Yuniarti, E. V., Andriyanto, A. (2021). *Nurse and Health: Jurnal Keperawatan.* 10 (1): 52-58 http://ejournal-kertacendekia.id/index.php/nhjk/index

## **Original Research Article**

# THE RELATIONSHIP OF PHYSICAL DISTANCING WITH MENTAL HEALTH OF INDONESIAN COMMUNITY DURING COVID-19

# Enny Virda Yuniarti<sup>1</sup>, Arief Andriyanto<sup>2\*</sup>

<sup>1</sup>Department of Surgical Medical Nursing, Bina Sehat PPNI Mojokerto College of Health Sciences, Indonesia <sup>2</sup>Department of Community Nursing, Bina Sehat PPNI Mojokerto College of Health Sciences, Indonesia

# \*Correspondence: Arief Andriyanto

Department of Community Nursing, Bina Sehat PPNI Mojokerto College of Health Sciences, Indonesia

Mailing Address

Email: ners.arif91@gmail.com

#### **Article Info:**

Received: October 21, 2020 Revised: January 25, 2021 Accepted: March 1, 2021

## DOI:

https://doi.org/10.36720/nhjk.v10i1.218

#### **Abstract**

**Background:** The spread of the COVID-19 virus has spread widely throughout the world, which affects various aspects (Lebov et al., 2017). Several aspects affected by the transmission of the COVID-19 virus are psychological / mental health impacts caused by the implementation of policies from various countries in the form of a physical distancing system (Ornell, Schuch, Sordi, & Kessler, 2020).

**Objectives:** Analyze the relationship between physical distancing and the mental health of Indonesian community during Covid-19.

Methods: The cross-sectional study design. The sample of the study was the Indonesian people affected by the covid-19 pandemic who were taken based on purposive sampling with complete answer criteria as many as 1,090 respondents. The research instrument consisted of 2 questionnaires, including: a method questionnaire in physical distancing practices methods consisting of 11 items of physical distancing application to prevent the spread of the Covid-19 virus as recommended by World Health Organization. The Self-Reporting Questionnaire-29 is a questionnaire issued by the Directorate of Mental Health Services of the Indonesian Ministry of Health with the domains of anxiety and depression, psychomatics, symptoms of psychotic disorders, trauma stress. Parametric statistical tests used the Pearson test (p-value < 0.05).

**Results:** The results obtained a p-value of 0.03, which means that there is a physical distancing relationship with the mental health of the Indonesian people during Covid-19.

**Conclusion:** There is a significant relationship between physical distancing and the mental health of the Indonesian people. Recommendations for health workers, especially nurses in providing health services to the community, must be more comprehensive and recognize client responses to prevent psychological impacts.

**Keyword:** *Physical distancing; mental health; covid-19 pandemic.* 

© 2021 The Authors. Nurse and Health: Jurnal Keperawatan Published by Institute for Research and Community Service-Health Polytechnic of Kerta Cendekia, Sidoarjo

This is an Open Access Article distributed under the terms of the <u>Creative Commons Attribution-NonCommercial 4.0 (CC BY-NC 4.0)</u>, which allows others to remix, tweak, and build upon the work non-commercially as long as the original work is properly cited. The new creations are not necessarily licensed under the identical terms.

E-ISSN 2623-2448 P-ISSN

2088-9909

## INTRODUCTION

The World Health Organization (WHO) on April 6, 2020, the number of sufferers in the world is 1,278,523 infected with covid-19

cases. Of the 1.2 million corona positive cases, 69,757 (5.46%) covid-19 patients have died and 266,732 (20.9%) people have recovered from the total positive cases (WHO, 2020). In

Indonesian 203,342 confirmed cases and 8,336 deaths.

