The Input Analysis of Filling The Preeclampsia Screening Sheet in The Maternal and Child Health Handbooks in Tegal Regency

Ustriyaningsih^{1*}, Martha Irene Kartasurya¹, Ayun Sriatmi¹ ¹Magister Kesehatan Masyarakat, Fakultas Kesehatan Masyarakat, Universitas Diponegoro, Semarang

Email corespondence : <u>bundarayya28@gmail.com</u>

Track Record Article	Abstract
Accepted: 1 June 2023 Revised: 26 November 2023 Published: 18 December 2023	In 2019–2021, Preeclampsia has been among the highest causes of maternal death in the Tegal Regency. Early detection of preeclampsia risk factors is done by filling out the screening sheet in the Maternal and Child Health (MCH) Handbooks. However, its implementation has not been carried out properly. This study aims to analyzes the input
How to cite : Ustriyaningsih, Kartasurya, M. I., & Sriatmi, A. (2023). The Input Analysis of Filling The Preeclampsia Screening Sheet in The Maternal and Child Health Handbooks in Tegal Regency. <i>Contagion : Scientific</i> <i>Periodical of Public</i> <i>Health and Coastal</i> <i>Health</i> , 5(4), 1270–1283.	factors the filling out of preeclampsia screening sheets by doctors in Tegal regency. The research was conducted qualitatively with phenomenological approach. This research started from October to December 2022. There were 2 main informant from the Head of the Division and Sub-Coordinators at the Health Office and 12 triangulation informant there where the Head of the Health Center, Coordinating doctors and midwives. Data collection techniques are conducted by in-depth interviews. Analysis of the research data is data reduction, data presentation and drawing conclusions. The results of the screening sheets were completely filled out showed 12.5%. The limited human resource is overcome by collaboration between health workers. Doctors' willingness to fill out screening sheets is still lacking. The infrastructure form of physical and laboratory examination tools is available and sufficient; the shortage of preeclampsia screening sheets is fulfilled by duplicating these sheets. Guidelines in the preparation stage, implementation of filling out the preeclampsia screening sheet, it was mostly done by midwives, and there was still non-compliance in filling out the management of screening results. Indeed, filling out the preeclampsia screening sheet had not gone well, and mostly done by midwives. It is recommended that the Health Service make a circular and guidelines for filling out the preeclampsia screening sheet had not gone well, cant mostly done by midwives. It is recommended that the Health Service make a circular and guidelines for filling out the preeclampsia screening sheet. The head of the Community Health Center prepares a daily schedule, clarifies the duties and authority of doctors and midwives, and creates a service flow.
	Keyword: Input factor, Maternal and Child Health Handbook, Preeclampsia screening sheet

INTRODUCTION

Indonesia still has a high rate of maternal mortality, the government has made various efforts to reduce Maternal and Infant Mortality Rates (Aulya et al., 2021). It is one of the main indicators of a country's health status, with the main priority being to improve maternal health (Ketut, 2020). The results of the 2015 Inter-Census Population Survey (*SUPAS*), the Maternal Mortality Rate (*MMR*) in Indonesia reached 305 per 100,000 live births. With 359/100,000 live birth, Indonesia comes in second place in Southeast Asia for MMR, behind Laos. It is recorded in Indonesia that there are four maternal deaths a day due to childbirth, meaning that there is one maternal death every six hours (World Health Organization, 2014), one maternal death occurs every six hours in Indonesia, where four maternal deaths related to childbirth occur each day (Mariati et al., 2022).

When compared to other nations in 2015, Maternal Mortality Rate in Singapore was 7/100,000 live birth, and Malaysia was 24/100,000 live birth. It is far from the target MMR in Indonesia set in the *SDGs* (Sustainable Development Goals) in 2024, 183 per 100,000 live birth (Kementrian Kesehatan RI, 2021). The most common causes of maternal death in Indonesia are hypertension or preeclampsia and eclampsia, bleeding, and infection. According to the 2016 Sample Registration System (SRS), 33% of hypertension in pregnancy, including preeclampsia, is the main cause of death in Indonesia (Kementrian Kesehatan RI, 2020)(Setyorini et al., 2019). Preeclampsia is a pregnancy complication that can be detected earlier by screening for risk factors for preeclampsia during pregnancy (Litwinska et al., 2021).

