Presidential Address*

A healthy start to a healthy future

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Present day health care involves a "Life Cycle approach" and "Continuum of care". Health care should start before conception, with the health of the girl child and continue throughout pregnancy. It should continue through infancy and childhood into adolescence. The health of the adolescent girl child, the future mother, affects her unborn baby in the future, and thus the next generation. Health care should be delivered as a continuum of care, linking home, community and facility. This is the concept of "Life Cycle Approach" and "Continuum of Care"[1]. As guardians of children's health, we should ensure a healthy start in the newborn period and infancy which will lay the foundation to a healthy future.

Health care during childhood is assessed by indicators such as the Under-5 mortality rate. Globally, newborn deaths account for over 40% of all deaths under 5 years of age, thus being one of the most important contributors to childhood deaths of the world[2]. Hence, the proposed launch by the World Health Organisation (WHO), of a "Global Action Plan for Newborn Health" named "Every Newborn". This is an action plan to be launched in 2014, aimed at ending preventable neonatal deaths, thereby reducing overall childhood mortality globally[2].

Child mortality in Sri Lanka is even more weighted towards neonatal deaths as over 66% of Under-5 deaths and nearly 80% of infant deaths are due to deaths in the neonatal (NN) period[3]. So, if we are to improve our mortality figures, this is the area we need to address - Newborn Health.

Over the last few decades, there has been a significant downward trend in infant and neonatal mortality rates in Sri Lanka. The infant mortality rate (IMR) has declined from 140/1000 live births in 1945, to 9 per 1000 live births in 2008. The neonatal mortality rate (NNMR) has shown a similar decline, from 80 to 6 per 1000 live births during the same period[4].

There are several factors which interacted to produce these improvements in mortality figures. As well as due to the availability of a strong health care infrastructure, these achievements were also due to socio-economic factors such as poverty alleviation, free health and free education, food subsidies and gender equality, especially in education. However, we are now, at a stage where further improvements in mortality and morbidity need more sophisticated interventions.

Furthermore, these national mortality figures mask district variations where some districts have higher mortality figures e.g. Nuwara Eliya and Anuradhapura in the Central and North Central Provinces respectively[5]. These undoubtedly contribute more towards national mortality than other areas. Therefore, when planning health care interventions, we need to pay more attention to these areas if we are to improve our mortality figures further.

The most significant causes of newborn deaths in Sri Lanka are congenital anomalies, accounting for over 41% of all neonatal deaths. Other noteworthy causes include prematurity and low birth weight (26%), birth asphyxia (12%) and neonatal infections (11%)[3].

When one considers congenital defects, some are invariably fatal but significant progress is being made to save babies with treatable anomalies such as correctable congenital heart disease. This is a complex and expensive process which is nevertheless quite essential.

If one considers the other 3 causes viz. prematurity & low birth weight (LBW), birth asphyxia (BA) and

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infections, these make up almost 50% of our newborn deaths. Unlike congenital anomalies, the majority of deaths from these 3 causes are mostly, if not totally, preventable and importantly, these deaths can be prevented or treated *largely* with simple low cost interventions. This is where we could make an impact on our NNMR, even with our limited resources.

This brings me now to the interventions that I propose to make:

Improving neonatal mortality

- **Reducing birth asphyxia**

Even with the best obstetric practices, BA cannot always be prevented but proper management will significantly alter the outcome. Thus neonatal resuscitation (NNR) is a lifesaving skill which essentially gives *"a breath of life"* to the baby. Therefore it should be an essential skill to be acquired by all birth attendants.

Due to the untiring efforts of Dr. Srilal de Silva, an excellent NNR Programme is already in place. While helping to expand this programme, I also hope to make NNR a *mandatory* skill for all health care workers (HCW) attending deliveries. This could be done through incorporation of this "skills training" into regular ongoing programmes such as the Orientation of Intern House Officers, and regular in-service training for nurses and midwives. With the cooperation of other stake holders such as the Ministry of Health (MoH) and Family Health Bureau (FHB), I am confident that this could be made a practical and sustainable venture.

- **Reducing preterm/LBW deaths**

Twenty six percent of newborn babies die because they are born too soon. Preventing preterm births is not entirely possible but the situation could be mitigated with good and optimal obstetric care. The timely use of dexamethasone and in-utero transfers for very preterm deliveries, are examples of these.

Once they are born, preventing these preterm deaths is a difficult task. It involves two components – firstly, strengthening Special Care Baby Unit (SCBU) and Neonatal Intensive Care Unit (NICU) services and secondly, strengthening Essential Newborn Care (ENBC).

Although the first option is a must when dealing with preterm babies, the second option also saves many newborn lives, costing only a fraction of what it would do to improve SCBU/NICU services. Improving SCBU/NICU services is already in place with the MoH making significant progress in this area; Every Province has an NICU manned by a designated neonatologist or a paediatrician-in-charge and every district has at least one hospital with SCBU/NICU facilities[6].

