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Analisis Masalah dan Penentuan Aksi untuk menurunkan Kematian Ibu

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Kerangka

- Pengantar (50 menit)
  - Kematian Ibu dan penyebabnya
  - Penjelasan root cause analysis dan pemanfaatannya dalam penyusunan rencana aksi untuk menurunkan kematian ibu
- Diskusi (10 menit)
- Penyampaian penugasan (5 menit)

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Every pregnancy is at risk

Kematian Ibu

Indikator Kinerja RIBK 2025-2029 yang diselaraskan dalam RPJMD 2025-2029

Sasaran Kinerja	Indikator Kinerja Provinsi		Indikator Kinerja Kabupaten/Kota
Tercapainya masyarakat yang sehat dan produktif sesuai siklus hidup	1	Usia harapan hidup	Usia harapan hidup
	2	*Total Fertility Rate* (Angka kelahitan total)	*Total Fertility Rate* (Angka kelahitan total)
	3	Angka kematian ibu	Jumlah kematian ibu
	4	Angka kematian balita	Jumlah kematian balita
	5	Prevalensi stunting	Prevalensi stunting
	6	Cakupan penerima pemeriksaan kesehatan gratis	Cakupan penerima pemeriksaan kesehatan gratis
	7	Cakupan imunisasi bayi lengkap	Cakupan imunisasi bayi lengkap
	8	Cakupan kepesertaan aktif jaminan kesehatan nasional (JKN)	Cakupan kepesertaan aktif jaminan kesehatan nasional (JKN)
	9	Angka keberhasilan pengobatan TB	Angka keberhasilan pengobatan TB
	10	Persentase hipertensi dalam pengendalian	Persentase penderita hipertensi yang mendapatkan pelayanan kesehatan sesuai standar
Meningkatnya pembudayaan gaya hidup sehat pada masyarakat melalui penguatan kesadaran, pengetahuan, dan penerapan untuk hidup sehat	11	Proporsi penduduk dengan aktivitas fisik cukup	Proporsi penduduk dengan aktivitas fisik cukup

Image credit to Prof. dr. Laksono Trisnantoro, MSc.., Ph.D.

Kematian Ibu:

Kematian yang terjadi **selama kehamilan**, **persalinan** dan **masa nifas** (yang menggantikan istilah Pregnancy-related deaths/PRD) adalah kematian seorang wanita pada saat hamil atau dalam waktu 42 hari terminasi kehamilan, apapun penyebabnya kematian (obstetri atau non-obstetri):

1) ***Kematian obstetrik*** *langsung* yaitu kematian yang diakibatkan oleh komplikasi obstetri pada keadaan kehamilan (termasuk kehamilan, persalinan dan masa nifas sampai 42 hari);

2) ***Kematian obstetrik tidak langsung*** yaitu kematian akibat penyakit yang sudah ada sebelumnya atau penyakit yang berkembang selama masa kehamilan yang bukan disebabkan oleh penyebab obstetri langsung, tetapi diperparah oleh efek fisiologis kehamilan

(Ameh et al., 2014)

Penyusunan Rencana Aksi menurunkan Jumlah Kematian Ibu

- Data kematian ibu: jumlah, tempat kematian, data demografi ibu, penyebab kematian
- Mengidentifikasi akar masalah penyebab kematian ibu
- Memahami faktor risiko pada berbagai tahapan kehamilan dan persalinan
- Mencari intervensi berbasis bukti
- Unsur sistem kesehatan yang dibutuhkan sebagai *enabler* intervensi
- Unsur lintas sektor yang dibutuhkan sebagai *enabler* intervensi

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Evidence-based cause of death

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OPEN

Global temporal trends in maternal hypertensive disorders incidence and mortality from 1990 to 2021 based on the global burden of disease study

Xuanyu Zhao[1] & Weimin Kong[2]

Maternal hypertensive disorders (MHD) remain a significant global health challenge. This study aims to provide a comprehensive analysis of the global burden of MHD from 1990 to 2021, focusing on incidence and mortality trends across different sociodemographic index (SDI) regions and age groups. We utilized Global Burden of Disease (GBD) study methodologies to analyze MHD incidence and mortality. Temporal trends were examined using Joinpoint regression to calculate annual percentage changes and average annual percentage changes with 95% confidence interval (CI). Age-period-cohort models were applied to analyze trends across different age groups, time periods, and birth cohorts, with particular attention to SDI regions. Globally, the age-standardized incidence rate (ASIR) of MHD decreased from 554.35 (95% Uncertainty Interval [UI]: 461.38t o 675.43) per 100,000 in 1990 to 461.94 (95% UI: 392.73 to 551.65) in 2021, with an average annual percent change (AAPC) of − 0.6% (95% CI: −0.67% to − 0.53%). The age-standardized death rate (ASDR) declined from 1.94 (95% UI: 1.71–2.15) per 100,000 in 1990 to 0.97 (95% UI: 0.81–1.18) in 2021 (AAPC − 2.18%; 95% CI: −2.3% to − 2.06%). Low SDI regions faced the highest burden. Age-period-cohort analyses revealed heterogeneous trends across age groups and SDI regions, with younger age groups (particularly ages 15–19 years) showing the most substantial improvements, demonstrated by the steepest declines in both incidence (-1.62% per year) and mortality rates (-2.57% per year). More recent birth cohorts demonstrated greater improvements, with declining risks of both incidence and mortality compared to earlier birth cohorts. Despite global reductions in MHD incidence and mortality over the past three decades, substantial disparities persist across regions and age groups. Targeted interventions, particularly in low SDI regions and among high-risk age groups, are crucial for further reducing the global burden of MHD.

Keywords Maternal hypertensive disorders, Global burden of disease, Joinpoint regression, Age-Period-Cohort analysis

Abbreviations

MHD	Maternal Hypertensive Disorders
SDI	Sociodemographic Index
GBD	Global Burden of Disease
ASIR	Age-Standardized Incidence Rate
UI	Uncertainty Interval
AAPC	Average Annual Percent Change
CI	Confidence Interval
ASDR	Age-Standardized Death Rate

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Transisi penyebab kematian ibu

Perdarahan,hipertensi dalam kehamilan, dan infeksi

→

Komplikasi non obstetric (*), hipertensi dan perdarahan.

*Komplikasi non obstetric: kumpulan penyakit yang berkaitan dengan gangguan metabolisme, termasuk di dalamnya penyakit jantung, obesitas, dan diabetes mellitus

scientific reports

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The construction and validation of a prediction model of hypertensive disease in pregnancy

Yuanyuan Chen & Jianting Ma

The HDP prediction model was constructed and validated by using the demographic characteristics, blood routine and biochemical screening indicators in early pregnancy to reduce the incidence of HDP. 16,112 pregnant women admitted to Yuyao People's Hospital from May 1, 2018 to April 30, 2022 were randomly divided into modeling group (n = 11279) and validation group (n = 4833) according to a ratio of 7:3. Demographic characteristics, blood routine and biochemical screening data of 8–12+6 weeks gestation were obtained from Ningbo Health Records system. Univariate analysis and multivariate binary Logistic regression analysis were used to determine the independent risk factors of HDP, and the scoring system was established by using the nomogram. Univariate analysis and multivariate binary Logistic regression analysis showed that Age, BMI, previous medical history, HB, TG, HDL and ALB were independent risk factors for HDP (P < 0.001). In the modeling group, AUC = 0.809, sensitivity = 74.30%, specificity = 73.10%, and in the validation group, AUC = 0.801, sensitivity = 77.60%, specificity = 68.90%. Hosmer-Lemeshow goodness of fit test showed that modeling group: P = 0.195 > 0.05, validation group: P = 0.775 > 0.05. The prediction model of early pregnancy Age, BMI, previous medical history, HB, TG, HDL and ALB can effectively predict the occurrence of HDP.

Keywords Gestational hypertension, Maternal demography, Complete blood count, Biochemical indicators, Predictive models

Hypertensive disorders complicating pregnancy (HDP) is a disease unique to women during pregnancy. It refers to the sudden occurrence of high blood pressure in pregnant women with no history of hypertension, more than after 20 weeks of gestation. Generally within 12 weeks after delivery, it can return to normal on its own, and is a common cause of maternal and perinatal death[1,2].It has been reported[3] that the global incidence of HDP is as high as 5–10%. The main clinical symptoms of HDP are hypertension, proteinuria and edema.In severe cases, pregnant women can suffer systemic multi-organ damage or functional failure until death. The disease will not only cause harm to pregnant women such as placental abruption, disseminated intravascular coagulation, cerebral hemorrhage and even death, but also cause harm to the fetus such as intrauterine dysplasia, premature delivery and death, seriously threatening the life and health of the mother and child[4,5].The pathogenesis of hypertensive diseases in pregnancy is complex, and the mechanism of occurrence can not be explained by any single factor, but by a combination of maternal, placental, fetal and other factors. At present, we are in an era of personalized, predictable and participatory medical big data, and the occurrence, development or prognosis of diseases can be predicted. ACOG practice bulletin[6] points out that early screening of HDP risk factors are extremely important. Early and accurate screening of HDP high-risk groups is of great significance to improve maternal and infant prognosis[7–9]. The clinical prediction model is a quantitative tool for personalized clinical risk assessment, which is built on the support of several logically-calculated variables. In recent years, the construction of HDP prediction model at home and abroad is in the development stage.A retrospective case-control study[10] analyzed 62 pregnant women with HDP and confirmed that the HDP risk prediction model established by using maternal impedance electrocardiogram, electrocardiogram Doppler ultrasound and bioimpedance combined with demographic data has high predictive value and clinical significance.Another retrospective case-control study[11] analyzed 117 pregnant women with HDP. Seven independent predictors were selected by logistic regression and a prediction model was built based on them. However, the above two studies have not been validated by the model, the number of cases is small, and some predictors are not common clinical examination indicators, so it is difficult to popularize. Therefore, there is no unified prediction method for the prediction model of HDP that can be applied to the clinical practice of real events. Based on this, we need to find a simple and easily available laboratory data to build a predictive model to guide clinical practice, so as to achieve

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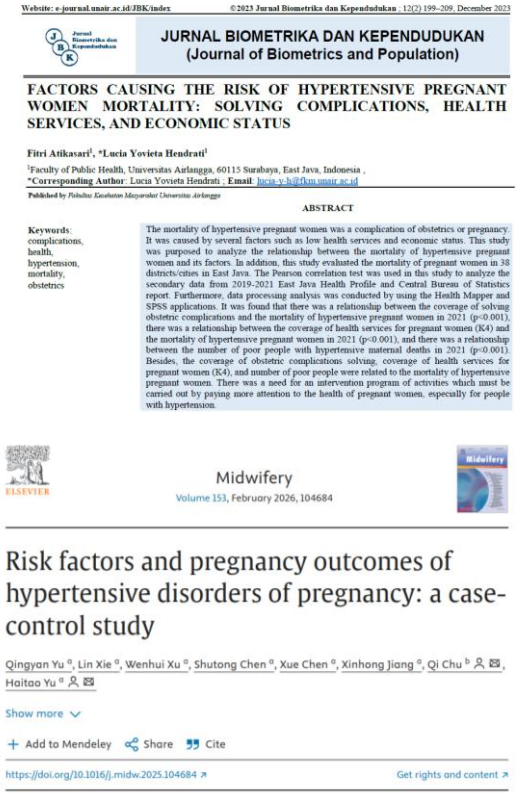
Evidence-based risk factors

