



# Workshop Objectives - Emergency Transport workshop

Edward O'Connor  
Project Manager - Transaid

# Workshop objectives

- Bring together ambulance service practitioners and key stakeholders to share their expertise and experience
- Provide a forum for presentation and dissemination from relevant research
- Allow for debate regarding how to improve emergency health transport across sub-Saharan Africa
- Promote dialogue and advocacy for policy change



# Integrating Emergency Transport and Maternal Health – A Need for Action

Jeff Turner and Caroline Barber

# Maternal Mortality

Every day, approximately 800 women die from preventable causes related to pregnancy and childbirth (WHO)

99% of all maternal deaths occur in developing countries (WHO)

Maternal mortality is higher in women living in rural areas and among poorer communities

Transport can play a significant role in reducing maternal mortality and morbidity as timely access to health services are critical in an obstetric emergency

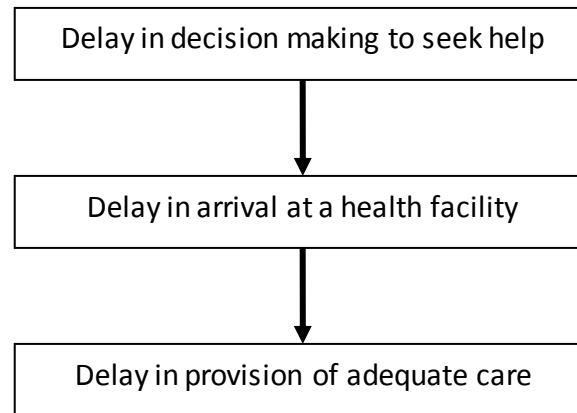
Interventions that involve transporting pregnant women to health facilities and onwards referral often have a dependency on mobile phones

# Maternal Mortality

- Despite the various policy calls to action and international networking amongst development agencies on the topic, in Africa the situation is challenging
- In addition to displaying the scale of the gap there is a need for a rapid identification of immediate operational measures which can be taken to redress this glaring inequity
- Though much has been learned during the past decade about the causes of maternal death, there is still a need for significant progress towards reducing maternal mortality in Africa

# Where the discussion on transport often starts...

## Medical “Three Delays” Model of Maternal Mortality



(Source: Thaddeus and Maine, 1994; see <http://www.maternityworldwide.org/causes.html>)

# Transport's role in maternal health

- As we all know many women in rural Africa still give birth at home
- The financial and time cost of travelling to health facilities and their low status and negotiating power within the household may delay the decision to seek care
- Most women walk to care
- Rural health facilities often have large catchment areas and often lack trained staff, drugs, equipment and effective transport and communication referral systems
- It is becoming accepted that poor access may play a role in maternal deaths and conditions such as Fistula, but still, little research available.

## **Growing body of evidence..**

There is growing evidence of the importance of poor transport in maternal, newborn and child mortality. A recent systematic review highlights it to be a significant explanatory factor in the cause of maternal mortality.



# Integration with community-level primary health care

- Growing evidence for the importance of integration of transport in programs designed to improve access to MNCH services.
- Failure to integrate transport, for example, reduces the effectiveness of community-based efforts to improve maternal health and child health through increased levels of institutional deliveries.
- An evaluation of the Skilled Care Initiative for Maternal Health in Burkina Faso found that even with the improvements to health facilities and staff, distance to health centre was a major determinant of institutional delivery, where less than 20 per cent took place in a facility if the women lived more than 10km away.

# Integration with Emergency Obstetric Care

- One study found that ‘modelling techniques have predicted that maternal mortality decline will reach a threshold of less than 35% decline if access to emergency obstetric care is not provided, and that referral and transport strategies, alongside other interventions, could contribute to as much as an 80% reduction in maternal mortality’.



# Integration with Emergency Obstetric Care

- Delays in access through poor transport also increase the clinical severity of cases that need to be handled by referral facilities.
- Recent research by Transaid in partnership with the Ghana National Ambulance service and the State Ministry of Health in Katsina State, Nigeria, found that women with access to motorised means of transport for referral arrived at referral facility with a significantly better health condition than those without such means.

## Integration with Emergency Obstetric Care

- In the 1990's pilot interventions around improved emergency transport and referral found that of the women with maternal complications carried 38% were assessed as arriving good condition compared with only 30% of women not arriving by project vehicle.
- The ETS drivers transferred 94% of all reported maternal complications being referred from the targeted communities.

