

**MATERNAL AND CHILD HEALTH STATUS OF SOUTH ASIAN POPULATION; WHAT IS THE PANACEA? A REVIEW****Dr. Raj Prakash<sup>\*1</sup>, Dr. Sujata Alawani<sup>2</sup> and Dr. Shylaja<sup>3</sup>**<sup>1</sup>Department of Neonatology Kerala Institute of Medical Science Trivandrum Kerala-695029, India.<sup>2</sup>Department of Pediatrics Mediclinic Welcare Hospital PO Box 31500 Al Garhoud Dubai, UAE.<sup>3</sup>Department of Obstetrics and Gynaecology CRAFT Hospital and Research Centre Kodungalloor Thrissur Kerala - 680664, India.**\*Corresponding Author: Dr. Raj Prakash**

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**ABSTRACT**

Around 24% of world's population resides in South Asia and any progress in the global health status is directly dependent on the overall progress of the region. By keen focus on achieving Millennium Developmental Goal targets, some South Asian countries have made substantial improvement in health status of its population. But many countries of the region still strive hard to provide even the basic health needs. This disparity can be better visualized by examining and comparing the maternal and child health status of various countries of the region. Analysis of various reports from international agencies clearly underscore that the health and social status of a population can be improved even in low income nations. Sri Lanka, a developing nation in South Asia and Kerala, a small state in South India, set example for whole region. The lessons learned from these places may be replicated in other low performing countries. The health of a population is not determined by an isolated parameter. Many other interrelated factors are involved in determining health status of a country. A health status comparable to developed world can surely be achieved in this region of world by an integrated development of all these factors.

**KEYWORDS:** Maternal Health; Child Health; South Asia.**1. INTRODUCTION**

The South Asian countries are characterized by wide disparity in economic and health status of its population. Around 24% of world's population resides in these countries and any progress in the global health status is directly dependent on the overall progress of the region. By keen focus on achieving Millennium Development Goal (MDG) targets, the region has achieved much improvement since last one decade despite many challenges. Despite many challenges the region has made significant progress in last one decade by focusing on achieving Millennium Development Goals (MDG). The countries included in South Asian Association for Regional Cooperation are Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. It has been noted that some countries of the region excel in many health parameters and few other countries have improved their performance over the past one decade. But most of the South Asian nations still strive hard to provide for even the basic health needs of its population.

This can be better visualized by examining and comparing the maternal and child health status of various countries of the region

**2. Maternal health**

South Asia accounts for 22% of global maternal deaths annually. The maternal mortality dropped by 60% between 1990 and 2015. This was achieved by various strategic interventions of both government and non-government agencies in the region. Maternal mortality has dropped by 59% in Pakistan and Sri Lanka, 70% in Afghanistan and 90% in Maldives. Even then, as per 2015 data MMR (per 100000 live births) of some countries like Afghanistan (396), Nepal (258), Pakistan (178), Bangladesh (176) and India (174) has remained dismal. Sri Lanka has got the lowest MMR (30) in the region.<sup>[1]</sup> (figure 1) Maternal haemorrhage, hypertensive disorders, obstructed labour and uterine rupture, abortion and miscarriage are the leading causes of maternal death in most countries of the region.<sup>[2]</sup>

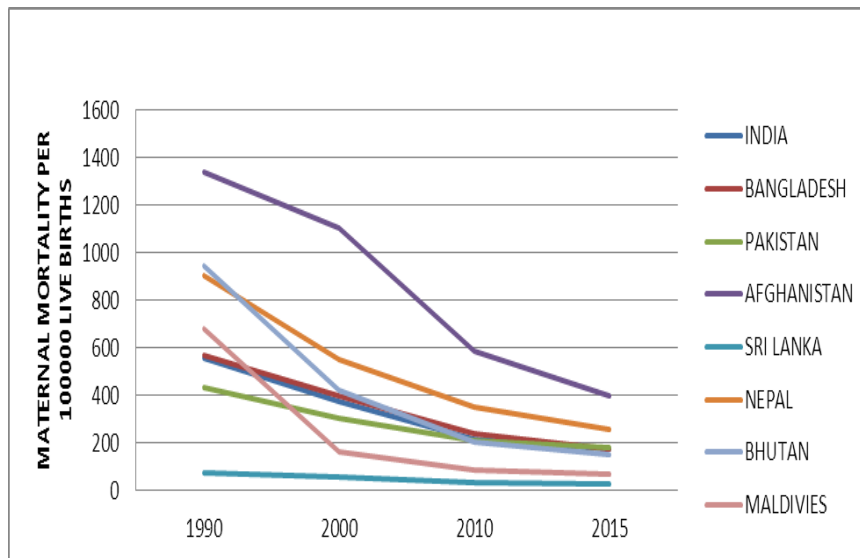


Figure 1: Maternal mortality trend in South Asian countries, 1990-2015.

