

## **Two Timelines of Milestones in Maternal Health 1985-2013:**

- I. Initiatives, Policies and Social Science Research**
- II. Commodities, Technologies and Clinical Research**

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### **I. Initiatives, Policies and Social Science Research**

- 1985. First maternal mortality estimates are published by WHO.
- 1985. *Maternal health – a neglected tragedy: Where is the M in MCH (Maternal and Child Health)?* is published in The Lancet.
- 1987. The Safe Motherhood Initiative and Family Care International are founded.
- 1988. *Why Did Mrs. X Die?* Mahmoud Fathalla circulates his video at WHO and it is published in *People* magazine.
- 1994. *Too Far To Walk: Maternal Mortality in Context*, describing the three delays, is published by Thaddeus, S. Maine, D. in *Social Science Medicine*.
- 1994: International Conference on Population and Development, Cairo, and The Programme of Action.
- 1995: Fourth International Conference on Women, Beijing and The Platform for Action.
- 1999: Averting Maternal Death and Disability program is established at Columbia University to improve emergency obstetric care services.
- 1999: The White Ribbon Alliance is established to reinvigorate the safe motherhood movement, continuing today to lead maternal health advocates and activists in many high burden settings.
- 2000. The Millennium Development Goals are launched, calling for a 75% reduction in maternal mortality rates by 2015.
- 2000. 13th International AIDS Conference, Durban, highlighting the dawn of the women's HIV epidemic and a new focus on the prevention of mother-to-child transmission.

- 2000. Saving Lives: Skilled Attendance at Childbirth Conference, Tunis. The conference issued an evidence-based call for a policy shifts from mass training of traditional birth attendance to improving access to quality institutional care.
- 2002. The Initiative for Maternal Mortality Programme Assessment (IMMPACT) is established at the University of Aberdeen: “what can’t be measured, can’t be monitored.”
- 2003. The Grand Challenges in Global Health is launched with a consortium of donors led by the Gates Foundation, to stimulate breakthrough research in 16 priority areas including the challenge to Discover New Ways to Achieve Healthy Birth, Growth and Development.
- 2004. USAID and EngenderHealth launch Fistula Care: the first multi-million, multi-year grant to address fistula, the major and most common obstructed labor problem, through improved and expanded service delivery.
- 2004, 09, 12. The Guttmacher Institute’s *Adding It Up* series in collaboration with UNFPA becomes the most consistent and comprehensive cost-benefit analysis of investing in women’s sexual, reproductive and maternal health.
- 2004. With MacArthur support, Sue Goldie’s decision science modeling conducted in her post at Harvard, including simulation modeling and cost-effectiveness analyses, is applied to maternal health.
- 2005. The Partnership for Maternal, Newborn and Child Health is established at WHO, to foster the continuum of MNCH care and highlight maternal health within it.
- 2005. The Lancet and WHO launch *Countdown 2015*: a multi-lateral and inter-agency initiative that monitors global and country-by-country progress on the health-related MDGs 4, 5 and 6.
- 2005: As part of the Government of India’s National Rural Health Mission, a large scale conditional cash transfer scheme called Janani Suraksha Yojana is launched to incentivize institutional care and delivery; similar schemes are launched elsewhere.
- 2006: Ann Starrs of Family Care International, publishes *Safe motherhood initiative: 20 years and counting* in the Lancet Online. A challenge to the global MH community to remedy the errors of the defunct Safe Motherhood Initiative, and use the newly formed PMNCH to take bolder action.
- 2006. *WHO systematic review of maternal mortality and morbidity: methodological issues and challenges* is published with ongoing systematic

reviews of incidence, prevalence and interventions, generating a bigger evidence base of what does and does not work; setting the stage for an era of implementation research.

- 2007. The Millennium Development Goals are amended to include target 5b: universal access to health services.
- 2007. Special Lancet Series on Maternal Survival: the first time that a major medical and health journal devotes a special series to maternal health; it was the primary resource for the first Women Deliver conference.
- 2007. 1<sup>st</sup> Women Deliver Conference, London marking the 20<sup>th</sup> anniversary of the Safe Motherhood Initiative; Government of Norway announces \$1 billion pledge over 10 years.
- 2007: ICRW. *Women Deliver for Development*. The first report attempting to define the impact of maternal mortality on economic productivity at various levels.
- 2007-08. Jeremy Shiffman, a political scientist, published his analysis of the political science of health and development issue ascendance, and how maternal health fares in the global competition for attention and funding.
- 2008: USAID launches its flagship initiative, The Maternal Child Health Integrated Program (MCHIP) based at JHPIEGO with projects in 30 priority countries.
- 2008. A WHO Bulletin is published entitled *Using human rights to improve maternal and neonatal health; history, connections, and a proposed practical approach* by Sophia Gruskin et al., clearly establishing that maternal mortality is an urgent public health concern and a human rights violation.
- 2009: The Maternal Health Task Force (MHTF) is launched with Gates and MacArthur funding to bring cohesion and focus to the technical and scientific maternal health community.
- 2010. Launch of UN Secretary General's Every Woman Every Child campaign and its Global Strategy for Women's and Children's Health.
- 2010. First Global Maternal Health Conference, New Delhi; holding donors accountable for their maternal health commitments emerges as a priority among scientists and researchers.
- 2010: Second Women Deliver Conference, Washington D.C. where the Gates Foundation announces \$1.5 billion in new funding.