- Masa Prekonsepsi
- Masa Kehamilan
- Masa Persalinan
- Masa Nifas



Website: e-journal.unair.ac.id/JBK/index ©2023 Jurnal Biometrika dan Kependudukan ; 12(2) 199–209, December 2023

JURNAL BIOMETRIKA DAN KEPENDUDUKAN
(Journal of Biometrics and Population)

FACTORS CAUSING THE RISK OF HYPERTENSIVE PREGNANT WOMEN MORTALITY: SOLVING COMPLICATIONS, HEALTH SERVICES, AND ECONOMIC STATUS

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ABSTRACT

Keywords: complications, health, hypertension, mortality, obstetrics

The mortality of hypertensive pregnant women was a complication of obstetrics or pregnancy. It was caused by several factors such as low health services and economic status. This study was purposed to analyze the relationship between the mortality of hypertensive pregnant women and its factors. In addition, this study evaluated the mortality of pregnant women in 38 districts/cities in East Java. The Pearson correlation test was used in this study to analyze the secondary data from 2019-2021 East Java Health Profile and Central Bureau of Statistics report. Furthermore, data processing analysis was conducted by using the Health Mapper and SPSS applications. It was found that there was a relationship between the coverage of solving obstetric complications and the mortality of hypertensive pregnant women in 2021 (p<0.001), there was a relationship between the coverage of health services for pregnant women (K4) and the mortality of hypertensive pregnant women in 2021 (p<0.001), and there was a relationship between the number of poor people with hypertensive maternal deaths in 2021 (p<0.001). Besides, the coverage of obstetric complications solving, coverage of health services for pregnant women (K4), and number of poor people were related to the mortality of hypertensive pregnant women. There was a need for an intervention program of activities which must be carried out by paying more attention to the health of pregnant women, especially for people with hypertension.

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Risk factors and pregnancy outcomes of hypertensive disorders of pregnancy: a case-control study

Qingyan Yu [a], Lin Xie [a], Wenhui Xu [a], Shutong Chen [a], Xue Chen [a], Xinhong Jiang [a], Qi Chu [b], Haitao Yu [a]

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Risk factors and prediction model for new-onset hypertensive disorders of pregnancy: a retrospective cohort study

Ling Zhou[1*†], Yunfan Tian[2†], Zhenyang Su[2†], Jin-Yu Sun[2] and Wei Sun[2*]

[1]Department of Obstetrics and Gynecology, Liyang People's Hospital, Liyang, Jiangsu, China, [2]Department of Cardiology, The First Affiliated Hospital of Nanjing Medical University, Nanjing, China

Background and aims: Hypertensive disorders of pregnancy (HDP) is a significant cause of maternal and neonatal mortality. This study aims to identify risk factors for new-onset HDP and to develop a prediction model for assessing the risk of new-onset hypertension during pregnancy.
Methods: We included 446 pregnant women without baseline hypertension from Liyang People's Hospital at the first inspection, and they were followed up until delivery. We collected maternal clinical parameters and biomarkers between 16th and 20th weeks of gestation. Logistic regression was used to determine the effect of the risk factors on HDP. For model development, a backward selection algorithm was applied to choose pertinent biomarkers, and predictive models were created based on multiple machine learning methods (generalised linear model, multivariate adaptive regression splines, random forest, and k-nearest neighbours). Model performance was evaluated using the area under the curve.
Results: Out of the 446 participants, 153 developed new-onset HDP. The HDP group exhibited significantly higher baseline body mass index (BMI), weight change, baseline systolic/diastolic blood pressure, and platelet counts than the control group. The increase in baseline BMI, weight change, and baseline systolic and diastolic blood pressure significantly elevated the risk of HDP, with odds ratios and 95% confidence intervals of 1.10 (1.03–1.17), 1.10 (1.05–1.16), 1.04 (1.01–1.08), and 1.10 (1.05–1.14) respectively. Restricted cubic spline showed a linear dose-dependent association of baseline BMI and weight change with the risk of HDP. The random forest-based prediction model showed robust performance with the area under the curve of 0.85 in the training set.
Conclusion: This study establishes a prediction model to evaluate the risk of new-onset HDP, which might facilitate the early diagnosis and management of HDP.

KEYWORDS
hypertensive disorders of pregnancy, body mass index, weight change, risk factors, prediction model

1 Introduction

Hypertensive disorders of pregnancy (HDP) is a common placental-mediated syndrome characterised by elevated blood pressure, proteinuria and edema (1). HDP can result in various serious complications, such as hemolysis, placental abruption, and stillbirth (2). Besides the short-term effects on pregnancy, HDP also increases the long-

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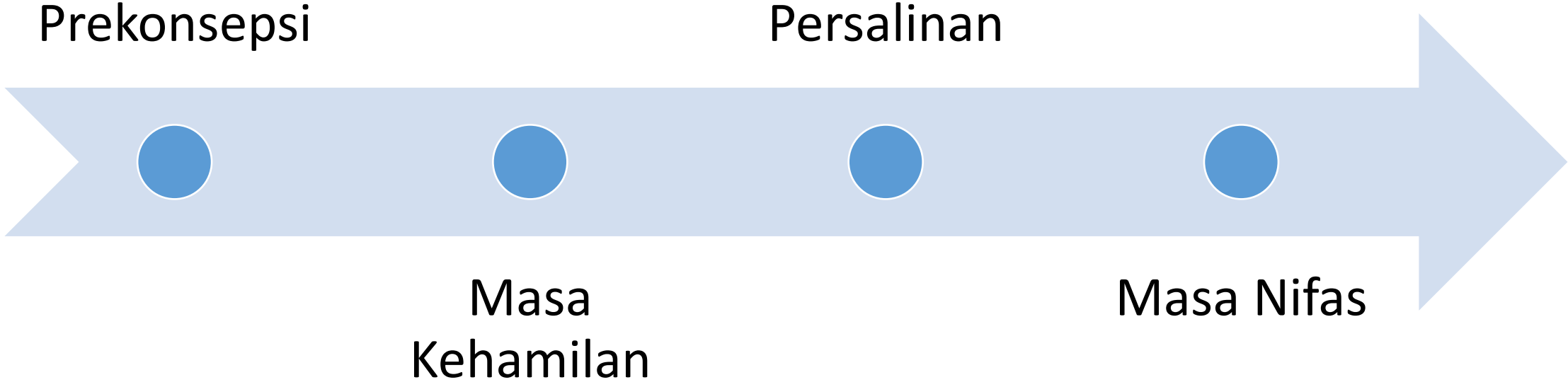
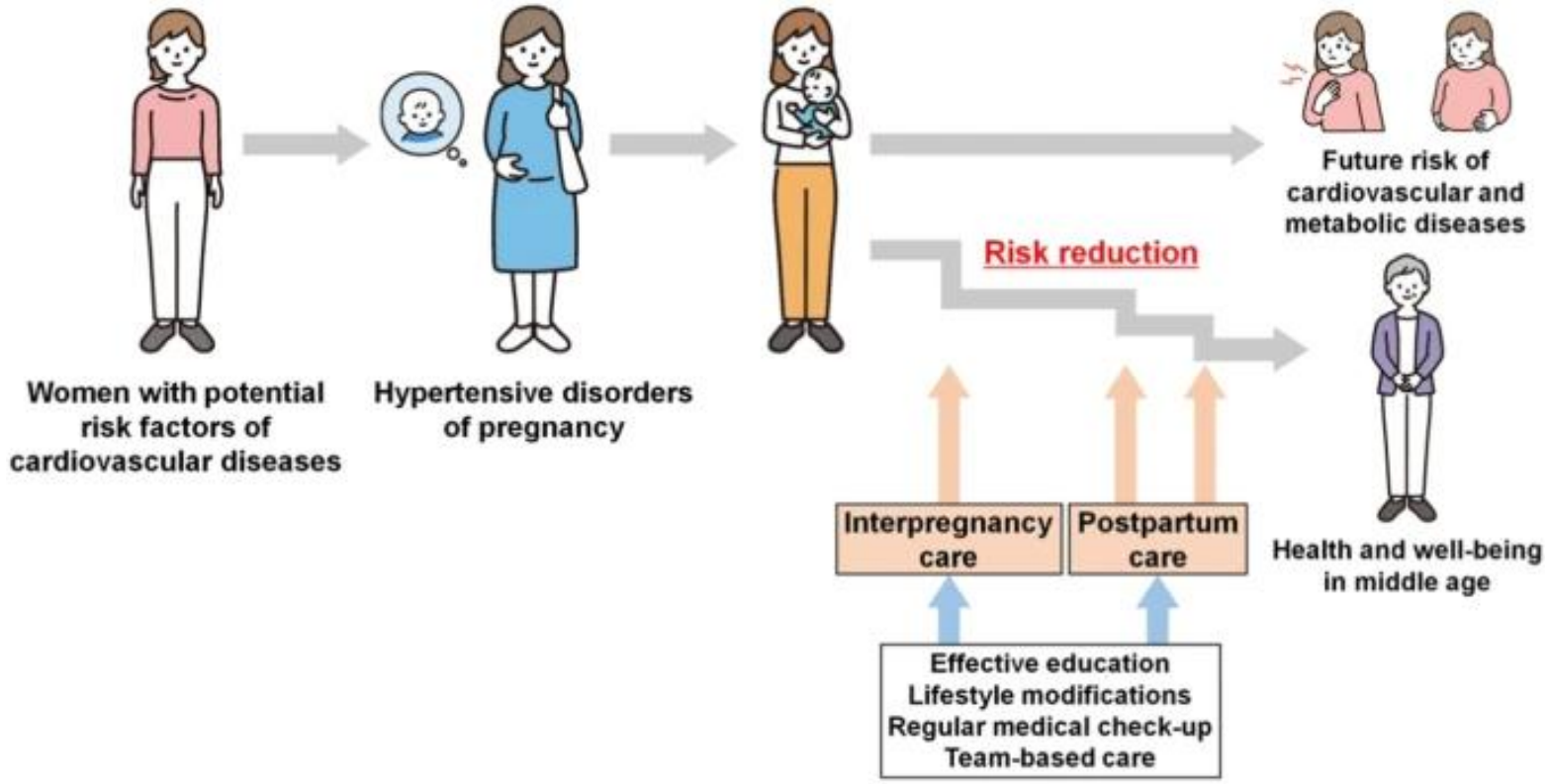
- High systolic blood pressure
- Metabolic risks
- High BMI/overweight/obesity
- High Gestational Weight Gain
- Unhealthy diet
- Alcohol use
- Low fruit and vegetable intake

Windows of Opportunities (and Risks!)