In reducing MMR in Indonesia, the government made various efforts through several programs. Including the implementation of the Safe Motherhood approach in 1990, the program for using the *MCH handbooks* started in 1994, the Mother Care Movement (*GSI*) in 1996, the Making Pregnancy Safer strategy in 2000, Health Operational Assistance (*BOK*) started in 2010, Jampersal in 2011 and the Expanding Maternal and Neonatal Safer (*EMAS*) program in 2012. (Meikawati et al., 2019) (Yuniarti et al., 2018) In 2020, through the Revised Maternal and Child Health Handbooks, the Ministry of Health added doctor screening services to detect risk factors for preeclampsia in the form of a Preeclampsia Screening sheet at <20 weeks of gestation (Kemenkes, 2020).

Based on health profile data for the Central Java Province in 2019, there were 416 maternal deaths, with an MMR of 76.93 per 100,000 live births (Marniyati et al., 2016). The highest causes of death were hypertension in pregnancy with 123 cases (29.6%), bleeding with 102 cases (24.5%), circulatory system disorders with 49 cases (11.8%), infections with 25 cases (6.0%), metabolic disorders in 2 cases (0.5%) and others in 115 cases (27.6%) (Dinas Kesehatan Provinsi Jawa Tengah, 2019). From the data above, preeclampsia is the highest cause of maternal death in Central Java, this happens because preeclampsia/eclampsia is often referred to as "the disease of theories" where the number of cases is always high, which can lead to high morbidity and mortality in maternal (Manuaba, 2010)

It shows that pregnancy hypertension in Tegal Regency, including preeclampsia, is the main cause of maternal death in 2019 – 2021, respectively 58.3%, 46.4%, and 30% (Dinas Kesehatan Kabupaten Tegal, 2020). The results of a study of 11 cases of maternal death due to preeclampsia in October 2020 – December 2021 show that 81.8% of the preeclampsia screening sheets were not filled in. Then, from observations on the 50 preeclampsia screening sheets in the MCH Handbook, 86% of the screening sheets were not filled in. From the preliminary study, it was found that there were still problems in the implementation of

preeclampsia screening, including the limited number of doctors and insufficient time for examinations, socialization of filling out the preeclampsia screening sheet in the *MCH handbooks* was still lacking, the absence of specified schedules, inadequate facilities, and infrastructure, no policy or SOP, the absence of monitoring or supervision from the Health Office or Health Center.

Improving the quality of maternal health services through filling out preeclampsia screening sheets is necessary to prevent preeclampsia in pregnant women (Sarasati et al., 2016). If the preeclampsia screening sheet is not filled out, it can cause delays in the detection of risk factors for preeclampsia, so it will be too late to provide preventive measures to prevent preeclampsia in pregnancy(Litwinska et al., 2021).

From the description above, the researcher uses a qualitative method to analyze the input factors, including human resources, funds, infrastructure, and methods in filling out preeclampsia screening sheets by doctors at the Tegal District Health Center.

METHODS

This type of research was qualitative, with a phenomenological approach and data collection methods using in-depth interviews and observation. The main informants were 1 Head of Community and Individual Health Efforts and 1 Public Health Sub-Coordinator. Triangulation informants were 4 Health Center heads, 4 Health Center doctors, and 4 Health Center coordinating midwives who were selected purposively. The selected Health Centers were two Health Centers with high preeclampsia detection coverage (> 10%) and two Health Centers with low preeclampsia detection coverage (< 4%). The data was taken from the report on the maternal health program at the end of 2021.

The data was collected from October to December 2022 in Tegal Regency. In-depth interviews used to collected data and source triangulation used to validation the data. The research variables include input aspects such as human resources, funds, infrastructure, and methods in filling out the preeclampsia screening sheet. The research instrument follows open interview guidelines, recording devices, and observation checklist formats. Analysis of the research data is data reduction, data presentation and drawing conclusions. This research has received approval from the Health Research Ethics Commission of the Faculty of Public Health, Diponegoro University, with number 348/EA/KEPK-FKM/2023.

RESULTS

Characteristics of informants include age, gender, education, years of service, term of office, and positions are shown in Table 1.

