



The Level of Elderly Knowledge of PHBS in Facing the New Normal Era with the Virtual Learning Method

Asyhara Naela Arifin^(✉)

Program Studi Fisioterapi Fakultas Ilmu Kesehatan, Universitas Aisyiyah Yogyakarta,
Yogyakarta, Indonesia

Asyharafisio@unisayogya.ac.id

Abstract. New normal is a term issued by the government in order to loosen social restrictions. In this new normal era elderly are one part of the population who have a high vulnerability to the Covid-19 Virus. Therefore, in the new normal era, is necessary for the elderly to carry out an activity that can keep them from being exposed to the Covid-19 virus. One way is to maintain a Clean and Healthy Lifestyle (CHL). The purpose of this study was to determine the relationship between the elderly and PHBS in facing the New Normal Era with the virtual learning. The method used in this research is a type of non-experimental research, the research design used in this study is analytic observation, namely studying the relationship between two or more variables to find a relationship if there is, how closely related or no relationship. A sample of 60 showed that the subjects were male 13 (21.6%) and female 47 (78.3%). The results of hypothesis testing using the Spearman correlation test show that there is a relationship between the elderly and PHBS in facing the New Normal Era with the virtual learning method. The conclusion obtained is that there is a strong relationship between self-cleaning, clean environment, eating patterns, and activities in the elderly in facing the New Normal Era.

Keywords: new normal era · eaderly · chl · virtual learning

1 Introduction

Elderly or known as the elderly is someone who enters the age of more than 60 years. When you get older, there are many changes, both physical, psychological, and social. Physical changes include a decrease in the musculoskeletal system and appearance. While these changes can affect psychologically so that some people feel depressed about these changes. Given the changes that occur in the elderly or referred to as degenerative changes, they are susceptible to both infectious and non-communicable diseases.

The number of elderly population in Indonesia has increased significantly or continues to increase every year. The increase in the number of the elderly population occurred more than 10% which resulted in changes in the structure of the population, which is estimated towards an aging population structure [3]. This aging population structure is

an illustration of the increasing average age of life expectancy (UHH) of the Indonesian population. The high UHH is one indicator of the success of achieving national development, especially in the health sector [3].

The elderly population in Indonesia ranks fourth in the world after China, India and Japan. Based on population projections for 2010–2035, the number of elderly people in Indonesia in 2014 is estimated at 20.8 million people. The number of elderly in the Special Region of Yogyakarta is recorded as having a percentage of 13.56% of the total population in Indonesia.

New normal is a term issued by the government in order to loosen social restrictions. The government has a hope in the new normal era that all levels of society can be productive in carrying out activities. In this new normal era, the elderly are one part of the population who have a high vulnerability to the Covid-19 Virus. There is a link between age and the body's susceptibility to fighting viruses caused by the presence of Physiological function, as age increases, the physiological function will decrease. In fact, the human immune system also has a strong relationship with physiological systems.

Therefore, in the new normal era, it is necessary for the elderly to carry out an activity that can keep them from being exposed to the Covid-19 virus. One way is to maintain a Clean and Healthy Lifestyle or abbreviated as PHBS. Clean and Healthy Lifestyle is a form of effort to break the chain of the Covid-19 pandemic. In order to increase knowledge, change attitudes and behavior, socialization is encouraged to the entire community, especially the elderly. By utilizing advanced technology to increase understanding related to PHBS, it can be done by means of virtual learning.

2 Methodology

This research is a non-experimental type of research, the research design used in this study is analytic observation, which is studying the relationship between two or more variables to find a relationship if there is, how closely related or no relationship. The approach used in this study is a cross sectional approach, namely data collection is carried out at one time during the study and to determine the relationship between the dependent and independent variables that are observed and measured only once at the same time [1].

Sampling in this study used a non-probability sampling technique with a purposive sampling model, namely the technique of determining the sample with certain considerations [2].

This research was conducted in the Sleman-Kulon Progo area in the period August 2021-October 2021. The subjects of this study were the elderly selected by the Elderly group around the Sleman, Gamping, and Kulon Progo areas. Clean and Healthy Life Behavior is an activity related to health. The measuring instrument uses a questionnaire, the method of measurement is by filling out a questionnaire, and the measuring scale uses an ordinal.

Data analysis in this study was conducted to see the relationship between PHBS and the distribution of individual factors (age). Processing and data analysis of the questionnaire results will be carried out with the help of a computer using the SPSS program, the data will be analyzed by Spearman analysis.

Spearman analysis is used to measure correlation on nonparametric statistics or ordinal scales [4]. The correlation is a measure of the correlation connected by the two variables measured at least on an ordinal scale so that The research objects can be ranked in two sequential series [5].

