

Chapter 1

Situational Analysis of Prematurity in Thailand, 2006.



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Child development has an important role in health, life quality, life skills, and ability. Therefore, childcare was very important for good maturity of body, mind, and social relations of every Thai children. In this way, Thai government always set high priority on health promotion and maternal and childcare by drafting these issues in the 3rd National Economic and Social Development, which consequently enhanced the health of mother and child.

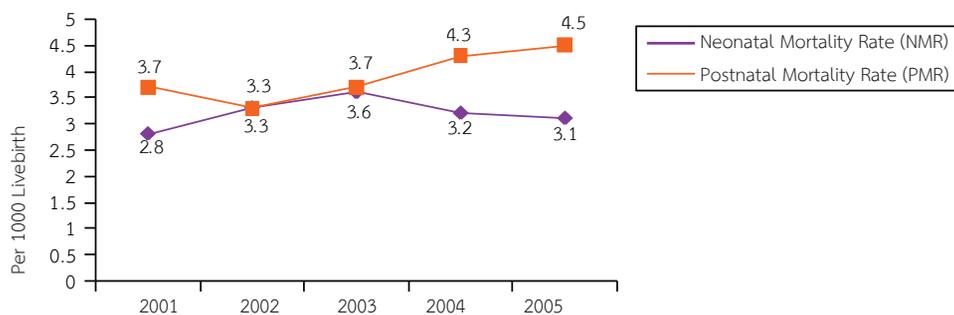


Figure 1 NMR and PMR per 1000 Livebirth in 2001-2005.

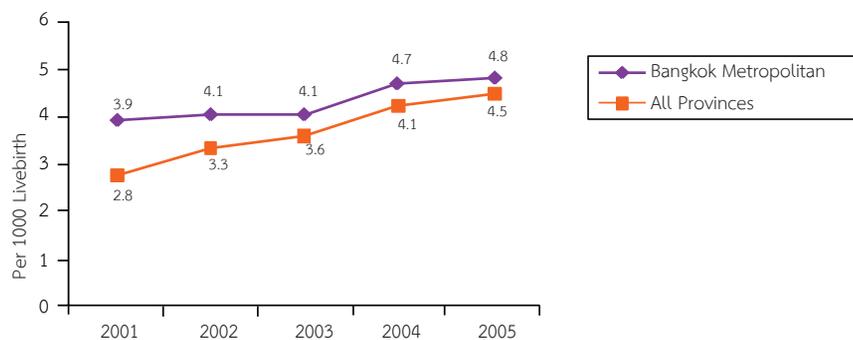


Figure 2 NMR in Bangkok metropolitan compared to all provinces, 2001-2005.

According to Ministry of Public Health's statistics, the Neonatal Mortality Rate (0-28 d.) was higher than Postnatal Mortality Rate (29 d.- 1 y.), and the statistics showed the possibility of rising trend (Fig. 1). In this regard, the statistics classified by Thailand's geography was found that the NMR of infants living in metropolitan area such as Bangkok region increased from 3.9 in 2001 to 4.8 per 1000 Livebirth in 2005 (Fig. 2).

The 3rd
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Table 1 Top 5 leading causes of infant mortality, 2001-2005.

Causes	Numbers of Death				
	2001	2002	2003	2004	2005
Abnormalities or diseases in perinatal period	4596	2538	2258	3928	5904
Clinical signs and abnormal laboratory investigation	892	2527	2878	1923	2553
Congenital abnormalities	1082	1240	1518	1844	2004
Respiratory diseases	1506	1372	1374	1336	808
Infectious diseases	512	1784	2123	1890	605

As shown in Table 1, the highest causes leading to infant mortality during 2001-2005 were perinatal abnormalities or diseases (28 wks of gestational age to 7 days of life). Moreover, prematurity was the key cause of infant mortality during these ages (Table 2).

Table 2 The number of postnatal mortality classified by top 5 causes during 2001-2005.

Causes	Numbers of Death				
	2001	2002	2003	2004	2005
Pathological and an unidentified lesions	66	770	912	394	882
Prematurity	421	605	472	670	694
Congenital heart disease	198	248	286	347	413
Respiratory diseases	121	33	99	268	296
Pneumonia	493	447	485	516	264

Source: Cluster for Health Information, Bureau of Policy and Strategy.

Some of the premature infants, needed to be care in the Neonatal Intensive Care Unit (NICU), drastically affected the health of mother and child, family, hospitals, and national public health system. The neonatal care required expert specialists, expensive medical appliances, and a longer length of stay than other patients; therefore, the expenses were higher accordingly. According to Siriraj's NICU premature infant expenses statistics, it was found that caring one premature infant in NICU had an average cost at 170000 baht. Moreover, there were approximately 15000 premature infants in Thailand each year, so the expenses for the caring cost were estimated to be 2300000000 baht annually. Besides, that excluded expenses of a postnatal care of premature infants, when they were discharged from hospital.