Mengapa tidak berhenti sampai di situ?



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Evidence-based interventions

Manajemen hipertensi dalam kehamilan (HDP)

Preventif

> Am J Hypertens. 2025 May 8:hpaf080. doi: 10.1093/ajh/hpaf080. Online ahead of print.

Hypertensive Pregnancy Disorders: From Mechanisms to Management

Marcus K Robbins [1], Hellen Nembaware [1], Sautan Mandal [1], Anukool Bhopatkar [1], Azaziah Parker [1], Christy Chambers [1], Chas Brewerton [2], Jessica Mauroner [1], Krystle Hughes [1], Evangeline Deer [1 2], Jan M Williams [1], Denise C Cornelius [1 3]

Affiliations + expand

PMID: 40336354 DOI: 10.1093/ajh/hpaf080

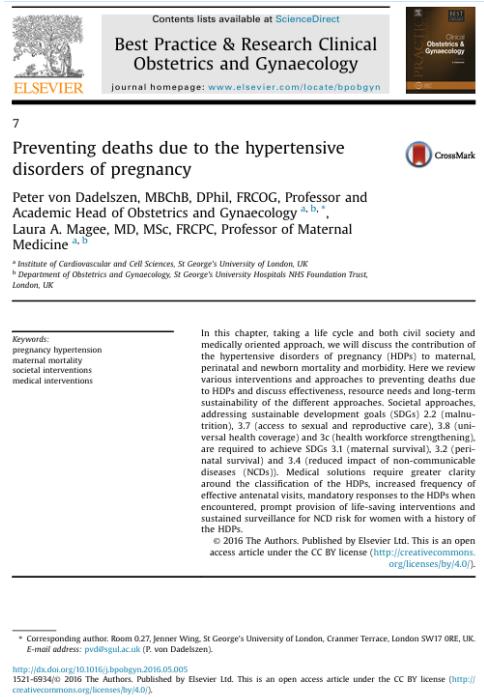
Abstract

Hypertensive disorders of pregnancy (HDP) are a leading cause of maternal and perinatal morbidity and mortality globally, affecting up to 10% of pregnancies. As rates of obesity, chronic hypertension, and advanced maternal age continue to rise, the burden of HDP is expected to escalate. This review

Table 1: Global Guidelines for Management of Hypertensive Disorders in Pregnancy

Aspect	WHO Guidelines [49]	ACOG Guidelines [48]	UK NICE Guidelines [50]
Screening Recommendations	Universal BP monitoring at each prenatal visit.	Universal BP monitoring with routine urine protein analysis.	BP monitoring and urine protein analysis; assess for risk factors.
Antihypertensive Threshold	Start treatment at BP ≥ 140/90 mmHg.	Initiate treatment at BP ≥ 160/110 mmHg.	Commence management at BP ≥ 150/100 mmHg.
Preferred Antihypertensives	Methyldopa, Labetalol, Nifedipine.	Labetalol, Nifedipine, Hydralazine.	Labetalol, Methyldopa, Nifedipine.
Management of Severe Preeclampsia	Magnesium sulphate for seizure prevention.	Magnesium sulphate recommended.	Magnesium sulphate in severe cases only.
Aspirin Prophylaxis	Recommended for high-risk women (75 mg).	Initiate 81 mg daily for women at risk of PE.	Recommend 75 mg daily for high-risk women.
Fetal Surveillance	Doppler ultrasound for growth assessment.	Ultrasound every 3–4 weeks	Regular growth scans and fetal monitoring in severe cases.

Source: Hypertensive Disorders of Pregnancy: Exploring Epidemiology, Risk Factors, Maternal-Fetal Outcomes, and Comprehensive Management and Prevention Strategies – A Review. Priyanka Malaiyappan, Augusta Rebecca James Ravichandran. International Journal of Research Publication and Reviews, Vol 6, Issue 4, pp 7564-7573 April 2025



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7

Preventing deaths due to the hypertensive disorders of pregnancy

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Laura A. Magee, MD, MSc, FRCPC, Professor of Maternal Medicine [a, b]

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[b] Department of Obstetrics and Gynaecology, St George's University Hospitals NHS Foundation Trust, London, UK

Keywords:
pregnancy hypertension
maternal mortality
societal interventions
medical interventions

In this chapter, taking a life cycle and both civil society and medically oriented approach, we will discuss the contribution of the hypertensive disorders of pregnancy (HDPs) to maternal, perinatal and newborn mortality and morbidity. Here we review various interventions and approaches to preventing deaths due to HDPs and discuss effectiveness, resource needs and long-term sustainability of the different approaches. Societal approaches, addressing sustainable development goals (SDGs) 2.2 (malnutrition), 3.7 (access to sexual and reproductive care), 3.8 (universal health coverage) and 3c (health workforce strengthening), are required to achieve SDGs 3.1 (maternal survival), 3.2 (perinatal survival) and 3.4 (reduced impact of non-communicable diseases (NCDs)). Medical solutions require greater clarity around the classification of the HDPs, increased frequency of effective antenatal visits, mandatory responses to the HDPs when encountered, prompt provision of life-saving interventions and sustained surveillance for NCD risk for women with a history of the HDPs.

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Peripartum Screening for Postpartum Hypertension in Women With Hypertensive Disorders of Pregnancy

Veronica Giorgione, MD,[a,b] Asma Khalil, MD,[a,b] Jamie O'Driscoll, PhD,[c,d] Basky Thilaganathan, MD, PhD[a,b]

ABSTRACT

BACKGROUND Chronic hypertension (CHT) is the main risk factor for cardiovascular diseases in women with a history of hypertensive disorders of pregnancy (HDP).

OBJECTIVES This study sought to assess the effectiveness of peripartum screening in predicting CHT after HDP.

METHODS In this longitudinal prospective study, women with HDP underwent peripartum transthoracic echocardiography and were evaluated for CHT (blood pressure ≥140/90 mm Hg or on antihypertensive medication) at least 3 months postpartum. Univariable and multivariable analyses assessed the association between clinical and transthoracic echocardiography data and a postpartum diagnosis of CHT.

RESULTS At a median postpartum follow-up of 124 days (IQR: 103-145 days), 70 (33.2%) of 211 women remained hypertensive. Compared with normotensive women, women with CHT were older (35.5 ± 5.0 years vs 32.9 ± 5.6 years; $P = 0.003$), were more likely to be Afro-Caribbean (27.1% vs 7.8%; $P < 0.0001$), had higher body mass index (33.4 ± 5.9 kg/m^2 vs 31.2 ± 5.4 kg/m^2; $P = 0.006$), and had higher mean arterial pressure (106.5 ± 8.4 mm Hg vs 101.3 ± 7.0 mm Hg; $P = 0.004$). Moreover, they showed significantly higher left ventricular mass index (84.0 ± 17.9 g/m^2 vs 76.3 ± 14.8 g/m^2, $P = 0.001$), higher relative wall thickness (0.46 ± 0.10 vs 0.40 ± 0.10; $P < 0.0001$), and lower global longitudinal strain (−15.6% ± 2.7% vs −16.6% ± 2.2%; $P = 0.006$) than normotensive women. A prediction model combining clinical (maternal age and first trimester mean arterial pressure) and echocardiographic features (left ventricular mass index >75 g/m^2, relative wall thickness ≥0.42, and E/e' ratio >7) showed excellent accuracy in identifying women with persistent hypertension after HDP (area under the curve: 0.85; 95% CI: 0.79-0.90).

CONCLUSIONS This peripartum screening approach might be used to identify women at risk of CHT who would benefit from intensive blood pressure monitoring and pharmacological strategies from the early postpartum period to prevent cardiovascular disease. (J Am Coll Cardiol 2022;80:1465-1476) © 2022 the American College of Cardiology Foundation.

Women with a history of hypertensive disorders of pregnancy (HDP) are prone to develop cardiovascular disease (CVD), the leading cause of mortality in the female population.[1,2] Before developing CVD, which typically manifests several decades after pregnancy, women with HDP first exhibit CVD risk factors such as chronic hypertension (CHT), diabetes, and dyslipidemia.[3-5] In particular, CHT is the major mediator of the associations between gestational hypertension and preeclampsia with CVD.[6,7] More recent work has demonstrated that soon after a pregnancy complicated by HDP, women have persistent left ventricular (LV) diastolic dysfunction and abnormal geometry

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The authors attest they are in compliance with human studies committees and animal welfare regulations of the authors' institutions and Food and Drug Administration guidelines, including patient consent where appropriate. For more information, visit the Author Center.

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https://doi.org/10.1038/s41440-024-02024-8

ARTICLE

Special Issue: Current evidence and perspectives for hypertension management in Asia

Visualizing risk modification of hypertensive disorders of pregnancy: development and validation of prediction model for personalized interpregnancy weight management

Sho Tano[1,2] · Tomomi Kotani[1,3] · Takafumi Ushida[1] · Seiko Matsuo[1] · Masato Yoshihara[1] · Kenji Imai[1] · Fumie Kinoshita[4] · Yoshinori Moriyama[5] · Masataka Nomoto[6] · Shigeru Yoshida[7] · Mamoru Yamashita[7] · Yasuyuki Kishigami[2] · Hidenori Oguchi[2] · Hiroaki Kajiyama[1]

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Abstract

The growing recognition of the importance of interpregnancy weight management in reducing hypertensive disorders of pregnancy (HDP) underscores the importance of effective preventive strategies. However, developing effective systems remains a challenge. We aimed to bridge this gap by constructing a prediction model. This study retrospectively analyzed the data of 1746 women who underwent two childbirths across 14 medical facilities, including both tertiary and primary facilities. Data from 2009 to 2019 were used to create a derivation cohort ($n = 1746$). A separate temporal-validation cohort was constructed by adding data between 2020 and 2024 ($n = 365$). Furthermore, the external-validation cohort was constructed using the data from another tertiary center between 2017 and 2023 ($n = 340$). We constructed a prediction model for HDP development in the second pregnancy by applying logistic regression analysis using 5 primary clinical information: maternal age, pre-pregnancy body mass index, and HDP history; and pregnancy interval and weight change velocity between pregnancies. Model performance was assessed across all three cohorts. HDP in the second pregnancy occurred 7.3% in the derivation, 10.1% in the temporal-validation, and 7.9% in the external-validation cohorts. This model demonstrated strong discrimination, with c-statistics of 0.86, 0.88, and 0.86 for the respective cohorts. Precision-recall area under the curve values were 0.90, 0.85, and 0.91, respectively. Calibration showed favorable intercepts (−0.02 to −0.00) and slopes (0.96–1.02) for all cohorts. In conclusion, this externally validated model offers a robust basis for personalized interpregnancy weight management goals for women planning future pregnancies.