Number	Informant Code	Age (years)	Gender	Education	Years of service (Year)	Term of Office (Year)	Position
1	IU-SM	54	Р	Bachelor of Medicine	16	3	Head of Community and Individual Health Efforts
2	IU-SA	50	Р	Master of Public Health	20	3	Public Health Sub Coordinator
3	IT-SS	47	Р	Bachelor of Medicine	16	6	Head of Health Center
4	IT-RI	57	L	Bachelor of Nursing	27	3	Head of Health Center
5	IT-DW	49	Р	Bachelor of Medicine	17	3	Head of Health Center
6	IT-SI	48	Р	Master of Management	19	3	Head of Health Center
7	IT-SL	34	Р	Bachelor of Medicine	4	4	Medical center doctor
8	IT-SN	39	Р	Bachelor of Medicine	8	8	Medical center doctor
9	IT-HS	31	L	Bachelor of Medicine	2	2	Medical center doctor
10	IT-LK	39	Р	Bachelor of Medicine	3	3	Medical center doctor
11	IT-DA	56	Р	D4 Midwifery	18	5	Coordinator midwife
12	IT-RA	41	Р	D4 Midwifery	14	10	Coordinator midwife
13	IT-DS	46	Р	D3 Midwifery	17	5	Coordinator midwife
14	IT-EY	41	Р	D3 Midwifery	19	12	Coordinator midwife

Table 1. Characteristics of Informans

Table 1 shows that most informants are females over 40 years old. The education level of the informants varied from intermediate to master level. The years of service for most of the informants are more than ten years, ranging from 2 to 12 years. This study's informants were actively involved in filling out the preeclampsia screening sheet as program managers and implementers.

Input Aspect

The input comprises four themes: human resources, funds, infrastructure, and methods. From the interview results, the researcher got the theme from the code submitted by the informant.

Human Resources (HR)

From the results of interviews about HR, it was found that the theme originated from the code submitted by the informant, described in Table 2.

Theme	Category	Subcategories	Code
Quantity	Doctor	Number of Doctors in Health Center	Doctors are sufficient
Quality	Online and Offline socialization	By the Ministry of Health The Health Service with limited participants	Face-to-face socialization is still Lacking
	Commitment	Not all doctors are committed to filling out the preeclampsia screening sheet	Lack of the commitment
Filling Method	Preeclampsia screening	Anamnesis by midwives and doctors, laboratory examinations by analysts, and nutritional assessment (BMI) by nutritionists	Collaboration between other health workers
	Constraint	Not all pregnant women visit the Health Center Limited service time with the number of examined pregnant women	Less target range Incomplete screening sheet

Table 2. Themes, Categories, and Coding on Human Resources

The table above shows the condition of human resources in terms of quantity and quality or ability/competence of health workers. The quantity of human resources at the Health Center level has been fulfilled. Then the technical implementers for filling out the preeclampsia screening sheet are doctors, midwives, laboratory analysts, and nutritionists at the Health Center. The number of doctors in the Health Center is sufficient because the average Health Center has three doctors. It was conveyed by the informant in the interview as mentioned below:

"On average, each Health Center has more than two doctors. It includes a doctor that has additional duties as the head of the Health Center, is it?" (IU.SM).

"For doctors, there are already three people, there has been a picket schedule for services at the outpatient polyclinic including at the Maternal and Child Health clinic, and the schedule has been decreed..." (IT.SS and IT.SN)

Regarding quality, there are still quite a variety of human resource qualities of the Health Center Doctors, such as the level of ability, understanding, and commitment. Some doctors already understand and are committed. They have participated in socialization using the *MCH* *handbooks*, which includes procedures for filling out the preeclampsia screening sheet. It happens because the socialization carried out by the Health Office is still lacking. The preeclampsia screening sheet is filled out during Antenatal Care (*ANC*) at the Health Center. Doctors do not carry out the screening alone but collaborate with other health workers such as Midwives, Laboratory Analysts, and Nutritionists at the Health Center.

"The Health Service has held socialization on the use of the Revised MCH handbook, the year I forgot, I think it's still at the end of a pandemic. The participants are limited. There are doctors from the health center, the same coordinating midwives from 9 hospitals in Tegal Regency" (IU.SE)

"Midwives usually help to fill in data that can already be known, for example, age, gravida status, history of pregnancy. The point is the data that don't correlate with the history of the disease, check urine and blood sugar, refer to the laboratory, while for calculating BMI and determining nutritional status by nutritionist" (IT. RA)

Factors causing the filling out of the preeclampsia screening sheet to be incomplete were that not all pregnant women visited the Health Center. It means that the coverage of the targets was lacking, in addition to the limited service time and the unequal number of pregnant women served.

"...the problem is that pregnant women don't go to the Health Center, so they don't find a doctor. There are many patients at the Health Center, and doctors on duty every day often have double jobs too, so if the doctor wants to do screening, it will take time(IT.HS and IT.LK).

