

# Issue Briefs

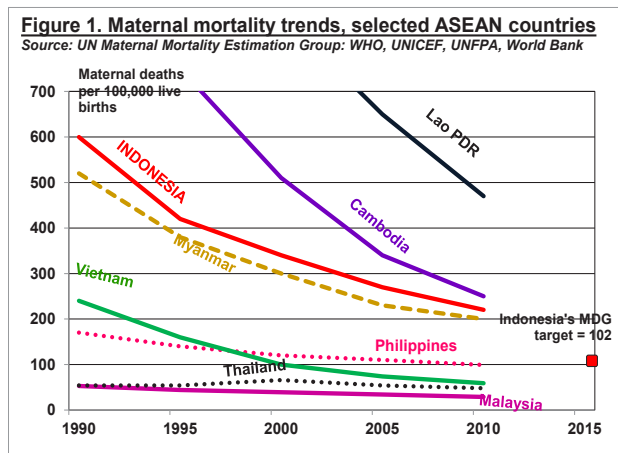
## Maternal and child health

### Critical issues

**E**very three minutes, somewhere in Indonesia, a child under the age of five years dies.

Moreover, every hour, a woman dies from giving birth or of causes related to pregnancy.

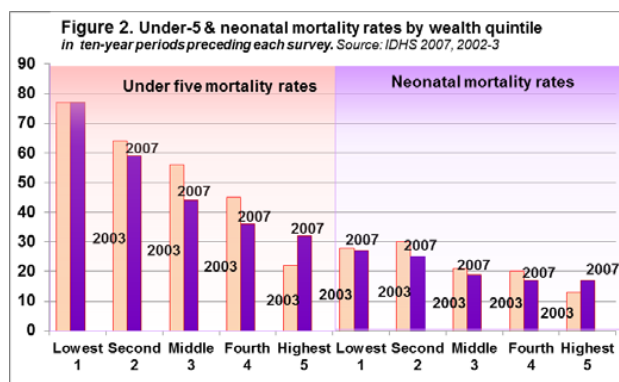
**Indonesia's progress on maternal health, the fifth Millennium Development Goal (MDG), has slowed in recent years.** Its maternal mortality ratio, estimated at around 228 per 100,000 live births, has remained stubbornly above 200 over the past decade, despite efforts to improve maternal health services. Poorer countries in the region show greater progress in this regard (Figure 1).



**Indonesia is doing much better in reducing infant- and under-five mortality, the fourth MDG.** The 1990s showed a steady progress in reducing the under-five mortality rate, together with its components, infant mortality and neonatal mortality rates. In recent years, however, the reduction of neonatal mortality appears to have stalled. If this trend continues, Indonesia may not achieve the MDG targets for child mortality reduction by 2015, although it appeared to be on track in earlier years.

### Patterns in child mortality

**M**ost of Indonesia's child deaths now take place during the neonatal period, the first month of life. The probabilities of the child dying at different ages are 19 per thousand for the neonatal period; 15 per thousand from 2 to 11 months and 10 per thousand from age one to five years. As in other developing countries attaining middle income status, Indonesia's child mortality due to infections and other childhood illnesses has declined, as mothers' education, household and environmental hygiene, income and access to health services have improved. Neonatal mortality is now the main hurdle in reducing further child deaths. Most of the causes of neonatal deaths are preventable.



**In both rural and urban areas and across all wealth quintiles, progress in reducing the neonatal mortality rate has stalled in recent years.** The 2007 Indonesia Demographic and Health Survey (IDHS 2007) shows that both under-five mortality rate and neonatal mortality rate have increased in the highest wealth quintile, but the reasons are unclear (Figure 2). Although rural households still have an under-five mortality rate one-third higher than that in urban households, one study shows that rural mortality rates are falling faster than urban rates, and that urban

mortality has even increased in the neonatal period. These trends appear to be associated with rapid urbanization, leading to overcrowding and poor sanitation conditions amongst the urban poor, exacerbated by changes in society that have led to the loss of traditional social safety nets. The suboptimal quality of services in poor urban areas could also be a contributing factor.

**Child mortality is associated with poverty.** Children in the poorest households generally have under-five mortality rates more than twice as high as those in the wealthiest quintile. This is because wealthier households have more access to quality health and social services, better health-seeking practices and generally higher levels of education.

