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an initiative of Seattle Children's

GLOBAL ALLIANCE TO PREVENT
PREMATURITY AND STILLBIRTH

Report Brief

Global report on
preterm birth & stillbirth:
the foundation for
innovative solutions
and improved outcomes

Edited by:
Craig E Rubens
Cesar G Victora
Michael G Gravett
Toni M Nunes

Guest editor:
Gordon CS Smith



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Why Focus On Preterm Birth And Stillbirth Now?

Globally, more newborns die each year from prematurity than from any other cause. Additionally, one million stillbirths occur each year during childbirth that could be saved with existing interventions. While child health is improving worldwide, maternal and newborn health has remained virtually unchanged for decades.

Preterm birth and stillbirth are inextricably linked with maternal, newborn and child health. Interventions aimed at reducing preterm births and stillbirths will accelerate efforts toward achieving the United Nation's Millennium Development Goals to improve maternal health and reduce child mortality.

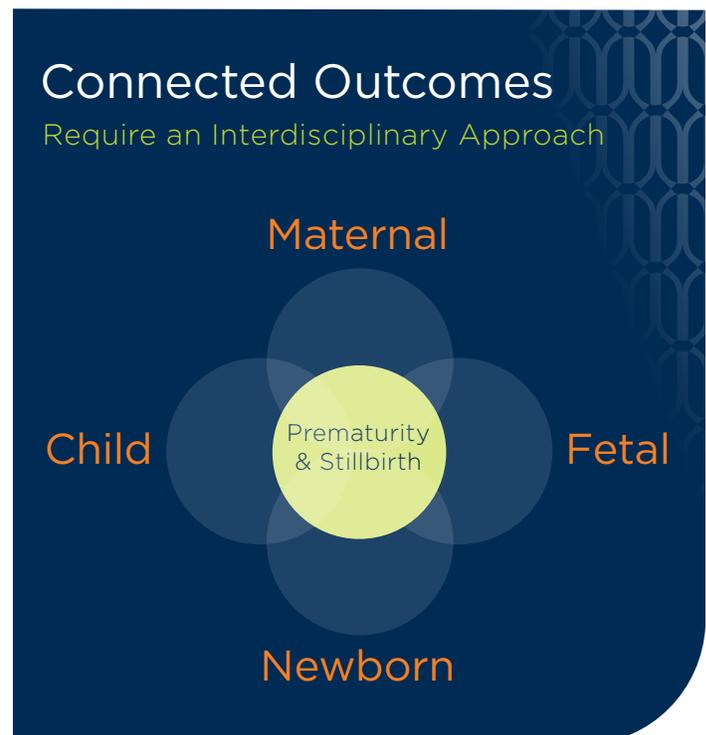
Global Estimate: 13 Million Preterm Babies are Born Each Year

More than one million babies born before 37 completed weeks of pregnancy die annually. Many preterm newborns also face other serious short- and long-term health risks. Despite great medical advancements in caring for preterm newborns in high-income countries, little progress has been made to care for them in other settings. Few low- and middle-income countries have reliable national data on preterm birth, and this lack of adequate data hampers visibility, effective policies, and research.

Global costs remain unknown, but costs related to prematurity in the United States alone are \$26 billion annually (based on 2005 data).

Global Estimates: 3.2 Million Stillbirths Occur Each Year

A stillbirth is a fetal death occurring late in pregnancy. For international comparisons, stillbirths include late fetal deaths weighing more than 1000g or occurring after 28 weeks gestation. The majority occur in sub-Saharan Africa and South Asia. While stillbirths are strongly linked to maternal health, most are neither recorded nor discussed in health policies—making them effectively invisible.



What can be done to improve country-level data?

- Increase the use of standard definitions so we can compare findings across studies
- Improve data collection coverage in regions with suspected highest burdens
- Leverage data to influence health policy decision making at country-levels

What We Can Do Now

Solutions Now Exist to Save Millions by 2015



I think the biggest thing that's going to drive commitment and focus is to have...solid data on the magnitude of the problem... supported by doable interventions that are currently available...and showing the potential impact of those simple interventions.

