

## Transport, health services and budget allocation to address maternal mortality in rural Indonesia

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### Abstract

The persistence of high Maternal Mortality Ratio (MMR) in Indonesia cannot be explained by simply looking at inadequate policies in health services and how they are implemented. It is also not only about the meagre budget allocations for reproductive health services, concentration of health workers in urban areas, and insufficient number of adequate community health services. Other factors, such as distance, transportation costs and road quality should also be considered as causes for why women living in remote areas find it difficult to access adequate health facilities. The transportation divide is a serious obstacle to the reduction of the high MMR in Indonesia.

*Keywords: state and local government expenditures, transportation divide, health and inequality*

### Introduction

Over the past few decades, Indonesia has enjoyed a steady reduction in its MMR, dropping from 423 in 1980 to 253 in 1990, rising slightly to 290 in 2000, and then continuing its decline to 229 in 2008 (Hogan and others, 2010, p. 1614). In September 2013, the National Population and Family Planning Board (Badan Koordinasi Keluarga Berencana Nasional or BKKBN) made a shocking announcement that the result of the Indonesian Demographic and Health Survey showed that MMR in 2012 was 359 deaths per 100,000 live births, significantly higher than the figure in 2008 (Jakarta Post, 2013).

However, in its official publication the BKKBN itself warns that "... one must be cautious in interpreting the results" and that "it does not necessarily indicate a failure in reducing the role of maternal deaths on overall adult female" (BPS, 2012, pp212-213). One should definitely be careful in comparing these numbers, as the sample sizes make uncertain estimates. The 95% confidence intervals for the two years have substantial overlaps, and furthermore the sample design was altered slightly between the surveys, limiting direct comparability. Nevertheless, the data suggests that three decades with a declining trend in the MMR of Indonesia is slowing down and possibly reversing.

While changes in the methodology make it difficult to compare the two figures, the recent trends have shocked policy makers as well as the general public as they suggest that Indonesia will definitely fail to achieve the Millennium Development Goals target of reducing MMR to 102 by 2015. Indeed, it suggests that Indonesia's MMR is high compared to the 2013 MMR of other Southeast Asian countries such as the Philippines (120), Viet Nam (49), Malaysia (29) and Thailand (26) (WHO, 2014, pp31-35).

In this article, several major factors contributing to the persistence of high MMR in Indonesia will be explored, including inadequate policies and their implementation, meagre budget allocations for reproductive health services, concentration of health workers in urban areas, insufficient number of adequate community health services, and severe road conditions that prevent easy and fast access to adequate health facilities in rural poor districts.

#### 1. Policies versus practice: an overview of national policies and programme on maternal health

The government has a variety of programmes to address maternal and infant mortality, such as the "Love Mom Movement" (Gerakan Sayang Ibu or GSI) that was launched by the president in December 22, 1996 and has been implemented through various strategies. First, the government

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introduced the Making Pregnancy Safer Movement (MPS). Second, the government developed an effective partnership through a cooperative cross-sector programme to promote the maximal use of available resources and improve coordination of MPS planning and activities. The implementation of GSI used a decentralized approach based on Act No. 22 (1999), Act No. 25 (1999), and a government regulation (Kepmen No.75/Kep/MenUPW/X/1997) concerning the GSI Manual.

Ten years later, to improve the implementation of the GSI programme, the Ministry of Health issued Decision No. 564/Menkes/SK/VIII/2006 concerning the development of a Prepared Village System (*Desa Siaga*). This policy became the foundation for local governments to provide early assistance to women in labour by mobilizing resources owned by the community in the area.

The Health Law No. 36/2009 also stipulates that the central government and local governments at the provincial and district/city level must allocate at least 5% of the national budget and 10% of the local budget, respectively, excluding salaries for public officials, for health programme. The law rules that 2/3 of the total budget should be used to finance public services to improve the standards of people's health. (Prayitno, 2014) The law provides the legal basis for the central and local governments to allocate sufficient budget to develop programmes for the reduction of MMR.

### 1.1 Lack of political will as reflected in low budget allocations

Judging from the budget allocated to health services in general, and health services for women in particular, however, neither the national nor local governments appear to have the political commitment to improve the health standards in the country. During the period of 2005-2012, budget allocation for health from the national budget only came to an average of 2.2% per annum. In 2013, the percentage of budget allocation for health went down to 1.5% of the national budget (Noerdin, 2011).

Meanwhile, allocations for specific programmes, such as *Jampersal*<sup>2</sup> (Childbirth Coverage, *Jaminan Persalinan*) and the Pregnant Mother and Reproductive Health Package, have increased only slightly. For example, data on pregnant mothers from the health ministry show that the per capita budget allocation for pregnant women through the *Jampersal* programme experienced a slight increase of Rp. 312,000 from 2011 to 2012. The increase from 2012 to 2013, however, dropped to only Rp. 11,000. Meanwhile, the *Jampersal* programme consumed 92.7% of the total budget for maternal health programme, leaving only 0.2% of the budget to be used for capacity building of reproductive health workers and as operational fund for health facilities for mothers.<sup>3</sup> This is in contrast to the fact that reproductive health workers and adequate birth clinic facilities play an important role in reducing MMR.

Furthermore, the key to the success of the GSI and the Prepared Village System programmes is contingent upon the political will of the local government to provide budget allocations, and not many local governments have done so. Most district governments are still reluctant to allocate funds for health programmes in general and for reproductive services in particular to reduce MMR (Prayitno, 2014).

