

26 Agustus 2021

Nomor : 011/SNMSA21/MATEMATIKA/FMIPA/08/2021
Lampiran : Satu berkas
Hal : Undangan (Pemberitahuan)

Kepada Yth.

Dewi Anggraini, S.Si., M.App.Sci., Ph.D.

di-

Tempat

Dengan hormat,

Sehubungan dengan kegiatan Seminar Nasional Matematika, Statistika, dan Aplikasinya (SNMSA) 2021 dengan tema "*Mathematics and Statistics for Supporting Research in The New Normal Era*" yang akan dilaksanakan pada:

Hari, Tanggal : Sabtu, 28 Agustus 2021

Waktu : 08.00-16.00 WITA

Tempat : Dalam jaringan (daring) dengan tautan


<https://unmul.zoom.us/j/96567775413> (Meeting ID: 965 6777 5413)

maka bersama ini kami memohon kesediaan Ibu untuk dapat hadir sebagai *Invited Speaker* pada kegiatan tersebut (susunan acara terlampir). Selanjutnya, guna keperluan administrasi laporan kegiatan, kami memohon kesediaan Ibu untuk mengirimkan *file scan* fotokopi buku tabungan, NPWP dan KTP.


Demikian undangan (pemberitahuan) ini kami sampaikan, atas perhatian Ibu kami mengucapkan terima kasih.

Mengetahui,

 Ketua Jurusan Matematika FMIPA UNMUL


Dr. Suyitno, S.Pd., M.Sc.
NIP. 19641115 199010 1 001

Ketua Pelaksana,


Dr. Darnah Andi Nohe, S.Si., M.Si.
NIP. 19770309 200501 2 002

Lampiran Surat Nomor: 011/SNMSA21/MATEMATIKA/FMIPA/08/2021

SUSUNAN ACARA

SEMINAR NASIONAL MATEMATIKA, STATISTIKA, DAN APLIKASINYA 2021
“MATHEMATICS AND STATISTICS FOR SUPPORTING RESEARCH IN THE NEW NORMAL ERA”
JURUSAN MATEMATIKA FAKULTAS MIPA UNIVERSITAS MULAWARMAN
SABTU, 28 AGUSTUS 2021

NO.	WAKTU	KEGIATAN
1.	08.00 – 08.30	Registrasi Peserta
2.	08.30 – 09.15	Pembukaan Seminar : <ol style="list-style-type: none"> 1. Menyanyikan Lagu Indonesia Raya 2. Menyanyikan lagu Mars dan Hymne Universitas Mulawarman 3. Pembacaan Do'a 4. Selayang pandang Jurusan Matematika dan FMIPA secara virtual 5. Laporan Ketua Panitia 6. Sambutan Ketua Jurusan Matematika 7. Sambutan dan Pembukaan oleh Dekan FMIPA 8. Sesi Foto bersama
3.	09.15 – 10.15	<i>Keynote Speaker 1:</i> Prof. Edy Soewono, M.Si., Ph.D. Institut Teknologi Bandung Moderator: Yuki Novia Nasution, S.Si., M.Sc.
4.	10.15 – 11.15	<i>Keynote Speaker 2:</i> Prof. Dr. rer.pol, Heri Kuswanto, M.Si. Institut Teknologi Sepuluh November Surabaya Moderator: Dr. M. Fathurahman, S.Si., M.Si.
5.	11.15 – 12.00	Sesi <i>Invited Speaker</i> : Ruang 1 <i>Invited Speaker 1:</i> Dewi Anggraini, S.Si., M.App.Sci., Ph.D. Universitas Lambung Mangkurat <i>Invited Speaker 2:</i> Dr. RB Fajriya Hakim, S.Si., M.Si. Universitas Islam Indonesia Moderator: Dr. Darnah Andi Nohe, S.Si., M.Si.



NO.	WAKTU	KEGIATAN
6.	11.15 - 12.00	Ruang 2 <i>Invited Speaker 1:</i> Prof. Dr. Muhammad Ivan Azis, M.Sc. Universitas Hasanudin <i>Invited Speaker 2:</i> Dr. Evi Noviani, S.Si., M.Si. Universitas Tanjung Pura Moderator: Fidia Deny Tisna Amijaya, S.Si., M.Si.
7.	12.00 - 13.00	Ishoma
8.	13.00 - 15.15	Sesi Paralel
9.	15.15 - 15.30	<i>Break</i>
10.	15.30 - 16.00	Penutupan.



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PENINGKATKAN KUALITAS DATA ANTENATAL DALAM MENYUSUN REKOMENDASI KEBIJAKAN UNTUK MENURUNKAN RISIKO KEMATIAN IBU DAN BAYI DI INDONESIA

Oleh:

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Sabtu, 28 Agustus 2021



Mengapa Kesehatan Ibu dan Anak Penting dan Menjadi Salah Satu Prioritas Pembangunan Kesehatan di Indonesia?

- Di dalam komponen keluarga, ibu dan anak merupakan kelompok rentan.
 - ✓ Fase kehamilan (ibu)
 - ✓ Fase persalinan (ibu)
 - ✓ Fase nifas (ibu)
 - ✓ Fase tumbuh kembang (anak)

- ❖ Angka Kematian Ibu (AKI) merupakan salah satu indikator untuk melihat keberhasilan upaya kesehatan ibu.

AKI adalah rasio kematian ibu selama masa kehamilan, persalinan, dan nifas yang disebabkan oleh kehamilan, persalinan, dan nifas atau pengelolaannya tetapi bukan karena sebab-sebab lain seperti kecelakaan atau insidental di setiap 100.000 kelahiran hidup.

Selain untuk menilai program kesehatan ibu, AKI juga digunakan untuk menilai derajat kesehatan masyarakat, karena sensitifitasnya terhadap perbaikan pelayanan kesehatan, baik dari sisi aksesibilitas maupun kualitas.



Kesehatan Anak

- ✓ Peraturan Menteri Kesehatan RI Nomor 25 Tahun 2014 tentang Upaya Kesehatan Anak menyatakan bahwa **setiap anak berhak atas kelangsungan hidup, tumbuh, dan berkembang serta berhak atas perlindungan dari kekerasan dan diskriminasi** sehingga perlu dilakukan upaya kesehatan anak secara terpadu, menyeluruh, dan berkesinambungan.
- ✓ Upaya kesehatan anak dilakukan **sejak janin dalam kandungan hingga anak berusia 18 (delapan belas) tahun.**
- ✓ Salah satu tujuan upaya kesehatan anak adalah menjamin kelangsungan hidup anak melalui upaya **menurunkan angka kematian bayi baru lahir (neonatal), bayi dan balita.**





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Di Dunia:

± 4 juta bayi baru lahir meninggal diusia < 4 minggu

500,000 ibu hamil meninggal setiap tahun
95% dari kematian ini terjadi di negara berkembang

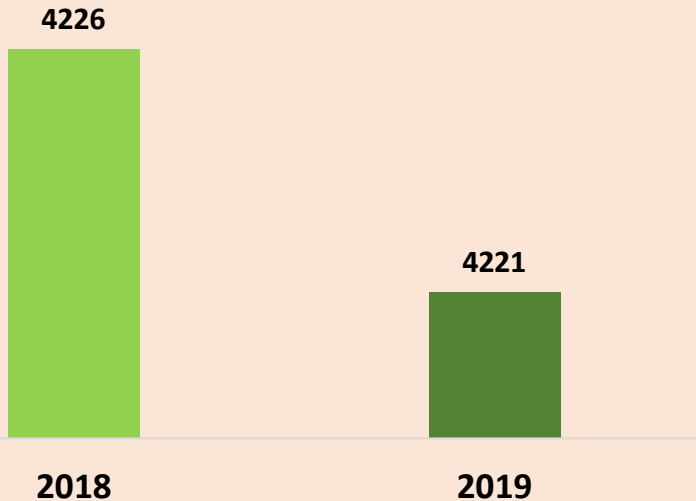
Di Indonesia:

1 anak dibawah 5 tahun meninggal setiap 3 menit: prematur, berat badan lahir rendah (BBLR) dan keterbatasan pertumbuhan janin

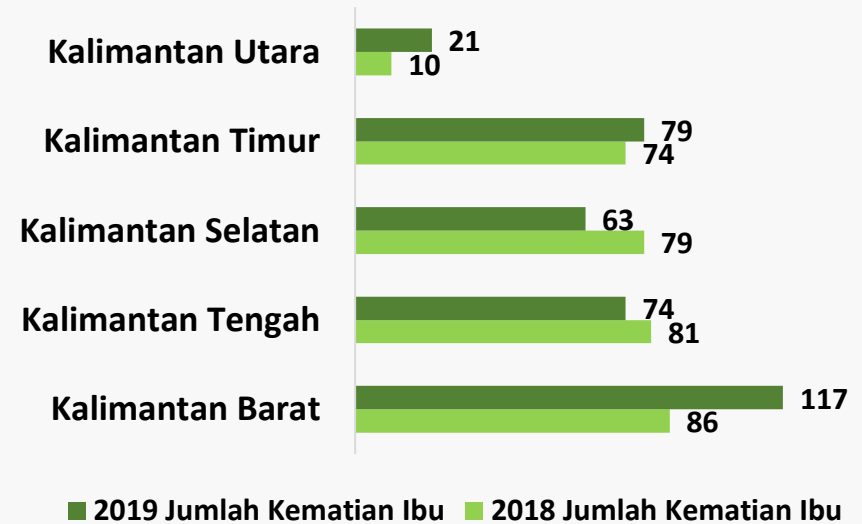
1 orang ibu hamil meninggal setiap jam: komplikasi kehamilan



Jumlah Kematian Ibu di Indonesia dan Pulau Kalimantan Tahun 2019



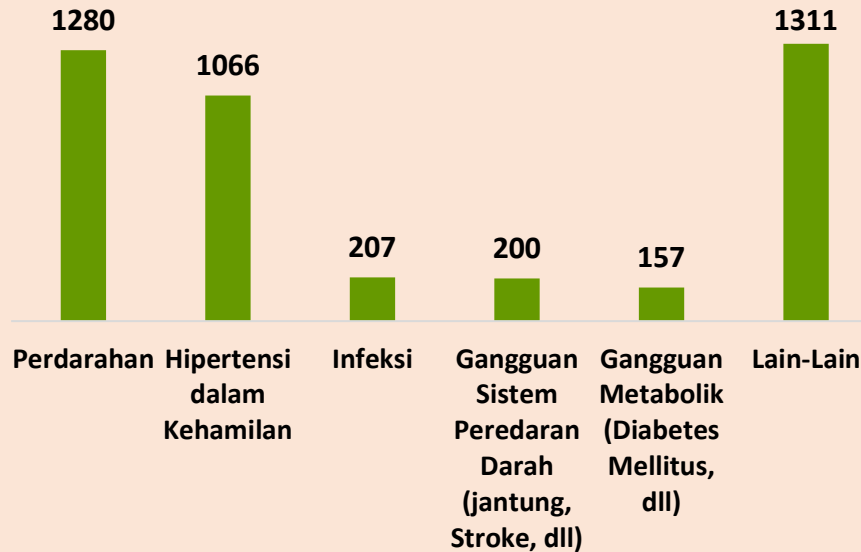
Terdapat penurunan jumlah kematian ibu sebesar 0,12%, yaitu dari 4.226 (Tahun 2018) menjadi 4.221 (Tahun 2019) berdasarkan data dari Ditjen Kesehatan Masyarakat, Kemenkes RI, per 27 Maret 2020.