Mark Young, M.D., MHS
United Nations Children's Fund (UNICEF)

Global Action Agenda on Preterm Birth & Stillbirth

Preterm birth and stillbirth are complex global health problems requiring an interdisciplinary approach and an international commitment. The Global Action Agenda (GAA) is a comprehensive set of recommendations that include short-, intermediate-, and long-term milestones, and success metrics. The primary goal of this GAA is to forge a collaborative effort toward achieving common goals to prevent preterm birth and stillbirth, and to improve related maternal, newborn, and child health outcomes.

Summary of key initiatives:

- Advance discovery of the magnitude, causes and innovative solutions
- Promote development and delivery of low-cost, proven interventions
- Improve advocacy efforts to increase awareness that preterm birth and stillbirth are leading contributors to the global maternal and newborn health burden
- Increase resources for research and implementation
- Consider ethical and social justice implications throughout all efforts

Who Created It?

The Global Action Agenda was developed by more than 200 stakeholders who attended the 2009 International Conference on Prematurity and Stillbirth. GAPPS co-convened this four-day conference with the Bill & Melinda Gates Foundation, March of Dimes, PATH, Save the Children, UNICEF and the World Health Organization. Participants included leading international researchers, policymakers, health care practitioners and philanthropists.

Visit www.gapps.org to see the full list of milestones in the GAA, find out about recent progress, and learn how you can make a difference.

We urgently need more action, research, champions, and cost-effective innovations.

The full magnitude and many causes of preterm birth and stillbirth remain unknown or untold.



Discovery Science: Building on What We Know

While we do know a little about the causes of preterm birth, much less is known about stillbirth. Now we need commitment and resources to scale-up proven and appropriate interventions worldwide.

What do we know about the causes?

Causes of preterm birth and stillbirth depend on gestational age, genetics, and environmental factors. The table below describes known causes of preterm birth.

Many stillbirths have similar causes. About two-thirds occur late in pregnancy, and a third during childbirth. Intrapartum asphyxia, or a lack of oxygen during childbirth, is a leading cause of stillbirth in low- and middle-income countries.

What do we need to know before we can find more cost-effective solutions?

Most research only addresses the onset of labor, which accounts for <0.5% of pregnancy. The biological process

of pregnancy and childbirth is poorly understood. It begins with implantation and ends with the return of the uterus to its pre-pregnancy state. We need more research to understand these complex processes and identify early and cost-effective ways to prevent preterm birth and stillbirth.

What do we need to do?

More resources must be directed toward accelerating our understanding of these complex processes and identifying more cost-effective solutions. The tools to do this now exist but are under-utilized. As has been done for cancer, we need biobanks that collect maternal data linked to biological specimens. These valuable resources will help close the research gaps and advance the discovery of diagnostics, prevention and treatment.

Commonly recognized causes of preterm birth

Causes or Pathway

Typical Gestational Age

Intrauterine infection
Genital infection
Systemic infection

Early preterm birth (24-32 weeks)

Excessive bleeding
Early placental separation
Autoimmune syndromes

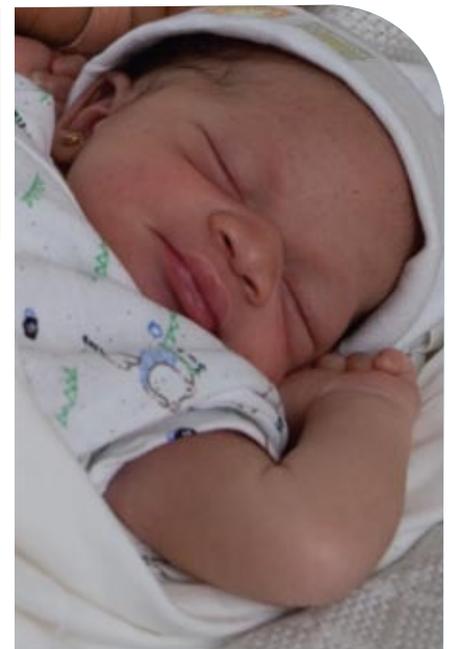
Early or late preterm birth

Stress

Late preterm birth (32-36 weeks)

Multiple fetuses (such as twins)
Excess amniotic fluid

Late preterm birth



Existing Solutions that are Proven Effective

Twenty-one evidence-based interventions are strongly recommended for low-resource settings.* These and others may also be used in high-income countries. Additional interventions require more research to improve the quality of evidence supporting their use for preterm birth, stillbirth, or other maternal, newborn and child outcomes.



