



Health Inequities and Investing in the Early Life Years: Lessons to reach to Poor and Vulnerable in Nepal

Corresponding Author:

Prof. Nastu P Sharma,
Prof of Community Medicine, School of Medical Sciences, 798 - Nepal

Submitting Author:

Prof. Nastu P Sharma,
Prof of Community Medicine, School of Medical Sciences, 798 - Nepal

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Author(s): Sharma N P

Abstract

It has clearly been proven in various studies that the poor suffer more than the rich in the matters of mortality, fertility, malnutrition, and morbidity, but it is the size of the gap between the rich and poor, which has caught the attention of policy makers and development agencies. Every year more than half a million maternal deaths and around four million prenatal deaths occur in low –and middle- income countries, mostly among the poorest groups within these countries. This review article high lights about need for robust health system performance in developing countries to reduce health inequalities particularly to reach to poor and vulnerables.

Introduction

It has clearly been proven in various studies that the poor suffer more than the rich in the matters of mortality, fertility, malnutrition, and morbidity, but it is the size of the gap between the rich and poor, which has caught the attention of policy makers and development agencies.

The sad reality is that in many instances effective health interventions for the mother and child are either not available, or are so poor in quality that they are ineffective. This is one of the examples for the need of a robust functioning health system with equitable access for good results in health care [1,2,5].

Apart from assistance for many other agencies, as an example, the World Bank alone has provided assistance in Maternal and Child Health (MCH) over 30 years and has contributed more than \$3 billion to these issues. In many countries in East Asia and Latin America, fertility rates have declined rapidly. A number of countries in Europe and Central Asia have low and even negative population growth rates. Life expectancy has increased dramatically in many countries, as has child survival. Some countries, including Nepal have been able to reduce child and maternal mortality rates. Despite important gains in population stabilization and improved maternal–child health, there are still major unfinished agendas in

[2,3,4]:

* High maternal mortality and morbidity, unwanted pregnancies and women's poor health (Nearly 500,000 women die every year from pregnancy-related causes. For every woman who dies, another 15-30 suffers a debilitating injury, often with life-long consequences. There are approximately 75 million unplanned pregnancies a year, a third of which results in unsafe abortion).

* Gaps in sexual and reproductive health care (which account for nearly one-fifth of the worldwide burden of illness and premature death, and one-third of the illness and death among the women of reproductive age; maternal mortality is the leading cause of death among women age 15-44).

* Demand for contraception (which is growing, and an estimated 120 million women want to space or limit further childbearing but lack access to family planning).

* Gender and financial inequality (women are disproportionately affected by ill health and poor education)

* Adolescent health and development needs (which are growing as the largest –ever cohort enter their childbearing age).

Review

What about Equity?

As shown in the figure 1, reported from different studies, the gap between the poor and the rich in infant mortality rate (IMR) is consistently large in every region where data is available. The gap between the rich and the poor is evident, not only in measures such as IMR, and under-five mortality; it extends to measures of malnutrition, such as stunting and micronutrient deficiencies, as fertility outcomes. This disparity of health gains in the past, between richer and poorer sections of population in many developing countries, despite of huge financial input from internal and external sources has helped policymakers and planners to look for a newer approach and strategy to maximize health benefits for those in need. The recent efforts have been, the state playing the stewardship role to involve members of civil society and

partnership with non-state players to provide equitable and affordable quality health services to all citizens, irrespective of their income status [3,4,5].

Figure-1 Infant Mortality Rates among Lowest and Highest 20% of the Population in 56 Low- and Middle-Income Countries

Where health systems are poor and populations, consequently lack appropriate care, a much higher proportion of pregnancies can result in complications, illness, permanent disability, or death of the mother and child. The experience of Sri Lanka shows how this can be averted. In the 1950s, estimates indicated that Sri Lanka's maternal mortality ratio was 500 to 600 per 100,000 live births. By 2009, it had plummeted to 30, and skilled practitioners were attending 97 percent of births. This was an outcome of continued, dedicated efforts by the government to extend health services, including essential maternal health care, equitably. The success of Sri Lanka is related to maternal health specifically, but it could not have been achieved without building a robust, equitable health system overall. It has pursued its goal of building a system accessible to all in many different ways: it has purposely located facilities in rural areas, made health care universally free, provided transportation networks, and strengthened referral systems. In developing human resources, it has paid particular attention to midwifery. Other basic attributes of the Sri Lankan system have been making good use of information for monitoring and planning, improving the quality of care, and targeting underserved population [6,7].

