

**Jurnal Info Kesehatan**

Vol. 20, No. 1, June 2022, pp. 49-59

P-ISSN 0216-504X, E-ISSN 2620-536X

DOI: [10.31965/infokes.Vol20Iss1.679](https://doi.org/10.31965/infokes.Vol20Iss1.679)

Journal homepage: <http://jurnal.poltekeskupang.ac.id/index.php/infokes>



**RESEARCH**

**Open Access**

## Spiritual Activity as an Effort to Cope with Depression during the COVID-19 Pandemic in Indonesia

Tri Wurisastuti<sup>1,2a</sup>, Helda<sup>1b\*</sup>

<sup>1</sup> Department of Epidemiology, Faculty of Public Health, Universitas Indonesia, Depok, West Java, Indonesia

<sup>2</sup> National Research and Innovation Agency, Central Jakarta, Indonesia

<sup>a</sup> Email address: [triwurisastuti88@gmail.com](mailto:triwurisastuti88@gmail.com)

<sup>b</sup> Email address: [heldanazar1@gmail.com](mailto:heldanazar1@gmail.com)

Received: 3 February 2022

Revised: 20 May 2022

Accepted: 27 May 2022

### Abstract

Spiritual activity is used to be associated with better mental health, particularly in the face of stress. At the beginning of the COVID-19 pandemic, numerous new regulations, including quarantine, restrictions on mobility, and physical distancing, triggered stress throughout society. The objective of the study is to explore the relationship of spiritual activities at each level of depression in Indonesia in the early stages of the COVID-19 pandemic (2-4 May 2020). The cross-sectional research was administered online in 34 provinces in Indonesia, involving 2189 respondents aged 15 years old and over and social media users. The researchers employed a structured questionnaire to examine demographic characteristics and coping activities and measured depressive symptoms using the Patient Health Questionnaire (PHQ-9). Multivariate results presented that the spiritual activities are able to decrease the risk of depression at every depression level (mild, moderate, and severe) after being controlled by gender and marital status. The values for each level, which are mild, moderate, and severe, were OR=0.332 (95% CI 0.19-0.60; p-value=0.000), OR=0.198 (95% CI 0.09-0.43; p-value=0.000), and OR=0.234 (95% CI 0.08-0.64; p-value=0.005), respectively. Good spiritual activities during an infectious disease outbreak are efficient to support some individuals in reducing the risk of depression, particularly in Indonesia.

**Keywords:** Spiritual Activity, Depression, Pandemic, COVID-19, Indonesia.

---

#### \*Corresponding Author:

Helda

Department of Epidemiology, Faculty of Public Health, Universitas Indonesia, Depok, West Java, Indonesia.

Email: [heldanazar1@gmail.com](mailto:heldanazar1@gmail.com)



©The Author(s) 2022. This article is distributed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license, and indicate if changes were made. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated.

## 1. INTRODUCTION

For some people, stress may lead to severe depression. At the beginning of the COVID-19 pandemic, the community have been experiencing many changes in habits and feelings, such as quarantine, restrictions on mobility and activities, wearing masks, fear of death, economic difficulties, and uncertainty about the future (Zarrouq et al., 2021). These made it tremendously possible for the incidence of depression to appear higher than usual (Chirico, 2021). A cross-sectional study conducted in Spain on 3480 respondents in early March 2020 revealed that 18.7% of respondents expressed symptoms of depression, while 21.6% reported anxiety (González-Sanguino et al., 2020). Another study in Morocco presented that 43% of respondents experienced anxiety, and 53% experienced depression at the beginning of the COVID-19 pandemic (Zarrouq et al., 2021).

Each individual attempts to overcome unpleasant events in their lives or stressful situations in various ways, one of which is by performing spiritual activities (Shamblaw et al., 2021). People consider that spirituality is able to encounter the negative consequences of the COVID-19 pandemic in the short and long terms (Chirico, 2021). Spirituality is religious behavior towards religious beliefs such as praying, fasting or reading scriptures, both individually or together. Several studies have unveiled that spiritual activity is inversely associated with depression. Research in the United Arab Emirates (UAE) confirmed this relationship by comparing spirituality between Christians and Muslims (Thomas, & Barbato, 2020). Many other studies have also evident the relationship between spirituality and depression (Davis et al., 2021), (Zarrouq et al., 2021), (Askari et al., 2018).

