







# ANALYSIS OF HEALTH LEVEL IN INFANTS AND TODDLERS IN THE MIDST COVID-19 PANDEMIC IN PETUNG SUB-DISTRICT, PENAJAM PASER UTARA REGION: SOCIAL AND HEALTH PHENOMENON

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#### **Abstract**

Health services for mothers and children are among those affected by the Covid-19 pandemic that has hit the world since the end of 2019 and began to enter Indonesia in early 2020. Maternal and child health programs (MCH) are considered not to be running well. so that Indonesia is one of the countries with the highest MMR in ASEAN. This study uses a descriptive research method using a qualitative approach. The place of research is the Petung-Public Health Center (P-PHC), Penajam Paser Utara Regency. This research is intended to provide information and analyze comparisons related to health status in MCH services, especially in the health of young infants and toddlers before and after the Covid-19 pandemic, and hopes that in the future health services will be better good. The impact of the Covid-19 pandemic was quite detrimental to the growth and development of children throughout the Petung Sub-District. Immunization activities in Petung were quite experiencing problems. As for immunization itself, it was intended that infants, toddlers and children could protect against various diseases in the future and help build special antibodies to fight certain diseases. As a result, young infants, toddlers and children who are not immunized are very at risk of developing complications of diseases related to the immune system of children in the future.

# **Keywords: Young Infants, Toddlers, Immunization**

## **BACKGROUND**

The Covid-19 case in July 2021 has reached 3.24 million, with 2.6 million recovered cases and 85,835 deaths. In East Kalimantan, it has 109,814 confirmed cases and 3,030 deaths. COVID-19 infection can cause mild, moderate or

severe symptoms. The main clinical symptoms that appear are fever (temperature > 380), cough and difficulty breathing. In addition, it is accompanied by severe shortness of breath, fatigue, myalgia, gastrointestinal symptoms such as diarrhoea and other respiratory symptoms. In severe cases rapidly and progressively











worsens, such as ARDS, septic shock, uncorrected metabolic acidosis and

bleeding or coagulation system dysfunction within a few days. In some patients, symptoms appear mild, not even accompanied by fever. Most patients have a worthy prognosis, with a small proportion in critical condition and even death (Rahmi et al., 2020).

Maternal and child health is health that includes all aspects to maintain optimal health degrees comprehensively in every cycle of life starting from pre-conception, pregnancy, conception, childbirth. postpartum, newborn, toddler, pre-school, school, adolescent, adult to menopause. Midwifery services are an integral part of the health care system provided by midwives, carried out independently, in collaboration, consultation and referrals aimed at women's reproductive health throughout their life cycle, including infants and toddlers (Depkes.go.id, 2012).

Health development is the implementation of health efforts by the Indonesian people, to increase awareness, willingness, and ability to live healthy for everyone, to realize the highest degree of public health. Definition of health Based on the Law of the Republic of Indonesia no. 36 of 2009 concerning Health Article 1 Health is a state of health, both physically, mentally, spiritually and socially that enables everyone to live socially and economically productive lives. Puskesmas is one of the technical implementing units of the district/city health office which is in charge of implementing health development for

the community. The health efforts carried out include environmental health promotion, maternal and child health

efforts and family planning, efforts to improve community nutrition, prevention and eradication of infectious diseases and treatment efforts (Mutiawati et al., 2015).

Immunization is an effort to provide immunity to infants and children by introducing vaccines into the body so that the body makes antibodies to prevent certain diseases. The purpose immunization itself is to provide immunity to the baby's body by giving vaccines. Vaccines come from certain germs that can cause disease, but these diseases are first weakened or killed so that they are not dangerous when inserted into the human body. The diseases targeted by this vaccine are diphtheria, polio, tuberculosis, tetanus, pertussis and hepatitis B (Wawomeo et al., 2019).

Basic immunization in infants should be given to children according to their age. As in this condition, the immune system is expected to work optimally, every baby is receive complete required to basic immunization consisting of 1 dose of BCG, 3 doses of DPT-HB and/or DPT-HB-Hib, 4 doses of polio, and 1 dose of complete Of the immunizations that are required, measles is the immunization that gets more attention, is following Indonesia's commitment to maintain high and evenly distributed measles immunization coverage. However, under certain some babies conditions, do not get











complete basic immunizations. As we know, that in society there are still different understandings about immunization, so there are still many babies and toddlers who do not get immunization services. The reasons given by parents regarding this were because their children were afraid of heat, often got sick, the family did not allow it, the immunization place was far away, did not know where the immunization was and so on (Safitri, 2019).