Along with the infectious diseases, maternal and neonatal conditions account for a substantial part of the health gap between the rich and the poor countries; for example, more than 99 percent of maternal deaths occur in the developing world. This differential represents the largest single disparity in public health statistics between low-income and high-income countries. Overall, the average lifetime risk of maternal death is 1 in 4,000 in high-income countries, 1 in 61 in middle-income countries, and 1 in 17 in the lowest-income countries [5,8].

Death rates during the neonatal period (from birth to 28 days old) also reveal vast differences between the rich and the poor countries. Only one percent of all neonatal deaths occur in high-income countries, where the neonatal mortality rate averages 4 per 1,000 live births. In low-income countries, the average is about 33 per 1,000 live births. The majority of neonatal deaths occur in South Asia because of its sizable population; however, 20 of the countries with the highest neonatal mortality rates are in Sub-Saharan Africa.

International agreements have recognized the

importance of reducing maternal and child mortality in low- and middle-income countries. Indeed, two of the eight Millennium Development Goals (MDGs) address these issues: the fourth goal calls for reducing mortality, among children under five by two-thirds and the fifth calls for reducing the maternal mortality ratio by three-fourths, both by 2015. The neonatal deaths account for 40 percent of all deaths of children under five, that the first week of life is when 75 percent of these neonatal deaths occur, and that 50 percent of maternal deaths occur in the first week after childbirth [3,5,8].

The maternal and infant mortality rates in a particular country may reveal more about the state of its health system, than any other figures. Achieving low maternal and infant mortality rates requires an integrated and well-functioning health care delivery system that reaches communities with education and counseling, helps people avoid unwanted pregnancies, promotes good nutrition, screens for risks, assists healthy births, and responds to obstetric emergencies effectively and equitably.

As shown in figure 2, coverage rates of almost all the public health interventions for mother and children are relatively higher for the richer section of population, as compared to the poorer 20 percent. Immediately, one would ask why this does happen, despite all our efforts to reach to targeted groups of population (i.e. lowest 20% of population). As we also know that most maternal deaths and disabilities are preventable, and the interventions required to prevent them are known. So what are the barriers that keep women and children from utilizing the interventions? Poor health sector performance is one reason: lack of trained personnel, poor deployment of personnel, ineffective referral, substandard treatment at referral centers, lack of suitably equipped transport facility, lack of medicines and equipment, poor coordination between state and non-state partners, lack of good governance, and so on. Economists refer to them as supply-side-barriers. Economist also pay attention to demand-side factors that determine, whether or not a mother utilizes appropriate preventive interventions, and, in the event of a life-threatening emergency, whether or not she and her family and community recognize and seek appropriate care. These are known as demand-side barriers, which operate at the individual, household, and community levels. These demand side barriers happen to be the major hurdles in utilization of targeted health services in most of the developing countries, which can be addressed through well designed behavior changed communication strategies (BCC) [4,5,6,9].

Figure-2

USE OF BASIC MATERNAL AND CHILD HEALTH SERVICES

Coverage Rates among Lowest and Highest 20% of the Population, 56 Low- and Middle Income Countries

The risks that children and youth face vary greatly, among regions and countries. Moreover, the local economic and cultural conditions of a country may determine its understanding of issues, concerning childhood, adolescence and youth. Thus, there is the need to respond with tailor-made approaches, without predefined packages from the central authorities.

Having recognized all these needs and the inequities, it can be suggested that there are areas where preventive policies appear key to breaking the cycle of poverty, as well as to achieving several Millennium Development Goals (MDGs), particularly on health, education, equal opportunities for women for their empowerment, and youth employment and social inclusion. Investing in early years can play instrumental role in this approach, particularly to narrow the gap between the rich and the poor in the areas of social service utilization, human-social capital buildings and improving social and welfare indicators, thus contributing balanced economic growth, countries productivity and poverty reductions in reality [5,7,9].

Investing In Early years

Interventions during pregnancy, around birth and in the early life years, not only produce large and immediate benefits by reducing the risk of adverse outcomes in the short term, but also create the conditions for improved outcomes and more effective interventions at subsequent stages. For example, chances of school enrollment are increased, and risk of vertical transmission of HIV/AIDS is reduced. It is at this stage that the richer and poorer women during pregnancy, girl and boy during childhood are likely to be treated, either preferentially or with discriminations. Moreover, early interventions are the most effective in improving equity and breaking the poverty cycle because the disparity of vulnerabilities, risks, and adverse outcomes, between the poor and the better off is greater among infants and young children, than at older ages [10,11].