Funding

The themes obtained from the interview results regarding funding are explained in Table 3 below.

Theme	Category	Sub Categories	Code
Source	General Allocation Fund	Dropping of <i>MCH handbooks</i> by the Ministry of Health	2022 doesn't exist, using the remaining dropping in 2021
	Health Operation Assistance	For integrated ANC activities	Activity budget integration Sufficient
	Local community services agency	Purchase of laboratory medical consumables (urine protein sticks and blood sugar)	Not routinely budgeted

Table 3. Themes, Categories, and Coding of Funding

Theme	Category	Sub Categories	Code
		Two Health Centers have budgeted for equipment calibration	
Adequacy	Fulfillment of audit facilities budget	It already exists, and it is sufficient	That's enough
	Compliance with the budget for documentation facilities	The Health Center does not have a budget for printing <i>MCH Handbooks</i> . There is a budget for duplicating preeclampsia screening sheets	Not enough

The information regarding the funding is described in Table 3. It shows that there is no funding for printing *MCH handbooks*. Another budget that can support filling out the preeclampsia screening sheet is through Integrated Antenatal Care activities which are budgeted through Health Operation Assistance, screening activities for high-risk pregnant women at Health Center and Hospitals from the Tobacco Revenue Sharing Fund budget, purchasing medical disposable for laboratory tests for urine protein and blood sugar as well as for the maintenance or calibration of medical devices such as tensiometers and scales are budgeted through the Local community services agency of the Health Center. For general patients, urine protein checks are charged at IDR 10,000, and blood sugar checks are charged at IDR 25,000.

"... this year, thank God, a mandatory budget from the district DAU can be used to print MCH handbooks. Although we can't cover all of them, we will ask the Ministry of Health for the additional budget. Maybe, there will be another MCH Handbooks drop. We also have a budget for screening pregnant women from tobacco excise miss.." (IU.SM and IU.SE)

"The budget for Integrated Antenatal care activities is from Health Operation Assistance to Health Center, and equipment calibration is also available from Local Community Services Agency The social security administrator capitation funds also cover urine protein sticks and blood sugar. For general patients, they are charged." (IT.SI – IT.DS)

Facilities and infrastructure

The themes obtained from the results of interviews about facilities and infrastructure are explained in Table 4.

Themes	Category	Sub Categories	Code
Type of Facilities	Examination tool	Tensiometers, weight scales, height gauges, urine protein, and blood sugar test sticks	Sufficient
	Screening sheet	It's in the MCH Handbooks	The insufficient number of the targets
Adequacy	Tensiometers,	Every Maternal and Child Health	Available but not
and quality	scales, height	Clinic room is available, and	routinely calibrated
	gauges	calibration is not always carried out	
	Medical	every year	Adequate, according to standards
	cosumable for urine protein stick laboratory	Examination of urine protein using a urine dip	
	and blood sugar		Not enough
	Availability of		
	MCH Handbooks	Not according to the target number.	
		Photocopy of the screening sheet, if	
		using the 2015 version of the MCH	
		Handbooks	

The table above shows that some facilities have been and have not been fulfilled. Two types of facilities are needed to support the implementation of filling out the preeclampsia screening sheet, namely those related to examination tools and screening sheets in the MCH handbooks as a documentation tool. The need for examination tools to fill out preeclampsia screening sheets, such as tensiometers, scales, height gauges, and medical cunsumable laboratories for checking urine protein and blood sugar, is sufficient in every Health Center. Regarding the quality of the tensiometer and scales, calibration has not been carried out every year. So it can be said that they are not following the standard. The availability of the MCH handbooks as a medium for filling out the preeclampsia screening sheet at the Health Center is still lacking and insufficient to meet the target needs of all pregnant women in its area.

"...then, a revised version of the MCH handbook must be revised. Besides that, it needs scales, height gauges, and regularly calibrated tensiometers. For laboratory tests, urine protein and blood sugar must be checked, so they must be available at the Health Center..." (IU.SE)

"... for the MCH Handbook is still lack miss. The scales, tensiometers, and microtoise are available in the MCH clinic, and the equipment is still good. It has been sufficient for urine protein sticks and blood sugar so far..." (IT.EY)

Method

Researchers got the themes obtained from the results of interviews about the method, which are explained in Table 5.

