

In the Era of Digitization, Government's Role in Alleviating Stunting

Diana Lestari

Faculty of Economics and Business, Mulawarman University of Samarinda East Kalimantan, Indonesia.

Eny Rochaida

Faculty of Economics and Business, Mulawarman University of Samarinda East Kalimantan, Indonesia.

Rahmad Budi Suharto*

Faculty of Economics and Business, Mulawarman University of Samarinda East Kalimantan, Indonesia.

E-mail: rahmad.budi.suharto@feb.unmul.ac.id

Shinta Mixila

Faculty of Economics and Business, Mulawarman University of Samarinda East Kalimantan, Indonesia.

I Nyoman Sutapa

Faculty of Economy and Business, Warmadewa University, Bali, Indonesia.

E-mail: sutapanym@gmail.com

Received September 29, 2021; Accepted December 21, 2021

ISSN: 1735-188X

DOI: 10.14704/WEB/V19I1/WEB19330

Abstract

The digital era transforms behavior change; this study aims to determine the role of local governments in the digital era and the pandemic in alleviating stunting in Indonesia. This type of research is qualitative; the research method uses in-depth interviews and triangulation for data analysis. Sources of data from Key informants and informants from the Department and the community in Loa Kulu District, Kutai Kartanegara. The results showed that the program "Deserves Healthy Sports" Kutai regional government applied mammal, in Kalimantan, Indonesia, has been applied in various areas through online media such as health programs. However, the socialisation of this health program is still lacking, and the health program is also not optimal; it is shown that the level of public health, especially regarding stunting, is still quite high. The program for the community's welfare to alleviate poverty has not been achieved because the government's efforts have experienced many obstacles in its implementation due to the pandemic, such as many residents who do not work due to limited employment opportunities. Residents do not have other work skills; another factor is

distributing food. Does not support it, so that in order to collect data and distribute assistance for stunting toddlers, they still often experience obstacles.

Keywords

Information Mobilization, Program Stunting, Community Welfare.

Introduction

The transformation of the era from conventional to digital does not change the civilisation system. The stunting rate resulting from malnutrition in children under five in Indonesia exceeds the limit set by WHOM. Stunting cases are mostly found in areas with high poverty and low education levels. Instead of being a blessing, the demographic bonus is threatened to become a disaster because of the high percentage of children under five with stunting in Indonesia (Abu-Rumman, A., 2018). It is this toddler who will later become the productive force. The correlation between poverty and health is not a simple relationship and is a reciprocal relationship that cannot be separated between the two. Poor health can lead to poverty, and poverty can lead to low health status (World Bank. 2002). At the macro level, the health conditions of the people in developing countries are generally not as good as those in non-poor countries, as at the micro-level, children from low-income families have a health level that is not as fortunate as their friends from well-off families or living in non-poor areas (Wagstaff, 2002).

Stunting is a chronic malnutrition problem caused by a lack of nutritional intake for a long time; this causes future problems, namely experiencing difficulties in achieving optimal physical and cognitive development. Stunting children have intelligence or IQ lower than the average IQ of normal children (Kemenkes RI, 2018). Stunting has the potential to slow down brain development, with long-term effects in the form of mental retardation, low learning abilities, and the risk of developing chronic diseases such as diabetes, hypertension, and obesity (Nasir Abdul Jalil, et al., 2019). About the health concept in Kutai Kartanegara, the local government has implemented many programs as a form of poverty alleviation in the regions, such as improving the quality of health supported by CSR, healthy home renovation programs related to environmental sanitation, food distribution programs for underprivileged families, and the “*Raga Pantas*” program (Family Movement Concerned for Prevention and Overcome stunting). The “*Raga Pantas*” program is a program that continues to be promoted to this day. The program has become the main program in the health sector in Kutai Kartanegara Regency, considering that this program is very important so that in its implementation, legislation is made, namely the Regent of Kutai Kartanegara Regulation Number 66 of 2019 concerning the

Implementation of the Family Movement Care for Prevention and Overcome stunting (Zulfiqar, U., et al., 2020).

The decree of the Regent of Kutai Kartanegara Number 66 of 2019 shows that the number of children experiencing stunting is quite high so that its use requires serious efforts (Almomani, R.Z.Q., et al., 2019). The highest stunting rate in Kutai Kartanegara Regency is in Loa Kulu sub-district, with a stunting rate reaching 71.43% in 2020. Data from the East Kalimantan Provincial Health Office in 2019 shows that Kutai Kartanegara has the highest stunting rate. The Kukar Health Office noted that 2,840 children were suffering from stunting, children under five years old (toddlers) and children under two years old (Baduta). The 561 Baduta babies consist of 167 short and 394 short children. While the cases of stunting of fewer than five children were 2,279, 674 were very short, and 1,605 were short. (Source: East Kalimantan Health Office, 2019).

The high number of stunting sufferers in Kutai Kartanegara is caused by chronic malnutrition due to lack of nutritious food intake, unhealthy environmental factors, unhealthy parenting patterns, including poor water hygiene. (Source: East Kalimantan Health Office, 2019). The local government has made efforts to prevent the increasing number of stunting sufferers, of course (B. Singh, et al., 2021). Many programs have been established to support stunting prevention in Kutai Kartanegara, such as: conducting direct checks on infant health, checking vitamin intake, identifying food adequacy, economic level and intake patterns for children, including implementing the “*Raga Pantas*” program (Family Movement Concerned for Prevention and Overcome stunting) (Safi, A., et al., 2021). The problems that occur in the field make this research appointed so that later it will be able to eradicate stunting in Kutai Kartanegara Regency.