### 3. Child health

South Asian countries account for about 30% of global child deaths annually. A drop of 60% in under-5 deaths was observed in South Asian countries from 1990-2015 (figure 2). Under 5 mortality rate (per 1000 live births) of Afghanistan (91), Pakistan (81) and India (48) remain alarming.<sup>[3]</sup> Meanwhile, some countries including

Bangladesh, Nepal, Bhutan and Maldives have shown considerable progress in child health and mortality rates. In most of the countries, pneumonia and diarrhea are the leading causes of child deaths. Congenital anomalies cause one third of child death in Sri Lanka and Maldives.<sup>[4]</sup>

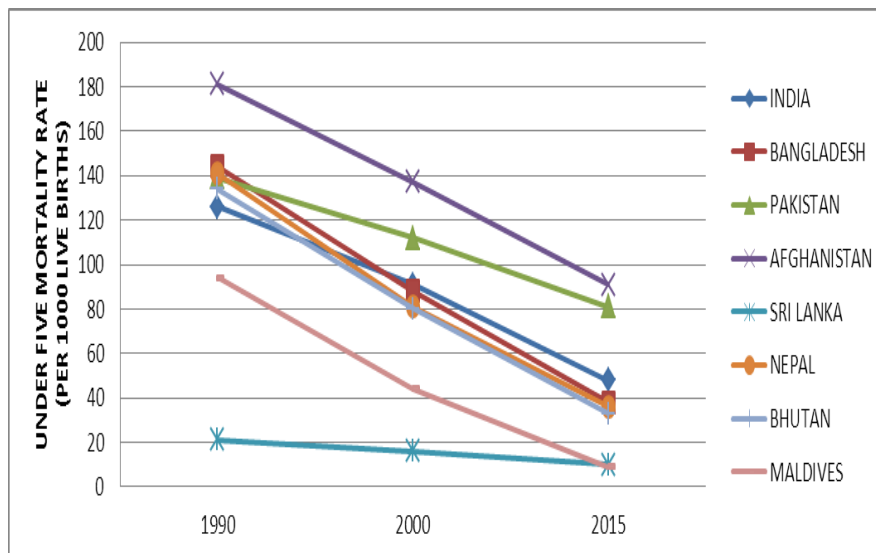
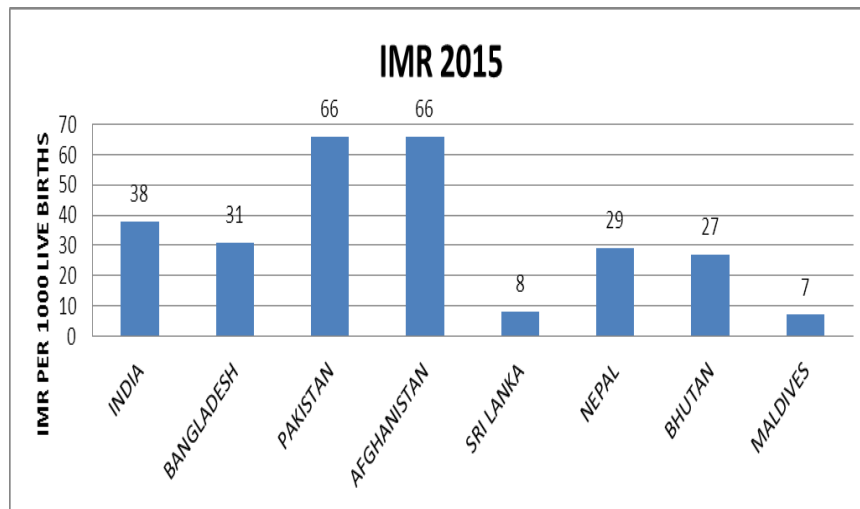


Figure 2: Under five mortality trend in South Asian countries, 1990-2015.