In 2007-2008, the Women Research Institute (WRI) conducted research on health spending for women in six poor districts and one city, Indramayu (West Java), Jembrana (Bali), Lebak (Banten), Lombok Tengah (West Nusatenggara), Sumba Barat (West Nusatenggara), Lampung Utara (Lampung), and the city of Surakarta. The budget analysis was done by identifying programmes and activities that were directly related to women's reproductive health and the reduction of MMR. The research covered only the budget for women's reproductive health in the areas of health and family welfare.

An overview of the budget allocation for health in the seven areas can be seen in Table 1. The results show that only two of the seven districts/city, i.e., Jembrana (10%) and Lebak (10.7%), had actually fulfilled the mandate of Health Law No. 36/2009 to allocate a minimum of 10% of the local budget (Anggaran Penerimaan dan Belanja Negara or APBD) for health programmes. The decision of the governments of Jembrana and Lebak was striking because the two districts were among the

<sup>2</sup> The *Jampersal* programme covers health check-ups for pregnant women, delivery services, post-delivery services related to blood clots, family planning services after delivery, and health services for the newborn baby.

<sup>3</sup> See Health Law No. 36/2009, Chapter XV, Article 170-172 concerning Health Financing.

districts with the lowest fiscal capacities. Fiscal capacity is calculated as the percentage share of Net Regional Income (Penerimaan Asli Daerah or PAD) to total income. The higher a district is able to generate income from local sources, the higher is its fiscal capacity and the less dependent it is on the block grants from the national government (Dana Alokasi Umum or DAU). Having low fiscal capacity means that both Jembrana and Lebak had low PAD that could be used to finance local poverty reduction and development programmes. The fiscal capacity of Lebak was 10% while Jembrana's was only 7%, both far below the fiscal capacities of Indramayu (22%) and Surakarta (22%). Despite their meager income from local sources, they both made the political decision to use a significant portion of their budget to fulfill the Health Law mandate to allocate a minimum of 10% of the APBD for health programmes.

**Table 1. Fiscal capacities and allocation for health spending, 2007**

	Fiscal capacities of selected districts			Allocation for health spending		
	A Total Income (Rp. Million)*	B Local revenues (Rp. Million)	B:A Fiscal capacity (%)	Total (Rp. Millions)	% of APBD (local budget)	Per capita
Surakarta	590,132	129,910	22	37,155	5.8	65,934
Lebak	664,871	67,894	10	75,662	10.7	64,319
Central Lombok	571,075	54,123	9	42,725	7.1	51,740
Indramayu	959,915	210,877	22	73,646	7.3	41,838
North Lampung	542,889	59,647	11	43,593	8.0	74,857
West Sumba	395,144	37,421	9	38,098	9.0	95,182
Jembrana	378.668	26,668	7	38,887	10.0	151,043

Note:\*Income consists of funds from the central government and local revenues generated from Net Regional Income (PAD) and Production Sharing Funds

Source: Noerdin (2011, p. 20)

Thus, limited fiscal capacities should not prevent local governments to allocate larger budgets for health programmes. If Jembrana and Lebak could meet this mandate, then the other three districts whose fiscal capacities were approximately equal to those of Jembrana and Lebak, Central Lombok (9%), West Sumba (9%) and North Lampung (11%), and Indramayu and Surakarta whose fiscal capacities were twice as much, could not claim fiscal limitations as a suitable excuse. It is not a higher DAU or PAD that is needed to save the lives of poor women, but the political will of the government to fulfill the Health Law mandate to allocate a minimum of 10% from the APBD budget for health.

The percentage of local budget is actually not an accurate measure of the budget needs for health because districts and cities have different population and budget sizes. We also need to pay attention to per capita health spending. As shown in Table 2, the percentage of budget allocations for health in Lebak and Jembrana was more or less the same, but because the total population in Lebak was much higher than in Jembrana without the APBD budget being proportionately bigger, the budget allocation per capita for health in the two districts was uneven.

If we use the MDG target to determine the budget threshold for health, the target is a budget allocation of Rp. 120,000 per capita. Lebak, which has a higher fiscal capacity than Jembrana, achieved just 50% of the MDG target. But Jembrana, whose fiscal capacity was the lowest among the seven areas, made a health budget allocation that exceeded the international target. It shows that the low fiscal capacity did not stop the government of Jembrana to prioritize spending on health.

## 1.2 A closer look at budget allocated to women's health services

Two of the seven research areas, such as Jembrana and Lebak, fulfilled the mandate of the Health Law to allocate at least 10% of the APBD for health expenditures. However, the budget allocations for specific programmes to improve women's reproductive health were relatively low, as

shown in table 2. It seems that the Health Law that promotes gender equality had not been able to make local governments allocate an equitable health budget, especially for maternal health, that is sufficient to assure the safety of women's lives in Indonesia.

**Table 2. Share of budget for various women's reproductive health programmes to total, in %**

Programme	North Lampung	Lebak	Indramayu	Surakarta	Jembrana	Central Lombok	West Sumba
Family planning	0.01	0.06	0.04	0.02	0.01	n/a	0.03
Youth reproductive health programme	0.004	0.00		0.03	0.01	n/a	
Contraceptive services programme	0.01	0.06	0.01	0.02	0.01	n/a	0.16
Training for community	0.01		0.04	0.002		n/a	
Training for family guidance counselors	0.01		0.01	0.002	0.002	n/a	
Gender mainstreaming		0.01				n/a	
Mother, infant and child health programme				0.01		n/a	

Note: n/a – not available

Source: Noerdin (2011, pp. 22-35)

## 2. Why do poor women in rural areas continue to die from childbirth?

According to data from the Indonesian Demographic and Health Survey, hemorrhaging and eclampsia were responsible for 52% of the deaths of women in childbirth in 2008.<sup>4</sup> These medical conditions are both preventable, provided that the mother is assisted by a trained childbirth assistant in a childbirth facility that has adequate equipment and medical supplies, as well as the capacity to provide or refer to critical care and emergency services.