Keywords Overweight · Obesity, Pre-conception care, Preeclampsia, Interpregnancy care

Introduction

Hypertensive disorders of pregnancy (HDP), with an incidence of 8–10%, is a major cause of maternal

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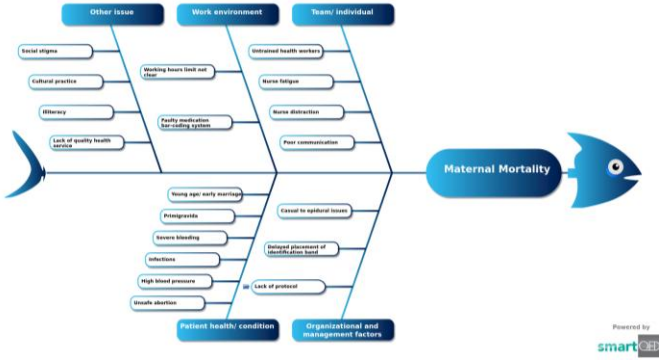
SPRINGER NATURE

LOCALLY ROOTED, GLOBALLY RESPECTED

Menganalisis masalah

Tools:

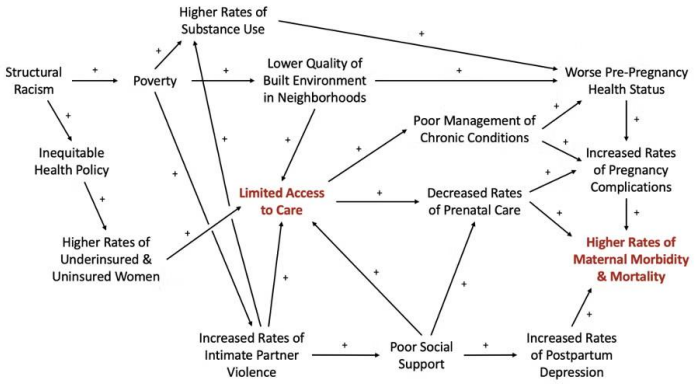
1. Fishbone/Ishikawa diagram
2. Diagnostic Tree analysis: 5 Whys
3. Tanahashi (bottleneck analysis)
4. Causal loop diagram
5. Etc.



https://www.who.int/news-room/fact-sheets/detail/maternal-mortality

Root cause analysis

Root cause analysis (RCA) adalah proses sistematik untuk mengidentifikasi akar masalah dari suatu kejadian



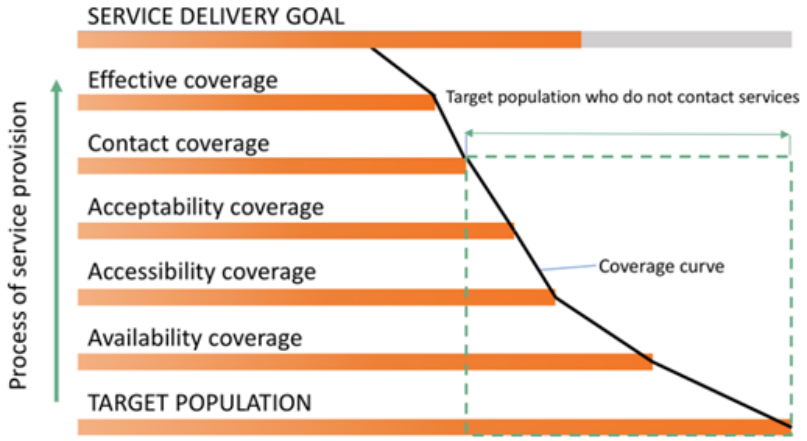
Source: Hill M, Tremont J, McCraw M, Spach N, Berry A. Maternal mortality in the United States: a focus on health disparities. HPHR. 2021;34, DOI:10.54111/0001/HH19

Tanahashi model

Tanahashi model melakukan analisis terhadap beberapa factor dalam system Kesehatan yang saling berinteraksi hingga dapat mengidentifikasi risiko kelompok yang “missing” di dalam care-seeking pathway.

Tanahashi model mempertimbangkan lima elemen yaitu :

- Availability coverage
- Accessibility coverage
- Acceptability coverage
- Contact coverage
- Effectiveness coverage



The Tanahashi Framework- an illustration of the links between attainment of service delivery goals and 'types' of coverage

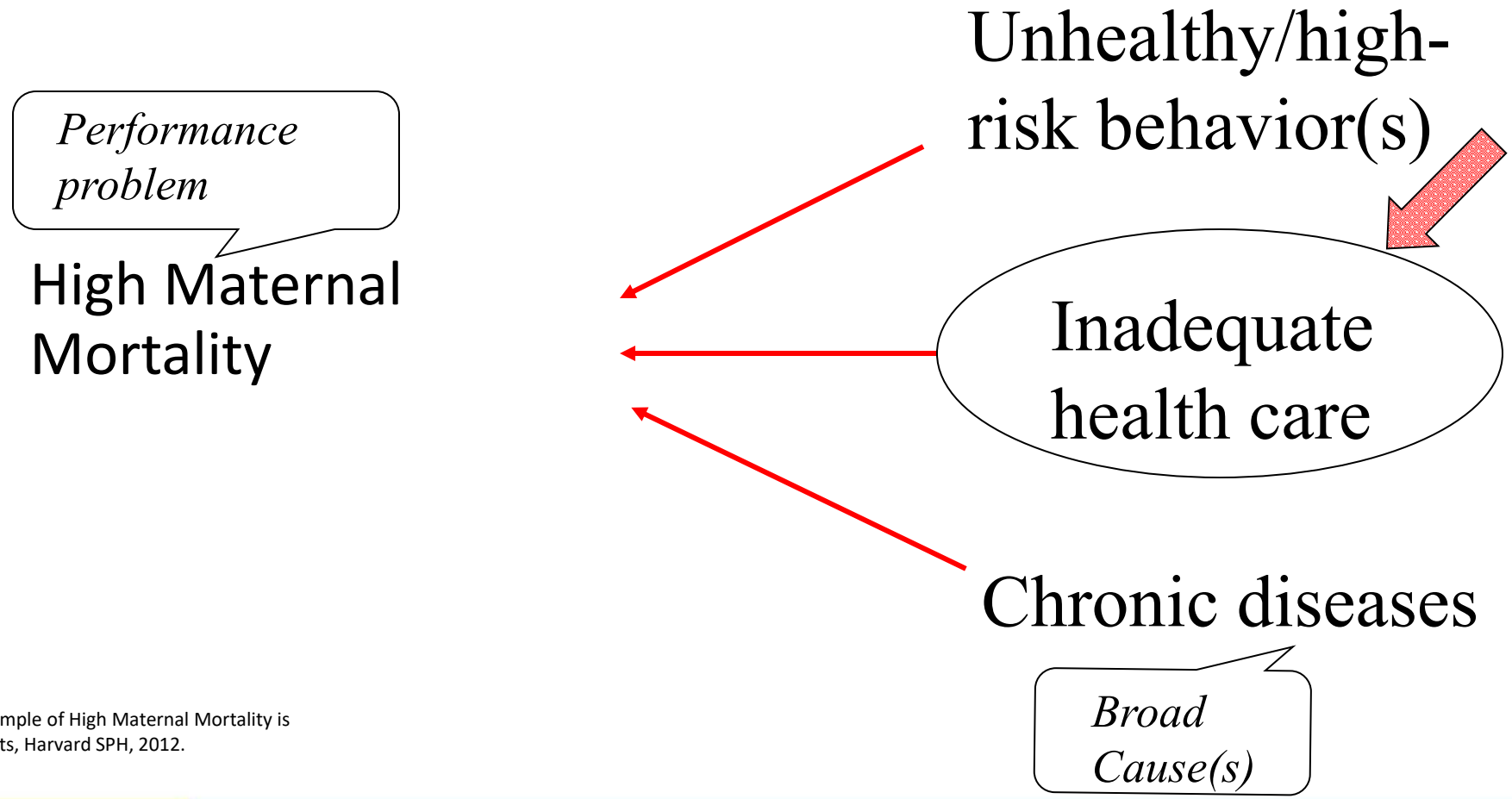
Source: Handbook for conducting assessments of barriers to effective coverage with health services:in support of equity-oriented reforms towards universal health coverage. Geneva: World Health Organization; 2024.Licence: CC BY-NC-SA 3.0 IGO.

Table 1 Mapping supply and demand determinants with Tanahashi levels of coverage

Supply and Demand	Tanahashi levels of coverage
Supply side determinants of the health system (those aspects of the health system which relate to the production of healthcare).	• Availability coverage – The availability of resources such as health workers, health facilities, drugs determines the extent to which a service can be provided. • Accessibility coverage – Defines the population who can use or access the service. A service has to be geographically accessible, located within reasonable reach of people who need it and financially affordable.
Demand side determinants (those aspects operating at individual, household or community level, which influence the ability of an individual to identify illness, and willingness to seek and use appropriate health care).	• Acceptability coverage – This domain defines the people who can access the service, are willing to use it and finds it acceptable for example in terms of costs, waiting time, beliefs. • Contact coverage – These are people who have been in contact with the service provider and have utilised the service. • Effectiveness coverage – The proportion of the population in need of an intervention that receive an effective intervention.