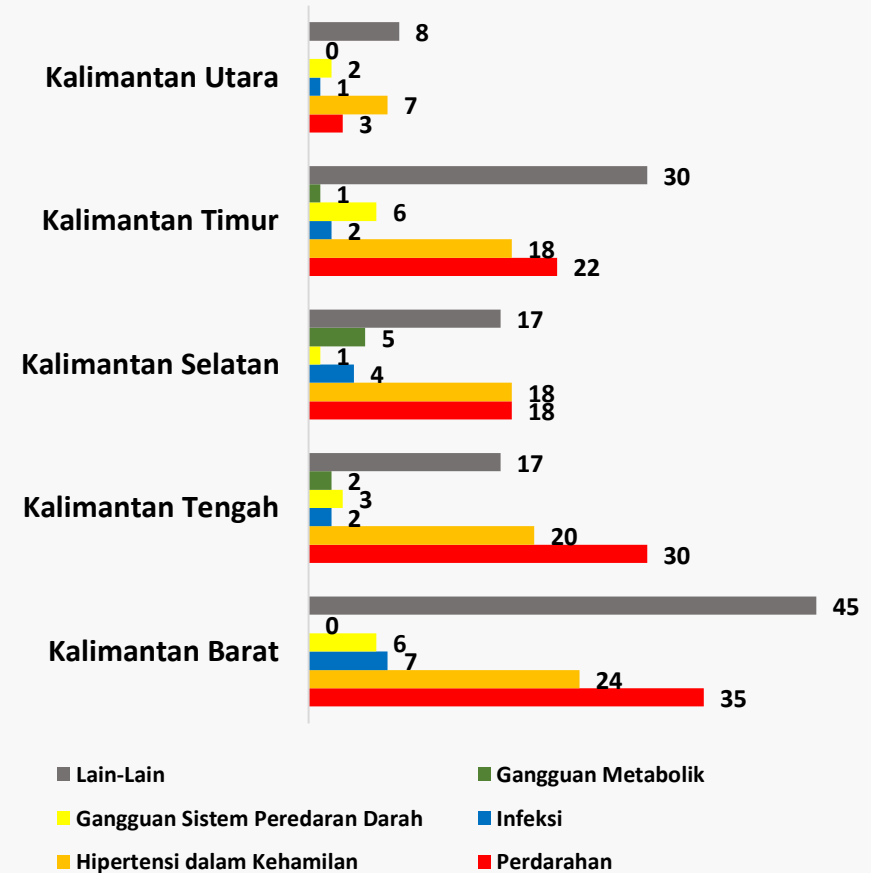
Di Pulau Kalimantan, jumlah kematian ibu tertinggi terjadi di Provinsi Kalimantan Barat dan terendah di Provinsi Kalimantan Utara. Dikedua provinsi ini juga terjadi kenaikan jumlah kematian ibu dari tahun 2018 ke tahun 2019, masing-masing sebesar 36% dan 1%.



Penyebab Kematian Ibu di Indonesia dan Pulau Kalimantan Tahun 2019



Pada tahun 2019, **tiga penyebab kematian ibu terbanyak di Indonesia** adalah **perdarahan** (1.280 kasus), **hipertensi dalam kehamilan** (1.066 kasus), **infeksi** (207 kasus) rincian per provinsi di Pulau Kalimantan terlihat pada Grafik di samping.





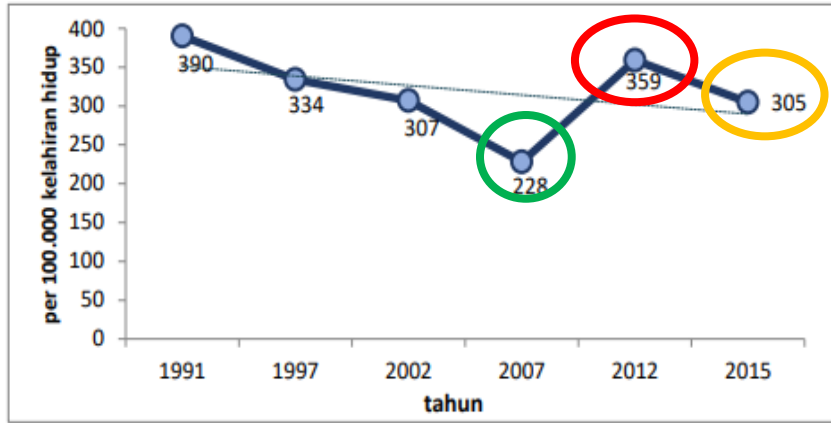
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ANGKA KEMATIAN IBU DI INDONESIA PER 100.000 KELAHIRAN HIDUP
TAHUN 1991 – 2015



Sumber: BPS, SDKI 1991-2012

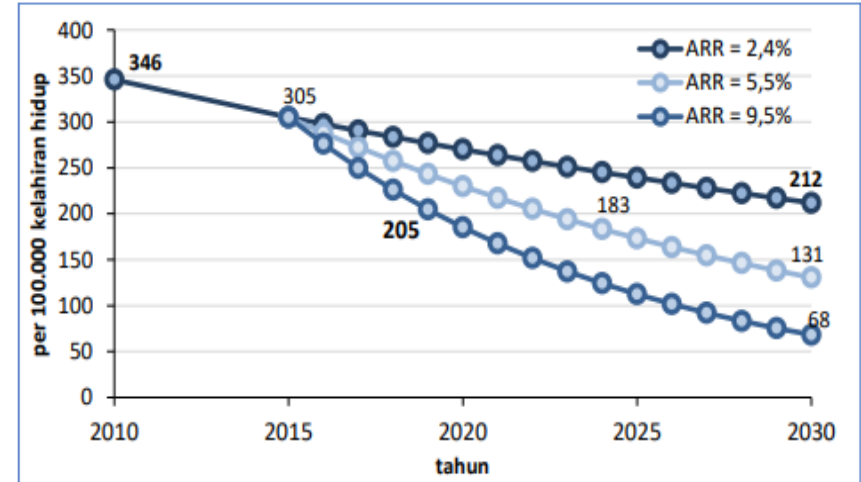
*AKI tahun 2015 merupakan hasil SUPAS 2015

Secara umum terjadi penurunan kematian ibu selama periode 1991-2015 dari 390 menjadi 305 per 100.000 kelahiran hidup.

Walaupun terjadi kecenderungan penurunan angka kematian ibu, namun tidak berhasil mencapai target MDGs yang harus dicapai yaitu sebesar 102 per 100.000 kelahiran hidup pada tahun 2015.

Hasil supas tahun 2015 memperlihatkan angka kematian ibu tiga kali lipat dibandingkan target MDGs.

TARGET PENURUNAN AKI DI INDONESIA



Sumber: Ditjen Kesehatan Masyarakat, Kemenkes RI, 2019

Target penurunan AKI ditentukan melalui tiga model *Annual Average Reduction Rate* (ARR) atau angka penurunan rata-rata kematian ibu pertahun.

Dari ketiga model tersebut, Kementerian Kesehatan menggunakan model kedua dengan rata-rata penurunan 5,5% pertahun sebagai target kinerja.

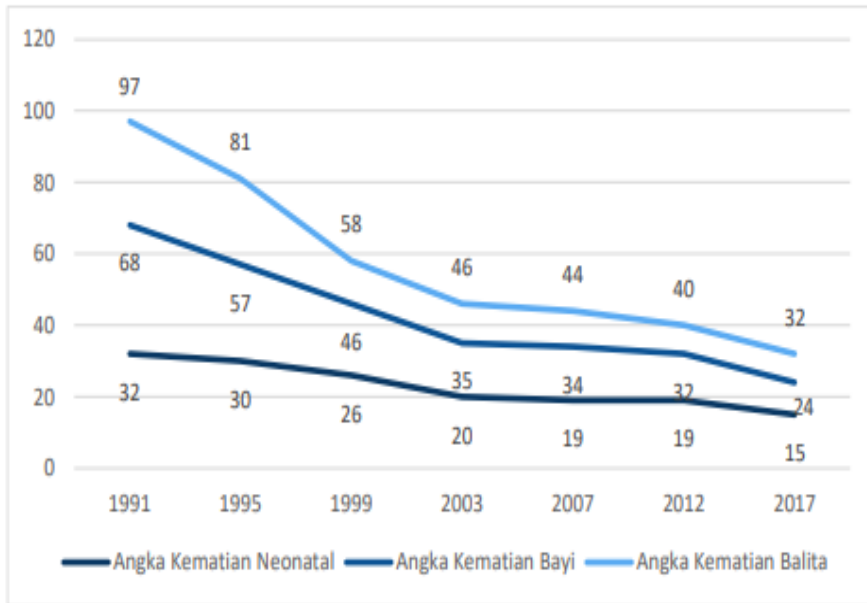
Berdasarkan model tersebut diperkirakan pada tahun 2024 AKI di Indonesia turun menjadi 183/100.000 kelahiran hidup dan di tahun 2030 turun menjadi 131 per 100.000 kelahiran hidup.



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**TREN ANGKA KEMATIAN NEONATAL, BAYI, DAN BALITA
TAHUN 1991 – 2017**



Sumber: SDKI tahun 1991-2017

Hasil Survei Demografi dan Kesehatan Indonesia (SDKI) tahun 2017 menunjukkan:

1. Angka Kematian Neonatal (AKN) sebesar 15 per 1.000 kelahiran hidup;
2. Angka Kematian Bayi (AKB) 24 per 1.000 kelahiran hidup; dan
3. Angka Kematian Balita (AKABA) 32 per 1.000 kelahiran hidup.