This was reaffirmed in a study conducted by the Women Research Institute (WRI) in six poor districts and one city, which indicated that childbirths that took place at home and were attended by a *dukun* often encountered difficulties, such as the lack of clean water, electricity for lighting, sterile space and equipment, and necessary medicines, which carry risks for the health and safety of the baby and mother (Noerdin, 2011).

A closer look at maternity health and services in the poor and remote areas confirms that 59% of all childbirths in the country occurred at home, while the remaining 41% took place at private and public maternity or health facilities (Nurjismi, 2008). According to the Indonesian Midwives Association (*Ikatan Bidan Indonesia* or IBI), a high rate of women in the rural and poor areas in West Nusatenggara gave birth at home. In the 31 poor and remote sub-districts in the province that had high occurrences of maternal mortality, 95.7% of all births took place at home, 85% of the mothers were assisted by traditional midwives (*dukuns*), and 32% of them were assisted by untrained *dukuns*. Only 2.6% of the births in the poor rural areas in the province occurred in hospitals.

The high rate of childbirth at home, the prevalence of untrained *dukuns* (traditional midwives), and the occurrences of hemorrhaging and eclampsia in the poor and remote rural areas in Indonesia are products of multiple causes. In the following sections, we will examine some of these causes, including insufficient number and poor quality of adequate community health services, concentration of health workers in urban areas, and severe road conditions that prevent easy and fast access to adequate health facilities.

<sup>4</sup> The Director for Maternal Health Services in the Directorate General's Office for Community Health in the Ministry of Health, Dr. Sri Hermiyanti, reported that the Indonesian Demographic and Health Survey (Survei Demografi dan Kesehatan Indonesia or SDKI) indicated that in 2008 the primary causes of death were hemorrhaging (28%), eclampsia (24%), infection (11%), prolonged delivery (5%), and abortion (5%). (Kompas, 2010)

## 2.1 Poor quality of community health centers and services

Legislative Resolution No II/1983 concerning the Outlines of State's Direction (Garis Besar Haluan Negara or GBHN) mandates the government to establish health service facilities to raise the quality of health of society in general. This mandate concerns the provision not only of medical equipment and health facilities, but also of high quality service that is affordable and accessible to society.

Table 3 shows the hierarchy of health services from the level of households to hospitals. Hospitals are managed by the provincial government, the district government or private companies. In comparison with the other health service facilities, hospitals are the most complete in terms of services and personnel, which include general practitioners, specialists, dentists, nurses, *bidans*, pharmacists, nutritionists, medical technicians, and sanitation specialists.

Services for women's health provided in the hospitals cover nutritional monitoring for expectant mothers, pregnancy examinations, childbirth assistance, postpartum recovery, reproductive health services, and administering of contraceptives. In addition to these services, the public regional hospitals (Rumah Sakit Umum Daerah or RSUD) also provide reproductive health services, including treatments for reproductive organs, infertility, family planning, and dissemination of information through the Communication, Information and Education (Komunikasi, Informasi dan Edukasi or KIE) programme.

**Table 3. Hierarchy of health services**

Level	Component or element of health service
Household	Treatment by the individual or family
Community	Treatment by community or health workers of <i>Posyandu</i> and <i>Polindes</i> .
Primary-level health service facility	<i>Puskesmas</i> , <i>Puskesmas Pembantu</i> , <i>Puskesmas Keliling</i>
Primary referral level	District hospital
Secondary referral level	Hospital class A or B

Source: Noerdin (2011, p. 84)

At the subdistrict level, health services are provided by the public community health center called *Puskesmas*. Currently there is one *Puskesmas* in every sub-district in Indonesia. The *Puskesmas* serve as a center for the development of community health, promotion of a healthy lifestyle, and provision of a comprehensive, integrated, and quality health services.<sup>5</sup> *Puskesmas* are located in the urban areas at the sub-district level and most of them are adequately equipped with health facilities and are attended by doctors, midwives and nurses.

To bring health services to the people in the villages and hamlets, the *Puskesmas* is supported by the *pustu* (sub-community health center) and mobile *Puskesmas* (*Pusling*). *Pustu* is smaller than *Puskesmas* and it covers one or two hamlets with a population of 2,500 (outside of Java) to 6,000 (Java and Bali) people. In 2007, there were 60 *pustus* in West Sumba. Since the population of the district was 400,262 people, one *pustu* served 6,671 people. To achieve the ideal ratio, the district needed 100 more *pustus*.

*Pustus* provide the best possibilities for medical care for the poor in communities that are far from a *Puskesmas*. However, as the Health Department admitted, *pustus* in general were poorly staffed. Usually, there is only one *bidan* or nurse who also takes care of the administrative work. When the *bidan* or nurse is away to provide services or to go the sub-district center or to the *Puskesmas*, then the *pustu* must close and patients must return later for treatment. *Pustus* are not yet effective in extending medical care to the villagers, let alone to pregnant women.

In the rural areas, women assist the government in implementing health-care services at the community level by participating in the *Posyandu* (integrated services post) and the *Polindes* (village maternity house) programme. These are hybrid labour-. Each hamlet is required to have a *Posyandu*.

