

innovating to save lives



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Maternal and Early Newborn Sepsis:

An additional consequence of prolonged and obstructed labor

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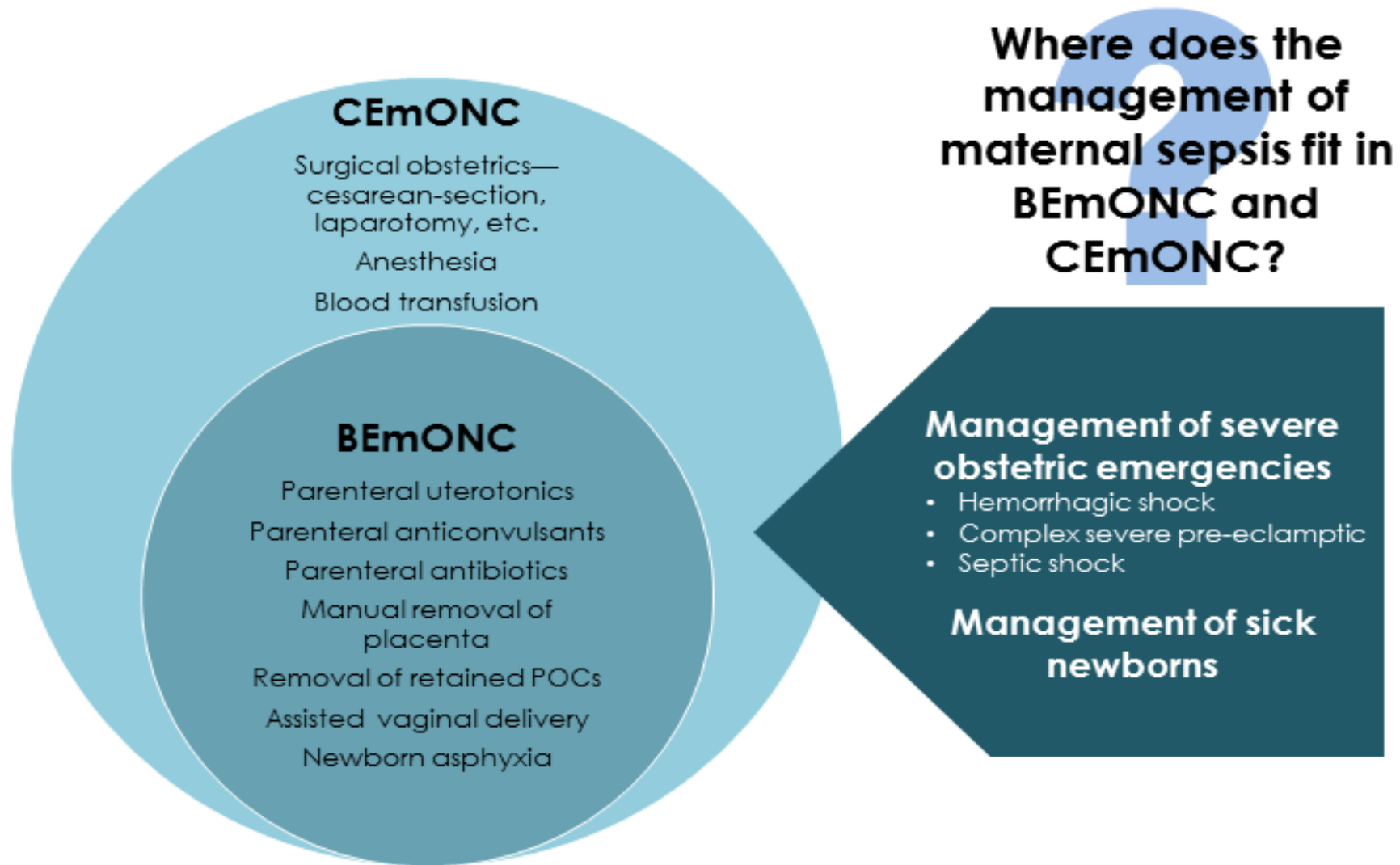


Progress on Causes of Maternal Death: But Infection?

- Facility birth:
 - Poor facility IP
 - Increasing Cesarean rates
 - Increased crowding
 - Early discharge
- Puerperal Infection:
 - No real innovation
 - No new drugs
 - No new protocols
 - Rising rates: Rwanda, Uganda



Basic EmONC, Comprehensive EmONC and ????