Low-income countries need to increase the efficiency and equity of all public spending, including health spending. Given budget constraints and difficulties in generating additional fiscal space, low-income countries are likely to have a larger and more equitable impact on health outcomes, if they select a very basic universal package of public and merit goods, including some treatment services that have been proven effective in advancing toward the Millennium Development Goals. The financing of other interventions should be targeted. Studies of equity

show large imbalances in the benefit incidence of public spending on health. So, low-income countries, like ours, must improve their targeting of expenditures to those interventions that have the greatest marginal impact on the poor. Low-income countries like Nepal also need to do a better job in purchasing services that target to invest in the early life years. Whether this job involves decentralization, contracting in or out, or develop efficiency-based provider, payment incentives and systems, we need to get better value for the money spent. Similarly, promoting public private partnerships is necessary to increase access, coverage, quality and use of services, but their role in provision of equitable and affordable health care needs to be clarified. There is a need to initiate discussions to develop a policy on the respective roles of the state and the private/NGO sector in the health sector, in most of the developing countries in South Asia, including Nepal [4,5,6,10,11].

The role of international development agencies in health, such as the development Banks is to maintain and increase its support to strategies, programs and interventions that have been proven effective in preventing and mitigating risks, during the earliest years of life. Within these, more attention should be paid to areas that appear key to the achievement of the MDGs, which require scaling up of maternal nutrition, child health, early child development linked to early support to nutrition and parenting skills, or have been relatively neglected areas of essential newborn care, prevention of domestic violence, and children's environmental health.

Ultimately investing in the early years is key to the achievement of the MDGs 2 (Achieve universal primary education), 4 (Reduce child mortality), 5 (Improve maternal health), 6 (Combat HIV/AIDS, malaria and other diseases) and contributes to the achievement of MDG 1 (Eradicate extreme poverty and hunger) and 3 (Promote gender equality and empower women).

Discussion

Nepal's Health Sector and lessons learned to reach Poor and Vulnerable

In Nepal, maternal, newborn, and child health was prioritized, starting in the 2004 after Health SWAp. The initial focus was on a selective child health and Family planning package; immunization, vitamin-A supplementation, oral rehydration solution use and contraceptive use are at high coverage now. Nepal has made progress in scaling up skilled birth

attendance, now reaching about three-quarters of the population, but has a major equity gap with only 9% of the poorest quintile accessing skilled care, compared with 59 % of the richest quintile [10,11,12].

Despite the conflict and the instable political situation, the health sector made significant progress with, infant, under-five and maternal mortality falling dramatically over the last 10-15 years (Table 1). NHSP-1 has delivered well over its target. Since 2000, skilled attendance at births has increased from 13% to 29% of births, contraceptive prevalence rate has risen from 35% to 46% (modern methods) and the total fertility rate has declined from 4.1 to 2.9 per 1000 live births. Though these achievements are much below, as compared to middle and high income countries and should not be a matter of complacency [10,12].

Gains over the last six years(2004-2010) are due to: (a) Increasing effectiveness of the total health sector wide approach (SWAp) ; (b) increased access to, and quality of public health interventions (confirmed by independent reviews); (c) gradual improvements in other non-health determinants (expansion of water, roads and education services); and (d) the gradual evolution, since 2007, of free health care and maternal incentives in the public health sector to cover the majority of the country including rural areas [12].

Although progress has been made, enormous challenges remain:

The MDG nutrition target is off-track. Over one third of children under-five are chronically undernourished (low weight for age) and the proportion of acutely undernourished (wasted) increased over the last decade to 13%;

The HIV/AIDS MDG is unlikely to be met. Nepal has the highest HIV prevalence (0.49%) in South Asia but, in large areas of the country, HIV/AIDS programs are poorly implemented and ineffective;

Progress in health gains is not equal. Disparities in child health have decreased, but are widening in respect to maternal health utilization care and family planning use, and travel times to health facilities are worse for the poor and socially excluded.

These challenge will be addressed through a series of wider stakeholders consultations, which has identified selected interventions for essential health care services in its upcoming Nepal Health Sector Program second phase, starting from July 2010 (NHSP2). These interventions will be delivered using strong district-based network of health facilities with community health workers in villages, supervised by extension workers in health posts, who are in turn affiliated to district hospitals. Community-case management of pneumonia or diarrhea or MCH counseling is provided by community health workers,

and the government is presently working with partners to test the addition of neonatal sepsis case management.

