



ARTICLE RESEARCH

URL article: <http://jurnal.fkmumi.ac.id/index.php/woh/article/view/woh9206>**Study of The Implementation of Minimum Service Standards for Maternal Health Services in Magelang City**Sri Suwitri¹, ^CRani Pajrin², Yuni Kurniasih³, Triantono⁴¹ Department of Public Administration, Faculty of Social and Political Science, Universitas Diponegoro, Indonesia^{2,4} Department of Law, Faculty of Social and Political Science, Universitas Tidar, Indonesia³ Department of Public Administration, Faculty of Social and Political Science, Universitas Tidar, IndonesiaCorrespondence Author's Email (C): ranipajrin@untidar.ac.id
witkusdali@gmail.com¹, ranipajrin@untidar.ac.id², yunikurniasih@untidar.ac.id³, Triantono@untidar.ac.id⁴

ABSTRACT

Maternal health services are an essential component of public health systems and play a significant role in reducing maternal mortality. The implementation of Minimum Service Standards (MSS) is one of the government's strategies to ensure the quality and accessibility of maternal health services at the regional level. This study aims to analyze the implementation of Minimum Service Standards for maternal health services in Magelang City. This research employed a qualitative approach with a socio-legal perspective. Data were collected through in-depth interviews, observations, focus group discussions, and literature review involving stakeholders related to maternal health services. The data were analyzed using data reduction, data presentation, and verification through triangulation techniques to ensure validity. The results show that the implementation of MSS for maternal health services in Magelang City generally meets the established indicators, including the availability of health facilities, health personnel, and maternal health service coverage. However, several aspects still require improvement, particularly the quality of services and the continued involvement of traditional birth attendants in the childbirth process. Socioeconomic factors such as poverty, education level, and social inequality also influence the effectiveness of maternal health services. Strengthening community education and improving service quality are necessary to support optimal implementation of MSS. In conclusion, although the implementation of maternal health MSS in Magelang City has largely met the required standards, improvements in service quality and equitable access remain essential to optimize maternal health outcomes.

Keywords: Minimum Service Standards; Baby Birth Process; Magelang**PUBLISHED BY :**Faculty of Public Health
Universitas Muslim Indonesia**Address :**Jl. Urip Sumoharjo Km. 5 (Kampus II UMI)
Makassar, Sulawesi Selatan.**Email :**jurnalwoh.fkm@umi.ac.id**Phone :**

+62 82188474722

Article history

Received 22 April 2024

Received in revised form 18 November 2025

Accepted 23 April 2026

Available online 25 April 2026

licensed by [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).

INTRODUCTION

Health is an essential and fundamental part of human life, whether individual, family or community. Maternal mortality has been problem around the world(1). The importance of health as a necessity will impact all aspects of life. To improve care seeking and satisfaction with health services, woman-centred care is necessary for a positive childbirth experience(2). Adequate maternal health care could prevent 54% of maternal deaths in low- and middle-income countries(3). The cause of death can be prevented from several factors including health workers, patients, referrals, and the availability of healthcare facilities(4). Maternal mortality accounts for 40% of all deaths in the first 24 hours(5). The government has the ability and willingness to improve the quality of health services for all citizens. The health sector is one of the top priorities in national development. A large budget and various strategic initiatives are carried out to improve public service quality, especially health-related ones. Local governments are subject to implementing mandatory government affairs in the health sector based on Law No. 23/2014 on Local government. In this context, the government acts as a provider and developer of domestic health services. A single instrument to improve the availability and quality of health services in a region. In the context of policy implementation, the recommendation system model encompasses human resources, processes, infrastructure, and policies(6).

The first line of defence against disease is the provision of healthcare services. Implementing the Minimum Service Standards (MSS) for health is outlined in the Minister of Health Regulation (PMK) Number 4 of 2019 on the Technical Standards for Fulfillment of Basic Service Quality in Minimum Service Standards for Health. The substance of the SPM in the health sector has two functions, namely: (1) to facilitate local governments to perform appropriate public services for the community and (2) as an instrument for the community to control government performance in public services in the health sector. According to PMK No. 4 of 2019, maternal health is one of the 12 (twelve) essential services that local governments, including the Magelang District, must provide. This is in the context of lowering the minimum service standards (SPM) in health care. We express the need for comprehensive research and detailed longitudinal studies of women from early pregnancy to the extended postpartum period to understand how health and symptoms and signs of ill health change(7). Healthcare faces challenges, including viral pandemics such as COVID-19(8).

Despite various policies aimed at improving maternal health services, the effective implementation of Minimum Service Standards (MSS) at the local government level remains a significant challenge in many regions in Indonesia. Several studies have examined maternal health services; however, limited research specifically analyzes the implementation of MSS for maternal health services from a socio-legal perspective at the local level. This research is urgent because maternal mortality and disparities in access to maternal health services are still influenced by socio-economic inequalities, education levels, and the availability of health facilities. Understanding how MSS is implemented in Magelang City is important to evaluate whether government policies have been effectively translated into practical service delivery. The novelty of this research lies in its integrative

analysis that combines legal, institutional, and socio-economic perspectives to evaluate the implementation of maternal health Minimum Service Standards at the municipal level, particularly by examining the interaction between formal health services and the ongoing role of traditional birth attendants in childbirth. Optimizing the role of nongovernmental organizations is one of the ways to strengthen the community's response system(9).