Meskipun demikian, angka kematian neonatus, bayi, dan balita diharapkan akan terus mengalami penurunan dengan target:

1. AKN menjadi 10 per 1000 kelahiran hidup (2024);
2. AKB menjadi 16 per 1000 kelahiran hidup (2024); dan
3. AKABA menjadi 18,8 per 1000 kelahiran hidup di tahun 2030 (Target Pembangunan Berkelanjutan).



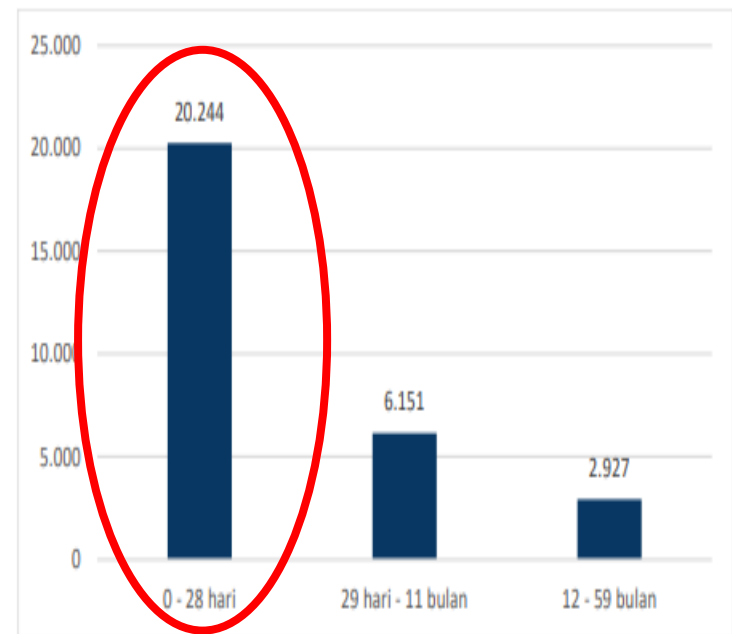
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Berdasarkan data yang dilaporkan kepada Direktorat Kesehatan Keluarga (2019), **dari 29.322 kematian balita, 69% (20.244 kematian) diantaranya terjadi pada masa neonatus.**

Dari seluruh kematian neonatus yang dilaporkan, 80% (16.156 kematian) terjadi pada periode enam hari pertama kehidupan. Sementara, 21% (6.151 kematian) terjadi pada usia 29 hari – 11 bulan dan 10% (2.927 kematian) terjadi pada usia 12 – 59 bulan.

JUMLAH KEMATIAN BALITA (0 – 59 BULAN) DI INDONESIA MENURUT KELOMPOK UMUR
TAHUN 2019



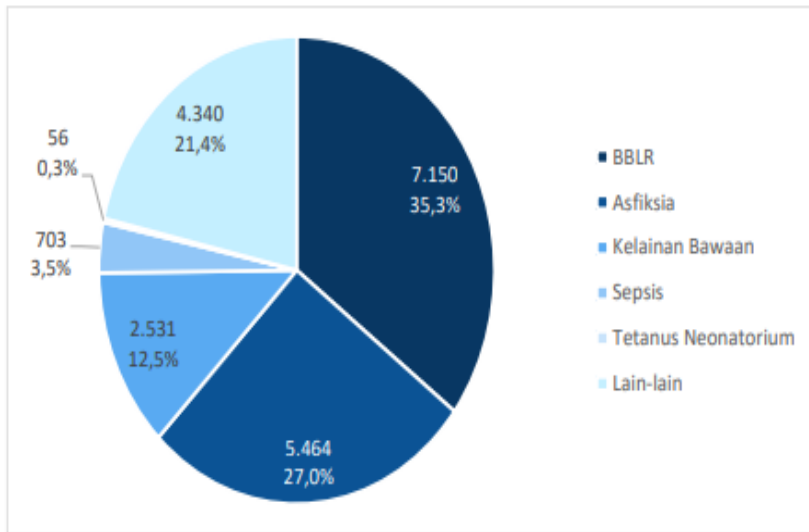
Sumber: Ditjen Kesehatan Masyarakat, Kemenkes RI, 2020



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PROPORSI PENYEBAB KEMATIAN NEONATAL (0-28 HARI) DI INDONESIA
TAHUN 2019



Sumber: Ditjen Kesehatan Masyarakat, Kemenkes RI, 2020

Pada tahun 2019, penyebab kematian neonatal terbanyak adalah:

- ✓ **Berat badan lahir rendah (BBLR) (35,3%);**
- ✓ **Asfiksia (27,0%);**
- ✓ **Kelainan bawaan (12,5%);**
- ✓ **Sepsis (3,5%);**
- ✓ **Tetanus neonatorium (0,3%); dan**
- ✓ **Lain-lain (21,4%).**

Referensi: UNICEF, 2019

Sabtu, 28 Agustus 2021



Program Intervensi Kesehatan



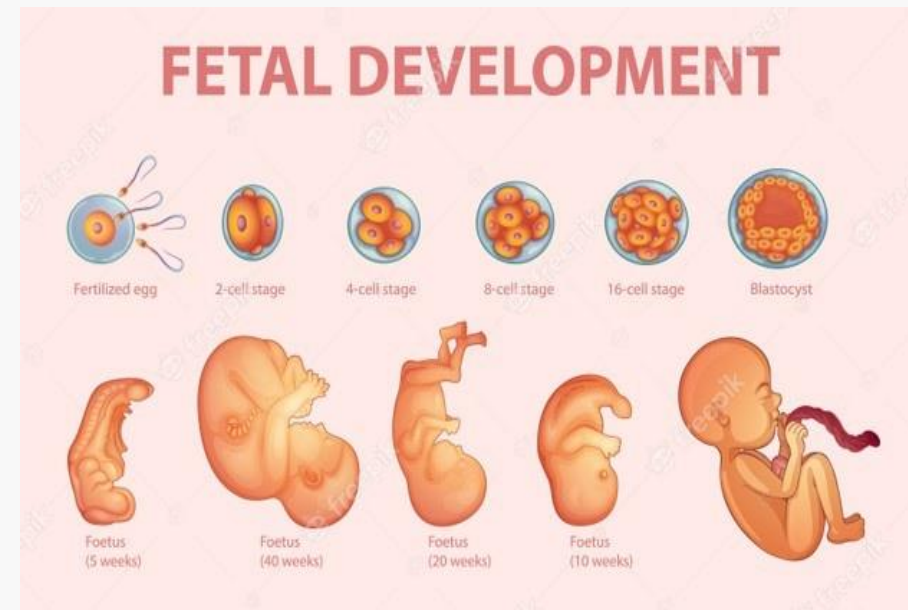
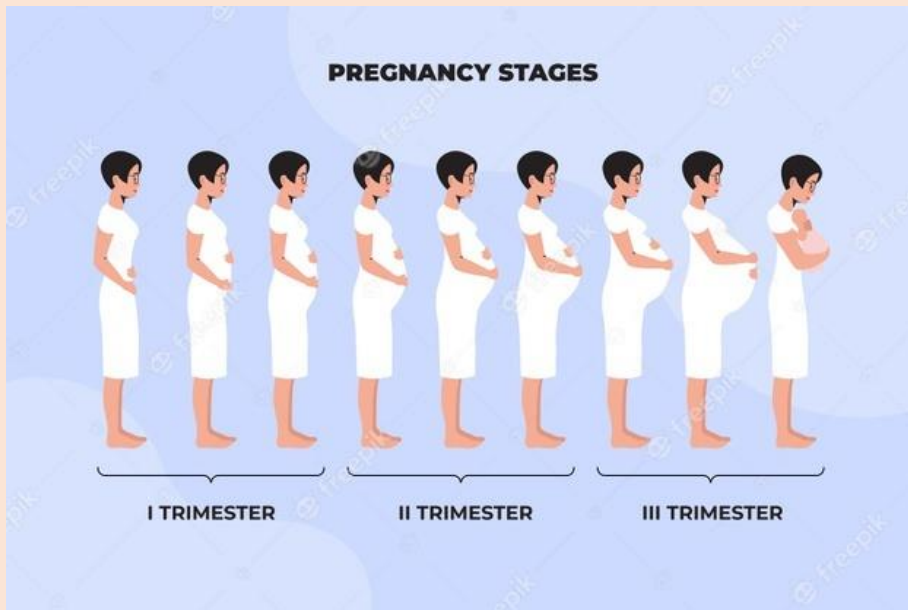
**Selama
Kehamilan –
Antenatal Care**

Saat Persalinan

**Setelah
Bersalin/Masa
Nifas –
Posnatal Care**



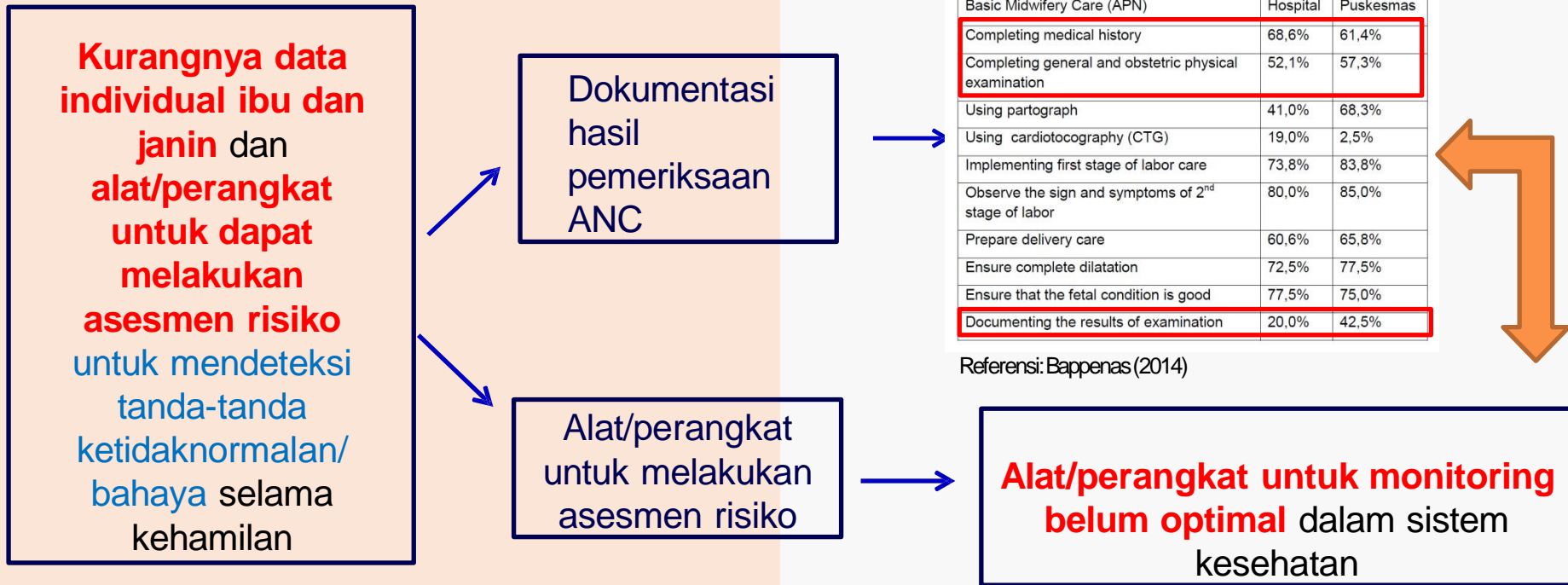
Antenatal Care (ANC)



Periode 1.000 hari pertama kehidupan **sejak kehamilan** sampai dua tahun pertama kehidupan anak merupakan **masa-masa penting** dalam menentukan status gizi anak (**preventive actions for stunting**) termasuk **proses monitoring dan evaluasi tumbuh kembang janin/anak**.