**Child mortality rates in poor peri-urban areas are much higher than the urban average.** A study of “mega-urban” Jakarta (called Jabotabek<sup>1</sup>), Bandung and Surabaya in 2000 found child mortality rates up to five times higher in Jabotabek’s poor peri-urban subdistricts than in Jakarta city centre. The higher child mortality is attributed to diseases and conditions associated with crowding, and by poor water quality and sanitation.

**Geographic disparities are striking: under-five mortality rates are over 90 per thousand in three eastern provinces** (Figure 3). Neonatal mortality is particularly high in West Sulawesi, South Kalimantan, West Nusa Tenggara and West Sumatra, exceeding the under-five mortality rates in better-off provinces such as Central Kalimantan, Central Java and Yogyakarta. Whilst the mortality rates in Java are generally lower, this nonetheless translates into large numbers of affected women and children, an important consideration in targeting efforts.

**Children of less educated mothers generally have higher mortality rates than those born to better-educated mothers.** In the period 1998-2007, the infant mortality rate amongst children of mothers with no education was 73 per 1,000 live births, whilst that amongst children of mothers with secondary or higher education was 24 per 1,000 live births. The difference is attributed to better health seeking behaviour and knowledge amongst educated women.

**Indonesia is seeing an increasing feminization of the HIV/AIDS epidemic.** The proportion of women amongst new HIV cases has grown from 34 per cent in 2008 to 44 per cent in 2011. Consequently, the

Ministry of Health has projected a rise in HIV infection among children.

### Disparities in health services

**Quality maternal and neonatal health services can prevent a large proportion of deaths.** In Indonesia, the neonatal mortality rate amongst children whose mothers received antenatal care and delivery assistance by a medical professional was one-fifth of that amongst children whose mothers did not receive these services. Figure 4 provides an overview of the coverage of selected maternal and neonatal health services in Indonesia.

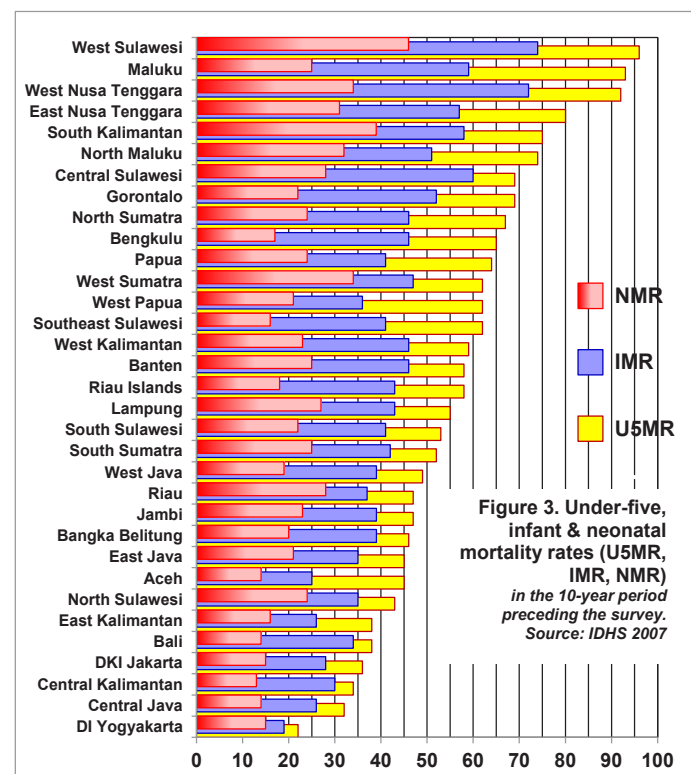


Figure 3. Under-five, infant & neonatal mortality rates (U5MR, IMR, NMR) in the 10-year period preceding the survey. Source: IDHS 2007