The spearman method has 3 criteria, the following is an explanation:

2.1 Criteria for the Level of Correlation Strength

- The correlation coefficient value is 0.00- 0.25: the relationship is very weak
- Correlation coefficient value of 0.26–0.50: sufficient relationship
- Correlation coefficient value of 0.51–0.75: strong relationship
- The correlation coefficient value is 0.76- 0.99: the relationship is very strong
- Correlation coefficient value of 1.00: perfect relationship

2.2 Correlation Direction Criteria:

The value of the correlation coefficient lies between + 1 to -1. If the correlation coefficient is positive, then the relationship between the two variables is unidirectional (if x increases then y also increases. Conversely, if the value is negative, the relationship is not unidirectional (if x increases then y decreases).

2.3 Correlation Significance Criteria:

- Significant relationship if the 2-tailed significant value is less than 0.05
- The relationship is not significant if the 2-tailed significant value is greater than 0.5

3 Result

Characteristics of research subjects showed that all subjects were male 13 (21.6%) and female 47 (78.3%). The distribution of data based on age was mostly at the age of 67–71 years as much as 25%. The distribution of data based on the higher level self-cleaning category is often 73, 3%.

Data based on environmental cleanliness, the highest level is sometimes at 58.3%. Characteristics of the highest level of eating pattern data is often 41.6%. The data obtained from the activity obtained the highest level is often 61.6%.

Based on the Spearman correlation test data that the value between self-cleaning and environmental cleanliness is -.714 which has a strong relationship, a negative coefficient value means that the relationship is not unidirectional.

(if x increases then y decreases), and there is a significant relationship smaller than 0.05. The value of self-cleaning and eating patterns is -.545 which has a moderate relationship, a negative coefficient value means the relationship is not unidirectional (if x increases then y decreases), and there is a significant relationship less than 0.05. The net self value and activity is 0.402 which has a sufficient relationship, positive coefficient value means a unidirectional relationship (if x increases then y increases), and there is a significant relationship less than 0.05. The net value of the environment and diet is 0.764 which has a strong relationship, the coefficient is positive, then the relationship

Table 1. Characteristic OF RESEARCH SUBJECTS

<i>Karakteristik</i>	<i>Hasil n = 60 Jumlah (%)</i>
Gender	13(21.6%)
Man	47(78.3%)
Woman	
Age	8(13.3%)
50–54 th	14(23.3%)
55–58 th	11(18.3%)
59–62 th	12(20%)
63–66 th	15(25%)
67–71 th	
Clean Yourself	44(73.3%)
Often	16(26.6%)
Sometimes	-
Never	
Clean Environment	25(41.6%)
Often	35(58.3%)
Sometimes	-
Never	
Diet	33(55%)
Often	27(45%)
Sometimes	-
Never	
Activitas	37(61.6%)
Often	2(3.3%)
Sometimes	21(35%)
Never	

is unidirectional (if x increases then y increases), and there is a significant relationship less than 0.05. The net value of the environment and activity is $-.711$ which has a strong relationship, a negative coefficient value means the relationship is not unidirectional (if x increases then y decreases), and there is a significant relationship less than 0.05. The value of diet and activity is $-.707$ which has a strong relationship, a negative coefficient value means the relationship is not unidirectional (if x increases then y decreases), and there is a significant relationship less than 0.05. So it can be concluded that there is a strong relationship between self-cleaning, clean environment, eating patterns, and activities.

4 Discussion

Based on the data obtained from this study, it was found that there is a relationship between the elderly and PHBS in facing the new normal era with the virtual learning method. The results of the relationship level of clean and healthy living behavior indicate

Correlations

		Bersih diri	Bersih lingkungan	Pola Makan	Aktivitas
Spearman's rho	Bersih diri	1,000			
	Correlation Coefficient		-.714**	-.545**	.402**
	Sig. (2-tailed)		.000	.000	.001
	N	60	60	60	60
Bersih lingkungan	Correlation Coefficient	-.714**	1,000	.764**	-.711**
	Sig. (2-tailed)	.000		.000	.000
	N	60	60	60	60
Pola Makan	Correlation Coefficient	-.545**	.764**	1,000	-.707**
	Sig. (2-tailed)	.000	.000		.000
	N	60	60	60	60
Aktivitas	Correlation Coefficient	.402**	-.711**	-.707**	1,000
	Sig. (2-tailed)	.001	.000	.000	
	N	60	60	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Fig. 1. Correlations

that the elderly are ready to face this new normal era. There are several factors that can be seen to determine the existence of this relationship.

Table 1 shows that most of the respondents in the self-cleaning category have frequent 73.3%. Respondents also have high activity in the table, which shows that the value is often 61.6%. While the characteristics of environmental hygiene and eating patterns have a difference of 16.9%. Gender characteristics of the respondents found that the percentage of women was more than the percentage of men.

