

# International Journal of Medical and Exercise Science

(Multidisciplinary, Peer Reviewed and Indexed Journal)

## **REVIEW ARTICLE**

# HYGIENE AND HEALTHY LIVING BEHAVIOR AND STRESS DURING THE COVID-19 PANDEMIC

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#### **ABSTRACT**

**Background:** Our awareness of coexistence with the covid-19 virus, forces us to carry out hygiene and healthy living behaviors which we have been ignoring. Objective of the study is to find out the description of hygiene and healthy living behavior before and during the pandemic as well as the psychological during the pandemic. **Methods:** Descriptive with a quantitative approach, data collection using a questionnaire of nine hygiene and healthy living behaviors indicators and stress indicators. **Results:** Hygiene and healthy living behavior of 245 respondents before the pandemic was still low, especially in sports behavior 0.06%, behavior wearing masks when leaving the house 15% and washing hands before entering the house 16%. Changes in behavior during the pandemic occurred in the behavior of respondents using masks when leaving the house as much as 75%, washing hands before entering the house 50%, and washing hands with soap as much as 37%. The Psychological condition of respondents during the pandemic 67% felt stressed about personal and family health, 77% of respondents took more vitamins than before the pandemic. **Conclusion:** There was a change in respondents' hygiene and healthy living behavior during the pandemic.

**Keywords:** PHBS; Hygiene and healthy living behaviors; Behavior change; Covid-19.

Received on 11<sup>th</sup> July 2021, Revised on 16<sup>th</sup> August 2021, Accepted on 25<sup>th</sup> August 2021 DOI:10.36678/IJMAES.2021.V07I03.002

#### **INTRODUCTION**

Entering 2020, Indonesia is overshadowed by the news of the Covid-19 pandemic which first appeared in the city of Wuhan, China with a very fast spread. The stipulation of the Health Protocol was immediately taken by the world and Indonesia when the Covid-19 virus attack was announced as a pandemic. At the beginning of the determination, there were 3 health protocolsset by the Indonesian government, namely: washing hands, wearing masks, and maintaining distance. In 2017 a policy was issued through the Presidential Instruction of the Republic of Indonesia Number 1 of 2017 concerning the Healthy Living Community Movement where the purpose of this program is to accelerate and actions from synergize promotive preventive efforts to healthy living to increase population productivity and reduce the burden of financing health services due to disease (1). One of these movements is the promotion of hygiene and healthy living behavior.

Hygiene and healthy living behaviors in Indonesia we call it PerilakuHidupBersihSehat (PHBS) has not become a culture in society (2) (3) (4) so that Indonesia faced a triple burden of health problems, namely the presence of infectious diseases, non-communicable diseases, and new diseases that befall the community. When the Covid-19 virus attack Indonesia, people stuttered and took many victims. Individual behavior is the key to adapting to new habits that we must live so that we can coexist with the existence of the Covid-19 virus. We don't know how long this covid-19 will pass, so we have to adapt by adopting new habits, which in practice are healthy living behaviors.

Behavioral changes that occur in individuals can occur naturally and planned. Natural change is a change in behavior that occurs automatically due to changes in a person's social or economic environment. Planned change is a change in the behavior of a person or group of people due to a very strong impulse, for example, the current Covid-19 pandemic has pushed all the joints of human life almost all over the world to change. Based on the above background, the purpose of this study is to find out a description of the hygiene and healthy living behavior of the community and a description of stress during the pandemic COVID-19.

#### **METHODOLOGY**

This study uses a quantitative approach with a descriptive design regarding hygiene and healthy living behavior. This study uses a quantitative approach that is intended to reveal the symptoms in a holistic-contextual way through collecting data from a natural setting by utilizing the researcher as a key instrument 5. The population of this research is employees of one of the oldest private universities in Indonesia who are active and registered at Human Resources Development as many as 625 at the time the research were carried out in October 2020. With a sample error rate of 5%, a sample of 245 was obtained. Data collection used primary data with an online questionnaire. Which was contains a statement of nine indicators of hygiene and healthy living behavior program during a pandemic as well as stress indicators during the COVID-19 pandemic according to WHO<sup>6</sup>. The frequency of hygiene and healthy living behavior indicators used are always, never but not always, and never. Frequency of stress was meassured using yes and no during a pandemic.