<sup>5</sup> *Puskesmas* have five Health Promotion (*Promkes*) programmes consisting of a) Environmental Health (*Kesling*); b) Mother and Child Health (Kesehatan Ibu dan Anak or KIA), including family planning; c) Nutritional Improvement; d) Control of Infectious Diseases; and e) Treatments.

However, *Posyandus* are not designed to provide childbirth services. *Posyandu* sessions are held once every month in each hamlet, usually between 9 a.m. to 12 noon. A *bidan* and a nurse from a nearby *Puskesmas* come to run the *Posyandu* sessions by providing health check-up to pregnant women and infants. *Posyandu* is not a replacement for reproductive services for women provided by *Puskesmas*.

On the other hand, *Polindes* in the villages provide services that are similar to those provided at the *Puskesmas*, i.e., healthcare for mothers and children, family planning, immunizations, and childbirth assistance. *Polindes* is designed to have a resident *bidan* and adequate facilities for pregnant women to give birth and recover.

However, the reality of *Polindes* is far from its ideal design. The reason why *Polindes* currently cannot spearhead the effort to reduce MMR is the poor condition of the buildings and inadequate facilities. The village *bidan* in North Lampung complained about the small size of the *Polindes* building, measuring 2x3m, inadequate facilities for examining patients, and the lack of electricity and clean water. The government provided only medicines and basic equipment for medical treatments and the village *bidan* must supply the other needs herself.

Of the 100 *Polindes* in Central Lombok, 37 were damaged and needed repairs. According to a village *bidan*, although the remaining 63 *Polindes* were not damaged, they lacked furnishings and medical equipment for providing delivery services. Many *Polindes* did not have running water, electricity or bathrooms. Many of them only had one examination room and a bed thus, they can accommodate only one patient at a time.

On top of these, many *Polindes* were located in unsafe remote areas. Since *Polindes* is built on communal land, the community or the village administration tends to use unproductive land with low commercial value that is located far from the village residencies. According to one village *bidan*, several *Polindes* were situated in an abandoned cemetery. The remote locations of the *Polindes* make it difficult for the village *bidans* to live there.

WRI found out that the *Polindes* in the Gerunung subdistrict in Central Lombok was empty and deserted. Similarly, the *Polindes* in Ketare village had been empty for four years and the building was damaged. When the *Puskesmas* finally appointed a *bidan* to Ketare village in 2007, she did not live in the *Polindes*. Although she carried out her duties in Ketare, she lived in Sengkol village, which was the Pujut sub-district center. She went to Ketare only for the scheduled *Posyandu* activities and when there were villagers that needed her services. According to the villagers, the *bidan* did not live there because she did not feel safe and the *Polindes* building was not suitable for residence.

To solve the problem of the persistence of high MMR, the *Polindes* should be made suitable for living and provided with adequate equipment and facilities, human resource support and budgets.

## 2.2 Uneven distribution of health workers across districts

The high number of *dukuns* attending births at home in poor and rural areas is not caused by a scarcity of *bidans*. While there were almost 71,000 villages in Indonesia, according to the IBI there were actually more than 83,000 *bidans* available in 2006. This means that there were more *bidans* than villages in Indonesia.

The problem was that *bidans* were not equally distributed across districts and cities, and within a district/city they tended to cluster around *Puskesmas* at the subdistrict level and at hospitals in the urban areas. Although data regarding the exact unequal distribution of midwives between urban and rural areas are not available, data on the percentage of delivery services provided by midwives indicate the unequal distribution. Data from the ministry of education shows that in 2007, 64% of all deliveries in the urban areas were conducted by midwives, while the percentage for the rural areas was only 46% (Ministry of Education and Culture, 2010, pp31-32). The government has yet to issue a policy to provide sufficient financial incentives for *bidans* to live in villages, especially those in remote areas. The more isolated the village, the higher the MMR. The MMR in Papua, the most sparsely populated and geographically challenging big island based on data from the provincial office of the Ministry of Health, was 364 deaths per 100,000 live births in 2007 (Yomo, 2014).

The unequal distribution of health workers has caused severe shortages of health workers in poor and remote districts in Indonesia, as shown in Table 4. The shortage was calculated by looking at the ratio of the actual number of health workers in the field and the ideal number of reproductive services health workers. The shortage percentage shows the gap between the actual and the ideal number of reproductive health workers. For different reasons, the city of Surakarta and the district of Jembrana fared better than the other five poor districts. Surakarta did not experience such dramatic shortages of reproductive health workers because it was mostly urban in character and it was able to produce and attract health workers to live in the area. Surakarta even had a high surplus of nurses. Meanwhile, Jembrana is a poor district that has made budget allocations to make education and health services free for all residents (Prasojo, 2014). These policies are the likely reason why the district suffered much lower rates of health worker shortages than the other poor districts.

**Table 4. Shortages of reproductive services health workers (%)**

Districts	Doctors, general practitioners	Midwives	Nurses
Surakarta (City)	- 35.0	- 60.0	+ 142.0
Lebak	- 81.3	- 82.3	- 81.8
Central Lombok	- 87.6	- 79.5	- 54.5
Indramayu	- 86.7	- 73.3	- 55.5
North Lampung	- 80.0	- 70.0	- 60.0
West Sumba	- 69.3	- 58.7	- 50.6
Jembrana	- 27.0	- 47.0	- 27.0

Note: Data availability varies from 2004 to 2007.

Source: Author's own estimates based on data in Noerdin (2011, pp. 39-81).