Despite targeted policies and programs, health outcomes for women, excluded social groups and people in remote regions are significantly worse than for other groups. While improving physical access to health facilities in remote, under-served regions is necessary, other issues also need to be tackled. These include: poor quality of care, insufficient supply of medicine and equipment, inadequate and lack of diversity in staffing, discriminatory behavior by health workers and weak accountability. Lessons learned from other successful countries to make primary health services universally accessible, irrespective of age, gender, cast and religion, such as in Thailand and Sri Lanka, there is the need for Nepal to have a nationally agreed package of prioritized and phased public health care services that all stakeholders will require commitment to implementing, through a pluralistic and robust health system, reaching right down to community levels. Table 2 below presents summary of the nationally agreed EHCS package, which are drawn from first and second national health sector program- implementation plans.

Conclusion(s)

Health outcomes have improved in Nepal, but progress at the national level masks worsening disparities across wealth quintiles, social groups and geographic locations. The poor suffer higher rates of mortality and morbidity, yet the richest fifth spend 25 times more than what the poorest spend on health care utilization. While the total fertility rate has declined, it remains high for Muslims, Dalits and poor women. Brahmans and Newars are benefiting more than Muslims and Tarai Janajatis in receiving antenatal care by a Skilled Birth Attendant (SBA). The under-five mortality rates are more than twice as high for the poorest compared to the wealthiest. The childhood mortality rates are highest for Dalits. There is also a concern with the equity of declines in stunting with nearly one third of children from the poorest quintile severely stunted, as compared to only one-tenth of the wealthiest. The association between region and wealth has important implications for prioritizing allocation of resources. The mid and far-western development regions are the poorest and a greater effort needs to be made, towards targeted support to these regions.

Three principles of action for the success of Nepal's

health sector program to address inequity and social inclusion could be:

1. Improve the conditions of daily life by implementing gender equality and social inclusion strategy across the health sector program, and track the progress by measuring disaggregated information. Improve the well-being of girls and women and the circumstances in which their children are born, put major emphasis on early child development and education for girls and boys, improve living and working conditions and create social protection policy supportive of all [4,11].
2. Work with executive and legislative branch of the Constitutional authorities, develop, implement, and monitor policies and plans to tackle the inequitable distribution of power, money, and resources – the structural drivers of those conditions of daily life – nationally, and locally. In order to address health inequities, and inequitable conditions of daily living, it is necessary to address inequities – such as those between men and women and the poor and the rich – in the way society is organized [11,12].
3. Measure the problem, evaluate action, expand the knowledge base for evidence based policy and strategies, develop health workforce that is trained in the social determinants of health, and raise public awareness about the social determinants of health [11,14,15].

References

1. Alan DL, Begg S, Bos E; Demographic and Epidemiological characteristics of major rejoins, 1990-2001; In *Global Burden of Disease and Risk Factors*, 17-44: New York: Oxford University Press.
2. Ensor T, Cooper S; *Overcoming Barriers to Health Service Access*, 2004; *Influencing the demand side: Health Policy and Planning* : 19(2):69-79
3. White AL, Merrick TW, Yazbeck AS; *Reproductive Health the missing Millennium Development Goal*, 2006; the World Bank
4. Gottret P, Schieber G; *Health Financing Revisited , A practioner's guide*, 2006; Washington,DC; The World Bank
5. Gwatkin D, Wagstaff A, Yazbeck A; *Reaching the poor with Health, Nutrition, and Population Services*, 2005; Washington DC: International Bank for Reconstruction and Development.
6. Loevinsohn B, Harding A; *Buying Results? Contracting for Health Service Delivery in Developing Countries*, 2005; *Lancet*; 366: 676-81.
7. Pathmanathan I, Liljestrand J et.al ; *Investing in Maternal Health: Learning from Malaysia and Sri Lanka*, 2003; Human Development Network,