The Large-Scale Social Restriction Policy (PSBB) including in North Penajam Paser Regency was also implemented as an effort to prevent the transmission of Covid-19 by various elements involving of community, government, medical personnel and the TNI/POLRI. Because this causes a significant impact on health services at the Petung Health Center, one of which is Maternal and Child Health. The impact of the Covid pandemic has caused various services for pregnant women and newborns to be hampered, pregnancy checks such as immunizations for babies. This is because many pregnant women and mothers of babies are worried about being in public places during this pandemic.

Until now, knowledge about COVID-19 infection concerning maternal and child health is still limited and there are no specific recommendations for handling COVID-19. Based on these limited data and several examples of cases in the treatment of previous Coronaviruses (SARS-CoV and MERS-CoV) and some cases of COVID-19, it is believed that mothers and children have a higher risk of

serious illness, morbidity and mortality compared to the general population. (Rohani et al., 2020).

### **RESEARCH METHODS**

This study used a descriptive research method with a qualitative approach. The place of research was Petung Public Health Center, North Penajam Paser Regency. This study was conducted in July 2021. The two informants in this study came from medical personnel at the Petung Health Center. The researchers themselves were assisted with additional instruments in the form of interview guides, voice recorders and writing instruments. The data collected was secondary data.

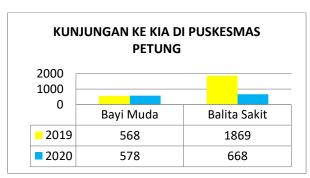
## RESULTS AND DISCUSSION

This study was conducted by interviewing medical personnel at the Petung Health Center, Penajam Paser Utara Regency. Due to the COVID-19 pandemic, visits to the Puskesmas are very limited due to reduced mobility and crowds occur in one place. So that the sources are taken only from existing medical personnel and administrative data sources of Petung-Public Health Center (P-PHC), Penajam Paser Utara Regency.

The time used in the comparative analysis of this data was data before the pandemic in 2019 and data during or post-pandemic 2020. The subject of observation were infants and toddlers in Petung Sub-District in Kutai Karta Negara Regency.







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Figure 1

Based on the data in Figure 1, visits by young infants (aged 0-2 months) before the pandemic at MCH Petung-Public Health Center were 568 babies, while after the pandemic there were 578 babies. This indicated an increase in visits of 1.7%. It was influenced by the increasing number of pregnancies and births in the working area of the Petung-Public Health Center during the pandemic

Although young infants experienced an increase in visits, this was different from visits for toddlers to MCH Petung Health Center. Prior to the pandemic, visits by toddlers (Age 2 months -5 years) to MCH Petung Health Center reached toddlers, while during the pandemic there were only 668 toddlers. This has decreased by 64.3%. This decline occurred due to several factors, namely, the existence of restrictions on visits to each poly including KIA, the concern of mothers to bring their toddlers to public places or crowds during the pandemic, as well as the existence of digital advances where mothers can consult with doctors through applications or home visits by a doctor outside the health centre.

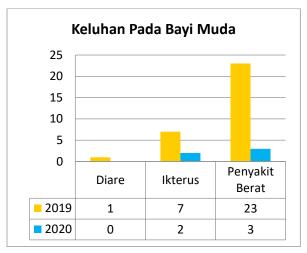


Figure 2

Based on the data on visits by infants and toddlers before and after the pandemic in Figure 1, it can also be seen how the data on the percentage of complaints in infants and toddlers at the Petung Health Center is shown in Figure 2. In infant complaints (aged 0 - 2 months) complaints in infants are divided into 3; diarrhoea, jaundice and serious illness. Before the pandemic, there was 1 infant who complained of diarrhoea young infants, while during pandemic there were 0. This means that there was a 100% decrease in cases. There were 7 cases of jaundice (jaundice) before the pandemic and 2 cases after the pandemic, resulting in a 71.4% decrease in cases. For complaints of severe illness, before the pandemic there were 23 cases, while after the pandemic there were 3 cases, there was a decrease in cases of 86.9%.