- 2010. Respectful MH Care: USAID Translating Research into Action (TRAction) Project; identifies seven categories of disrespect and abuse during facility-based childbirth. New research is undertaken to determine incidence and potential interventions.
- 2011. MHTF adds an implementation research component to discover what's working where and how successful interventions can be systemized.
- 2011. Saving Lives at Birth: A Grand Challenge for Development is launched to stimulate innovation and new technologies for maternal and newborn health, with multi-million dollar commitments from USAID, NORAD, the Gates Foundation, CIDA and the World Bank.
- 2011. The Commission on Information and Accountability for Women's and Children's Health, and an independent Expert Review Committee are established at WHO to monitor and evaluate progress on the Global Strategy for Women's and Children's Health.
- 2012. A Family Planning Summit, organized by DFID and the Gates Foundation, launches FP2020, a \$2.6 billion initiative aiming to increase access to contraceptives for 120 million women by 2020.
- 2012. The newly formed UN Commission on Commodities on Lifesaving Commodities for Women and Children prioritizes 3 maternal health commodities, magnesium sulfate, oxytocin and misoprostol.
- 2012. The Journal of Health, Population and Nutrition publishes *Maternal Morbidity and Disability and Their Consequences: Neglected Agenda in Maternal Health*. As mortality rates decline, momentum begins on addressing morbidities.
- 2013. Blanc, A., Winfrey, W., Ross J., *New Findings for Maternal Mortality Age Patterns: Aggregated Results for 38 Countries*; a decomposition analysis of MMRs published in PLOS One showing that maternal mortality risks are highest among women over 30, not adolescents as has long been conventional wisdom.
- 2013. The Reproductive Health Supplies Coalition accelerates efforts to include maternal health commodities in its advocacy and facilitation processes, with MacArthur Foundation support.
- 2013. Second Global Maternal Health Conference, Arusha where *A manifesto for maternal health post-2015* is generated.
- 2013. Third Women Deliver Conference, Kuala Lumpur; the Islamic Malaysian government announces bold commitments to family planning and reproductive health.

- 2013. The Lancet Global Health publishes an article co-authored by leaders at WHO and USAID calling for a new target to further reduce preventable maternal mortality: a global MMR of 50 per 100,000 live births.
- 2013. Lancet Commission releases *Global health 2035: a world converging within a generation* providing strong economic evidence for investing in global public health challenges, with specific mentions of possibly ending preventable maternal, newborn and child mortality within a generation.

## **II. Commodities, Technologies and Clinical Research**

- 1988: First approvals of mifepristone for abortion in China and France
- 1995: Results of the Collaborative Eclampsia Trial (undertaken in 9 developing countries) published in *The Lancet* demonstrate that magnesium sulfate is more effective than diazepam in preventing progression of pre-eclampsia to eclampsia.
- 2002 (Draft) and 2006 (Final): UNFPA/WHO *Essential Drugs and Other Commodities for Reproductive Health Services List* developed to encourage inclusion of essential reproductive and maternal health commodities in national essential medicines lists.
- 2002: *The Lancet* publishes *Do women with pre-eclampsia, and their babies, benefit from magnesium sulphate? The Magpie Trial: a randomised placebo-controlled trial showing findings from a large-scale trial that determined that magnesium sulphate halves the risk of eclampsia, and probably reduces the risk of maternal death, without any substantive harmful effects.*
- 2003. Studies begin on Lifewrap, a non-pneumatic anti-shock garment, for the treatment of post-partum hemorrhage.
- 2003: WHO *Safe abortion: technical and policy guidance for health systems* (first edition) recommends manual vacuum aspiration for surgical abortion and mifepristone/misoprostol regimen as preferred option for medical abortion; and includes recommendations for misoprostol only, as well as treatments for incomplete abortions.
- 2003: WHO model Essential Medicines List includes magnesium sulfate for pre-eclampsia/eclampsia for first time (injection, 500mg/ml in 2-ml ampoule; 500mg/ml in 10-ml ampule).
- 2003: The International Confederation of Midwives and the International Federation of Gynecology and Obstetrics issue a joint statement entitled “Management of Third Stage of Labor to Prevent Postpartum Hemorrhage” which recommends training of all skilled birth attendants on administration of Active Management of the Third Stage of Labor (AMTSL) – including uterotonics, uterine massage and controlled cord traction. The statement notes that oxytocin is the preferred uterotonic, including conditions in which ergometrine or misoprostol might be used instead.
- 2004: International Journal of Gynecology & Obstetrics publishes a literature review entitled “*Puerperal sepsis and maternal mortality: what role can new technologies play?*” which concludes that infection-control protocols and evidence-based procedures, including prophylactic antibiotics for cesarean section or preterm rupture of membranes, and updated antibiotic regimens should be

widely adopted, and that devices such as hand rubs, needle-disposal systems, and rapid microbiological diagnostic tests can improve compliance and efficiency.

