



Analysis of Maternal Health in Local Area Monitoring – Maternal and Child Health (LAM-MCH) Indicators in Pagerageung Health Center

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ABSTRACT

Objective: The purpose of this research is to know the description of the results of the analysis of maternal health in the indicators of LAM-MCH in Sukamaju Village, the Working Area of the Pagerageung Health Center, Tasikmalaya Regency, in 2022.

Methods: The research method used is a descriptive method. Data analysis used with univariate analysis.

Results: The results showed that the coverage indicator for K1 visits was 87.08%, the coverage indicator for K4 visits was 78.20%, the coverage indicator for delivery by health personnel was 87.51%, the coverage indicator for postpartum visits was 87.51%, the achievement coverage indicator Early detection of risk factors and complications of obstetrics by health workers and the public at 26.66%

Conclusion: The conclusion of this study is that indicators of maternal health have not been achieved, especially coverage of K1, K4, delivery of health workers, postpartum visits and handling of obstetric complications cases. Suggestions for this research are the need for mutually supportive cooperation between pregnant women, midwives (health workers), and also the community or regional cadres.

Keywords: child health, maternal health, monitoring

Introduction

The Maternal Mortality Rate (MMR) is an indicator to improve health status and the success of implementing health development. The maternal mortality rate is the number of women who die during pregnancy, childbirth and the puerperium (42 days after giving birth)

caused by pregnancy disorders and their management. According to data sourced from WHO, in 2017, the global maternal mortality rate reached 211 per 100,000 live births (WHO, 2019)

Efforts to reduce MMR and IMR in Indonesia are the Sustainable Development Goals (SDGs) with targets set by the Ministry of Health to reduce maternal mortality to below 70 per 1,000 live births. End preventable infant and under-five deaths, to reduce by one third premature deaths from non-communicable diseases through prevention and care and promote health and well-being so that the Neonatal Mortality Rate can decrease to 12 per 1,000 KH and the Under-five Mortality Rate to 70 per 1,000 KH, LBW prematurity is the main cause of infant mortality (38.8/1000 KH) in achieving the SDGs, namely a healthy and prosperous life, especially those related to maternal and infant health in 2020 until August there have been 74 cases of neonatal death (AKN) (WHO, 2019)

Many factors influence MMR and IMR, including quality antenatal care, delivery services at health facilities, postpartum services, neonatal services, and detection of high risk and complications of neonatal obstetrics. This can be seen from the coverage of LAM-MCH indicators. In order for the implementation of the MCH program to run smoothly, aspects of improving the quality of MCH program services are still expected to become priority activities at the Puskesmas level. The improvement in the quality of the MCH program was also assessed from the size of the program coverage in each work area. For this reason, the level of achievement of MCH services in a work area needs to be monitored continuously, in order to obtain a clear picture of which groups in the work area are the most vulnerable. By knowing the locations that are prone to maternal and child health, more attention can be given to these work areas and solutions to the problem can be found. To monitor the scope of MCH services, a Maternal and Child Health Monitoring System (LAM-MCH) was developed (RI, 2010)

Local Area Monitoring – Maternal and Child Health (LAM-MCH) is a MCH program management tool to continuously monitor the coverage of MCH services in a work area. This is intended so that prompt and appropriate follow-up can be carried out on work areas where the coverage of MCH services is still low or areas that require special handling or follow-up (Meilani, 2009)

LAM-MCH is very dependent on reliable human resources, especially midwives who play a very important role as the spearhead of these activities. Reporting activities for MCH services are carried out by midwives who work in an area, which in stages the results of recording by the Village Midwife/BPM are reported to the Puskesmas, the Puskesmas to the Regency/City Service, the Regency/City Service to the Provincial Office, and from the Provincial Service to the Ministry of Health (Harnaningrum, L., 2014)

According to the data obtained based on the annual report at the Pagerageung Health Center in Tasikmalaya Regency, in 2021 there were 4 cases of infant death and 1 case of maternal death. Cases of infant mortality increased compared to the previous year, namely in 2020 there were 3 cases, while the number of cases of maternal death was the same, namely 1 case. As a benchmark used to realize the degree of maternal health includes the coverage of K1 and K4. For K1 coverage at the Pagerageung Health Center in 2021 it reaches 92.68% of the target of 100%, K4 coverage reaches 89.74% of the 100% target. Neonatal or KN services, for KN1 94.24% of the 100% target and for complete KN coverage of 94.03% of the 100% target (Puskesmas Pagerageung, 2021)

