

LPPM UNIVERSITAS ESA UNGGUL (Profil Ringkasan LITABMAS)

JUDUL:

Impact of the Covid-19 Pandemic on Changes in Weight, Consumption and Lifestyle in Indonesian Students



Peneliti

ersit

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The Covid-19 pandemic that has hit various parts of the world, includ-ing Indonesia, has had an impact on society. One of the layers of soci-ety that has experienced this impact is students. With the large-scale social restrictions, Indonesian students do a lot of activities at home. Many students become concerned with themselves, but there are also students who feel bored because of low social interaction which in turn causes high food consumption and sedentary behaviour at home. The objective of this study to determine changes in body weight, food consumption and lifestyle in Indonesian students. The design of this study was cross sectional, with descriptive analysis conducted on 1185 students in Indonesia. The results of the study stated that the pandemic had an impact on Indonesian students. During the pan-demic as many as 67.1% of students experienced changes in the size of their BB. Most of the students experienced moderate stress (77.1%), and bad sedentary behaviour by 63.4%. However, diet and exercise habits have changed for the better as much as 52.6% and 63.7%, respectively. Indonesian students need to pay more attention to changes in body weight and lifestyle during the pandemic so as not to have a negative impact on health and nutritional status.

Kata Kunci : Indonesian Students, Impact Pandemic, lifestyle, weight



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Latar Belakang

Indonesia is one of the countries affected by the Covid-19 pandemic. Covid 19 (corona virus disease) is very deadly and easily transmitted. The high number of deaths and illnesses due to contracting the virus has caused the Indonesian government to imple-ment Pembatasan Sosial Berskala Besar (PSBB). With this rule, the community inevita-bly has to limit physical activity outside the home, including students and students who have to do online and distance learning (Siahaan, 2020).

Quarantine and PSBB can lead to changes in lifestyle, eating habits, triggering stress and anxiety, which in turn causes weight gain (Bolang et al., 2021). If this happens in the long term to students who are the nation's young generation, it can certainly result in poor nutritional status and health status.

The results of the study stated that the pandemic had an impact on increasing body weight every month. To overcome this, it is necessary to find ways to increase physical activity even at home, and pay attention to food (Lin et al.,2021). The results of a similar study stated that during the pandemic, the nutritional status of female students decreased by around 0.45 kg/m2, while in male students there was an increase of about 0.5 kg/m2, however, from all students there was a change in body weight where nutritional status was more and obesity became more, namely for nutritional status more than 11.5% to 25.4% and obesity from 3.4% to 5% (Pop, 2021).

This study tries to explore how changes in body weight, food consumption and lifestyle during the pandemic among university students represent all regions of Indonesia, including western, central and eastern Indonesia. In addition, it is also carried out on Indonesian students from various levels of education, both in the health and non-health fields.



Hasil dan Manfaat

Research was conducted on all Indonesian students online. From the results of data collection which took about 35 days, there were 1185 respondents. The following presents the re-sults of univariate data analysis based on the results of the study.

Table 1 Characteristics of Respondents

Variabel	Changes in Weight n (%)	Unchanges Weight n (%)	Total n (%)
Gender	()	()	()
Male	231 (19.5)	112 (9.5)	343 (28.9)
Female	564 (47.6)	278 (23.5)	842 (71.1)
Age	, ,	. ,	. ,
Teen end	726 (61.23)	355 (30)	1081 (91.2)
Adults beginning	54 (4.6)	25 (2.1)	79 (6.7)
Adults end	12 (1)	9 (0.8)	21 (1.8)
Elderly	3 (0.3)	1 (0.1)	4 (0.3)
Educational Level			
Diploma	90 (7.6)	36 (3)	126 (10.6)
Bachelor/Professional	657 (55.4)	326 (27.5)	983 (83)
Master	40 (3.4)	25 (2.1)	65 (5.5)
Doctor	8 (0.7)	3 (0.3)	11 (0.9)
** * * * * *	Changes in Weight	Unchanges Weight	Total
Variabel	n (%)	n (%)	n (%)
Education	,		
Health	438 (37)	205 (17.3)	643 (54.3)
Non Health	357 (30.1)	185 (15.6)	185 (15.6)
Area of Residence		. ,	. ,
WIB	701 (59.2)	344 (29)	1045 (88.2)
WITA	80 (6.8)	42 (3.5)	122 (10.3)
WIT	14 (1.2)	4 (0.3)	19 (1.5)

