IMPACT OF PRONTO TRAINING IN EMERGENCY OBSTETRIC AND NEWBORN CARE ON 24 HOUR NEONATAL MORTALITY

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Background

◆ In Kenya, neonatal mortality accounts for 60% of infant mortality(I).
  ◇ One third of these deaths are intra-partum complications due to birth asphyxia
  ◇ Enhancing the capacity of health facilities to provide routine and emergency obstetric and neonatal care (EmONC) can prevent birth asphyxias.
◆ The USAID Global Health Initiative (GHI) Kenya strategy 2011-2014 emphasized on improvement of Maternal Newborn and Child Health (MNCH) outcomes by accelerating support for Human Resources for Health, particularly health facility providers(II)
◆ PRONTO developed a simulation and team training program for low-resource settings to address the major barriers to provision of sustainable quality EmONC.
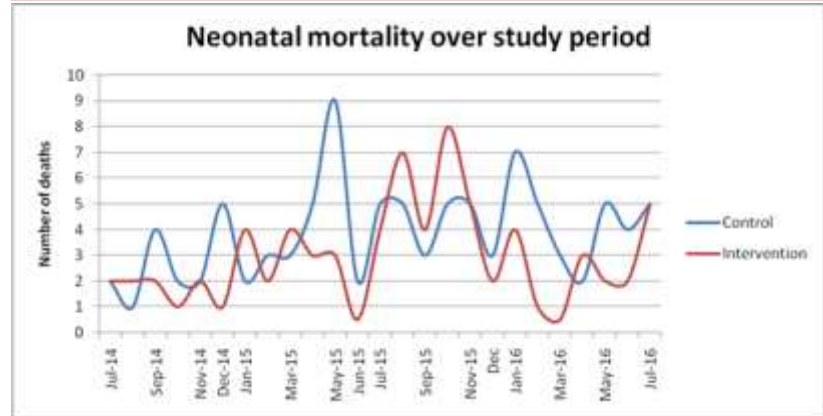
Study goal and objective

◆ The overall goal was to evaluate the effectiveness of PRONTO simulation and team training in EmONC in Kisii a rural Kenyan setting.
◆ Primary objective was to determine the impact of PRONTO training on 24 hour neonatal mortality in health facilities.

1: Group photo of PI and technical staff meeting with Community Health Volunteers

Methods

◆ A cluster randomized trial design
◆ Hypothesis :PRONTO training will improve 24 hour neonatal mortality.
◆ Participating health facilities randomized into two arms: PRONTO training and standard of care.
◆ Intervention effect :difference in change of 24 hour NMR from baseline to 18 months between matched intervention and control clinics.

2: Group Photo of the PI, EmONC stakeholders including ministry of health meeting focusing on embracing the results into policy

RESULTS

RESULTS

	Baseline IR/1000 live births			Post-intervention IR/1000 live births		
	Intervention	Control		Intervention	Control	
	IR (95%CI)	IR (95%CI)	p-value	IR (95%CI)	IR (95%CI)	p-value
Neonatal mortality	7.75 4.34 - 12.79	12.43 7.59 - 19.2	0.169	12.89 9.79 - 16.66	19.92 15.72 - 24.89	0.012
Perinatal mortality	12.95 8.9 – 18.72	16.27 10.9 – 23.37	0.392	15.89 12.67– 19.89	23.54 19.18– 28.61	0.009

CONCLUSION

➢ Marked reduction in neonatal and perinatal mortality in intervention clinics post-PRONTO training was demonstrated
➢ We have disseminated results to Ministry of Health and a task force constituted that is working on incorporating simulation in EMONC package for delivering the training

Literature cited

I) Kenya Demographic and Health Survey 2008-2009. II)USAID Global Health Initiative Kenya Strategy 2011-2014.

Mortality Outcomes

- 170 neonatal deaths, 68 fresh still-births and 4 maternal deaths during study period
- No difference in neonatal and perinatal mortality comparison at baseline
- Marked reduction in neonatal and perinatal mortality in intervention clinics post-PRONTO training