Washington, DC; The World Bank

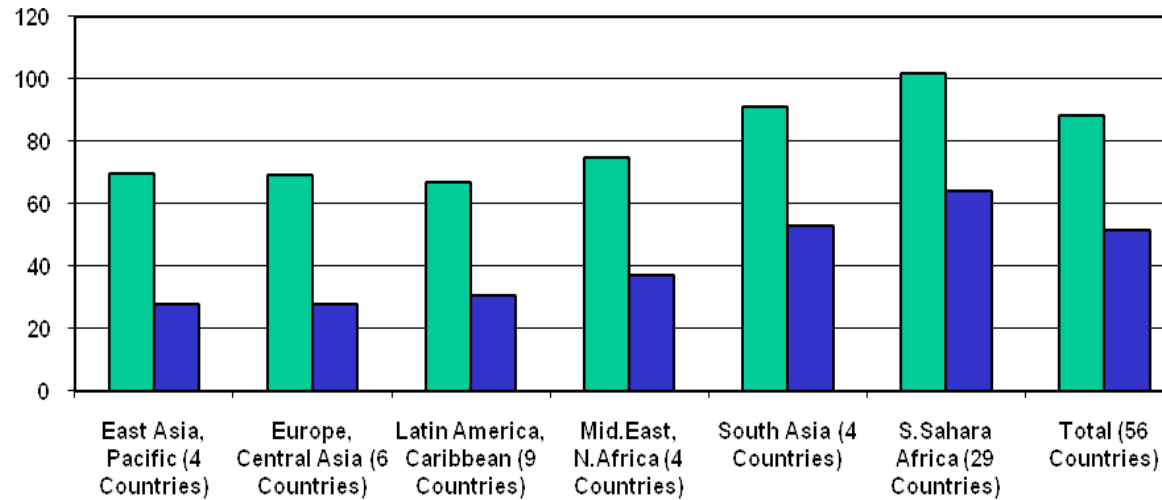
8. Roberts M J et al ; *Getting Health Reform Right: A guide to Improving Performance and Equity*, 2004; Oxford: Oxford University Press.
9. *Healthy Development 2007: The World Bank Strategy for Health, Nutrition and Population Results*.
10. Rohde J, Cousens S et al; *30 years after Alma-Ata: has primary health care worked in countries?* 2008;*The Lancet*;9642 (372):950-61.
11. CSDH 2008; *Closing the gap in generation: health equity through action on the social determinants of health*. Final report, WHO, Geneva
12. *Nepal Health Sector Program –Implementation Plan 2010-2015*, GON, Ministry of Health and Population 2010.
13. *Nepal Demographic and Health Survey 2006*
14. *Rural Household Survey Report 2009*, NFHP.
15. www.dcp2.org

Illustrations

Illustration 1

Figure 1

Figure-1 INFANT MORTALITY RATES among Lowest and Highest 20% of the Population in 56 Low- and Middle-Income Countries



■ **Lowest 20% of Population** ■ **Highest 20% of Population**

Source: Adapted from WB 2006 *Reproductive Health the Missing Millennium Development Goal*

Illustration 2

Figure 2

Figure-2
USE OF BASIC MATERNAL AND CHILD HEALTH SERVICES
Coverage Rates among Lowest and Highest 20% of the Population,
56 Low- and Middle Income Countries