Literature Review

1. Stunting

Stunting or short toddlers is a chronic malnutrition problem caused by inadequate nutritional intake for a long time due to feeding that is not by nutritional needs. Stunting can occur when the fetus is still in the womb, and only appears when the child is two years old. Stunting is nutritional status based on the index of BB/U or TB/U where in anthropometric standards for assessing the nutritional status of children, the measurement results are within the threshold (Z-Score) <-2 SD to -3 SD (short/stunted) and <-3 SD (very short/severely stunted) (Trihono et al, 2015). Stunting is one of the nutritional problems that occur in toddlers. Stunting in toddlers results from nutritional problems since the beginning of their lives (UNICEF, 2017); (Rjoub, H., Iloka, C.B., & Venugopal, V., 2022).

Stunting is a condition of failure to thrive in children under five due to chronic malnutrition so that the child is too short for his age. Multi-Dimensional Factors cause stunting (Al Shraah, A., et al., 2021). The most decisive intervention at 1,000 HPK (First 1000 Days of Life). Stunting is also a chronic malnutrition problem caused by inadequate nutritional intake for a long time due to feeding that is not by nutritional needs (Eko, 2018). Stunting in children is the main indicator in assessing the quality of human capital in the future (Akther, T. 2017). Children's growth disorders can cause permanent damage (Anisa, 2012).

Stunting in toddlers can have a long-term impact; namely, the impact that can be directly seen is becoming a stunted adult. Toddler stunting occurs because a lack of energy and protein that lasts a long time can delay cognitive development (Al-Shqairat, Z.I., et al., 2020). They have less attention and memory than toddlers who get good nutritional intake (Kar et al., 2008).

Physical characteristics in stunted children include below average height, failure to thrive, low attention and memory, avoiding eye contact, and being quieter. Stunting is also caused by malnutrition at the age of toddlers and low birth weight (LBW) (Roy Setiawan, et al., 2021). It is important to eradicate stunting in Indonesia, especially emphasising early prevention measures by improving nutrition intake for adolescents, women of childbearing age, pregnant women and toddlers. Special efforts for toddlers include exclusive breastfeeding for 6 months, giving good parenting patterns, and monitoring children's growth and development status in the first 1000 days of birth. Short nutrition problems are caused by conditions that last a long time, so the character of problems (Alshawabkeh, R., et al., 2020). Nutrition shown by short children is chronic nutritional problems (Gibney, 2009).

The problem of short toddlers describes chronic nutritional problems influenced by the condition of the mother/prospective mother, fetal period and infancy/toddler, including diseases suffered during infancy (Demir, M., Rjoub, H., & Yesiltas, M., 2021). In the womb, the fetus will grow and develop through increased body weight and length, the development of the brain and other organs (Xu, F., & Akther, T., 2019). Malnutrition that occurs in the womb and early in life causes the fetus to make an adjustment reaction (Gupta, Ravi Kumar., 2018). In parallel, these adjustments include slowing growth with a reduction in the number and development of body cells, including brain cells and other organs (Zafar, S.Z., Zhilin, et al., 2021). The results of the adjustment reaction due to malnutrition are expressed in adulthood in a short body shape (Coordinating Minister for People's Welfare, 2013).

The stunting process is caused by inadequate nutrient intake and repeated infections which result in delayed cognitive function development and permanent cognitive damage (Gupta, Ravi Kumar, 2019). In women, stunting can have an impact on the development and growth of the fetus during pregnancy, delay the delivery process and increase the risk of *underweight* and stunting in the child born, which later can also bring risks to metabolic disorders and chronic diseases when the child grows up (Sandra Fikawati et al., 2017); (D. K. Sharma, et al., 2021). The causes of stunting in children are poor nutrition experienced by pregnant women and children under five, the lack of knowledge of mothers about health and nutrition before and during pregnancy, and after the mother gives birth (Akther, T. and Xu, F., 2021); (Roespinoedji, D., et al., 2019). And there are still limited health including health services for mothers during pregnancy) *Post Natal Care* and quality early learning and the lack of access to nutritious food (Eko Putro S, 2017). Dewey and Begum (2011) mention that the causes of *stunting* are closely related to the conditions that underlie the incident, the conditions that influence the factors causing stunting consist of 1) Political and economic conditions in the local area, 2) education status, 3) community culture, 4) *agriculture* and food systems, 5) water conditions, sanitation, and the environment (Abu-Rumman, A., et al., 2021); (D.K. Sharma, et al., 2021).

The bad impact that can be caused by nutritional problems during this period, in the short term, is disruption of brain development, intelligence, impaired physical growth, and metabolic disorders in the body (Li, H.S., Geng, Y.C., Shinwari, R., Yangjie, W., & Rjoub, H., 2021). Whereas in the long term, the bad consequences that can be caused are decreased cognitive abilities and learning achievement, decreased immunity so that it is easy to get sick, and a high risk for the emergence of diabetes, obesity, heart and blood vessel disease, cancer, stroke, and disability in old age and uncompetitive work quality which results in low economic productivity (Kemenkes RI, 2016); (Ahmed, Z., et al., 2021). Children who experience stunting earlier, namely before 6 months, will experience more severe stunting by two years (Mishra, Shivam Kumar & Gupta, Ravi Kumar, 2021). Severe stunting in children will cause long-term deficits in physical and mental development so that they cannot learn optimally in school, compared to children of normal height. Children with stunting tend to attend school longer and are more often absent from school than children with good nutritional status (Akther, T., & Xu, F., 2020). This has consequences for children's success in their lives in the future (Hidayat, 2012).