Furthermore, numerous studies have discussed the relationship between spiritual activity and depression, including the biological mechanism. Spiritual practice is associated with positive emotions such as gratitude, inner peace, and acceptance for everything that happens (Rentala et al., 2017). Performed together, spiritual activities may produce a sense of belonging and social support (Mahwati, 2017). As a result, it is expected to prevent the doers from consuming alcohol and drugs, particularly among Muslims, in which excessive use of these substances is significantly related to higher depression scores (Shamblaw et al., 2021).

Previous studies examined the relationship between spiritual activity and the incidence of depression but almost none concerning the role of spiritual activity at each level of depression, whether mild, moderate, or severe. By paying attention to the culture which develops in Indonesia, in which Indonesian people are tremendously thick with spiritual activities, the researchers were eager to investigate the relationship of spiritual activity at each level of depression in the general public in Indonesia. The researchers proposed two hypotheses which are (1) there is a relationship between spiritual activity at each level of depression and (2) spiritual activity protects people from depression.

## 2. RESEARCH METHOD

This research was a cross-sectional study conducted online randomly in 34 provinces of Indonesia from 2 to 4 of May 2020, when the peak of the COVID-19 cases occurred in Indonesia. The researchers employed the lime survey application to generate a URL link containing the questionnaire and distributed it to key respondents via social media. The key respondents were individuals living in the provinces where the study was conducted, owned social media, and, mostly, worked in government agencies. They were asked to share the link with the next eligible respondents. The reason for selecting government agencies as key respondents is because government agencies possess an extensive network in their area.

The research population was the entire Indonesian population aged 15 years or older. The research sample was the Indonesian population aged 15 years or older who lived in Indonesia during the pandemic period, had social media, and had the willingness to fill out the survey questionnaire. Before the study was conducted, the minimum sample size was 1200 assessed using the proportion estimation formula with a p-value for psychological conditions  $p = 35.1\%$ ;  $d = 0.04$ ; 95% confidence interval;  $deff=2$ , considering a 10% drop-out. As many as 2800 respondents agreed to participate in this study and fill out a complete questionnaire. However, the researchers excluded 611 respondents who were working as health workers, assuming that the psychological pressure experienced by health workers was different from that experienced by the general public. Thus, only 2189 respondents were ready to be examined.

Symptoms of depression were calculated using the Patient Health Questionnaire (PHQ 9) (Kroenke & Spitzer, 2002). PHQ-9 is a mental health instrument which is part of the primary care evaluation of mental disorders (PRIME-MD) and has been employed in general by various studies. The PHQ-9 comprised 9 (nine) questions about how frequent the respondent experienced emotional disturbances in the last two weeks, with a Cronbach's alpha of 0.777. The researchers translated 9 question items in the PHQ-9 into Bahasa in this study. The questions encompassed "I am not interested in or passionate about doing anything," "I feel gloomy, sad, or hopeless," "I have trouble getting to sleep, or wake up easily, or sleep too much," "I feel tired or lacking energy," "I lack appetite or eat too much," "I lack self-confidence or feel like a failure or have let myself or my family down," "I have trouble concentrating on something, such as reading the newspaper or watching television," "I move or speak so slowly that I other people notice it or, conversely, I feel restless so that I move more often than usual," and "I would rather die or want to hurt myself in any way." Each answer to each question possessed 4 Likert scales which ranges from 0 to 3, in which 0 was for never, 1 was for several days, 2 was for more than one week, and 3 was for almost every day (Kroenke & Spitzer, 2002).

Depression scores were divided into four categories, which are "none" coded "0" for respondents with a total score of 0-4, "mild" coded "1" for those with a total score of 5-9, "moderate" coded "2" for those with a total score of 10-14, and "severe" coded "3" for those with a total score of  $\geq 15$  (Kroenke & Spitzer, 2002).