The local government's success in providing essential maternal health services, especially in Magelang City, is evident in its implementation of minimum service standards (MSS). The greatest challenge in managing neonatal birth cases and addressing stunting lies in the public's lack of knowledge(10). If the study data are analyzed, it can be concluded that achieving minimum service standards (MSS) in Magelang City has met the target set for them. However, a few indicators need to be addressed, the most important being improving the quality of the company's customer service. Delivery of pregnant women is a series of actions that must include pre-pregnancy, pregnancy, and neonatal health. Studying SPM implementation is one way to learn more about its benefits and drawbacks as they relate to a person's overall health. For this reason, this study was designed with the title "Study on the Implementation of Minimum Service Standards (MSS) for Maternal Health Services at Health Facilities in Magelang City". Therefore, this study contributes to the literature by providing empirical evidence on the implementation of Minimum Service Standards for maternal health services at the local government level.

METHODS

This research uses a qualitative case study method. This research method is conducted infield or field research, with the type of empirical legal research or socio-legal research(11). Data were collected using in-depth interviews, observation, focus group discussions (FGDs), and literature study. We will use an empirical-to-conceptual approach to develop a typology of health visiting service delivery(12) in Magelang City. Research is required for the innovation of effective and culturally appropriate(13). Interviews were conducted with key informants, namely, an individual who lives in Magelang City. A further observation was conducted at the Magelang City Health Office and several health service facilities. Meanwhile, research was conducted by reviewing various academic courses, print media, and digital media relevant to the study. The collected data were analyzed and interpreted using data reduction, presentation, validation, analysis, removal, and utilization. The data that has been explored is tested for validity using triangulation techniques, which will scientifically try the data of this study.

This research was conducted in accordance with ethical principles in social research. Prior to data collection, all participants were informed of the study's objectives and their voluntary participation. Informed consent was obtained from all informants involved in interviews and focus group discussions. Participants were assured that the information provided would be kept confidential and used solely for research purposes. Respondents' identities were anonymized to protect their privacy. The research process also ensured that no physical or psychological harm occurred to the participants during the study.

This study addresses ethical, legal, and social issues (ELSI), highlighting its potential benefits while acknowledging the inherent complexities and risks that require careful consideration(14).

RESULTS

Benchmarks/ indicators in implementing public services in Law Number 25 of 2009. Long after Law Number 25 of 2009, Government Regulation Number 96 of 2012 on implementing Law Number 25 of 2009 on Public Service. The government implemented Government Regulation Number 2 of 2018 on Minimum Service Standards to meet the minimum service standard. Minimum Service Standards for Public Services have two functions: first, as a facility that local government officials can use in providing public services to the community; second, as a tool or instrument that the community can use in initiating and managing the process of organizing public services by local government officials. The minimum Wage Standard is a set of guidelines for the type and amount of minimum wage that focuses on mandatory government affairs that the entire community must fulfil. The concept of MSS was developed due to the failure to recognize the state of resources in each region in carrying out related tasks, so it is necessary to apply Minimum Service Standards to ensure equal treatment for all Indonesian citizens. In order to ensure compliance with these standards, it is necessary to monitor and evaluate the services provided in accordance with them (15).

In the Regional Government Law, one of the mandatory affairs related to essential services is health sector affairs. The Regulation of the Minister of Health of the Republic of Indonesia Number 4 of 2019 concerning Technical Standards for Fulfilling the Quality of Basic Services at the Minimum Service Standards for the Health Sector sets out the mandatory requirements that health facilities must meet for service users. Minimum Service Standards in the health sector are provisions for the type and quality of minimum essential services, which are mandatory government responsibilities and are entitled to be obtained by the entire community. Minimum Service Standards in the health sector consist of provincial and city/city areas. Equally important is the fact that facilities and infrastructure are essential requirements that must be in place and provided for every health service(15).

Minimum Service Standards in the health sector in provincial areas with promotive (improvement) and preventive (prevention) characteristics consist of: Types of health sector services for residents affected by health sector crises arising from disasters and potential provincial disasters. Types of health services for citizens in the event of extraordinary local events.

Furthermore, the Minimum Service Standards in the health sector in the city/city area with promotive (improvement) and preventive (prevention) characteristics consist of the following:

1. Types of health services for pregnant women.
2. Types of health services for maternity.
3. Types of health services for newborn babies.
4. Types of health services for children under five.
5. Types of health services for primary education age.
6. Types of health services for a productive period.

7. Types of health services for older people.
8. Types of health services for people with hypertension.
9. Types of health services for people with diabetes mellitus.
10. Types of health services for patients with severe mental disorders.
11. Types of health services for people suspected of tuberculosis.
12. Types of health services for people at risk of HIV infection.

This study focuses on the extent to which the minimum service standards for delivery mothers in Magelang City have been implemented and met. These standards include Quantity and quality standards for products and services, Minimum standards for the number of health workers and other human resources, and technical guidelines or processes to fulfill the criteria. The implementation of the Minimum Service Standards is an effort to provide basic services in the area of Mandatory Government Affairs for the residents of Magelang City, covering education, health, public works and spatial planning, public housing and residential areas, public safety, public order, and community protection and social services(16).