The Indonesian government is committed to reducing stunting by joining the *Scaling up Nutrition (SUN) movement* (Agarwal, Akshata & Gupta, Ravi Kumar., 2021). SUN is a global movement with the principle that everyone in the world has the right to good food and nutrition (Jalil, N.A., Hwang, H.J., 2019). This movement aims to accelerate nutrition

improvement to improve the lives of Indonesian children in the future, and this movement involves various sectors and policymakers to work together to reduce stunting prevalence (Riskasdas, 2013). Specific nutrition intervention efforts for short toddlers are focused on the first 1,000 Days of Life (HPK) group, namely Pregnant Women, Breastfeeding Mothers, and Children 0-23 months because the most effective control of short toddlers is carried out at 1,000 HPK (Jalil, N.A., et al., 2019). The first day of life is known as 1,000 HPK (J. Kubiczek and B. Hadasik, 2021).

The period of 1000 HPK includes 270 days during pregnancy and the first 730 days after the baby is born, which has been scientifically proven to be a period that determines the quality of life (Li, M., Hamawandy, N.M., Wahid, F., Rjoub, H., & Bao, Z., 2021). Therefore, this period is called the “golden period”, “critical period”, and the World Bank (2006) calls it the “window of opportunity” (Pusdatin, 2016).

Pusdatin (2016) describes several specific nutrition intervention efforts in the first 1000 days of life, including 1) in pregnant women (Nasir Abdul Jalil and Koay Kian Yeik. 2019). Improving the nutrition and health of pregnant women is the best way to overcome stunting. Pregnant women need to get good food, so if the pregnant woman is very thin or has experienced Chronic Energy Deficiency (KEK), it is necessary to give additional food to the pregnant woman. Every pregnant woman needs to get a blood boost tablet, at least 90 tablets during pregnancy (Abu-Rumman, A., 2021). Mother’s health must be maintained so that the mother does not get sick. 2) When the baby is born. A trained midwife or doctor assists deliveries and, as soon as the baby is born, perform Early Breastfeeding Initiation (IMD) (Abu-Rumman, A., et al., 2020). Infants up to 6 months are given only breast milk (ASI). 3) Infants aged 6 months to 2 years. Starting at the age of 6 months, babies are given complementary foods (MP-ASI) in addition to breast milk. Breastfeeding continues until the baby is 2 years old or older. Infants and children receive vitamin A capsules, complete basic immunisations. 4) Monitoring the growth of children under five at the posyandu is a strategic effort to detect early growth disturbances. 5) Clean and Healthy Lifestyle (PHBS) must be pursued by every household, including increasing access to clean water and sanitation facilities and maintaining environmental cleanliness. PHBS reduces the incidence of illness, especially infectious diseases that can divert energy for growth to the body’s resistance to infection; nutrients are difficult to absorb and stunted growth (Pusdatin, 2016).

2. “Raga Pantas” Program

Raga Pantas (Family Movement Concerned for Prevention and Overcame Stunting). The program has become the main program in the health sector in the Kutai Kartanegara area,

considering that this program is very important so that in its implementation, a legislative regulation is made, namely the Kutai Kartanegara Regent Regulation Number 66 of 2019 concerning the Implementation of the Family Movement Concerning the Prevention and Overcoming of Stunting. The RAGAPANTAS program by the local government will encourage families to be actively involved in monitoring the growth of children in the environment, especially during the 1000 days of a child's growth period, by providing good nutrition and detecting the child's health perfectly.

Appropriate exercise implemented by the local government aims to reduce the incidence (prevalence) of stunting in 1000 HPK families or 1000 hopeful families gradually in Kutai Kartanegara Regency (Article 2 Perbup Kukar Number 66 of 2019). This appropriate exercise program will continue to be carried out to reduce stunting sufferers, for that the measurement indicators (Article 5 paragraph 2 Perbup Kukar Number 66 of 2019) include: 1) Deserves healthy, 2) Deserves education, 3) Decent food, 4) Decent housing, and 5) Prosperous (Figure 1).

