SOLUTIONS JOURNALISM NETWORK A REPORTER'S GUIDE TO MATERNAL HEALTH









INTRODUCTION

When most journalists confront the landscape of maternal health, the tendency is to see what's wrong. And surely, there is no shortage of grim news: Every day, 800 women around the world die for reasons related to pregnancy or childbirth. And some 5.7 million women annually suffer severe disabilities following childbirth.

But there's another side to this story. Maternal mortality has decreased by **half** since 1990 - including in places that are extremely poor. New technologies and health care approaches, better infrastructure, and creative government policies are changing the odds for pregnant women and their families.

The Solutions Journalism Network was created to help journalists examine the stories behind changes like these. We are working to support and legitimize the practice of **solutions journalism**: rigorous and compelling reporting about responses to social problems. We help reporters examine not just what's wrong, but also examples of innovators working toward solutions – focusing not just on what may be working (based on available evidence), but how and why it appears to be working, and alternatively, in what ways it may be falling short.

We've developed this reporter's guide to help journalists like you add a solutions lens to your work, when it is needed to capture the whole story. We've used data from the authoritative Global Burden of Disease study to uncover "bright spots," or places where maternal mortality has decreased tremendously and could offer insights for others. We've outlined several ways communities and innovators are responding to maternal mortality – and for each, noted pros, cons, and potential sources to use, if you're interested in digging deeper. We've asked a few leading global health journalists for advice on how they would approach this story. And we've compiled a few resources that can get you started.

We hope you find this useful! You can learn more about us at solutionsjournalism.org

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WHERE ARE THE BRIGHT SPOTS?

attendants.

few "bright spots," or countries that have improved their MMR dramatically, and offered hypotheses for why. (Source: Institute for Health Metrics and Evaluation) Over 50% decrease 50% to 25% decrease 25% to 5% decrease 5% decrease to 5% increase 5% to 25% increase 25% to 50% increase Over 50% increase MMR less than 20 in 2010 no data **BANGLADESH** In Bangladesh, maternal mortality **RWANDA** dropped from 500 in 1990 to 240 in 2010. This incredible reduction Rwanda dropped its MMR from 720 to may be a result of the following **ECUADOR** 180, and as you can see, is an outlier interventions in sub-Saharan Africa. Here are some • More training: BRAC, a rural In 1990, Ecuador had an MMR of 160. hypotheses for what contributed to the development organization, They cut it to 75 by 2010. Here are trained midwives to perform some hypotheses of how they did it: • Affordable care: The Rwandan c-sections and health workers in • Better clinical care: Health facilities government subsidizes a national pre and post natal care. around the country adopted best health insurance scheme, which has • Prioritizing women: Women with practices, including the active led to increased use of family planning, less than eight years of school management of third stage of labor prenatal care and health facilities. are three times more likely to die (AMTSL). This drastically reduced • Task shifting: Midwives and other during pregnancy and childbirth. postpartum hemorrhage. clinical officers are trained in In 2001 the government • Affordable care: The Law of Free emergency obstetric care. introduced free education and Maternity and Child Care gives free • Incentives and sanctions: Women are incentives for girls to finish high health care to all pregnant women fined for giving birth at home, and school, which caused enrolment and their children up to age 5. doctors are financially rewarded for to spike. • Cultural sensitivity: Intercultural high quality obstetric care. • Better access to health care: birth wards encourage rural and • High quality care: Rwandan clinics Maternal health has improved indigenous women to deliver in a have focused on improving their with increased availability of health facility with indigenous birth quality. Many strive to keep regular family planning tools, maternal

This map depicts how the maternal mortality ratio (MMR) has changed in every

health vouchers, and home visits

by health workers.

country from 1990 to 2010. Maternal mortality ratio is the number of women who die during pregnancy and childbirth, per 100,000 live births. We've highlighted a

clinic hours, well-staffed and supplied

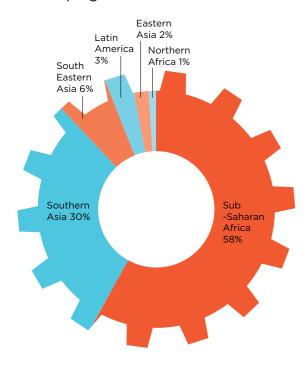
clinics, good hygiene practices and

respectful staff.