Based on existing data, it can be seen that before the pandemic, 5.45% of young infants visited the Petung Health Center











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with complaints of illness, while 94.55% of young infants had no complaints of certain diseases and 92.9% of young infants received immunization injections. Complete Basics (IDL) on time at the Public Health Center (PHC) Meanwhile. Community Health Care. during the pandemic, 0.8% of infants had complaints of illness during visits to the Public Health Center, while 99.2% of other infant visits had no specific complaints and for Complete Basic Immunization (IDL) as many as 83% of young infants received immunizations but with protocols and which schedules. has been strictly determined by medical personnel and was only performed at the PHC.

In the complaints of toddlers (aged 2 months – 5 years) in Figure 3, complaints in toddlers are divided into 7; Cough/respiratory complaints, diarrhoea, fever, Dengue Fever (DHF), ear problems, nutritional status and anaemia.

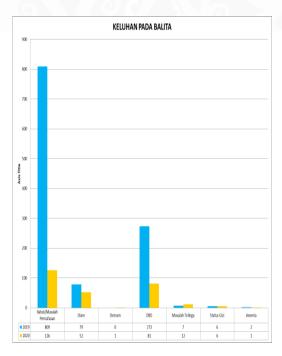


Figure 3

Before the pandemic, complaints of coughing or breathing problems occurred in 809 toddlers while during the pandemic 126 toddlers. Then the percentage decrease in cases is 84.4%. Complaints concerning diarrhoea before the pandemic were 79 toddlers and after the pandemic, there were 52 toddlers, the percentage decrease in cases was 34.2%. For complaints of fever before the pandemic, there were 0 toddlers and after the pandemic, there was 1 toddler, likewise, there was an increase in the percentage of cases by 100%.

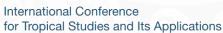
Complaints on Dengue Fever (DHF) before the pandemic were 273 toddlers and after the pandemic, there were 81 toddlers, there was a decrease in cases of 70.3%. Complaints regarding ear problems before the pandemic were 7 toddlers and after the pandemic, there were 12 toddlers, there was a 41.7% increase in cases. Complaints concerning nutritional status before the











pandemic were 6 toddlers and after the pandemic as many as 6 toddlers. Then the percentage of these complaints is 0%. Complaints about anaemia before the pandemic were 2 toddlers and after the pandemic, there was 1 toddler, this indicates an increase in cases of 50%.

for immunization toddlers children, there are significant obstacles related to immunization. For measles immunization for toddlers (under 2 years old) at the beginning of the pandemic, immunization at the Petung Health Center was abolished because it reduces physical touch and avoids babies and toddlers being in crowds. For grade 1 and grade 2 elementary school children from 2020 to 2021 also cannot obtain measles and Td immunization. Because in previous years, this immunization was conducted on a schedule with each elementary school. The delay in immunization for elementary school children is also constrained if they come directly to the PHC, there are fears that there will be crowds. In addition, medical officers at the Petung Public Health Center are also limited, because they have to divide services in each poly, handling Covid-19 and procuring Covid Vaccination in Petung.

## **CONCLUSION**

The impact of the Covid-19 pandemic is very detrimental to the growth and development of children throughout Indonesia. Immunization itself aims so that infants, toddlers and children can protect against various diseases in the future and help build special antibodies to fight certain diseases.

It can be concluded that before the pandemic, 66.3% of toddlers visited MCH in Petung Public Health Center (PHC) with disease complaints. Meanwhile, 33.7% of healthy toddlers have no complaints of disease. Meanwhile, during the pandemic, 41.8% of toddlers had complaints of illness during visits to the PHC, while 58.2% of other toddlers' visits had no specific complaints.

With the delay in the implementation of immunization for grade 1 and 2 elementary school children in the working area of the Petung-Public Health Center, it is feared that children in Petung Village do not have strong antibodies like children who receive measles and Td immunization injections. Because of this, the Petung-Public Health Center prioritizes immunization of infants and toddlers because they are more vulnerable and this immunization can be minimized from the crowd by being held at Posyandu scattered in Petung Village.

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