Questions about spiritual coping were developed by the authors with eight questions about the coping strategies which were implemented by respondents to maintain mental health during the COVID-19 pandemic. Questions incorporated "What do you do to maintain mental health?" "1. Do you do sports/physical activities?" "2. Do you practice spiritual activities (worship, prayer, *dhikr*, meditation, etc.)?" "3. Do you do recreational activities (doing hobbies, watching movies, gardening, etc.)?" "4. Do you consume cigarettes?" "5. Do you consume alcohol?" "6. Do you consult with health workers/professionals (doctors, psychiatrists, psychologists)?" "7. Do you consult with non-medical personnel (spiritual teachers, pastors, priests, etc.)," and "8. Do you talk about problems with partner/family/friends? The answer to each question has two scales, which consist of "0" for "no" and "1" for "yes." The variable spiritual coping was obtained to the second question, that is "What do you do to maintain mental health? Do you practice spiritual activities (worship, prayer, *dhikr*, meditation, etc.)?" with the code "0" for "no" and "1" for "yes."

The researchers applied six covariates as potential confounders. This covariate is frequently applied by previous studies (Mahwati, 2017). The covariates encompass the variables age, gender (female vs. male), marital status (not/unmarried vs. married), educational status (middle vs. low), employment status, and homeownership status. The

variable age was classified into three categories, which are 15-24 years, 25-45 years, and >45 years. The variable employment status was segregated into five categories, consisting of Layoff, Unemployed, Informal Worker, Student, and Civil servant/Private/Retiree. Respondents in the layoff category were those who before the COVID-19 pandemic possessed a job but were experiencing layoffs during the COVID-19 pandemic. Respondents in the unemployed category were those who had not been working from before the pandemic period until the time of data collection (excluding retirees). These categories were differentiated from each other because the researchers speculated that individuals who are laid off encounter higher psychological pressure than their non-working status from the beginning. The student category did not encompass civil servants assigned to schools. The variable homeownership status was indicated by the researchers to represent the socio-economic status of the respondents with four categories incorporating own house, family-owned house, office-owned house, and rented house.

Statistical analysis was conducted by employing SPSS (Statistical Package for the Social Sciences) version 22.0. The relationship between respondent characteristics (covariates) on symptoms of depression and spiritual activity was examined using chi-square. A  $p$ -value  $< 0.05$  was considered statistically significant. Covariate variables that possess a statistically significant relationship with depressive symptoms and spiritual activity were determined to be potential confounders. Simple multinomial logistic analysis was administered to calculate the crude Odds Ratio (OR) of the relationship between spiritual activity and symptoms of depression at each level. Multiple multinomial logistic analysis was applied to measure the adjusted OR of the relationship between spiritual activity and depression level in the control covariate variables. This analysis also analyzed a confounding variable. It would be implied to be a confounding variable if the OR of spiritual activity changes by over 10% when the potential confounding variable is omitted in the model.

This study followed the research protocol which is submitted to the Research Ethics Commission. The ethical approval was admitted by the Health Research Ethics Commission-Health Research and Development Agency, that is Ethical Approval No. LB.02.01/2/KE.326/2020. All respondents who were distributed the link had previously been explained about the objective of the study and were asked for their consent to participate in the research voluntarily.

### 3. RESULTS AND DISCUSSION

This study involved 2189 respondents who have filled out the questionnaire completely and were included in the analysis. Table 1 presents the distribution of respondents based on demographic characteristics and levels of depression. Characteristic variables associated with the level of depression ( $p$ -value  $< 0.05$ ) were age, gender, marital status, educational status, employment status, and homeownership status. Respondents experiencing severe depression were, mostly, aged 15-24 years (4.8%), women (3.6%), unmarried (4.8%), had high-middle education (3.4%), were laid off (6.2%), and lived in a rented house (5.2%). Likewise, most of them experiencing moderate or mild depression were teenagers (15-24 years), women, unmarried, had high-middle education, were laid off, and lived in a rented house. Full details of the characteristics are displayed in Table 1.