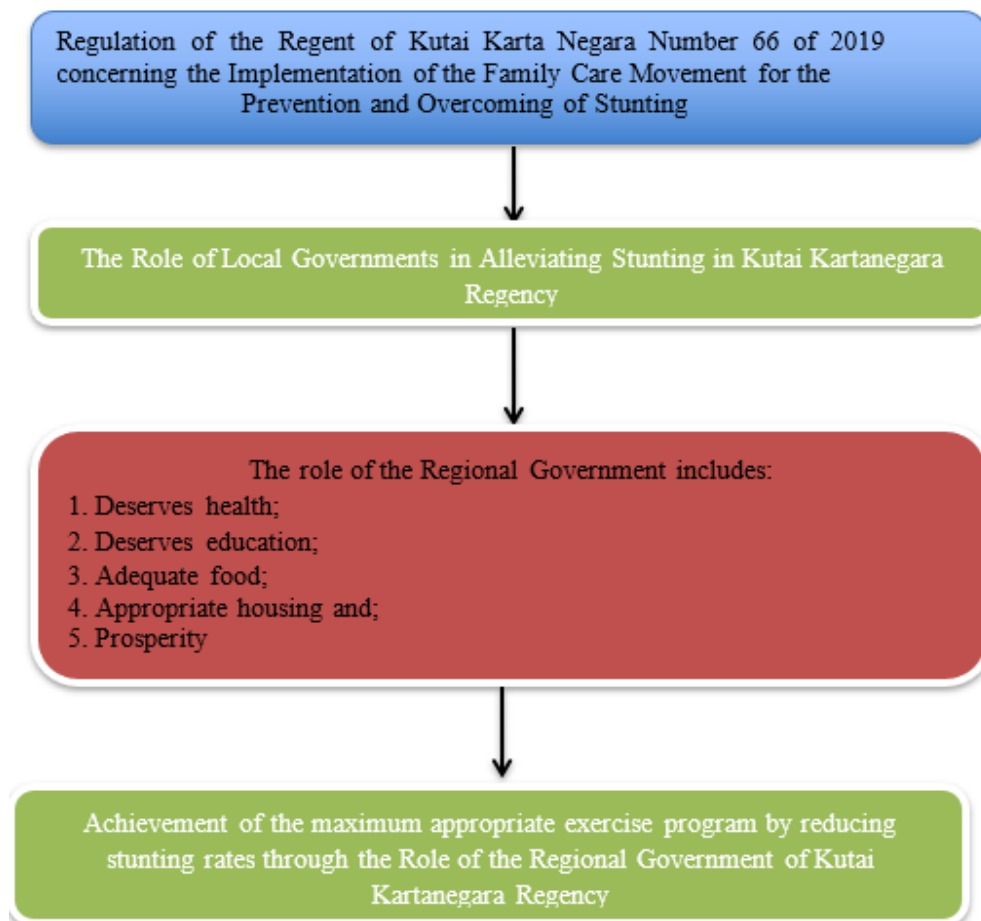


Figure 1 Framework for Thinking

Source: Data processed by researchers, 2021

Research Results

Using Huberman analysis which is directed to describe and describe. The focus of research is on the role of the Kutai Kartanegara Regional Government in alleviating stunting; because the object of the study is too broad, the researchers only chose the Loa Kulu District as the object of research (Odugbesan, J.A., et al., 2021).

1. The Role of the Government in the Healthy Decent Program The level of

Health value in an area is very dependent on the condition and handling of individuals and the government regarding health; the better the handling, the better the level of health; if not, the health is categorised as low. Inadequate facilities and infrastructure are still located in remote villages far from the center of the sub-district city. For more details, the following data is described:

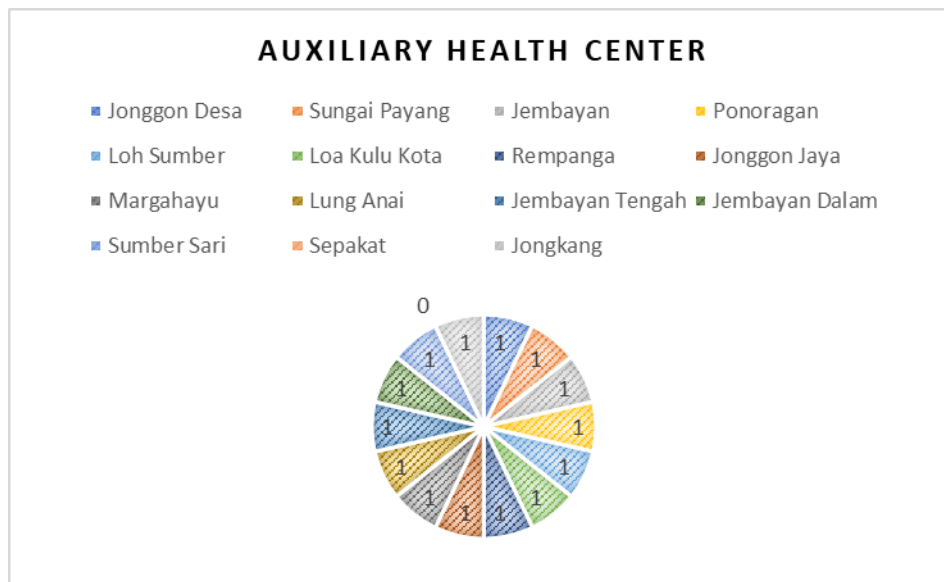


Figure 2 Number of Community Health Centers and Community Health
Source: Kutai Kartanegara in Figures

Based on the figure 2 above, sub-health centers are in all villages except the village of Sepakat. The number of nurses in the Loa Kulu sub-district is 49, midwives are 39, and other medical personnel are 6. This shows that there is still a lack of medical personnel in villages, especially villages that are far from the sub-district capital. As stated in the appropriate body, the program implemented by the government is intended for the people of Kutai Kartanegara. In this study, the object of the area studied, namely the Loa Kulu District, related to the implementation of the appropriate exercise program, the indicator

of healthy fit, by the Head of the Regional Development Planning Agency of Kutai Kartanegara in an interview with The researcher said that:

Efforts made by the government in alleviating poverty, the indicators being developed at this time apart from the appropriate sports program, also collect data on the poor, especially areas that are difficult to reach, so that with these efforts at least the government can collect more detailed data and can take preventive action because all this time eradicating poverty is not easy.

This is corroborated by the opinion conveyed by the Section Head of the Kutai Karta Negara Social Service in an interview saying that:

The high level of poverty in the regions also affects the health level of the population. And through this program Public health is already quite good, only for difficult areas to reach have not been fully recorded.