Indonesian students who were respond-ents in this study, most of them were in the western part of Indonesia, namely 88.2%, but there were also respondents who were in the central and eastern parts of Indonesia, respec-tively 10.3% and 1.5%. With the spread of re-spondents throughout Indonesia, it is hoped that they can represent the characteristics and problems related to weight changes in students in Indonesia. When the Covid-19 pandemic struck, it had a huge impact on the world of ed-ucation. One of those affected by the learning method is students. This is a learning system in Indonesia, in all regions being online and limit-ing direct contact, as well as crowds in learning or known as distance learning. Students from any region in Indonesia are expected to be able to access and obtain maximum education freedom learning of (Abidah, Hidaayatullaah, H N; Simamora, R M; Fehabu-tar, D; Mutakinati, 2020).

The sex of the respondents was dominated by women, namely 71.1%, with the age being in the late teens group, which was 91.2%. Of course, this is interesting to study in relation to changes related to weight and nutrition that oc-curred during the COVID-19 pandemic. Re-search conducted by Bolang *et al.*, (2021) stated that the

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Metode

This research is a descriptive analysis with design cross sectional, in which factors that can be operationalized into variables are collected and found at the same time. This research was conducted using survey method online using Google Form, conducted on Indonesian students who are currently studying in Indonesia, which was carried out from April to September 2021.

The population in this study were all Indo-nesian students who were studying in Indone-sia, with the technique sampling Snowball and obtained a sample of 1185 students. The instru-ment used in this study was questionnaire online including the identity of the respondent, a questionnaire on changes in body weight, breakfast habits, changes in eating patterns, and consumption of supplements. As for the lifestyle using a questionnaire of stress, seden-tary behaviour and exercise habits.

Iniversitas **Esa U** covid-19 pandemic caused changes in the nutritional status of students. From the results of his research, it was stated that male students had a higher average body weight during the Covid-19 pandemic than women, as well as their nutritional status. In-creases in body weight and nutritional status are experienced by many late teens and young adults during the pandemic compared to be-fore the pandemic (Huber et al., 2021). This is contrary to the results of this study, because changes in body weight are mostly experienced by female students. The results of the study are in line stating that women experience more weight changes than men, because when bored at home they tend to consume a lot of staple foods and snacks (Mustofa, Festy Ladyani; Husna, Ismalia; Hermawan, Dessy; Langki, 2021).

Judging from the level of education, most of the respondents have undergraduate/profes-sional education, which is 83%, however there are also respondents who are currently pursu-ing doctoral education, which is 0.9%. As for the education sector, the proportions are al-most the same between the sector health, namely 54.3% and non-health 45.7%. Based on these data, it can be seen that both students with health and nonhealth fields have almost the same proportion to experience changes in body weight, either good or down. Some stu-dents care about what they eat so they pay at-tention to their diet, but some spend a lot of time at home eating fast food. The pandemic causes an increase in non-communicable dis-eases due to decreased physical activity, in-creased stress and high consumption of snacks (Ardella, 2020).

In this study, there are 3 latent variables and their indicators, including changes in body weight, consumption factors and lifestyle fac-tors. From the results of data analysis, it is known that most of the respondents experi-enced changes in body weight during the Covid-19 pandemic, namely 67.1%, and had a habit of weighing as much as 57.4%. During the pandemic, many changes in body weight oc-curred in the community, including students. Changes in body weight during the pandemic as a result of increased consumption of snacks and diet can result in an increase in degenera-tive diseases (Lin et al., 2021).

