



**Global Network**  
*for Women's & Children's Health Research*

# **The Global Network for Women's and Children's Health Research**

*Improving the health of mothers  
and children through research  
partnerships*

## STRENGTHENING HEALTH KNOWLEDGE AND CAPACITY

Since 2001, through the support of the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), in collaboration with the Bill & Melinda Gates Foundation (BMGF) - the Global Network for Women's and Children's Health Research (Global Network) has worked to improve the health and survival of pregnant women, fetuses, and infants in low and middle income countries through research partnerships. Scientists from low and middle income countries partner with their peers from the United States to conduct research that addresses major causes of maternal and newborn mortality and morbidities. These teams have created in-country research infrastructure with the capacity to quickly launch clinical trials and studies. This diverse and nimble research network is built to answer critical maternal and newborn health questions.



## OUR SITES ARE

- **Led** by highly experienced, multidisciplinary teams of experts from U.S. universities and their peers in countries of study;
- **Funded** by the NICHD through grants, while the BMGF and other organizations have supported specific trials;
- **Supported** by RTI International, which acts as the Global Network's Data Coordinating Center and provides overall technical assistance and scientific leadership; and,
- **Guided** by a Steering Committee, which includes representatives from each site and from NICHD and RTI, with input from an External Advisory group.

## OUR RESEARCH



**Focus on high-need areas**, such as obstetric emergencies, the enhancement of birthing practices, and survival for preterm babies.



**Build health research capacity and infrastructure** in low and middle income countries



**Test cost-effective and sustainable interventions**



**Have real-world impact**, providing guidance for national policy and the practice of evidence-based medicine





## FINDINGS & IMPACT

Knowledge gained from the Global Network's research has provided insight to prevent maternal and neonatal deaths in low and middle income countries. Our findings influence health policies and programs, as well as the global research agenda. Below are examples from our research:



### FINDING

A-PLUS (2019-2023): A 7-country trial found that a single oral dose of azithromycin resulted in a significantly lower risk of maternal sepsis or death than placebo among women planning a vaginal delivery. Maternal infections were also significantly reduced.

Tita ATN, et al. Azithromycin to Prevent Sepsis or Death in Women Planning a Vaginal Birth. *The New Engl J Med*. 2023 Mar 30; 388(13):1161-1170.



### IMPACT

The A-PLUS trial results are informing global public health policy and guidelines to reduce maternal infection and improve pregnancy outcomes.



### FINDING

ASPIRIN (2016-2019): A 6-country trial found that first-time mothers who take a daily low dose of aspirin during pregnancy may be at lower risk for preterm birth. Hoffman MK, et al. *Lancet*. 2020 Jan 25;395(10220):285-293.



### IMPACT

This study provides evidence to support the widescale use of aspirin among women in low and middle income countries during early pregnancy — a low cost intervention that could save many lives given preterm birth is the most common cause of infant death.



### FINDING

Women First (2014-2019): A 4-country trial found that maternal nutrition supplementation before conception or in the first trimester may improve fetal growth. Hambidge KM, et al. *Am J Clin Nutr*. 2019 Feb 1;109(2):457-469.



### IMPACT

These results strongly support strategies that improve nutrition among women beginning before conception or very early in pregnancy.



### FINDING

First Look (2014-2016): A 5-country trial found that the routine use of ultrasound during antenatal care did not increase women's use of care nor did it improve adverse outcomes for mothers, fetuses, or newborns. Goldenberg RL et al. *BJOG*. 2018 Nov; 125(12): 1591-1599.



### IMPACT

These results confirm that simply introducing ultrasound is not enough to improve the health of mothers and babies without overall improvement in the quality of care provided.



### FINDING

ACT (2011-2014): A 6-country trial found that the use of antenatal corticosteroids in preterm infants did not decrease, but slightly increased, neonatal death rates. Althabe F, et al. *Lancet*. 2015;385(9968):629-39.



### IMPACT

Since results were published in *The Lancet*, they have generated extensive interest regarding practice and guidelines for using ACS in low-resource community settings.

## ESTABLISHING A RESEARCH PLATFORM

In 2008, The Global Network established a Maternal Newborn Health Registry (MNHR) across all research sites to support the accurate reporting of pregnancy outcomes and to enable the analysis of trends. All sites enroll pregnant women and collect data through 6 weeks post-delivery.

To date, more than one million pregnant women have been enrolled in the registry. Findings from the registry inform future Global Network studies and data help inform progress on the U.N. Sustainable Development Goals for maternal and newborn health. The MNHR continues to be the only database of pregnancy and pregnancy-related outcomes of its magnitude in low-resource settings.

As the MNHR study infrastructure is well-established yet flexible it is able to quickly address pressing issues. For example, in response to the current COVID-19 pandemic, the MNHR has added data collection to evaluate both the direct and indirect impacts of COVID-19 on maternal, fetal and newborn health.



## PROJECT SPOTLIGHT:




### Prevention of Iron Deficiency Anemia Post-delivery (PRIORITY Trial)

The PRIORITY Trial is an ongoing prospective, two-arm, randomized trial in low-middle income countries expected to complete enrollment in 2024. Women with moderate hemoglobin concentrations immediately post-delivery (6-48hrs) and who deliver at study hospitals or birthing facilities in Global Network sites will be enrolled into the trial. The trial is assessing the impact on maternal anemia in the postpartum period between women receiving IV iron compared to women receiving standard care with oral iron.

### GLOBAL NETWORK 'BY THE NUMBERS'\*

Since 2001:

\*all data as of January 2020

-  Nearly **1 million pregnant women** have been registered in the **maternal and newborn health registry**.
-  More than **50** multi- and single-site **studies completed**
-  More than **300 scientific publications generated**, including The Lancet and New England Journal of Medicine



For more information about the Global Network, please visit <http://gn.rti.org> or e-mail [gn-info@rtiresearch.org](mailto:gn-info@rtiresearch.org)





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*" The Global Network's ongoing Registry, with its now more than a decade of historic data, allows us to better understand the impact of new global outbreaks, such as the COVID-19 pandemic, on antenatal and obstetric care as well as maternal and newborn morbidity and mortality. Ultimately, the Global Network's research provides insights into risk factors and for developing strategies to improve pregnancy outcomes in LMIC."*

*~ Elizabeth McClure, PhD  
Global Network Data Coordinating Center,  
Principal Investigator, RTI International*



RESEARCH PARTNERS



## RESEARCH PARTNERS

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