About the healthy program of the appropriate exercise program carried out by the local government, the Camat of Loa Kulu District, Kutai Karta Negara, also explained that:

The government needs to continue to improve public health because the handling is still lacking, especially for stunting sufferers, which is currently experienced by many residents, including in Loa Kalu. And government programs through appropriate sports programs have not fully helped, because of the limitations and poverty of sufferers, making it difficult to receive healing. For this reason, it is necessary for the maximum role of the government in providing adequate health facilities, as well as providing assistance in the form of milk drinks, vitamins, and most importantly, socialising to prospective mothers the importance of adequate nutrition during pregnancy nutrition for toddlers.

Regarding the provision of health facilities in order of application of the program deserve a healthy, Head of Regional Development Planning Board Kukar explained in an interview with a researcher, that:

In support of the government program that was carried in the program deserve, such as programs deserve healthy, the government's efforts demonstrated by the provision of facilities health in various areas of Loa Kulu. Such as facilities, health center, medicines. There are several additional health centers, such as 1 in the village of Loh Sumber, and the Village of Jonggon Jaya. Procurement of nurses, especially remote areas.

The role of the government in alleviating poverty through healthy programs, as described in the interview above, it was concluded that the appropriate healthy program applied to the community was not fully maximised, this was because there were still many areas, especially those that were difficult to reach, that had not received health assistance, be it vitamin assistance. For toddlers, assistance for basic needs for nutritious food and services in health facilities are also inadequate, such as health centers; in Loa Kulu, there are only 2 health centers, namely Loh Sumber village and Jonggon Jaya village, the rest of villages. Only sub-health centres are fully equipped with their health facilities, not enough. Regarding the limited facilities and the lack of handling of sufferers stunting in Loa Kulu District, the researcher interviewed several residents of Loa Kulu, as said by Nursiah as a resident who lives in Loa Kulu City saying that:

I think the exercise program is appropriate to be implemented in this area,
But residents in the village Villages far from downtown Loa Kulu still receive minimal assistance with vitamins and food nutritious from this program. There are still many stunting cases in villages that are difficult to reach. Case this high stunting is because many residents are still poor so that when pregnant women cannot buy nutritious food, and when the child is they are born, not given 4 healthy 5 perfect food and also mothers of children who experience stunting have low knowledge

Regarding the limitations of these facilities, Syarif as a resident who lives in Loh Sumber, in an interview with researchers, said that:

There are no adequate health facilities in this village, although there is a puskesmas the availability of facilities medicine and staff is still minimal, as a result of handling for residents who can seek treatment is also not done well, and the poverty that prevails in the area this makes some residents do not want to go to the Health center because they have to buy medicine. Not to mention the patients with strunting; of course, the handling is minimal.

Based on the description above, it is concluded that the government's program through proper health, especially for the Loa Kulu District area, still needs to be improved because the level of health services is still experiencing problems, especially limited health facilities., only villages agreed that they did not have these health facilities and facilities; it also impacted the level of poverty experienced by some villages in Loa Kulu District.

Sepakat Village is a resident whose level of health care is still low, so many residents seek treatment in neighbouring villages. There are still disadvantaged areas in the Loa Kulu

sub-district that lack health services. In fact, in addition to providing care for sick children or pregnant women, health workers are also needed to provide. Knowledge about nutrition for pregnant women and children in their early life and to reduce stunting rates. From the lack of health workers in the villages, pregnant women and having children under five and toddlers lack an understanding of providing adequate nutrition for children.

Table 1 Informants of the Healthy Appropriate Program

Informant	Healthy Fast
Head of Bappeda	Collect data on the poor, especially areas that are difficult to reach, so that with these efforts, at least the government can collect more detailed data and take stunting prevention measures.
Section Head of Social Service	Public health is quite good through this program, only for difficult areas to reach have not been fully recorded.
Section Head of the Education Office	The government's efforts are shown by providing health facilities in various areas in Loa Kulu. Such as health center facilities, medicines.
Head of Loa Kulu	Government should continue improving public health because the handling is still lacking, especially for stunting sufferers, which is currently experienced by many residents, including in Loa Kalu.
Inhabitant	There are no adequate health facilities in this village, although there is a puskesmas, the availability of medical facilities and staff is still minimal
Inhabitant	The existing program, namely health, has not been implemented in this area, such as there are no health facilities, especially the procurement of nurses who serve the community,

Source: Processed from the results of research interviews, 2021

Based on the description of table 1 above, it is concluded that the appropriate exercise program is a government effort in improving public health, especially suppressing the increase in stunting rates and also as a strategic step for poverty alleviation in the Kutai Karta Negara areas including in Loa Kulu District. The local government has implemented the appropriate sports program. Still, not all regions are touched by the program implemented by the government because many remote areas are not under government supervision due to regional isolation, so that the provision of facilities as stated in the appropriate body has not been fully implemented, such as education, health, housing and more.

Discussion

Discussion is the content of the analysis results and facts that researchers in the field adapted to the researchers' theory. In this study with the title The Role of Local Governments in Alleviating Stunting in Kutai Karta Negara Regency, researchers used Huberman's analysis to describe several research focuses that have been determined based

on supporting theories and inhibiting factors faced by the Regional Government of Kutai Karta Negara Regency in their role in Alleviating stunting, as for the description of the discussion. as follows:

1. Alleviation of Stunting with a Healthy Appropriate Program

The limitation raised from the health limit is that health is a perfect state, physically, mentally, and socially, and not only free from disease and disability. Body health plays an important role in carrying out activities both physically and mentally, where health is the main capital in carrying out activities in living life. Deteriorating health and lack of maintenance, in addition to lowering health immunity, also has an impact on impaired physical conditions. For someone with a low level of health, the impact can be on a disabled body condition. One of the diseases regarding this, namely stunting, generally affects infants or toddlers. Stunting can have a long-term impact, which can directly be seen as being a stunted adult; besides that, it will also impact cognitive development, school achievement, productivity as an adult, and affect the offspring (Dewey and Begum, 2011).

