

# SAN PIISAN

O U T R E A C H M A T E R I A L

# **Outreach Service for Maternal Care and Stunted Children in Semarang City**

# SANPIISAN

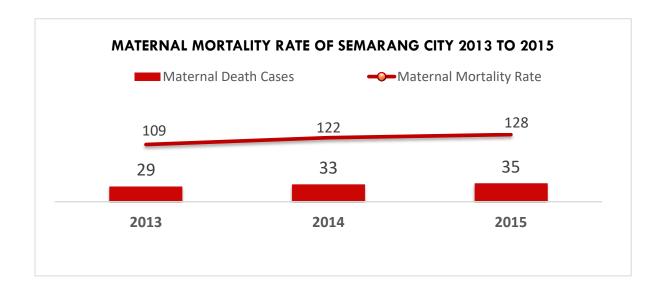
Maternal and child health services (MCH) programs are one of the main priorities of health development and a national issue because it determines the quality of human resources (HR) in the next generation. This programme is responsible for health services for pregnant women, mothers giving birth and neonates. Maternal mortality is the death of a woman during pregnancy, childbirth and within 42 days (6 weeks) after the end of pregnancy regardless of gestational age or fetal attachment but not caused by accident/injury.

In 2000, the Millennium Development Goals (MDGs) were launched, with a target to reduce maternal mortality by 75% by 2015 from 1990 levels. However, the target has not been achieved by developing countries, so it must be continued in the Sustainable Development Goals (SDGs). In this case, Indonesia must achieve a MMR of 70 per 100,000 live births by 2030. However, until 2015, the maternal mortality rate (MMR) in Indonesia was still high at 305 per 100,0000 live births. Efforts are still needed to accelerate the reduction of maternal mortality so that the target can be achieved in accordance with the Sustainable Development Goals (SDG's) by 2030, namely reducing maternal mortality to below 70 per 100,000 live births.

Indonesia still faces several challenges, including access, quality and inequity of maternal and neonatal health care. Disparities in the coverage of various services, particularly in the assistance provided during childbirth at health facilities, show that certain groups of the population, such as the poor, those living in rural areas and those with low levels of education, face barriers in accessing and being reached by maternal health services. As an archipelago with a large population, Indonesia is in dire need of access and availability of communications and adequate infrastructure.

Semarang is the capital city of Central Java province, Indonesia. It is the fifth largest

metropolitan city in Indonesia after Jakarta, Surabaya, Bandung, and Medan. As one of the developing cities in Java, Semarang city has a population of 1,693,035 people. 35,068 people are pregnant women, 65% of them were at high risk pregnancy. This condition can lead to maternal death. The maternal mortality rate fluctuates every year. The Maternal Mortality Rate (MMR) in Semarang City from 2013 to 2015 increased from 107.95/100,000 live births in 2014 and increased to 128.05/100,000 live births in 2015 and became the second highest rank in Central Java.



The highest causes of maternal mortality in 2015 in Semarang City were eclampsia, haemorrhage and disease. Meanwhile, the indirect causes of maternal mortality were due to lack of information on socio-economic, poverty, education, the position of women's role in society, social, cultural and access that affected 3 Too Late such as Too late to recognise danger signs/risks and make decisions, too late to reach health care facilities, too late to get help at health services. And 4 Too namely too young to have children (less than 20 years old), too many births (more than 3 children), too close birth interval (less than 2 years), and too old (more than 35 years old).

The severity of the mother's health problems affects the baby's condition, making it a priority issue that must be resolved. Based on the results of the Maternal Perinatal Audit (AMP) study by the team, the causes of MMR in Semarang City are as follows:

- 1. Pregnant women with 4 too (43%) and 14% too late conditions

  Non-ideal conditions cause maternal risks during pregnancy. 4 Too conditions in pregnancy
  namely too young (<19 years old), too old (>35 years old), too close (<2 years) to the previous
  pregnancy, and too frequent pregnancies. These 4 Too cases accounted for 43% of the MMR
  in Semarang City. In addition, the delay in treating pregnant and postpartum women with
  emergency conditions is also one of the causes of maternal mortality, which is 14%.
  Semarang City still has some areas that lack access to health facilities, causing delays in
  treating pregnant women with emergencies.
- 2. Low level of access to health services by the general public

  The lack of sensitivity of pregnant women to seek early antenatal care to health facilities is
  the cause of low access to health in the community. The reluctance of mothers to seek early
  antenatal care is based on several factors such as the lack of knowledge and awareness of
  mothers in being aware of pregnancy, limited time for working pregnant women, then
  economic conditions also affect this situation

- 3. Deliveries assisted by health workers 80% (155 cases of women assisted by traditional birth attendants)
- 4. Working pregnant women who have attended ANC (53%)
- 5. Low data accuracy (data duplication, not up-to-date, long verification time due to manual data entry)

The high maternal mortality rate shows that there is an urgent need to improve maternal and child health (MCH) services, both in terms of coverage and quality of services. Therefore, the community, together with the Semarang City Government, is striving to reduce maternal mortality rate by providing equal and equitable access to health services to the entire community, especially pregnant women, lactating mothers, newborns and infants through the Outreach Service for Maternal Care and Stunted Children (SANPIISAN).