**Table 1.** Distribution of respondents based on demographic characteristics and level of depression.

Variable	Total N (2189)	Depression Level				p-value
		None (N=1495)	Mild (N=488)	Moderate (N=134)	Severe (N=72)	
<b>Age (year)</b>						0.000*
15-24	606(27.7)	348(57.4)	164(27.1)	65(10.7)	29(4.8)	
25-44	1161(53.0)	798(68.7)	271(23.3)	58(5.0)	34(2.9)	
>=45	422(19.3)	349(82.7)	53(12.6)	11(2.6)	9(2.1)	
<b>Gender</b>						0.000*
Female	1486(67.9)	960(64.6)	363(24.4)	110(7.4)	53(3.6)	
Male	703(32.1)	535(76.1)	125(17.8)	24(3.4)	19(2.7)	
<b>Marital Status</b>						0.000*
Unmarried	983(44.9)	578(58.8)	266(27.1)	92(9.4)	47(4.8)	
Married	1206(55.1)	917(76.0)	222(18.4)	42(3.5)	25(2.1)	
<b>Educational Status</b>						0.472
Mid-high	2103(96.1)	1434(68.2)	467(22.2)	131(6.2)	71(3.4)	
Low	86(3.9)	61(70.9)	21(24.4)	3(3.5)	1(1.2)	
<b>Employment Status</b>						0.000*
Layoff	161(7.4)	82(50.9)	50(31.1)	19(11.8)	10(6.2)	
Unemployed	379(17.3)	243(64.1)	89(23.5)	30(7.9)	17(4.5)	
Informal Worker	92(4.2)	66(71.7)	21(22.8)	3(3.3)	2(2.2)	
Student	432(19.7)	257(59.5)	118(27.3)	34(7.9)	23(5.3)	
Civil servant/private/retiree	1125(51.4)	847(75.3)	210(18.7)	48(4.3)	20(1.8)	
<b>Homeownership Status</b>						0.000*
Rented house	368(16.8)	223(60.6)	94(25.5)	32(8.7)	19(5.2)	
Family-owned house	915(41.8)	565(61.7)	237(25.9)	78(8.5)	35(3.8)	
Office-owned house	53(2.4)	40(75.5)	11(20.8)	1(1.9)	1(1.9)	
Own house	853(39.0)	667(78.2)	146(17.1)	23(2.7)	17(2.0)	

\*Statistically significant,  $p$ -value<0.05

Table 2 presents the distribution of respondents based on demographic characteristics and spiritual activities. Characteristic variables associated with spiritual activities ( $p$ -value <0.05) were gender and marital status. The respondents who performed spiritual activities in maintaining their mental health were slightly more in the female group (97.8%) and the married group (98.0%).

The COVID-19 pandemic owns consequences on global public health, such as the physical and mental health of the population. The result of this study revealed that most respondents experiencing depression were teens. In accordance with Gonzales-Sanguino's study, groups of adolescents are more likely to experience symptoms of depression because the younger group possesses less maturity and resources to deal with



stress (González-Sanguino et al., 2020). Adolescents are still progressing a perspective of the world and do not yet possess a satisfactory answer on the meaning of life (Giannone & Kaplin, 2020). They also own the frequency of accessing news of the COVID-19 pandemic through social media, which makes them more vulnerable to anxiety and depression (Zarrouq et al., 2021).

Other groups prone to symptoms of depression in this study were women, unmarried or divorced, and unemployed. As in Mahwati's research, depression is more common among women, unemployed, and unmarried or divorced groups (Mahwati, 2017). Another study in Spain also unveiled that women were associated with the greater symptoms of depression (González-Sanguino et al., 2020). It was correlated with the absence of work for women and possible domestic violence which develops symptoms of depression in women in Morocco (Zarrouq et al., 2021).

**Table 2.** Distribution of respondents based on demographic characteristics and spiritual activities.

Variable	Total N (2189)	Spiritual activities		p-value
		Yes (N=2126)	No (N=63)	
<b>Age (year)</b>				0.215
15-24	606(27.7)	585(96.5)	21(3.5)	
25-44	1161(53.0)	1126(97.0)	35(3.0)	
>=45	422(19.3)	415(98.3)	7(1.7)	
<b>Gender</b>				0.005*
Female	1486(67.9)	1454(97.8)	32(2.2)	
Male	703(32.1)	672(95.6)	31(4.4)	
<b>Marital Status</b>				0.009*
Unmarried	983(44.9)	944(96.0)	39(4.0)	
Married	1206(55.1)	1182(98.0)	24(2.0)	
<b>Educational Status</b>				0.500
Mid-high	2103(96.1)	2044(97.2)	59(2.8)	
Low	86(3.9)	82(95.3)	4(4.7)	
<b>Employment Status</b>				0.840
Layoff	161(7.4)	156(96.9)	5(3.1)	
Unemployed	379(17.3)	371(97.9)	8(2.1)	
Informal Worker	92(4.2)	89(96.7)	3(3.3)	
Student	432(19.7)	417(96.5)	15(3.5)	
Civil servant/private/retiree	1125(51.4)	1093(97.2)	32(2.8)	
<b>Homeownership Status</b>				0.068
Rented house	368(16.8)	356(96.7)	12(3.3)	
Family-owned house	915(41.8)	880(96.2)	35(3.8)	
Office-owned house	53(2.4)	52(98.1)	1(1.9)	
Own house	853(39.0)	838(98.2)	15(1.8)	

