

The Impact of the Covid-19 Pandemic on the Posyandu Program in Palu City

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Abstract – Since then, the Covid case in Central Sulawesi - especially in Palu - the number of Covid-19 cases has fluctuated – even the curve tends to slope. However, from August 2020 to October 2020 there was a significant increase in cases. As of October 31, 2020, there were 857 confirmed positive cases (CFR = 3.97) in Central Sulawesi and the city of Palu is the highest area of Covid-19 cases in Central Sulawesi (338 cases or 39.4% with CFR = 5.59). Even though the first Covid-19 case in Palu was found on March 26, 2020, the closure of posyandu and other community-based health services (pregnant women classes, counseling, etc.) had started since early March 2020 for 3 months. The purpose of this study was to determine the characteristics of the posyandu, analyze the level of community participation and analyze the impact of the Covid-19 pandemic on the posyandu program in Palu city including: weighing children under five, monitoring the growth and development of toddlers and basic immunization, especially in the first 3 months of Covid-19 entering in Indonesia. In this study, we conducted a combination of quantitative data obtained from the Palu City Health Office (January 2020 to July 2020) and interviews with the person in charge of Posyandu and Immunization at the Palu City Health Office (Mix Method). The results showed that: 1) Most of the Posyandu in Palu were in the intermediate strata (47.98%); 2) The level of community participation in Posyandu in 2019 was 62.57% (decreased by 10.82% compared to 2018 due to the impact of the 2018 Palu Disaster); 3) The direct impact of Covid-19 on the Posyandu program included: a decrease in the coverage of complete Basic Immunization (63.49% in April), a decrease in the weighing rate for children under five (24.8% in May) and a decrease in monitoring of under-five growth and development (30, 7% in May). **Conclusion:** The Covid-19 pandemic in Palu City has a direct impact on the Posyandu program. A significant decline occurred in April and May, at the start of the Covid-19 Pandemic. Preventive action needs to be taken to prevent a decrease in coverage in phase 2 (October - December 2020).

Keywords – Covid-19 Pandemic, Posyandu Characteristics, Level of Community Participation, Posyandu Program.

I. INTRODUCTION

The Covid-19 case in Central Sulawesi was first discovered in the city of Palu on March 26, 2020. Since then the Covid-19 case in Central Sulawesi-especially in Palu-the number of Covid-19 cases has fluctuated, even the curve has tended to slope. August 2020 to October 2020 there is a significant increase in cases. As of October 31, 2020 there were 857 confirmed positive cases (CFR = 3.97) in Central Sulawesi and the city of Palu is the highest area of Covid-19 cases in Central Sulawesi (338 cases or 39.4% with CFR = 5.59)¹.

Even though the first Covid-19 case in Palu was found on March 26, 2020, the closure of posyandu and other community-based health services (pregnant women classes, counseling, etc.) had started since early March 2020 for 3 months. This is due to a letter from the Ministry of Home Affairs, RI Number: 094/1737 / BPD regarding Operations of Integrated Service Posts (Posyandu) in Preventing the Spread of Covid-19 which contains instructions for implementing health protocols at Posyandu². Because the government has not been able to implement covid-19 standards at Posyandu and other community-based health services, the Palu city

government has chosen to temporarily close these services. Some Puskesmas continue to carry out weighing activities for babies aged 0-11 months and limited immunization. Activities are focused at the Puskesmas or Puskesmas Pembantu with health protocols. But still the number of community visits has decreased, because they are worried about making contact. This has an impact on Posyandu coverage figures, such as weighing children under five, monitoring the development of children under five and immunization.

The purpose of this study was to determine the characteristics of Posyandu in Palu City, to know the level of community participation in Posyandu, and to analyze the impact of the Covid-19 pandemic on posyandu services in Palu including: weighing children under five, monitoring toddler growth and development and basic immunization.

II. METHOD

We conducted a combination of quantitative data obtained from the Palu City Health Office (January 2020 to July 2020) and interviews with the person in charge of Posyandu and Immunization at the Palu City Health Office (Mix Method) ^{3,4}.