SANPIISAN was initiated in 2015 as an innovative health service programme to address maternal and child health issues, with the aim of preventing maternal and child deaths adequately and quickly. It is important to ensure that the programme is appropriate, responsive and effective in achieving its objectives. For this reason, planning analysis is carried out to ensure that the programme meets the needs. SANPIISAN's planning analysis uses Gender Path Analysis, which is a tool or method used to analyse the impact and implications of gender differences in an initiative, policy or programme.

# **GENDER ANALYSIS PATHWAY (GAP) MATRIX SANPIISAN**

REGIONAL WORKING UNIT : Semarang City Health Office
PROGRAMME : Fulfilment of Individual Health Efforts and Public Health Efforts Programme
ACTIVITES : Provision of health services for communities and individuals at the regional level of Semarang City
SUB- ACTIVITES : Management of maternal health services

| Step 1  | Step 2  | Step 3  | Step 4                                       | Step 5  | Step 6   | Step 7   | Step 8  | Step 9   |
|---|---|---|--|---|--|--|---|--|
| Name of   |   | GENDER ISSUES   |  |   | FUTURE POLICIES AND PLANS  |  | OUTCOME MEASUREMENT   |  |
| Policy/Progra<br>mme/Activity   | Insight opening<br>data   | Gap Factors   | Causes of<br>Internal Gaps                   | Causes of External<br>Gaps  | Reformulatio<br>n of<br>Objectives                                     | Plan of Action   | Database<br>(Base-Line)   | Performance Indicators   |
| Programme: Fulfilment of Individual Health Efforts and Public Health Efforts Programme  Activity: Provision of Health Services for Individuals and Public Health Efforts  Sub-activity: Management of Maternal Health Services  Objective: All pregnant and postpartum women receive standardised | Targeted Pregnant Women Year 2014 = 29.021 Year 2015 = 29.478  Number of pregnant women receiving standardised health services Year 2014 = 28.215 Year 2015 = 28.741  Maternal Mortality Rate (MMR) Year 2014 122/100,000 live births Year 2015 128/100,000 live births Infant Mortality Rate (IMR) Year 2014 9.37/1000 live births Year 2015 8.38/1000 live births | Access: Not all pregnant women receive standardised health services, some women do not give birth with the assistance of a health worker, and there is a lack of health information.  Participation: There is still a lack of husband/family and community support for pregnant women, Low community participation in maternal and children health services.  Control: Efforts to reduce maternal and infant mortality are only carried out by the Health Office. | Limited budget     Inadequate infrastructure | There is still a community stigma if death during childbirth is "JIHAD" or a religious belief that when a pregnant woman dies during childbirth, she will be rewarded with heaven. Families assume that after the baby is born, the baby and mother do not need further health services There is still a lack of role of husband/family towards the health of newborns Low family/community knowledge about health in pregnancy Pregnancy that is hidden because of pregnancy outside of marriage | Reducing<br>Maternal<br>Mortality Rate<br>and Infant<br>Mortality Rate | - Involving the community in reporting and assisting pregnant women - Improving health information, education and communication for mothers and families - Engaging community leaders and cross-sectoral stakeholders to support pregnant women - Interventions and reproductive health education for future brides and grooms - Reproductive health education and provision of blood supplement tablets for adolescents | Targeted Pregnant Women Year 2014 = 29.021 Year 2015 = 29.478  Number of pregnant women receiving standardised health services Year 2014 = 28.215 Year 2015 = 28.741  Maternal Mortality Rate (MMR) Year 2014 122/100,000 live births Year 2015 128/100,000 live births | Output: 1.100% of pregnant women screened 2.100% of pregnant women receive standardised health services 3.100% of pregnant women have an antenatal care visit 4.100% of women give birth in a health facility 5. All companies work together to ensure that female workers have access to health services. 6.100% of infants received standardised health services 7.100% of children immunised  Process: 1. Implementation of maternal assistance from pregnancy to delivery and postpartum by involving the community and cross-sectors. 2. Implementation of infant to young children assistance by involving the community and cross-sectors |