Themes	Category	Sub Categories	Code
Policies and SOPs	Policies for filling out preeclampsia screening sheets	Included in the Circular of the Head of the Health Office regarding the Use of the Revised <i>MCH Handbooks</i> as a monitoring tool and documentation tool for maternal and child health.	There is no specific policy yet
	SOP for filling out the preeclampsia screening sheet	There is no specific SOP yet, but it is included in the SOP for screening high-risk pregnant women.	There is no specific SOP yet
Fill out the screening sheet	History and physical examination section	Following National Guidelines for Medical Services preeclampsia	According to National Guidelines for preeclampsia
Procedure development	Develop SOPs or guidelines	Develop more complete preeclampsia screening guidelines by adding physical complaints, therapy, and results of escorting pregnant women	Proposed preparation of a complete method
	SOP or Guideline drafting team	The Health Office as the coordinator, the drafting team involved ob-gyn doctors, internal medicine doctors, Health Center doctors, midwives, analysts, and nutritionists.	

Table 5. Themes,	Categories,	and Coding	of Methods

The study results in Table 5 show no specific policy for filling out the preeclampsia screening sheet in pregnant women. The policy regarding filling out the preeclampsia screening sheet is included in the circular from the Head of the Tegal District Health Office number 672 of 2020 concerning using the Revised *MCH Handbooks* as a monitoring tool and documentation tool for maternal and child health in Tegal District. There is no SOP (Standard Operating Procedure) in filling out the sheet.

Preeclampsia screening, the available SOPs are SOPs on managing preeclampsia following the National Guidelines for Preeclampsia Medical Services. While filling out the preeclampsia screening sheet still follows the SOP for screening high-risk factors in pregnant women. It is common for doctors to carry out preeclampsia screening, but it has not been well documented. Doctors can focus more on history taking with the preeclampsia screening sheet in the revised *MCH handbooks*.

Most Health Center doctors already understand that the *MCH handbooks* is very useful for recording the results of services received by mothers and children. According to the Health Center doctor, the format of the preeclampsia screening sheet in the revised *MCH handbooks* can still be developed. So it can be used for maximum prevention of preeclampsia. There is a suggestion for developing the screening form by compiling guidelines containing history taking, screening time, giving therapy, follow-up plans, and maternity control records.

"...The policy is incorporated in the circular of the Head of Service regarding using the MCH handbook, miss. Suppose there is no special SOP for filling out the preeclampsia screening sheet. There is an SOP for the management of preeclampsia and refers to National Guidelines for preeclampsia" (IU.SM and IU.SE)

"...if I can suggest, it is also given instructions to give the questions, even though it will be the doctor who will do it later, but to speed up the history taking, he can share tasks with the midwife...you can also add therapy notes and escorts..." (IT.SN and IT.LK).

DISCUSSION

According to WHO, the ratio of doctors and the population is 1:1000 people. It means it will be effective if one doctor serves 1000 people (Maulidiyah N, 2022). Although according to the WHO ratio, the conditions in Tegal Regency have not met the needs. Then, according to the Minister of Health Regulation Number 75 of 2014 concerning Health Centers, it is stated that the minimum standard for inpatient doctors at a Health Center is two people. It is the minimum condition so the Health Center can run well (Kementrian Kesehatan RI, 2014). Human resources are the most important element in achieving the objectives of implementing this program. In the process of carrying out preeclampsia screening, doctors play an important role (Jayanti K, 2016).

Using the preeclampsia screening sheet in the revised *MCH handbooks* is new, so it is necessary to make efforts to increase understanding of a program through socialization. The purpose of socialization is to increase the ability and understanding of health workers (Hassan et al., 2016). So, the implementation of a program can run well, and socialization needs to be done regularly (Susanti et al., 2020), (Agustini & Danefi, 2021).

In every program implementation, doctors need to collaborate with other health workers. A collaborative approach between health teams can improve the capabilities and skills of each health worker involved in implementing activities (Vinsensius, LB, 2019) (Indrawan, 2017). In addition, collaboration can also improve the quality of service to patients. So it can prevent complications from occurring in patients (Sakai et al., 2017).

The availability of funds has an important role in the management of the filling out the preeclampsia screening sheet obedience (Yuniarti et al., 2018). Adequacy of funds will affect employee motivation and whether a program's targets and objectives are achieved (Widiastuti et al., 2014). In financing health services, four budget sources can be used, namely from the government such as the APBN, provincial and city/district budgets, the private sector, the community, which is collected directly or collected by insurance companies, and foreign grants/loans (Elvira et al., 2019) (Haleeda & Sholichah, 2016).