The central government is currently attempting to overcome the problem of the limited number of health personnel by introducing the Temporary Employee Programme (Pegawai Tidak Tetap or PTT) that provides attractive financial and career incentives for doctors and midwives. However, since the policy only reaches down as far as the sub-district level, it fails to encourage doctors and midwives to live in villages, let alone in remote villages. There have been no integrated policies to provide midwives in the villages with decent housing and health facilities that are adequately equipped and have electricity, clean water and sanitation.

### 2.3 Bad roads and high transportation costs inhibit access

Government policies and budget allocations have created a skewed distribution of health workers in favor of urban areas, either at the city or sub-district level. The unequal distribution of health workers has been made worse by the transportation divide that makes it difficult for poor women living in remote villages to access the better reproductive health services offered by hospitals at the provincial, district and city levels and by *Puskesmas* at the sub-district level. The roads they must travel to get there were in poor condition and transportation were neither easily available nor affordable.

Table 5 shows that the five poor districts were not able to maintain the quality of their roads. The Lombok Tengah and Sumba Barat districts fared the worst by having less than 30% of their roads in good condition. Meanwhile, around half of the roads in Jembrana and Lombok Tengah districts were either damaged or heavily damaged. This was in contrast to the city of Surakarta where, due to its urban character, damaged and heavily damaged roads came to less than 10%.

The bad quality of roads contributed to the development of the transportation divide in WRI's six research areas. Data presented in Figures 1, 2 and 3 shows the prevailing perception in poor districts that hospitals and *Puskesmas* were not easy to access because of long travel distances that consumed time and involved high transportation costs. The fees for transportation were influenced by a number of factors, including distance to the hospital, condition of the roads, and the availability of transportation. Only poor women in the city of Surakarta had easier access to hospitals and *Puskesmas* because Surakarta was an urban area that was able to maintain the good condition of its roads.

Table 5. Road conditions in six districts and one city, 2011

	Good (%)	Slightly damaged (%)	Damaged and heavily damaged (%) *
Lebak district, Banten	n/a	n/a	n/a
Indramayu district, Jabar	48.77	25.95	25.21
Surakarta city, Jawa Tengah	57.90	33.26	8.82
Lampung Utara district, Lampung	35.75	20.38	43.85
Jembrana district, Bali	38.56	11.77	49.65
Lombok Tengah district, NTB	26.06	23.80	50.12
Sumba Barat district, NTT	25.57	31.52	42.89

Note: n/a – not available

Source: Seksi Statistik Neraca Wilayah dan Analisis. (2012). *Lombok Tengah dalam Angka 2012*. Lombok Tengah: Badan Pusat Statistik Kabupaten Lombok Tengah; Seksi Integrasi Pengolahan dan Diseminasi Statistik (Ed). (2012). *Indramayu dalam Angka 2012*. Indramayu: BPS Kabupaten Indramayu; Badan Pusat Statistik Kabupaten Jembrana. (2013). *Jembrana dalam Angka 2013*. Jembrana: BPS Kabupaten Jembrana; Seksi Integrasi Pengolahan dan Diseminasi Statistik (Ed). (2011). *Surakarta Dalam Angka 2011*. Surakarta: Badan Pusat Statistik Kota Surakarta dan BAPPEDA Kota Surakarta; Seksi Integrasi, Pengolahan, dan Diseminasi Statistik (Ed). (2012). *Lampung Utara Dalam angka Tahun 2012*. Lampung Utara: BPS Kabupaten Lampung Utara; Saksi Neraca Wilayah dan Analisis Statistik (Ed). (2012). *Sumba Barat Dalam Angka Tahun 2012*. Sumba Barat: BPS Kabupaten Sumba Barat.

The research by WRI on “Access and Use of Reproductive Health Service Facilities for Poor Women in Seven Districts/Cities in Indonesia” combined qualitative and quantitative research methods to provide an integrated illustration of the problems faced by impoverished women in accessing and using reproductive health care facilities. The quantitative research was conducted through a survey involving 300 respondents in each of the six districts and one city, which came to a total of 2,100 respondents. To complement the results of the quantitative research, WRI also used qualitative research methods by conducting in-depth interviews of 30 people in each district and city (totaling 210 people) and organizing Focused Group Discussions (FGDs) in each area. Each FGD involved 30 people, bringing the total number of participants to 210 people.

The results of WRI's quantitative survey, in-depth interviews and FGDs showed that for poor women living in remote areas, transportation costs to go to a hospital or Puskesmas could be as much as their day wage. In Jembrana, the local health insurance system that provided coverage to all residents did not cover transportation costs. In Central Lombok for example, the distance between Sengkol village and the Puskesmas in the Pujut subdistrict center was 30 km. Ketare village was closer, but the Puskesmas was still 4 km away. Travelling on public transportation, either on a *bemo* or *ojek*, usually took 90 minutes to reach the furthest hamlets.

Figures 1 to 3 show the result of WRI's quantitative survey on the perception of poor women regarding the costs and distance to go to hospitals and Puskesmas. The percentages show the share to the total number of respondents to the survey questions. The three figures show that the distance and length of time needed to reach the Puskesmas made the cost of transportation expensive. Marjah and several other women from Ketare village complained about the expensive transportation costs.