| health    | Risk Factors for                      |                  | - Lack of cross-sector | Infant Mortality | 3. Implementation of             |
|-----------|---------------------------------------|------------------|------------------------|------------------|----------------------------------|
| services. | Maternal Mortality                    | Benefits:        | support                | Rate (IMR)       | guaranteed access to             |
|           | in Semarang:                          | Not all people   |                        | Year 2014        | maternity services (RAISA)       |
|           | - Teenage                             | understand the   |                        | 9.37/1000 live   | 4. Implementation of cross-      |
|           | pregnancy                             | importance of    |                        | births           | sector partnerships through      |
|           | (pregnant women                       | pregnancy check- |                        | Year 2015        | the Healthy Women Workers        |
|           | under 20 years                        | ups              |                        | 8.38/1000 live   | Movement (GEPUK PEPES)           |
|           | old)                                  |                  |                        | births           | programme in the company         |
|           | - Geriatric                           |                  |                        |                  | 5. Development of the Healthy    |
|           | pregnancy                             |                  |                        |                  | and Productive Future Brides     |
|           | (pregnant women                       |                  |                        |                  | and Grooms Towards Ideal         |
|           | over 35 years                         |                  |                        |                  | Family programme (TUGU           |
|           | old)                                  |                  |                        |                  | MUDA)                            |
|           | - Multigravida                        |                  |                        |                  | 6. Management of health          |
|           | (pregnancy more                       |                  |                        |                  | service for pregnant women       |
|           | than 4 times)                         |                  |                        |                  | and infants with nutritional     |
|           | - Short inter-                        |                  |                        |                  | problems                         |
|           | pregnancy                             |                  |                        |                  | 7. Monitoring of infants growth  |
|           | interval                              |                  |                        |                  | and development                  |
|           | <ul> <li>Childbirth helper</li> </ul> |                  |                        |                  | Results:                         |
|           | by non-health                         |                  |                        |                  | Reduction in maternal            |
|           | workers                               |                  |                        |                  | mortality ratio from             |
|           | - Inadequate                          |                  |                        |                  | 122/100,000 to                   |
|           | antenatal care                        |                  |                        |                  | 67.25/100,000 live births        |
|           | examination                           |                  |                        |                  | 2. Reduction in infant mortality |
|           |                                       |                  |                        |                  | rate from 17.4/1000 to           |
|           |                                       |                  |                        |                  | 13/1000 live births              |
|           |                                       |                  |                        |                  | 3. Reduction in number of        |
|           |                                       |                  |                        |                  | pregnant women with              |
|           |                                       |                  |                        |                  | nutritional problems             |
|           |                                       |                  |                        |                  | 4. Reduction in number of        |
|           |                                       |                  |                        |                  | young children with stunting     |

#### **FORM OF CHANGE**

Sayangi Dampingi Ibu Anak Kota Semarang (SANPIISAN) is a solution and action of community concern for maternal and child health issues. SANPIISAN originated from community initiatives, especially women village health volunteers, which aim to improve the health of mothers, infants, and young children in Semarang City. This innovation involves the active role of the community, across programmes and sectors, and is supported by an integrated information system based on the website and Android to facilitate monitoring and reporting systems. The program has been successful in reducing maternal and infant mortality, preventing stunting, and raising public awareness of the importance of maternal and child health.

SANPIISAN starts with adolescents, bride-to-be, health services for pregnant women, laboring women, postpartum, newborns, and infants.

#### The SANPIISAN programme aims to

- 1. Reduce maternal mortality rates (MMR) and infant mortality rates (IMR).
- 2. Improve access to health services for pregnant women and children.
- 3. Prevent stunting by paying special attention to nutrition.
- 4. Raise community awareness of the importance of maternal and child health.

## **FORM OF INNOVATION**

SANPIISAN (Sayangi Dampingi Ibu dan Anak Kota Semarang) is a breakthrough in Semarang City that is implemented in a promotive, preventive, curative, and collaborative manner to ensure pregnant women to maternity have easy access to health services through community empowerment and supported by information systems.

SANPIISAN uses a continuum of care approach starting from infants, toddlers, adolescents, expectant mothers, health services for pregnant women, and laboring women to postpartum. The activities are as follows:

#### 1. Assistance for pregnant women, maternity, postpartum, and newborns

a. Reporting and data collection of pregnant women, maternity, and newborns by village health volunteers

The village health volunteers have been trained and socialized by the local public health center on maternal health so that the village health volunteers and the community know what the danger signs and emergencies are for pregnant women and postpartum women. For village health volunteers to start collecting data and reporting on pregnant women in their area according to what they have learned in the training so that pregnant women can receive maximum health services. Pregnant women in the area carry out sweeps and door-to-door data collection to record pregnant women in their area, then report and screen using the Sayang Bunda application.

Picture. Data collection and simple screening by trained village health volunteers







Activities continue until postpartum. Pregnant women with normal screening results are monitored once a month, and postpartum women and babies are monitored once a week according to the Operational Implementation Standard (SOP). This activity can accelerate the discovery of pregnant women to ensure that mothers receive services as early as possible so that they are not late for treatment.