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Variable	Variable number	%	
variable	(n)	90	
Change Weight			
 Size Weight 			
Changed	795	67.1	
Unchanged	390	32.9	
2. Habit of Weighing			
Not Routine	680	57.4	
Routine	505	42.6	
Factor Consumption		Ilmin	_
Breakfast Habits			
Usual	616	52	
Unusual	569	48	
2. Change in Diet			
Not Good	562	47.4	
Good	623	52.6	
3. Consumption Supplements			
Not Good	532	47.4	
Good	653	52.6	
Lifestyle Factors			_
1. Stress			
Severe Stress	110	9.3	
Moderate Stress	914	77.1	
Mild Stress	161	13.6	
Sedentary Behavior			
Not Good	751	63.4	
Good	434	36.6	
3. Exercise Habits			
Not Good	430	36.3	
Good	755	63.7	
Total	1185	100	

Based on the results of consumption factor analysis, for breakfast habits, some respond-ents did not usually eat breakfast, namely 52%, experienced changes in eating patterns with almost the same proportion of those who were not good (47.4 %) and good (52.6%), while the supplement consumption indicator did not dif-fer from the proportion of changes in diet, where most of the respondents had taken sup-plements and ith well during the pandemic which is 52.6%. Changes in consumption pat-terns during the Covid-19 pandemic for stu-dents consisted of increasing meal portions, frequency of cooking at home, frequency of snacks, frequency of vegetables and fruit (Novi-asty, Reny; Susant, 2020).

Lifestyle factors of respondents Most of them experienced moderate stress, namely 77.1%, with bad sedentary behaviour by 63.4% and good exercise habits by 63.7%, especially sports that are popular again such as bicycles. Activity restrictions during the COVID-19 pan-demic can disrupt daily activities where there are several changes, including an increase in sitting, lying down, playing games, watching television and using mobile phones (Chen et al., 2020).



Skema LITABMAS

Hibah Internal



Ucapan terimakasih

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DAFTAR PUSTAKA

- Abidah, A; Hidaayatullaah, H N; Simamora, R M; Fehabutar, D; Mutakinati, L. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar" *Studies in Philosophy of Science and Education (SiPoSE)*, 1(1), 38–49.
- Ardella, K. B. (2020). Health Risks Due to Changes in Diet and Physical Activity Levels During the Covid-19 Pandemic. *Jurnal Medika Hutama*, *02*(01), 292–297.
- Bolang, C. R., Kawengian, S. E. S., Mayulu, N., & Bolang, A. S. L. (2021). Student Nutritional Status Before and During the COVID-19 Pandemic. *13*(28), 76–83.
- Chen, P., Mao, L., Nassis, G. P., Harmer, P., Ainsworth, B. E., & Li, F. (2020). Coronavirus disease (COVID-19): The need to maintain regular physical activity while taking precautions. *Journal of Sport and Health Science*, 9(2), 103–104. https://doi.org/10.1016/j.jshs.2020.02.001
- Huber, B. C., Steffen, J., Schlichtiger, J., & Brunner, S. (2021). Altered nutrition behavior during COVID 19 pandemic lockdown in young adults. *European Journal of Nutrition*, *60*(5), 2593–2602. https://doi.org/10.1007/s00394-020-02435-6
- Lin, A. L., Vittinghoff, E., Olgin, J. E., Pletcher, M. J., & Marcus, G. M. (2021). Body Weight Changes During Pandemic-Related Shelter-in-Place in a Longitudinal Cohort Study. 4(3), 17–20. https://doi.org/10.1001/jamanetworkopen.2021. 2536
- Mustofa, Festy Ladyani; Husna, Ismalia; Hermawan, Dessy; Langki, S. S. (2021). Overview of Weight Gain Rates During the Covid-19 Pandemic Period in Class 2017 Students of the Faculty of Medicine, Malahayati University. *Jurnal Ilmu Kedokteran Dan Kesehatan*, 8(1), 73–80.
- Noviasty, Renny; Susant, R. (2020). Changes in Eating Habits of Nutrition Specialist Students During the Covid-19 Pandemic. *Jurnal Kesehatan Masyarakat Mulawarman*, 2(2), 90–99.
- Pop, C. L. (2021). Body Mass Index Evolution Before And During The Covid Pandemic In A Sample Of University Students. XIII(1), 11–17. https://doi.org/10.24818/mrt.21.13.01.02
- Siahaan, M. (2020). The Impact of the Covid-19 Pandemic on the World of Education. 1(1), 1-3.



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