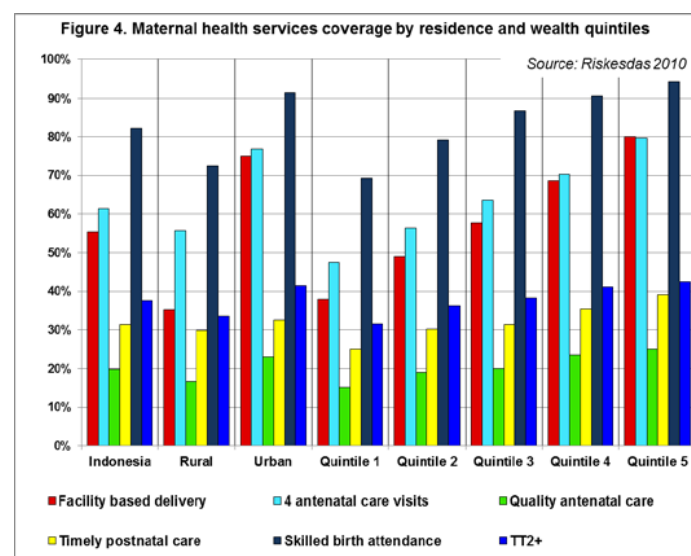
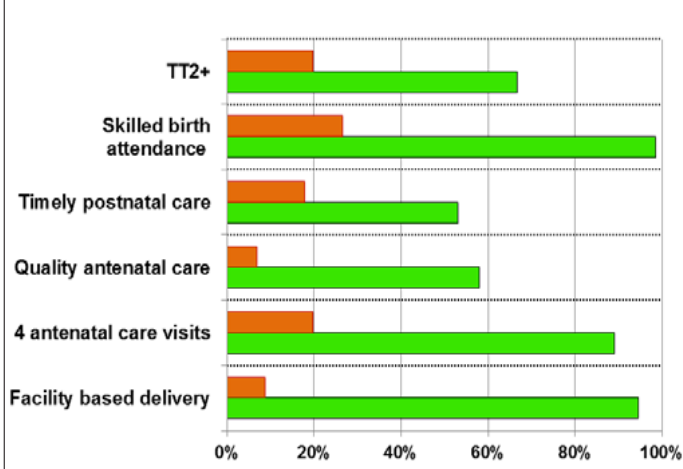


Figure 4. Maternal health services coverage by residence and wealth quintiles

Source: Riskesdas 2010

<sup>1</sup> The urban area surrounding Jakarta: Bekasi; and Bogor and Depok in West Java Province; Tangerang and South Tangerang in Banten Province.

Figure 5. Maternal health services coverage: best and worst-performing provinces (provinces)  
Source: Riskesdas 2010



**The proportion of births attended by skilled health personnel has improved steadily from 41 per cent in 1992 to 82 per cent in 2010.** The indicator includes only doctors and midwives or village midwives. Still, in seven eastern provinces, one out of every three births took place without assistance from any type of health staff, attended only by traditional birth attendants or family members.

**The proportion of births delivered in a health facility remains low at 55 per cent.** Over half the women in 20 provinces were unable or unwilling to use any type of health facility, delivering instead in their own homes. Women who deliver in a health facility are more likely to have access to emergency obstetric and newborn care services, although this is not necessarily the case with all health facilities.

**Some 61 per cent of women age 10-59 years made the required four antenatal care visits during their last pregnancy.** Most pregnant women (72 per cent) in Indonesia make the first visit, but drop out before the four visits recommended by the Ministry of Health. Some 16 per cent of women (25 per cent of rural and 8 per cent of urban women) never received any antenatal care during their last pregnancy.

**The quality of care received during antenatal visits is inadequate.** Indonesia's Ministry of Health recommends the following components of quality antenatal care: (i) height and weight measurements, (ii) blood pressure measurement, (iii) iron tablets, (iv) tetanus toxoid immunization, (v) abdominal examination, and in addition, (vi) testing of blood and urine samples and (vii) information on the signs of pregnancy complications. Some 86 and 45 per cent of pregnant women respectively had blood samples taken and were informed on the signs of pregnancy complications. However, only 20 per cent of pregnant

women received the complete set of the first five interventions, according to Riskesdas 2010. Even in Yogyakarta, the province with the highest coverage, this proportion was only 58 per cent. Central Sulawesi has the lowest coverage at 7 per cent.