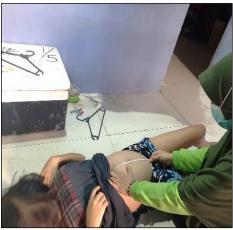


# b. Reported pregnant women, postpartum women, and newborns will be monitored through homecare by health workers.

Health workers visit the mother's home to collect data and assist the mother's health during pregnancy. Initial data collection is carried out by interviewing to obtain complete data on the characteristics of pregnant women after which the Health Officer will measure the mother's blood pressure, LILA (Upper Arm Circumference), and ask about the mother's current complaints. Officers can provide interventions in the form of health information or counseling related to the mother's current condition and provide

status on the mother whether it is normal, has 1 risk factor, high risk, or complications. The officer is also obliged to coordinate with the urban village and sub-district regarding data collection, and the presence and condition of pregnant women in the area. Officers provide assistance to postpartum women who are normal but have risk factors or complications.





Postnatal care for mothers is carried out together with care for newborns aged 0-42 days. The activities carried out in the postpartum period are asking mothers about their complaints, taking blood pressure, accompanying newborns, and counseling according to the complaints of postpartum mothers.







Data collection of pregnant women by village health volunteers and the community is also supported with technology for integrated reporting, namely Teman Bunda (Semarang City Maternal Child Health Monitoring System). The Teman Bunda application can be downloaded at Android Playstore, which has features that are useful for pregnant women and families, including requests for assistance from health workers, pregnancy calendar, health articles, requests for assistance, calling Ambulance Hebat and service information, estimated health delivery in Semarang City.

Picture. Utilisation of the Sayang Bunda app by pregnant women





This application is a data warehouse that integrates digital platforms from hospitals, health centers, and clinics, not only that, Teman Bunda is also connected to the Sayang Bunda application that already exists in the community. Data on mothers during pregnancy up to 42 days postpartum and babies born are integrated, making it easier to:

- 1. Monitoring the condition of pregnant women, especially with high-risk and anemic conditions, and examination results from health facilities.
- 2. Make it easier for officers to report data on pregnant women
- 3. As a documentation tool for the results of assistance to pregnant women,

- 4. Monitor the assistance to measure the mother's compliance
- 5. Pregnancy Consultation

# 2. Improve health education for mothers and families

One of the main tasks of the assistants and village health volunteers is to provide health counseling according to the complaints, needs, and conditions of the mother, either in pregnant women's class or at community meetings such as Family Welfare Programme, Dasawisma, recitation association.



Picture. Officers conduct counseling in pregnant women's classes





# 3. Health care services for women of reproductive age and working pregnant women in companies

This activity is in collaboration with the Association of Indonesian Companies in providing health services for pregnant women and female workers. The services provided include pregnancy check-ups, general health services, family planning services, lactation/breastfeeding corner, and reproductive health. The Health Office collaborates with several partner companies in Semarang City to provide health services for working pregnant women or GEPUK PEPES.



Picture. Monitoring and implementation of classes for pregnant women working in the Company





# 4. Efforts to treat pregnant women with malnutrition

Efforts to reduce maternal, infant, and under-five mortality from the first 1000 days of life through interventions for pregnant women with high blood pressure and anemia by providing additional food, special pregnant women's classes for high blood pressure and anemia, and intensive care. Normal pregnant women are given intervention once a month. For pregnant women with SEVERE and Anemia, the intervention is given once a week.



### 5. Free Maternal Care

The SAN PIISAN program does not only focus on pregnant women. However, mothers who are about to give birth also get access to health facilities with the RAISA program (Rawat Ibu Bersalin Gratis) which aims to reduce delays in getting delivery assistance with free shuttle, free delivery, free hospitalization, and free laundry. The assistant also provides assistance when there is a referral.

Picture. Officers assist in referring high-risk pregnant women to hospital with the Great Ambulance





## 6. Preparation for a Healthy Pregnancy for Brides-to-be





Every prospective couple is required to attend education on reproductive health, family planning, protection of women and children, and marriage. The Tugu Muda program is a collaboration between the Semarang City Health Office, Religious Affairs Office, Women and Children Empowerment Office, Population Control and Family Planning Office, and Family Welfare Program Semarang City. This activity is carried out in each sub-district and each bride-tobe is entitled to a certificate after participating in the Tugu Muda activity as a requirement for marriage. In addition, there is assistance for prospective brides at risk, carried out 3 months before marriage to ensure eligibility for pregnancy. Assistance is carried out by village

health volunteers and health workers. The assistance carried out is:

- 1. Health checks including blood pressure checks, laboratory clinic checks
- 2. Health Referral Eligibility Screening

# 7. Monitoring and Intervention Through Early Screening of Toddlers' Health

Monitoring and Intervention through Early Screening of Toddler Health is a comprehensive and children-quality development program through stimulation, detection, and early intervention of developmental deviations in children aged 0-5 years and 60-72 months. Semarang City's Early Child Health Screening has involved Pediatricians. The service is conducted at a public health center, nursery school/kindergarten.





