

EDITORIAL

PRIORITY IN SPECIAL CARE NURSERIES IN MALAYSIA

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The Deputy Minister of Health, the Honourable Datuk Pathmanathan recently happily announced that our Infant Mortality Rate has declined by 50 percent in the last ten years. This was attributed to the many improvements made in the child care and preventive health services and to the improved living conditions currently enjoyed by the rakyat as compared to ten years ago.

The Infant Mortality Rate records the mortality rate of infants from birth to the age of 364 days and is made up of three components, viz:-

- i. Early Neonatal Mortality Rate — recording mortality rates of newborns under 1 week of age per 1000 live births.
- ii. Late neonatal mortality rate — recording deaths of newborns under the first 28 days of life per 1000 live births.
- iii. Post Neonatal Mortality Rate — recording mortality rates between 28 days to under 1 year of life per 1000 related live births.

The 50 percent decline in the Infant Mortality Rate (I.M.R.) is impressive but when each individual component is examined, one notices that the big fall has been mainly brought about by marked falls only in the Post Neonatal and Late Neonatal Mortality Rates which fell by 76 percent and 60 percent respectively in the last two decades.

The third component — the Early Neonatal Mortality Rate only declined by about 12 percent in the same period.¹ So that despite the many improvements referred to by our Deputy Minister of

Health, in the same period when the two other component indices of the I.M.R. have declined by 76 percent and 60 percent, why has the Early Neonatal Mortality Rate shown no parallel decline?

The Department of Statistics, Ministry of Health has no figures detailing the causes of death in the early neonatal period but if we look at the University Hospital mortality statistics compiled over a five year period from 1974 to 1978, ⁴ out of a total 21,567 live births, 267 babies died within the first week of life. The causes of death in this first week are:-

Cause of Death	No. of Deaths
Low Birth Weight	104
Respiratory Distress syndrome	53
Congenital malformations	35
Infections	22
Asphyxia neonatorum	16
Other Respiratory disorders (pneumothorax, meconium aspiration, aspiration pneumonia)	14
Cerebral haemorrhage (intraventricular and 'intracranial')	14
Rhesus iso-immunisation	3
Others including pulmonary haemorrhage, intra-abdominal bleed, gastric perforation, meconium peritonitis and birth injuries.	6
	267

Of the 267 deaths, 212 or 79.3 percent occurred in babies with low birth weights of less than 2250 grams and slightly more than half died within the first 24 hours of life.

Over this same period, after the first week of life, another 25 babies died, the causes of death being:-

Low Birth weight	9
Congenital malformations	7
Infections	5
Cerebral haemorrhage	2
Respiratory distress syndrome	1
Milk Curd syndrome	1

Only four babies in this group weighed more than 2250 gms. and all died of congenital heart disease.

Taken together, *about 80 percent of early neonatal and neonatal deaths occurred in babies weighing less than 2250 gms.*³ and perhaps what is more important, *at least 30 percent of the main causes of deaths were either treatable e.g. RDS and infections or were preventable like asphyxia neonatorum, aspiration pneumonias and infections or were both treatable and preventable.*

If so, why are we not succeeding in minimising deaths in this highly vulnerable group?

Adequate supportive services like radiological and laboratory facilities are important. Provision of well designed hospital nurseries, essential equipment and the maintenance of these in good functioning order are also important. So too are dedicated and experienced doctors especially those with training and who are interested in neonatology. The obstetricians also have a big role to play.

But perhaps the one often overlooked but to my mind easily *the most important priority, should be the provision of adequate numbers of well trained and dedicated nursing personnel in our special care nurseries and their retention in these areas.*

The nursing of sick and at risk neonates is a very highly specialised, field demanding a high level of skill and training and it is perhaps here, more so than in other areas that experience is very important. It requires years of training coupled with experience to develop the skill required to immediately detect minor changes in a neonate's condition that may herald ominous events to come.

The ideal would be to man all our neonatal and neonatal intensive care units with staff nurses trained and experienced in the care and nursing of neonates. This is not possible at the moment but we need to make a commitment and seriously start

training adequate numbers of nurses to fill this need.

Till we have enough neonatal nursing specialists we have to rely on the experienced staff nurses who have already acquired the skills after long years of on-the-job training. These are hard to come by as the job is very demanding and fortunately we do have this very small core of dedicated and experienced nurses caring for our sick neonates.

But the existing practice of rotating nurses through the various hospital units for promotional purposes undermines their morale and has disadvantaged our pediatric units. Our experienced nurses who for years have cared solely for sick neonates now find themselves rotated to care for adult patients or in other totally unrelated areas, having to learn new skills and what is more important, their hard earned skills and experience is completely wasted in these new areas.

Besides this, simply because a neonate is smaller, there is a widely held belief that they therefore require less of everything — this even extends to the staffing of nurseries especially at nights. Our decision makers need to realise that tough older children and adults when hard pressed can make do with less nursing care, the newborns are totally helpless and entirely dependent individuals who cannot survive except with help and when sick, need even more attention. The existing nurse: patient ratios of 1:4 or 1:6 need therefore to be upgraded at least to 1:2 throughout the country.

Although older children and adults have learnt that they are expected to sleep at nights and therefore allow less nurses to be posted to the wards, unfortunately our newborns have yet to learn this! Given time they will, but till they do so, the existing practice of halving the number of nurses on duty at nights should be reconsidered and preferably done away with. To quote only one example, the minimum three-hourly feeds must go on at nights as they do in the day and we need enough staff to cope with this.

To underline the importance of this, a survey carried out in our own hospital shows that a little more than 50 percent of deaths in the special care nursery occur between midnight and 6.00 am during the night shift when only half the number of nurses are available.^{3,4}

The 50 percent fall in the infant mortality rate over the last decade is impressive. The target now is

to try and achieve a similar fall in the decade to come. Given similar improvements in the country over the next decade, it is not inconceivable that our late and post neonatal mortality rates will similarly fall — what we need to aim for are changes that will lead to an equally impressive fall in the early neonatal mortality rate. The 12 percent fall recorded in the last 20 years is not good enough. Here the hospital and nursing administrators have a big role to play. The changes they can effect can be tremendous. I hope they can see the need and respond to it.

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⁴ Lam K L (1980). Challenges in Perinatal Care — The Paediatric Aspect. Proceedings, 4th Annual Convention of the Maternal and Child Health Association of the Philippines, Dec. 15-16.