\*Statistically significant, p-value<0.05

The multivariate analysis discovered two confounding variables, comprising of gender and marital status. Both of them possess a significant relationship with spiritual activity and depression. Substantially, the two variables are not intermediate variables in the relationship between spiritual activity and depression. When the variables gender and

marital status were excluded in the analysis, when, there was a change in OR over 10 percent. The final results of the multivariate analysis can be observed in Table 3.

Table 3 illustrates the relationship of spiritual activity at each level of depression employing a crude model (model 1) and a model adjusted by the variables gender and marital status (model 2). Spiritual activity decreases the risk of depression at every level of depression (mild, moderate, and severe), either crudely or after adjustment. The values of the relationship after adjustment for mild, moderate, and severe depression are OR = 0.332 (95% CI 0.19-0.60;  $p$ -value = 0.000), OR = 0.198 (95% CI 0.09-0.43;  $p$ -value = 0.000), and OR=0.234 (95% CI 0.08-0.64;  $p$ -value=0.005), respectively. Table 3 also presents that the model without adjustment by demographic characteristics (model 1) underestimates the spiritual relationship with depression at the mild and moderate levels but overestimates it at the severe level.

**Table 3.** Relationship between spiritual activity and level of depression based on crude and adjusted odds ratios.

Variable	OR (95% CI)	p-value
<b>Mild</b>		
<b>Model 1 (crude model) <sup>a</sup></b>		
<b>Spiritual</b>		
Yes	0.344(0.19-0.61)	0.000*
No	1 (reference)	
<b>Model 2 (adjusted model) <sup>b</sup></b>		
<b>Spiritual</b>		
Yes	0.332(0.19-0.60)	0.000*
No	1 (reference)	
<b>Moderate</b>		
<b>Model 1 (crude model) <sup>a</sup></b>		
<b>Spiritual</b>		
Yes	0.211(0.10-0.45)	0.000*
No	1 (reference)	
<b>Model 2 (adjusted model) <sup>b</sup></b>		
<b>Spiritual</b>		
Yes	0.198(0.09-0.43)	0.000*
No	1 (reference)	
<b>Severe</b>		
<b>Model 1 (crude model) <sup>a</sup></b>		
<b>Spiritual</b>		
Yes	0.228(0.10-0.61)	0.003*
No	1 (reference)	
<b>Model 2 (adjusted model) <sup>b</sup></b>		
<b>Spiritual</b>		
Yes	0.234(0.08-0.64)	0.005*
No	1 (reference)	

\*Statistically significant with 95% confidence interval

<sup>a</sup> model 1: crude model of the relationship between spiritual activity and severe depression

<sup>b</sup> model 2: model of the relationship between spiritual activity and severe depression, after adjustment by the variables gender and marital status

The main results of this study corroborated the proposed hypothesis, that spiritual activity is able to decrease the risk of depression at every level of depression (mild,

moderate, and severe), or it is implied that spiritual activity owns an inverse relationship with the occurrence of depression at all levels. It is in accordance with a study conducted in India on 120 patients with depressive disorders. Those with mild depression possessed higher spirituality scores than those with moderate or severe depression. Spiritual activities are significantly correlated with positive emotions, such as gratitude, inner peace, and acceptance, and making the doers overcome problems of meaning and purpose in life and provide self-restraint from relapse (Rentala et al., 2017). In Columbia, spirituality is lower in severely depressed individuals (Mcclintock et al., 2019). Spiritual activity reframes unpleasant events in life into less stressful ones (Zarrouq et al., 2021).

