

THE IMPACT ON THE PANDEMIC CORONAVIRUS DISEASE 2019 (COVID-19) ON HOUSEHOLD WELFARE IN WEST SUMATERA

Fery Andrianus¹, Hefrizal Handra², Arie Sukma³, Khaira Alfatih⁴,

feryandrianus@eb.unand.ac.id, hefrizal@yahoo.com,
comasukma@gmail.com,
khairaalfatih12@gmail.com

ABSTRACT :West Sumatera is the province with the highest number of Covid-19 cases in Sumatera Island and nationally it is in the ninth position. Similar to other events at the international and national levels, the spread of Covid-19 in West Sumatera has an impact on the regional economy. It affects not only the growth and other macroeconomic indicators but also the welfare of households and society directly. This study examines the effects of the pandemic Covid-19 on household welfare using objective and subjective indicators and observe into what extent the influence of PSBB and government assistance on community conditions during this pandemic. The results show that firstly, household welfare is above the provincial minimum wage, secondly, PSBB also affects people's income, and lastly, not all households or communities are informed about the assistance from the government during the pandemic.

Keywords: Covid-19, objective and subjective indicators, welfare, provincial minimum wage

A. INTRODUCTION

Since the stipulation of Covid-19 becomes a Public Health Emergency of International Concern (PHEIC) by WHO, Covid-19 is not only a health problem worldwide, but also has implications on various aspects of life, including social, cultural, and economics. Therefore, Covid-19 has turned into multidimensional problems.

By May 2020, Indonesia has recorded 13,645 confirmed cases of Covid-19. Since the announcement of the first positive case of Covid-19 in Indonesia in March 2020, the public and the economy as a whole have immediately reacted by some events, such as panic buying, goods scarcity, soaring prices for masks and disinfectant, a drop in the Composite Stock Price Index (IHSG), until the decline in export value for tourism sector. Pramoto (2020) added that Covid-19 also has an impact on the decrease in China's Balance of Payment. Based on the data from the Ministry of Manpower on 20 April 2020, there were 2,084,593 workers from 116,370 companies who were laid off and affected by layoffs due to the economic downturn amid the Covid-19 pandemic (Karunia, 2020).

In West Sumatera, by 9 May 2020, there have been 270 confirmed cases of Covid-19 or the equivalent of 2.1 percent of the number of cases nationally. With this number, again, West Sumatera is the province with the highest number of Covid-19 cases on Sumatera and gets the ninth place on the national level (Task Force for the Acceleration of Handling Covid-19, 2020).

Similar to the case at the international and national levels, the spread of Covid-19 to West Sumatera certainly has an impact on the regional economy. In the first quarter of 2020, the economy of West Sumatera is growing by 3.92 percent (YoY), still above the national and Sumatera average growth, 2.97 percent and 3.25 percent (YoY), respectively. However, this figure has decreased when compared to GDP growth in quarter IV-2019 of 5.13 percent and quarter I-

2019 of 4.85 percent in general due to the impact of the Covid-19 pandemic. West Sumatera's economic growth in 2020 is projected to slow down in the range of 2.3-2.7 percent with the assumption that the spread of Covid-19 will peak in early June 2020. This slowdown is affected by several sectors especially in tourism, such as accommodation, food and beverage, transportation, and trade due to Large-Scale Social Restrictions (PSBB). Beside that, CPO price pressures also slow down the economic growth in West Sumatera (Purnama A, 2020).

Covid-19 has affected not only on growth and other macroeconomic indicators, but also the welfare of households and society. For lower to middle income families, loss of income due to layoffs or reduced income due to PSSB policies can result in poverty increasing such as, children will get less nutritious food, limited access to health care for issue other than Covid-19, and decreasing the quality of education. Although, the government has formulated some policies to deal with these impacts, such as through fiscal policies with the reallocation of the State Budget (APBN) to be more prioritized for health, social safety net programs, and economic recovery due to the impact of this Covid-19. But how does it affect people's household welfare?

Therefore, this study examines three aspects. They are; into what extent the condition or level of household welfare during the Covid-19 pandemic, to analyze whether PSBB affects household welfare, to examine whether government assistance has affected the social welfare of people in West Sumatera.