#### 8. Mother of Toddler Class

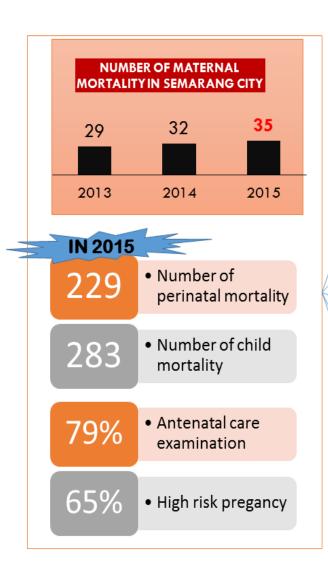
Implementation of classes for mothers of toddlers aged 0-5 years under the guidance of facilitators and using the Mother Child Health book, providing health education and supplementary feeding for toddlers.





SAN PIISAN has proven to be one of the strategic efforts that effectively reduced the maternal mortality rate in Semarang City from 128 in 2015 to 71 in 2020 per 100,000 live births. The implementation of SANPIISAN in 2021 is expected to increase the active role of the community in preventing maternal mortality so that the community is able to empower their reproductive health in breaking the chain of causes of maternal mortality.

### MAP THAT BEST ILLUSTRATES THE PHYSICAL CONTEXT OF THE INITIATIVE



#### **RISK FACTOR**

- 65% High risk pregnancy
- • Teenage pregnancy (pregnant women under 20 years old): 3%
- Geriatric pregnancy (pregnant women over 35 years old): 64%

#### Health Service

- Inadequate health service access
- Childbirth helper by non-health workers
- Inadequate antenatal care examination

#### Health information and technology

- Maternal health data collected manually and has a risk of duplicate data and nonintregated data
- · Delayed of data report

#### **SOCIAL**

- Poor knowledge related to MCH services
- Poor community participation in healthrelated community activities

#### ECONOMY

health insurance unequally distributed

# **SAN PIISAN**

- Data collection, reporting, and health screening of pregnant women, postpartum women, infants and toddlers by village health volunteers (kader)
- 2. Assistance for pregnant women, postpartum and toddlers by health workers with the community
- 3. Health education through counseling, classes for pregnant women, classes for mothers of toddlers
- 4. Women's health services at workplace
- 5. Free delivery services and health insurance through the "RAISA" program
- 6. Provision of additional food for pregnant women, infants and toddlers
- 7. Referral for mothers with emergency conditions
- 8. Integrated single data reporting

#### **PROGRAMME RESOURCES**

The SAN PIISAN innovation program has 4M resources for carrying out its activities. These are:

1. Man: The MANs referred to here are the people involved in the SAN PIISAN innovation in Semarang City. Namely, there is 1 village health volunteer in each village with a total of 177 village health volunteers in Semarang City, the chairperson of the sub-district PKK Movement Team with 16 people, Maternal and Child Health Surveillance Officers (Gasurkes KIA) with 37 people in 37 Puskesmas in Semarang City, Midwives of Puskesmas in Semarang City of 104 people, professional organizations in Semarang City (IDI, IBI, POGI, IDAI, PERBOI), 27 hospitals in Semarang City, 5 companies in Semarang City (PT. SAMA, PT. PANTJA KARYA) and educational institutions.

#### 2. Money:

Budget support to accelerate the reduction of the Maternal Mortality Rate in Semarang City has been ongoing since 2015 until now. This support comes from APBD II funds, training and socialization from DAK and CSR involvement, and self-help from the community.

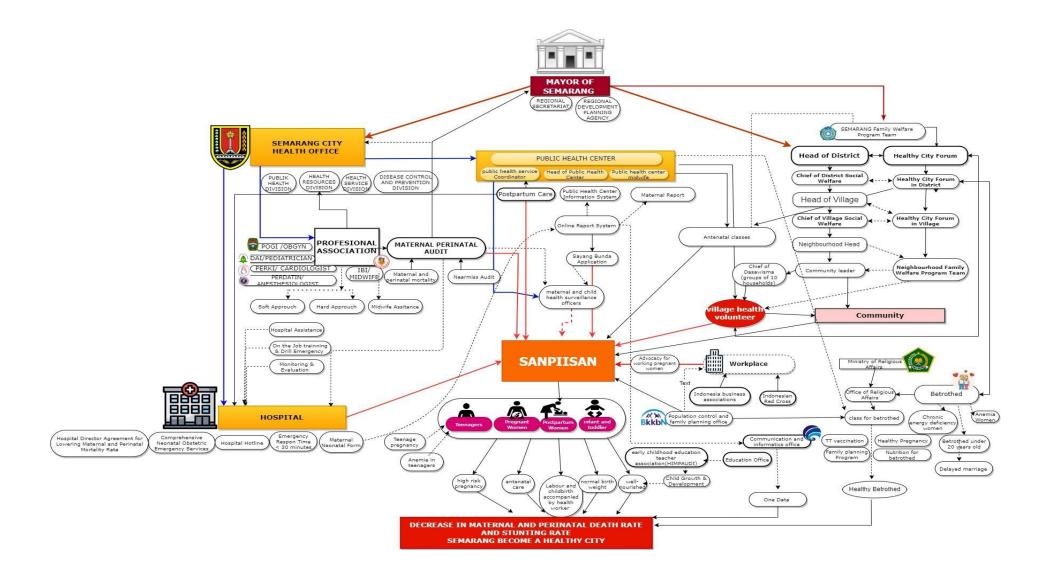
#### 3. Machine:

The material resources in the SAN PIISAN innovation are the first server for the data integration process of pregnant women, application support for data collection and homecare interventions for pregnant women, smartphones and computers for communication and processing the results of data collection and intervention in pregnant women.