Current situation on maternal infection

■ Policy

- National guidelines on Basic Emergency Obstetric Care (BEmOC) have some guidelines for prevention and management of sepsis, but not very specific and inconsistently followed.
- No clear framework for logical programming

■ Practice

- Antibiotic use
 - Overuse and unindicated use of antibiotics (wrong prophylaxis)
 - Incorrect use when antibiotics are indicated (wrong treatment)
- Lack of any effort to understand or address etiology
- Drug quality of Abx is not routinely assessed



Surviving Sepsis Campaign



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The Intensive Connection

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New Recommendations Aim to Redefine Definition and Enhance Diagnosis of Sepsis, Septic Shock

The recommendations are published in the February 2016 issue of JAMA and were recently highlighted for clinicians and media at the SCCM 45th Critical Care Congress in Orlando, Florida.



New Self-Directed Sepsis Performance Improvement Course Is Now Available

Improve your strategies for the recognition and treatment of sepsis with the Self-Directed Sepsis Performance Improvement course.



Watch Educational Tutorials from the Surviving Sepsis Campaign

An informative series, Spreading Quality Just in Time, offers short tutorials on the science and methods behind applying sepsis interventions at the right time in the right way.



SSC Listserv

The Campaign's listserv provides an active forum for professionals to share experiences and ask questions. Join SSC Listserv