The results of interviews with several informants indicate that maternal health services in Magelang City have generally been implemented in accordance with the Minimum Service Standards. Health workers explained that antenatal, delivery, and postnatal services are routinely provided at community health centers (puskesmas) and hospitals. However, several challenges were still identified in the field. These challenges are influenced by several factors, including input, process, and environmental aspects(17).

One midwife stated that although health facilities are available, community awareness of standardized health services still needs improvement. As expressed by one informant: “Most pregnant women regularly check their pregnancy at the puskesmas, but some still rely on traditional birth attendants due to cultural beliefs and family influence.” Another informant from the Magelang City Health Office explained that the government continues to promote maternal health programs through community outreach and health education activities.

According to the Magelang City Health Profile (2021), the coverage of childbirth assistance by health personnel reached 100%. In addition, postpartum service coverage reached 99.86%, and neonatal visit coverage reached 99.01%. These data indicate that the implementation of maternal health services has met the quantitative indicators of the Minimum Service Standards. However, qualitative findings from interviews reveal that socio-economic factors, such as poverty, educational level, and limited access to transportation, continue to influence service utilization in certain communities. A similar situation is also seen in other health programs; there are still challenges in their implementation (18).

DISSCUSION

The findings of this study indicate that the implementation of Minimum Service Standards (MSS) for maternal health services in Magelang City has generally met the quantitative indicators established by government regulations. The high coverage of childbirth assistance by health personnel

and postpartum services reflects the capacity of local health institutions to provide basic maternal health services. This condition demonstrates that the institutional framework and regulatory support provided by the government have significantly improved maternal health service delivery at the local level.

However, the findings also reveal that achieving service coverage does not automatically reflect the overall quality and effectiveness of maternal health services. The persistence of traditional birth attendants assisting childbirth indicates that cultural factors and community trust continue to influence health-seeking behavior. This finding supports previous studies suggesting that socio-cultural beliefs and community traditions often play an important role in shaping maternal health practices, particularly in developing countries where traditional practices remain influential.

In addition, socio-economic factors such as poverty and educational disparities also affect the accessibility and utilization of maternal health services. Limited access to transportation and health information can delay pregnant women from obtaining appropriate medical assistance during childbirth. Similar findings have been reported in previous research, which highlighted that economic inequality and low levels of education are significant barriers to the effective use of maternal health services. Health development requires a balanced combination of promotive and preventive efforts with curative and rehabilitative measures (19).

Nevertheless, this study also differs from several previous studies that reported low coverage of maternal health services in certain regions. Minimum Service Standards are indicators of government performance in ensuring the provision of basic services to the public(20). In Magelang City, the quantitative indicators for maternal health services have largely been met. Existing independent variables: SPM Data Management Personnel, SPM Data Management SOPs, Management Support/Regulations, Personnel Training/Technical Assistance, Data Utilization, and Monitoring and Evaluation of Data Management(21). This suggests that the policy implementation of Minimum Service Standards at the local level has been relatively effective in expanding access to maternal health services. However, this study's findings emphasize that improving service quality, strengthening community education, and integrating traditional birth attendants into the formal health system remain important strategies to enhance maternal health outcomes in the future.

Demographic Condition of Magelang City

According to data from the Population and Civil Registration Office of Magelang City in 2021, the total population of Magelang City is 127,846. The population distribution in Magelang City is relatively even; with an area of 18.54 km², the average population density is around 6,896 people per square kilometer (km²). The site with the highest population density in Magelang City is Kelurahan Rejowinangun Selatan, with 22,259 people per square kilometer (km²). The smallest area is Kelurahan Jurangombo Selatan, with a population of 3,386 people per square kilometer (km²). The number of households recorded in Magelang City in 2021 was 32,001. With a population of 127,846, the average household size in Magelang City is 4. In 2021, the total male population in Magelang City was 62,947 (49.24%), and the total female population in Magelang City was 64,899 (50.76%). This results in a sex

ratio of 97 per 100 female population. Thus, the sex ratio in Magelang City in 2021 was approximately 97 males per 100 females. The composition of the Magelang City population by age group and gender shows that the male population in Magelang City has the most significant proportion in the age group of 15-19 years with a ratio of 8.06%, while the female population has the essential proportion in the age group of 15-19 years with a balance of 7.62% Comparison of the proportional composition of Magelang city population by productive age in 2021 can be seen in the following table:

The results of calculations conducted by the Magelang City Central Bureau of Statistics (BPS) in 2021 show that the Life Expectancy Rate in Magelang City in 2021 is 76.93 years. Seen in the aspect of maternal mortality, the data significantly correlates with the act of childbirth. This is because the dominant maternal mortality rate is during the delivery phase, especially in Magelang City. Maternal mortality is the death of a woman during pregnancy or death within 42 days from the termination of pregnancy regardless of the gestation length, namely death caused by pregnancy or its handling, not due to other causes such as accidents or incidental cases.