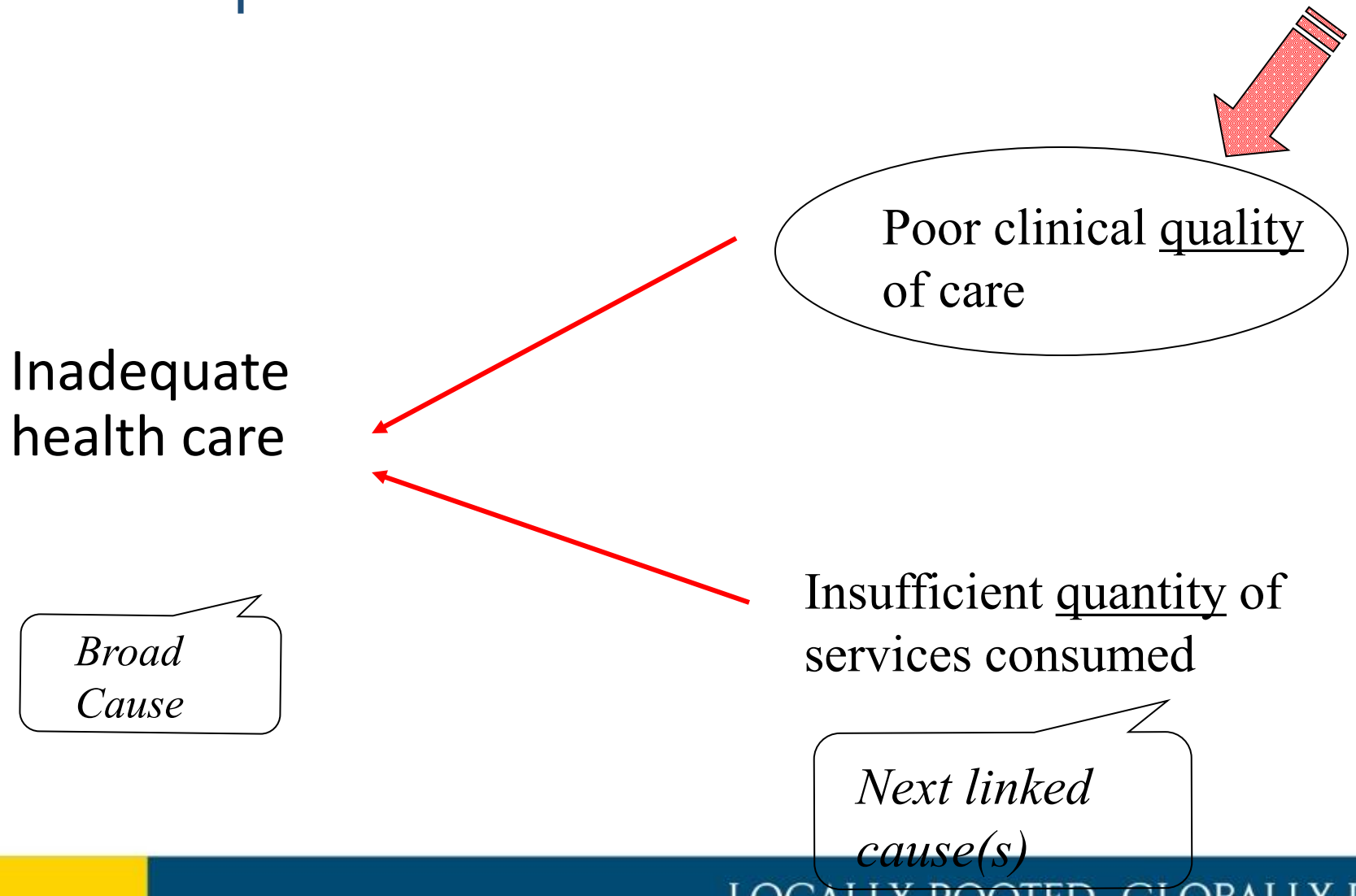
Sources (Frenz and Vega 2010; World Health Organisation (WHO) 2010; Tanahashi 1978; Ensor and Cooper 2004; Henriksson et al. 2017)

Example of 5-Whys: High Maternal Mortality

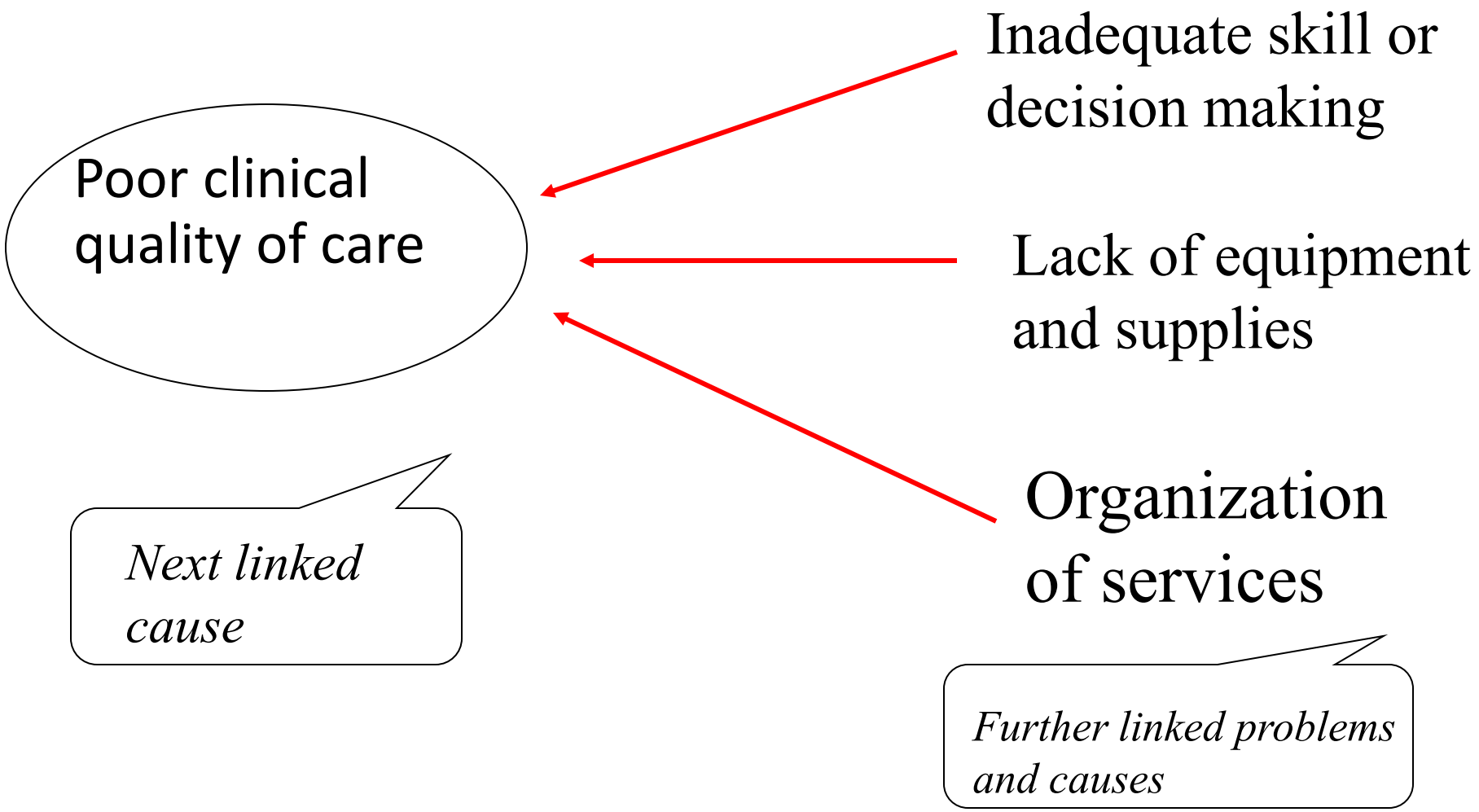


The Problem Tree diagram with an example of High Maternal Mortality is courtesy of (the late) Prof. Marc Roberts, Harvard SPH, 2012.

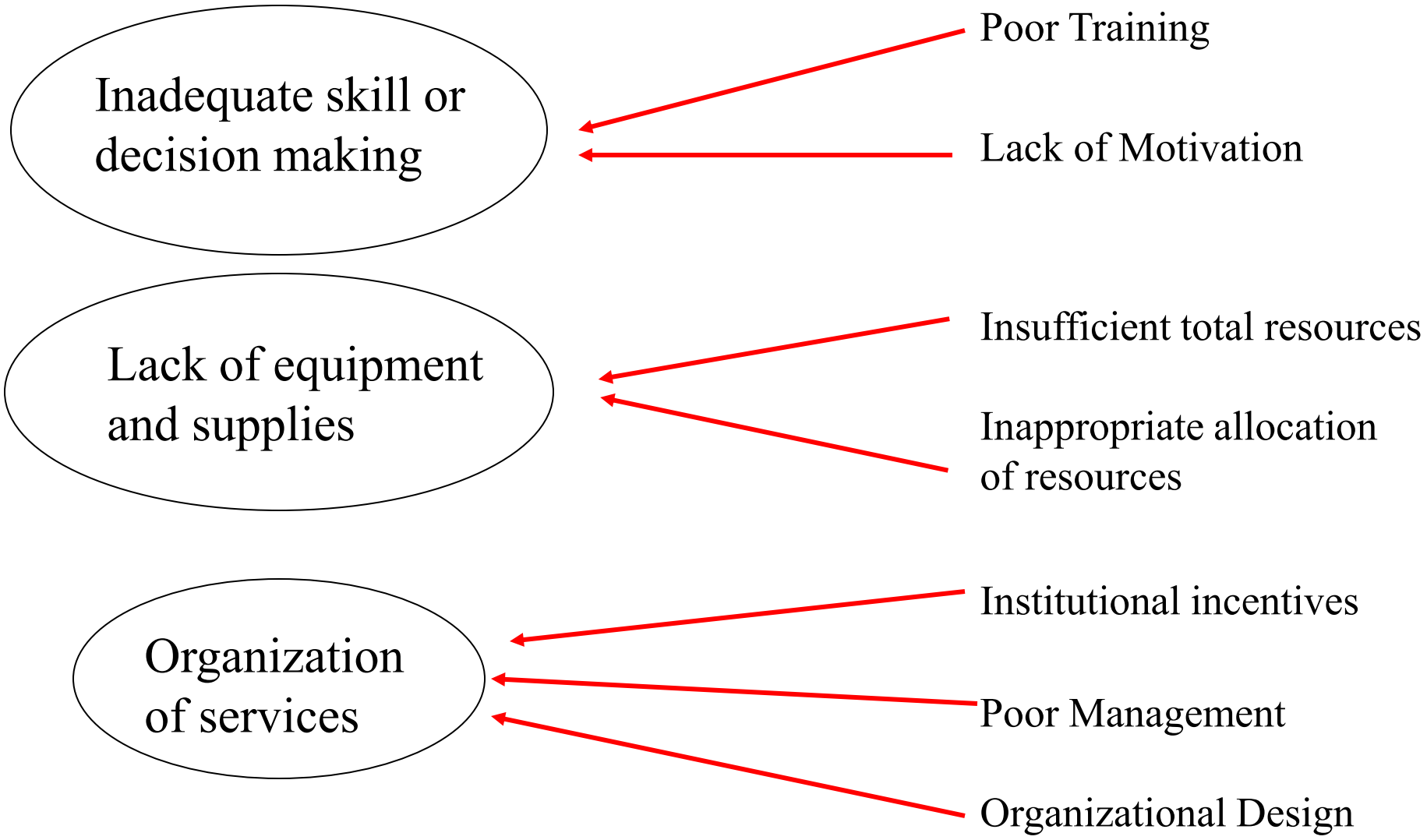
Broad Cause of High Maternal Mortality: Inadequate Health Care