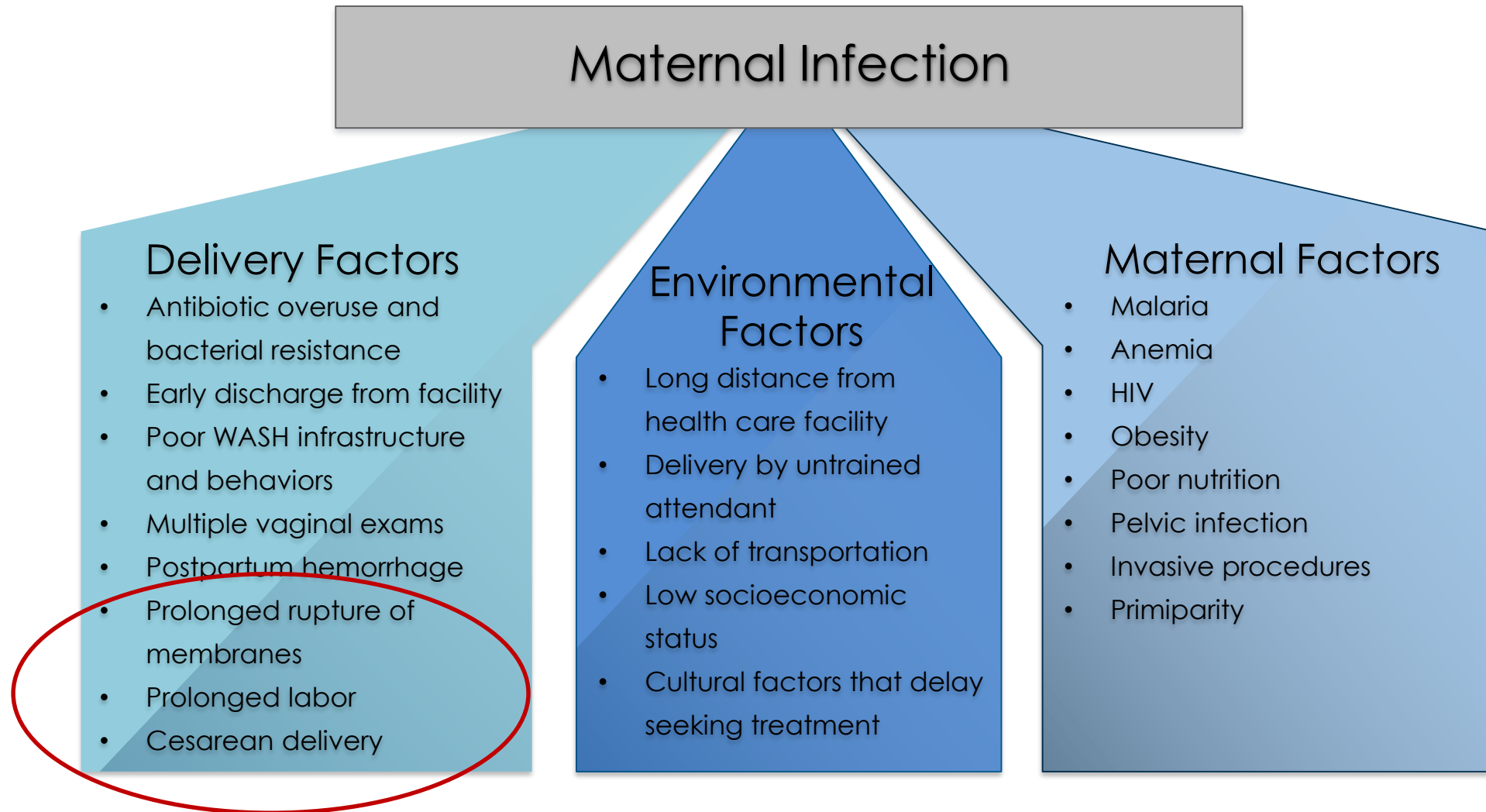
Patients and Families

MyICUCare.org and the THRIVE Initiative offer resources, including information on post-intensive care syndrome.



What causes maternal sepsis?

Factors Influencing Occurrence of Maternal Sepsis



Opportunities for improvement

- Emphasis on quality of care should include critical elements of maternal/newborn sepsis
- Prevention
 - Better labor care
 - Pre-cesarean prophylaxis
 - Abx for premature prelabor rupture of membranes
- Diagnosis
 - Stratification of discharge – prevent delay in dx.
- Treatment
 - Complex maternal regimen; Amp q 6 / Gent q 24 / Clinda (or Metron) q 8 (all intravenous!!)
 - Newborn treatment has been evolving / improving



Maternal / Early Newborn Sepsis

New Definition of Sepsis

Maternal sepsis is a life-threatening condition defined as organ dysfunction resulting from infection during pregnancy, childbirth, post-abortion, or postpartum period.

WHO recommendations
for prevention and
treatment of maternal
peripartum infections

Comment

The Global Maternal and Neonatal Sepsis Initiative: a call for collaboration and action by 2030

Significant progress has been made in reducing maternal and neonatal mortality in the past 15 years, but additional improvements will require a comprehensive approach that targets all causes of maternal and newborn mortality.¹ Further reduction of maternal and newborn deaths is a priority for achieving the Sustainable Development Goals and for implementing the UN Global Strategy for Women's, Children's and Adolescents' Health, and is also critical for two strategic plans—*Every Newborn: An Action Plan to End Preventable Deaths* (ENAP) and the *Strategic Roadmap to End Preventable Maternal Mortality* (EPMM).² As part of this comprehensive approach, it is impossible to neglect the importance of infection as an underlying and contributing cause of maternal and newborn mortality. Deaths due to infection occur mainly through sepsis—a potentially life-threatening condition caused by a dysregulated host response to infection and organ dysfunction.³ Infections cause about 11% of maternal deaths, and are also a significant contributor to many deaths attributed to other conditions.⁴ The risk of early neonatal sepsis increases in the event of maternal infection.⁵ Early neonatal sepsis causes about 8% of all neonatal deaths, but the proportion of late neonatal deaths due to sepsis is four times higher.⁶ Deaths from maternal and neonatal sepsis expose broader health determinants and underlying issues of quality of care including infrastructure constraints, inconsistent use of preventive measures, delayed diagnosis, and poor management of infection and its complications.^{7,8} Considering the importance of effective prevention, identification, and management of maternal and neonatal sepsis in reducing maternal and newborn deaths, WHO and Jhpiego have launched the Global Maternal and Neonatal Sepsis Initiative. This initiative consists of a broad programme of work that will be delivered through a collaborative and innovative approach combining research, innovation, service delivery programming, and advocacy. Working at the global, national, and health-care facility levels, the initiative will identify strategic opportunities to increase and strengthen the response to maternal and newborn sepsis. The panel summarises the Initiative's

vision, goals, priority areas of work, and objectives. The Initiative has received extensive support from the International Federation of Gynecology and Obstetrics, the International Confederation of Midwives, the International Pediatric Association, the Global Sepsis Alliance, and the Surviving Sepsis Campaign. In collaboration with the Society of Critical Care Medicine (SCCM) and the European Society of Intensive Care Medicine (ESICM).