With all the cost that had been invested, on 30th August 2005, the Faculty of Medicine Siriraj Hospital, Mahidol University, invited medical personnel from hospitals in Bangkok and other regions to a conference for this matter to find the solutions in order to prevent such the problems. The summary of the conference were as follows:

Problems Concerning Public Health System

1. Policy problems

- 1.1 Social security system did not cover expenses of infant care.
- 1.2 Standard of neonatal care (Kanchanapisek edition) had not been enforced concretely.

2. Health service management problems

2.1 National level

- Policy on pregnant women with high risk of prematurity and premature infants care had not been revised.
- Lacking of level of care hospital classification, led to incompetent resource management.
- Raising awareness and promotion of high risk pregnancy were insufficient.
- The installation of National Health Bureau's newborn infant medical fee compensation system showed slightly progress.
- Essential drugs for premature infants such as artificial surfactant were not listed in the National list of essential medicines.

2.2 Hospital level

- The transport system for pregnant woman and premature infant was inefficient.
- There was no cooperation center and hospital bed information.
- The number of doctors and nurses were insufficient.
- Medical service system management of the National Health Security Office did not support the transport system for pregnant women and premature infants.
- Some private hospitals could not provide critical neonatal care.

2.3 Individual level

- Thai society lacked body of knowledge on health service management, which led to the inefficient integrated approach solutions.
- Abortion and teen pregnancy incidents were increasing.
- Pregnant women did not go or delay the visit to an antenatal care.
- Pregnant women lacked of self-care knowledge when there was a sign of premature labor.
- Pregnant women and premature infants did not receive family and social helps.
- An expectation towards maternal and premature infant care quality was gradually increasing.
- Parents refused to take responsibilities when their babies were under treatment in NICU.
- Radio broadcasters and public transport drivers lacked of appropriate knowledge on transporting pregnant women with a labor pain.



All in all, solving the complicated and long-standing problems needed cooperation from all sectors including individuals. It could be started within a family under a support of a community, society, health service system, and national education system. All sectors should help raising awareness and enhancing proactive development on pregnant women health promotion. Moreover, improving pregnant women, maternal and childcare to international standard was necessary. All of this was goaled to strengthen Thai maternal and child physical and mental health, which would lead to a strong family relations and stability, society, and nation (Chart 1).

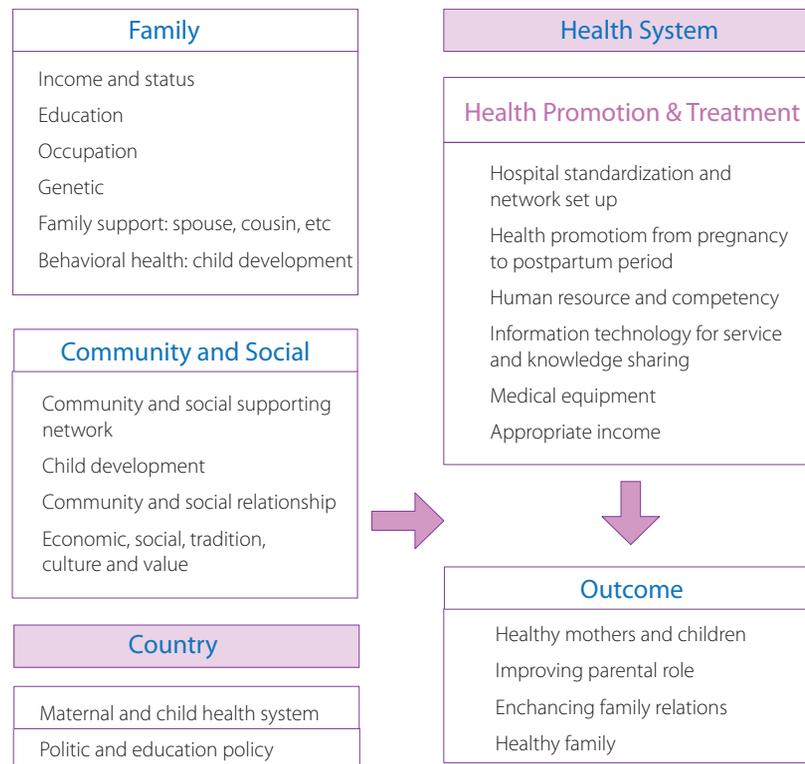


Chart 1 Dynamic relations of individual, environment, and health service system.

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