- 2005: WHO model Essential Medicines List includes mifepristone/misoprostol (200 mg/200mg) for incomplete abortion/miscarriage or for medical abortion (where permitted by law and culturally acceptable.)
- 2006. Article in The Lancet shows for the first time that oral misoprostol works to prevent post-partum hemorrhage: *Oral misoprostol in preventing postpartum haemorrhage in resource-poor communities: a randomised controlled trial.*
- 2006: PATH, the World Health Organization, and the United Nations Population Fund jointly publish *Essential Medicines for Reproductive Health: Guiding Principles for Their Inclusion on National Medicines Lists* which includes recommendations for inclusion of mifepristone/misoprostol for safe abortion; uterotonics for postpartum hemorrhage, and magnesium sulfate for pre-eclampsia/eclampsia on national essential medicines list.
- 2007: *WHO Recommendations of Prevention and Treatment of Postpartum Hemorrhage* include recommendation for AMTSL by a skilled birth attendant to be offered at every birth, including administration of a uterotonic (with strong preference for oxytocin where feasible) along with controlled cord traction, delayed clamping and uterine massage.
- 2007. Oxford and EngenderHealth issue a Call to Action on expanding the use of magnesium sulfate for eclampsia/pre-eclampsia. An e-learning module to train providers is commissioned with funding from the MacArthur Foundation.
- 2008: Argentina grants regulatory approval to Instituto Biologico Argentino (BIOL), to make oxytocin in the Uniject™ device commercially available in Argentina.
- 2009: WHO model Essential Medicines List moves misoprostol for incomplete abortion/miscarriage to core EML (remains on extended EML for medication abortion - when permitted under national law and culturally acceptable)
- 2010: Application change in wording of WHO model Essential Medicines List to revise specification (injection, 10 IU in 1-ml ampoule) to remove “ampule” to encourage 10 IU/1ml preloaded/auto-disposable dose (i.e. Uniject) inclusion on national EMLs
- 2010: Launch of, [MDG-5 Mesh Network](#), a public-private partnership to develop heat-stable oxytocin.
- 2011: “A review of health system infection control measures in developing countries: what can be learned to reduce maternal mortality.” **published in**

Globalization and Health reviews health system infection control measures, highlighting gaps in evidence on maternal infection control measures during labor and delivery in low resource setting.

- 2011: Misoprostol is included in WHO model Essential Medicines List for prevention of PPH for the first time (200 microgram tablets; recommended dosage is 600 micrograms), specifying that it is only appropriate in settings where oxytocin is not available.
- 2012: PATH publishes a *Landscape Analysis of Maternal and Perinatal Infections* covering epidemiological evidence on priority pathogens and their association with other important infectious causes of morbidity and mortality (e.g., HIV, TB, malaria, hepatitis); academic, commercial, and clinical evidence on innovative diagnostic, management, and treatment tools; and country-based contextual evidence on the needs, feasibility, and acceptability of existing and novel maternal, perinatal, and neonatal infection management approaches.
- 2012: Launch of [\*Fighting Maternal Infections\*](#) website to provide a hub for current health systems research in puerperal sepsis and other maternal infections with the goal of building a global community of practice on puerperal sepsis and other maternal infections.
- 2012: WHO *Recommendations on Prevention and Treatment of Postpartum Hemorrhage* include a total of 32 recommendations on prevention and treatment of postpartum hemorrhage, including revision of AMTSL recommendation to emphasize administration of a uterotonic; make controlled cord traction optional, and advises against uterine massage for women who have had prophylactic oxytocin. Guidelines are proposed on use of uterotonics, non-pneumatic shock garments, and prophylactic administration of antibiotics.
- 2012: WHO *Safe Abortion: Technical Guidance and Policy Recommendations* (second edition) include mifepristone/misoprostol as first choice regimen for medication abortion and manual vacuum aspiration as first choice for surgical abortion.
- 2012: UN Commission on Life Saving Commodities for Women and Children publishes recommendations for increasing access and appropriate use of commodities including magnesium sulfate misoprostol, and oxytocin, as well as opportunities for innovations in product delivery.
- 2012-2014 PATH, Cambridge Design Partnership (United Kingdom) and Tata Elxsi (India) partnership to develop and test the uterine balloon tamponade to effectively treat and manage severe PPH.
- 2013: BMC Pregnancy and Childbirth publishes “*An integrative review of the side effects related to the use of magnesium sulfate for pre-eclampsia and eclampsia*”



*management*” presenting low incidence of severe side effects as documented in a range of studies on various magnesium sulfate regimens for pre-eclampsia/eclampsia.