QUICK STATISTICS

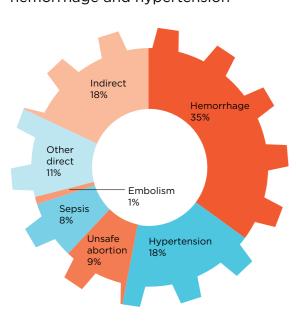
WHERE are women dying?

99% of all maternal deaths occur in the developing world



HOW are women dying?

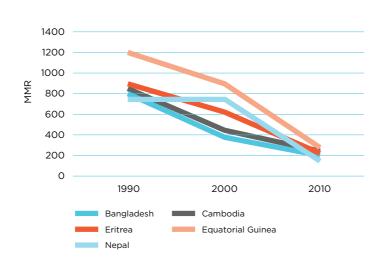
Over half of maternal deaths are due to hemorrhage and hypertension



- There were 287,000 maternal deaths in 2010. Every day, about 800 women die for reasons related to pregnancy or childbirth.
- Complications surrounding pregnancy & childbirth are the leading cause of death in girls aged 15-19 in developing countries (WHO, Fact Sheet 364)
- More women die giving birth in rural areas than in urban areas. (WHO, Fact Sheet 348)
- For every woman who dies, 20 30 more experience injury during childbirth
- 5.7 million women suffer severe disabilities following childbirth, including obstetric fistula and infertility (UNFPA)

WHERE is progress being made?

Here are some of the countries on track to meet Millennium Development Goal 5A, to reduce the maternal mortality ratio by three quarters



WHY ARE WOMEN DYING?



There aren't enough healthcare workers

Most developing countries are facing a critical health worker shortage. Without midwives and skilled birth attendants, pregnant women don't receive adequate prenatal care, and lifethreatening complications during pregnancy (e.g., pre-eclampsia) and childbirth (e.g., hemorrhaging) go undiagnosed. The UNFPA estimates midwives save 300,000 women each year.

Sub Saharan Africa has 24% of the global disease burden, but only 3% of the total global health workforce (WHO, Scaling Up). In Ethiopia, for instance, 25,000 women die every year from pregnancy and childbirth complications. Another 500,000 suffer long term disabilities such as obstetric fistula (UNFPA). More than a third of the births are unattended, and in rural areas more than 80% of births do not have a midwife or trained health worker present.

The UNFPA estimates that 3.5 million health workers, including 350,000 trained midwives, are needed to improve the health of women and children in the poorest countries (UNFPA. Save Lives, Invest in Midwives).



Pregnancy and childbirth are expensive

Since most rural health clinics don't have ambulances, many women end up paying for expensive taxi rides if they need to be transferred to a hospital. Once women show up the hospital, many are faced with user fees, medication costs and emergency services fees. These fees can be insurmountable obstacles in convincing women and their families to deliver in health facilities, especially in countries without insurance programs. These costs also discourage women from returning to the hospital for postnatal care, forcing women to live for years with easily repairable childbirth injuries and illnesses.



It's hard to get to hospitals...

In rural areas in the developing world, women often live miles from the nearest health center with limited transportation options and few useable roads. The health centers themselves often do not have ambulances or any other motorized transport to transfer emergency patients to the hospital. As a result, many women die while waiting to be transferred a facility that can handle obstetric emergencies. In rural Zimbabwe, transportation problems accounted for a third of maternal deaths in 2007 (Africa Policy Panel).



...and when they get there, there often aren't enough supplies or workers

When women do show up at health facilities, they often find severe supply shortages – from medications to equipment and beds. Frequent drugs stock outs, broken equipment, and insufficient space hamper the availability and quality of care.

On NPR's "All Things Considered," Melissa Block talked about a hospital in Mozambique that had overstuffed maternity wards, insufficient supplies, and sheets covered with old bloodstains. Both there and in many other developing world hospitals, many laboring women share beds and have little privacy. Electricity and running water are unreliable, water has to often be hand pumped from local wells, and woman can die while waiting for caesarean sections. Unsterile conditions increase the risk of women dying from infection after giving birth.



There are barriers to accessing family planning tools

Giving women the ability to control their fertility through delaying their first birth, spacing their children more than two years apart and deciding when to conceive will have dramatic effects on maternal death and disability. Half of the women who die from pregnancy & childbirth related causes hadn't wanted to get pregnant, and more than 200 million women want to use modern contraceptive methods but have no way to get them (Guttmacher). Experts believe the shortage is due to several cultural practices – including child marriage, the desire for large families, mistrust of previous family planning initiatives, and misinformation about side effects – as well as more logistical distribution obstacles.



t's part of a larger problem

There are many deep-rooted problems - including malnutrition, child marriage, barriers to secondary schooling, and low cultural value of women - that affect maternal health outcomes. UNFPA estimates that malnutrition contributes to 15% of maternal deaths, and a much higher rate of maternal injury, often because a malnourished woman's pelvis is not wide enough to safely deliver a child.