#### 4. Methode:

The motto or strategy in implementing SAN PIISAN activities begins with advocacy between the community/health cadres with local stakeholders and midwives or health workers in the public health center area. After data on pregnant women is obtained, homecare interventions are carried out for pregnant women at home and interventions in companies for working mothers with the GEPUK PEPES program are carried out by village health volunteers and accompanied by health workers using the Sayang Bunda application. And RAISA services for pregnant women who will give birth.

# **CROSS-SECTOR ENGAGEMENT**



## **Monitoring and Evaluation**

Monitoring and evaluation are initially conducted internally by the public health center once a month, with all midwives, nutrition officers, health promotion officers, epidemiologists, IT, doctors, and village health volunteers. The results of the internal evaluation were then brought to the sub-district cross-sectoral level. The sub-district cross-sectoral evaluation is conducted every month, involving the village head, steering team for family welfare program, Commander of a Military District Command, Head of Police District, village health volunteers forum, Sub-district Family Planning Field Officer, public health center and all local government organisation. The evaluation discusses all developments and obstacles in the field, as well as solutions. The results are brought for evaluation at the city level.

The results of monitoring and evaluation that have been carried out both internally and with cross-sectors, are discussed at the city level. Implementation of evaluation in the city is twice a year. This activity is in the form of reporting from the field team and the results of activities during the month including monitoring and evaluating successes and obstacles. The

following are some of the SAN PIISAN program indicators that are monitored and evaluated:

- Number of pregnant women postpartum-babies monitored
- 2. Percentage of high-risk pregnant women
- 3. Percentage of maternal visits to health centers
- 4. Speed of reporting
- 5. Sayang Bunda App downloaders
- 6. Number of maternal and infant deaths each year





#### **OUTCOMES AND BENEFITS OF INNOVATION**

The results of the SANPIISAN program are significant. Since the start of the SAN PIISAN innovation, it has proven to be one of the strategic efforts that effectively reduce the MMR in Semarang City. With integrated data collection, pregnant women can be reached to get maximum health service facilities. In addition, the information and reporting system is more accessible and effective regarding the condition of pregnant women and postpartum women in an area.

The main benefit of the SAN PIISAN program is a significant reduction in maternal mortality from 128/100,000 KH in 2015 to 71/100,000 KH in 2020. This is because many pregnant women have been monitored by health workers. Another benefit that can be felt is the empowerment of the community in monitoring pregnant women and postpartum women in the vicinity. Collaboration between health workers and the community is very good. Plus support from local stakeholders in carrying out homecare monitoring activities.

With the existence of SAN PIISAN, data on pregnant women is more complete, and assistance in emergencies for pregnant women and postpartum women is faster and more integrated. In 2021, it is hoped that it can increase the active role of the community to jointly prevent maternal deaths amid the Pandemic so that the community is able to break the chain of causes of maternal deaths.

The innovation of SAN PIISAN in Semarang City not only aims to reduce maternal mortality but also to increase the active role of the community in detecting emergencies in pregnant women in their neighborhood.

Table: San Piisan Innovation Results

| Indicators                                      | Before (2015)   | After (2020)  | Follow-up  |  |  |
|---|---|---|--|--|--|
| Maternal Mortality Rate                         | 128/100.000<br>live births  | 71/100.000 live births  | Increasing husband's role involvement  |  |  |
| Child Mortality Rate                            | 8.38/1000 live births   | 6.9/1000 live births (achieved the target of less than 12/1000KH)   | Monitoring and evaluation of health services for infants under five years old      |  |  |
| High risk pregnancy                             | 43%   | Decreased to 13%  | Improving family planning counselling  |  |  |
| Antenatal Care visit                            | first antenatal<br>care visit: 79%,<br>fourth antenatal<br>care visit: 69%  | first antenatal care visit: 100%, fourth antenatal care visit: 100% | Assessing and monitoring the quality of services to maintain 100% antenatal visits |  |  |
| Antenatal care visits by pregnant working women | 53%   | 100%  | Improving Cooperation with Companies   |  |  |
| Childbirth assisted by a health worker          | 155 women give<br>birth with the<br>assistance of a<br>non-health<br>worker | 100% women give birth with the assistance of a health worker        | Integrated referral health<br>service  |  |  |
| Time speed of reporting                         | Maximum 1 month   | Realtime reported, integrated                                       | Monitoring and evaluation of data-quality  |  |  |
| Accessibility of access                         | Difficult, face-to-<br>face   | Sayang-bunda App telemedicine facility                              | Monitoring and evaluation of application development                               |  |  |