In strengthening ENBC, it is important to concentrate on the districts where NNMR is considerably higher than the national average.

- **Strengthening ENBC**

ENBC has three concepts which have been shown to be extremely effective in saving newborn lives. These are: promotion of Exclusive Breast Feeding (XBF), Kangaroo Mother Care (KMC) to prevent hypothermia and prevention of infections[7]. Promotion of XBF can be done through education of HCWs through workshops. An excellent way to support and counsel mothers is through the establishment of Lactation Management Centres (LMCs).

Mother Baby Centres (MBCs) are also known to improve the outcome of preterm and LBW babies especially in resource poor settings. They are the ideal setting to promote KMC and XBF. My aim is to set up MBCs in conjunction with the LMCs wherever possible. I hope to expand this programme especially to areas where neonatal mortality/morbidity is higher than the national average.

Breast feeding policy issues

Although XBF is the norm for most Sri Lankan mothers, there are issues which prevent its continuation for six months. One such area is in the breast feeding policy itself. There is a discrepancy of maternity leave given to working mothers: While mothers in government service enjoy the full benefit of up to one year's maternity leave, those in the private sector get only 84 working days. Mothers in the non-formal private sector have no recourse to maternity leave at all[8]. These are important discrepancies which have to be addressed in order to strengthen continued XBF in working mothers. I do hope the Secretary of Health, who is here with us today, will take note of these issues.

Neonatal sepsis, accounting for 11% of NN deaths, can be prevented by relatively low cost ENBC interventions such as proper hand washing and the use of alcohol rub and also strengthening KMC. These attitudes and practices could be inculcated into HCW by way of workshops and CME programmes.

Improving neonatal outcome

Sri Lanka has achieved such commendable figures in mortality rates that the time has now come to not only think of mortality but also to review the morbidity and outcome of the survivors. This in turn is an assessment of the quality of care delivered. This could be done through initiating regular *neonatal morbidity* as well as *neonatal mortality* review meetings which are now in progress. An efficient way to collect statistics for these meetings is to have a real-time database. The present data collection system is slow and outdated, thereby creating a void where real-time data is needed. My aim is to initiate such a data base, initially networking the major hospitals where deliveries take place, which could later be expanded to cover the entire island.

Strengthening the Continuum of Home and Community Care

- **Role of the Public Health Midwife**

Much focus has been placed on institutional care but to influence maternal and newborn health, a continuum of care from facility to community to home is vital. In this context, it is vital to assess the role of the Public Health Midwife (PHM). The PHM has been the cornerstone of our health care system. First recruited for Maternal and Child Health (MCH) services, their duties over the years have evolved into a multitude of tasks beyond their original mandate[9]. This undoubtedly has compromised their delivery of MCH services to a certain degree. If we are to maintain a good MCH service in the community, it is important to redefine the role of the PHM, designating other non-MCH work to other HCWs. The PHM's role is a subordinate one at present, being at the bottom of the hierarchical tree of trained healthcare workers, with no real prospect of carrier advancement and incentives for the future[9]. If we are to improve their performance, one needs to look into "improving their lot"; they need to be empowered more through training and given more incentives, including better career prospects. They need to have their own hierarchical system of administration rather than be subordinate to nurses. I do hope the Ministry of Health will take serious note of these issues.

- **Trends in Immunization**

Immunization is insurance for a healthy future. Sri Lanka has an excellent immunization record. Poliomyelitis is a success story, and we will officially be given elimination status in 2014. We have to be thankful to Professor Priyani Soysa for the pioneering work she has done in this regard. Even so, we need to keep abreast with current developments of global and regional immunization activities. One such initiative is the *Measles & Rubella Initiative* (MRI)[10]. This initiative aims to eliminate measles and rubella globally within given time periods. For the region of South East Asia the goal is to eliminate measles and control rubella by the year 2020[11]. For Sri Lanka with her excellent immunization coverage, this goal has been brought forward to 2018[12]. In this context, we need to work with other stake holders to ensure that we reach these targets. With near elimination of the historical vaccine preventable diseases such as Diphtheria, Pertussis and Tetanus, one needs to consider the impact of new vaccines on other communicable diseases. When evaluating this impact, not only mortality, the disease burden due to morbidity should also be taken into account. An important example is pneumococcal disease. Research should be promoted in this regard, so that informed decision making could be done in order to maximally protect our children.

Conclusion

Honoured Guests, through the "Life Cycle and Continuum of Care" approach, I have attempted to address some aspects of a "Healthy start to a Healthy Future". I have touched on ways of reducing neonatal mortality and improving neonatal outcome through low cost interventions. My aim is to help improve the state of early nutrition through promotion of XBF, so that the health of children, especially that of the girl child, in the long term, is protected. I will aim to protect our children with an even stronger state of immunization.

These are multi-faceted problems involving many stake holders with whom we have to work in close cooperation. It is my fervent hope that I will be able to work towards these objectives not only during this year, but also in the years to come, for the betterment of the future of our children.

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