Ada masalah apa dalam ANC?





Rasional

Pelayanan Antenatal Care (ANC):

- Tingkat penggunaan layanan ANC oleh masyarakat masih rendah.
- Risiko kematian neonatal 80% lebih tinggi diantara wanita hamil yang tidak mendapatkan pelayanan ANC dibandingkan dengan mereka yang menerima pelayanan tersebut selama masa kehamilan.
- < 60% konten pemeriksaan ANC yang direkomendasikan dilakukan karena kurangnya kualitas dasar pelayanan kebidanan.
- < 50% data hasil pemeriksaan ANC didokumentasikan dengan baik.



Tujuan

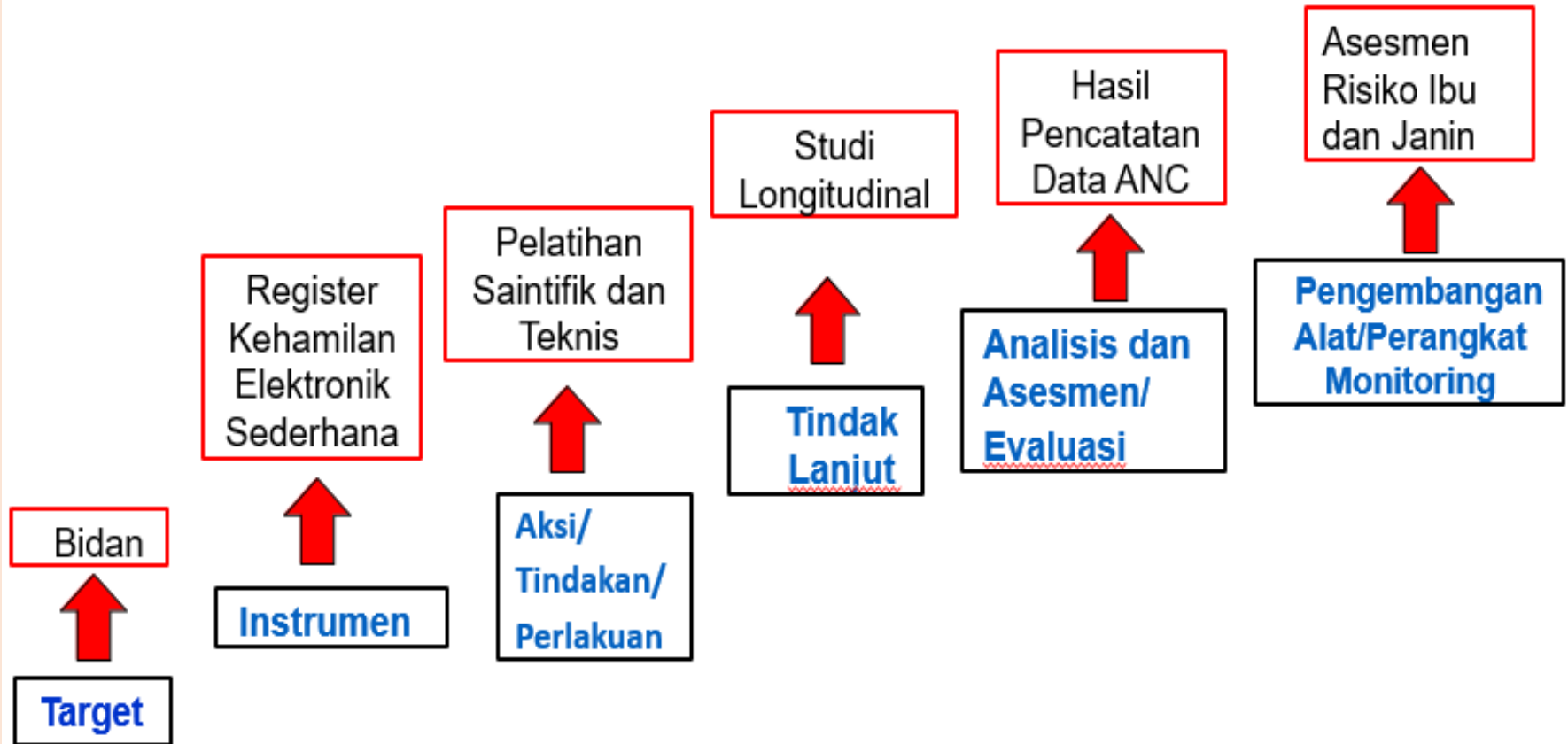
1. Meginisiasi pelatihan saintifik dan teknis kepada para bidan;
2. Menginvestigasi kemampuan bidan dalam melakukan pengukuran, monitoring, dan pencatatan/pendokumentasian data hasil pemeriksaan ANC.

Luaran yang diharapkan:

1. Membekali bidan dengan pengetahuan terkait pentingnya melakukan pengukuran, monitoring, dan pencatatan/pendokumentasian data hasil pemeriksaan ANC, terutama terhadap karakteristik utama ibu dan janin; dan
2. Melakukan transformasi pencatatan data dari register kehamilan manual ke register kehamilan elektronik.



Proses untuk memberikan Dampak





Metodologi

Desain Studi:

Metode Kuantitatif:

- **Studi Deskriptif:**

Deskripsi umum dari studi;

Menjelaskan pengembangan register kehamilan elektronik;

Prosedur dalam melaksanakan pelatihan saintifik dan training bagi bidan.

- **Studi Retrospektif:**

Menilai kelengkapan hasil pencatatan data ANC yang terdapat di register kehamilan manual (sebelum pelatihan).

- **Studi Prospektif:**

Menilai kelengkapan hasil pencatatan data ANC yang terdapat di register kehamilan elektronik (setelah pelatihan).

Pelaksanaan:

- **13 Kabupaten/Kota di Provinsi Kalimantan Selatan (2015-2019).**



Metodologi - Lanjutan

Partisipan:

- **14 bidan** Puskesmas dan **5 bidan** praktik mandiri yang dipilih secara proporsional dari 13 Kabupaten/Kota.
- Pemilihan bidan tersebut berdasarkan rekomendasi Ikatan Bidan Indonesia (IBI) Provinsi Kalimantan Selatan dan juga Dinas Kesehatan Provinsi Kalimantan Selatan.
- Bidan terpilih harus mempunyai pengalaman dalam pelayanan ANC minimal 5 tahun (rata-rata pengalaman 19 tahun dengan interval pengalaman 6-36 tahun).

Pengumpulan Data:

- **Saat pelatihan**, diperoleh data ANC dari **4,946 wanita hamil** yang telah mendapatkan pelayanan ANC dan melahirkan di Puskesmas atau Bidan Praktik Mandiri dari tahun **2012-2016 (data retrospektif)**. Kemudian, data ini dimasukkan ke dalam register kehamilan elektronik yang dibentuk.
- **Setelah pelatihan**, diperoleh data ANC dari **438 Wanita hamil** yang telah mendapatkan pelayanan ANC dan melahirkan di Puskesmas atau Bidan Praktik Mandiri dari **1 Juni 2016 – 30 Juni 2017 (data prospektif)**.



Pelatihan Sainstifik Bagi Bidan



Pada sesi ini dijelaskan:

1. **Karakteristik ibu dan janin** yang mempunyai peran penting dalam **memberikan dasar bukti pengambilan intervensi atau keputusan** untuk mengurangi risiko kematian.

2. **Signifikansi/pentingnya karakteristik ibu dan janin** dan **bagaimana pengukurannya** digunakan **dalam penentuan keputusan atau intervensi** untuk mencegah kematian.



Pelatihan Sainstifik Bagi Bidan



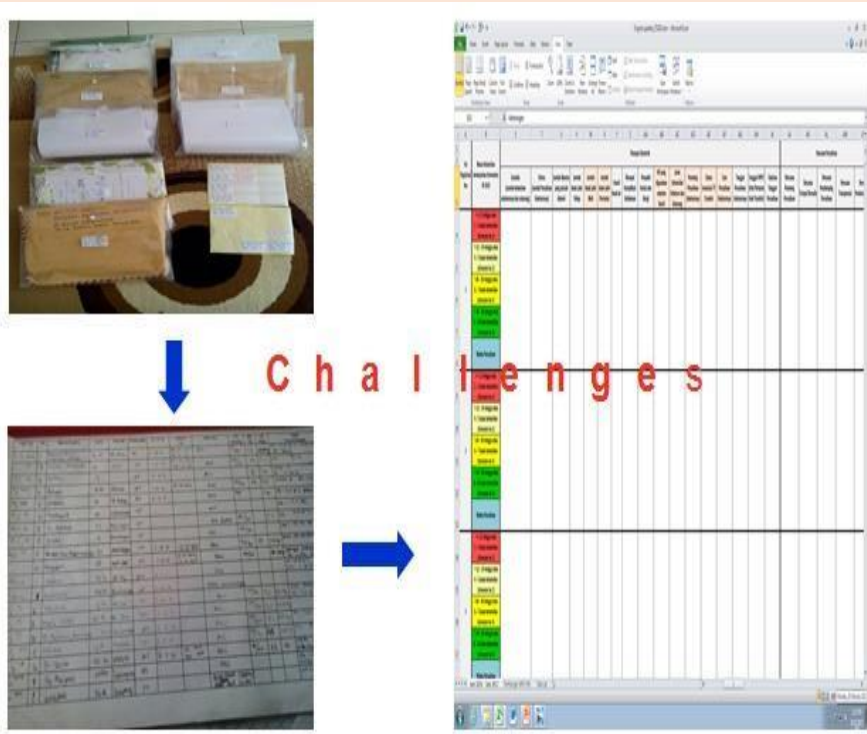
- **Scientific introduction highlights:**

1. The importance of monitoring maternal and foetal characteristics during pregnancy;
2. The review of several standard measurements (coverage) of ANC;
3. The review of the current literatures on causes of newborn mortality;
4. The review of existing weight prediction models; and
5. The importance of accurate estimation of birth weight during antenatal care.