The one health approach seeks to strategize coordinated efforts across multiple overlapping disciplines, including environmental monitoring and environmental health (Lebov et al., 2017). The urge to complete isolation or lockdown has emerged. However, the central government appears reluctant to do so. The government prefers to limit social movements or physical distancing "working at home, studying at home, and worshiping at home". The term physical distancing has only become popular recently. Based on a socio-economic perspective, quarantine in lockdown areas is not the right policy, Indonesia's economic growth is predicted to fall by 0.5% if the lockdown occurs for two weeks, especially in Jakarta.

This scenario raises a number of questions: is there a pandemic of fear / stress along with the COVID-19 pandemic and a physical distancing system. In order to understand the psychological and psychological effects of a pandemic, the emotions involved, such as fear and anger, must be considered and observed (Ornell, Schuch, Sordi, & Kessler, 2020). The fear is an adaptive defense mechanism that is fundamental to survival and involves several processes of biological preparation to respond to a potentially threatening event. However, when it is chronic or disproportionate, it becomes dangerous and can be a key component in the development of various psychiatric disorders (Ho, Chee, & Ho, 2020).

The fear increases anxiety and stress levels in healthy individuals and intensifies symptoms in people with psychiatric disorders. During epidemics, the number of people whose mental health is affected tends to be greater than the number of people affected by the infection (Ornell et al., 2020). Past tragedies have shown that mental health implications can last longer and have a greater prevalence than the epidemic itself and that psychosocial impacts can be quantified if we consider their

resonance in different contexts (Gary-Webb et al., 2011). Previous studies have shown that the prevalence of new infectious diseases, such as severe acute respiratory syndrome (SARS), can increase anxiety, depression, and stress levels in the general population (Shevlin et al., 2020).

Findings from recent research indicate that anxiety and stress in isolated individuals are at high levels, which suggests that psychological health should be considered for individuals who isolate during epidemics and that social isolation can affect mental health (Xiao, Zhang, Kong, Li, & Yang, 2020). The aim of the study was toanalyze the relationship between physical distancing and the mental health of Indonesian community during Covid-19.

#### **METHODS**

Study Design

This type of analytic research, with a cross-sectional approach.

Setting

The research was carried out from March - August 2020 to all Indonesians affected by the Covid-19 pandemic.

# Research Subject

The sampling method used in this study was purposive sampling, namely the sampling technique carried out with specific aims and objectives determined by the researcher following the sample criteria (Polit & Beck, 2010). The sample of the study was the Indonesian people affected by the covid-19 pandemic who were taken based on purposive sampling with complete answer criteria as many as 1,090 respondents.

Inclusion criteria, among others; 1) Indonesian people affected by the Covid-19 pandemic; 2) People who can use Android in filling out the questionnaire. The sample exclusion criteria in this study were people who did not answer the questionnaire completely. The questionnaire has been created in google form and distributed via social media; whatsapp groups, facebook, instagram. The data collected were 1,138 respondents, then cleaning was

carried out by the complete answers of the respondents which finally determined 1,090 respondents.

#### **Instruments**

The research instrument consisted of 2 questionnaires, including: method questionnaire in physical distancing practices methods consisting of 11 items of physical distancing application to prevent the spread of the Covid-19 virus as recommended by World Health Organization. The Self-Reporting Questionnaire-29 is a questionnaire issued by the Directorate of Mental Health Services of the Indonesian Ministry of Health with the domains of anxiety and depression, psychomatics, symptoms of psychotic disorders, trauma stress (Kembaren, 2018). The validity test on 11 and 29 questions was carried out on 32 people in Mojokerto Regency on February 30-31, 2020. The results showed that both internal consistency and intra-class correlation were good with r count values ranges starting from the lowest 0.511 to the highest of 0.830, which is greater than the value of r-table (0.2960), meaning that each item is said to be valid. Reliability test results conducted by researchers on February 30-31, 2020 in Mojokerto Regency showed that the results of Cronbach's Alpha 0.754 were said to be reliable because the Cronbach's Alpha calculated value was greater than 0.7.