A longitudinal study of family life in the United States examined the relationship of hope in the relationship of spirituality with depression. Higher spiritual levels are incorporated with lower levels of depression indirectly through higher hope (Rose et al., 2018). Similarly, research in the UAE on Muslims and Christians unveiled that in the Muslim community, it was discovered an inverse relationship between spiritual activity and depression ( $r=-0.110$ ;  $p=0.02$ ). Muslims reveal a greater dependence on spiritual activities compared to Christians during the COVID-19 pandemic ( $F=97.64$ ;  $P<0.001$ ). Muslims hope God strengthen them in this situation and prove that spiritual activity is able to uphold some people in handling their mental health during the COVID-19 pandemic (Thomas & Barbato, 2020).

A study conducted by Roming in the United States on 440 college students aged around 21 years discovered that spiritual activity is a crucial adaptive factor associated with mental health and a better quality of life for college students. Those possessing a low level of spirituality experienced higher levels of depression and, thus, a lower quality of life (Roming & Howard, 2019). The same study among adolescents in Malaysia revealed that spirituality was a protective factor against hopelessness, depression, and suicidal behavior among adolescents. According to the Islamic view, one's spirituality provides him a close relationship to Allah SWT that strengthens him to encounter difficulties. Individuals may possess hope and optimism in solving their problems in a better way (Talib & Abdollahi, 2017). Likewise, in a study of Chinese students in Hong Kong, students with lower levels of spiritual well-being owned higher rates of depression (Leung & Pong, 2021).

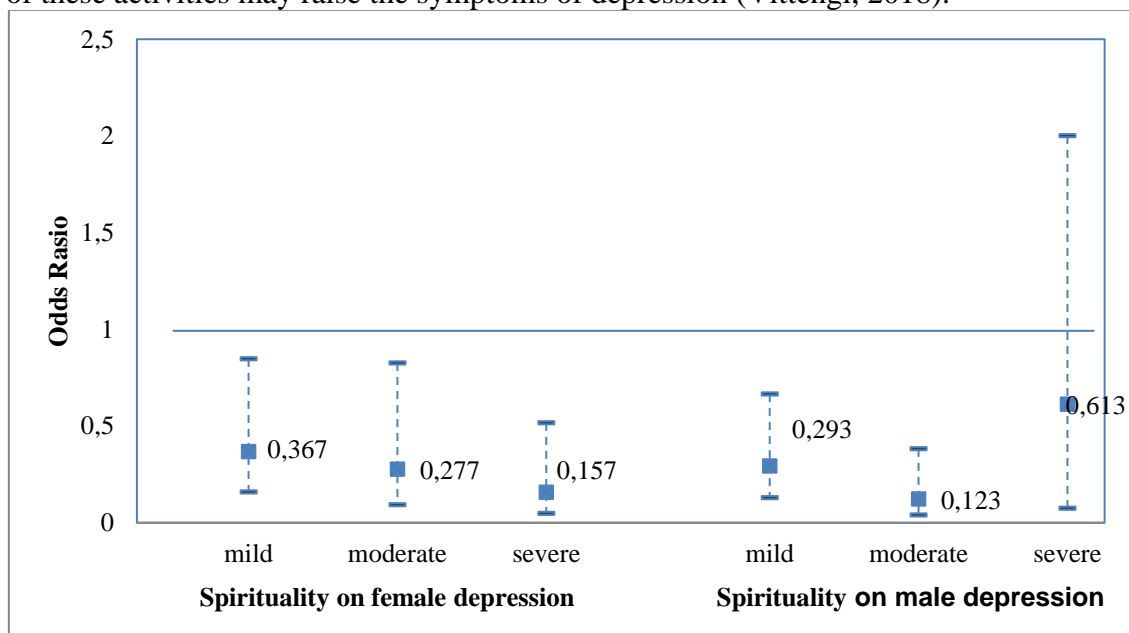
A study on adults in Korea recommended that higher levels of spiritual well-being are correlated with lower levels of depression. Prayer can substantially decrease stress levels as it is able to produce psychological comfort (You, et al., 2019), while spiritual practice increases social support, healthy behavior, lifestyle, and better happiness, thus, it helps people overcome difficulties in life's journey (Vitorino et al., 2018).

