

## **MATERNAL EMERGENCY REFERRAL CASES THROUGH SIRESIK CALL CENTER DATA**

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### **Abstract**

The government's efforts in reducing maternal and infant mortality by utilizing technological advances to allow users to communicate more quickly, effectively, and efficiently, Tasikmalaya Regency launched an Effective Referral Information System program to Save Mothers and Families called SI RESIK. But in fact, maternal emergency cases are still late to be handled, the cause is incomplete data during making referrals. Incomplete data will affect the potential fatality and access to advanced health facilities (FKTL). The purpose is to provide information related to the data in SIRESIK to describe the emergency referral situation in Tasikmalaya Regency which can be followed up for improvement of emergency case referral services to reduce maternal and infant mortality. Quantitative description research methods with quantitative data collected through SI RESIK call centers from January-December 2019 include variabel referral cases, referral hospitals, blood types, time response, funds guarantee. The data was analyzed using frequency distribution. The results of the most referral cases of maternity mothers (59.39%), the most referral hospitals SMC Hospital (64.18%), blood type unknown (62.87%), and response time 5-10 minutes (78.18%), guaranteed funds recipients (42.18%). Many emergency cases were not handled quickly because they have to complete the data to meet the requirements for case referral to advanced facilities.

**Keywords:** SI RESIK Call center, emergency, maternal, referral.

## **INTRODUCTION**

Maternal Mortality Rate (MMR) based on research by the Indonesian Demographic and Health Survey (SDKI) in 2012, data on the incidence of maternal death of 19 per 1,000 live births, this contributes 59% of infant mortality. The results of the inter-census population survey (SUPAS) in 2015, that the number of infant mortality as many as 22.23 per 1,000 live births, this is in accordance with the Millennium Development Goals (MDGs) target of 23 per live birth AKB is the number of infant deaths in the age range of the first 0-11 months of life (Ministry of Health, 2017). The causes of maternal death, one of which is the factor of '3 Late' and '4 Too'. '3 Late' cases include late recognizing the red flags of childbirth and making decisions; late reference; and late handling by health workers in health facilities.

Various efforts have been made by the government to reduce MMR, including the gold program which is a collaboration between the Ministry of Health of the Republic of Indonesia and USAID, JHPIEGO, Save the Children, Research Triangle International, Muhammadiyah, and Budi Kamuliaan Hospital, which lasted for five years with the period 2012-2016. The gold program focuses activities on 3 components, namely improving clinical services, increasing the effectiveness and efficiency of the referral system. Si jari emas (The Golden Finger) is an important component in the gold program that can reduce delays in referrals.

As the implementation of Si jari emas (The Golden Finger), Tasikmalaya Regency launched the Effective Referral Information System program to Save Mothers and Families called SI RESIK. SI RESIK is a breakthrough service in Tasikmalaya Regency as the IT-based health sector that can be used by people who need help by texting or phone call to an existing number, and can be reached 24/7. This system was launched considering the high maternal and infant mortality rate in Tasikmalaya Regency, so this service is very strategic in answering a health problem, especially in controlling the number of maternal and infant deaths and improving services, especially in the referral system.

## **METHODS**

A quantitative research approach used by researchers in this study. The population and samples were taken from quantitative data obtained from the SI RESIK call center from January until December 2019, as many as 5762 data. The research implemented in Tasikmalaya Regency starting from August 2020 until February 2021. The data processing through editing, cleaning and analysed by using frequency distribution.

**RESULT**

1. Distribution of referral cases via siresik call center. 3 highest referral cases during the period January until December 2019.

**Table 1 Distribution of Referral Cases via Siresik Call Center.**

KATEGORI	Frequency	Percent
Pregnant Women	1564	27.11%
Maternity Women	3420	59.39%
Parturition Women	367	6.37%
Others	411	7.13%
Total	5762	100.00%

Table 1 shows that the 3 most referral cases during January until December 2019 were maternity mothers (59%), and the smallest amount is parturition women (7%).

2. Distribution of Referral Hospitals via Siresik Call Center. Referral hospitals from January until December 2019 are as follows:

**Table 2 Distribution of Referral Case Referral Hospitals via SIRESIK Call Center**

Refferal Hospitals	Frequency	Percent
RS Dr. Soekardjo	1040	24.46%
RSUD SMC	2729	64.18%
RS Syifa Medina	97	2.28%
RSIA Respati	147	3.46%
Total	4252	100.00%

Table 2 shows that the most referral hospitals is SMC Hospital Tasikmalaya regency (64.18%).

3. Distribution of Blood Type of Referral Cases via SIRESIK Call Center. Blood types in referral cases during January until December 2019 are as follows;

**Table 3 Distribution of blood types via SIRESIK Call Center**

Blood Types	Frequency	Percent
A	569	9.92%
B	616	10.74%
AB	210	3.66%
O	736	12.83%
Unchekek	3631	62.87%
Total	5762	100.00%

Table 3 shows that the most blood type data via SIRESIK Call Center has not been checked (63%).