Outcome: equip midwives with the knowledge on the importance of monitoring and measuring the key characteristics and recording the results timely from the start of pregnancy to delivery time.



Pelatihan Teknis Bagi Bidan



Pada sesi ini dijelaskan:

1. **Pengenalan register kehamilan elektronik sederhana.**
2. **Penjelasan teknis dan diskusi setiap kategori pemeriksaan ANC beserta karakteristiknya dalam register kehamilan elektronik untuk mencapai kesamaan persepsi bagi bidan.**
3. **Demonstrasi bagaimana melakukan pencatatan, perekaman, dan manajemen data secara elektronik.**



Pelatihan Teknis Bagi Bidan

No	Nama Bidan	Tempat	Alamat	Telepon	Alamat	Telepon	Alamat	Telepon	Alamat	Telepon
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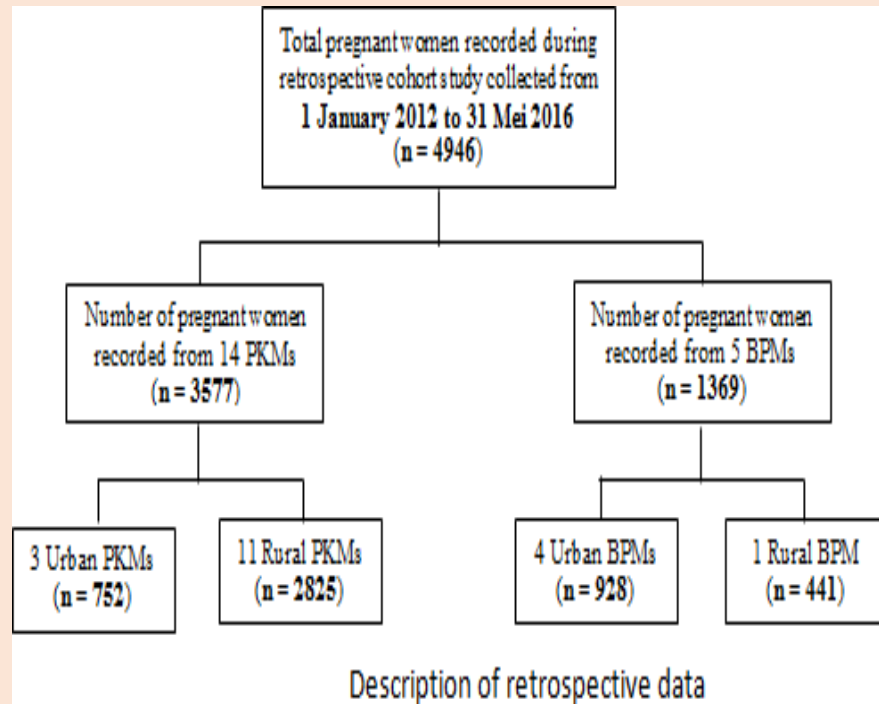


- Technical training highlights:
 1. The introduction of the developed electronic ANC cohort;
 2. The installation of the cohort on midwives' personal laptops and/or cell phones;
 3. The explanation of each component involved in the questionnaire and how to appropriately record and manage the data; and
 4. Two-way communications between the principal investigator and the participating midwives to achieve a consensus or same perception between scientific evidence or academic literature and the practitioners.

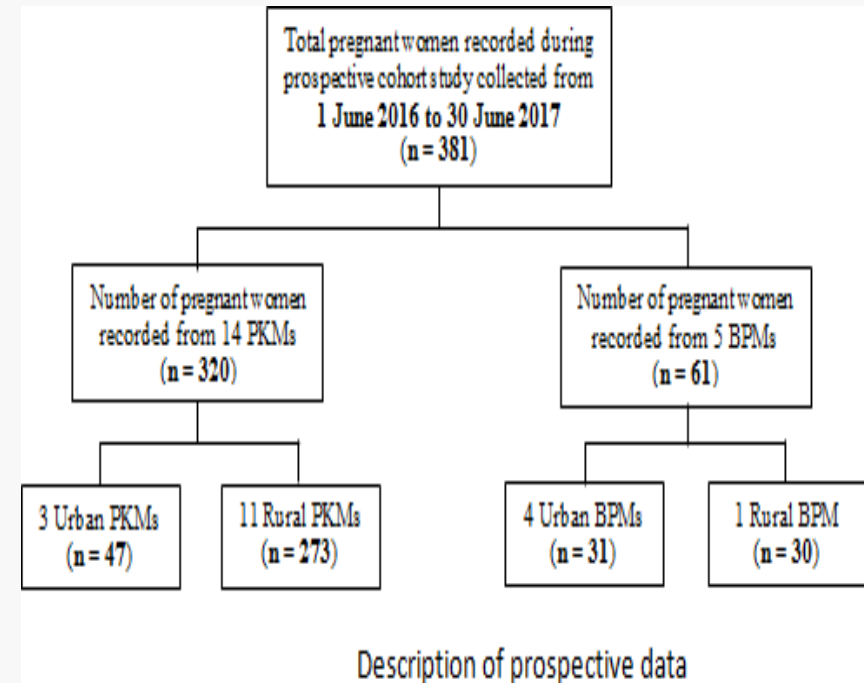
Outcome: provide the technical ability to replace the current paper-based data collection system with an electronic data recording system.



Hasil



4.946 retrospective study



381 prospective/longitudinal study



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12 recommended ANC components	Before training	After training
Personal information (PI)	35.2	93.4
Obstetric history (OH)	44.0	68.1
Delivery plan (DP)	0.8	99.2
Antenatal care utilisation criteria (ANCUC)	47.9	88.6
Maternal measurements (MM)	32.3	80.7
Laboratory tests (LT)	1.6	23.0
Supplementary (S)	5.0	67.9
Maternal risk detection (MRD)	2.5	10.0
Clinical foetal measurements (CFM)	18.0	63.2
Ultrasonic foetal measurements (UFM)	0.0	12.6
Foetal risk detection (FRD)	0.0	4.1
Delivery time (DT)	14.0	79.5
Total average	16.8	57.5

Hindawi
 Journal of Pregnancy
 Volume 2018, Article ID 9240157, 13 pages
<https://doi.org/10.1155/2018/9240157>



Research Article

The Impact of Scientific and Technical Training on Improving Routine Collection of Antenatal Care Data for Maternal and Foetal Risk Assessment: A Case Study in the Province of South Kalimantan, Indonesia

Dewi Anggraini^{1,2,3}, Mali Abdollahian,¹ Kaye Marlon,¹ Supri Nuryani,^{4,5}
 Fadly Ramadhan,² Rezky Putri Rahayu,² Irfan Rizki Rachman,² and Widya Wurlianto²

Two-sample T for Before training vs After training

	N	Mean	StDev	SE Mean
Before training	12	16.8	18.3	5.3
After training	12	57.5	35.1	10

Difference = μ (Before training) - μ (After training)

Estimate for difference: -40.8

95% CI for difference: (-64.5, -17.0)

T-Test of difference = 0 (vs \neq): T-Value = -3.56 P-Value = 0.002 DF = 22

Both use Pooled StDev = 28.0248



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Based on **4.946 retrospective study** and
381 prospective/longitudinal study

Maternal measurements

ANC category	PKMs				BPMs			
	Urban areas		Rural areas		Urban areas		Rural areas	
	%	%	%	%	%	%	%	
	Before training	After training	Before training	After training	Before training	After training	Before training	After training
Total Pregnancy	752	47	2825	273	928	31	441	30
Maternal measurements (MM)								
Weight (kg)	90.2	97.9	72.2	98.1	76.5	71.7	69.6	100.0
Height (cm)	79.4	97.9	56.7	98.1	55.5	71.7	5.2	100.0
BMI (kg/m ²)	78.5	97.9	70.8	98.1	53.3	71.7	5.2	98.6
Middle upper arm circumference (MUAC) (cm)	77.8	97.9	57.9	83.9	63.8	72.4	3.2	100.0
Nutritional status	77.7	97.9	59.2	83.9	63.8	73.2	3.2	100.0
Blood pressure (systole)* (mmHg)	88.0	97.3	68.8	97.8	76.5	70.9	69.6	100.0
Blood pressure (diastole)* (mmHg)	88.0	97.3	67.9	97.8	76.5	70.9	69.6	100.0
Body temperature* (°C)	0.0	72.9	0.0	97.8	8.2	70.1	0.0	100.0
Pulse*	0.0	76.1	0.0	97.8	14.7	70.1	0.0	100.0
Breath*	0.0	76.1	0.0	97.7	14.7	70.1	0.0	100.0
Abdominal palpation (Leopold I)*	0.0	96.8	0.9	89.1	26.6	71.7	0.0	100.0
Abdominal palpation (Leopold II)*	0.0	58.5	1.3	66.9	26.4	45.7	44.7	99.1
Abdominal palpation (Leopold III)*	0.0	56.9	0.6	69.2	19.4	44.9	34.9	66.7
Abdominal palpation (Leopold IV)*	0.0	55.3	0.5	66.9	14.2	43.3	36.7	67.1
Fundal height (cm)	0.0	62.2	16.5	65.8	62.0	42.5	69.8	63.5

*Currently not available in the current manual ANC register

Hindawi
Journal of Pregnancy
Volume 2019, Article ID 8540037, 10 pages
<https://doi.org/10.1155/2019/8540037>



Research Article

The Impact of Scientific and Technical Training on Improving Databases' Adequacy for Fetal Growth Chart Development in Limited-Resource Settings: A Case Study in the Province of South Kalimantan, Indonesia

Dewi Angraini^{1,2,3}, Mali Abdollahian,¹ Kaye Marlon,¹ Supri Nuryanti,^{4,5}
Fady Ramadhan,² Rezky Putri Rahayu,² Irfan Rizki Rachman,² and Widya Wurlianto²



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Based on **4.946 retrospective study** and **381 prospective/longitudinal study**