These are proven to work:

11 improve survival of preterm newborns

- Prophylactic steroids in preterm labor
- Antibiotics for preterm labor with premature rupture of membranes
- Vitamin K supplementation at delivery
- Case management of neonatal sepsis and pneumonia
- Delayed cord clamping
- Room air (vs. 100% oxygen) for resuscitation
- Hospital-based kangaroo mother care
- Early breastfeeding
- Thermal care
- Surfactant therapy for respiratory distress syndrome
- Application of continued distending pressure to the lungs for respiratory distress syndrome

8 prevent stillbirths

- Balanced protein energy supplementation
- Screening and treatment of syphilis
- Intermittent presumptive treatment for malaria during pregnancy
- Insecticide-treated mosquito nets
- Birth preparedness
- Emergency obstetric care
- Cesarean section for breech presentation
- Elective induction for post-term delivery

2 prevent preterm births

- Smoking cessation
- Progesterone

More research is imperative to identify preventive measures.



Delivery and Scale-Up of Proven Solutions

We are evaluating what works. Now we need commitment and resources to scale up cost-effective interventions worldwide. We must also stop using those that don't work.

What are the challenges?

The biggest challenge to scaling up is the lack of political will, resulting in large part from poor visibility. Lack of awareness makes it impossible to secure support from policymakers and other key stakeholders for global research efforts, and for the development and rapid deployment of proven, effective interventions.

Other challenges include sociocultural barriers, lack of resources and trained healthcare providers, and poorly functioning healthcare systems. Underlying problems of weak governance and accountability, political instability, and challenges in the physical environment also hinder delivery of healthcare services.

What are the strategies?

Preterm birth and stillbirth interventions must be considered as part of a broader maternal, newborn and child health strategy. Strategies include strengthening health systems by identifying appropriate opportunities for providing needed services across a variety of settings: households, communities, and facilities. Mass media campaigns and other marketing approaches may also be used to raise awareness and increase the use of interventions. Another important need is to discontinue ineffective or harmful interventions.



Advocacy

Preventing preterm births and stillbirths is difficult because causes are poorly understood and awareness is low. There are also few easy solutions, making it difficult for policymakers and other leaders to commit resources. Moving forward, we must raise awareness of the magnitude of this problem and show how prevention will lead to overall improvements in maternal, newborn, and child health (MNCH).

What are the key challenges?

- Lack of data (e.g., make every birth count)
- Lack of awareness and understanding for policymakers and others
- Lack of low-cost, effective and scalable interventions

What can be done to improve visibility, fuel investments, and strengthen commitments?

- Link preterm birth and stillbirth to the Millennium Development Goals
- Include preterm birth and stillbirth in the broader global health discussions
- Promote a united voice among MNCH advocates
- Include parents in the MNCH discussions to personalize these tragedies
- Engage champions

Milestones set in the Global Action Agenda help fill the MDG gaps between maternal and child health.

Why do we need more champions?

“Dead babies don't cry.”

Dr. Mahmoud Fathalla
Assiut University, Egypt

2009 Recipient of United Nations Population Award for Outstanding Leadership in Global Women's Health



Ethical Considerations

Despite the substantial global burden of preterm and stillbirth, little attention has been given to the ethical considerations related to research and interventions. For example, ethical dilemmas surrounding reproductive decisions and the care of preterm newborns impact the successful delivery of interventions, such as newborn resuscitation. Yet, little is known about the moral choices facing women, parents, providers and researchers in low-resource settings and across cultures.

Critical Questions

- Improving global visibility of stillbirths: To what degree do stigma, women's reproductive choices, or cultural beliefs affect accurate reporting and measurement?
- Promising discovery science research: Whose responsibility is it to ensure this meets the immediate needs of those now shouldering the burden?
- Biorepositories: How do we ensure that women and families contributing to these are treated ethically?
- Disability and extreme prematurity: How do these outcomes affect decisions to choose interventions aimed at improving newborn survival?
- Reproductive technologies: How do these contribute to the rate of preterm birth, and what is the responsibility of parents and providers to consider the cost and health problems associated with these choices?
- Newborn survival: How can we better understand and address women's health disparities as causes of preterm birth and stillbirth?
- Immediate- versus long-term outcomes: How do we balance the focus on caring for preterm newborns rather than preventing preterm births?
- Designing neonatal intervention trials in developing countries: How can we avoid moral "double-standards" in the choice of interventions while recognizing the real limits in resource-poor communities?