In a similar study collecting data online, the elderly age group possessed the lowest proportion because the questionnaires were distributed through social media, whereas most of them owned limited access to social media. A study conducted in Indonesia concerning the elderly justified a strong relationship between spirituality and depression (OR=1.869; 95% CI 1.42-2.46); Lower depression was revealed in those who performed spiritual activities (Mahwati, 2017). Clinical trial research conducted by Askari on 40 old adults unveiled that spiritual-religious psychotherapy could reduce 60% of symptoms of depression in the elderly (Askari et al., 2018). Old adults frequently participate in religious congregations, at which social support and open communication, which may reduce symptoms of depression. Furthermore, religious individuals are more likely to get married and have stable family relationships, which allow them to have a place to share feelings that is able to decrease symptoms of depression. Religious individuals generally have hope in God and think positively that everything is for their good. Such hope provides them strength in encountering difficulties (Mahwati, 2017).



Another study conducted on 84 pregnant women in Iran with an RCT also presented a 41% reduction in depression and blood pressure stability in pregnant women who were provided intervention in the form of religious education. Religious education is able to reduce the emotional symptoms of pregnant women and, in turn, stabilize the blood pressure (Sanaeinasab et al., 2021).

However, there are certain conditions in which spiritual activity can be a factor increasing the risk of an increase in depression longitudinally, even to severe depression (OR=1.34). The spiritual activity in question is any activity which objective is to identify contemplation with loneliness; contemplation like “why am I so sad?” or “why is this happening in my life?” and loneliness, which is an act of a sense of social isolation. Both of these activities may raise the symptoms of depression (Vittengl, 2018).



**Figure 1.** The relationship between spiritual activity and depression based on gender.

Figure 1 displays the stratification by gender. In the female group, the relationship pattern of spiritual activity with the level of depression is the same as that of the overall respondent. Spiritual activity reduces the risk of depression either at mild, moderate, or severe levels. The values for mild, moderate, and severe depression were OR=0.367 (95% CI 0.16-0.85; p-value=0.019), OR=0.277 (95% CI 0.09-0.83; p-value =0.021), and OR=0.157 (95% CI 0.05–0.52; p-value=0.002), respectively. Meanwhile, in the male group, the relationship between spiritual activity and depression was only significant at mild and moderate levels of depression, but not significant at the severe level with OR = 0.613 (95% CI 0.08-5.00; p-value = 0.647).

The limitation of this study was that the research was conducted online through the distribution of links through social media. Therefore, the sampling was not random; the respondents were selected unevenly in various characteristics. Most of the respondents were civil servants, and their close relatives possessed relatively good spiritual knowledge and a relatively stable economic level. Another limitation was that the variables were calculated not clinically but through self-reporting questionnaires.

#### 4. CONCLUSION

Spiritual activity is able to decrease the risk of depression at every level (mild, moderate, and severe). The higher one's spiritual level, the lower his/her level of depression. Good spiritual practice during an infectious disease outbreak is able to reduce the risk of developing depression for some individuals, particularly in Indonesia.