#### **RESULTS**

From the data, it can be seen that the majority of respondents are lecturers, namely 59% and 41% are education personnel. As many as 67% of respondents are married and the rest are not married. The age of the most respondents is in the age range of 25-45 as much as 56%, which means that the respondents who contribute to the study are of productive age. The education of the most respondents is in Masters 53% this is because most respondents are lecturers whose minimum education is masters.

Before analyzing the description and relationship of clean and healthy living

behaviors indicators before and during the covid-19 pandemic, the instrument was tested for reliability through validity and reliability tests. Test the validity with Pearson's product moment where the value of r count is greater than r table. By using SPSS statistic 21, it is found that r table with degree of freedom (df=28, Sig 5%) is 0.3610. R calculated for the 38 questions obtained is greater than r table so that the instrument is valid. To test the reliability of the croanbach's alpha value, which is 0.887, it is greater than the r table, so the instrument is reliable. An overview of clean and healthy living behaviorsbefore and during the COVID-19 pandemic seen from nine indicators can be seen in table 1 below.

	Before the Pandemic			During the Pandemic		
Behavior	always	ever but not always	never	always	ever but not always	never
Wash your hands when you enter the house	39	156	50	162	78	5
Wash hands before eating	130	109	6	188	55	2
Wash your hands with soap	92	141	12	183	60	2
Eating vegetables	70	175	0	98	146	1
The daily menu consists of fish, vegetables, rice, and fruit	47	197	1	79	165	1
Drink at least 8 glasses of water per day	84	160	1	109	135	1
Cleaning toilets/latrines	73	169	3	100	142	3
Exercise every day	23	215	7	29	215	1
Free time is used for walking or cycling	15	218	12	26	199	20
Free time I rest	52	193	0	77	168	0
Cleaning the house every day	90	154	1	121	123	1
The home environment is clean and doesn't look trashy	79	166	0	105	139	1
Smoke-free home environment	130	105	10	139	96	10
Do not smoke	147	45	53	150	42	53
Use a mask when outside the house	36	94	115	221	23	1

Table 1. Healthy and Clean Behavior of Employees Before and During the Pandemic

From table 2 it can be seen that there is a change in behavior from the number of respondents who always carry out clean and healthy living behaviors, during a pandemic, employees apply more clean and healthy living behaviors than before the pandemic.

The behavior that changed the most was in the behavior of washing hands and using masks. An overview of the stress experienced by employees with the new normal can be seen in table 2 below.

Statement	Yes	No
I feel afraid and worried about my personal or family health	166	79
My current sleep pattern has changed from before the Pandemic	126	119
My current diet has changed from before the Pandemic	130	115
I'm having a hard time sleeping right now	84	161
I'm having a hard time concentrating right now	77	168
I am currently taking medicines even though they are not prescribed by a doctor	54	191
I'm currently taking more vitamins than before the pandemic	189	56

**Table 2.** An overview of the stress experienced by employees during pandemic

The highest stress during the pandemic was shown by employees consuming more vitamins than before the pandemic, followed by anxiety about personal and family health. Meanwhile, the stress indicator that was felt by the employees was the use of drugs that were not prescribed by the doctor and it was difficult to concentrate.

#### DISCUSSION

The pandemic, which has been running for almost a year, is a challenge in itself to be able to carry out its responsibilities in the midst of increasing Covid-19 cases, even the area where the university is located is designated as a red zone. The new normal or adaptation to a new life is a behavior that must be done by society today to be able to break the chain of transmission of covid-19, which is a new habit that includes wearing masks, frequently

washing hands with soap, maintaining a minimum distance of 2 meters and avoiding crowds of people.

Data collection was carried out in October 2020, when the community underwent the semi lockdownperiod. The public has been exposed to a lot of health promotions carried out by the government both at the residential level, workplace, public places, online media and television stations which are constantly providing information about the development of COVID-19. Many behavioral changes occur in the clean and healthy lifestyle of the community, both individually, in families and in society.

The increasing number of COVID-19 cases requires an illustration from the community whether they already know clean and healthy

living behavior to break the chain of transmission, such as survey research conducted on parents of early childhood children in Kendari, it was found that 98% of parents already know about the clean and healthy lifestyle program<sup>7</sup>.