B. LITERATURE REVIEW

Welfare

Welfare Economic theory is a part of social welfare which is directly or indirectly related to the measurement of money (Pigou, 1960). Welfare can be assessed through two approaches, objective welfare, and subjective welfare, which are differentiated based on the indicators that influence them. (Campbell, 1976; Sumawan and Tahira, 1993; Milligan et al., 2006). Welfare can be aimed at the individual, family, and community levels. Feelings of peace, anxiety, satisfaction, and the meaning of life are examples of subjective indicators in assessing welfare at the individual level. At the family level, family members' satisfaction with the condition of the house is an example of a subjective indicator. Meanwhile, objectively, welfare is measured by more measured indicators, such as the condition of the house and the availability of clean water at the family level, the infant mortality rate, and the open unemployment rate in the community. Meanwhile, according to Act no 11 of 2009 on Social Welfare, social welfare is a condition for the fulfillment of the material, spiritual and social needs of citizens to live properly and be able to develop themselves, so that they can carry out their social functions.

According to Millers and Minners (in Andrianus, et al, 2018), the essence of the welfare function is the Pareto concept which explains that an exchange or change that benefits one party without harming the other is an increase in people's welfare and vice versa. However, the Pareto concept does not explain further about whether the change is beneficial or detrimental, and how much increase in welfare and decrease in satisfaction received by the community. For this reason, a clear analytical model or indicator is needed to measure how much the welfare of individuals, families, or communities has increased or decreased (Andrianus, et al, 2018).

According to Hendrik (in Andrianus, 2018), there are three measures of community welfare, namely:

- A. Regional Minimum Wage (UMR) According to the Decree of the Minister of Manpower and Transmigration Number KEP-226 / MEN / 2000, UMR level I is replaced with the Provincial Minimum Wage (UMP), while the UMR level 2 is replaced by the Regency / City Minimum Wage (UMK). The UMP is the minimum wage that applies to all districts/cities in a province which is determined by the governor and the amount depends

on the standard of living and economic characteristics of each region, which generally adjusts to the price of necessities, the rate of inflation, the standard of living feasibility, and other variables. Whereas UMK is the Regency / City minimum wage which is the Minimum Wage applicable in the Regency / City Region which is also determined by the governor, but the discussion is proposed by the regent or mayor. UMP is a benchmark to explain whether an individual is prosperous or not. If the income received by an individual is below the UMP, it means that the individual is not safe, and vice versa.

- B. The proportion of household welfare expenditure can be measured from household expenses. A household is classified as prosperous if their expenditure for non-basic needs is more than for basic needs. Meanwhile, households with a greater proportion of expenditure on necessities are still at a low level of welfare.
- C. Poverty Criteria Third, welfare can be measured using 14 poverty criteria according to BPS. BPS uses 14 variables to determine whether a household deserves to be categorized as poor. The fourteen variables are: 1) building area; 2) floor type; 3) wall type; 4) defecation facilities; 5) drinking water sources; 6) source of lighting; 7) type of fuel for cooking; 8) frequency of buying meat, chicken, and milk in a week; 9) frequency of meals per day; 10) the number of new sets of clothes purchased in a year; 11) access to public health; 12) access to employment opportunities; 13) the latest education of the head of the household, and 14) ownership of several assets. If a household had 9 out of the 14 criteria, they would be classified as not prosperous (Hendrik, 2011). However, two provinces have innovated against these criteria, namely DKI Jakarta and East Kalimantan, which only use 7 out of the 14 existing indicators (Isdijoso, 2016), namely:
 - a) area per capita house floor less than 8 square meters;
 - b) floor of the house in the form of soil or damaged bamboo;
 - c) do not have clean water facilities;
 - d) does not have a latrine / WC;
 - e) the consumption of side dishes does not vary;
 - f) unable to afford one set of clothes per year for each household member;
 - g) do not have productive household assets

Households are considered poor if they have met three out of the seven poverty indicators.

The welfare indicators described earlier are objective indicators of welfare. There is also an indicator of happiness to measure the level of welfare that is subjective. Individual happiness is not only determined by their income, but it is also determined by how other people can achieve results like them, and welfare is not only felt by a person but is also related to the welfare of those around him (Easterlin, 1995). In other words, a change in individual happiness is also an increase in other people's income (McBride, 2001; Bruno, 2008; Layard 2006). Happiness is not solely determined by material factors but also non-material, such as harmony in the family, relationships with neighbors, or community (in Andrianus, et al, 2018).

