



Lessons learnt from introducing a newborn resuscitation program in LMIC

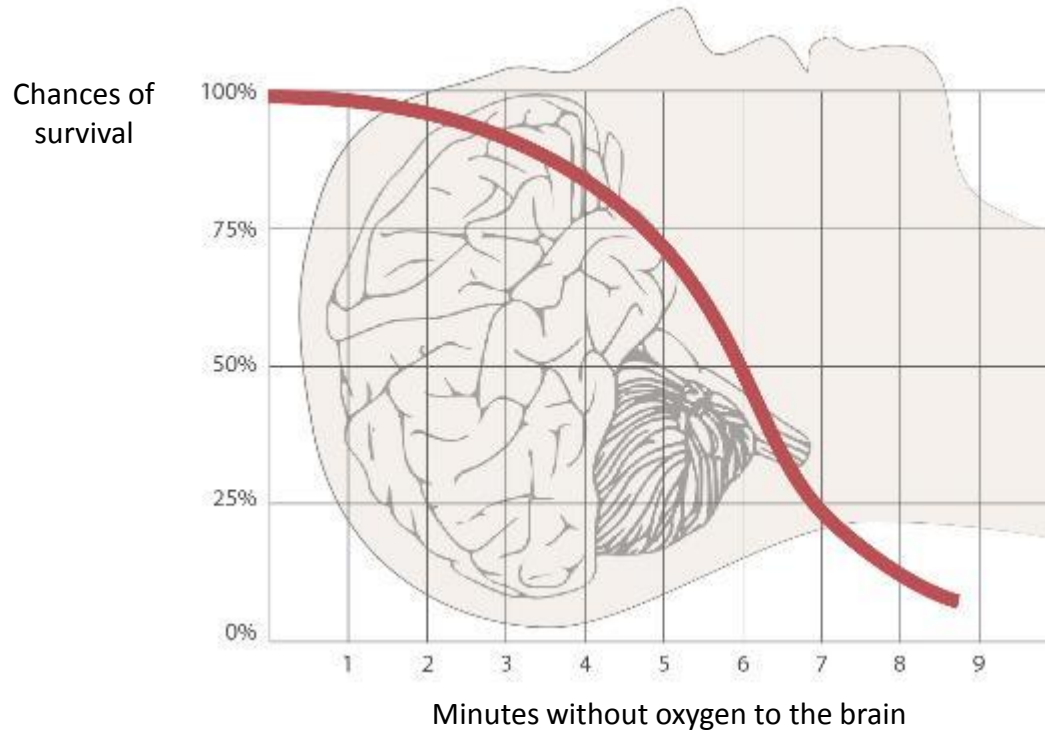
Utstein/GRA Meeting, Singapore Aug 1-2 2017 - Tore Laerdal, Laerdal Foundation

