, there is a tendency to experience fear of illness or death and to feel hopeless. The pandemic has harmed people's mental health which can even lead to a psychological crisis³. This shows the need for urgent action to reduce the adverse impact of the COVID-19 pandemic on public mental health. Various factors have



been cited as contributing to the deterioration of mental health. One of the main factors reported to cause stress, anxiety, and depression is the fear of being infected with COVID-19 and insecurity⁴. Although several anti-viral drugs have been tried, there is no evidence that they are effective for COVID-19. To date, there is no evidence of an effective treatment for COVID-19, although antiviral drugs, chloroquine, or hydroxychloroquine have been tried. Several clinical trials are being conducted with both western and traditional systems of medicine for the development of new therapies for COVID-19. There are many reports of an increase in lung function in patients with Acute Respiratory Distress Syndrome (ARDS) after changing the patient's posture to a prone position. There have also been recent reports of improved respiratory function after the prone position and quicker recovery from anosmia with the practice of *Pal's pranayama* from COVID-19 patients⁵.

Some research supports that yoga can be used as a complementary and alternative therapy for mental health. Also, there are reports of improvements in autonomic, cardiorespiratory neuromuscular, and psychological functions following the practice of *asanas* and *pranayamas*⁶. Yoga is very popular at this time, not only among Hindus but also among many followers of other religions. Yoga is very much welcomed all over the world for its health-enhancing and fitness-creation aspects. Several studies have proven the efficacy of yoga practices including meditation in building homeostasis in several non-communicable diseases by reducing stress levels⁷.

The meaning of the word yoga is control, mental modification; communion with the universal. Yoga is a way of life that has been part of Indian culture and traditions for a long time⁸, which helps maintain a balance of well-being, mental and spiritual attitudes, diet, and the practice of certain techniques such as *Asana* (postures), breathing exercises (*Pranayama*), and meditation to reach the highest level of consciousness⁹.

However, so far empirical investigations for the effects of experiencing practicing yoga on the perception of illness and well-being-related issues experienced by people during COVID-19 have not been studied. For this reason, empirical research studies are needed to provide evidence that yoga is an effective strategy for self-management of mental health problems related to depression, during COVID-19.

MATERIAL AND METHODS

Sample

The participants of the study belong to the member of *Sejer Oger* Yoga Community in Bali. Electronic consent was obtained from each participant before starting the survey. The data collected is anonymous. Respondent data is guaranteed and kept confidential and only used for research purposes. The sample was selected using the purposive sampling technique. The experienced practicing yoga aged less than two years (Group 1) and experiencing practicing yoga aged more than two years (Group 2). The total number of participants is $n = 78$ (Group 1 = 37 and Group 2 = 41).

Research Design

This research is a cross-sectional study to examine the effect of experience practicing yoga on depression levels. The participants of the study include individuals from two group of people who experienced practicing yoga for less than two years compared to those who experienced practicing yoga for more than two years during the COVID-19 pandemic. The total number participant in $n = 78$. Data is collected by online survey via a google form. A google form was generated in the Indonesian language to reach all the participants. Invitations to all the participants were sent with the help of a WhatsApp group community, in the form of a google form link. A total of 78 samples participated in filling out a closed questionnaire. The DASS-21 was used in this study as a self-report measurement tool that measures depression, developed by the Psychology Foundation Australia and has been translated into Indonesian. DASS-21 This is a shortened version of DASS-42 This questionnaire consists of 21 total items scale.

Statistical Analysis

The data obtained from the google form were tabulated using the Microsoft Excel 2013 program, then analyzed descriptively using the Statistical Product and Services Solution (SPSS.24) for Windows program. The present study is a comparative study. The Mann-Whitney U test is used to compare differences between two groups with a confidence level of 95% ($P \leq 0.05$)

RESULT

Table 1. shows the participant characteristics (age group, job, income, type of experience practicing Yoga, covid status, and comorbid status) at baseline. No significant differences were found between groups across all variables ($p > 0.05$) at baseline.