Based on these findings, efforts to reduce maternal mortality in Magelang City must focus on improving the quality and accessibility of maternal health services, particularly during the critical period of childbirth. In accordance with Ministry of Health Regulation No. 4 of 2019, local governments are obligated to ensure that every pregnant woman receives comprehensive antenatal care, gives birth in a health facility assisted by skilled health personnel, and receives adequate postnatal care. However, the persistently high maternal mortality rate indicates that challenges remain, such as delays in recognizing obstetric complications, limitations in the emergency referral system, and disparities in access to quality care. Therefore, improving the early detection of high-risk pregnancies, strengthening referral networks, and enhancing the competence of healthcare workers are critical strategies for reducing maternal mortality. Furthermore, public awareness and support systems must also be strengthened to ensure timely decision-making and access to health facilities, which will ultimately contribute to better maternal health outcomes in Magelang City. In improving healthcare services for the community to promote healing and restore health, a key factor is adequate planning for medication needs, both in terms of type and quantity(22).

The Maternal Mortality Rate (MMR) is an indicator usually used to determine the degree of public health. Maternal Mortality Rate (MMR) is the number of maternal deaths/women who die from pregnancy, childbirth and postpartum in an area at a particular time per 100,000 live births in the area and simultaneously. MMR reflects the risks mothers face during pregnancy and childbirth, which are influenced by nutritional status, socioeconomic conditions, poor health before pregnancy, the incidence of various complications in pregnancy and birth, and the availability and use of healthcare facilities, including prenatal and obstetric services. Therefore, many health efforts are made to reduce MMR. Based on the data in the health profile of Magelang City in 2021, there were 2 cases of maternal death with 1,410 live births, so the maternal mortality rate of Magelang City in 2021 was 141.84 per 100,000 live births. The MMR in 2021 is higher compared to 2020, which amounted to 138.79 per 100,000 KH

with 2 cases of maternal death and 1,441 live births. The MMR in 2021 is also higher compared to 2019, which amounted to 130.55 per 100,000 KH with two issues of maternal death and 1,532 live births.

Table 1. Population Distribution by Age Group and Gender in Magelang City, 2021

Source: BPS–Statistics Indonesia, Magelang Municipality

Age Group (Year)	Gender		Total
	Male	Female	
0-14	13.562	12.873	26.434
15-59	41.243	41.716	82.959
age 60 and above	8.143	10.310	18.453

Legal Basis for the Implementation of Minimum Service Standards in the Health Sector

Recent fiscal and legislative changes reducing women's access to family planning and reproductive health services have contributed to rising maternal mortality rates(23). Minimum Service Standards (MSS) in the health sector have the following legal basis: Law No. 23 of 2014 concerning Regional Government. The relationship between the health sector and the implementation of regional government based on Law No. 23 of 2014 is that Health affairs are mandatory affairs related to essential services. The legal basis is an affirmative norm for local governments to prioritize all affairs related to these essential services. Implementing basic services there are mandatory affairs of local government refers to service standards. The research team focused on the health SPM for maternal health services in this study. The beneficiaries of this type of SPM are maternity mothers. PP No. 2/2018 on SPM also stipulates the quality of essential services, which at least includes the responsibility to ensure that every citizen obtains quality health services according to their needs. As a basic need, every individual is responsible for meeting the needs himself and those for whom he is reliable, so basically, the fulfilment of community needs for health is the responsibility of every citizen.

Due to the unequal resource capacity of local governments throughout Indonesia in implementing these six affairs, the implementation of these affairs is regulated by Minimum Service Standards (MSS) to ensure the availability of these services for all citizens. SPM have at least two functions, namely (i) facilitating local governments to provide appropriate public services to the community and (ii) as an instrument for the community to control government performance in public health services.

Regarding the service mechanism, it is determined to set the target of delivery mothers in the city/municipality for one year by utilizing BPS calculations or actual data in the field based on consideration of valid research/research results and determined by the regent/mayor. Standards for regular delivery services refer to the Normal Delivery Guidelines, which are implemented at the facility and assistants of at least two people: doctors and midwives, or two midwives, midwives and nurses. Complicated delivery service standards refer to the Handbook of Maternal Health Services at basic and

referral health facilities. The calculation of the achievement of the performance of the Municipal Government in terms of providing health services to maternity mothers can be assessed from the extent of coverage of health services for maternity mothers according to standards in their working areas for one year.

Minimum Service Standard for Maternal Health in Magelang City

Health service facilities in Magelang City include community health centres (puskesmas), hospitals (general and specialized hospitals) and other health service facilities. The health service facilities presented in this section include community health centres (puskesmas), hospitals (public and specialized hospitals) and other health service facilities.

The number of health centres in Magelang City in 2021 is five units which are non-maintenance health centres. With the working area of each puskesmas serving a 30,000 population, the ratio of puskesmas in Magelang City in 2021 is 1.17, the same as in 2020, which is also 1.17 and increased from 2019 was 1.15 per 30,000 population. To increase the reach of puskesmas services to the community in its working area, puskesmas is supported by health service facilities in the form of Puskesmas Pembantu (Pustu) and Puskesmas Keliling (Pusling). The number of Pustu in Magelang City in 2021 is 12 units, the same as the previous year. Judging from the provincial health HDI achievement data, the position of HDI achievement for maternity mothers in Magelang City received a score of 100.00. This shows that the quantity and quality of all variables that support maternal delivery have been fulfilled. By looking at the graphical representation as described above, Magelang City is one of the cities that consistently has 100% achievement of maternal IPM. This percentage indicates that the target of quantity and quality of maternal HDI in Magelang City has been met. However, in a public policy, the measure of success certainly cannot only be seen in the aspect of 1 measurement indicator; it must also be seen in the element of the beneficiaries and the environment where the IPM of maternity mothers is determined implemented.