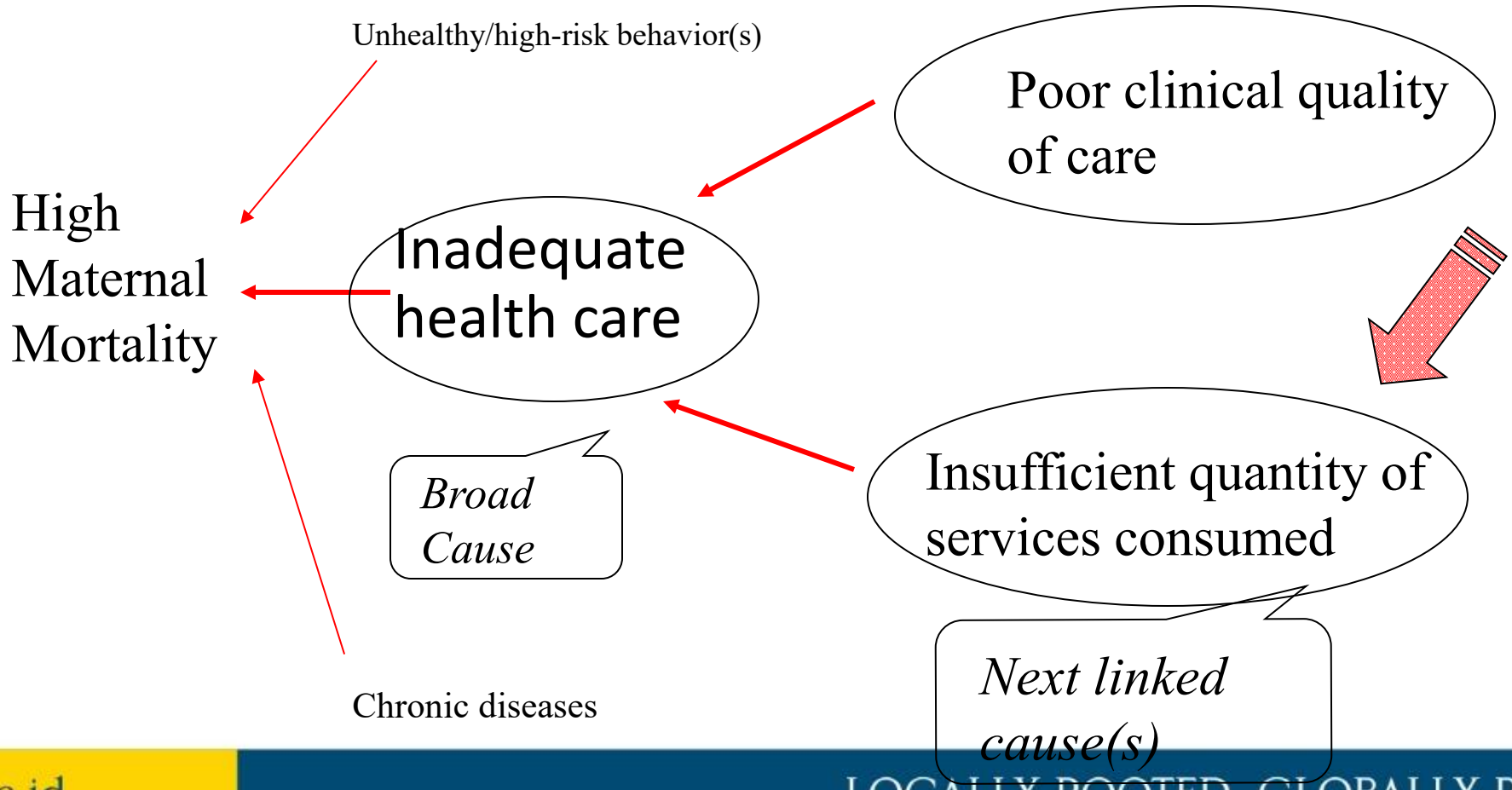
Next Linked Causes:
Poor Clinical Quality of Care



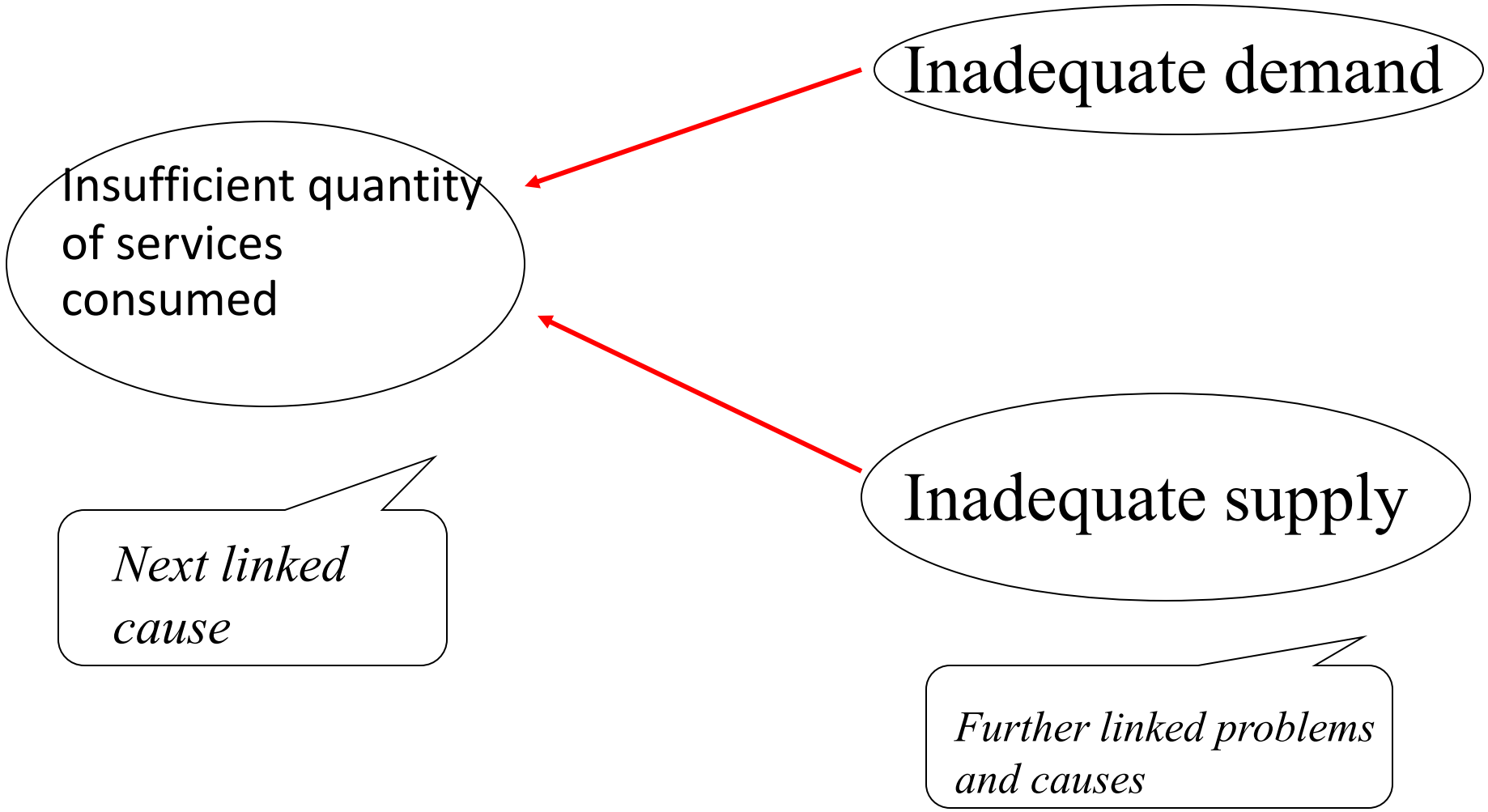
Further Linked Problems and Causes



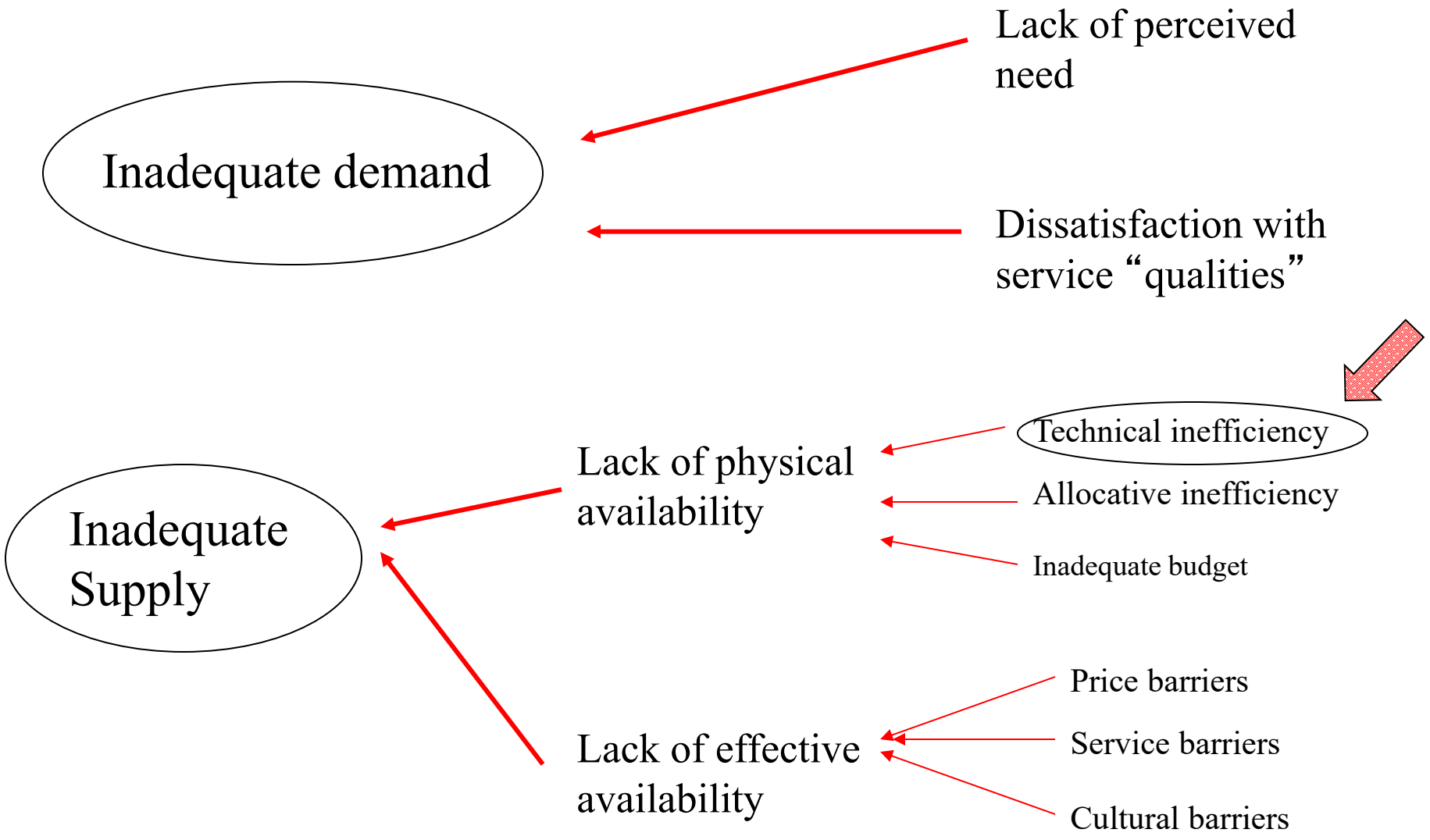
Broad Cause of High Maternal Mortality: Inadequate Health Care