Statement on Maternal Sepsis

Maternal Sepsis

Recognizing the need to foster new thinking and to catalyse greater action to address this important cause of maternal mortality

Panel: The Global Maternal and Neonatal Sepsis Initiative—vision and goals

Vision
The Global Maternal and Neonatal Sepsis Initiative contributes to the Sustainable Development Goals by developing solutions able to reduce deaths related to sepsis.

Goal
Accelerate the reduction of preventable maternal deaths related to sepsis.

Objectives

- Raise awareness about maternal sepsis among health-care providers and the public.
- Assess the burden and management of maternal sepsis at the global level.
- Develop and test effective strategies to prevent, identify, and successfully manage maternal sepsis.

Priority areas of work

- Strengthening health programmes.
- Research, development, and innovation.
- Global advocacy.

Sepsis: a leading cause of maternal deaths

Strategic approaches to reduce maternal mortality in the past 15 years have mainly focused on clinical interventions and health system strengthening (1). The greatest attention has been on postpartum haemorrhage and hypertensive disorders, the two leading direct causes of maternal mortality (2). Further reducing maternal deaths is a priority for achieving the Sustainable Development Goals (3). Implementing the UN Global Strategy for Women's, Children's and Adolescents' Health and critical for the strategies toward Ending Preventable Maternal Mortality (EPMM) (1).

However, the third most common direct cause of maternal mortality, maternal sepsis (2), received less attention, research and programming. Undetected or poorly managed maternal infections can lead to sepsis, death or disability for the mother and increased likelihood of early neonatal infection and other adverse outcomes.

Recognizing the need to foster new thinking and to catalyse greater action to address this important cause of maternal and newborn mortality and morbidity, the World Health Organization (WHO) and Jhpiego have launched the Global Maternal and Neonatal Sepsis Initiative, dedicated to focusing additional effort, engaging stakeholders and accelerating progress in the area of maternal and neonatal infection and sepsis (Box 1). The Initiative has received extensive support from the International Federation of Gynecology and Obstetrics (FIGO), International Confederation of Midwives (ICM), International Pediatric Association (IPA), Global Sepsis Alliance and the Surviving Sepsis Campaign in collaboration with the Society of Critical

Care Medicine (SCCM) and the European Society of Intensive Care Medicine (ESICM).

Defining maternal sepsis

In July 2015, Jhpiego hosted the 'Enhancing the Focus on Maternal Sepsis' meeting, which developed Key Themes and a Framework for Action as a first step in recognizing and addressing the importance of maternal infection. An important outcome of this meeting was the recognition of the need for a clear, evidence-based and actionable definition for maternal sepsis. Existing definitions related to maternal sepsis may be confusing (e.g. maternal infection, puerperal sepsis, postpartum sepsis) and imprecise, potentially leading to misdiagnosis, inadequate treatment or delays in care.

A literature review on maternal sepsis definitions and identification criteria was then conducted (4). The review included all review articles related to maternal sepsis or articles reporting on the development and testing of identification criteria for maternal sepsis, as well as current guidelines, published between 2010 and 2016, with no language or geographical restrictions. Information was extracted from 27 articles, out of 245 citations identified in the systematic review, and 9 guidelines and 3 additional WHO documents. This review found several terms, definitions and sets of criteria being used to describe maternal sepsis. A substantial proportion of studies (11/27) and guidelines (7/9) included definitions that consisted of variations and attempts at adaptation of the First and Second International Consensus Definitions for Sepsis and Septic Shock, which were developed for the general adult population but excluded pregnant women.