A woman's status in her household and country will directly determine the likelihood of her attending secondary school, which in turn affects her likelihood of child marriage, paid employment, and fertility choices. For these reasons, most countries with higher rates of girls attending secondary school have lower maternal mortality.

WHAT ARE SOME RESPONSES?

The best way to improve maternal health is to make sure a trained provider is present at every birth. Here are some efforts at getting more boots on the ground.



Task shifting

Mozambique, Bangladesh, Tanzania, and many other developing countries are confronting their doctor shortage by training health workers to perform basic caesarian sections and other procedures. The training period is short, typically 18 months to three years. After the training, most clinicians are posted to rural areas where they may be the only trained medical provider for thousands of people. Some academic research shows that these clinicians have similar outcomes as doctors - and that they are less likely to leave the countryside for either the city or abroad.

However, clinicians are limited in what they can do outside of their technical training, and are unable to treat all the conditions that are presented to them. There is a high burnout rate, especially in rural areas where they often feel isolated and unsupported.

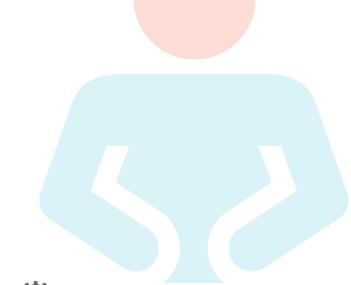
Potential sources for journalists: The World Health Organization (WHO), African Medical and Research Foundation (AMREF), Maternal Health Task Force, and Averting Maternal Death and Disability (AMDD) have written resources on task shifting. The College of Surgeons, in East, Central, and Southern Africa (COSECSA), which leads surgical training in Africa, clinical officer associations, community health workers, and ministries of health would all be good sources.



Community-based groups can often have a strong effect on maternal health. In fact, a meta-analysis in the Lancet estimates that peer counsellors and discussion groups in India, Nepal, Bangladesh, and Malawi could halve the maternal death rate. Also in Malawi, where speaking about pregnancy is taboo, traditional birth attendants (TBA) have developed ways to improve maternal health without disrupting long-standing tradition. TBAs and community elders act as "secret mothers," or liaisons with professional health workers. They are responsible for ensuring women get pre and postnatal care deliver in health facilities (Martin).

Many countries have also found ways to educate audiences about family planning and maternal health by using popular soap operas, radio shows, theatre productions, and other forms of fictional entertainment. Writers develop compelling characters that model positive or negative behaviors while maintaining a tightly plotted story to keep people tuning in.

Potential sources for journalists: Academic journals like the Lancet, the International Journal of Gynecology & Obstetrics, and Reproductive Health Matters discuss community responses to maternal mortality. When researching this topic, journalists could consider the potential scalability of a given response, its cost-effectiveness, and its sustainability.



Community health workers

In many countries, particularly where there are few trained medical professionals, community health workers (CHWs) play an essential role in the health system. CHWs typically have some formal training, ranging two weeks to two years. Regarding maternal health, CHWs can provide a range of services, from providing family planning tools and encouraging women to visit hospitals during pregnancy, to delivering babies. Some CHWs are also trained to prevent specific causes of maternal deaths – for instance, by administering misoprostol to reduce or prevent postpartum hemorrhaging.

In India, the Comprehensive Rural Health Project has trained low caste women in basic maternal health care, including uncomplicated home deliveries. BRAC's Manoshi project, in Bangladesh, sends CHWs to provide prenatal and postnatal care to women in urban slums. Maternal and child mortality rates have dropped dramatically in both of these areas.

Potential sources for journalists: The MDG Health Alliance, One Million Health Workers, Johns Hopkins, and Frontline Health Workers Coalition have written resources. Journalists could also study one of the many diverse CHW programs in existence today, such as BRAC in Bangladesh, the Health Extension Worker program in Ethiopia, and the government's program in Brazil.

In most developing countries, "three delays" account for most of the maternal deaths: delay in deciding to seek care, delay in reaching care in time, and delay in receiving adequate treatment. Here are some attempts at cutting those delays.