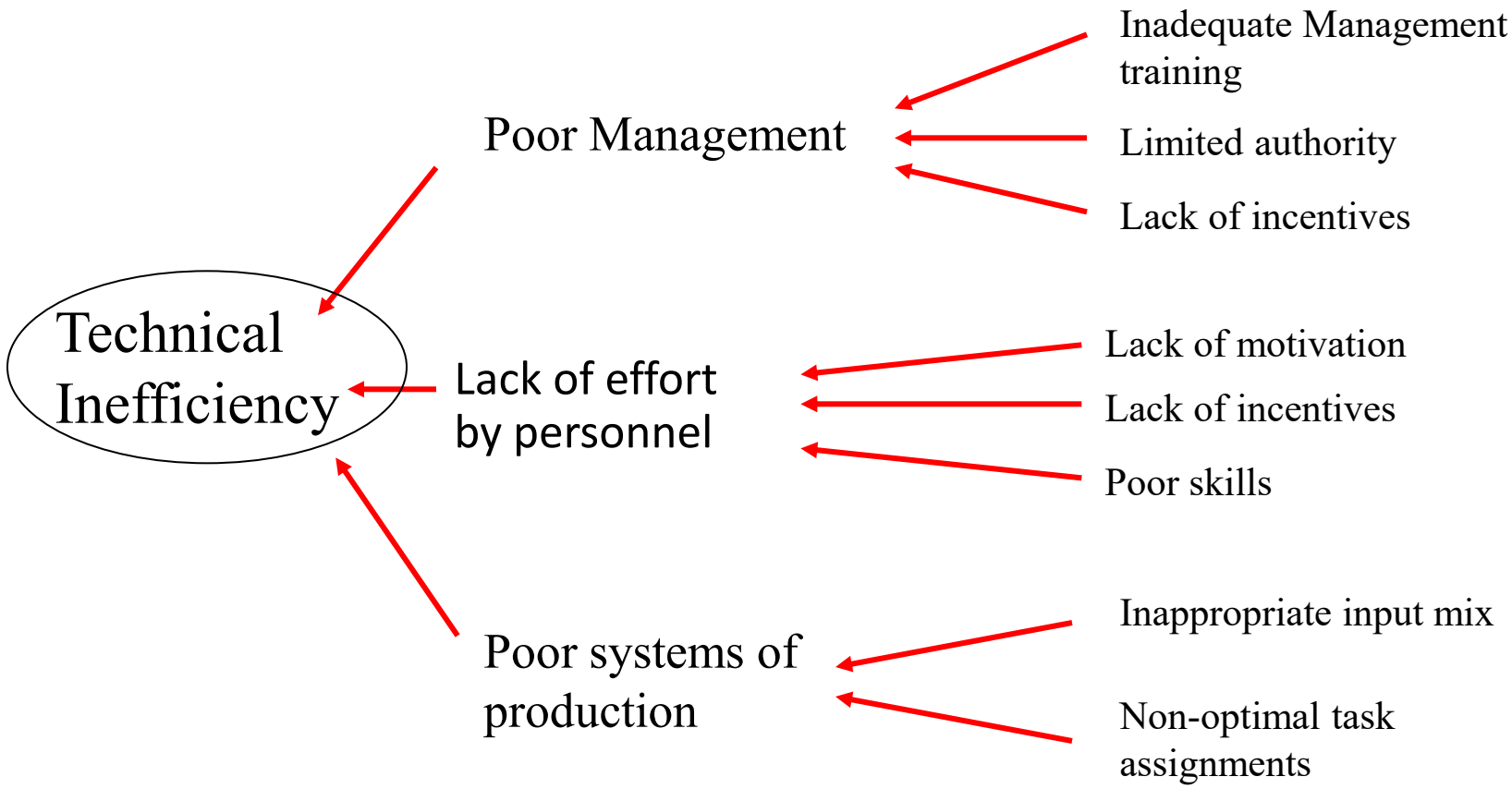
Next Linked Causes:
Insufficient Quantity of Services Consumed



Further Linked Problems and Causes



Further Linked Problems and Causes:



Catatan:

- Suatu ‘akibat’ dapat disebabkan oleh beberapa ‘penyebab’
- Suatu penyebab dapat menyebabkan beberapa akibat

Penugasan untuk Root Cause Analysis

- Identifikasi “Masalah penyebab kematian ibu” pada 3 fase yang berbeda:
  - Kehamilan
  - Persalinan
  - Pasca persalinan/nifas
- Dan menjawab ‘why?’
  - Judgement? Well-defined theory? Logical framework? Evidence?
    - Contoh: 3T
  - Siapa yang melakukan
    - Internal?
    - Eksternal?
    - Mix skills
  - Data
    - Ketersediaan data (dan aksesibilitasnya)
    - Gap data dan cara mendapatkan data baru (resources?)

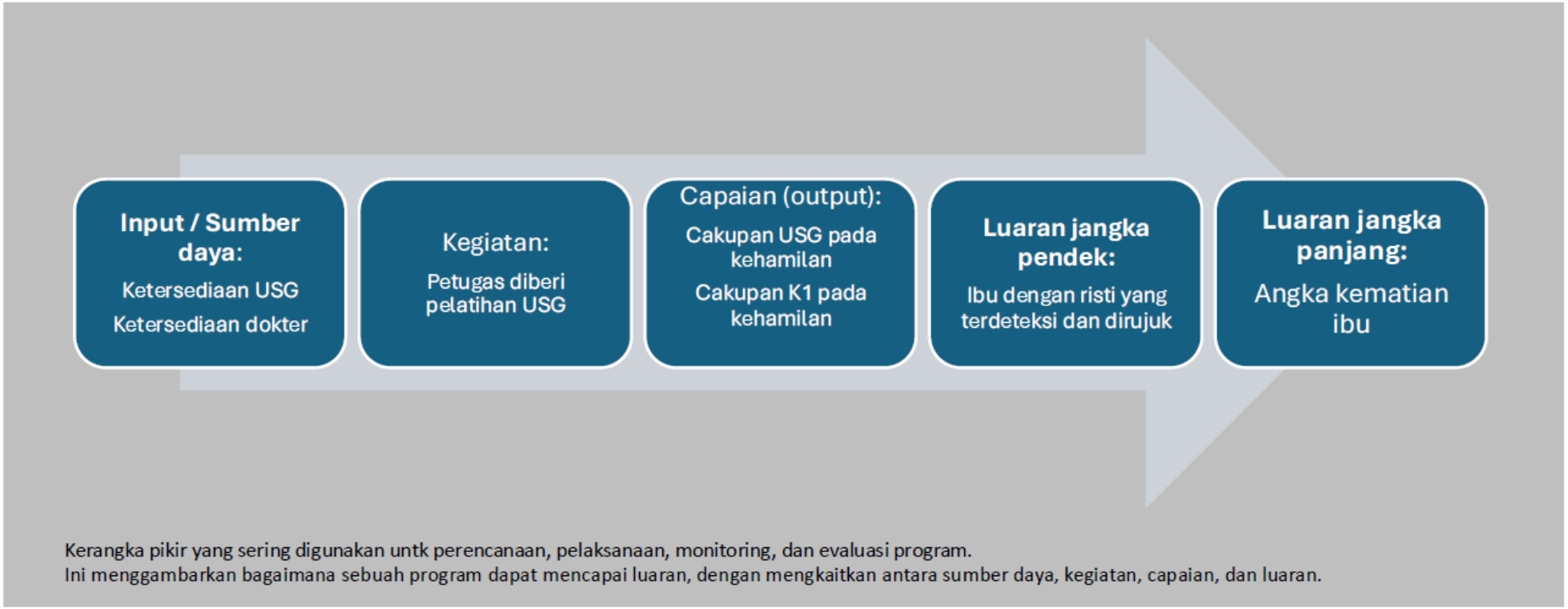
Penugasan untuk Penyusunan Rencana Aksi menurunkan Jumlah Kematian Ibu (indikator RIBK):

1. Melakukan analisis masalah

(Silakan pilih salah satu teknik analisis penyebab masalah)

- Kelompok 1: Masa kehamilan: Kematian terjadi di mana? Apa penyebabnya?
- Kelompok 2: Masa persalinan: Kematian terjadi di mana? Apa penyebabnya?
- Kelompok 3: Masa nifas : Kematian terjadi di mana? Apa penyebabnya?

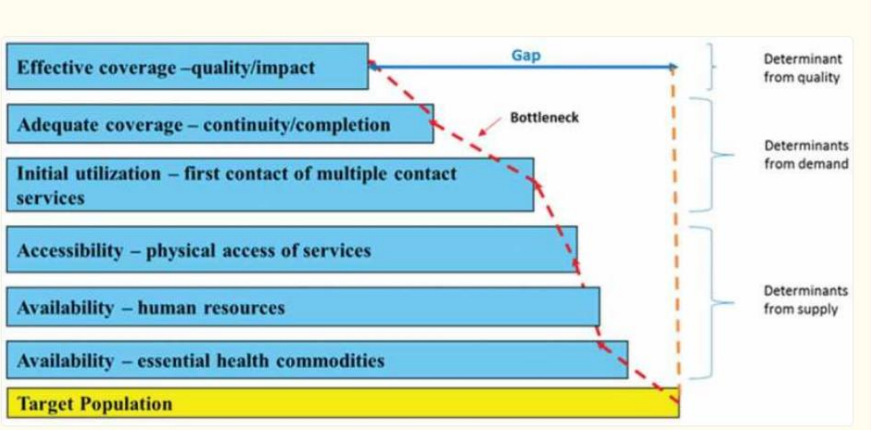
Pemanfaatan Logical Framework dalam penyusunan rencana aksi



Kerangka pikir yang sering digunakan untk perencanaan, pelaksanaan, monitoring, dan evaluasi program.
Ini menggambarkan bagaimana sebuah program dapat mencapai luaran, dengan mengkaitkan antara sumber daya, kegiatan, capaian, dan luaran.

Image credit to dr. Likke Prawidya Putri, M.P.H., Ph.D.
Paparan kepada program KIA di Kemenkes RI

Bottleneck analysis (Marginal Budgeting for Bottleneck)



Source: Kiwanuka Henriksson D, Fredriksson M, Waiswa P, Selling K, Swartling Peterson S. Bottleneck analysis at district level to illustrate gaps within the district health system in Uganda. Glob Health Action. 2017;10(1):1327256. doi: 10.1080/16549716.2017.1327256. PMID: 28581379; PMCID: PMC5496050.