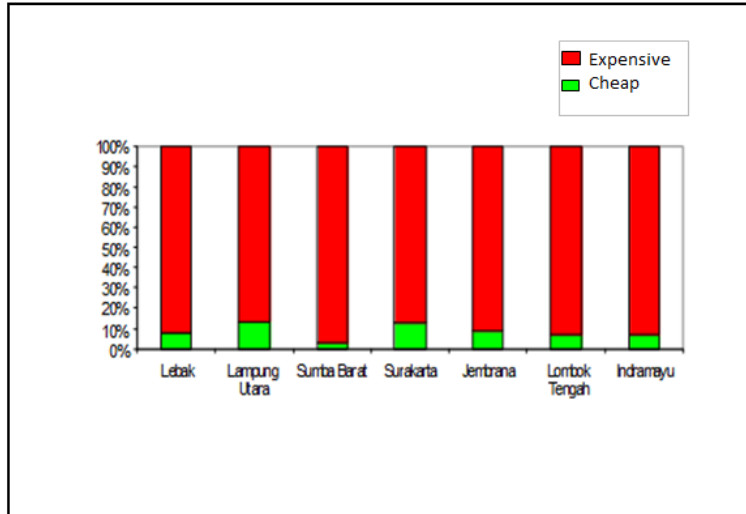
*"It is difficult for us to find income to feed our family. For us the ojek transportation cost is just too expensive... If they aren't really sick, I don't take my family members to the Puskesmas. They just need to rest a lot at home and they'll get better." (Marjah, 2007)*  
*"For that much money, it's better that I use it to buy food than to go to the Puskesmas." (Marian, 2007)*

These statements show that transportation costs were a heavy burden for poor families. The fee for an *ojek* (motorcycle taxi) from the most remote hamlets in Ketare and Sengkol village to the nearest healthcare facility ranged from Rp. 5,000 to Rp. 30,000, more or less an equivalent of one day's wage for a female labourer in the rice fields. In the North Lampung district, the cost of transportation going to the hospital in the Kotabumi subdistrict center came to around Rp. 2,000 to



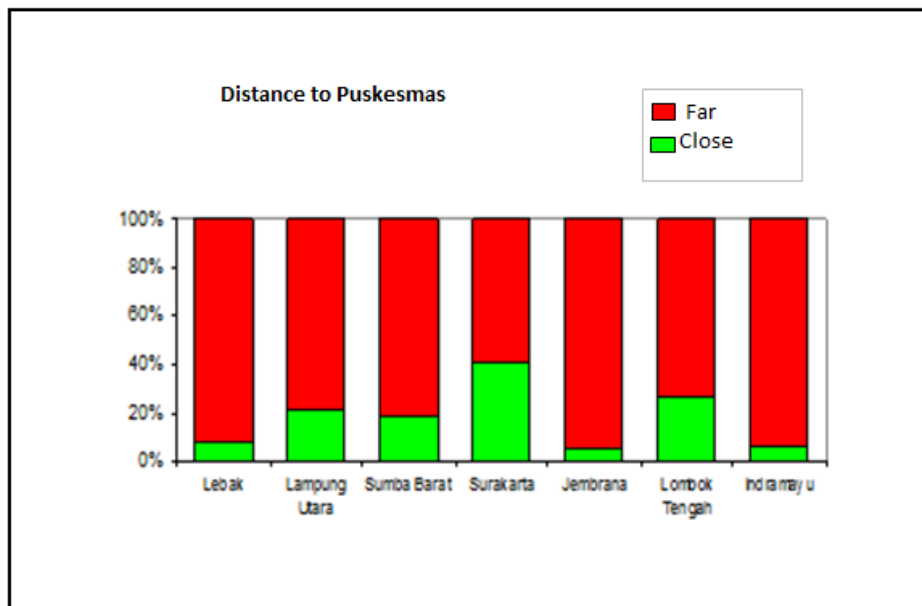
Rp. 20,000, depending on the distance and mode of transportation. Although the government and privately run public hospitals provided free pregnancy examinations, childbirth, medical treatments for illnesses, immunizations, and family planning services for Askeskin (health insurance for the poor) cardholders, the women said that they hardly went to the hospitals because they did not want to spend their money on transportation.

**Figure 1. Women’s perception of the cost of transportation to hospitals**



Source: Noerdin (2011, p. 88)

**Figure 2. Women’s perception of the distance to Puskesmas**



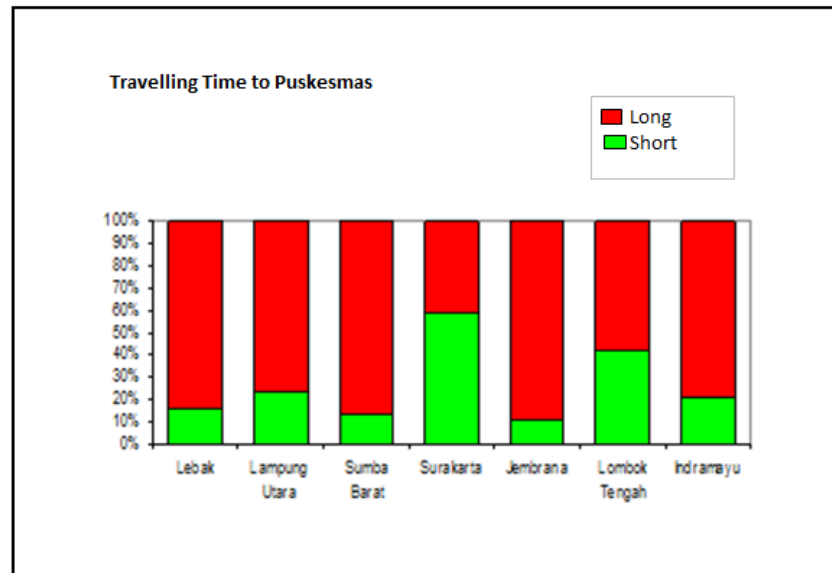
Source: Noerdin (2011, p. 89)

Women in the Hanakau Jaya research area in the Sungkai Utara sub-district and in Tulungmili, both in North Lampung district, said that they were reluctant to go to the hospitals because they must wait for a long time for the bus that only came twice a day. On top of that, in order to get to the bus stop they had to walk along isolated pathways that ran across the vast plantation area where robberies often took place. Therefore, women were often not allowed to leave their homes on their own for safety reasons.