**Some 38 per cent of reproductive aged women reported having received two or more tetanus toxoid injections (TT2+) during pregnancy.**

The Ministry of Health recommends that women receive two tetanus toxoid injections during the first pregnancy, with booster injections once during each subsequent pregnancy to maintain full protection. The lowest TT2+ coverage was found in North Sumatra (20 per cent) and the highest in Bali (67 per cent).

**About 31 per cent of post-partum mothers received "timely" postnatal care.** This means care within 6 to 48 hours after birth, as defined by the Ministry of Health. Good postnatal care is critical, as most maternal and neonatal deaths occur in the first two days and postnatal care is necessary to treat complications following the delivery. Riau Islands, East Nusa Tenggara, Papua are the worst performers in this respect, the coverage of timely postnatal care being only 18 per cent in Riau Islands. Some 26 per cent of all post-partum mothers never received any postnatal care.

**Amongst maternal health services, facility-based delivery has the greatest disparities** (Figures 4 and 5). The proportion of facility-based deliveries in urban areas is 113 per cent higher than that in rural areas. The proportion of women from the highest wealth quintile delivering in health facilities is 111 per cent higher than that from the poorest quintile.

**With respect to other services, wealth disparities are greater than urban-rural disparities.** The urban-rural differential is 9 to 38 per cent for services relating to antenatal care, TT2+, delivery and postnatal care services, but the differentials between wealth quintiles range from 34 to 68 per cent. The relatively low coverage of timely postnatal care services is more likely due to the lack of priority amongst women for these services, than to difficulties in access or availability.

## Barriers

**The poor quality of antenatal, delivery and postnatal health care services is a major barrier to reducing maternal and child deaths.** Across all population groups, the coverage on indicators relating to service quality (e.g., quality antenatal care) is consistently lower than that relating to quantity or access (e.g. four antenatal visits). A 2002 study showed that the

poor quality of care was a contributing factor in 60 per cent of the 130 maternal deaths examined.

***The poor quality of public health care shows the need to increase government spending on health.***

Indonesia has one of the lowest total health expenditures, at 2.6 per cent of its gross domestic product in 2010. Public health expenditures constitute just under half of total health spending. At district level, the health sector receives only 7 per cent of the total sub-national funds, and the Special Allocation Fund (DAK) for health constitutes, on average, less than one per cent of the total budget of the local government.

***Planning processes for DAK need to become more efficient, effective and transparent.*** At central level, parliamentary representatives play significant roles in determining funding allocation for their respective districts, and in doing so, slow down the DAK process considerably. Health funding is available at district level only late in the fiscal year.

***Various barriers prevent poor women from fully realizing the benefits of Jampersal, the Government's health insurance programme for pregnant women.***

The barriers include insufficient reimbursement levels, especially when the costs of transport and complications are included, and a lack of awareness amongst women of the eligibility for and benefits of Jampersal.

***On the supply side, there needs to be more health facilities offering Comprehensive Emergency Obstetric and Newborn Care (CEONC) services and more obstetrician-gynaecologists.*** Indonesia's CEONC facility-population ratio (0.84 per 500,000) is still below the ratio of one per 500,000 recommended by UNICEF, WHO and UNFPA (1997). Indonesia has around 2,100 obstetrician-gynaecologists (or one per 31,000 women of reproductive age), but not equitably distributed. More than half the obstetricians-gynaecologists practice in Java.

***Inappropriate behaviour and the lack of knowledge contribute to child deaths:***

- ***Mothers and community health workers lack knowledge on preventing or treating common childhood diseases.*** In Indonesia, one in three children under the age of five suffers from fever (which could be due to malaria, acute respiratory and other infections), and one in seven suffers from diarrhoea. A large proportion of deaths from these diseases is preventable. However, this requires knowledge, timely recognition, treatment and

behaviour change amongst mothers and health workers. For example, the IDHS 2007 reports that only 61 per cent of children under age five with diarrhoea were treated with oral rehydration therapy.

- ***Mothers are not aware of the importance of breastfeeding.*** The 2007 IDHS showed that less than one in three infants under the age of six months were breastfed exclusively. The majority of infants in Indonesia are therefore not receiving the benefits of breastmilk in terms of nutrition and protection against disease.