## Data Analysis

Collecting data with the following steps: 1) selecting research subjects according to the inclusion criteria; 2) provide research information as clearly as possible to research subjects contained in the first page on google form; 3) requesting the respondent's consent to be the research subject; 4) filling out questionnaires to all respondents; 5) perform data analysis of the results of distributing questionnaires. The parametric statistical tests used the Pearson test ( $\alpha$  < 0.05).

# **Ethical Consideration**

The study was approved by the research and has conducted ethical tests. Besides, it passed the ethical test and obtained a research permit from the College of Health Science Maluku Husada, Indonesia with no. RK.08/KEPK/STIK/II/2020.

# **RESULTS**

Characteristics of Respondents by Age, Gender, and Educational Level

The characteristics of respondents include age, gender, educational level of communities Indonesian.

**Table 1.** Distribution of Respondents by Age, Gender, and Educational Level in Indonesia.

<b>Characteristics of Respondents</b>	Frequency (f)	Percentage (%)
Age		
Mean ± Standard Deviation (SD)	$29.72 \pm 610.940$	
Gender		
Male	268	24.6
Female	822	75.4
<b>Educational Level</b>		
Illiterate	2	0.2
Only Literate but not School	3	0.3
Primary School	28	2.6
Junior High School	71	6.5

Characteristics of Respondents	Frequency (f)	Percentage (%)
Senior High School	395	36.2
Bachelor	350	32.1
Post Graduate	106	9.7
Professional Qualifications of Doctor, Nurse	135	12.4

Sources: Primary Data of Questionnaires, 2020.

Based on the results of this study above (table 1), it found that the majority of the respondents' characteristics were women was 822 respondents, senior high school was 395 respondents. The mean age was 29.72 years.

Analysis of the Relationship between Physical Distancing and the Mental Health of Indonesian Community during Covid-19

**Table 2.** Analysis of the Relationship between Physical Distancing and the Mental Health of Indonesia Community during Covid-19 using Pearson Test.

Variables	Mean	SD	<i>p</i> -value
Physical	4.23	1.397	
Distancing			.03
Mental	5.26	4.987	.03
Health			

Sources: Primary Data of Questionnaires, 2020.

Based on table 2 the results obtained p-value 0.03, meaning that there is a relationship of physical distancing with the mental health of Indonesian communities during COVID-19.

## **DISCUSSION**

The previous research has investigated the psychological impact of past pandemics, notably the SARS pandemic. The study has primarily considered the effects on pandemic survivors and healthcare professionals (Barro & Weng, 2020), for example, the long-term impact of pandemic, especially economic problems, and the success of the Australian government's in reducing the psychological distress of society. The research compares Australia with other countries. Australia's control over the spread of COVID-19 would be of international interest to determine the factors

predict psychological distress (Berger & Reupert, 2020). A study in China used a short questionnaire during the same pandemic, and the respondents were reported to increase the fear, anxiety, and panic (Chong et al., 2018). Based on table 2, the results obtain p-value 0.03, and it means that there is a relationship between physical distancing with the mental health of Indonesian communities during COVID-19. Previous research conducted on healthcare workers believed that the three aspects affected by the epidemic were economic problems, interpersonal communication problems, and mental health (Liu et al., 2020).

Other studies say approximately twothirds of respondents reported decreases in their income (61.6%) (Dang et al., 2020). Global health governance is increasingly focused on epidemic and pandemic health emergencies requiring an interdisciplinary approach to access scientific knowledge to guide crisis preparedness and response (Corman et al., 2020). The one health approach seeks to strategize coordinated efforts across multiple overlapping disciplines, including environmental monitoring and environmental health (Lebov et al., 2017).