Participant Depression

The data obtained from this study shows that during the Covid -19 pandemic. Of the total respondents, only one person stated that severe depression occurred, namely the respondent whose training was less than 2 years. Respondents who experienced moderate depressive symptoms were only 13.5% in practitioners less than 2 years and 14.63% in practitioners more than 2 years (Table 2).

The group of practitioners of less than 2 years with an average rating of 42.32, which is higher than the average rating in the group of practitioners of more than 2 years, which is 36.95. Based on the SPSS output results, in the Mann-Whitney U test above it was found that the Asymp. The Sig. (2-tailed) value of 0.164 is greater than the probability value of 0.05. Therefore, according to the decision-making basis for the Mann-Whitney U test, it can be concluded that there is no significant difference in the level of depression in yoga practitioners for less than 2 years compared to more than 2 years.

DISCUSSION

The results of an analysis of the level of depression of yoga practitioners during COVID-19 show that there is no significant difference between practitioners who practice yoga for less than 2 years compared to more than 2 years. Of the 78 respondents who were surveyed, only 1 person indicated severe depression, namely a practitioner of fewer than 2 years. While the rest indicated moderate to normal depression. So even during the pandemic, some yoga practitioners experienced depression, but overall, it can be said that yoga practitioners are still on a normal score. As much as 67.57% normal score in practitioners under 2 years and 82.92% normal score in practitioners more than 2 years. This proves that the Covid-19 pandemic causes anxiety and depression. In a pandemic situation, everyone feels mental pressure due to isolation and quarantine¹⁰.

The emergence of Covid-19 has significantly affected psychological and mental health¹. During the Covid-19 pandemic, there was a lot of psychological pressure on society¹¹. The prevalence of people who experience depression during Covid-19 reaches 33.7%². In Indonesia, the prevalence of people who are depressed during the Covid-19 pandemic is 20.8%¹². In a study that compared the duration of yoga practitioners between less than 2 years and more than 2 years, the prevalence of moderate depression only ranged from 13.5% in practitioners of less

than 2 years and 14.63% in practitioners of more than 2 years. This shows that people who usually do good yoga for a short duration show lower rates of depression in general. This proves that the practice of yoga can overcome the problem of depression. This is consistent with the opinion that yoga is increasingly being used as a form of alternative medicine to improve many conditions, one of which is used in individuals with depressive symptoms¹³. This is in line with the statement that participants who had just practiced for 2 months were able to significantly reduce levels of anxiety and depression¹⁴. Likewise, the statement that yoga plays a very important role in suppressing depressive symptoms, yoga is even said to be an additional therapy for patients with depression and anxiety disorders¹⁵. Yoga practitioners differ significantly in perceptions of personal control, fear of illness, and the emotional impact of COVID-19¹⁶. Yoga practitioners also differ significantly in cognitive reappraisal strategies for regulating emotions. Yoga is an activity that is beneficial for psychological health¹⁷. The results of this study which revealed that the duration of yoga was not significantly different between those who were less than 2 years and those who were more than 2 years. This result was in line with the research of which stated that novice practitioners who started practicing yoga during the Covid-19 outbreak period were reported there is no significant difference in terms of peace of mind when compared to mid-term practitioners¹⁶. This evidence supports that yoga is said to be an effective self-management strategy for overcoming anxiety and depression problems and maintaining health during the COVID-19 pandemic.

The results of the research on the effect of the duration of yoga practice indicate that the low prevalence may be because yoga practitioners are considered to have higher personal control, higher coherence/understanding, lower emotions, and higher prevention control for contracting COVID-19. Several studies have shown that yoga has benefits in terms of health promotion and health creation. The practice of yoga has shown efficacy in establishing homeostasis in non-communicable diseases by reducing stress levels and promoting a healthy lifestyle⁷.