- ***Poor sanitation and hygiene practices are widely prevalent.*** Riskesdas 2010 reports that some 49 per cent of households in Indonesia use unsafe means of excreta disposal, and 23 to 31 per cent of households in the poorest two quintiles still practice open defecation. Such practices are associated with diarrhoeal disease. Riskesdas 2007 reports diarrhoea as the cause of 31 per cent of deaths between the ages of 1 month to a year, and 25 per cent of deaths between the ages of one to four years old.

- ***Poor feeding and other care practices contribute to maternal and child malnutrition, an underlying cause of child death.*** One out of every three children is stunted, and in the poorer quintiles, one out of every four to five children is underweight. Nationally, six per cent of young children are severely wasted, which places them at high risk of death.

## Opportunities for action

***Overall, Indonesia's health spending needs to increase, including the proportion of DAK going to the health sector.*** Increasing health spending should go hand-in-hand with tackling the remaining financial and other barriers that prevent poor women from accessing quality health services.

***A clear delineation is needed between the roles of central and sub-national levels in health care provision.*** Standards and regulation are part of the central level stewardship function and should not be devolved to sub-national level.

***Maternal and child health services need a shift in focus to quality,*** including delivery at facilities equipped with emergency obstetric and neonatal care services. The shift to quality needs action at several levels.

- ***The central level needs to develop and enforce standards and guidelines on the quality of services.*** Rigorous monitoring is needed to ensure the

implementation of standards by both public and private health care providers.

- **Private health care needs to be part of government health policies and frameworks.** Current efforts to improve health care standards are disproportionately targeting government facilities. Yet three times as many deliveries took place in private facilities than in public facilities in the period 1998-2007. Private health care providers and training facilities are already significant parts of the Indonesian health system and therefore need to be part of government health policies, standards and information systems. Regulation, inspection and certification should ensure the compliance of private providers with government standards and information systems.

- **More facilities providing CEONC services need to be established.** At the same time, referral systems should be strengthened to promote appropriate use of these facilities.

- **The move towards quality will require additional resources to develop and motivate health staff.** The performance of staff depends on both skills and motivation. Building skills requires not just more training, but rather, facilitative supervision of case management, and for professionals, peer-review assessment, periodical supervision, and critical event or mortality audits. Continuous feedback, monitoring and supervisory sessions play an important role, not only in improving quality but also in motivating teams. Indonesia may wish to consider incentives for health staff. These could be non-financial (enhanced role, ownership, and professional recognition), financial (adding a performance-based component to the salary), or institutional and team-based (measures such as accreditation systems and friendly competitions).

- **A robust information system is one of the components of quality health services.** Health information systems across Indonesia are not performing as well as they did before decentralization. Administrative data is poor in many of the districts, making it impossible for the district health team to effectively plan and target interventions. The central level needs robust data for discharging its stewardship function. The situation may require re-centralizing and harmonizing certain functions relating to health information systems, especially with regard to processes, reporting and standards.

**At national level, the existing minimum service standards (SPM) need review and reformulation.** Many poor districts consider the current standards to

be unattainable. The standards should accommodate Indonesia's wide disparities and different baselines, for example, by formulating progress in terms of percentage increase rather than a fixed level. This would allow districts to develop more realistic action plans. The setting of certain standards will need to consider geographic realities, population density and the availability of human resources. The Government should support districts or cities that lack the infrastructure to achieve the minimum service standards.

**To realize the full benefits of decentralization, district health teams need central and provincial support in evidence-based planning and implementation.** Decentralization increases the potential for local governments to plan, budget, and implement programmes tailored to local needs, but this will happen only if the local capacities are adequate. The province level needs resources to help districts plan and implement interventions that improve quality and coverage.

**Preventive health programmes need to be promoted and accelerated.** This will require promoting a continuum of care starting from the adolescent and pre-pregnancy period and continuing throughout pregnancy, delivery and childhood. Interventions should include proven, cost-effective interventions such as community-based case management of common childhood illnesses, breastfeeding promotion and counselling, provision of folic acid supplementation in the preconception stage, maternal anthelmintic therapy, maternal and infant micronutrient supplementation, and maternal and infant use of insecticide-treated bed nets. Elimination of parent to child HIV transmission will require provider-initiated HIV testing and counselling for all pregnant women as part of routine antenatal care, more rigorous follow-up, and better public education.

## Resources

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