Objective

The aim of this study is to know the description of the results of maternal health analysis in LAM-MCH indicators (K1, K4, delivery by health personnel, postpartum visits and obstetric complications) in Sukamaju Village, Working Area of the Pagerageung Health Center, Tasikmalaya Regency in 2022

Method

The type of research used in this study is a quantitative research type descriptive method. The data collection technique used in this study with secondary data related to the coverage of LAM-MCH indicators, namely coverage of K1, K4, childbirth by health workers, postpartum visits and obstetric complications until November 2022. The location of this research was conducted in Sukamaju Village, the working area of the Pagerageung Health Center, Tasikmalaya Regency. The analysis used in this study was univariate analysis to describe the results of Maternal Health Analysis in LAM-MCH Indicators (K1, K4, Delivery by health personnel, postpartum visits and obstetric complications).

Result and Discussion

1. Target of LAM-MCH Sukamaju Village

Table 1. Targets of LAM-MCH Sukamaju Village

No	Integrated Healthcare Center	Projection Population	Pregnancy	Giving birth	Postpartum	High risk pregnancy
1	Kiarapandak	1143	21	20	20	4
2	Sukamaju	728	14	13	13	3
3	Margaluyu	1052	20	19	19	4
4	Ciakar	1115	21	20	20	4
5	Tanjungjaya	792	15	14	14	3
6	Pasirtamiang	1188	22	21	21	4

2. Target of LAM-MCH Sukamaju Village

Table 2 Targets of LAM-MCH Sukamaju Village

Indicator	Target Setting Per-Indicator				
	K1	K4	Pn	Kf	Obstetric Complication
Target	100	100	100	100	100
January	8.33	8.33	8.33	8.33	8.33
February	16.67	16.67	16.67	16.67	16.67
March	25.00	25.00	25.00	25.00	25.00
April	33.33	33.33	33.33	33.33	33.33
May	41.67	41.67	41.67	41.67	41.67
June	50.00	50.00	50.00	50.00	50.00
July	58.33	58.33	58.33	58.33	58.33
Agust	66.67	66.67	66.67	66.67	66.67
September	75.00	75.00	75.00	75.00	75.00
Oktober	83.33	83.33	83.33	83.33	83.33
November	91.67	91.67	91.67	91.67	91.67
December	100.00	100.00	100.00	100.00	100.00

3. Achievement and Analysis of LAM-MCH Indicators

a. 1st Visit of Pregnant Women (K1)

To find out in more detail the K1 of pregnant women from 6 villages in Sukamaju Village and the coverage results can be seen in the following table.

Table 3. 1st Visit of Pregnant Women (K1)

Village	Target	Realization	
		Total	%
Kiarapandak	21	18	84.21
Sukamaju	14	7	51.42
Margaluyu	20	21	106.75
Ciakar	21	20	95.92
Tanjung jaya	15	23	155.30
Pasirtamiang	22	9	40.51
Village	113	98	87.08

From the results of table 3 above, it can be seen that the achievement of the Indicator for Visit 1 for pregnant women is 87.08%, the highest is 155.30% in Kampung Tanjung Jaya while the lowest achievement is Kampung Pasirtamiang at 40.51%.

b. 4th Visit of Pregnant Women (K4)

Achievement of K4 Pregnant Women in 6 villages of Sukamaju Village, as follows:

Table 4. 4th Visit of Pregnant Women (K4)

Village	Target	Realization	
		Total	%
Kiarapandak	21	16	74.86
Sukamaju	14	7	51.42
Margahayu	20	15	76.25
Ciakar	21	18	86.33
Tanjungjaya	15	10	67.52
Pasirtamiang	22	22	99.03
Village	113	88	78.20

From the results of table 4 above, it can be seen that the achievement of the 4th Visit Indicator for pregnant women is 78.20%, the highest is 99.03% in Pasirtamiang Village while the lowest achievement is Sukamaju Village at 51.42%.

c. Delivery by Health Personnel

The achievements of Linakes in 6 Kampung Desa Sukamaju are as follows:

Table 5. Delivery by Health Personnel

Village	Target	Realization	
		Total	%
Kiarapandak	20	18	88.22
Sukamaju	13	6	46.17
Margaluyu	19	12	63.90
Ciakar	20	23	115.56
Tanjungjaya	14	15	106.10
Pasirtamiang	21	20	94.31
Village	107	94	87.51

From the results of table 5 above it can be seen that the achievement of Childbirth Indicators by Health Workers was 78.51%, the highest was 115.56% in Ciakar Village while the lowest achievement was Sukamaju Village of 46.17%

d. Postpartum Visit (KF)