III. RESULTS AND DISCUSSION

Posyandu (Integrated Service Post) is a form of Community-Based Health Efforts (UKBM) which are managed and organized from, by and with the community in the implementation of health development, which aims to empower the community and provide facilities for the community in obtaining basic health services to accelerate reduction in maternal and infant mortality ^{5,6,7}.

Characteristics of Posyandu

Posyandu organizes at least 5 priority programs, namely maternal and child health, family planning, nutrition improvement, immunization and diarrhea management. To improve the quality of Posyandu, Posyandu has been grouped into 4 strata, namely Pratama, Madya, Purnama, and Mandiri ^{8,9}.

In 2020 the number of Posyandu in Palu City was 223 units with the classification of Posyandu according to strata. The level of development of Posyandu in Palu City in the last 5 years can be seen in the following table ^{10,11}.

Table 1. Characteristics of Posyandu by Strata in Palu City 2016 – 2020.

Level	2018		2019		2020	
	n	%	n	%	n	%
Pratama	8	3,57	5	2,24	6	2,69
Madya	96	42,84	104	46,64	107	47,98
Purnama	98	43,76	90	40,36	86	38,56
Mandiri	22	9,83	24	10,76	24	10,77
Total	224	100,0	223	100,0	223	100,0

Source: Health Promotion Section of the Palu City Health Office 2020.

The table above shows that the highest percentage is Posyandu Madya (47.98 %) and the lowest is Posyandu

Pratama (2.69%). So that there is still need for intensive efforts to increase the number of Posyandu Mandiri. The ratio of Posyandu to the number of Kelurahan in Palu City in 2020 is 4.85. Each Posyandu has 5 cadres in carrying out its activities.

Level of Participation

Posyandu activities in the city of Palu include: weighing children under five, monitoring the development of children under five and immunization. Some Posyandu also carry out checks for pregnant women (antenatal care). To monitor the level of community participation in Posyandu and child development, SKDN was used to compare some data such as ownership of KMS (K), arrival to Posyandu (D) and weight gain (N) with target data (S).

SKDN conducted through Posyandu is an effort that aims to determine the success rate of weighing children under five based on SKDN indicators and other indicators. Some indicators of SKDN include program coverage (K / S), level of community participation (D / S), results of weighing children under five (N / D), intensity level of nutritional problems, program quality, active Posyandu and active cadres. The monitoring of SKDN growth for children under five in the city of Palu in 2019 is as follows ^{10, 12}.

Table 2. Monitoring the Growth of SKDN for Toddlers in Palu City in 2019.

Number	Puskesmas	Target Data (S)	Ownership of KMS (K)	Arrival to Posyandu (D)	Weight Gain (N)	BGM		Total BGM
						Case (New)	Case (Old)	
1	Pantoloan	1790	1443	1110	830	0	0	0
2	Tawaeli	1881	1760	1590	1372	4	0	4
3	Mamboro	1987	1987	1457	1348	17	0	17
4	Talise	4690	4480	2440	1580	96	0	96
5	Singgani	4896	4466	3243	2551	0	0	0
6	Kawatuna	2129	1415	1048	927	0	0	0
7	Birobuli	5042	5042	4004	3228	21	0	21
8	Mabelopura	3884	3884	2527	1529	45	0	45
9	Bulili	2878	2787	1721	1079	9	0	9
10	Nosarara	2747	2747	1856	1381	0	0	0
11	Kamonji	6073	6073	4339	4186	125	0	125
12	Sangurara	6394	6352	3593	3236	33	0	33
13	Tipo	1202	1202	770	581	95	0	95
Total		45593	43638	29698	23828	445	0	445

Source: Nutrition Section of Palu City Health Office 2019.