Happiness is a general term used by experts to denote the positive perceptions of individuals about their life. Happiness means a state of mind in which the individual feels satisfied. One aspect that is certain about happiness is that there is no consensus on the definition of this term (Kasmaoui&Bourhaba, 2017). It is because happiness is a subjective concept, where each individual may have a different way of interpreting happiness. Therefore, happiness is also known as the concept of subjective well-being. One welfare indicator that measures achievement based on standards that are not the same for each individual is the happiness index issued by the Central Statistics Agency (BPS).

Covid-19 as a National Disaster

Disaster is a serious disruption to society that causes widespread harm and is felt by the community, various materials, and nature where the impact exceeds human ability to cope with existing

resources (Asian Disaster Reduction Center, 2003). WHO (2002) states that a disaster is any event that causes damages, ecological disturbances, loss of human life, or deterioration of health status or health services on a certain scale that requires a response from outside the community or affected area.

Therefore, Presidential Decree (Keppres) 12 of 2020 related to the Determination of Non-Natural Disasters for the Spread of Coronavirus Disease 2019 (Covid-19), President Joko Widodo declared Covid-19 a national disaster. The considerations for the stipulation of the Presidential Decree are as follows:

- a) that non-natural disasters caused by the spread of Coronavirus Disease 2019 (COVID-19) have had an impact on increasing the number of victims and property losses, expanding the coverage of areas affected by disasters, and having implications for broad socio-economic aspects in Indonesia;
- b) that the World Health Organization (WHO) has declared COVID-19 a Global Pandemic on March 11, 2020;
- c) that based on the considerations referred to the point a and b, it is necessary to stipulate a Presidential Decree concerning the Determination of Non-Natural Disaster for the Spread of Coronavirus Disease 2019 (COVID-19) as a National Disaster.

C. RESEARCH METHODOLOGY

This research was conducted in West Sumatera using a questionnaire with a total sample of 130 respondents using a welfare level analysis based on two welfare indicators, that is objective indicators and subjective indicators.

Objective indicators are using the Regional Minimum Wage (UMR) standard issued by the Governor as the head of the provincial government. The UMR becomes a benchmark to explain whether an individual is prosperous or not. If their income received by an individual is below the UMR, it means that an individual is not safe and vice versa. The determination of the UMR is an actualization of paragraph 2 of article 27 of the 1945 Constitution, on decent living. Therefore, the calculation of the UMR must accommodate sufficient, not minimum needs (Pratomo and Saputra, 2011). So, UMR is a measure of the level of community welfare at an area seen from the amount of income or expenditure of the community to meet their daily needs

Subjective indicators with household satisfaction with ten welfare indicators, consisting of 1) health, 2) education, 3) occupation, 4) household income, 5) family harmony, 6) availability of free time, 7) social relations, 8) conditions of houses and assets, 9) environmental conditions, and 10) conditions of security.

The respondents asked these ten indicators. Respondent satisfaction answers to these ten indicators made in 3 scales, namely Very Satisfied (SP), Satisfied (P), and Not Satisfied (TP). Based on this scale, it would conclude how the overall satisfaction of respondents with welfare indicators.

D. RESEARCH RESULTS AND DISCUSSION

1. Analysis of the level of household welfare

A. Objective Indicators

Income is used as objective indicators to analyze the level of household welfare during the Covid-19 pandemic. Household income in this study is calculated based on the income received by the head of the household based on their main livelihood/occupation. In the survey results, the average household income of the research respondents was 6,048,461 rupiah per month. When compared

with the provincial minimum wage of Rp. 2,289,228, this average income means that the respondents' average income is above the provincial minimum wage in West Sumatera. This shows that during the pandemic, the average income of people in West Sumatera was high by seeing what the main occupation of the community was.

B. Subjective Indicators

Analysis of Household Welfare with Subjective Indicators is an analysis of the level of satisfaction based on household perceptions on ten indicators of happiness. Subjective indicators include the perception of satisfaction: such as health, education, work, household income, family harmony, availability of free time, social relations, housing conditions and assets, environmental conditions, security conditions. So the result of this perception is the subjective assessment of households on the conditions they feel or experience. Respondent satisfaction with each indicator is divided into three categories of satisfaction, namely Dissatisfied (TP), Satisfied (P), Very Satisfied (SP).