# Sanpiisan has also contributed to the achievement of the SDG's:

Table. SANPIISAN's Contribution to the Achievement of SDG's

| Poin<br>SDG's           | Indicators  | Target SDG's  | Baseline                                      | Year | Semarang City<br>Achievement  | Central Java Province<br>Achievement              | National Achievement                        |  |
|-------------------------|---|---|---|------|---|---|---|--|
| SDGs Goal               | 3: Good Health and Well-being   |   |   |      |   |   |   |  |
|                         | Maternal mortality rate (MMR) (Number of maternal deaths / number of live births in the same year*) 100.000 Life birth) | <b>By 2030,</b> Reduce MMR<br>to < 70 per 100,000 live<br>births  | <b>305/ 100.000KH</b> (SUPAS, 2015)           | 2015 | 128/100.000 Live birth  | 111.16/100.000 Live birth                         | 305/100.00 Live birth                       |  |
| 3.1.1                   |   |   |   | 2016 | 121/100.000 Live birth  | 109.65/100.000 Live birth                         | 100.9/100.000 Live birth                    |  |
|                         |   |   |   | 2017 | 88.3/100.000 Live birth   | 88.58/100.000 Live birth                          | 177/100.000 Live birth (Supas 2017)         |  |
|                         |   |   |   | 2018 | 75.8/100.000 Live birth   | 78.6/100.000 Live birth                           | 87/100.000 Live birth (Health profile 2019) |  |
|                         |   |   |   | 2019 | 75.1/100.000 Live birth   | 76.9/100.000 Live birth                           | 88/100.000 Live birth (Health profile 2019) |  |
|                         |   |   |   | 2020 | 71.3/100.000 Live birth   | 98.6/100.000 Live birth<br>(Health handbook 2020) |   |  |
| 3.1.2 and<br>3.1.2. (a) |   | <b>By 2030,</b> Ensure women have access to childbirth at Health Facilities to reduce Maternal Mortality  |   | 2015 | 87,53 %   | 98,09 %   | 80,01 %                                     |  |
|                         | Percentage of women aged 15-49 years  |   | 87.53%<br>(Target<br>100%)                    | 2016 | 97,58 %   | 98 %  | 80,61 %                                     |  |
|                         | giving birth assisted by a skilled birth attendant and in a health facility   |   |   | 2017 | 99,98 %   | 99 %  | 91 %  |  |
|                         |   |   |   | 2018 | 100 %   | 99,30 %   | 86,28 %                                     |  |
|                         |   |   |   | 2019 | 100 %   | 99,41 %   | 88,75 %                                     |  |
|                         |   |   |   | 2020 | 100 %   |   |   |  |
|                         | Infant Mortality Rate (IMR)   | <b>By 2030</b> , End<br>preventable newborn<br>deaths to 12 per 1,000<br>Life Birth   | 22,23/1.000<br>Life Birth<br>(SUPAS,<br>2015) | 2015 | 8,38/1.000 Live birth   | 10/1.000 Live birth                               | 22,23/1.000 Live birth                      |  |
|                         |   |   |   | 2016 | 7,63/1.000 Live birth   | 9,99/1.000 Live birth                             | 25,5/1.000 Live birth                       |  |
| 3.2                     | (Number of infant deaths / Number of  |   |   | 2017 | 7,56/1.000 Live birth   | 8,93/1.000 Live birth                             | 24/1.000 Live birth                         |  |
| 3.2                     | live births in the same year *1000 Life   |   |   | 2018 | 6,38/1.000 Live birth   | 8,36/1.000 Live birth                             | 21,86/1.000 Live birth                      |  |
|                         | Birth)  |   |   | 2019 | 6,15/1.000 Live birth   | 8,2/1.000 Live birth                              | 21,12/1.000 Live birth                      |  |
|                         |   |   |   | 2020 | 6,09/1.000 Live birth   |   |   |  |
| Target 5: L             | End Poverty in All Its Forms Everywhere   |   |   |      |   |   |   |  |
|                         |   | Availability of laws or government regulations that guarantee women to get services, information and education related to sexual and reproductive health. |   |      | Local regulation of Semarang City:  |   |   |  |
| 5.6.2                   | Ensure universal access to sexual and   |   |   |      | 1. Semarang City's local regulation on maternal and child safety No.2 Year 2015 |   |   |  |
|                         | reproductive health, and reproductive   |   |   |      | 2.mayor's regulation on breastfeeding No.7 of 2013                              |   |   |  |
|                         | rights as agreed.   |   |   |      | 3. mayor regulation no 14 year 2013 regional budget plan for Accelerating the   |   |   |  |
|                         |   |   |   |      | Achievement of Millennium Development Goals Targets of Semarang City            |   |   |  |

#### CASE EXAMPLES OF INNOVATION OUTCOMES AND BENEFITS

In March 2021, there was a pregnant woman with an emergency condition in Sampangan Village, Gajah Mungkur District, Semarang City. Mrs. A is a high-risk pregnant woman. Mrs. A is at high risk because after surgery to remove the ovarian tumour located on the right. Previously, the mother did not know that she was pregnant, but when she was examined it turned out that the mother was declared pregnant by the doctor with a gestational age of about 8 weeks.