The results of the coverage of SKDN indicators in 13 Puskesmas throughout Palu City in 2019 show that the program results (N / D) reached 80.23%, decreased by 2.65% when compared to coverage in 2018 (82.88%), while for the level of community participation (D / S) Palu City amounted to 62.57%, a decrease of 10.82%

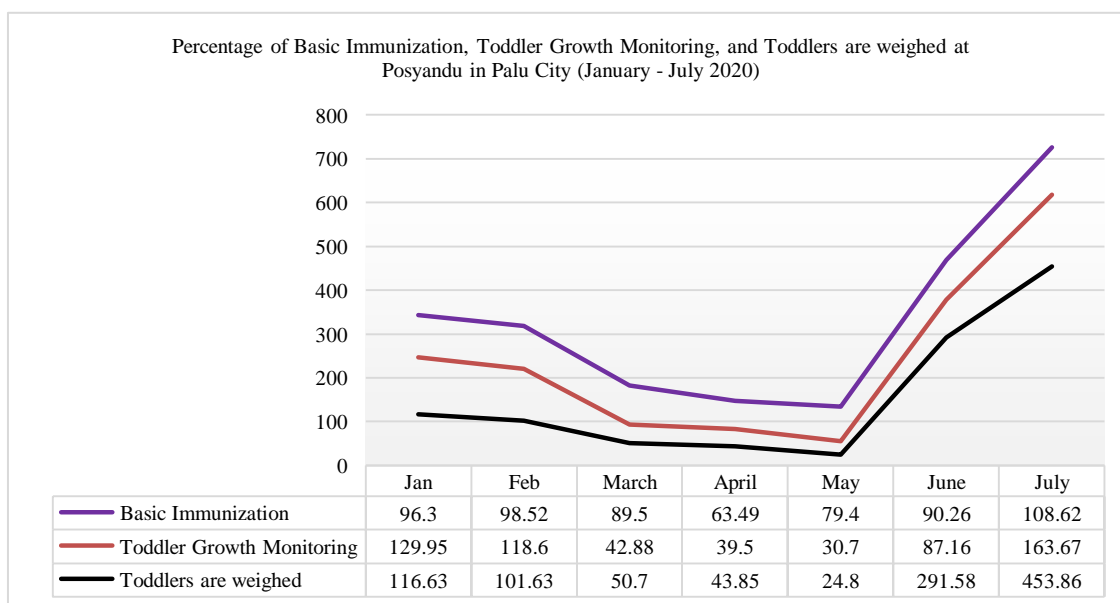
compared to 2018 (76.08%). This decline is inseparable from the natural disaster that hit Palu at the end of 2018, where several Posyandu were severely damaged and even lost due to tsunami waves and liquefaction.

Active involvement or community participation can mean involvement in the process of determining the direction, strategy and policy of activities carried out by the government. There are three main reasons for the importance of community participation in activities, namely: 1) as a means of obtaining information about the conditions, needs and attitudes of the local community towards work programs; 2) to assess the level of community trust in the program; 3) as the democratic right of the people in their involvement in activities. In the context of posyandu, community participation can be assessed from the involvement of posyandu cadres in every posyandu activity as well as the presence of the community bringing their toddlers to the posyandu¹³.

Of the 223 Posyandu units in Palu city, most of them have 5 (five) active cadres. The stratification of posyandu shows that 107 posyandu are in the intermediate level and 86 posyandu are in the full moon strata (a total of 193 posyandu or 86.5% are in these two strata). From this aspect, the level of community participation in the city of Palu is good. From the aspect of community attendance bringing their children to the posyandu, the level of community participation only reaches 62.57%. The results of interviews with the person in charge of the Posyandu at the Palu City Health Office revealed that most people were reluctant to come to the posyandu for several reasons: 1) their children were over 12 months old, so they were not immunized again; 2) there is no delivery; 3) posyandu is less attractive.

Impact of the Covid-19 Pandemic on Posyandu Activities

Based on data analysis from the Palu City Health Office for Posyandu activities, there are several coverage activities that have decreased significantly. This condition will have an impact on increasing cases of malnutrition, malnutrition and infant immunity if no immediate intervention is taken. These activities include: weighing children under five, monitoring the development of children under five and immunization, as follows:



Graph 1. Coverage (%) of Posyandu Activities in Palu City (January - July 2020).