Table 1.
Satisfaction of Household on Welfare Indicators in SumateraBarat.

No	Indicators	Dissatisfied	Satisfied	Very Satisfied	Total
1	Health	8	49	73	130
2	Education	62	29	39	130
3	Work	29	49	52	130
4	Income	49	29	52	130
5	Harmony in the family	8	70	52	130
6	Availability of time with family	14	63	53	130
7	Social relations with neighbors and relatives	21	75	34	130
8	Home condition and assets	2	35	93	130
9	The state of the environment and comfort	10	46	74	130
10	Security and order	9	71	50	130

Source: Survey Data, 2020

Table 1 shows that the level of satisfaction respondents to the condition of the house and assets have a very high level of satisfaction compared to other indicators because 93 respondents out of a total of 130 respondents stated that they are very satisfied with the condition of their houses and assets at this time. It shows that a high average household income will also result in household satisfaction with the condition of the house and the assets that they have. Meanwhile, the condition of social relations with neighbors and relatives shows a very low level of satisfaction, namely from a total of 130 respondents, only 34 respondents stated that they were very satisfied with the conditions of social relations with their neighbors and relatives. The low level of respondent satisfaction with this indicator was because during the Covid-19, the community was advised not to leave the house and work from home with the implementation of large-scale social restrictions (PSBB) by the government. So, this would reduce social relations with friends, neighbors, and relatives.

At the level of respondent satisfaction with health, only eight respondents stated that they were not satisfied with their health condition. Others were satisfied and very satisfied with their health condition. It shows that people take care of their health during the Covid-19 because with these viruses, of course, people should maintain their health starting from the government's recommendation to use masks, wash their hands frequently and keep their distance, so that public health can be maintained well and avoided from covid-19 exposure.

Table 1 also shows that the level of respondent satisfaction with education is low, out of 130 respondents only 34 respondents stated that they were very satisfied with their current education conditions. The Education condition of the respondents is relatively low because there

are still 44 respondents whose education level is SMA and below, even though in this survey the respondents' education was relatively good

Other results show that employment and income, household satisfaction levels during Covid-19 are classified as good because 87 respondents work in the government and service sector. This allows respondents to work in a decent job so that it will have a good impact on their income. Thus, during the Covid-19 pandemic, they will not experience difficulties with their income and jobs. Not differently with work and income, the level of respondent satisfaction with the availability of time with family is also high because almost all activities were carried out from homes such as work and school so that more time would be available for families and relations with families would be even more harmonious.

Table 1 also shows the level of household satisfaction with conditions environmental and comfort as well as security and order are also classified as high. This condition shows that during the Covid-19 environment, comfort and household order can be maintained so that people can carry out activities properly even though it is still recommended to be at home.

2. Analysis of large-scale social restrictions (PSBB)

Large-scale social restrictions (PSBB) are restrictions on certain activities of residents in an area suspected of being infected with a disease or contamination in such a way as to prevent the possible spread of disease. This PSBB is a policy undertaken by the government to reduce the rate of Covid-19 spreading. In West Sumatera, the PSBB used to reduce positive cases of Covid-19 infection. This is because West Sumatera is the ninth province with the most cases of Covid-19, therefore West Sumatera implements the PSBB to reduce the spread of Covid-19.

Based on the results of the survey, in general, the community already knows what PSBB is, and it has implemented and complied with PSBB. Out of 130 respondents, 83 percent of respondents know, understand, and have implemented obediently and they are also discipline with the policies implemented by the regional government in West Sumatera. The result shows that the community is very concerned about the impact that would cause if they violate the rules and policies of this PSBB.

Table 2.
Respondents' Knowledge Of PSBB

No	Question	Frequency	Percentage
1	Know, understand and have implemented obediently and discipline	107	83
2	Know and understand, but Difficult to Implement	17	13
3	Know but do not understand the meaning	3	2
4	Never heard of the policy	0	0
5	Others	3	2
Total		130	100

Source: Survey data, 2020

From table 2, Some respondents know and understand but had some problems to implement the PSBB policy. It was because not all people know if the government implements the PSBB, so they donot care and donot comply. Then, all of the total respondents, there are no respondents who have never heard of the PSBB policy. It means that the community knows about PSBB, but not all of them care and implement it properly. By implementing PSBB in West Sumatera, of course, the existence of PSBB will affect activities in the community outside the home, and it is advisable to carry out activities in the house.