BMC Public Health

BMC Public Health. 2013 Jun 21;13:601. doi: 10.1186/1471-2458-13-601

Investment case for improving maternal and child health: results from four countries

Eliana Jimenez Soto [1,✉], Sophie La Vincente [2], Andrew Clark [3], Sonja Firth [1], Alison Morgan [4], Zoe Dettrick [1], Prarthna Dayal [4], Bernardino M Aldaba [5], Soewarta Kosen [6], Aleli D Kraft [5], Rajashree Panicker [7], Yogendra Prasai [8], Laksono Trisnantoro [9], Beena Varghese [7], Yulia Widiati [9], Investment Case Team for India, Indonesia, Nepal, Papua New Guinea and the Philippines

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PMCID: PMC3701475 PMID: 23800035

Pilihan Intervensi:

- Kerber et al (Continuum of care for maternal, newborn, and child health: from slogan to service delivery. The Lancet, 2007;370:1358–1369) membagi 190 intervensi KIA berdasarkan tiga setting:
  - Family/community-based preventive and health promotion (reproductive health, antenatal care)
  - Outreach and Outpatient (reproductive health, antenatal care, postnatal care and child health services)
  - Clinical and curative services (reproductive health, obstetric care, dan care of sick newborn babies and children)

Model 3Terlambat
(Thaddeus and Maine, 1994)

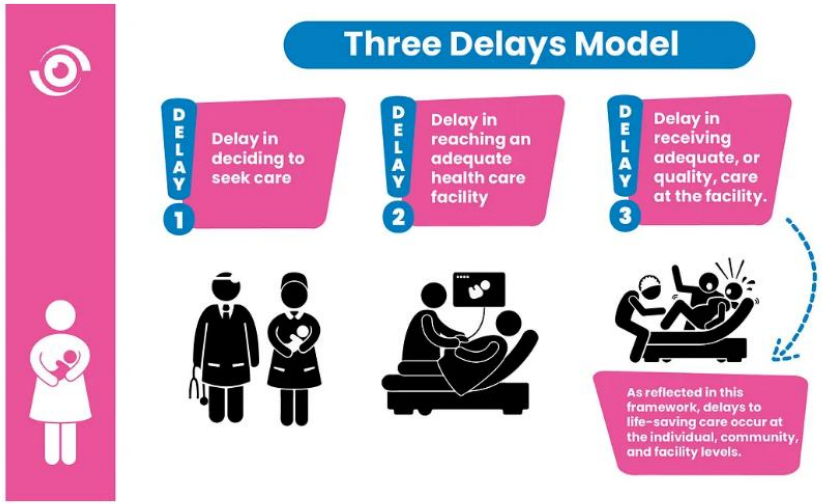
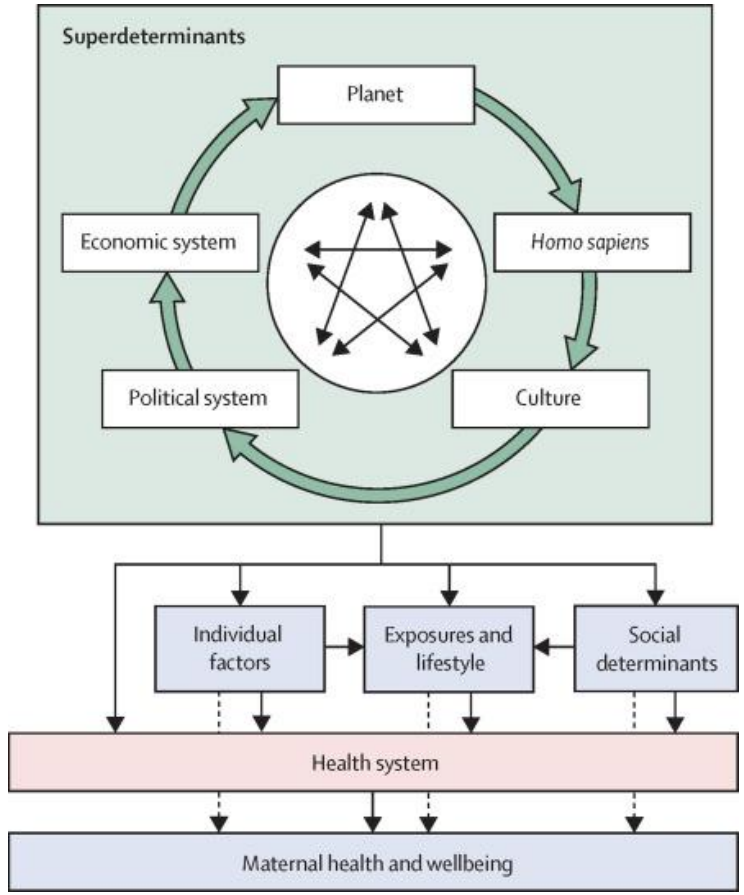


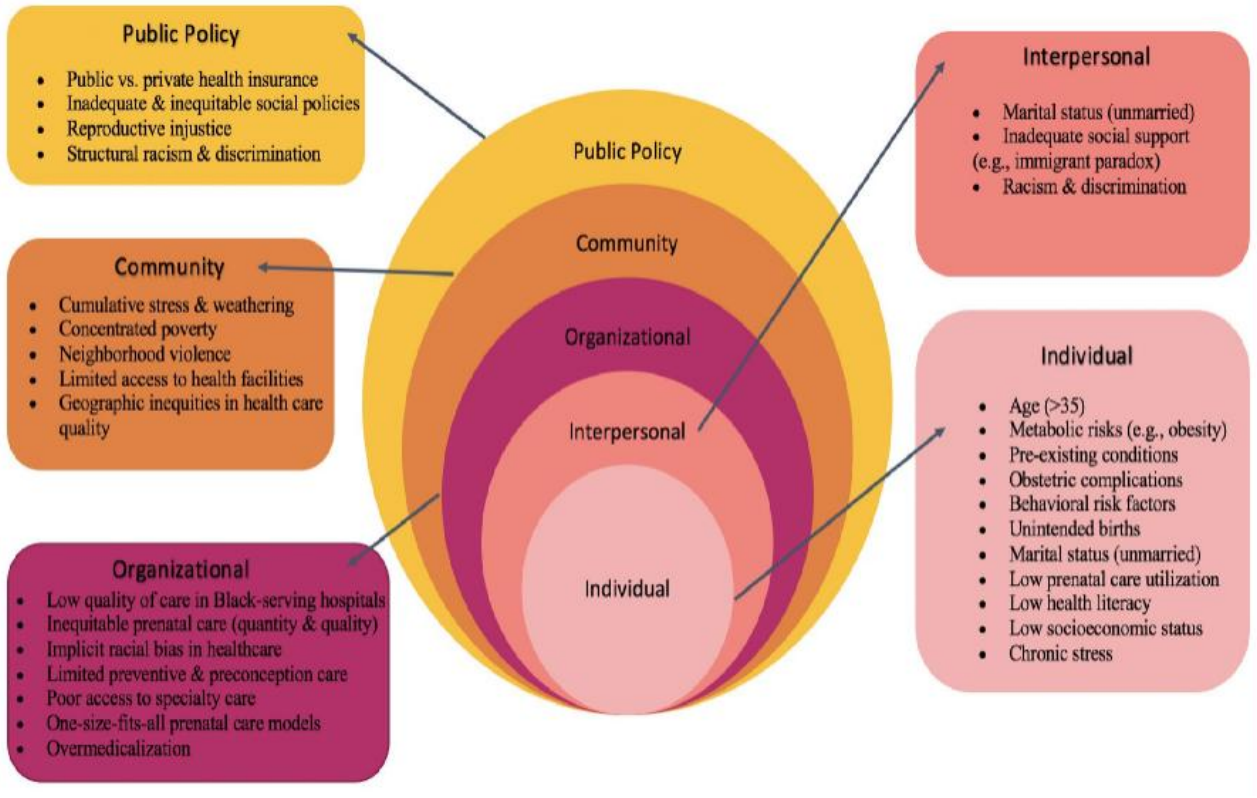
Image credit: Nigeria Health Watch

Image credit: Nigeria Health Watch

https://nigeriahealthwatch.medium.com/how-a-collaborative-approach-to-maternal-care-is-saving-the-lives-of-mothers-in-kaduna-state-8a50e1caf9d6

Beyond the health system





Source: Souza JP, Day LT, Rezende-Gomes AC, Zhang J, Mori R, Baguiya A, Jayaratne K, Osoti A, Vogel JP, Campbell O, Mugerwa KY, Lumbiganon P, Tunçalp Ö, Cresswell J, Say L, Moran AC, Oladapo OT. A global analysis of the determinants of maternal health and transitions in maternal mortality. Lancet Glob Health. 2024 Feb;12(2):e306-e316. doi: 10.1016/S2214-109X(23)00468-0. Epub 2023 Dec 6. PMID: 38070536.

https://facultyshare.liberty.edu/ws/portalfiles/portal/40288752/A%20Review%20of%20the%20Socio-ecological%20Determinants%20of%20Maternal%20Mortali.pdf

2. Penugasan untuk Rencana Aksi menurunkan Jumlah Kematian Ibu

- Kelompok 1: Identifikasi intervensi untuk periode **Prakonsepsi dan Kehamilan**, stakeholders, biaya (prakiraan), sumber anggaran dan indicator kinerja
- Kelompok 2: Identifikasi intervensi periode **Persalinan**, stakeholders, biaya (prakiraan), sumber anggaran dan indicator kinerja
- Kelompok 3: Identifikasi intervensi periode **Nifas**, stakeholders, biaya (prakiraan), sumber anggaran dan indicator kinerja

Maksimal 5 slide
Presentasi 10 menit

	Proses sampai Ibu hamil meninggal atau tetap hidup			
Komponen	**Sebelum Hamil**	**Kehamilan**	**Persalinan**	**Masa Nifas / Pascapersalinan**
Intervensi yang dapat menurunkan kematian ibu				
Pihak yang Berperan (Stakeholders), termasuk lintas sektoral: - Pemerintah - Lembaga Swasta - Masyarakat				
Biaya. **Komponen terkait dengan Pihak yang berperan:** Biaya Modal: Biaya Operasional:				
Sumber Pendanaan / Anggaran: - Pemerintah Pusat (APBN) - Pemerintah Daerah (APBD) - BPJS - Lembaga Swasta - Masyarakat - Filantropi ...				
Indikator Kinerja (Output/Outcome) di setiap tahapan				

Image credit to Prof. dr. Laksono Trisnantoro, MSc.., Ph.D.

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Terimakasih

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