This study has strengths and limitations. As an advantage, the sample is highly representative of the Indonesian population. They were recruited early in the pandemic development and used standard measures, allowing comparison with findings from later stages of the COVID-19 crisis. However, despite the sampling frame and large sample size, and the participants represented the Indonesian population on demographic, economic, and social factors, as well as voting history. It was not an actual random probability sample (which would be very difficult to obtain

under the circumstances), and individual decisions about whether to participate may be influenced by psychological factors, creating the possibility of sampling bias. Second, all mental health assessments were based on selfreports rather than interviews conducted by physicians, and this may result overestimating prevalence rates. Third, the validity of the traumatic stress assessment might be questionable because it is unclear that the COVID-19 pandemic met the ICD-11 criteria for a traumatic event, "a very threatening or dire event or sequence of events," and the researchers did not screen for other forms of trauma exposure.

Modeling studies show that the impact of a pandemic on the psychological distress of the population can influence the progress of the pandemic, so it indirectly affects mortality (Tsamakis et al., 2020). Furthermore, the development of mental disorders in the community can impose burdens that hinder national social and economic recovery after the pandemic over. The fact that the levels of psychological distress observed in this study are not dramatically higher than those reported in previous studies suggests that the population, in the early stages of the pandemic, has shown resistance to the unprecedented changes that have been imposed on them (Shevlin et al., 2020). However, the researchers have identified certain groups who may be more vulnerable to the social and economic challenges of the pandemic, especially for those whose incomes are affected, have children living at home, and the health conditions make them vulnerable to the effects of COVID-19. Further research is needed to prove that this group exhibits higher levels of psychological distress at a later stage in the pandemic, and the specific interventions and policies should be developed to meet their needs.

## **CONCLUSION**

There is a significant relationship between physical distancing and the mental health of the Indonesian people. The respondents in the study, namely the Indonesian people are most at risk of being affected by physical distancing on mental health. The reason is, a person is usually most happy when visited and gathered with family and friends. With limited meetings with friends, they will feel lonely.

#### **SUGGESTIONS**

Recommendations for health workers, especially nurses in providing health services to the community, must be more comprehensive and recognize client responses to prevent psychological impacts.

## **ACKNOWLEDGMENT**

The authors would like to thank the Chairperson of Bina Sehat PPNI Mojokerto College of Health Sciences, Indonesia who permitted for the researchers to conduct the research.

# DECLARATION OF CONFLICTING INTEREST

There is no conflict of interest that arise when conducting research.

# **FUNDING**

This research received funding from the Internal grant for the Bina Sehat PPNI Mojokerto College of Health Sciences, Indonesia.

## **AUTHOR CONTRIBUTION**

**Enny Virda Yuniarti:** As Lead researcher, coordinating research, data collection, preparation of manuscripts.

**Arief Andriyanto:** Collecting data, assisting data analysis, drafting manuscripts.

#### **ORCID**

**Enny Virda Yuniarti** 

https://orcid.org/0000-0002-7470-1227

# **Arief Andriyanto**

https://orcid.org/0000-0002-1372-5401

# REFERENCES

Barro, R. J., & Weng, J. (2020). The

- Coronavirus and the Great Influenza Pandemic: Lessons from the "Spanish Flu" for the Coronavirus's Potential Effects on Mortality and Economic Activity. *NBER Working Paper Series*, 25. Retrieved from http://www.nber.org/papers/w26866.
- Berger, E., & Reupert, A. (2020). The COVID-19 Pandemic in Australia: Lessons Learnt, 2(999), 2–4.
- Chong, M. Y., Wang, W. C., Hsieh, W. C., Lee, C. Y., Chiu, N. M., Yeh, W. C., ... Chen, C. L. (2018). Psychological impact of severe acute respiratory syndrome on health workers in a tertiary hospital. *British Journal of Psychiatry*, 185(AUG.), 127–133. https://doi.org/10.1192/bjp.185.2.127.
- Corman, V. M., Landt, O., Kaiser, M., Molenkamp, R., Meijer, A., Chu, D. K. W., ... Schmidt, M. L. (2020). Detection of 2019 novel coronavirus (2019-nCoV) by real-time RT-PCR. *Eurosurveillance*, 25(3).
- Dang, A. K., Le, X. T. T., Le, H. T., Tran, B. X., Do, T. T. T., Phan, H. T. B., ... Ho, R. C. M. (2020). Evidence of covid-19 impacts on occupations during the first vietnamese national lockdown. *Annals of Global Health*, 86(1), 1–9. https://doi.org/10.5334/AOGH.2976.
- Gary-Webb, T. L., Baptiste-Roberts, K., Pham, L., Wesche-Thobaben, J., Patricio, J., Pi-Sunyer, F. X., ... Brancati, F. L. (2011). Neighborhood Socioeconomic Status, Depression, and Health Status in the Look AHEAD (Action for Health in Diabetes) Study. *BMC Public Health*, *11*. https://doi.org/10.1186/1471-2458-11-349.
- Ho, C. S., Chee, C. Y., & Ho, R. C. (2020). Mental Health Strategies to Combat the Psychological Impact of COVID-19 Beyond Paranoia and Panic. *Annals of the Academy of Medicine, Singapore*, 49(1), 1–3.
- Kembaren, L. (2018). Sehatkah Jiwa Anda, Bagaimana Mengetahui Tingkat