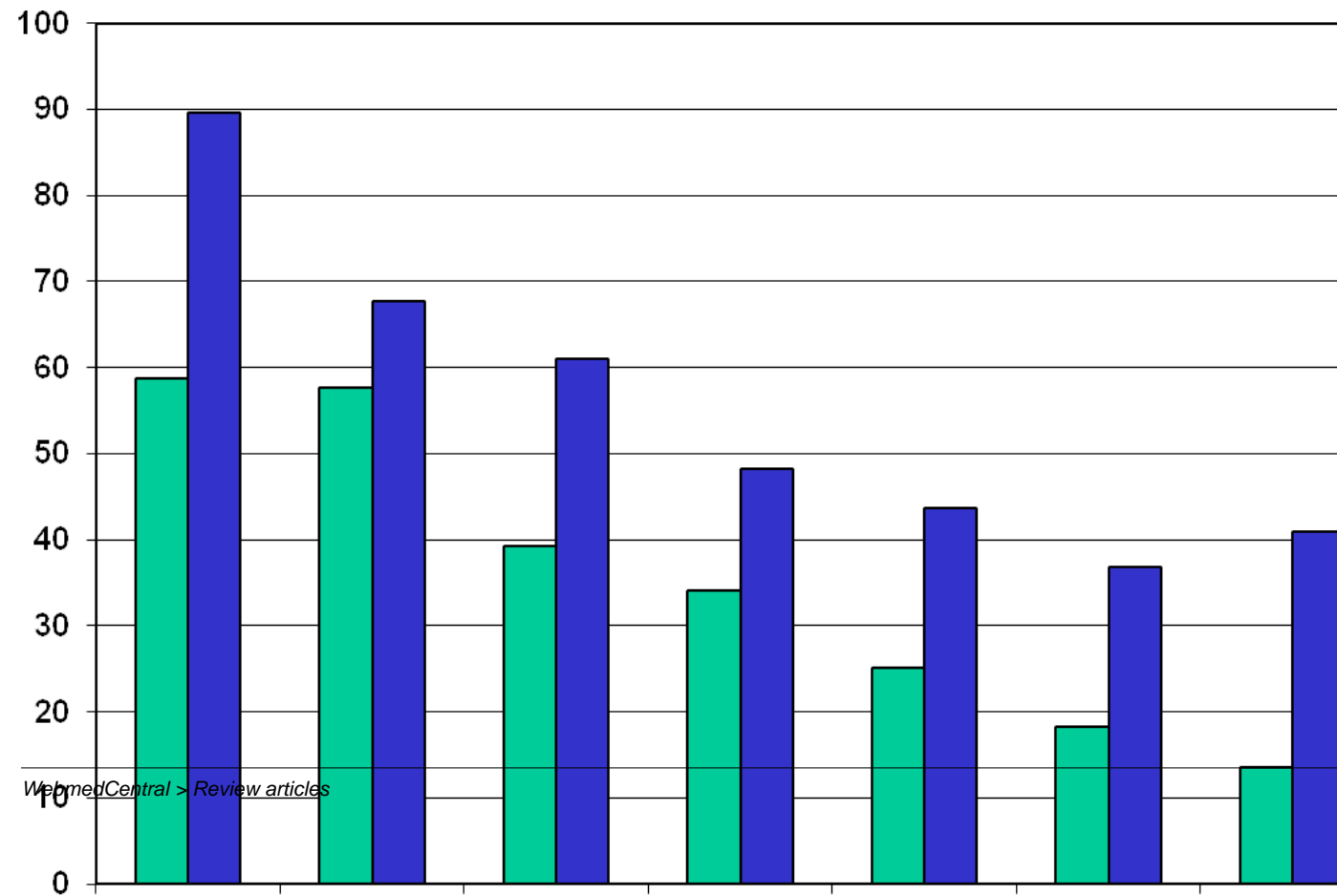


Illustration 3

Table 1 and Table 2

Table 1: Declines in mortality and improvement in service coverage in recent years

	Per	1991-94	2001-05	2009 -10
Infant mortality	1,000 live births	79	48	41
Under -5 mortality	1,000 live births	118	61	50
Maternal mortality	100,000 live births	539 (1996)	281 (2006)	229 (2009)
Total Fertility	1000 live births	4.3	3.1	2.9
Immunization Coverage	percentage	60	81	88
Deliveries by SBA	percentage	9	19	29

Source- NDHS 2006; and Nepal Rural Health Survey 2009.

Table: 2 prioritized health care services included in NHSP-1 and NHSP-2

EHCS elements	NHSP-1 Existing EHCS services 2004-2010	Additional services under NHSP-2 2010-2015
1. Reproductive Health	1.1 Family planning 1.2 Safe motherhood including newborn care (free institutional delivery nationwide for all from Jan 2010)	1.3 Adolescent friendly services 1.4 Prevention and repair of prolapsed uterus (referral hospital and tertiary hospitals)

3. Communicable diseases	3.1 Malaria control 3.2 Kala-azar control 3.3 Japanese Encephalitic control 3.4 Prevention of snakebites and rabies control 3.5 Tuberculosis control 3.6 Leprosy control 3.7 HIV/AIDS/STDs control	3.8 Filariasis control
4. Non-communicable diseases (NCD)		4.1 Mental health program (community based) 4.2 Health education/behavior change communication for non-communicable diseases
5. Oral health care		5.1 Promotion and prevention
6. Eye care		6.1 Promotion and prevention 6.2 Examination, surgery and therapy
7. Rehabilitation of disabled		7.1 Promotion and prevention 7.2 Rehabilitation, surgery and therapy
8. Environmental health		8.1 Promotion and prevention (water, air quality, sanitation, hygiene, waste disposal, etc.)
9. Curative	9.1 Out patient care district level and below	9.4 Inpatient care at district hospital (free for all)

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