Not all people are afraid or worried about the transmission of Covid-19 so they don't always carry out clean and healthy behavior, such as the results of an online survey conducted on sports education students at State University, there is clean and healthy behavior with a very high category of only 7.76% and a high category. 18.59%, and most respondents in the moderate category 29.65%, followed by the very low category 23.06% and the low category 20.94%, (8). Apart from the behavior of the community, the role of the government is needed to be an example so that it familiarizes the community to undergo the new normal, research conducted by the central and regional governments including village officials in Balong Village, Balong District, Ponorogo Regency with a quantitative approach obtained differences in attitudes about clean and healthy living behaviors before and during The covid-19 pandemic, where during the pandemic most government employees implemented clean and healthy living behaviors in their daily lives

Research conducted on 19 informants with interviews found that getting used to a healthy and clean lifestyle in children during the COVID-19 pandemic can be done by reminding children to eat nutritious foods such as vegetables and fruit, exercising regularly and getting enough rest and doing regular exercise. sunbathe every morning for about 10-15 minutes, wash hands with soap, and maintain personal hygiene<sup>10</sup>. Other education was also

carried out to the general public, such as an outreach program on the importance of a clean and healthy lifestyle during the COVID-19 pandemic, which was integrated with the student Thematic Community Service Program as a form of appreciation for the role of students in the surrounding environment by implementing solutions to partner problems, including conducting counseling/ socialization, renovating garbage dumps, conducting training on clean and healthy living behavior, then carrying out maintenance on tourism places in the village and behavioral changes were successfully carried out <sup>11, 12, 13, 14</sup>.

With the implementation of work from home and learning from home, it is likely to lead to a sedentary lifestyle, for that promotion of physical activity so that the body is healthy and fit is important. such as the implementation of self-stretching counseling conducted teachers and staff of SMKN 10 Cawang, by doing self-stretching there is a decrease in the prevalence of neck pain and low back pain (15). Doing aerobic exercise in post partum women reduces low back pain disorders (16). It is no exception for athletes to maintain motor skills and deal with stress while still doing sports exercises (17). A sedentary lifestyle will cause many other diseases such as cardiovascular disease, motion and body function disease, and psychological.

The highest stress during the pandemic was shown by employees consuming more vitamins than before the pandemic, followed by anxiety about personal and family health. Meanwhile, the stress indicator that was felt by the employees was the use of drugs that were not prescribed by the doctor and it was difficult to concentrate. Research on 42 students from small classes (Grades 1-3 elementary school)

and 48 students from large classes (Grades 4-5 elementary school) with the method of collecting data using a psychological scale, namely the Child Reaction Scale, proves that the average stress level of elementary school students is higher than the average stress level of small grade elementary school students <sup>18</sup>. Other research, using qualitative methods through observation and interviews, shows that firstly online learning during the covid 19 pandemic causes students to experience stress, secondly, online learning habits cause students to become bored and lazy due to some disturbances that may occur in learning habits <sup>19, 20</sup>

This stress needs to be addressed immediately so that it does not become another health problem. Some things that can be done are such as research involving 421 employees who work WFH in the private, public and government sectors in Indonesia by testing the moderating effect in this study using moderated regression analysis (MRA), where the results show that coping strategies moderate the relationship positively, so that the relationship between work flexibility and work productivity is enhanced when employees apply problem-focused coping mechanisms to control stressors and maintain their work productivity during the COVID-19 pandemic <sup>21</sup>. Another alternative is Emotional Freedom Therapy as an alternative therapy to reduce stress levels during the COVID-19 pandemic.

The efficient use of EFT as an alternative during the COVID-19 pandemic can reduce stress levels and eliminate negative energies that can cause anxiety, fear, and stress (22). By overcoming stress, it is hoped that people can live in peace and coexist with the covid-19 virus so that people are able to adapt and manage

well the existing conditions and will avoid stress, even being able to make stress into eustress (positive stress) because they become creative and productive<sup>23</sup>.

#### CONCLUSION

The employees' healthy and clean living behavior before the pandemic period was still low, especially in terms of routinely exercising, using masks when going out of the house, washing hands before entering the house and consuming a balanced diet. There has been a change in behavior during the pandemic, especially in terms of using masks when leaving the house, washing hands before entering the house, washing hands with soap and consuming a balanced diet. There is anxiety about personal and family health during the pandemic, causing behavioral changes by consuming more vitamins than before the pandemic.

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### Citation:

**Citra Puspa Juwita, Rosintan Milana Napitupulu (2021**). Hygiene and healthy living behavior and stress during the Covid-19 pandemic, ijmaes; 7 (3); 1041-1048.