Toddler stunting occurs because a lack of energy and protein that lasts a long time can lead to delays in cognitive development so that they have less attention and memory than toddlers who get good nutrition; delayed cognitive development in stunted toddlers occurs due to delays in maturity of the structure and function of the -parts that play a role in the formation of the brain.

The number of sufferers in Loa Kulu sub-district, Kutai Karta Negara Regency in 2019 reached 71.43% of the sufferers consisted of children under five years old (toddlers) and children under two years old (Baduta). 561 Baduta babies consist of 167 very short children and 394 short children. While the cases of stunting of fewer than five children were 2,279, 674 were very short, and 1,605 were short. The number is still quite high, but the efforts made by the local government in handling health, especially in overcoming stunting through appropriate exercise programs, continue to be developed.

Kutai Karta Negara made Regulations regarding stunting handling realised through the Kukar Regent's Decree Number 301/SKBUP/HK/2019, which essentially accelerated the prevention and handling of stunting in areas with high stunting populations, especially Loa Kulu District. Efforts to minimise stunting sufferers are carried out by setting a target of achieving 35% of the total 67% from 2021 for the entire area in the area Kukar. The

achievement realisation is still around 43.2%, and this has not been realised properly because local governments still experience obstacles in the healthy deserved program.

The government program through proper health, especially for the Loa Kulu District area, is still quite low, and one of the measurements of the program is that the number of stunting sufferers is still quite a lot, especially in villages in Loa Kulu District, this is because the people there have not received services. Due to the limited number of health facilities and health workers such as nurses and midwives, proper health care. Especially the limited health facilities, for Loa Kulu Subdistrict, there are only 2 puskesmas and 14 supporting puskesmas. Only villages agree that they do not have these health facilities and facilities. This also impacts the poverty level experienced by some villages in Loa Kulu Subdistrict.

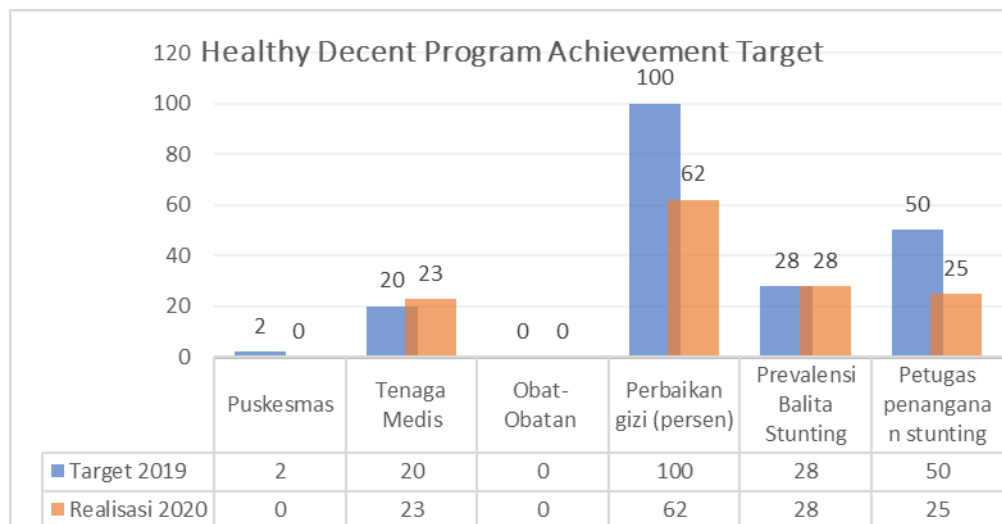


Figure 3 Healthy Decent Program Achievement Target

Source: Department of Health (Processed by the author)

The figure 3 above shows that the realisation of health facilities in Loa Kulu District has not been fully implemented, especially the puskesmas, which only has two puskesmas, and the government’s efforts to add 2 puskesmas have not reached the target. Meanwhile, medical personnel consisting of nurses and midwives have exceeded the target number, while health facilities have not reached the target. As for the improvement of nutrition, the target achieved was 62% of the specified target of 100%, so that the improvement in nutrition had not yet reached the target.

The poverty factor is the basis for the decline of public health. The link between poverty and health is stated by the World Bank (2002) that poverty and health are something that cannot be separated. Because poor health can cause a decrease in productivity and cost

money and savings, which reduces the quality of life and creates poverty, poverty can put a person in an unfavourable health condition due to the limitations of a person in obtaining health facilities and facilities, making the individual experience a decline in social life, no health services, which over time make a person experience poverty. Based on the research results, the low level of public health found in Sepakat Village is a population whose level of health care is still low, so many residents seek treatment in neighbouring villages. Not yet fully achieving the target in improving health facilities and infrastructure in Loa Kulu also shows that public health is still low; thus, poor public health is also the cause of poverty. This shows that in several villages in Loa Kulu sub-district, poverty is still there; this also impacts low health services. Communities, especially in villages that are far away and difficult to reach by transportation, are villages that need to be empowered, especially the fulfilment of health facility services, which of course improves the welfare of the community so that they stay healthy, the health of the population is quite important to meet the needs of the family, because the lower the level of a healthy society, it can lead to prolonged poverty.