Video presenting Helping Babies Breathe

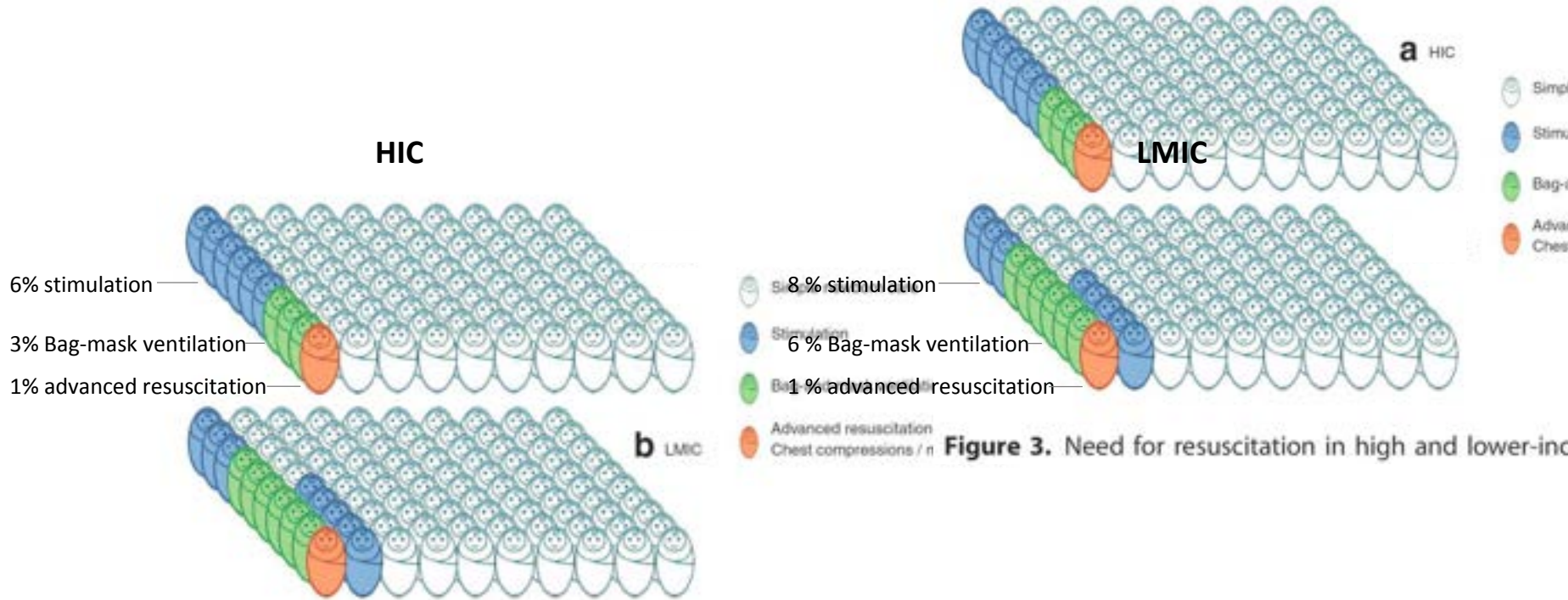


Restoring oxygen supply to the brain

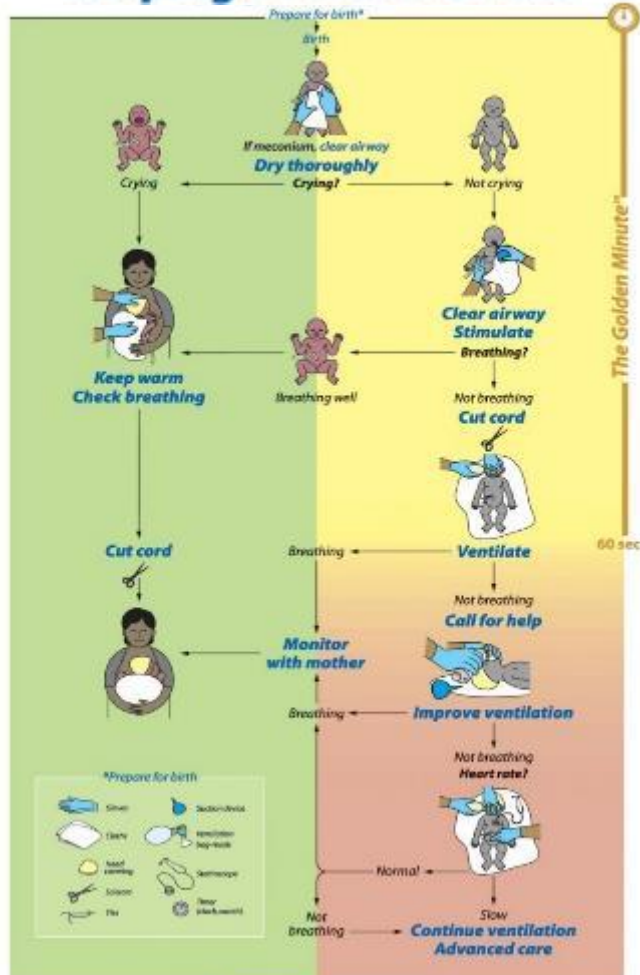
Same need for asphyxiated babies and OHCA victims



What helps asphyxiated babies breathe ?



Helping Babies Breathe





←
potential of
50% reduced early
mortality¹⁾

1) Based on four studies from Tanzania, Nepal, Uganda and Ghana;
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.10178073>

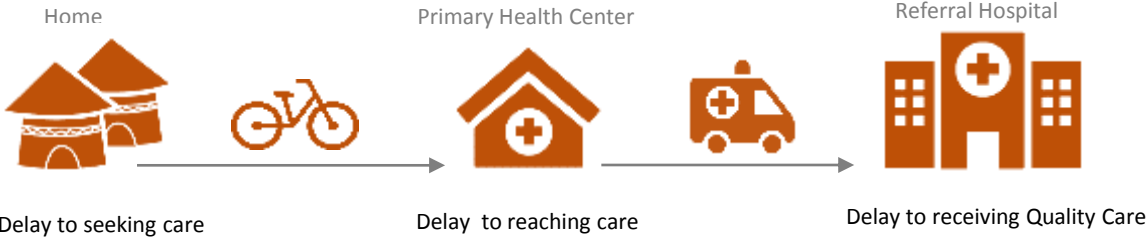
The Chain of Survival

"It takes a system to save a life."