- Distribution of Response Time for referral cases via siresik call center. The response time required when the patient is referred to in the emergency room is as follows:

**Table 4 Distribution of Response Time of referral cases via SIRESIK Call Center**

<b>RESPON TIME</b>	<b>Frequency</b>	<b>Percent</b>
<5 Menit	1182	20.55%
5-10 Menit	4507	78.18%
>10 Menit	73	1.27%
Total	5762	100.00%

Table 4 shows that the response time when referring in the emergency room is 5-10 minutes (78%).

- Distribution of Health Insurance for referral cases via the SIRESIK Call Center. Health insurance when referred to through the SIRESIK call center as follows Health insurance when referred to through the SIRESIK call center as follows;

**Table 5 Distribution of Health Insurance for referral cases via SIRESIK Call Center.**

<b>Health Insurance</b>	<b>Frequency</b>	<b>Percent</b>
Umum	985	17.01%
Non PBI	644	11.21%
PBI	2433	42.18%
Jamkesda	30	0.52%
Jampersal	1654	28.80%
Asuransi Swasta	15	0.26%
Lain – lain	1	0.02%
Total	5762	100.00%

Table 5 shows that the health insurance at the time of referral is the most recipients of Contribution Assistance (42%).

## **DISCUSSION**

Obstetric emergencies are the leading cause of maternal and perinatal death. Obstetric emergency risk factors in obstetric emergencies in Obstetric Emergencies (AGDO) are related to the implementation of referrals and the increase in risk factors for obstetric emergencies will increase the implementation of referrals (Laili, Garna, Husin et al, 2015).

One of the cause of delays in handling maternal emergency cases is an incomplete data in referral system that affect the potential for fatalities and access to further health facilities in hospitals. The results showed that the most referred cases were maternity mothers, namely 59.39% with cases of preeclampsia and PEB. Preeclampsia and PEB during pregnancy will have an impact at the time of delivery including bleeding and other complications or disabilities to the baby and eventually causing death.

In line with Diflayzer, Syahredi S.A ,& Eka Nofita (2017) that the most high-risk and slow-referenced pregnancy cases are still high, namely preeclampsia. In addition, there is also a lack of understanding of mothers and families about the dangers of pregnancy.

As a result of the study, the most data on emergency cases via SIRESIK Call Center is the age of pregnant women who are at less risk than those who are not at risk between the ages of 25-30 years. However, even though not at risk, blood pressure has to be controlled during pregnancy by always visiting the ANC. According to Haryani, Maroef, Adilla (2013) that in the age group of > 35 years, the most were diagnosed with preeclampsia / eclampsia.

The hospital that became the most referrals was SMC in Tasikmalaya Regency, as many as 64.18%. This is because it is the regional hospital in Tasikmalaya Regency besides being close is also a referral for all cases in the district although there are some that are referred to Tasikmalaya City because the patient's area is close to the border of the area. The results of the study also obtained blood type from the referred cases as many as 62.87% did not know the blood type. This will hinder when a referral is made and usually the hospital will refuse because of the incomplete data submitted by SIRESIK officer because of the fear that the patient needs this transfusion will wait a long time because they have to be checked for blood type first in the treatment that should be handled quickly. In line with the research of Dhanik Dwi, (2018) that blood type examination is necessary for blood type competence that requires the action of a baby and for mothers if they need blood transfusions.

The results of the study obtained the response time needed for patients to get help when they entered the emergency room, 5-10 minutes as much as 78.18%. This shows that there is a long time for handling emergency cases when it comes to the emergency room which should be according to UU No.4 of 2009 the preparedness of the medical team in accordance with the standard time needed to provide treatment to pregnant women in the emergency room is about  $\leq 5$  minutes (Tirtaningrum, DA, Sriyatmi, A, 2018). Response time in the implementation of referrals that tend to be slow is feared to have the potential to endanger the safety of the mother. The causes of late response time in hospitals according to Fadilah (2017), include lack of human resources and lack of facilities and infrastructure. The addition of human resources in service units in need, the separation of emergency and elective operating rooms, and the on-site care of operating room officers, specialist doctors can be considered to speed up the response time.

The results of the study obtained health insurance data used from referral cases via siresic call centers, mostly using the Contribution Assistance Guarantor (PBI) as much as 65.34% using services or utilizing health facilities provided by the government for the poor. In fact, there are still those who are not in accordance with government regulations, the middle class also enjoys it even though there are still poor people who do not have this health insurance. The

obscurity of the health insurance becomes an obstacle because there are some hospitals that refuse if there is some unclear insurance guarantee, although there is usually also a reason to refuse because of the full bed capacity. Cases of maternal emergency in pregnant women experience delays in treatment because health insurance is unclear. According to Putri H, Mohammad H, & Mora C. (2017), that the high referral of BPJS patients will have an impact on increasing the use of advanced service facilities, then as a result there will be an overrun in the cost of health services in advanced health facilities.

## CONCLUSION

Cases of maternal emergency referral via SIRESIK Call Center in Tasikmalaya Regency. The most referral cases for maternity mothers were 59.39%, the most referral hospitals is SMC Tasikmalaya regency as much as 64.18%, there is still incomplete blood type data because it has not been checked as much as 59.93%, response time when arriving at the emergency room 5-10 minutes as much as 78.18% and the most health insurance recipients of contribution assistance 42.18%.

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