Various studies have revealed that the practice of yoga is very beneficial for health including improving cognition, and breathing, reducing cardiovascular risk, blood pressure, and diabetes mellitus as well as affecting immunity⁹. Yoga practitioners are also reported to have a better and higher understanding in terms of personal control over COVID-19. Yoga practitioners also feel that

yoga is an effective therapy for dealing with COVID-19 both for physical and mental health¹⁶. Several yoga techniques are available to develop mastery of the mind by increasing willpower which maintains the immune system. These include *asanas*, *pranayama*, and meditation with or without the use of *Mantras*⁷. Yoga is not only limited to acrobatic poses and postures with impressive demonstrations but essential human tools i.e. mind, breath, speech, and body are used in the yogic process to achieve the highest goal of human life which is Pure Bliss¹⁸. Yoga *Sejer Oger* is yoga that has the concept that in a healthy body there is a healthy body. Yoga is defined as a spiritual skill because what is studied is not only the body or physique, but includes the mind and body, physically and mentally healthy, and can activate the body's natural protection and repair system. This fundamental thing may cause yoga practitioners, both short and long in duration, can reduce depression levels so that it appears that the prevalence of fresh yoga practitioners who experience depression is very low. All yoga practices use deep relaxation which can release all tension and stress to prevent immune suppression that would otherwise weaken the response to infectious bacterial and viral attacks⁷.

In this study, a significant effect of the duration of yoga practitioners was found on respondents' perceptions of enthusiasm for the situation during a pandemic. Yoga practitioners less than 2 years of age reported no enthusiasm for the situation compared to those over 2 years. This is possible because practitioners less than 2 years of age lack self-awareness compared to practitioners of more than 2 years. In previous research, continuous yoga practice was reported to increase self-confidence, reduce stress, anxiety, and depression, and improve overall well-being. So overall, the findings from this study suggest that yoga duration does not significantly affect the management of depression during the Covid-19 outbreak.

CONCLUSION

Based on the results of the study it was concluded that yoga is an effective strategy for self-management of mental health problems related to depression, during COVID-19. Also, this study indicate that the duration of yoga does not affect the level of depression in *Sejer Oger* Yoga practitioners.

ACKNOWLEDGMENTS

The authors thank Mr. Ode Purnama, as a yoga master, and all of the members of the *Sejer Oger* Yoga Community to

support and by was willing to be a respondent

Conflicts Of Interest- Nil

Source of finance & support – Nil

ORCID

I Wayan Mahaksa Kumaratungga ,
<https://orcid.org/0000-0003-4882-1679>

REFERENCE

1. Al Dhaheeri, 2021, Impact of COVID-19 on mental health and quality of life: Is there any effect? A cross-sectional study of the MENA region. PLoS ONE 16(3): e0249107. <https://doi.org/10.1371/journal.pone.0249107>
2. Salari, N, Prevalence of stress, anxiety, depression among the general population during the COVID-19 pandemic: a systematic review and meta-analysis. Global Health 16, 57. <https://doi.org/10.1186/s12992-020-00589-w>
3. Xiang, YT, Timely mental health care for the 2019 novel coronavirus outbreak is urgently needed. The Lancet Psychiatry, 7(3), 228–229. [https://doi.org/10.1016/S2215-0366\(20\)30046-8](https://doi.org/10.1016/S2215-0366(20)30046-8).
4. Jiang, N, Depression, Anxiety, and Stress During the COVID-19 Pandemic: Comparison Among Higher Education Students in Four Countries in the Asia-Pacific Region. Journal of Population and Social Studies (JPSS). 29 : 370-383. <http://doi.org/10.25133/JPSSv292021.023>
5. Pal GK, Yoga to Combat and Prevent COVID-19. International Journal of Clinical and Experimental Physiology, 7(2), 46–47. <https://doi.org/10.5530/ijcep.2020.7.2.12>.
6. Pachegaonkar, U Early Recovery from Anosmia and Ageusia of COVID-19 by Practice of Slow Breathing of Pal's Pranayama Schedule: A Brief Communication. International Journal of Clinical and Experimental Physiology, 7(3), 119–121. <https://doi.org/10.5530/ijcep.2020.7.3.28>.
7. Nagendra, HR 2020, Yoga for COVID-19. 3–5. <https://doi.org/10.4103/ijoy.IJOY>
8. Venkatesh, H, Molecular signature of the immune response to yoga therapy in stress-related chronic disease conditions: An insight. International Journal of Yoga, 13(1), 9. https://doi.org/10.4103/ijoy.ijoy_82_18
9. Balaji, PA, Physiological effects of yogic practices and transcendental meditation in health and disease. North American Journal of Medical Sciences, 2010 4(10), 442–448. <https://doi.org/10.4103/1947-2714.101980>