A 55% decrease in infant death was observed in the region from 1990-2015. Infant mortality rate (IMR) decreased from 92 per 1000 live births in 1990 to 42 per 1000 live births in 2015. IMR of Pakistan and Afghanistan remains elevated at 66 per 1000 live births.

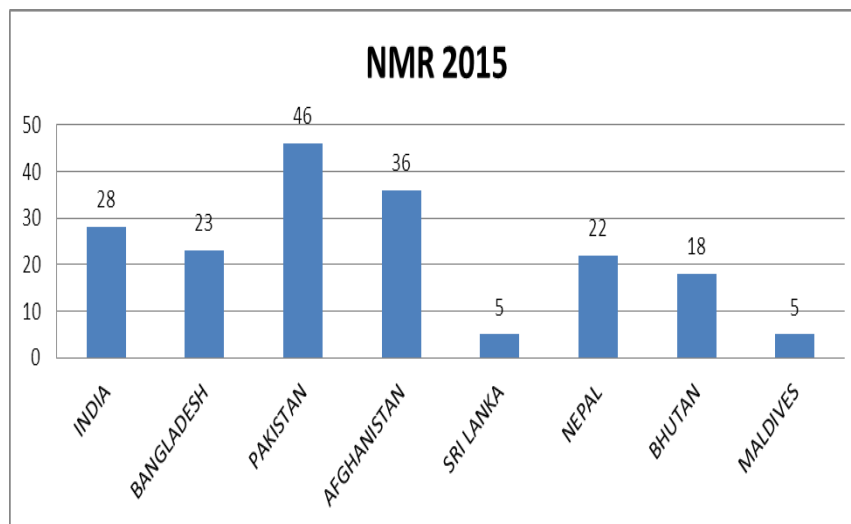
Substantial progress of IMR has been made by Bhutan (27), Nepal (29), Bangladesh (31) and India (38). Sri Lanka and Maldives have been maintaining consistently low IMR at rate of 8 and 7 per 1000 live births.<sup>[3]</sup> (Figure 3).



**Figure 3: IMR (per 1000 live births) in South Asian countries.**

Around 50-60% of child deaths occur in the neonatal period (first 28 days of life). More than 4 million neonatal deaths happen every year globally in which more than 1 million deaths are contributed by South Asian countries. Of 2.6 million stillbirths occurring every year globally, at least 1 million deaths are accounted by South Asian countries.<sup>[5]</sup> Neonatal mortality rate (NMR)

of Pakistan (46/1000 live births) and Afghanistan (36/1000 live births) remain the highest in the region<sup>[3]</sup> (figure 4). Prematurity and Sepsis/Pneumonia remain the major cause of neonatal death and these causes are consistently reported over the years in almost all countries of region.<sup>[4]</sup>



**Figure 4: NMR (per 1000 live births) in South Asian countries.**

#### **4. The unique characteristics and wide variation of health status in the region**

Wide variation within the countries between rich and poor, rural and urban population is reported in health statistics and intervention practices.

While Sri Lanka and Bhutan has got highest coverage for contraceptive use, Afghanistan and Pakistan has got the lowest coverage status. While Sri Lanka and Maldives leads in antenatal care visits, maternal TT injection rates and skilled birth attendant for delivery, Afghanistan trends last.<sup>[6]</sup>

Breastfeeding interventions like early initiation of breast feeding has got highest coverage in Sri Lanka and lowest

in Pakistan, exclusive breast feeding for 6 months has got highest coverage in Afghanistan with Pakistan having lowest coverage status. Vaccination coverage remains consistently high in Sri Lanka and low in Pakistan and Afghanistan. Seeking medical care for pneumonia was reported to be highest in India and lowest in Bangladesh.<sup>[7]</sup>

Water and sanitation facilities are closely interrelated with health status of population. Access to safe drinking water and sanitation facilities are not available to majority of population in the region.<sup>[8]</sup>

About 35% of women are malnourished in India which accounts for the highest in the region. Women

empowerment indicators including female literacy rate is 92% in Sri Lanka and 99% in Maldives and 24% in Afghanistan. Other indicators like age at marriage and child birth, spacing and number of pregnancies also show wide variation.<sup>[9]</sup>

### 5. *Is there a panacea?*

Despite much improvement, the overall health status of South Asian population remains dismal. Many feel that this low status is because of the geographical region's unique characteristics and low human, material and financial resources. But if one looks closer, it will become evident that in spite of all hurdles there are a few countries whose quality of living standards and health indices are comparable even with the most developed countries of the world. Sri Lanka is one such country worth mentioning. Similar finding can be recognized within a country itself. Kerala, a small state in South India is a similar place whose health indices, human developmental index and standard of living is much higher than the national standards and even many developed countries.