Seen in Fig. 1., The Spearman's relationship proves that there is a strong relationship between personal hygiene, environmental cleanliness, eating patterns, and activities from clean and healthy living behavior. On each characteristic has both negative and positive coefficients. A positive coefficient means that there is a unidirectional relationship between 2 characteristics, which consist of a correlation between self-cleanliness and activity and a net environmental value with eating patterns. While the negative coefficient means that the relationship is not unidirectional consisting of the value of self-cleaning with clean environment, clean of self with diet, clean environment with activity, and eating pattern with activity.

If it is associated with the number of elderly people in Indonesia, which reached 20.24 million people, equivalent to 8.03 percent of the entire population of Indonesia in 2014. Elderly households (households with at least one household member aged 60 years and over) amounted to 16.08 million households or almost a quarter of all households in Indonesia and most of them live in rural areas with their extended families. It should be a concern that education on the application of clean and healthy living behavior is also implemented with the extended family.

The total number of elderly population both globally and nationally in Indonesia continues to increase every year. An increase in the number of elderly population by more than 10% results in changes in the population structure, which is estimated to be towards an aging population structure. This old population structure is an illustration of the increasing average age of life expectancy (UHH) of the Indonesian population. The high UHH is one indicator of the success of achieving national development, especially in the health sector [3].

The elderly and pre-elderly age in the covid-19 pandemic are one of the groups that are vulnerable to being affected, as evidenced by the data written in the Task Force for the Acceleration of Handling Covid-19 2020 where there are 12.2% of positive confirmed

cases in the elderly and in the pre-elderly. As much as 25.1% in Indonesia. In DKI Jakarta alone, there are 2,257 positive confirmed cases in the > 60 year age group, 1,938 cases in the 50–59 year age group and 6,207 cases in the 40–49 year age group.

The elderly are said to be vulnerable for various reasons. Old age is one of the markers. Living longer does not mean living in a healthy condition. Previous research has found that increasing age is also accompanied by an increasing tendency to get sick and have physical limitations (disables) due to a drastic decrease in physical abilities [6].

Increasing age also tends to be followed by the emergence of various chronic diseases, not a few elderly have chronic diseases, such as heart disease, diabetes, asthma, or cancer. This can increase the risk or danger of Corona virus infection.

Cancer patients and chronic liver disease are more susceptible to SARS-CoV-2 infection. Cancer is associated with immunosuppressive reactions, cytokine overload, suppression of proinflammatory agent induction, and impaired dendritic cell maturation. Patients with cirrhosis or chronic liver disease also experience a decreased immune response, making them more susceptible to contracting COVID-19, and may experience a worse outcome [7].

5 Conclusion

Based on the data obtained from the discussion that has been explained, the results show that there is a strong relationship between personal hygiene, environmental cleanliness, eating patterns, and activities in the elderly in facing the new normal era. For health workers, especially physiotherapists, it is necessary to examine factors related to the correlation between clean and healthy living behavior, especially in the new normal era. As a form of prevention, health workers are expected to continue to provide education, both virtual and face-to-face. Meanwhile, to realize government programs, especially for the community, is to always implement clean and healthy living behaviors in daily life, both at home and outside the home. Do not forget also the role in the family environment as the most important factor to always remind and implement clean and healthy living behavior.

References

1. Notoatmodjo.,S. (2012). *Metode Penelitian Kesehatan*. Jakarta. Rineka Cipta.
2. Sugiyono.(2016). *Metode Penelitian*.Bandung: Alfa Beta.
3. Achmad, N. (2022). Pemberdayaan Masyarakat Lanjut Usia melalui Perilaku Hidup Bersih dan Sehat selama Pandemi Covid-19. *Perspektif*, 11(2), 745–750. <https://doi.org/10.31289/perspektif.v11i2.63> 85
4. Yanti, C. A., & Akhri, I. J. (2021). Perbedaan uji korelasi pearson, spearman dan kendall tau dalam menganalisis kejadian diare. *Jurnal Endurance: Kajian Ilmiah Problema Kesehatan*, 6(1), 51-58.
5. Kusumastuti, A., Khoiron, A. M., & Achmadi, T. A. (2020). *Metode Penelitian Kuantitatif*. Deepublish.

6. Sudargo, T., Freitag, H., Kusmayanti, N. A., & Rosiyani, F. (2018). Pola makan dan obesitas. UGM press.
7. Rusman, A. D. P., Umar, F., & Majid, M. (2021). Covid-19 dan psikososial masyarakat di masa pandemi. Penerbit NEM.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as 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 images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