Maternal waiting homes

Maternal waiting homes are dormitory-like facilities close to hospitals or health centers. Women come to the homes at the end of their pregnancy, and once labor starts they move to the health facility. They are intended for women who live in rural areas who may not be able to get to the hospital quickly, as well as for women with high-risk pregnancies. Small scale studies in Eritrea and Ethiopia have shown an increased use of skilled practitioners at births, and a reduction in maternal mortality rates ((Andemichael, Kelly).

It's still early days, though - a 2012 systematic review showed insufficient evidence in determining the impact of waiting homes and maternal health outcomes. Also, getting to them means finding transportation and losing wages, which is challenging for many women (van Lonkhuijzen).

Potential sources for journalists: Programs in Malawi, Ethiopia, and Eritrea deserve closer attention. Journalists could ask how the homes are designed, how culturally sensitive they are, who oversees them, and how easily women can access them.



Many countries are experimenting with ways to get women to deliver babies in hospitals instead of homes. Some are taking the "carrot" approach. For example, the Indian government began a program called Janani Suraksha Yojana, which gives cash incentives to women who have prenatal care check-ups and deliver in health facilities (Lim). In Rwanda, doctors are being paid for prenatal checkups, family planning visits and deliveries in a "results based financing" initiative (Basinga).

Other countries are experimenting with "stick" approaches. In Malawi and Zambia, for instance, some tribal chiefs have instituted fines for women who give birth outside of a health facility and with a traditional birth attendant. The traditional birth attendants are fined as well (Martin).

Both approaches have setbacks. Regarding the "carrot" approaches, there are limitations on who qualifies for vouchers. And health facilities are not always ready for the increased demand for services. In the countries that use "stick" approaches, traditional birth attendants often continue to deliver babies, especially in distant rural areas.

Potential sources for journalists: The World Bank, UNICEF, USAID and Population Council have funded pay for performance and other financing solutions, and there is a lot of academic research on the topic. Results Based Financing for Health is a good written resource - it includes case studies, academic papers, information on pilot programs, and more. Tribal chiefs (or other local leaders), TBAs, and ministries of health would be good sources.





In various parts of Africa and Latin America, nonprofits like Riders for Health and eRanger drive laboring women from their villages to local health care facilities on their motorcycles or bicycles. Some motorcycle ambulances are specially designed to transport pregnant women, and many can transport family members as well. Other motorcycle initiatives are being piloted in Tanzania, Uganda and other parts of sub-Saharan Africa, including paying local motorcycle owners to take women to their pre-natal appointments.

They are cheaper to purchase and maintenance than car and bus ambulances, and have shown success in rural areas – for instance, in South Sudan, Uganda, and Malawi (Bismarck, Hofman, Canadian Broadcasting Corporation). They are also easier to drive over unpaved roads. Unfortunately, they are difficult to use in bad weather and may not be the most comfortable form of transport (then again, if you're about to give birth, little is comfortable).

Potential sources for journalists: There is some academic literature - for instance, in the Journal of Paramedic Practice - on the effectiveness of these ambulances, and the situations and geographies in which they make the biggest difference. Journalists could ask about response time of motorcycles, patient safety, privacy, and maintenance.



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WHAT ARE SOME RESPONSES?

Developing technology for maternal health is sometimes the easier nut to crack; it can sometimes be tougher to ensure the technology is cost-effective, scalable, culturally appropriate, easily transportable, and user-friendly. If you choose to research any of these technologies, all of these supplementary questions are critical.



Supplies and medication

Here are a few examples of innovations in birthing supplies:

Clean birth kits: There are several programs that supply pregnant women with birth kits to help with clean delivery and reduce infection. The kits can include basic hygienic supplies (like soap, sterile razors, plastic sheets for labor) and common medications (like tetracycline eye ointment for the newborn). Studies show these kits are effective in reducing infection, especially when accompanied with training.

Misoprostol and Oxytocin: Both medicines can be used to reduce and prevent postpartum hemorrhage. Misoprostol is less expensive than Oxytocin, easier to transport, and easier for an unskilled health worker to administer (pill versus injection). Oxytocin, however, is considered safer and more advanced. It's important to note that misoprostol is controversial since it can also be used to terminate pregnancy.