In West Sumba, limited public transportation was a major problem for people living in the

villages. Almost 50% of the land area was hilly with slopes as steep as around 14°- 40°. Because of the topography, the residents of West Sumba had traditionally built their villages on top of the hills to protect themselves from enemies, thieves and wild animals. Presently, many people have started to build houses in the lowlands but they still kept their traditional houses on the hills. The villages on the hills were far from the government centers in the lowlands. Kodaka village, for example, was 7 km away from the administrative center of Waikabubak sub-district.

**Figure 3. Women's perception of the travel time to *Puskesmas***



Source: Noerdin (2011, p. 90)

Some hamlets could be reached by *ojek*, but there were many others where people had to go on foot to get there. Women from these villages had serious difficulties in accessing health service facilities. To reach the *Puskesmas*, poor women must walk down from their villages for 4 km at most. Women in rural areas in West Sumba were accustomed to walking great distances, but not when they were at their later stage of pregnancy. At the beginning of their pregnancy, they walked up to 4 km to go for medical examinations by health professionals. As their pregnancies advanced, the poor women chose to be examined by a *dukun* in their village, who also provided a service package to assist in childbirth. *Puskesmas* were simply too far and transportation was neither readily available nor affordable.

Gaura, a village in the Lamboya sub-district that was 48 km away from the Waikabubak sub-district center, presents another example of public transportation difficulties. The winding road to and from this village had sharp turns and it ran along the edge of a deep ravine. Only trucks dared to pass through the heavily damaged roads to carry passengers. The roads were very slippery and dangerous when it rained. Although the fee to ride the truck, which was Rp. 5,000, was considered inexpensive, most pregnant women did not dare ride on the truck to go to the *Puskesmas* in Kabukarudi village. Other than trucks, *ojeks* were also available to go to Waikabubak. But the cost was Rp. 100,000 for a one way trip and it was considered way too expensive.

The results of WRI's research also indicated that poor women in the six districts considered it difficult to access *bidans* since *bidans* tended to cluster in urban areas. Only in the city of Surakarta did the majority of respondents say that a *bidan's* practice was easily accessible. In the other areas, conditions were much worse.

Because *bidans* were not accessible, poor women such as Paile Deke (2007) from Kalembu Kuni village in Waikabubak used the services of the cheaper and more accessible *dukuns*. Four of her children died either in childbirth or shortly after birth. Wini Mude (2007) from the same village also used the services of *dukuns* and had suffered two miscarriages. Those poor women living in remote areas did not have other alternatives because health services at the community level were neither staffed with competent health workers nor adequately equipped to provide safe childbirth assistance.

### 3. Case studies: Sumba and central Lombok districts in West Nusatenggara province

The three case studies were part of a series of case studies conducted by WRI to complement the survey, in-depth interviews and FGDs. The case studies were selected based on information about the plights of poor women in accessing reproductive services that WRI came across during the in-depth interviews and FGDs. Selected women were then interviewed further to get their detailed experiences and WRI researchers also conducted background checks on the local condition of reproductive services. The combination of quantitative and qualitative methods and case studies is expected to provide a comprehensive picture of the problems faced by poor women in accessing and using reproductive health service facilities. The three cases outlined below state for more transport services, low cost and accessibility of health services.

#### 3.1 Case Study 1: West Sumba: Rahel R. Dapa, Gaura village, Lamboya subdistrict

Rahel R. Dapa was born on October 5, 1984 in Gaura village, Lamboya subdistrict, West Sumba District. At a relatively young age she had had four children, one of whom died not long after the baby was born. Rahel admitted to getting married at a very young age because her family's poverty had forced her to get married quickly. Her husband was a farmer and Rahel, after taking care of her family and her children, helped her husband plant vegetables in their garden. The produce from their garden was the income source for their family.

When she gave birth to her youngest child, Rahel just summoned a *dukun* in her village. She did not want to ask for the help of a midwife. However, the childbearing was very difficult. The convulsion and stomach ache lasted for almost two days. When she was dying, she remembered that a similar incident had fallen upon her adjacent neighbor who died because of excessive bleeding. Unable to bear the pain, Rahel told her husband to summon a midwife. Before the midwife arrived the baby was safely born but the bleeding on the oviduct did not seem to stop. Rahel was dizzy and her body became so feeble, and the last thing she could remember was the hysterical screaming of the *dukun* because the bleeding would not stop.

When the midwife came, she gave some injections and told Rahel's husband to find a vehicle to take Rahel to the *Puskesmas*. It was very difficult to find a vehicle. Gaura village is located on a mountainous area. It took two hours to reach the *Puskesmas* through damaged and steep roads. The only means of transportation was a truck that operated just once a day. Other than the truck, people use *ojek* for a fare of Rp100,000. It was quite impossible to take a dying patient on an *ojek*. In some referral cases, bleeding women died on the way to the hospital because of the bad road conditions and long travel time.