Standards on the quantity and quality of goods and services

This finding highlights the need to improve health workers' knowledge to achieve better care readiness to deliver quality care(23). Quantitatively, this study found that goods/services related to maternity care were generally met. However, the research also shows some problems with the quality of goods/services.

Availability of medicines

Drug Requirement is the total need for drug items obtained by calculating the average monthly usage of certain types of drugs in the previous year multiplied by 18. Total usage is the full usage of medicines and vaccines obtained by the cumulative usage of each reporting period of the entire stock of drugs and vaccines calculated at the end of the month per reporting period. The remaining stock is the total of medicines and vaccines calculated at the end of the month per reporting period. The percentage of drug/vaccine availability is the number of drugs/vaccines according to their units in an area at a certain

period for each amount needed in the same place. The percentage of medicine availability in Magelang City in 2021 is 100%, the same as in 2020 and 2019, which amounted to 100%.

Standard of number and quality of health personnel/human resources

The number of medical personnel/doctors in health facilities in Magelang City in 2021 is 393 people, with a ratio to 100,000 population of 307.40 per 100,000 population. Medical personnel consist of 190 general practitioners with a balance of 148.62 per 100,000 population, 157 specialists with a ratio of 122.80 per 100,000 population, and 46 dentists with a ratio of 35.98 per 100,000. There are several factors that can hinder the implementation of health services, one of which is resource problems(24).

The ratio of Nursing and Midwifery Staff in Health Facilities

A nurse is a person who has graduated from nursing higher education, either at home or abroad and is recognized by the government by the provisions of Laws and Regulations (Law Number 38 of 2014 concerning Nursing). The number of nurses in health facilities in Magelang City in 2021 is 1,487 people (453 men and 1,034 women), with a ratio of 1,163.12 per 100,000 population. A midwife is a woman who graduated with a midwife education registered by the provisions of laws and regulations (Permenkes Number 28 of 2017 concerning Licenses and Implementation of Midwife Practices). The number of midwives in Health Facilities in Magelang City in 2021 is 205 people, with a ratio of 160.35 per 100,000 population.

Coverage of Childbirth Assistance by Health Personnel

Childbirth assistance by health workers is the coverage of pregnant women who receive delivery assistance from health workers (Expert Doctors, Doctors, Midwives or other health workers) who have midwifery competence, which is carried out with established guidelines and technical procedures. This does not include assisted delivery assistance that has midwifery competence / has obtained specialized training to help mothers in labour. The coverage of delivery by health personnel in Magelang City in 2021 is 100%, the same as that of health personnel in 2020 and 2019, which is also 100%.

The findings in the study show that in addition to midwives and health workers, there are also village midwives and even "dukun bayi" who play a role in the delivery process. These village midwives and traditional healers are at the forefront of providing first aid, especially for people whose access to health is hampered by economic capacity or lack of education and understanding. The facts show that although village midwives have received training and improved competence, some still need help, especially in managing Class III labour and obstetric emergency services.

Technical guidelines or procedures for standard fulfilment

Antenatal services are health services by health workers for mothers during pregnancy. Antenatal services that meet the standards include weighing and measuring height, measuring blood pressure, assessing nutritional status (measuring upper arm circumference), fundus uteri height, determining fetal presentation and fetal heart rate (DJJ), screening tetanus immunization status and providing tetanus toxoid (TT) immunization if needed, giving iron tablets (at least 90 days of pregnancy), laboratory tests (urine, Hb), case management, counselling, including childbirth planning

and prevention of complications (P4K), and postpartum family planning. The coverage of health services for pregnant women can be seen using the indicators of K1 coverage and K4 coverage.

The provision of Fe tablets (blood supplement tablets) to pregnant women is carried out to overcome and reduce the rate of anaemia in pregnant women. Pregnant women receive 90 Fe tablets during their pregnancy at each visit to a health facility or visited by a health worker at home or the posyandu starting from K1 (new visit of pregnant women). The coverage of pregnant women who received 90 Fe tablets (Fe3) in 2021 was 96.56%, slightly lower than in 2020 which amounted to 96.99% and in 2019, which amounted to 97.14%.

Postpartum Services and Vitamin Provision

Postpartum services are health services according to standards for mothers from 6 hours - 42 days postpartum by health workers. Postpartum visits are conducted at least three times with a time distribution, the first postpartum visit (KF1, 6 hours postpartum - 3 days), the 2nd postpartum visit (KF2, 2nd week postpartum), and the 3rd postpartum visit (KF3, 6th week postpartum). Postpartum health services include checking blood pressure, pulse, respiration and temperature; checking for lochia and other vaginal discharges; examining breasts and recommending exclusive breastfeeding for six months; giving vitamin A capsules twice; and postpartum family planning services. The coverage of postpartum services in Magelang City in 2021 was 99.86%, the same as in 2020, which amounted to 99.86%, but slightly lower than in 2019, which amounted to 99.87%.