Conclusion

Based on the results of the analysis and discussion regarding the role of the government in alleviating stunting in Kutai Karta Negara Regency:

1. The role of the government in alleviating stunting through appropriate health programs is not fully maximised, this is because there are still many areas, especially those that are difficult to reach, that have not received health assistance, be it medicines, service assistance in the form of health facilities, such as puskesmas. The limitation of the provision of these facilities is that services in health in the villages of Loa Kulu District are still low, including the handling of stunting.
2. The efforts of the Kutai Karta Negara government in the community's welfare are supported by programs that have been carried out previously. Still, the fulfilment of community welfare cannot be measured, especially in areas in Kutai Karta Negara, because there are still many villages in Kutai Karta Negara that have not received adequate health services. Appropriate education, livable housing facilities, and making it difficult to eradicate stunting.
3. Supporting factors in implementing the government's role in alleviating stunting in Kutai Karta Negara Regency are supported by an appropriate exercise program that needs to be implemented because it contains elements of development and community needs such as education, health, and the need for food, housing, and efforts welfare improvement. The inhibiting factor in alleviating stunting is a

population with a weak economy. They pay less attention to the nutrition of children and pregnant women. Then some areas are difficult to reach in socialising stunting prevention.

References

- Anisa, P. (2012). Factors Related to Stunting Incidence in Toddlers Age 25-60 Months in Kalibaru Village, Depok in 2012. Depok. *Faculty of Public Health, University of Indonesia*.
- Dewey, K.G., & Begum, K. (2011). Long Term Consequences of Stunting in Early Life. Blackwell Publishing Ltd Maternal and child nutrition. *Journal*, 7(3), 5-18.
- East Kalimantan Health Office, (2019). Kutai Kartanegara in Figures, 2020 Hidayat, A. 2012. A Complete Explanation of the Odds Ratio. Jakarta Ministry of Health RI, 2016. The Nutritional Situation in Indonesia. Indonesian Ministry of Health Data and Information Center. Jakarta.
- Regulation of the Regent of Kutai Kartanegara Number 66 of 2019 concerning the Implementation of the Family Movement for the Prevention and Overcoming of Stunting Trihono et al., 2015. Short (Stunting) in Indonesia. Problems and Solutions. Agency for Health Research and Development. Jakarta.
- UNICEF, 2017. Stunted Pada Balita. Public Health.
- Wagstaff, L.R., Mitton, M.W., Arvik, B.M., & Doraiswamy, P.M. (2003). Statin-associated memory loss: analysis of 60 case reports and review of the literature. *Pharmacotherapy: The Journal of Human Pharmacology and Drug Therapy*, 23(7), 871-880.
- Zulfqar, U., Mohy-Ul-Din, S., Abu-Rumman, A., Al-Shra'ah, A.E., & Ahmed, I. (2020). Insurance-Growth Nexus: Aggregation and Disaggregation. *Journal of Asian Finance, Economics and Business*, 7, 665-675.
- Al-Shqairat, Z.I., AL Shraah, A.E.M., Abu-Rumman, A. (2020). The role of critical success factors of knowledge stations in the development of local communities in Jordan: A managerial perspective. *Journal of management Information and Decision Sciences*, 23(5), 510-526.
- Abu-Rumman, A. (2021). Transformational leadership and human capital within the disruptive business environment of academia. *World Journal on Educational Technology: Current Issues*, 13(2), 178-187.
- Almomani, R.Z.Q., Al-Abadi, L.H.M., Rumman, A.R.A.A.A., Abu-Rumman, A., & Banyhamdan, K. (2019). Organizational Memory, Knowledge Management, Marketing Innovation and Cost of Quality: Empirical Effects from Construction Industry in Jordan. *Academy of Entrepreneurship Journal*, 25(3), 1528-2686.
- Alshawabkeh, R., Rumman, A.A., Al-Abadi, L., & Abu-Rumman, A. (2020). The intervening role of ambidexterity in the knowledge management project success connection. *Problems and Perspectives in Management*, 18(3).
- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). Entrepreneurial networks, entrepreneurial orientation, and performance of small and medium enterprises: are