After failing to take her to the *Puskesmas*, the midwife succeeded in getting help from another midwife. For almost four hours the two midwives struggled to stop the bleeding. Slowly the bleeding stopped and Rahel's life was saved.

#### 3.2 Case Study 2: Central Lombok, Mariam, Ketare village, Central Lombok

Mariam was born 40 years ago in the Embung Rungkas hamlet in Katare village. During the time of the interview, she had six children and was still breastfeeding her youngest, a 9-month old baby. Mariam admitted to having been pregnant eight times, but one of her children died at the age of 50 days while another died when it was still in the womb. Out of the eight pregnancies, seven got medical check-ups and their births were assisted by the *dukun* in her hamlet. Only one of her children was born in the *Puskesmas*. Although it was free of charge, there were other expenditures much bigger than the cost spent for a *dukun's* assistance. After that, Mariam never gave birth in the *Puskesmas* again.

When she was pregnant with her fourth child, Mariam had a miscarriage. For one week she bled heavily and for two days after that she could not walk because of a terrible pain in the upper part of her vagina. However, her suffering did not relieve her of doing household chores. Mariam still had to wash her blood-stained clothes and cook for her husband and children.

When giving birth to her last child, Mariam had a horrible colic for one day and one night, causing pain and cramp on her stomach. The pain made her think of not having more children but she

could not do anything about this because she could not pay the Rp15,000 for the contraceptive injection. She thought it was better to use the money to provide food for her family.

A *dukun* was summoned to help with the childbearing. Arriving at Mariam's house, the *dukun* told Mariam to take a sitting position. The *dukun* said that sitting down would make it easier to deliver the baby. After giving birth, Mariam bled for seven days. The pain and cramps in her vagina made her unable to walk for three days. On top of that she had high fever for two days and her breasts were swollen.

There were no midwives in Ketare village and the Puskesmas in Sengkol was 7 km away. The distance from her house to the highway was 3 km and an ojek would cost Rp. 5,000. From the highway, she would need to take public transportation for Rp. 2,500. This means that to get to the Puskesmas and back Mariam would have to spend Rp. 15,000, which was more than what her husband earned for a one day work in the field. So it was quite impossible for her to have regular medical checkups.

### **3.3 Case Study 3: Lebak, Salima Pasir Tanjung Village, Rangkasbitung subdistrict, Lebak district**

As soon as Salima realized that she was pregnant, she went to the midwife in the *Posyandu* for a medical check-up. She had her pregnancy checked by the midwife on a regular basis every month. But when she was four months pregnant, she started to go to the *dukun* instead, a common thing to do in the village. Her decision to go to the *dukun* was because of the difficulty of accessing midwives. The village midwife who was assigned to work in her village lived in the urban area. She could see the midwife only once a month during the *Posyandu* activities. According to Salima it was very rare to see a midwife in their village.

The unavailability of midwives in her village made Salima look for other midwives in the neighboring villages or in the city. The distance between her village to the neighboring villages was around 2 km and there was no public transportation available. She would have to use an *ojek*, which was very difficult to do when she was pregnant. Salima's village was located in a mountainous area with steep and winding roads. Most of the roads were not asphalted and were very slippery during the rainy season. Moreover, the road passed through forest and plantation areas which were not safe. Another reason that made it difficult for Salima to visit a midwife was the high transportation cost.

When she gave birth, Salima was attended by a *dukun*. For her second childbirth, she also looked for help from a *dukun*, although she had heard and known that a childbirth assisted by a midwife could be free of charge if she used a Gakin insurance for the poor card.

In remote villages in Indonesia, there are usually no midwives who live in the village. Midwives cluster in the subdistrict and urban areas. The three case studies show that distance, transportation and transportation costs, and bad road conditions had left many women with no options other than to go to a *dukun* when they gave birth. Policy to ensure the distribution of midwives to remote villages is as important as budget allocations to improve road infrastructure and public transportation.

## **4. Conclusions and policy recommendations**

This article has highlighted the fact that lower fiscal capacities of a district cannot be blamed for the meager budget allocation for women's reproductive health services. When there is political will of policymakers, even poor districts facing fiscal constraints could provide higher budget allocations to address women's reproductive needs. It is also important to bear in mind that the unequal distribution of reproductive health workers, especially midwives, between urban and rural areas has made it difficult for poor women living in remote rural areas to access reproductive health services. It is important for the national and local governments to issue policies to provide incentives for reproductive health workers to live in the rural and remote areas. The access barriers faced by rural poor women consist of the actual distance to the closest adequate reproductive facilities, the amount of time it takes to go to the facilities, and the costs they have to pay. Bad road conditions exacerbate the enormity of distance, time and costs.

When it comes to efforts to reduce MMR, most academicians, policymakers and women non-governmental organizations (NGO) activists focus their attention on the capacity, quality and availability of reproductive health facilities and workers. Meager budget allocations for reproductive health services at the national and local level are often viewed as the root cause of the inadequate reproductive health services.

While this article supports the view that budgetary allocations are one factor contributing to Indonesia's high MMR, other factors such as distance, transportation costs and road quality should also be considered. Since a large part of the Indonesian population still live in the rural areas, the government, women activists, and the public at large have to start including the transportation divide as a serious obstacle to the reduction of the high MMR in Indonesia. It is still common for budget advocacy activists to criticize the budget allocation for the development of road infrastructure, and to advocate for more to be spent on reproductive programmes and services and not on road development. What is needed is an integrated approach including budget allocation for both health services provision and transport development, as well as policies to encourage more health workers to address rural women's needs.

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