The graph above shows that the lowest percentage for immunization activities, weighing children under five and monitoring the growth and development of toddlers through SKDN occurred in April and May 2020. The

results of the interview with the person in charge of the posyandu at the Palu City Health Office said that Posyandu activities began to close in March 2020, when the Covid case has entered Indonesia as well as a circular from the Ministry of Home Affairs to establish the Covid protocol at Posyandu. At the start of the pandemic, the Puskesmas and health workers were troubled and confused. Personal protective equipment (PPE) in very limited conditions. Puskesmas are also not used to implementing the Covid protocol. So that the Head of the Health Office gave instructions to reduce contact with the community, including contacts at Posyandu.

The closure of Posyandu for 3 months (March, April and May) had a very significant impact on the reduction in program coverage. The lowest immunization rate was in April (63.49%) because several Puskesmas still carry out immunizations at the Puskesmas with the covid protocol, accompanied by weighing babies aged 0-11 months. Some Puskesmas also make home visits to carry out immunizations. In June 2020, most Posyandu in Palu city have returned to normal activities, while still paying attention to the Covid protocol. This greatly helped increase the posyandu program coverage figures significantly.

Growth is an important component in assessing nutritional status and can be used as an indicator of the health / well-being of individuals and populations. Growth disruption is still a health problem in Indonesia, including in the city of Palu.

Community participation in weighing children under five is very important in early detection of cases of malnutrition and malnutrition. By diligently weighing toddlers, the growth of toddlers can be monitored intensively, so that if the child's weight does not increase or if disease is found, efforts to recover and prevent it from becoming malnutrition or malnutrition can be carried out immediately.

Nutritional problems are directly affected by the lack or insufficient consumption of energy, protein and other micronutrients. Malnutrition can have a serious impact on the quality of future generations, where children who suffer from malnutrition will experience physical and mental growth disorders. Malnutrition can occur in all age groups, but what needs more attention is the infant and toddler group. Age 0-2 years is a period of optimal growth and development (golden period), especially for fetal growth so that if there is a disturbance at this time it cannot be fulfilled in the next period so that it will negatively affect the quality of the next generation¹⁴.

One of the ways to overcome malnutrition and malnutrition is to use malnutrition management as an effort to deal with every case found. Malnutrition occurs as a result of severe malnutrition which if not handled quickly, precisely and comprehensively can result in death. The problems of malnutrition cases mostly come from underprivileged families with low levels of education, lack of knowledge of mothers about parenting and feeding patterns, so they cannot maintain the nutritional status of children under five after treatment. This situation causes the emergence of cases of malnutrition repeatedly¹⁵.

The Health Minimum Service Standards (SPM) also mandate that all cases of malnutrition must receive 100% treatment either inpatient or outpatient or home care. During 2019, in Palu City there were 30 cases of malnutrition (19 cases male, 11 female cases) and 818 malnutrition cases (400 cases male, 418 female cases). All cases found were handled 100%. This figure increases when compared to the 2018 data with 21 cases of malnutrition and 547 cases of malnutrition. The Palu disaster in September 2018 is one of the causes.

If preventive action is not taken, it is possible that the Covid-19 pandemic will increase the prevalence of malnutrition and malnutrition in the city of Palu, exceeding the impact of the 2018 Palu disaster.

IV. CONCLUSION

1. Most of the Posyandu in Palu City in 2020 are in the Intermediate (47.98%) and Purnama (38.56%) strata;
2. The level of community participation in the city of Palu in bringing their children to the posyandu reaches 62.57%;
3. The closure of Posyandu activities for 3 (three) months at the start of the Covid-19 Pandemic had a direct impact on several Posyandu programs, including: a) Basic Immunization Activities, the lowest achievement was in April 2020 (63.49%); b) weighing toddlers, the lowest achievement was in May 2020 (24.8%); c) Monitoring of the lowest Toddler Growth in May 2020 (30.7%).

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