Table 3
Frequency Of People Who Were At Home During PSBB

No	Question	Frequency	Percentage
1	Yes, I try to always be at home	91	70
2	Staying at home or travelling are almost frequent	14	11
3	Work requires me more to leave the house	25	19
Total		130	100

Source: Survey Data, 2020

Based on table 3, at the time the PSBB was implemented in West Sumatera, the frequency of people always staying at home was the greatest compared to continuing to travel. From a total of 130 respondents, 70 percent of the community tried to always be at home during the Covid-19 pandemic. It shows that as long as the PSBB policy exists, society will remain following the directions given by the government to reduce the spread of Covid-19. However, as a large percentage of people stay at home, there is still around 19 percent of respondents who demand that they leave their home more to work. It is because not all respondents can work at home and require them to leave the house to earn income, and these respondents who leave the house for work are those who work in the informal sector like farmers, drivers, and traders. Because of the pandemic of covid-19 and the implementation of the PSBB in West Sumatera, it will have an impact on people's income, especially those who work in the informal sector.

Table 4.
Effect Of PSBB On Respondent Income

No	Question	Frequency	Percentage
1	Increasing	7	5
2	Fixed	55	42
3	Decreasing	68	53
Total		130	100

Source: Survey Data, 2020

Based on table 4 above, during the implementation of the PSBB policy, 53 percent of respondents stated that their income decreased, 42 percent remain, and only 7 percent of respondents say that their income increased during the PSBB. It proves the influence of the PSBB policy on their income.

3. Analysis of Government Assistance

Government assistance is an assistant provided to help the community during the Pandemic Covid-19. The government has launched various aid schemes. These programs are expected to help and ease the burden on communities whose economies are affected by the pandemic. This government assistance project can boost the economy to grow by 5.32 percent per second quarter of 2020. This government assistance will be in food assistance and cash transfers. Based on the survey results, out of a total of 100 respondents, 78 respondents said they did not know about the distribution of government assistance in their area.

Table 5
**Respondents' Answers Regarding The Distribution Of Government Assistance
Related To The Impact Of The Covid-19 Crisis.**

No	Question	Frequency	Percentage
1	Already know	17	13
2	Not yet	12	9
3	Don't know	101	78
Total		130	100

Source: Survey Data, 2020

The people in West Sumatera also stated that 9 percent had not received assistance, and 13 percent had received it. It shows that more than 50 percent of respondents do not know about the distribution of government assistance. So, there are still many people who have not received aid. It means the assistance has not been evenly distributed in West Sumatera.

There are still many people in West Sumatera who do not know about assistance, and there are still many who have not received it from the government. Based on the survey results from 100 respondents, 54 respondents did not need assistance from the government, and the remaining 46 percent needed assistance as a result of Covid-19.

Table 6
The Current Condition Of Respondents, Whether They Need Government Assistance Or Benefactors During The Covid-19 Pandemic.

No	Question	Frequency	Percentage
1	Yes, they need it	60	46
2	No, they do not need it	70	54
Total		130	100

Source: 2020 Survey Data

The number of people who do not need help from the government or philanthropists is due to the work factor owned by the respondent because not all respondents work with low income. So, they do not need help from the government and can meet their expenditure with their salary received during the pandemic covid-19.

Conclusion

The results showed that the level of household welfare in West Sumatera during the Pandemic Covid-19 pandemic was still above the Provincial Minimum Wage (UMP). Judging from the level of respondent satisfaction with their condition, currently out of ten indicators are generally satisfied, but the community is not satisfied with their social relationships with neighbors and relatives. It was due to the impact of the PSBB policy carried out by the government to reduce the rate of spread of Covid-19, which urges people to stay at home so that it has an impact on social relations with both relatives and the surrounding community.

Then, the existence of the PSBB has an impact on household income due to the limited activities of the community, especially those who have to work outside the home to earn a living. Besides, information regarding government assistance is not yet fully known by the public, although the data shows that more than 50 percent of respondents do not need government assistance or donors. It was partly because not all respondents work in the informal sector, but some also work for a good income.

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