#### 5.1 *The Sri Lanka model of development and health care*

MMR of Sri Lanka is 30 per 1 lakh live births, under-5 mortality 10, IMR 8 and NMR 5 per 1000 live births.<sup>[1, 3]</sup> The success has not been attained in a single day. Soon after independence Sri Lanka invested in health and education recognizing the importance of these parameters in socio-economic development. The female literacy rate is 92% contributing much to women empowerment. Gender and social equality was maintained in highest standards. More than half of total work force is contributed by women. Introduction of land reforms was a major stepping stone ending feudal land holdings and contributing to promote social and

economic equity. Sri Lanka focused mainly on primary care and especially in maternal and child health. They formulated a strong multilayered health system with adequate provision of basic services at community level. Thus it is clear that any investment in education and health care will provide a framework for human development.<sup>[10, 11]</sup>

#### 5.2 *The Kerala model of development and health care*

Kerala maintains a sex ratio of 1124 females per 1000 males, 91% households having sanitation facilities, 93% female literacy, total fertility rate(children per woman) 1.9, 93% of mothers receiving at least 4 antenatal checkups, 99% institutional delivery and high immunization coverage. Kerala's Under 5 mortality rate is 7, IMR 6 and MMR 4 per 1000 live birth.<sup>[12]</sup> Kerala's high standard and quality of living (comparable to US or Europe) at very low per capita income which is only 1/80th of US citizens' per capita income is nearly impossible as per the standard economic theory (figure 5).

Land reforms, decentralization of financial resources to grass root level, effective public distribution system, influence of progressive and social reform groups and their leaders, the Christian missionaries were some factors which provided a basis for socio-economic equity. High female literacy rate along with apt health seeking behavior is another major contributing factor for high health standards. Kerala's strength is its effective public health system with sub-centers, primary health centers, community health center, district hospitals and medical college hospitals at primary, secondary and tertiary levels. Along with large number of private health institutions, this model provides universal and affordable access to health care to all sections of population.<sup>[13, 14]</sup>

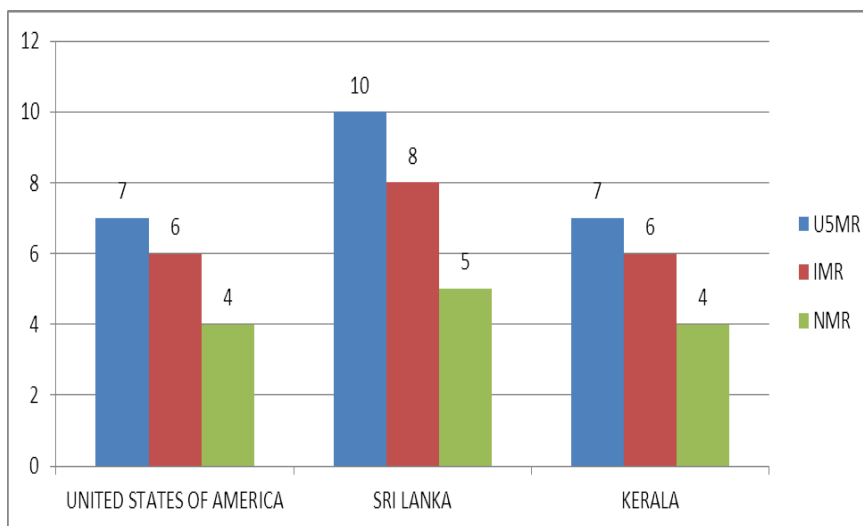


Figure 5: Child health status (per 1000 live births) comparing USA, Sri Lanka and Kerala.

## 6. CONCLUSION

Analysis of various reports from international agencies clearly underscore that the health and social status of a

population can be improved even in low income nations. The lessons learned from these countries may be replicated in other low performing countries. The health

of a population is not determined by an isolated parameter. It has to be noted that many interrelated factors are involved in determining health status of a country. A health status comparable to developed world can surely be achieved in this region of world by an integrated development of all these factors.

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