ANC category	PKMs				BPMs			
	Urban areas		Rural areas		Urban areas		Rural areas	
	%	%	%	%	%	%	%	
	Before training	After training	Before training	After training	Before training	After training	Before training	After training
Total Pregnancy	752	47	2825	273	928	31	441	30
Foetal measurements: clinical method (CFM)								
Number of gestation	0.0	56.4	25.5	78.5	0.0	62.3	0.0	100.0
Foetal weight estimation (g)	0.0	33.5	4.4	57.3	0.3	26.8	50.6	63.9
Foetal heart rate	0.0	50.0	20.9	65.6	28.6	41.7	61.0	77.2
Foetal presentation	0.0	43.6	24.4	61.1	12.2	40.2	54.4	70.3
Foetal station/descent level	0.0	50.0	24.2	58.7	0.1	40.2	54.2	70.8
Foetal measurements: ultrasonic method (UFM)								
Gestational age (GA) based on ultrasound scanning* (weeks)	0.0	0.0	0.0	3.7	0.0	1.6	0.0	70.4
Crown-rump length* (mm)	0.0	0.0	0.0	0.3	0.0	0.0	0.0	18.3
Head circumference* (mm)	0.0	0.0	0.0	0.1	0.0	0.0	0.0	55.3
Abdominal circumference* (mm)	0.0	0.0	0.0	0.4	0.0	0.0	0.0	57.1
Biparietal diameter* (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	54.8
Femur length* (mm)	0.0	0.0	0.0	0.2	0.0	0.0	0.0	49.8
Humerus length* (mm)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.0
Placenta localisation*	0.0	0.0	0.0	1.1	0.0	1.6	0.0	58.9
Foetal presentation*	0.0	0.0	0.0	2.8	0.0	2.4	0.0	54.8
Amniotic fluid index*	0.0	0.0	0.0	0.7	0.0	1.6	0.0	0.9
Foetal heart rate*	0.0	0.0	0.0	1.2	0.0	2.4	0.0	50.7
Foetal weight estimation* (g)	0.0	0.0	0.0	2.6	0.0	2.4	0.0	39.3

*Currently not available in the current manual ANC register

Hindawi
Journal of Pregnancy
Volume 2019, Article ID 2846037, 10 pages
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Research Article

The Impact of Scientific and Technical Training on Improving Databases' Adequacy for Fetal Growth Chart Development in Limited-Resource Settings: A Case Study in the Province of South Kalimantan, Indonesia

Dewi Angraini^{1,2,3}, Mali Abdollahian,¹ Kaye Marion,¹ Supri Nuryanti,^{4,5}
Fady Ramadhan,² Rezky Putri Rahayu,² Irfan Rizki Rachman,² and Widya Wuriyanto²



Estimasi Berat Lahir Janin: Tinggi Fundus Uteri Ibu versus Biometrik Janin



Pengukuran Tinggi Fundus Uteri Ibu –
Pita Meter

Anggraini et al. *BMC Pregnancy and Childbirth* (2018) 18:436
<https://doi.org/10.1186/s12884-018-2047-z>

BMC Pregnancy and Childbirth

RESEARCH ARTICLE

Open Access

Foetal weight prediction models at a given gestational age in the absence of ultrasound facilities: application in Indonesia



Dewi Anggraini^{1,2*}, Mali Abdollahian¹ and Kaye Marion¹



Pengukuran Biometrik Janin – Ultrasound



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PLOS ONE

RESEARCH ARTICLE
 The development of an alternative growth chart for estimated fetal weight in the absence of ultrasound: Application in Indonesia

Dewi Anggrani^{1,2*}, Mail Abdolshah^{3,4*}, Kaye Marion^{4*}

¹ Study Program of Statistics, Faculty of Mathematics and Natural Sciences, Lambung Mangkurat University, Banjarbaru, South Kalimantan, Indonesia, ² School of Science, College of Science, Engineering, and Health, SMTT University, Melbourne, Victoria, Australia

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Table 1. Accuracy of the existing and proposed models (16–38 weeks).

Number of pregnant women = 19 (53 observations)							
Prediction error (ABW–EFW p)	Mean (ME) (g)	Mean percentage (MPE) (%)	Mean absolute percentage (MAPE) (%)	Median percentage (MEDPE) (%)	Median absolute percentage (MEDAPE) (%)	Number of estimates within 10% of ABWs (%)	Number of estimates within 20% of ABWs (%)
Proposed clinical model							
Dewi, Mali, and Kaye (2019): FH	1,163.36	36.17	37.46	34.78	34.78	4	23
Existing ultrasound models							
Campbell and Wilkin (1975): AC	1,735.93	54.50	55.47	55.12	55.12	4	11
Hadlock (1985) I: AC and FL	1,861.86	58.69	58.69	59.92	59.92	6	8
Hadlock (1985) II: AC, BPD, and FL	1,849.20	58.30	58.36	60.54	60.54	6	8
Hadlock (1985) III: AC, HC, and FL	1,890.65	59.65	59.66	60.77	60.77	4	6
Hadlock (1985) IV: AC, BPD, HC, and FL	1,875.13	59.15	59.21	60.87	60.87	4	6
Stirnemann (2017): HC and AC	1,888.09	59.49	59.58	61.96	61.96	2	6

<https://doi.org/10.1371/journal.pone.0240436.t001>



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The development of an alternative growth chart for estimated fetal weight in the absence of ultrasound: Application in Indonesia

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Table 2. Accuracy of the existing and proposed models (33–40 weeks).

Number of pregnant women = 19 (19 observations)							
Prediction error (ABW-EFWp)	Mean (ME) (g)	Mean percentage (MPE) (%)	Mean absolute percentage (MAPE) (%)	Median percentage (MEDPE) (%)	Median absolute percentage (MEDAPE) (%)	Number of estimates within 10% of ABWs (%)	Number of estimates within 20% of ABWs (%)
Proposed clinical model							
Dewi, Mali, and Kaye (2019): FH	235.09	7.08	11.44	10.52	11.09	42	84
Existing ultrasound models							
Campbell and Wilkin (1975): AC	272.18	8.46	11.69	11.61	12.03	42	89
Hadlock (1985) I: AC and FL	269.76	8.28	15.24	12.34	15.06	26	84
Hadlock (1985) II: AC, BPD, and FL	247.37	7.58	14.86	11.00	12.45	26	79
Hadlock (1985) III: AC, HC, and FL	338.45	10.50	15.36	13.59	14.72	26	84
Hadlock (1985) IV: AC, BPD, HC, and FL	299.07	9.24	15.12	12.98	13.07	26	79
Stirnemann (2017): HC and AC	503.58	16.04	17.61	18.55	18.55	21	58

<https://doi.org/10.1371/journal.pone.0240436.t002>

Sabtu, 28 Agustus 2021



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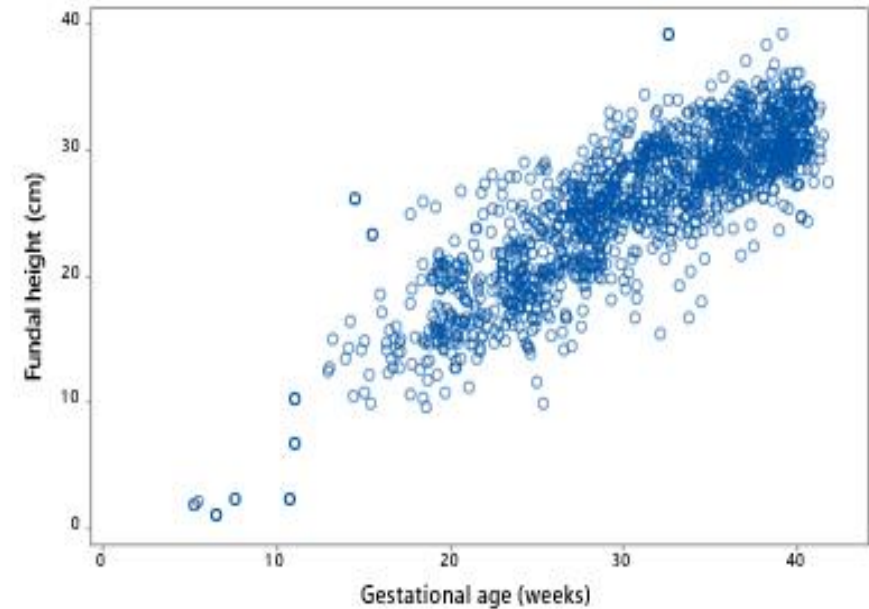
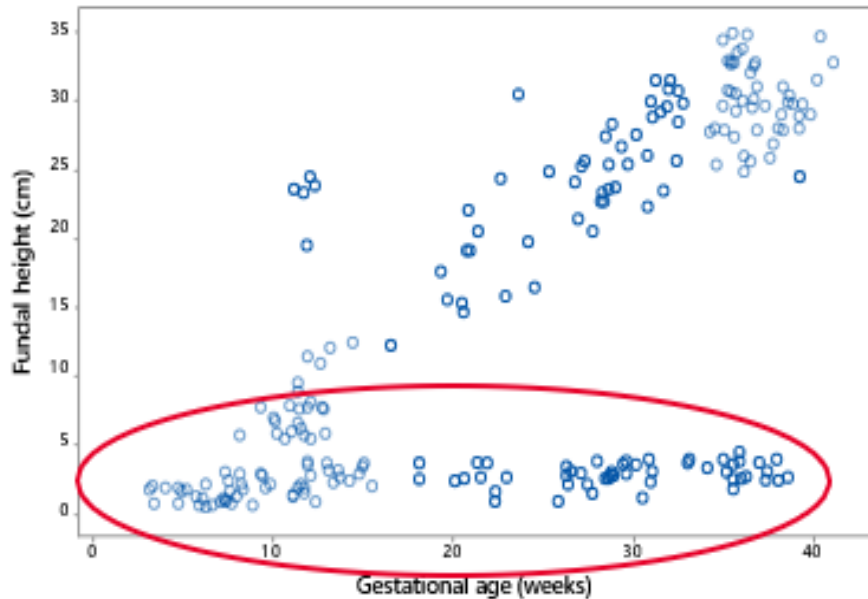
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Before training

Peningkatan Kualitas Dokumentasi Data

After training



Relationship between gestational age and fundal height
(**Retrospective data**, 1 January 2012–31 May 2016,
n = 2515 of 4946)

Relationship between gestational age and fundal height
(**Prospective data**, 1 June 2016–30 June 2017, n = 435)

Open Access Full Text Article

Improving the Information Availability and Accessibility of Antenatal Measurements to Ensure Safe Delivery: A Research-Based Policy Recommendation to Reduce Neonatal Mortality in Indonesia