Vitamin A is a vital substance that is fat-soluble and, in the liver, cannot be made by the body, so it must be fulfilled from outside (essential), functions for vision and growth and increases the body's resistance to disease. Provision of high doses of vitamin A, a pregnant woman is given 200,000 SI vitamin A capsules twice during the postpartum period, namely 6 hours to 42 days postpartum, so that the baby gets enough vitamin A through breast milk. Coverage of vitamin A administration to postpartum women in 2021 is 99.93%, higher than in 2020, which amounted to 99.86% and the same as in 2019, which also amounted to 99.93%.

Obstetric Complication Services Handled

Obstetric complications are illnesses in pregnant, labouring, and postpartum women that can threaten the life of the mother and or baby. Obstetric complications include Hb < 8 g%, high blood pressure (systole > 140 mmHg, diastole > 90 mmHg), prominent oedema, eclampsia, vaginal bleeding, premature rupture of membranes, transverse location at gestational age > 32 weeks, breech location in primigravida, severe infection/sepsis, and premature labour. Obstetric complications treated are pregnant women, delivery women, and postpartum women with complications who receive services according to standards at the primary and referral service levels (Polindes, Puskesmas, PONEK Puskesmas, Maternity Homes, RSIA/RSB, RSUD, PONEK RSUD). This indicator measures the ability of MCH program management to provide professional health services to mothers (pregnant, delivery, postpartum) with complications. The coverage of obstetric complications treated in Magelang City in 2021 amounted to 169.30% of the estimated 20% of obstetric complications cases (291 points), or as

many as 492 cases, of which all 492 cases that occurred had received services according to standards. The coverage of obstetric complications treated in 2021 has decreased from the 2020 coverage of 170.83% but has increased compared to the 2019 coverage of 161.69%.

Service Standards for Neonate Complications and Neonatal Deaths

The quality of evidence is low for newborn mortality outcomes and very low for early, late, and perinatal mortality(25). Neonates with complications are neonates with diseases and disorders that can cause morbidity, disability and death. Neonates with complications include asphyxia, tetanus neonatorum, sepsis, birth trauma, LBW (low birth weight < 2,500 gr), respiratory distress syndrome, and congenital abnormalities. Neonates with complications treated are neonates who receive services from trained health workers, doctors, and midwives at healthcare facilities. The coverage of neonates with treated complications in Magelang City in 2021 was 234.52% of the estimated 15% of neonates with treated complications (212 cases) or as many as 496 points. The coverage in 2021 is higher than in 2020, which amounted to 231.32% with 500 cases of neonates with complications, and the range in 2019 amounted to 215.40% with 495 cases of neonates with complications.

Neonatal deaths occur in infants up to 28 days of age. Neonatal or endogenous mortality is a death that occurs before a baby is one month or 28 days old in an area at a certain period per 1,000 live births (KH) in the area and at the same time. Neonatal deaths or endogenous infant deaths are generally caused by factors carried from birth or during pregnancy. There were 19 cases of neonatal deaths that occurred in Magelang City in 2021, 14 points occurred in males, and 5 cases occurred in females. From 19 neonatal death cases and 1,410 live births, the neonatal mortality rate was 13.48 per 1,000 live births. This figure increased compared to 2020, which amounted to 11.10 per 1,000 KH and 2019, which amounted to 5.87 per 1,000 KH. Neonatal deaths in 2021 were caused by LBW (Low Birth Weight), namely 13 cases, asphyxia in 4 points, and other causes in 2 patients.

Service Standard of Neonate Visit to Maternity Homes

Multi-sectoral efforts are needed to improve maternal health targets by reducing maternal mortality through improved health care services(3). Neonate visit (KN) is a visit/contact of neonates (0 - 28 days) conducted by health workers in health facilities or through home visits of maternity mothers to monitor and provide health services for mothers and their babies according to the standard at least three times, with the conditions of age 6 - 48 hours after birth (KN1), at the period of 3 - 7 days and age 8 - 28 days after birth (KN Complete). Neonate visits aim to increase the access of neonates to essential health services and find out as early as possible complications that occur in infants so that they can be treated immediately. If they cannot be treated, they are referred to a complete facility for optimal care. Essential neonate services include exclusive breastfeeding, infection prevention through eye care, umbilical cord, vitamin K1 injection if not given at birth, hepatitis B1 immunization if not given at birth and integrated management of young infants. The coverage of neonate visits in Magelang City in 2021 was 99.01%, an increase compared to the range of visits in 2020 which amounted to 98.96%, but a decrease compared to the coverage in 2019, which amounted to 99.41%.

Responses to health services, especially in maternity care and delivery, were generally positive. For people who have a Jamkesmas card, all services are provided free of charge. Until now, I have never paid for a pregnancy check-up at the puskesmas. At the puskesmas, I see various activities, from immunizations and examinations of pregnant women to childbirth services. People who do not have Jamkesmas can use SKM (Surat Keterangan Miskin) (Mrs Anik Sumarni, Magersari Kota Magelang). A positive response to maternal and delivery services was also expressed: "..the service of visiting pregnant women has been done well; we are served every Tuesday. If there are complications, we are usually referred to the hospital, and the health worker reaches Semarang..."