In the beginning, Mrs A suddenly felt severe pain in her abdomen. The incident was first noticed by Mrs A's mother and then reported to the surrounding community. The pregnant woman lived in the same house with only vulnerable family members and it was difficult to help her.

Because the surrounding community, especially village health volunteers, had been socialized about emergency conditions in pregnant women, when they found out about the incident, the village health volunteers contacted health workers at the nearest public health center, as well as



contacting stakeholders in the area such as the head of neighberhood, head of village and Territorial defence management. The mother was immediately taken to the hospital for further treatment.

#### CHALLENGES ENCOUNTERED

In the implementation of the activities of SAN PIISAN, there are several obstacles experienced both from the human resources and the technical point of view.

First, there are difficulties for officers in using the application in the data collection and reporting system. Some officers, although they already have smartphones, are still not using the application optimally. This obstacle was resolved by training and re-strengthening the use of the application. In addition, a WhatsApp group was also formed as a means of consultation if there were application problems.

Secondly, some areas cannot access the internet. Therefore, some pregnant women were not reported in real-time during homecare. To overcome this, officers recorded the results of homecare monitoring by writing in their daily notebooks. After completing monitoring and leaving the area, the officer immediately uploads the monitoring results that have been written in the book.

Third, the condition of the COVID-19 Pandemic which is currently being



experienced not only in Indonesia but also throughout the world. This condition was initially a challenge faced in carrying out SAN PIISAN activities because the implementation of lockdowns in each region and restrictions on outside activities made it difficult for health workers to obtain data on pregnant women and had difficulty performing homecare interventions on pregnant women. However, this obstacle can be overcome by using the Sayang Bunda application for data collection and monitoring pregnant women through the chat feature on the application. In carrying out homecare interventions, health workers and cadres and stakeholders use Personal Protective Equipment (PPE) in the form of masks and faceshields and apply physical distancing in interacting. So that they can protect each other from COVID-19.

# SUSTAINABILITY AND REPLICATION OPPORTUNITIES

SAN PIISAN's innovation in the implementation of its activities is a system that integrates the relationship between the community, pregnant women, and families. All three parties need to understand the purpose of data collection and monitoring during pregnancy.

In addition to the three parties mentioned above, the government also supports providing health insurance for the treatment of pregnant women in emergencies and during childbirth. The legal basis for this innovation is the Regional Regulation No. 2/2015 on Maternal and Child Health. The involvement of hospitals through MoUs and agreements with family welfare programs in Semarang City also strengthens the sustainability of this innovation. To maintain the involvement of village health volunteers in this activity, the Health Office and public health center organize monitoring and evaluation activities and capacity-building meetings for village health volunteers every year.

From a social perspective, the innovation is sustainable because it is designed to meet the needs, characteristics, and socio-economic conditions of Semarang City. The innovation is not only accessible to health workers but also to pregnant women, as village health volunteers in each neighborhood are tasked with collecting data on pregnant women in their neighborhood and reporting it to health workers. Pregnant women themselves can also self-report to village health volunteers that they are pregnant and can receive health monitoring.

Currently, not only in Indonesia but also throughout the world is experiencing the COVID-19 pandemic period resulting in limitations in interacting with other people. However, SAN PIISAN activities can continue even during the Covid-19 Pandemic, both from the data collection system using the application and in carrying out homecare interventions for pregnant women by continuing to apply health protocols, namely using Personal Protective Equipment (PPE) at least masks and faceshields, maintaining distance from each other, and always washing hands after completing activities. So that pregnant women in each region can continue to be recorded and monitored by health workers, village health volunteers, and stakeholders and continue to receive health services according to the needs of the mother.

The SAN PIISAN program in implementing its activities relies on intense communication and high community awareness, this initiative is very easy to adapt and implement by other regions by empowering the community through the Family Health Forum and cross-sector collaboration to work together in collecting data and monitoring pregnant women in their area.

# **Lessons from Innovation**

Healthy and empowered pregnant women produce healthy and quality generations, a measure of the success of the country's development. SANPIISAN demonstrates that by moving together & the commitment of all stakeholders can provide solutions for the prevention of maternal mortality with a multisectoral approach through integrated program synchronization.

The SAN PIISAN program demonstrates how companies, communities, professional organizations, health service facilities, and the government build synergy and commitment to produce effective solutions to prevent maternal and infant mortality. In the future, it is necessary to optimize support so that the sustainability of SANPIISAN can be developed according to the roadmap.

Picture of pregnant women's class activities with public health center health workers, stakeholders, and village health volunteers during the COVID-19 pandemic

