

IMPROVING THE OUTCOME OF PRETERM BABIES IN RESOURCE POOR SETTINGS

Fidelis O. Njokanma

Lagos State University College of Medicine/ Lagos State University Teaching Hospital, Ikeja, Lagos.

INTRODUCTION

A preterm baby as we all know is one delivered before 37 completed weeks of gestation. The prevalence of preterm deliveries in most countries lies between 5% and 10% although there are reports of figures as low as 3% (Zideh 2001) and as high as 16.7% (Pambou et al 2006). Observations from Nigeria in the past two decades have yielded figures of 5.2% to 7.6%. (Njokanma and Olanrewaju 1995, Ighanesebhor and Afadapa 1996).

WHY DO PRETERM BABIES DIE?

Preterm delivery is one of the commonest causes of death worldwide (Lawn, Cousens and Zupan). This is even more obvious in developing countries (Ngoc et al 2006) where babies die who might have survived in more privileged settings. Thus while preterm babies generally constitute less than 10% of deliveries, they account for up to 60 percent of mortality (Ngoc et al 2006, Ambe et al 2007). In Nigeria, mortality of preterm babies born at or before 32 weeks is unacceptably high – 624/100 (Ighanesebhor and Afadapa,) 919/1000 (Njokanma and Olanrewaju).

Proximate medical causes and associated causes of mortality

- Birth asphyxia
- Sepsis
- Poor temperature regulation
- Recurrent apnoea
- Intraventricular haemorrhage

Remote causes are related to:

- Dearth of facilities and trained health care personnel to take care of the listed problems
- Poverty
- Ignorance

WHAT IS THE WAY OUT?

There must be a comprehensive and holistic approach to the challenge of high neonatal mortality especially as it affects preterm babies. If we depend on the generally poor allocation of resources that trickles down to the quality of care available to high-risk babies, success will be compromised right at the outset. For any serious effort to be translated into desired success, such effort must be accompanied

and supported by recognizable reallocation and commitment of resources towards providing the requisite infrastructure, facilities and trained personnel. In other words, we can leap or we can crawl – it's up to the policy makers!

Specific Approaches to the Challenge of High Mortality Among Preterm Babies

Aggressive advocacy directed at generating the required political will

Penetrating health education directed at the populace and expectant mothers

Emphasis on quality antenatal care

- Detection of risk factors for preterm delivery should be followed by early referral to a better-staffed and better-equipped centre

Regionalization of perinatal and neonatal care

- Success depends on effective communication and transportation between levels of health care delivery

In utero referral of high risk mothers

- In-utero referral to a centre equipped for care of the high risk neonate has a far superior outcome in comparison to referral of the same baby after delivery

Training and retraining of health care personnel

- Training health workers in the art of Neonatal Resuscitation produces dramatic results with respect to reduction in asphyxia-related morbidity and mortality

- This effort need not be expensive as it can readily be facilitated 'in-house' by already trained personnel. It should also be possible to organize group training for perinatal service providers pooled from various institutions within a given region.

The use of appropriate technology

- Of course the provision of a thermo-neutral environment by way of incubators with all kinds of monitoring gadgets and controls is the ideal. However, in the presence of lean resources, even a safe heating mechanism

providing warmth within a safe but fixed temperature is far better than nothing.

- For the reasonable stable baby, kangaroo baby care is of proven benefit.

Finally the option of partnering with better endowed institutions and/philanthropic NGOs should always be kept open.

References

1. Ambe JP, Idrisa A, Usman JD. A review of preterm admissions into special care baby unit in University of Maiduguri Teaching Hospital: a four year experience. *Niger J Clin Pract* 2007; 10: 229–33.
2. Ighanesebhor SE, Afadapa MA. Epidemiology of Preterm delivery in Benin-City. *Nig J Paediatr* 1996; 23: 27–32.
3. Lawn JE, Cousens S, Zupan J. 4 million neonatal deaths: when, where, why? *Lancet* 2005; 365: 891–900.
4. Ngoc NTN, Merialdi M, Abdel-Aleem H et al. Causes of stillbirths and early neonatal deaths: data from 7993 pregnancies in six developing countries. *Bull WHO* 2006 84; 699–705.
5. Njokanma OF, Olanrewaju DM. A study of Neonatal Deaths at the gun State University Teaching Hospital, Sagamu. *J Trop Med Hyg* 1995; 98: 156–160.
6. Pambou O, Ntsika-Kaya P, Ekoundzola JR, Mayanda F. Preterm births at Brazzaville University Hospital. *Sante* 2006; 10: 185 – 189.
7. Zeitlin J, Draper ES, Kolle L, et al. Differences in Rates and Short-term Outcome of Live Births Before 32 Weeks of Gestation in Europe in 2003: Results From the MOSAIC Cohort. <http://www.pediatrics.org/cgi/content/full/121/4/e936>
8. Zideh SM. Obstetrical outcome amongst preterm singleton births. *Saudi Med J* 2001; 22: 342–6.