Medium Income
Urban Settings



Low Income
Rural Settings



Local Solutions for Local Problems

Low income Rural Settings

Medium income Urban Settings



Haydom, Tanzania



Malawi



China, Shanghai

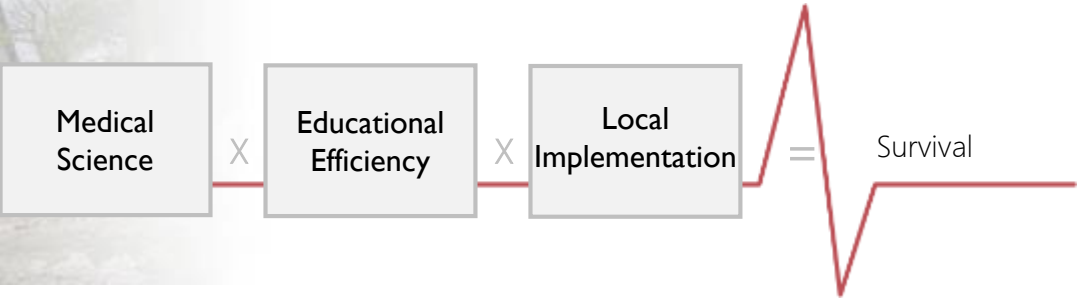


Uganda

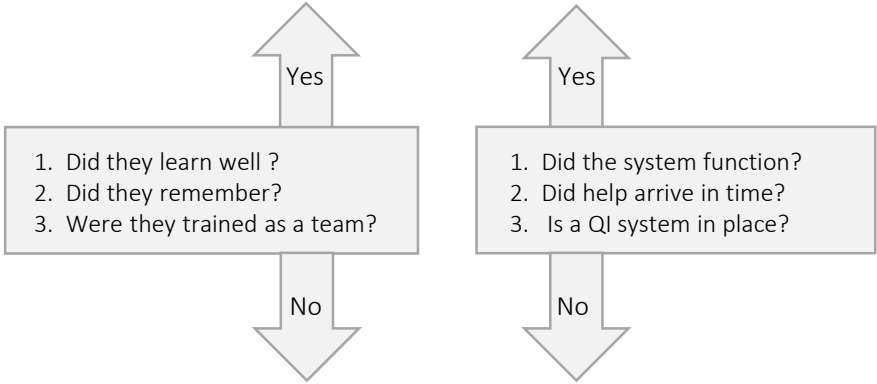


India, EMRI - GVK

The Utstein Formula of Survival



Best practice 80% x 80% x 80% = 50%



Poor practice 80% x 20% x 20% = 3%

Improving Survival from Out-of-Hospital Cardiac Arrest:



A Call to Establish a Global Resuscitation Alliance



Global
Resuscitation
Alliance

Best Practice

10 Steps to Increase Survival from OHCA in HIC

1. Cardiac arrest registry
2. Telephone CPR for more and better CPR
3. High performance EMS CPR
4. Rapid dispatch
5. CPR performance data
6. First responder AED programs
7. Smart technologies to expand CPR and PAD
8. CPR/AED training in schools and the community
9. Accountability
10. Work towards a culture of excellence

<https://foundation915.files.wordpress.com/2016/07/a-call-to-establish-a-global-resuscitation-alliance-2016.pdf>



Best Practice

10 steps for Helping Babies Breathe in LMIC

1. Secure Ministry of Health buy-in
2. Form a working group for planning, training and monitoring
3. Develop national roll-out plan, for pre-service and in-service training, in both public and private sector
4. Provide learning materials & equipment at time of training
5. Identify and support local leaders and champions
6. Establish Low Dose High Frequency refresher training
7. Establish facility level QI teams
8. Monitor performance
9. Establish a system for reporting and feedback
10. Engage HCPs, families and the broader community

<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0178073>



In Summary

1. *Helping Babies Breathe* is a culturally adapted newborn resuscitation program that has been successfully introduced in 80 LMIC.
2. Studies in four countries show that when well implemented the program can reduce early newborn mortality by 50 %.
3. Lessons learnt have been summarized in an Utstein paper that also has established a 10 step Best practice for implementation of the program

A woman is seen from the back, carrying a young child on her back. She is wearing a bright orange t-shirt and a white headwrap. The child is wearing a white shirt and a colorful, patterned wrap. The background is a blurred, outdoor setting with a sandy or dusty ground.

Question;

Should newborn resuscitation be made part of the GRA in LMIC?

1. Simple interventions can help avoid many of the over 700,000 asphyxia deaths and fresh stillbirths occur every year out-of-hospital in LMIC
2. Asphyxiated newborns can be saved through immediate actions, even in places when there is no system for full chain of survival