Minister of Finance Regulation number 215/PMK.07/2021 stipulates that the 2022 Tobacco Excise Revenue Sharing Fund budget is allocated for the health sector by 40% (Kementerian Keuangan, 2021) . Community health centers can charge examination fees for general patients following Tegal Regent Regulation Number 67 of 2020 concerning the types and rates of Tegal District Health Center services, where clinical chemistry examinations such as blood sugar are charged at IDR 25,000 and urine protein is charged at IDR 10,000 (Peraturan Bupati Tegal, 2020)

According to the Ministry of Health, one of the important supporting factors in implementing health development is the availability of health facilities that can support health services for the individual until the community level . The intended service facilities include all types of equipment, work equipment, and other facilities that are the main or supporting tools in carrying out activities (Kementrian Kesehatan RI, 2017).

Researcher Wulan Ratna et al. (2018) stated that the higher the midwife's facilities, the higher the level of performance, and vice versa. The lower the midwife's infrastructure, the lower their performance level (Wulan et al., 2018). The research results by Ludgar (2018) state that program managers and pharmacies plan for the need for drugs and other supplies (Muharini, 2015). The calculation must consider the needs, use, and remaining stock of drugs and reagents at the Health Center. In the implementation of filling out the preeclampsia screening sheet, the *MCH handbooks* is the main tool that must be available (Muhar et al., 2019). If the *MCH handbooks* is unavailable either because the pregnant woman did not bring it or because it is unavailable, the *MCH handbooks* cannot be filled in completely (Krull & Kurniasari, 2020).

The SOPs are used to facilitate the organization and running of workflows. Besides, it avoids unwanted events during work (Islami, 2019). The research conducted by Rosnaya Ari

S et al. stated that the completeness of filling out the *MCH handbooks* was unrelated to the complexity of the forms.(Sarasati et al., 2016)

According to the researcher's analysis, there are still many deficiencies in input factors that can support filling out the preeclampsia screening sheet, in terms of human resources, funding, facilities and infrastructure and methods. This could be because filling out the preeclampsia screening sheet is not considered important by some service providers, so screening is carried out only as a series of services that are usually carried out without being followed by good documentation as proof of service.

CONCLUSIONS

It was concluded that the input aspects in filling out the preeclampsia screening sheet, namely the existence of sufficient human resources in terms of quantity and quality, activities to increase understanding and commitment through outreach are still lacking, collaboration between health workers is needed in carrying out screening. The budget to support the success of the activity comes from various sources but there is no specific budget yet. Most of the facilities and infrastructure needed are sufficient, except for the availability of *MCH handbooks*, there is no specific SOP regarding filling out preeclampsia screening sheets.

Suggestions for the Health Service to carry out regular socialization to reach many targets, facilitate the formation of a team for the preparation of more technical SOPs and guidelines by developing procedures for filling out preeclampsia screening sheets, for the Head of the Puskesmas to arrange available resources for each activity implementation. For future researchers, they can evaluate the follow-up of filling out the preeclampsia screening sheet and see the output on the scope of detection of preeclampsia risk factors.

REFERENCE

- Agustini, F., & Danefi, T. (2021). Sosialisasi Buku Kia Versi 2020 Bagi Kader di Desa Cikunir Kecamatan Singaparna Kabupaten Tasikmalaya Tahun 2021. *Jurnal Pelayanan Dan Pengabdian Masyarakat (Pamas)*, 5(2), 131–139.
- Aulya, Y., Silawati, V., & Safitri, W. (2021). Analisis Preeklampsia Ibu Hamil pada Masa Pandemi Covid-19 di Puskesmas Sepatan Kabupaten Tangerang Tahun 2021. Jurnal Akadema Baiturrahim Jambi (JABJ), 10(2), 375–384. https://doi.org/10.36565/jab.v10i2.387
- Dinas Kesehatan Kabupaten Tegal. (2020). Profil Kesehatan Kabupaten Tegal Tahun 2019. Kabupaten Tegal.
- Dinas Kesehatan Provinsi Jawa Tengah. (2019). Profil Kesehatan Provinsi Jaw Tengah Tahun 2019 (Vol. 3511351, Issue 24).
- Elvira, D., Defrin, & Erwani. (2019). Studi Kualitatif Analisis Implementasi Standar Pelayanan Antenatal Care 10 Terpadu Pada Ibu Hamil Di Puskesmas Bungus Kota Padang Tahun 2019. Jurnal Kesehatan Masyarakat, 5(2), 151–172.