10. Sharma, N 2021, peace of mind (the inner peace) and mental health: a comparative study of two age groups during the Covid19 pandemic", International Journal of Emerging Technologies and Innovative Research (www.jetir.org),8(9):b817-b822, DOI: 10.6084/m9.jetir.JETIR2109200
11. Alnazly E, Anxiety, depression, stress, fear and social support during COVID-19 pandemic among Jordanian healthcare workers. PLoS ONE 16(3): e0247679. <https://doi.org/10.1371/journal.pone.0247679>.
12. Izzatika, Indonesia's mental health status during the Covid-19 pandemic. Indigenous: Jurnal Ilmiah Psikologi, 2021 6(2). 78-92. doi: <http://dx.doi.org/10.23917/indigenous.v6i2.11945>
13. Bridges L, and Sharma M. 2017. The Efficacy of Yoga as a Form of Treatment for Depression. Journal of Evidence-Based Complementary & Alternative Medicine 2017, Vol. 22(4) 1017-1028.
14. Javnbakht, M., 2009. Effects of yoga on depression and anxiety of women. Complementary Therapies in Clinical Practice 15: 102-104.
15. Saeed SA, Depression and Anxiety Disorders: Benefits of Exercise, Yoga, and Meditation. American Family Physician.99 (10): 620-627.
16. Sahni PS, Yoga an effective strategy for self management of stress-related problems and wellbeing during COVID-19 lockdown: A crosssectional study. PLoS ONE 16(2): e0245214. <https://doi.org/10.1371/journal.pone.0245214>
17. Kim, O.; Heo, N. Self-Management Support with Yoga on Psychological Health and Quality of Life for Breast Cancer Survivors. Int. J. Environ. Res. Public Health 2022, 19, 4183. <https://doi.org/10.3390/ijerph19074183>
18. Shashidhara, 2020. Basic Concept of Yoga. International Journal of Creative Research Thoughts, 8 (5): 4125-4130

How to cite this article: Kumaratunga IWM, Suparna K, Giri MKW "Depression Levels In Yoga Practice: A Comparative Study Of Two Experiencing Practicing Yoga Groups During The Covid-19 Pandemic In Bali " IRJAY.[online]2022;5(12); 10-15.
Available from: <https://irjay.com>
DOI link- <https://doi.org/10.47223/IRJAY.2022.51202>

Table 1. Participants’ characteristics at baseline

Characteristics	Categories	Frequency
Age group (years)	≤ 40	15 (19.2)
	41 – 50	29 (37.2)
	51 – 60	27 (34.6)
	≥ 61	7 (9.0)
Job	Government employees	3 (3.8)
	Non-government employees	75 (96.2)
Income	<5 million	52 (66.7)
	6-10 million	17 (21.8)
	>10 million	9 (11.5)
Type of experience practicing Yoga	< 2 years	37 (47.4)
	>2 years	41 (52.6)
Covid Status	diagnosed with covid	19 (24.4)
	negative covid	59 (75.6)
Comorbid Status	Comorbid	5 (6.4)
	Non-Comorbid	73 (93.6)

Table 2. Participant depression level

Depression Level	Experiencing practicing yoga for less than two years	Experiencing practicing yoga for more than two years
Normal	25 (67.57)	34 (82.92)
Mild	6 (16.21)	1 (2,43)
Moderate	5 (13.51)	6(14,63)
Severe	0 (0.0)	0 (0.0)
Extremely severe	1 (2.70)	0 (0.0)