In this aspect, the equality and unevenness of health services will be related to poverty, education, and other social inequalities. In this aspect, the government organizes standard affirmative mechanisms to support vulnerable subjects who do not maximally enjoy minimal services, especially in maternity services. Rapid response and referral to childbirth events also have a less encouraging record. Based on observations, research shows that places still have difficulty accessing maternity service vehicles. Community units in villages have yet to be empowered as an element to provide rapid response to delivery complications. Quality maternal health care is unaffordable when women have to pay for essential services and medicines and when they have to bear the high hidden costs of having to leave work and not earn wages, losing time to do household tasks such as providing food, child care and so on.

Establishing a referral system and providing the best possible transportation for mothers and newborns with complications is only effective if there is a genuine need for referral and women and their families are willing to use these services. The knowledge of mothers and families, including husbands, about the danger signs that indicate the need for referral is inferior. Furthermore, there are indications that the community has been less thriving in assisting women in making use of the referral system, such as helping in the provision of funds for service fees, the use of communication technology at various levels of the service system, and the arrangement of a functioning transportation system. These conditions result in the first and second delays in recognizing danger signs and being referred to the hospital. The third delay in obtaining adequate complication care can result in unnecessary maternal deaths. Some of these issues ultimately become obstacles and challenges in fulfilling the IPM of maternity mothers in a higher quality manner.

CONSLUSSION

Standard health services in Magelang City have been by the minimum traditional service indicators set. However, several aspects have not been optimized from the study's results. First, the quality of goods or services in maternity services can be improved. Second, in the delivery service, it was found that not only health workers but also traditional birth services "baby shamans". This condition certainly needs socialization and education in the community so that they give birth to government-standardized health services. Third, there is undoubtedly a need for equity in fulfilling the minimum

service standards for the community. However, some obstacles are influenced by poverty, education and other social inequalities.

REFERENCES

1. Marita I, Budiyono, Purnaweni H. Kualitas Standar Pelayanan Minimal Kesehatan Ibu Hamil di Kabupaten Brebes. *Higeia J Public Heal Res Dev* [Internet]. 2021;5(1):39–51. Available from: <https://journal.unnes.ac.id/sju/index.php/higeia/article/view/38391>
2. Ahmed SAE, Mahimbo A, Dawson A. Quality intrapartum care expectations and experiences of women in sub-Saharan African Low and Low Middle-Income Countries: a qualitative meta-synthesis. *BMC Pregnancy Childbirth* [Internet]. 2023;23(1):1–19. Available from: <https://doi.org/10.1186/s12884-022-05319-1>
3. Woldeamanuel BT. Factors associated with inadequate prenatal care service utilization in Ethiopia according to the WHO recommended standard guidelines. *Front Public Heal*. 2022;10.
4. Sukriani W, Hilmanto D, Susanto H. Understanding Perinatal Mortality Causes in Indramayu, Indonesia. *Kemas*. 2022;17(3):319–28.
5. Chawla S, Kumar C, Bose M, Shrivastav SM. Performance and challenges of Accredited Social Health Activists (ASHAs) in delivering key Maternal and Newborn Health (MNH) services in India: A systematic review and meta-analyses. *SSM - Heal Syst* [Internet]. 2025;5:100134. Available from: <https://www.sciencedirect.com/science/article/pii/S2949856225000868>
6. Priambodo R, Handayani PW, Aji RF, Dimiyati K. Challenges for a Maternal-Care Health Recommender System in Indonesia: Formative Preimplementation Qualitative Study. *JMIR Form Res* [Internet]. 2026;10. Available from: <https://www.sciencedirect.com/science/article/pii/S2561326X2600079X>
7. Filippi V, Chou D, Barreix M, Say L, Barbour K, Cecatti JG, et al. A new conceptual framework for maternal morbidity. *Int J Gynecol Obstet*. 2018;141:4–9.
8. Herwansyah H, Czabanowska K, Schröder-Bäck P, Kalaitzi S. Barriers and facilitators to the provision of maternal health services at community health centers during the COVID-19 pandemic: Experiences of midwives in Indonesia. *Midwifery* [Internet]. 2023;123:103713. Available from: <https://www.sciencedirect.com/science/article/pii/S026661382300116X>
9. Ledoh L, Suroso DSA, Sagala S, Suhirman S. Integrating adaptive governance into disaster management planning in medium-sized cities: a case study of Kupang city, Indonesia. *Disaster Prev Manag An Int J* [Internet]. 2025;35(1):81–94. Available from: <https://www.sciencedirect.com/science/article/pii/S0965356225000412>
10. Ashar H, Rahfiludin MZ, Nugraheni SA, Tjandrarini DH, Murwani A, Supadmi S, et al. A qualitative study in Magelang Central Java Indonesia: Mothers' knowledge, parenting styles and national priority programs managing of stunting in toddlers. *Soc Sci Humanit Open* [Internet]. 2025;12:101874. Available from: <https://www.sciencedirect.com/science/article/pii/S2590291125006023>