- Haleeda, S. R., & Sholichah, N. (2016). Gambaran Kelengkapan Pengisian Buku KIA di Wilayah Kerja Puskesmas Banyuasin Kecamatan Loano Kabupaten Purworejo. Jurnal Komunikasi Kesehatan, 7(1). https://doi.org/https://doi.org/10.56772/jkk.v7i1.84
- Hassan, B., Almushait, M., Mubashar, H., & Zia, S. (2016). The Role of Risk Assessment at Antenatal Care Clinics in the Prediction of Pre-Eclampsia in a High Altitude Area. *International Journal of Clinical Medicine*, 7(1). https://doi.org/10.4236/ijcm.2016.71002
- Indrawan, D. (2017). Faktor-Faktor Yang Mempengaruhi Kepatuhan Dokter Dalam Mengisi Rekam Medis Di Unit Rawat Inap Rumah Sakit Wava Husada. *Journal of Islamic Medicine*, 1(2), 55–66.
- Islami, D. (2019). Midwives' Compliance To The Standard Operating Procedure On The Early Identification Of Preeclampsia. *Jurnal Administrasi Kesehatan Indonesia*, 7(1), 50. https://doi.org/10.20473/jaki.v7i1.2019.50-59
- Jayanti K. (2016). Analisis Pengaruh Kompetensi Dan Pelatihan Bidan Terhadap Pelaksanaan Program Skrining Preeklampsia Di Puskesmas Wilayah Kabupaten Gresik. UG Jurnal, 14(1), 16–23.
- Kemenkes, R. I. (2020). Buku Kesehatan Ibu dan Anak (Buku KIA). In Jakarta: PPSDM Kemenkes RI.
- Kementerian Keuangan. (2021). Peraturan Kementerian Keuangan (PMK) Nomor 215 Tahun 2021 tentang Penggunaan, Pemantauan, dan Evaluasi Dana Bagi Hasil Cukai Hasil Tembakau.
- Kementrian Kesehatan RI. (2014). Peraturan Menteri Kesehatan Nomor 75 Tahun 2014 Tentang Pusat Kesehatan Masyarakat.
- Kementrian Kesehatan RI. (2017). Peraturan Menteri Kesehatan Nomor 48 Tahun 2017 tentang Pedoman Perencanaan dan Penganggaran Bidang Kesehatan.
- Kementrian Kesehatan RI. (2020). Peraturan Menteri Kesehatan Republik Indonesia Nomor 21 Tahun 2020 Tentang Rencana Strategis Kementrian Kesehatan tahun 2020-2024. JDIH BPK RI (Database Peraturan).
- Kementrian Kesehatan RI. (2021). Profil Kesehatan Indonesia 2020. In *Kementrian Kesehatan Republik Indonesia*.
- Ketut, S. (2020). *Strategi Menurunkan Angka Kematian Ibu (AKI) di Indonesia* (Cetakan Pe). Deepublish.
- Krull, M., & Kurniasari, D. (2020). Gambaran faktor kelengkapan pencatatan buku kesehatan ibu dan anak (KIA) oleh bidan di puskesmas di Kota Kupang Provinsi Nusa Tenggara Timur. Arch. COMMUNITY Heal, 7(2).
- Litwinska, M., Litwinska, E., & Bouariu, A. (2021). Contingent screening in stratification of pregnancy care based on risk of pre-eclampsia at 19 24 weeks gestation. *Ultrasound Obstet Gynecol*, *58*(4), 553–560. https://doi.org/10.1002/uog.23742
- Manuaba, I. B. (2010). Ilmu Kebidanan Penyakit kandungan dan KB (Edisi Kedu). EGC.
- Mariati, P., Anggraini, H., Rahmawati, E., & Suprida. (2022). Faktor-faktor Yang Berhubungan Dengan Kejadian Preeklampsia Pada Ibu Hamil Trimester III. *Jurnal Aisyiyah Medika*, 7(2), 246–258.
- Marniyati, L., Saleh, I., & Soebyakto, B. B. (2016). Pelayanan Antenatal Berkualitas dalam Meningkatkan Deteksi Risiko Tinggi pada Ibu Hamil oleh Tenaga Kesehatan di Puskesmas Sako, Sosial, Sei Baung dan Sei Selincah di Kota Palembang Pendahuluan menjadi peserta Jaminan Kesehatan Nasional Pemerintah Propi. Jurnal Kedokteran Dan Kesehatan, 3(1), 355–362.
- Maulidiyah N, Z. (2022). Analisis Kebutuhan Dan Pengembangan Tenaga Dokter Umum Di Puskesmas Ngaliyan Kota Semarang. Jurnal Kesehatan Masyarakat (e-Journal),

10(1), 122–129.