# Monitoring & Evaluation

- There is a need for greater monitoring of the referral chain as well as more robust evaluation of transport interventions.
- Recent work by Transaid together with the Katsina State Ministry of Health, Nigeria, as you will later in the conference, has contributed a method using basic vital signs measurement to assess women's changing health condition through the referral chain that may enable evaluation of transport interventions on referral health outcomes.

## A space for action

- Within the policy discussion there is a need for:
  - more accurate measurement,
  - more focused solutions,
  - more sensitive social scientific analysis of the relationship between mobility, gender and health.
- There is now a policy goal of dramatically reducing maternal mortality in Africa and there is a body of evidence which speaks to the scale of the problem
- However, the literature on concrete measures for bringing about this goal and the operational activities of development agencies in pursuit of this goal are thin on the ground.
- Particularly in respect of the transport and maternal mortality link.

# A need for further investigation

- What is the nature of the interaction between physical access, communication and maternal, neonatal and child health services and their outcomes?
- How can we capture and measure the nature and scale of these complex interactions as part of a wider multi-dimensional picture of maternal, neonatal and child health services?
- What can be learnt from a more systematic evaluation of the range of localised access and communication solutions that have been implemented to improve physical access to maternal health services?
- How can greater community involvement be encouraged in tackling barriers to access?
- What are the institutional issues pertinent to maintaining the responsiveness of patient transport services?
- What scope is there for new communication technologies in overcoming access difficulties and interacting with access solutions



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# References

- Turner J (2009) 'Mobility, maternal mortality and mainstreaming gender – a need for action' Chapter in Grieco et al. (eds) Africa, Transport and the Millennium Development Goals: Achieving an Internationally Set Agenda Cambridge Scholars Publishing
- Gil-González, D. M. Carrasco-Portiño & M. T. Ruiz (2006) Knowledge gaps in scientific literature on maternal mortality: a systematic review, WHO Bulletin Vol. 84 No 11 pp 903-909 <http://www.who.int/bulletin/volumes/84/11/05-029454.pdf?ua=1>
- Hounton, S., G. Chapman, J. Menten, V. De Brouwere, T. Ensor, I. Sombie, N. Meda, C. Ronsmans (2008) 'Accessibility and utilisation of delivery care within a Skilled Care Initiative in rural Burkina Faso' Tropical Medicine and International Health Vol. 13 Supp. 1 pp. 44-51
- Saving Mothers Giving Life in Uganda and Zambia 2013 Annual Report <http://www.savingmothersgivinglife.org/doc/SMGL%20Annual%20Report%202013.pdf>
- Murray and Pearson (2006) 'Maternal referral systems in developing countries: Current knowledge and future research needs' Social Science & Medicine, Vol. 62 pp. 2205-2215
- Hussein, J., L. Kanguru, M. Astin, S. Munjanja (2012). The Effectiveness of Emergency Obstetric Referral Interventions in Developing Country Settings: A Systematic Review. *PLoS Med* 9(7)
- <http://www.plosmedicine.org/article/fetchObject.action?uri=info%3Adoi%2F10.1371%2Fjournal.pmed.1001264&representation=PDF>
- Transaid (2013) Linking Rural Communities with Health Services: Assessing the Effectiveness of the Ambulance Services in Meeting the Needs of Rural Communities in West Africa. Final Report <http://r4d.dfid.gov.uk/pdf/outputs/AfCap/AFCAP-GEN%20-60-Linking%20rural-communitieis-with-health-services-Final-Report.pdf>
- Samai, O., and P. Sengeh (1997) 'Facilitating emergency obstetric care through transport and communication, Bo, Sierre Leone' *International Journal of Gynaecology & Obstetrics*, Vol. 59, Supt 2 S157-S164
- Green, C., F. Adamu & I. Abdul Rahman (2013) 'The Role of a Transport Union in Increasing Rural Women's Access to Emergency Maternal Care in Northern Nigeria' *World Transport Policy & Practice* Vol. 19, No. 2 pp. 29-45 <http://www.ecologica.co.uk/pdf/wtpp19.2.pdf>
- Murray S. and S. Pearson (2006)
- Hussein, J., L. Kanguru, M. Astin, S. Munjanja (2012).
- Transaid (2013)