Based on the calculation of the target of Postpartum Visits (KF) in 6 Kampung Desa Sukamaju as follows:

Table 6. Postpartum Visit (KF)

Village	Target	Realization	
		Total	%
Kiarapandak	20	18	88.22
Sukamaju	13	6	46.17
Margaluyu	19	12	63.90
Ciakar	20	23	115.56
Tanjungjaya	14	15	106.10
Pasirtamiang	21	20	94.31
Village	107	94	87.51

From the results of table 6 above, it can be seen that the achievement of the Postpartum Visit Indicator (KF) was 87.51%, the highest was 115.56% in Ciakar Village while the lowest achievement was Sukamaju Village of 46.17%.

e. Management of Obstetric Complications

Based on the results of coverage in 6 Kampung Desa Sukamaju, the following data were obtained:

Table 7 Management of Obstetric Complications

Village	Target	Realization	
		Total	%
Kiarapandak	4	1	23.39
Sukamaju	3	1	36.73
Margaluyu	4	1	25.42
Ciakar	4	3	71.94
Tanjungjaya	3	0	0.00
Pasirtamiang	4	0	0.00
Village	23	6	26.66

From the results of table 7 above, it can be seen that the achievement of Obstetric Complications Handling Indicators was 26.66%, the highest was 71.94% in Ciakar Village while the lowest achievement was Yanjungjaya and Pasirtamiang Villages at 0%.

Antenatal Services

Antenatal services are health services provided by health workers for mothers during their pregnancy, antenatal care is called complete if it is carried out by health workers and meets standards according to the frequency of antenatal care at least 4 times during pregnancy, provided that the recommended time for providing services is at least 1 time in the first quarter, 2 times in the second quarter, and 3 times in the third quarter, with a quality of service of 10 T namely, weigh, measure blood pressure, measure upper arm circumference, measure fundal height, determine baby's heart rate, Tetanus Toxoid Immunization, administration of iron supplement tablets, laboratory checks, case management and interviews (RI, 2010)

Based on the results of the study of indicators for visits to pregnant women (K1) in LAM-MCH until November 2022, a cumulative result of 87.08% was obtained, compared to the November target of 91.69%, meaning that the achievement of indicators for visiting pregnant women (K1) in Sukamaju Village still below the LAM-MCH indicator achievement target. The indicator for visiting pregnant women (K4) obtained a cumulative result of 78.20%, meaning that of all pregnant women there were 78.20% who had completed their pregnancy check-up. The k4 achievement of 78.20% pregnant women is still below the expected target in November of 91.69%, so there is a gap of 13.47% of mothers who have not carried out a complete pregnancy examination. This gap can be influenced by several factors. There are many factors that cause low K4 visits, according to (Nurbaiti, Donal N, 2020)

Factors that influence pregnant women in carrying out pregnancy checks are the characteristics of the mother including (age, education, occupation, parity), knowledge, pregnancy check service facilities, family support and access to health services. In addition, the results of the evaluation stated that the factors in not achieving K4 for pregnant women were because pregnant women had not yet entered gestational age in the third trimester, lack of knowledge of mothers in fully recognizing visits during pregnancy and several pregnant women who moved regions. From these conditions it can be analyzed regarding the solutions that This is done so that the target of achieving LAM-MCH indicators for pregnant women visits (K1) can

be achieved, including providing knowledge to pregnant women about the importance of prenatal checks until delivery and informing mothers about the importance of health services during pregnancy and delivery.

Delivery Assistance

Delivery assistance by health personnel is a safe delivery service performed by competent health personnel. In reality on the ground, there are still birth attendants who are not health workers and are carried out outside health care facilities. Therefore, gradually all deliveries will be assisted by competent health workers and directed to health care facilities

The indicator for delivery visits by health personnel obtained a cumulative result of 87.51%, compared to the November target of 91.69%, meaning that the achievement of the indicator for delivery visits by health workers in Sukamaju Village was still below the target for achieving LAM-MCH indicators, and there was a gap of 4.16 %. Based on the results of the program evaluation, this gap was caused by moving cities during pregnancy and childbirth and the solution was made so that they could reach the target, namely being able to provide information related to delivery for those who could not afford it, which could be facilitated with JAMPERSAL and maternity insurance.

Postpartum Maternal Health Services

Postpartum maternal health services are health services according to standards for mothers from 6 hours to 42 days postpartum by health workers. For early detection of complications in postpartum mothers, it is necessary to monitor the examination of postpartum mothers and increase the coverage of Postpartum Family Planning by conducting postpartum visits at least 4 times.