Evidence based
interventions

Global Maternal Sepsis Study GLOSS



World Health
Organization



Study design

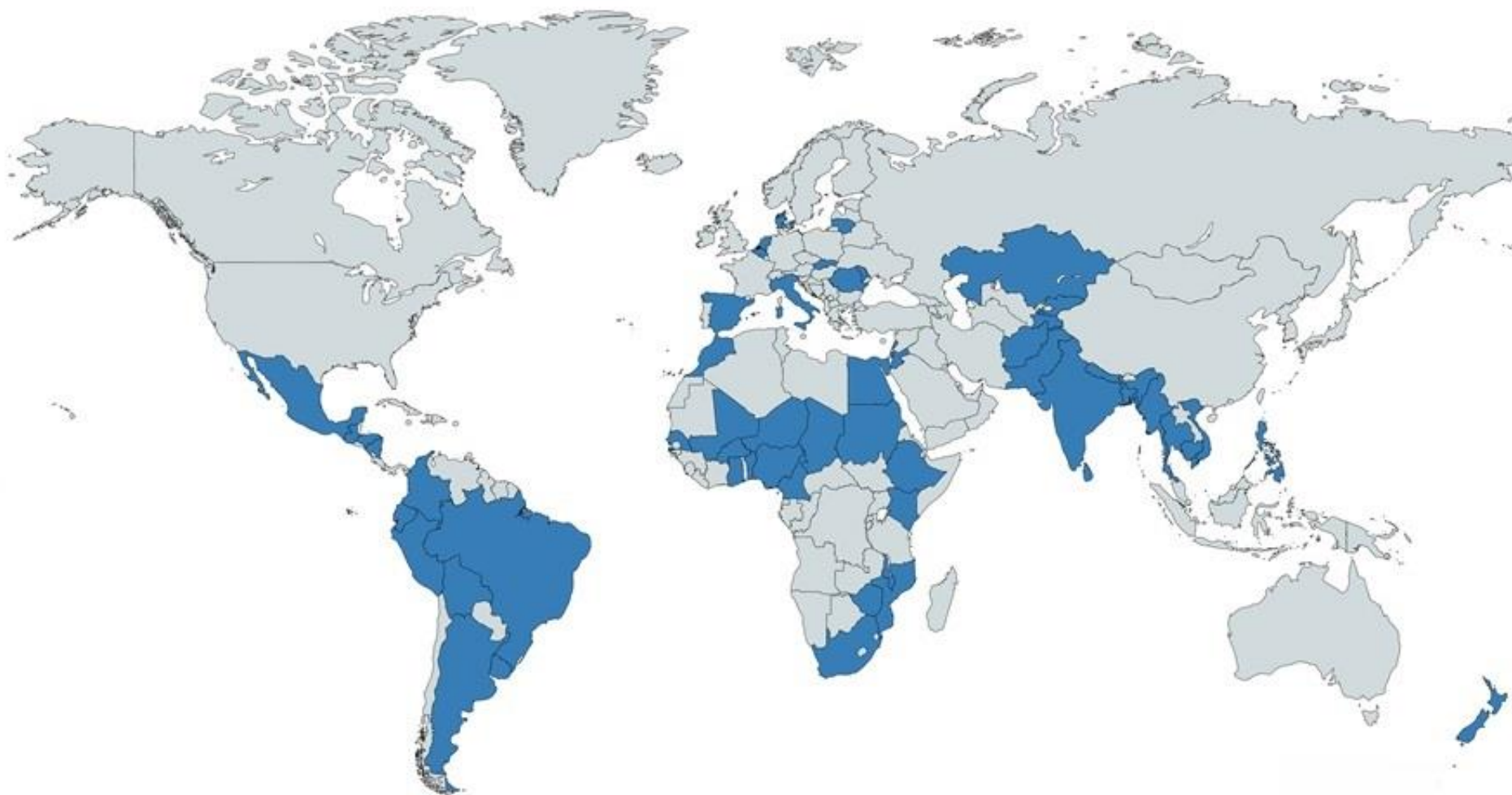
✓ One-week inception cohort

- ✓ all eligible women and their babies admitted or hospitalized in participating facilities between 00:00H, Wednesday, September 13, 2017 to Tuesday, September 19, 2017 at 24:00H

✓ Geographical areas in 50 core developing countries and 8 developed countries

- ✓ Ensure adequate sample size and generalizability of results
- ✓ Different health systems
- ✓ Geographic and seasonal variability
- ✓ Decrease local burden of data collection

Countries participating to the Global Maternal Sepsis Study



WSC Spotlight: Maternal & Neonatal Sepsis

Save the date

September 12th, 2017

***A Free Online Congress by the
World Health Organization and the
Global Sepsis Alliance***



Safer Cesarean Births in Tanzania

- ***Project Goal:*** Reduce cesarean section related infection and maternal morbidity through a unified and cohesive program
 - Create an enabling environment for surgical change (leadership)
 - Implement safe cesarean practices to reduce maternal and newborn surgical morbidity and improve care (clinical)
- ***Donor:*** ELMA Philanthropies and GE Foundation, building on USAID bilateral)
- ***Partners:*** Government of Tanzania, Jhpiego and Safe Surgery 2020
- ***Geographic Focus:*** 40 facilities in 5 regions of the Lake Zone
- ***Duration:*** 2 Years



Thank you