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WHAT WILL IT TAKE TO ACCELERATE THE RATE OF DECLINE OF NEONATAL MORTALITY IN WEST AFRICA?
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SCIENTIFIC COMMUNICATION

Several studies have highlighted the high rates of infant and young child mortalities in Sub-Saharan Africa (1). Indeed this is clearly reflected by the fact that a majority of these countries will not meet the MDG 4 (2). In an attempt to meet the MDGs, resources that have been put into improving maternal and child health in the last decade contributed to a significant decline in maternal and child mortality rates but less so for newborn deaths which continues to decline at a very slow pace because maternal health and child survival programs received greater attention (1,2). Close examination of the contributory segments to the witnessed decline in mortality rates indicate that neonatal mortality contributes 40% or more to the current rate of child deaths globally (3). This emphasises the need for refocussing neonatal health. Three causes - preterm delivery, asphyxia and infections - account for three quarters of the neonatal mortalities globally¹. The contributions of these causes are even further exaggerated in certain parts of the world.

There is abundant evidence to show that where babies are born influences their chance of survival (1-4). About 99% of the burden of these deaths occur in the developing countries. Nigeria, the seventh world's most populous country, now ranks second for neonatal deaths because of her large population and minimal decline in neonatal deaths. Nigeria contributes 15% of Africa's neonatal mortality (3). It is estimated that 265,000 newborn deaths occur annually in Nigeria alone. With current neonatal death reduction rate of 1% per annum, Africa has the slowest rate of decline and of the 15 countries with Neonatal Mortality Rate (NMR) greater than 39 per thousand; 12 are from African region and indeed six of these are from West Africa! Why are these countries lagging behind? Is progress purely dependent on economic resources? An intact health system is crucial for the delivery of interventions to reach and scale.

Of the ten countries that have decreased by two

thirds or more their neonatal mortality rates, eight are from high income and two are from middle income countries. These countries have a functionally intact health system and good social support services.

Should millions of babies be dying in Africa when there are proven cost-effective interventions? For most of these listed causes of deaths there are evidence-based interventions to mitigate their effects. Such include programs like the Neonatal Resuscitation Training (NRT) and Helping Babies Breathe and thrive, antenatal cortico-steroids, surfactant therapy. These interventions target birth asphyxia (BA) and prematurity. Indeed, for situations where morbidity has set in, like in sepsis (as with cases of respiratory distress), respiratory support if provided can make a difference.

What needs to be done is for the policy makers to show more commitment and support implementation of the various approaches through the strengthened public health system to achieve reach and scale. Such implementation needs to be integrated through partnerships with different organisations but must be properly coordinated by national government.

A casual review of outcomes by trends in the neonatal mortalities at the University of Benin Teaching Hospital, Benin City, Nigeria; over the 1970s to current trends of the 2014 by a review of the categories of babies and the causes of the neonatal death revealed some important highlights. Thus a significant identifiable cause of Peri-natal Mortality Rate (PMR) of 80.9 per thousand was BA in 1974-76 which dramatically decreased to 33.4 per thousand in 1976-80 because of introduction of specific perinatal health measures of NRT. However, recently the prematurity rate has tripled from 6.6% in 1985 to 19.3% in 2013 with resultant increase in mortality. The preterm population is predisposed to respiratory distress and failure. Although Respiratory support as part of intensive care is lifesaving, it is at high cost to the patient who pays out of pocket and to the system

that has to provide the means for such intensive care. Resources are meagre or not available in Africa. In Nigeria, the cost to the patient for provision of requisite respiratory support ranges from equivalent of 1050 USD to 1677 USD for the use of CPAP or ventilator for a minimum duration of five days.

Respiratory support cannot not be a standalone programme. There is the need to build; supportive physical structures, material resources and manpower capacities. These are major challenges. These investments are warranted so as to ensure that basic amenities for provision of basic respiratory support at all the secondary level health facilities with appropriate trained staff are available if mortality from respiratory disorders has to be curbed (5-7). More advanced respiratory support can be provided at tertiary health care facilities with full neonatal intensive care services.

Regionalisation of sophisticated care at Specific tertiary regional centres may reduce costs whilst secondary level centres could offer basic respiratory support with the bubble CPAP models. Neonatal care has to be prioritised and delivery of cost effective interventions should be made available to reach and scale.

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