#### REFERENCES

- Askari , M., Mohammadi , H., Radmehr , H., & Jahangir, A. H. (2018). The effect of spiritual–religious psychotherapy on enhancing quality of life and reducing symptoms of anxiety and depression among the elderly . *Journal of Pizhūhish Dar dīn Va Salāmat* (i.E., Research on Religion & Health), 4(2), 29-41. <https://doi.org/10.22037/jrrh.v4i2.15595>
- Chirico, F. (2021). Spirituality to cope with COVID-19 pandemic, climate change and future global challenges. *J Health Soc Sci*, 6(2), 151-158.
- Davis, E. B., McElroy-Heltzel, S. E., Lemke, A. W., Cowden, R. G., VanderWeele, T. J., Worthington Jr, E. L., ... & Aten, J. D. (2021). Psychological and spiritual outcomes during the COVID-19 pandemic: A prospective longitudinal study of adults with chronic disease. *Health Psychology*, 40(6), 347-356. <https://doi.org/10.1037/hea0001079>
- Giannone, D. A., & Kaplin, D. (2020). How does spiritual intelligence relate to mental health in a western sample?. *Journal of Humanistic Psychology*, 60(3), 400-417. <https://doi.org/10.1177/0022167817741041>
- González-Sanguino, C., Ausín, B., Castellanos, M. Á., Saiz, J., López-Gómez, A., Ugidos, C., & Muñoz, M. (2020). Mental health consequences during the initial stage of the 2020 Coronavirus pandemic (COVID-19) in Spain. *Brain, behavior, and immunity*, 87, 172-176. <https://doi.org/10.1016/j.bbi.2020.05.040>
- Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals*, 32(9), 509–515. <https://doi.org/10.3928/0048-5713-20020901-06>.
- Leung, C. H. and Pong, H. K. (2021). Cross-sectional study of the relationship between the spiritual wellbeing and psychological health among university students. *PLoS ONE*, 16(4), 1–19. <https://doi.org/10.1371/journal.pone.0249702>
- Mahwati, Y. (2017). The Relationship between Spirituality and Depression Among the Elderly in Indonesia. *Makara Journal of Health Research*, 21(1), 13–19. <https://doi.org/10.7454/msk.v21i1.6206>.
- McClintock, C. H., Anderson, M., Svob, C., Wickramaratne, P., Neugebauer, R., Miller, L., & Weissman, M. M. (2019). Multidimensional understanding of religiosity/spirituality: relationship to major depression and familial risk. *Psychological medicine*, 49(14), 2379-2388. <https://doi.org/10.1017/S0033291718003276>
- Rentala, S., Lau, B. H. P., & Chan, C. L. (2017). Association between spirituality and depression among depressive disorder patients in India. *Journal of spirituality in mental health*, 19(4), 318-330. <https://doi.org/10.1080/19349637.2017.1286962>
- Roming, S., & Howard, K. (2019). Coping with stress in college: an examination of spirituality, social support, and quality of life. *Mental Health, Religion & Culture*, 22(8), 832-843. <https://doi.org/10.1080/13674676.2019.1674794>
- Rose, A. H., Rose, J. R., Miller, R. B., & Dyer, W. J. (2018). Exploring hope as a mediator between religiosity and depression in adolescents. *Journal of Religion & Spirituality in Social Work: Social Thought*, 37(3), 239-253. <https://doi.org/10.1080/15426432.2018.1488646>

- Sanaeinasab, H., Saffari, M., Sheykh-Oliya, Z., Khalaji, K., Laluie, A., Al Zaben, F., & Koenig, H. G. (2021). A spiritual intervention to reduce stress, anxiety and depression in pregnant women: Randomized controlled trial. *Health Care for Women International*, 42(12), 1340-1357. <https://doi.org/10.1080/07399332.2020.1836643>
- Shamblaw, A. L., Rumas, R. L., & Best, M. W. (2021). Coping during the COVID-19 pandemic: Relations with mental health and quality of life. *Canadian Psychology/Psychologie canadienne*, 62(1), 92-100. <https://doi.org/10.1037/cap0000263>
- Talib, M. A., & Abdollahi, A. (2017). Spirituality moderates hopelessness, depression, and suicidal behavior among Malaysian adolescents. *Journal of religion and health*, 56(3), 784-795. <https://doi.org/10.1007/s10943-015-0133-3>.
- Thomas, J., & Barbato, M. (2020). Positive religious coping and mental health among Christians and Muslims in response to the COVID-19 pandemic. *Religions*, 11(10), 498. <https://doi.org/10.3390/rel11100498>
- Vitorino, L. M., Lucchetti, G., Leão, F. C., Vallada, H., & Peres, M. F. P. (2018). The association between spirituality and religiousness and mental health. *Scientific reports*, 8(1), 1-9. <https://doi.org/10.1038/s41598-018-35380-w>
- Vittengl, J. R. (2018). A lonely search?: Risk for depression when spirituality exceeds religiosity. *The Journal of nervous and mental disease*, 206(5), 386-389. <http://doi.org/10.1097/NMD.0000000000000815>
- You, S., Yoo, J. E., & Koh, Y. (2019). Religious practices and mental health outcomes among Korean adults. *Personality and Individual Differences*, 142, 7-12. <https://doi.org/10.1016/j.paid.2019.01.026>
- Zarrouq, B., Abbas, N., Hilaly, J. E., Asri, A. E., Abbouyi, S., Omari, M., ... & Ragala, M. E. (2021). An investigation of the association between religious coping, fatigue, anxiety and depressive symptoms during the COVID-19 pandemic in Morocco: a web-based cross-sectional survey. *BMC psychiatry*, 21(1), 1-13. <https://doi.org/10.1186/s12888-021-03271-6>