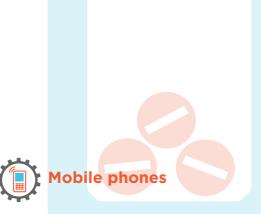
The Anti-Shock Garment: This garment stabilizes a severely bleeding woman who go into shock, making it possible to transport her to a clinic with emergency obstetric care. While effective, Dr. France Donnay from the Gates Foundation cautions that the suit itself won't help if there aren't trained providers, equipment and enough blood for transfusions. Training providers to recognize signs of post-partum hemorrhage, using drugs to contract the uterus have been effective in preventing hemorrhaging women from going into shock.

Potential sources for journalists: The International Confederation of Midwives has experience with all of these technologies, and there are ample academic resources on each technology's effectiveness. Pathfinder, PATH, the Gates Foundation, Clean Delivery Kits, the Healthy Newborn Network, and CHW training designers would all be good sources.



Solar solutions, such as solar power suitcases, are bringing reliable electricity to rural health centers and hospitals. For instance, WE CARE solar suitcases, which are designed for maternal health emergencies, are distributed in 24 developing countries across Africa, Asia, and Latin America. They are designed to provide light and electricity for medical equipment in areas off the electricity grid, making it possible for health workers to deliver babies at night and during power outages. They are also equipped with fetal heart rate monitor to monitor the baby and cell phones with SMS for consultations and surveys.

Potential sources for journalists: WE CARE and eHealth Africa have direct experience with solar solutions for maternal health. COSECSA and other surgical associations, the International Confederation of Midwives, and hospital administrators would all be good sources.



The maternal health community has used mobile phones creatively. A subsidized voucher program in Madagascar uses an SMS money transfer system instead of cash payments to pay service providers (Corby). The mobile alliance for maternal action (MAMA), which operates in Bangladesh, South Africa and India, delivers information about pregnancy and childbirth to women through voice and text messages. In Rwanda community health workers uses rapidSMS to track pregnant women, monitor prenatal care and identify and refer high-risk pregnancies (Kalich). In Tanzania a new program will use video conferencing, laptop and cell phones to support health workers in rural areas. The hope is that through video conferencing health workers can continue their education, discuss difficult cases with colleagues and take part in online lectures and refresher courses.

Anurag Mairal, who leads Technology Solutions at PATH, warned that some health workers may be facing a problem of plenty. He met a CHW in India who had nine mobiles from nine different mHealth pilots, most of which sat unused in her desk. The most powerful players may thus be those who build on existing architecture.

Potential sources for journalists: rapidSMS, Ushahidi, PATH, and MAMA would all be good sources to discuss individual mobile health programs. Journalists could also turn to mobile carriers (like Celtel and Vodafone), ministries of health, and organizations that piloted mHealth programs that eventually failed.

ADVICE FROM OTHER JOURNALISTS

We asked Ameto Akpe (Businessday Media, Nigeria), Mae Azango (FrontPage Africa, Liberia), Liz Ford (Guardian, UK), Nicholas Kristof (New York Times, US), Don McNeill (New York Times), and Tina Rosenberg (New York Times) how they report these stories. Here's what they had to say:



On deciding what's newsworthy:

Pon: A newsworthy story is one that makes me sit up and say, "Huh? I didn't know that."

Newsworthy stories for us tend to offer something new or a bit different - an innovative way for women to access healthcare information; major announcements by governments, such as free healthcare, major new projects/initiatives to assist women in childbirth and pregnancy.

And I cover solutions as well as problems. If and when a miracle drug or vaccine or diagnostic test comes along, I usually write about it. When a cute new gizmo comes along, I sometimes write about it depending on how nifty an idea it is and whether it has any track record of success.

On how to engage readers:

characters come alive they have to be as complex as possible. Another way is to work off readers' expectations and tell them something surprising. If "everyone knows" that poor, rural African families have seven children, it's potentially interesting to write about a family planning program that has dramatically cut the birth rate.

Trying as much as possible to make it relevant to women in other parts of the world is key. This requires speaking to women, getting real-life examples. Many women know the physical pain of childbirth, so the thought of going through that with only a cup of tea or a paracetamol tablet for pain relief in a clinic lit only by the light of a mobile phone is something that will probably get their attention, and they will empathize.

My advice to other journalists reporting on this topic, is that they should be very careful because it is very sensitive and involves two lives. It also helps educate pregnant women who are ignorant of going to the clinics regularly [and only go] once in a while.

ina: Focus on what works. Someone solves a problem that others have not been able to solve - what did that person do differently? It's a how-dunn-it. People like to keep reading to find out the answer.