Dewi Angraini¹
Mali Abdollahian²
Kaya Harion³
Asmu¹
Gusni Tasya Meilania⁴
Auliyah Syifa Annisa¹

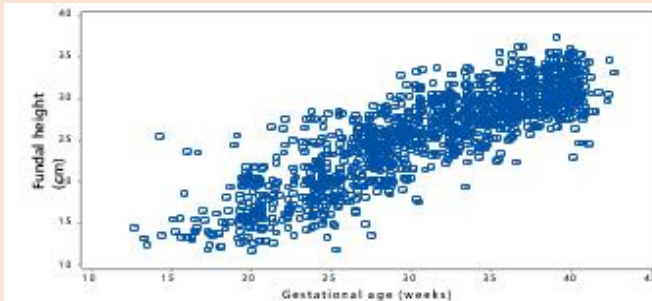
This article was published in the following Dove Press journal:
International Journal of Women's Health

Purpose: Assessing the risks and preventable causes of maternal and neonatal mortality requires the availability of good-quality antenatal information. In Indonesia, however, access to reliable information on pregnancy-related results remains challenging. This research has proposed a research-based policy recommendation to improve availability and accessibility to vital information on antenatal examinations.
Patients and Methods: Descriptive statistics were used to characterize midwives' capabilities in routinely gathering and recording antenatal information during pregnancy. The investiga-

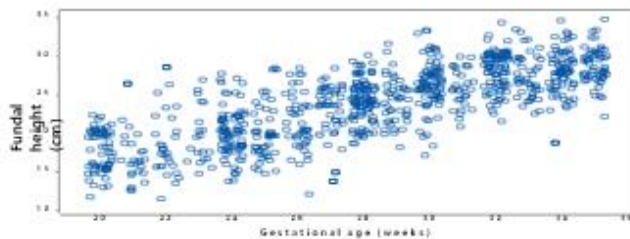
Sabtu, 28 Agustus 2021



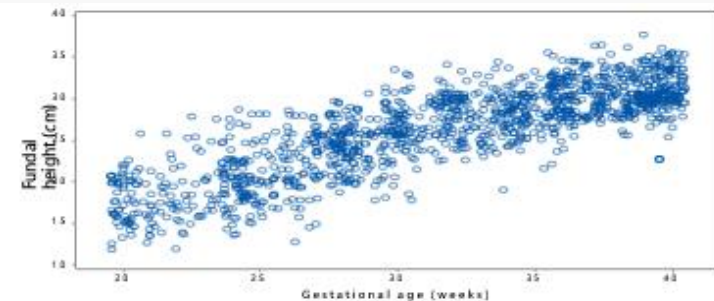
Pola sebaran tinggi fundus uteri ibu pada periode-periode penting masa kehamilan



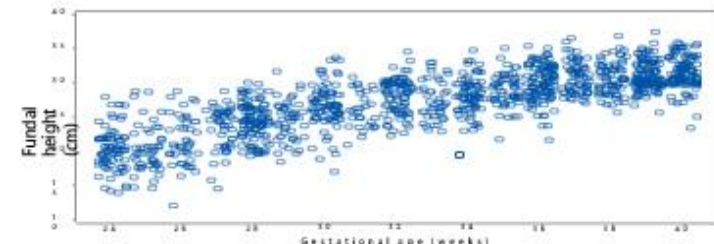
Between 13 and 42 weeks



Between 20 and 35 weeks



Between 20 and 40 weeks



Between 24 and 40 weeks

ORIGINAL RESEARCH

Improving the Information Availability and Accessibility of Antenatal Measurements to Ensure Safe Delivery: A Research-Based Policy Recommendation to Reduce Neonatal Mortality in Indonesia

This article was published in the following Dove Press journal: International Journal of Women's Health

Authors: Dewi Anggraini¹, Mali Abdillahian², Kaye Marion², Asmu¹, Gusti Tasya Meilania¹, Auliya Syifa Annisa¹

Purpose: Assessing the risks and preventable causes of maternal and neonatal mortality requires the availability of good-quality antenatal information. In Indonesia, however, access to reliable information on pregnancy-related results remains challenging. This research has proposed a research-based policy recommendation to improve availability and accessibility to vital information on antenatal examinations.

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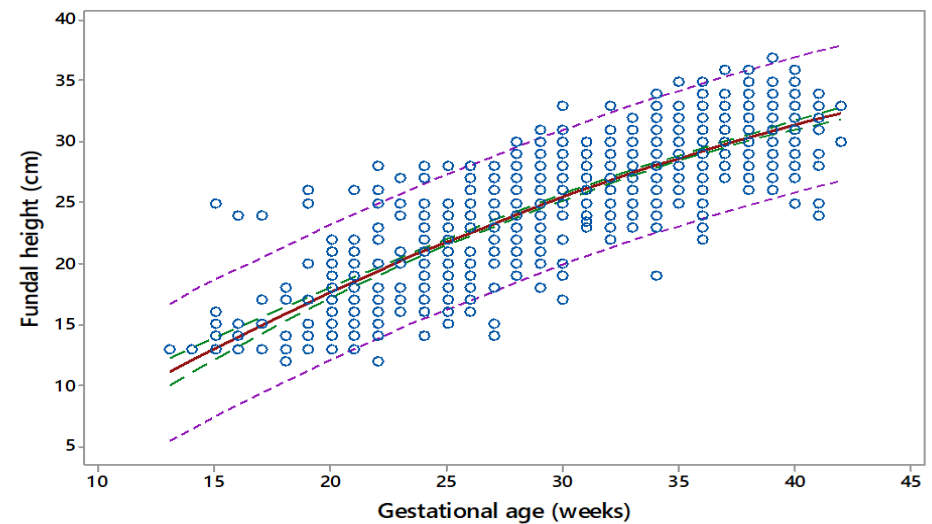
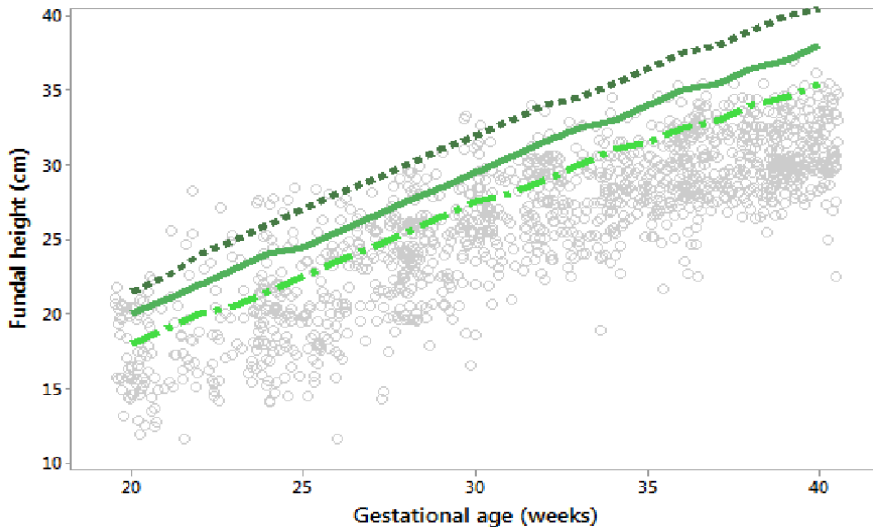
RESEARCH ARTICLE

The development of an alternative growth chart for estimated fetal weight in the absence of ultrasound: Application in Indonesia

Dewi Anggraini^{1,2*}, Mali Abdollahian^{3,4,5}, Kaye Marion^{6*}

¹ Study Program of Statistics, Faculty of Mathematics and Natural Sciences, Lambung Mangkurat University, Banjarmasin, South Kalimantan, Indonesia, ² School of Science, College of Science, Engineering, and Health, RMIT University, Melbourne, Victoria, Australia

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Our local Indonesian data superimposed by the International standards for FH (The Intergrowth 21st Project) (Papageoghiou, et al., 2016)

Our local Indonesian data performance for FH growth chart

Sabtu, 28 Agustus 2021



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$$EFW = 137.173GA - 1.035GA^2 - 675.199$$

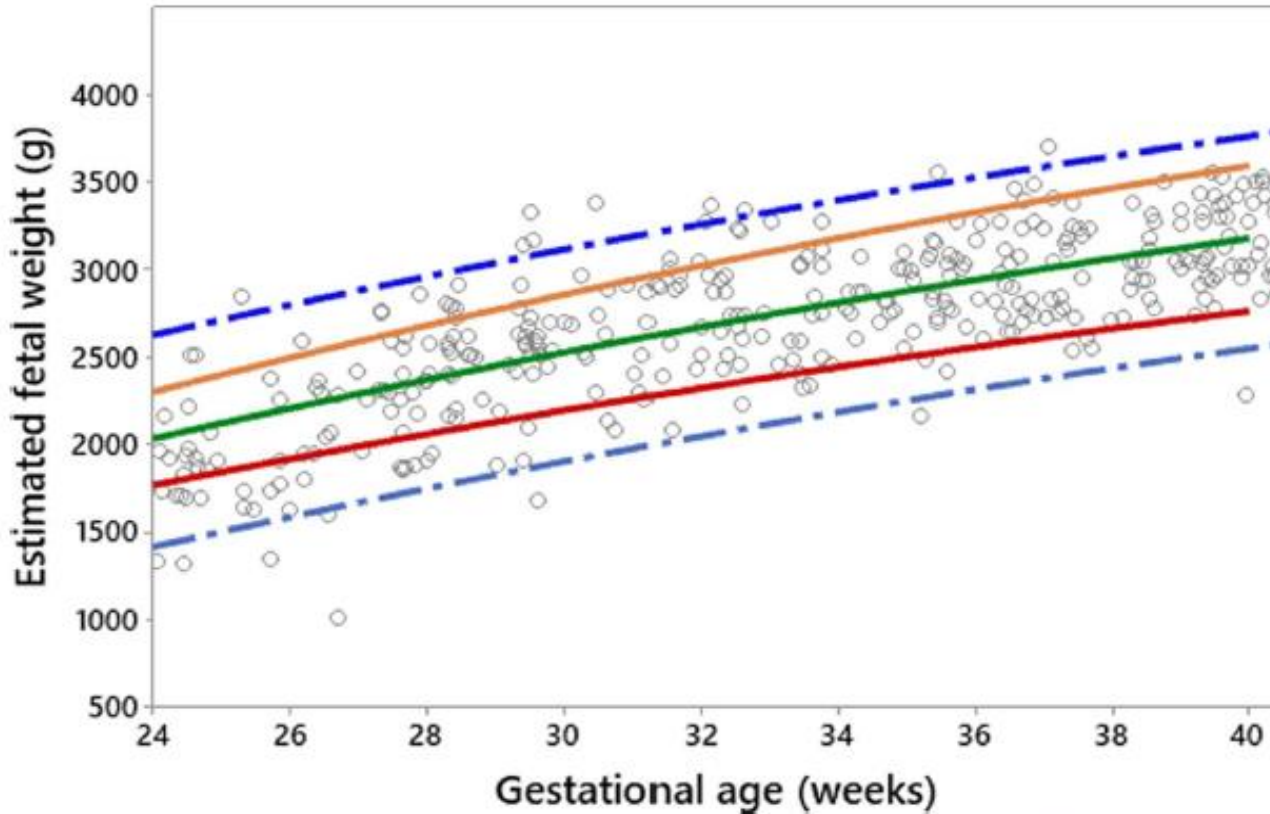


Fig 8. Proposed fetal weight chart with test data superimposed. Key: - - - - = 10th percentile, - - - - = 50th percentile, — — — = 90th percentile, - - - - = 95% confidence intervals.