- Kesehatan Jiwa Kita? Self-Reporting Questionnaire-29. Retrieved April 29, 2020, from http://www.yankes.kemkes.go.id.
- Lebov, J., Grieger, K., Womack, D., Zaccaro, D., Whitehead, N., Kowalcyk, B., & MacDonald, P. D. M. (2017). A framework for One Health research. *One Health*, 3, 44–50. https://doi.org/10.1016/j.onehlt.2017.03. 004.
- Liu, Z., Wu, J., Shi, X., Ma, Y., Ma, X., Teng, Z., ... Zeng, Y. (2020). Mental Health Status of Healthcare Workers in China for COVID-19 Epidemic. *Annals of Global Health*, 86(1), 1–8. https://doi.org/https://doi.org/10.5334/aogh.3005.
- Ornell, F., Schuch, J. B., Sordi, A. O., & Kessler, F. H. P. (2020). "Pandemic fear" and COVID-19: mental health burden and strategies. *Revista Brasileira de Psiquiatria (Sao Paulo, Brazil: 1999)*, 00(00), 1–5. https://doi.org/10.1590/1516-4446-2020-0008.
- Polit, D. F., & Beck, C. T. (2010). Essentials of Nursing Research Appraising Evidence for Nursing Practice (Seventh Ed). China: Library of Congress Cataloging in Publication Data.
- Shevlin, M., McBride, O., Murphy, J., Miller, J. G., Hartman, T. K., Levita, L., ... Bentall, R. P. (2020). Anxiety, Depression, Traumatic Stress, and COVID-19 Related Anxiety in the UK General Population During the COVID-19 Pandemic, 1–27.
- Tsamakis, K., Rizos, E., Manolis, A., Chaidou, S., Kympouropoulos, S., Spartalis, E., ... Triantafyllis, A. (2020). COVID-19 pandemic and its impact on mental health of healthcare professionals. *Experimental and Therapeutic Medicine*, 3451–3453. https://doi.org/10.3892/etm.2020.8646.
- WHO. (2020). Penggunaan rasional alat perlindungan diri untuk penyakit coronavirus ( COVID-19 ) dan

pertimbangan jika ketersediaan sangat terbatas. *World Health Organization*. Retrieved from WHO/2019-nCov/IPC\_PPE\_use/2020.2.

Xiao, H., Zhang, Y., Kong, D., Li, S., & Yang, N. (2020). Social capital and sleep quality

in individuals who self-isolated for 14 days during the coronavirus disease 2019 (COVID-19) outbreak in January 2020 in China. *Medical Science Monitor*, 26, 1–8. https://doi.org/10.12659/MSM.923921.

Cite this article as: Yuniarti, E. V., Andriyanto, A. (2021). The relationship of physical distancing with mental health of Indonesian community during Covid-19. Nurse and Health: Jurnal Keperawatan, 10 (1), 52-58. https://doi.org/10.36720/nhjk.v10i1.218