- Meikawati, P. R., Setyowati, A., & Ulya, N. (2019). Efektivitas Kelengkapan Pendokumentasian Buku KIA Untuk Deteksi Resiko Tinggi Kehamilan Di Puskesmas Wilayah Kota Pekalongan. *Jurnal Kebidanan Harapan Ibu Pekalongan*, 6, 257–262. https://doi.org/https://doi.org/10.37402/jurbidhip.vol6.iss2.63
- Muharini, T. R. I. (2015). Analisis Sitem pencatatan dan pelaporan Program Kesehatan Ibu dan Anak Di Puskesmas Kecamatan Pasar Minggu.
- Muhdar, Purnami, C. T., & Suherni, T. (2019). Supervisi dan Ketersediaan Buku KIA Terhadap Penggunaan Buku KIA oleh. *Jurnal Manajemen Kesehatan Indonesia*, 7(3), 163–170. https://doi.org/https://doi.org/10.14710/jmki.7.3.2019.7-14
- Peraturan Bupati Tegal. (2020). Peraturan Bupati Tegal Nomor 67 Tahun 2020 Tentang Jenis dan Tarif Pelayanan Puskesmas Kabupaten Tegal.
- Sakai, I., Yamamoto, T., Takahashi, Y., Maeda, T., Kunii, Y., & Kurokochi, K. (2017). Development of a new measurement scale for interprofessional collaborative competency: The Chiba Interprofessional Competency Scale (CICS29). Journal of Interprofessional Care, 31(1), 59–65. https://doi.org/https://doi.org/10.1080/13561820.2016.1233943
- Sarasati, R., Mawarni, A., & Dharmawan, Y. (2016). Hubungan Beberapa Faktor Dengan Kelengkapan Pengisian Buku Kesehatan Ibu Dan Anak Oleh Bidan Desa Di Wilayah Kerja Puskesmas Jepara Tahun 2016. *Jurnal Kesehatan Masyarakat (e-Journal)*, 4(4), 247–254.
- Setyorini, D., Santoso, B., Martini, S., & Cahyono, I. (2019). Early Detection Score of Preeclampsia Risk. 13(4), 1717–1721.
- Susanti, E., Zainiyah, Z., Hasanah, F., Dewi, W., & Sakdiyah, H. (2020). Kartu Skor Puji Rochyati (KSPR) Dalam Upaya Screening Kehamilan Ibu Resiko Tinggi. *Jurnal Paradigma*, 2(2), 1–9.
- Vinsensius, LB, J. J. (2019). Gambaran Kolaborasi Tenaga Kesehatan Dalam Anc Terpadu Dengan Tingkat Kepuasan Ibu Di Puskesmas Oepoi Kupang. *CHMK Midwifery Scientific Journal*, 2(1), 45–49.
- Widiastuti, T., Kartasurya, M. I., & Mawarni, A. (2014). Manajemen Deteksi Dini Ibu Hamil Risiko Tinggi pada Pelayanan Antenatal di Tingkat Puskesmas Kabupaten Jepara. Jurnal Manajemen Kesehatan Indonesia (UNIVERSITAS DIPONEGORO), 2(3), 261–267.
- World Health Organization. (2014). WHO Maternal Mortality.
- Wulan, R., Soepardan, S., & Sedjati, A. (2018). Pengetahuan Keterampilan Sikap Motivasi Dan Sarana Prasarana Bidan Desa Di Kabupaten Sumedang. Jurnal Stikes Muhammadiyah Ciamis : Jurnal Kesehatan, 5(2), 52–60.
- Yuniarti, F., Wijayati, W., & Ivantarina, D. (2018). Analisis Perilaku Kesehatan Dan Faktor Resiko Kejadian Preeklampsia Pada Ibu Hamil Di Poliklinik Obstetri Gynekologi RSUD Kabupaten Kediri. *Journal of Isues in Midwifery*, Vol. 1 No.(3), 1–17.