Contact us to find out how you can make a difference.

GAPPS Headquarters
1100 Olive Way, Suite 1000
Seattle, WA 98101

206.884.2777
gapps@seattlechildrens.org

Where Can I Access The Free, Full Report?

The full report has been published by BioMed Central and can be found on their website with open access.

<http://www.biomedcentral.com/1471-2393/10?issue=S1>

Outline Of The Full Global Report On Preterm Birth & Stillbirth

- Article 1: Definitions, description of the burden and opportunities to improve data
- Article 2: Discovery science
- Article 3: Evidence for effectiveness of interventions
- Article 4: Delivery of interventions
- Article 5: Advocacy barriers and opportunities
- Article 6: Ethical considerations
- Article 7: Mobilizing resources to accelerate innovative solutions
(Global Action Agenda)

The GAPPS Review Group

Co-Principal Investigators

Craig E Rubens, MD, PhD

GAPPS, an initiative of Seattle Children's
Department of Pediatrics
University of Washington School of Medicine

Thomas N Hansen, MD

Seattle Children's
Department of Pediatrics
University of Washington School of Medicine

Other Authors and Members of the GAPPS Review Group

Fernando C Barros, MD, PhD

Universidade Católica de Pelotas

Maneesh Batra, MD, MPH

Division of Neonatology
University of Washington School of Medicine

Zulfiqar Ahmed Bhutta, MBBS, FRCP, FRCPC, FCPS, PhD

Division of Women & Child Health
Aga Khan University

Anne-Véronique Fajon

GMMB

Michael G Gravett, MD

Department of Obstetrics and Gynecology
University of Washington School of Medicine
GAPPS, an initiative of Seattle Children's

Maureen Kelley, PhD

Seattle Children's
Treuman Katz Center for Pediatric Bioethics
University of Washington School of Medicine

Joy Lawn, BMedSci, MB BS, MRCP (Paeds), MPH, PhD

Saving Newborn Lives/Save the Children USA
Cape Town, South Africa

Toni M Nunes, MA, MPH

GAPPS, an initiative of Seattle Children's

Megan Sather

GMMB

Cynthia Stanton, PhD, MPH

Department of Population, Family and Reproductive Health
The Johns Hopkins Bloomberg School of Public Health

Cesar G Victora, MD, PhD

Universidade Federal de Pelotas

Rachel Zaentz

GMMB

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Scientific Advisory Council

Robert E Black, MD, PhD

The Johns Hopkins Bloomberg School of Public Health

Gary L Darmstadt, MD

Bill & Melinda Gates Foundation

Christopher Elias, MD, MPH

PATH

Mahmoud F Fathalla, MD

Assiut University, Egypt

Robert L Goldenberg, MD

Drexel College of Medicine

King K Holmes, MD, PhD

University of Washington, Center for AIDS and STD

Alan H Jobe, MD, PhD

Cincinnati Children's Hospital Medical Center

Michael Katz, MD

March of Dimes

Mark A Klebanoff, MD, MPH

Eunice Kennedy Shriver National Institute of Child Health and Human Development

Michael S Kramer, MD

McGill University

Eve M Lackritz, MD

Centers for Disease Control and Prevention

Vinod K Paul, MD, PhD, FAMS, FIAP, FNNF

All India Institute of Medical Sciences

Ellen Piwoz, ScD, MHS

Bill & Melinda Gates Foundation

Ruyan Pang, MD, MPH

Peking University

Peter Salama, MD, MPH

UNICEF

Severin von Xylander, MD

World Health Organization

Jacqueline Sherris, PhD

PATH

F. Bruder Stapleton, MD

Seattle Children's
Department of Pediatrics
University of Washington School of Medicine

Renee Van de Weerd, MD, MS

UNICEF

José Villar, MD, MSc, MPH, FRCOG

University of Oxford, UK

Daniel Wikler, PhD

Harvard School of Public Health



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Please visit our Web site to learn more and find out how you can make a difference.

www.gapps.org



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The full report has been published by BioMed Central and can be found on their website with open access.

<http://www.biomedcentral.com/1471-2393/10?issue=S1>

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