11. Ria Karlina Lubis, Meydora Cahya Nugrahenti RP. Peran Kabupaten Magelang dalam Pendaftaran Indikasi Geografis. 2019;3:242–53.
12. Woodman J, Mc Grath-Lone L, Clery A, Weatherly H, Jankovic D, Appleton J V., et al. Study protocol: a mixed-methods study to evaluate which health visiting models in England are most promising for mitigating the harms of adverse childhood experiences. *BMJ Open*. 2022;12(9).
13. Azad R, Fahmi R, Shrestha S, Joshi H, Hasan M, Khan ANS, et al. Prevalence and risk factors of postpartum depression within one year after birth in urban slums of Dhaka, Bangladesh. *PLoS One*. 2019;14(5):1–15.
14. Sumiya M, Nishimura T, Aizaki K, Hirata I, Tsukui N, Osuka Y, et al. Addressing the Ethical, Legal, and Social Issues of Healthtech in Education: Insights From Japan. *JMIR Form Res* [Internet]. 2025;9. Available from: <https://www.sciencedirect.com/science/article/pii/S2561326X25004834>
15. Suci Ramadhani, Dwi Sutiningsih CTP. Obstacles to Implementation of Minimum Service Standards in the Health Sector for Hypertension Sufferers at Health Centers: Literature Review. 2023;6(4):553–60. Available from: <https://jurnal.unismuhpalu.ac.id/index.php/MPPKI/article/view/3209/2670>
16. Sarastri L, Indarto I, Wardoyo P. STRATEGI MENINGKATKAN CAPAIAN STANDAR PELAYANAN MINIMAL PADA PEMERINTAH KOTA MAGELANG. *Solusi* [Internet]. 2023;21(4):379–389. Available from: <https://journals.usm.ac.id/index.php/solusi/article/view/7531>
17. Cahyaningsari BA, Jati SP, Sriatmi A, Kesehatan K, Masyarakat FK, Diponegoro U. Pelaksanaan Standar Pelayanan Minimal Bidang Kesehatan pada Indikator Kebencanaan di Balkesmas Wilayah Magelang Provinsi Jawa Tengah. 2021;99–105.
18. Pujiastuti RN, Sriatmi A, Nandini N. Mengapa Program Pelayanan Kesehatan Peduli Remaja (PKPR) di Puskesmas Kota Magelang tidak Optimal ? 2021;9(April).
19. Rengga OA. STUDI IMPEMENTASI STANDAR PELAYANAN MINIMAL (SPM) BIDANG KESEHATAN DASAR DI KOTA MAGELANG. 2009;
20. Renawati A, Paramita F, Adi S. Analisis implementasi standar pelayanan minimal (SPM) bidang pelayanan kesehatan hipertensi di Puskesmas X Kabupaten Malang Analysis of the implementation of Minimum Service Standards (MMS) in the field of hypertension Health Services at Puskesmas X Malang District. 2025;05(01):36–45.
21. Intan Rachmita Sari B. Evaluasi Kinerja Dan Upaya Peningkatan Kualitas Data Standar Pelayanan Minimal (SPM) Bidang Kesehatan. 2022;13:723–31. Available from: <https://journal.unigres.ac.id/index.php/JNC/article/view/2398/1757>
22. Sofyan O, Wiedyaningsih C, Danu SS, Priyatni N. THE EFFECT OF FOCUS GROUP DISCUSSION WITH FEEDBACK INTERVENTION ON DRUG kelompok anggota . Hal-hal yang perlu diperhatikan kuasi eksperimen dengan rancangan pretest -. 2014;17(01):22–9.

- Available from: https://d1wqtxts1xzle7.cloudfront.net/107356734/5081-libre.pdf?1699948252=&response-content-disposition=inline%3B+filename%3DPengaruh_Intervensi_Diskusi_Kelompok_Kec.pdf&Expires=1777134896&Signature=Q8NraJI21KTKUznzaWuSfxcoDJ4ZBXht8iXGNEtjZu-rejUN1-CEfcTUJ-ilm5METk-xbht8RmKm2IJ3eo82LEGMkFfy3LCzpCp1dxKxAlUv5dSxJVjHefGHV20NEDJ6WXMGPB1nE8ODcqzqhvFVwdKGgDdPejVnoFOG6jXdUeMtgF8goTOFHxB-r5tXgy71xTI2QSkdi2Ph58uAe~msSvfu1wvlunLFhtaInIY-mv2KVzY9Do5c-lQ206OZkjwnxZKhrOIc~CmxOx~-4sZYp0KaxbgoH~WdmDSHWW1WCWM3oZyZKZs-2-Akx09ppRTHzpRiQuoyz2QvC6clVSMQ__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA
23. Di Giorgio L, Evans DK, Lindelow M, Nguyen SN, Svensson J, Wane W, et al. Analysis of clinical knowledge, absenteeism and availability of resources for maternal and child health: A cross-sectional quality of care study in 10 African countries. *BMJ Glob Heal*. 2020;5(12):1–14.
24. Zudi M, Suryoputro A, Arso SP. Analisis Implementasi Standar Pelayanan Minimal Bidang Kesehatan di Puskesmas Guntur I Kabupaten Demak. *JKM (Jurnal Kesehat Masyarakat) Cendekia Utama* [Internet]. 2021;8(2):165–79. Available from: <https://jurnal.stikescendekiautamakudus.ac.id/index.php/JKM/article/view/681>
25. Ducos P, Rouessac F. Coupures thermiques du type retro-Diels et Alder-II. Une nouvelle synthese du (\pm) jasmonate de methyle. *Tetrahedron*. 1973;29(20):3233–6.