<https://doi.org/10.1371/journal.pone.0240436.g008>

PLOS ONE

RESEARCH ARTICLE
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Table 5. Estimated fetal weights for an Indonesian population.

Gestational age (weeks)	Percentiles of estimated fetal weight (g)										
	1 st	3 rd	5 th	10 th	25 th	50 th (mean)	75 th	90 th	95 th	97 th	99 th
20	1271	1346	1386	1448	1551	1666	1781	1884	1946	1986	2062
21	1343	1423	1466	1531	1640	1762	1883	1992	2057	2100	2180
22	1415	1499	1544	1612	1727	1855	1983	2097	2166	2211	2295
23	1484	1573	1619	1692	1812	1946	2080	2201	2273	2320	2408
24	1552	1645	1694	1769	1895	2035	2175	2301	2377	2426	2518
25	1619	1715	1766	1845	1976	2122	2268	2400	2479	2530	2626
26	1683	1784	1837	1919	2055	2207	2359	2496	2578	2631	2731
27	1747	1851	1906	1991	2133	2290	2448	2590	2675	2730	2834
28	1808	1916	1973	2061	2208	2371	2534	2681	2769	2826	2934
29	1868	1980	2039	2129	2281	2450	2618	2770	2861	2920	3031
30	1927	2042	2102	2196	2353	2526	2700	2857	2951	3011	3126
31	1984	2102	2165	2261	2422	2601	2780	2941	3038	3100	3218
32	2039	2160	2225	2324	2490	2674	2858	3023	3122	3187	3308
33	2093	2217	2283	2385	2555	2744	2933	3103	3204	3271	3395
34	2145	2273	2340	2445	2619	2812	3006	3180	3284	3352	3480
35	2195	2326	2395	2502	2680	2878	3077	3255	3362	3431	3562
36	2244	2378	2449	2558	2740	2943	3145	3327	3436	3507	3641
37	2291	2428	2500	2612	2798	3005	3211	3398	3509	3581	3718
38	2337	2477	2550	2664	2854	3065	3276	3465	3579	3653	3792
39	2381	2523	2598	2714	2908	3123	3337	3531	3647	3722	3864
40	2424	2568	2645	2763	2960	3178	3397	3594	3712	3788	3933
41	2465	2612	2690	2809	3010	3232	3455	3655	3775	3852	3999

<https://doi.org/10.1371/journal.pone.0240436.t005>

Sabtu, 28 Agustus 2021



Translation Timeline



Past

- **19 midwives** from rural and urban primary health care centers have been trained in 2016.

Present

- The **prospective study** shows their abilities to document the results of antenatal examination during pregnancy has improved from **17%** to **63%**.

Future

- The **trained midwives will train other midwives** to get access to more reliable data.
- **Train midwives** to use the **developed surveillance tools** to **detect signs of abnormalities** during pregnancy.
- The **project** can be **adopted** in other **low-resource settings/developing countries** with the same challenges to **improve public health awareness**.



Kesimpulan

Pelatihan sainsifik dan teknis bagi bidan telah menghasilkan **kualitas data ANC yang lebih baik dan andal** yang dapat digunakan untuk:

- mengembangkan alat, began, dan protokol surveilans pertumbuhan janin guna meningkatkan keselamatan ibu dan janin;
- asesmen risiko ibu dan janin berbasis bukti, audit hasil kehamilan, serta perencanaan dan alokasi sumber daya; dan
- meningkatkan kualitas pelayanan kesehatan.



Project Team

Team Members



Dr. Mali Abdollahian

- Senior Supervisor
- Senior Lecturer in Mathematical Sciences
- Program Manager, Master of Analytics, Statistics and Operations Research



Kaye Marion

- Joint Supervisor
- Senior Lecturer in Mathematical Sciences



Supri Nuryani

- Senior Midwife
- Midwifery Academia
- Manager of Midwifery Service Excellence Program



Dr. Andy Yussianto, M.Epid

- Epidemiologist
- Team Members of the development of National Maternal and Child Health Surveillance (sponsored by AusAID-AIPMNH 2012)



Dr. Bambang Abimanyu, SpOG, KM

- Obstetrician
- Foetal and Maternal Health Specialist



Midwives' Representatives of Urban and Rural Primary Health Care Centres in South Kalimantan, Indonesia

- Senior midwives (29-56 years old)
- Experience midwives (6-36 years) in antenatal care and midwifery services



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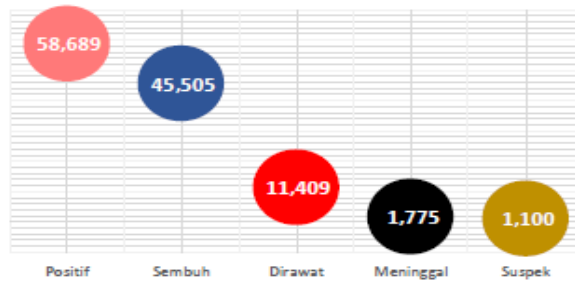
LAPORAN MINGGUAN BIDANG DATA

SATGAS COVID-19 Provinsi Kalimantan Selatan



ANALISIS DAN PELAPORAN No. 10, Senin 16 Agustus 2021

PERKEMBANGAN KASUS KUMULATIF PER 15 AGUSTUS 2021

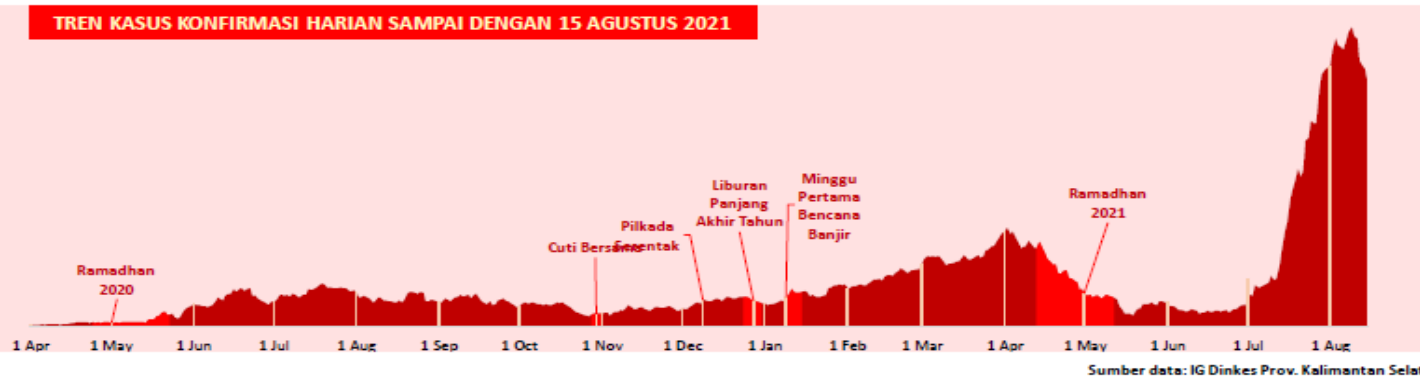


WASPADA PENURUNAN SEMU

DAFTAR ISI

- Kabar penting
- Perkembangan Covid-19
- Sebaran kasus Covid-19
- Protokol Kesehatan
- Mobilitas Penduduk
- Efektivitas PPKM Mikro
- Cakupan 3T dan Vaksinasi
- Proyeksi kasus Covid-19

TREN KASUS KONFIRMASI HARIAN SAMPAI DENGAN 15 AGUSTUS 2021



<https://covid19.ulm.ac.id/>

Sabtu, 28 Agustus 2021



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PROGRAM PERLINDUNGAN
SUMBER DAYA MANUSIA
KESEHATAN DI PROVINSI
KALIMANTAN SELATAN
TERHADAP PAPARAN
COVID-19

Oleh: Dewi Anggraini^{1,2,3}

¹Dosen Program Studi Statistika, FMIPA, Universitas Lambung Mangkurat

²Anggota Tim Pakar Percepatan Penanganan Covid-19
Universitas Lambung Mangkurat

³Ketua Bidang Data, Analisis, dan Pelaporan Satgas Covid-19
Provinsi Kalimantan Selatan



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et. al 2011;
rchadi

Sabtu, 28 Agustus 2021



LANGKAH STRATEGIS ANTISIPASI PENINGKATAN LAJU PENYEBARAN COVID- 19 PADA TAHUN 2021 DI PROVINSI KALIMANTAN SELATAN

DEWI ANGGRAINI*

RINGKASAN KEBIJAKAN

Langkah strategis antisipasi peningkatan laju penyebaran Covid 19 pada Tahun 2021 di Provinsi Kalimantan Selatan diantaranya: (1) mempertimbangkan peta zonasi risiko penyebaran Covid 19 di daerah sebelum pemberian izin pelaksanaan pembelajaran tatap muka; (2) menunda pembukaan sekolah dengan sistem pembelajaran tatap muka sampai risiko penyebaran Covid 19 di daerah rendah atau tidak ada kasus; (3) memberikan informasi dan bimbingan kepada orangtua terkait proses pendampingan anak selama mengikuti pembelajaran jarak jauh; (4) memberikan informasi dan bimbingan kepada orangtua terkait proses pengawasan ketat terhadap perubahan perilaku dan deteksi dini gejala Covid 19 pada anak dan

al 2011;
adi



Reducing Maternal and Neonatal Mortality in Indonesia

“Saving **Lives**, Saving the **Future**”

(Bulletin of Indonesian Economic Studies, 2015)

Thank You

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