The coverage indicator for postpartum services (KF) obtained a cumulative result of 87.51%, compared to the November target of 91.69%, meaning that the achievement of the indicator for delivery visits by health workers in Sukamaju Village is still below the target for achieving LAM-MCH indicators, and there is a gap of 4.16%. This is because there are several postpartum mothers who have not yet made it to the 4th postpartum visit. As it is known that postpartum visits are carried out 4 times with time provisions, namely: the first postpartum visit in the period of 6 hours to 3 days after delivery, the second postpartum visit in the day the 4th to the 7th day after delivery and the third postpartum visit within the 8th to the 28th day after delivery. And the 4th postpartum visit from the 29th to the 42nd day after delivery. Postpartum visits to postpartum mothers can be carried out in two ways, namely postpartum mothers visiting village midwife health facilities, or village health workers/midwives conducting home visits. During this postpartum visit, more village midwives made home visits than postpartum mothers who visited health facilities. This was also conveyed by (Tri Pinaringsih, E Riyanti, 2017) in his journal entitled Factors Associated with Postpartum Mothers' Visits to Services in the Work Area of the Tlogosari Kulon Health Center, Semarang City, which stated that 34.4% of respondents did not intend to carry out another postpartum visit to health services. Based on the evaluation, it was found that the reasons for the non-achievement of the indicators for postpartum visits include a lack of public awareness, which affects people's knowledge about the importance of postnatal checks, and the existence of limitations in the community's economy to go to the nearest health facility or puskesmas.

Early detection of obstetric risk factors and complications

Early detection of pregnancy with risk factors is an activity carried out to find pregnant women who have risk factors and obstetric complications. Pregnancy is a normal reproductive process, but there is still a risk of complications. Therefore, early detection by health workers and the community about the presence of risk factors and complications, as well as adequate treatment as early as possible, is the key to success in reducing maternal and infant mortality.

The indicator for Handling Obstetric Complications obtained a cumulative result of 26.66%, compared to the November target of 91.69%, meaning that the achievement of the Indicator for Handling Obstetric Complications in Sukamaju Village was still below the target for achieving the LAM-MCH indicator. Lack of knowledge of mothers in recognizing complications in pregnant women and childbirth. By providing knowledge to pregnant women about danger signs in pregnancy and childbirth. Informing mothers about the importance of health services during pregnancy and delivery can prevent complications. This is in line with the results of the study (Siti Khadijah, 2018) in his Jurnal on Efforts for Early Detection of High Risk Pregnancy determined by Knowledge and Support of Staff, which states that Analysis of the closeness of the relationship, respondents who have high knowledge have the opportunity to carry out early detection of high risk of pregnancy 8 times compared to respondents who have low knowledge.

Conclusion

The coverage indicator for K1 visits was 87.08%, the coverage indicator for K4 visits was 78.20%, the coverage indicator for delivery by health personnel was 87.51%, the coverage indicator for postpartum visits was 87.51%, the indicator coverage for detection was achieved early obstetric risk factors and complications by health workers and the public by 26.66%

References

1. Harnaningrum, L., D. (2014). *Sistem Informasi Bergerak Untuk Peningkatan pelayanan Kesehatan Bagi Bidan Desa*.
2. Meilani, N. dkk. (2009). *Kebidanan Komunitas*. Fitramaya.
3. Nurbaiti, Donal N, A. S. (2020). Faktor-faktor Yang Berhubungan Dengan Kunjungan K4 Ibu Hamil di Wilayah Kerja Puskesmas Kota Kuala Simpang Kabupaten Aceh Tamiang. *Jurnal Muara Sains*, 4(1), 23–32.
4. Puskesmas Pagerageung. (2021). *Laporan Puskemas Pagerageung*.
5. RI, Dinas Kesehatan. (2010). *Pedoman PWS-KIA*.
6. Siti Khadijah, A. (2018). *Upaya Deteksi Dini Risiko Tinggi Kehamilan ditentukan Oleh Pengetahuan dan Dukungan Tenaga Kesehatan*.
7. Tri Pinaringsih, E Riyanti, A. K. (2017). Faktor-faktor yang Berhubungan dengan Kunjungan Ibu Nifas ke Pelayanan Kesehatan Di Wiayah Kerja Puskesmas Tlogosari Kulon Kota Semarang. *Jurnal Kesmas*, 5(3).
8. WHO. (2019). *Maternal Mortality*.