- dynamic capabilities the missing link? *Journal of Innovation and Entrepreneurship*, 10(29).
- Abu-Rumman, A. (2018). Gaining competitive advantage through intellectual capital and knowledge management: an exploration of inhibitors and enablers in Jordanian Universities. *Problems and Perspectives in Management*, 16(3), 259-268.
- Al Shraah, A., Abu-Rumman, A., Al Madi, F., Alhammad, F.A., & AlJboor, A.A., (2021). The impact of quality management practices on knowledge management processes: a study of a social security corporation in Jordan. *The TQM Journal*.
- Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T. (2021). The impact of quality framework application on patients' satisfaction. *International Journal of Human Rights in Healthcare*. <https://doi.org/10.1108/IJHRH-01-2021-0006>
- Zafar, S.Z., Zhilin, Q., Malik, H., Abu-Rumman, A., Al Shraah, A., Al-Madi, F., & Alfalah, T.F. (2021). Spatial spillover effects of technological innovation on total factor energy efficiency: taking government environment regulations into account for three continents. *Business Process Management Journal*, 27(6), 1874-1891.
- Gupta, R.K. (2018). Employment Security and Occupational Satisfaction in India. *Journal of Advanced Research in Dynamical & Control System*, 10(10), 244-249.
- Gupta, R.K., & Singh, D.B. (2019). Minimum Wage and Minimum Work Hour in India. *Journal of Advanced Research in Dynamical & Control System*, 11(02), 2402-2405.
- Mishra, S.K., & Gupta, R.K. (2021). Developing Effective Digital Marketing Strategies in Gaming Sector Through Gamers Response. *Empirical Economics Letters*, 20, 112-121.
- Agarwal, A., & Gupta, R.K. (2021). Perception of Investors Regarding Mutual Funds as a Worthy Investment. *Empirical Economics Letters*, 20(2), 102-111.
- Kubiczek, J., & Hadasik, B. (2021). Challenges in Reporting the COVID-19 Spread and its Presentation to the Society. *Journal of Data and Information Quality (JDIQ)*, 13(4), 1-7.
- Akther, T., & Xu, F. (2021). An investigation of the credibility of and confidence in audit value: evidence from a developing country. *Accounting Research Journal*, 34(5), 488-510.
- Xu, F., & Akther, T. (2019). A partial least-squares structural equation modeling approach to investigate the audit expectation gap and its impact on investor confidence: perspectives from a developing country. *Sustainability*, 11(20).
- Akther, T., & Xu, F. (2020). Existence of the audit expectation gap and its impact on stakeholders' confidence: The moderating role of the financial reporting council. *International Journal of Financial Studies*, 8(1).
- Akther, T. (2017). Corporate Environmental Reporting and Profitability: A Study on Listed Companies in Bangladesh. *Jagannath University Journal of Business Studies*, 5(1&2), 99-104.
- Jalil, N.A., Prapinit, P., Melan, M., & Mustaffa, A.B. (2019). Adoption of business intelligence-Technological, individual and supply chain efficiency. In *International Conference on Machine Learning, Big Data and Business Intelligence (MLBDBI)*, 67-73.

- Jalil, N.A., Hwang, H.J., & Dawi, N.M. (2019). Machines learning trends, perspectives and prospects in education sector. *In Proceedings of the 3rd International Conference on Education and Multimedia Technology*, 201-205.
- Jalil, N.A., & Hwang, H.J. (2019). Technological-centric business intelligence: Critical success factors. *International Journal of Innovation, Creativity and Change*, 5(2), 1499-1516.
- Jalil, N.A., & Yeik, K.K. (2019). Systems, design and technologies anxieties towards use of self-service checkout. *In Proceedings of the 2019 3rd International Conference on Education and E-Learning*, 122-127.
- Singh, B., Jalil, N.A., Sharma, D.K., Steffi, R., & Kumar, K. (2021). Computational systems overview and Random Process with Theoretical analysis. *In 7th International Conference on Advanced Computing and Communication Systems (ICACCS)*, 1, 1999-2005.
- Setiawan, R., Cavaliere, L.P.L., KartikeyKoti, G.A.O., Jalil, N.A., Chakravarthi, M.K., Rajest, S.S., & Singh, S. (2021). The Artificial Intelligence and Inventory Effect on Banking Industrial Performance. *Turkish Online Journal of Qualitative Inquiry (TOJQI)*, 12(6), 8100-8125.
- Roespinoedji, D., Juniati, S., Hasan, H., Jalil, N.A., & Shamsudin, M.F. (2019). Experimenting the long-haul association between components of consuming renewable energy: ARDL method with special reference to Malaysia. *Int. J. Energy Econ. Policy*, 9, 453-460.
- Sharma, D.K., Jalil, N. A., Regin, R., Rajest, S.S., Tummala, R.K., & Thangadurai, N. (2021). Predicting Network Congestion with Machine Learning. *In 2nd International Conference on Smart Electronics and Communication (ICOSEC)*, 1574-1579.
- Rjoub, H., Iloka, C.B., & Venugopal, V. (2022). Changes in the Marketing Orientation Within the Business Model of an International Retailer: IKEA in Malaysia for Over 20 Years. *In Handbook of Research on Current Trends in Asian Economics, Business, and Administration*, 170-190.
- Li, M., Hamawandy, N.M., Wahid, F., Rjoub, H., & Bao, Z. (2021). Renewable energy resources investment and green finance: Evidence from China. *Resources Policy*, 74.
- Li, H.S., Geng, Y.C., Shinwari, R., Yangjie, W., & Rjoub, H. (2021). Does renewable energy electricity and economic complexity index help to achieve carbon neutrality target of top exporting countries? *Journal of Environmental Management*, 299.
- Ahmed, Z., Ahmad, M., Rjoub, H., Kalugina, O.A., & Hussain, N. (2021). Economic growth, renewable energy consumption, and ecological footprint: Exploring the role of environmental regulations and democracy in sustainable development. *Sustainable Development*.
- Safi, A., Chen, Y., Wahab, S., Zheng, L., & Rjoub, H. (2021). Does environmental taxes achieve the carbon neutrality target of G7 economies? Evaluating the importance of environmental R&D. *Journal of Environmental Management*, 293.
- Odugbesan, J.A., Rjoub, H., Ifediora, C.U., & Iloka, C.B. (2021). Do financial regulations matters for sustainable green economy: evidence from Turkey. *Environmental Science and Pollution Research*, 1-16.
- Demir, M., Rjoub, H., & Yesiltas, M. (2021). Environmental awareness and guests' intention to visit green hotels: The mediation role of consumption values. *Plos one*, 16(5).