On the most important questions to ask:

How will this announcement/new money/new idea impact the lives of women in rural communities? [...] I always want to know how the new announcements of funding for family planning, or free healthcare and medicines, will benefit these women in practical terms - how will they access contraceptives, for example, who will pay for them to get to the shiny new health center 3 miles down the road? Who will deliver the drugs from the warehouse to the clinic?

In reporting on maternal health, you [must] talk to pregnant women, doctors and nurses, midwives or birth attendants, be they trained or untrained. Some trained midwives say untrained birth attendants in Liberia are the ones responsible for the death of pregnant women and their unborn children. Therefore if you are reporting on such matters with one group being accused, you have to speak to [both sides].

When we first pitched the Fixes column, we assumed we'd be writing about new inventions and technologies. But we quickly found as we did research that there were hundreds of creative and potentially useful new inventions and technologies. What was lacking was not technology, but the delivery system to make sure that technology got to the poor, was accepted by them, and wasn't just a one-shot donation. So now I always ask about the delivery model. How are you persuading people to use this intervention? How do you get it to villages? How will people afford it? If you are giving it away, what are you doing to ensure that it's here for the long term?

Ameto: That depends on the specific story, but, generally, why does the statistic remain so poor in Nigeria and what specific (distinctive) cultural or local issues influence maternal health?

On challenges:

I'd say a challenge is that maternal health is best covered with the drama of a crisis - a woman whose life is in jeopardy. But finding that case can be difficult, and then you feel like a vulture if you intrude. Moreover, most of these cases occur in rural areas, so there's no good diagnostics to determine what went wrong. Did she have anemia? Malaria? Eclampsia? Most of the time no one really knows in rural areas, and no one has measured her hemoglobin or blood pressure.

Ameto: Getting requisite resources to follow the story where it leads, getting the story published before it goes stale, getting people to open up on what some may regard as taboo or 'too private'.

The assumption among American readers and editors that the third world is uniformly miserable and there is no hope to change this. This is completely untrue, but it makes American readers turn off when they see a story about developing countries. And it makes editors less likely to run them.

WHAT ARE SOME GOOD RESOURCES?

Academic Articles and Resources

- Rosenfield A, Maine D. "Maternal Mortality a neglected tragedy. Where is the M in MCH?" The Lancet. 13 July 1985;2(8446): 83-5. The seminal article that sparked conversation and action on maternal mortality.
- Thaddeuus S, Maine D. "Too Far too Walk: Maternal mortality in context." Social Science & Medicine vol 38 issue 8 April 1994, 1091-1110. The article that first discussed the "three delays" model of maternal mortality
- Singh S, Darroch J. "Adding it up: Costs and Benefits of Contraceptive Services. Estimates for 2012." Guttmacher Institute. 2012. http://www.guttmacher.org/pubs/AIU-2012-estimates.pdf. This resource highlights the need for family planning services in developing countries.
- The Lancet Maternal Survival Series. 30 September 2006. (http://www.thelancet.com/series/maternal-survival). The Lancet Women Deliver Themed Issue. 17 May 2013. (http://www.thelancet. com/themed/women-deliver-2013). The Lancet has had two series on maternal health: a landmark set of papers in 2006 on maternal health in developing countries, and the current Women Deliver issue that presents recent progress and obstacles.

Datasets and Reports

- Institute for Health Metrics and Evaluation. Global Burden of Disease Report. 2010. http://www.healthmetricsandevaluation.org. GBD 2010 is the most comprehensive study of its kind, producing comparative metrics for 291 different causes of premature death and disability across 187 countries, 20 age groups, and b<mark>oth sexes f</mark>or three time periods: 1990, 2005, and 2010.
- The World Health Organization. "Topic Area: Maternal Health and The Partnership for Maternal, Newborn and Child Health." http://www.who.int/topics/maternal_health/en/ and http://www.who.int/pmnch/about/en/. The WHO has a wealth of information on maternal health, including country guides, descriptions of interventions, and lessons from the field.
- WHO, UNICEF, UNFPA, World Bank. "Trends in Maternal Mortality: 1990-2010." World Health Organization. 2012. A data driven look at changes in maternal mortality from 1990 to 2010. It includes extensive country statistics, analysis, and a
- "Countdown to 2015 MNCH: Building a Future for Women and Children: The 2012 report." http://www.countdown2015mnch.org/ reports-and-articles/2012-report. This report highlights country progress in achieving millennium development goals 4 and 5.

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