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Health Chapter 2014

Pakistan is a signatory of the Millennium Declaration which obligates it to achieve the Millennium Development Goals (MDGs) by 2015. These goals represent an agreement of world leaders to work towards eradicating poverty, hunger, disease, illiteracy, environmental degradation and discrimination against women. Health forms an important component of the development goals as out of the eight core MDGs, three are directly health related. Studies reveal that many developing countries will not reach the MDG targets without effective policy initiatives and expenditure of additional resources.

For Pakistan to make headway in the health sector, it is important that it achieves key MDGs namely Goal 1: Eradicate extreme poverty and hunger, Goal 4: Reduce child mortality, Goal 5: Improve maternal health, Goal 6: Combat HIV/AIDS, malaria and other infectious diseases and Goal 7: Ensure environmental sustainability. So far, Pakistan has failed to formulate a holistic and integrated approach that can expedite the country's progress towards achieving these goals. Health issues in Pakistan are intertwined with other problems afflicting the country. The current political and economic scenario has impeded Pakistan's progress towards the health related MDGs. Slow economic growth, a mounting energy crisis; military operation against militants and humanitarian disasters brought about by two years of consecutive flooding severely hampered government efforts to achieve the MDG 2015 targets.

One of the most alarming indications of the health crisis facing children is the increase in Polio (across FATA and Khyber Pakhtunkhwa), Measles and malnutrition (across Tharparkar, Sindh). It is projected that in the absence of rigorous policy and administrative initiatives, Pakistan could face a Polio epidemic along with an increase in malnutrition and stunting rates given the dismal state of the economy. This chapter will provide an overview of the health sector in Pakistan while specifically focusing on children's health in the country. In this context, the chapter will highlight the recent developments including the 2014-2015 budgetary allocations and impact of the Polio and Measles diseases on child health in Pakistan. Furthermore, the country's progress towards the attainment of the health related MDGs will be highlighted.

Budget Allocation

Punjab

The Punjab government has allocated an estimated Rs. 121.80 billion for the health budget along with an additional Rs. 2 billion so as to achieve the Millennium Development Goals (MDG's) 2015.¹ Moreover, Rs 600 million have been reserved for dialysis facilities for poor kidney patients, Rs 8.25 billion for free treatment and medicines for the poor and destitute in public sector hospitals across the province and Rs.47.44 billion will be spent on treatment facility and

¹ Ahmed, Salim. *Rs. 2 Billion Allocated for Achieving MDG's*. Pakistan Observer. 21 September 2014. Web. www.pakobserver.net/detailnews.asp?id=252919

up gradation of hospitals during current financial year. Three thousand new job opportunities have also been created for nurses in public hospitals along with the regularization of 52,000 lady health workers.²

The importance of provision of these facilities at the primary level i.e. BHUs and RHCs cannot be over emphasized. The province of Punjab has 2,455 BHUs and 293 RHCs in the public sector. These centers somehow were not delivering health services at the optimal level due to many reasons e.g. staff absenteeism, lack of facilities both in terms of civil work and equipments at these centers. In fact no serious efforts have been made to maintain these centers as per yardstick over the last 20-25 years. Taking cognizance of the situation, Government of the Punjab has taken the initiative to launch the Health Sector Reforms Program. This initiative will be a stepping stone towards achieving the Millennium Development Goals by 2015³.

Sindh:

For the year 2014-2015, the Sindh government has allocated a total of Rs. 43.58 billion non salary budget for its health department, while the allocation for the 2014-15 health sector Annual Development Program (ADP) has been set at Rs. 13.5 billion.⁴ Despite this gradual increase in the health budget, efforts needed to strengthen the health sector in Sindh have been stagnant. The province has the highest rate of undernourished children (40 per cent) while 73 per cent children are anemic and only 70 per cent children below the age of one year are immunized for measles⁵.

On the legislation front, Sindh had introduced a number of bills in the provincial assembly in the year 2014 but failed to enact the rules of business or enforce them effectively. Moreover, many bills passed in the year 2013 are pending enforcement such as the Sindh HIV and AIDS Control Treatment and Protection Bill 2013, the Sindh Newborn Screening Bill 2013 and the Sindh Prevention and Control of Thalassemia Bill 2013. Some of the pertinent legislation passed in 2014 includes the Sindh Epidemic Disease Bill 2014, Sindh Healthcare Commission Bill 2014, the Sindh Tuberculosis Notification Bill 2014 and so on.⁶

The new health schemes include strengthening of Thalassemia control in Sindh costing some Rs33 million over the next two years. Rs13.835 million has been allocated for the rescue ambulatory services program including a call centre in Sindh; the estimated cost of which is Rs1.486 billion. The government has also allocated Rs. 500 million for the establishment of an

² Ibid

³ *Punjab Health Sector Reforms Program*. Punjab Government. 2014. Web.

<http://www.phsrp.punjab.gov.pk/phsrp.asp>

⁴ Akhter, Shahnawaz. *Rs14 bn Sindh Deficit Budget Announced*. The News. 14 June 2014. Web.

<http://www.thenews.com.pk/Todays-News-13-30931-Rs14-bn-Sindh-deficit-budget-announced>

⁵ *Sindh Lagging Behind in Social and Health Indicators: Report*. Dawn. 6 October 2012. Web.

<http://dawn.com/2012/10/06/sindh-lagging-behind-in-social-and-health-indicators-report/>

⁶ Mansoor, Hasan. *Thar Deaths, Scary Diseases Overshadow Health Legislation in 2014*. Dawn News. 12 January 2015. Web.

<http://www.dawn.com/news/1156412/thar-deaths-scary-diseases-overshadow-health-legislation-in-2014>

integrated health management information system. Approximately, Rs.35 million has been allocated for the provincial child survival program. In the case of ongoing preventive side schemes, Rs.1 billion will be spent under the chief minister's initiative for hepatitis prevention and control program, while Rs40 million as operational support for expanded program on immunization, Rs185 million each for the provincial tuberculosis program and extension of the malaria control program for rollback malaria initiative.⁷

Khyber Pakhtunkhwa:

The government of Khyber Pakhtunkhwa has allocated Rs 25.23 billion for the health sector in the upcoming financial year; a 10% increase from last year's budget. The government plans to allocate Rs8 billion for 67 ongoing and 26 new projects in the province. Numerous insulin banks in the province were also in the budget agenda and received an allocation of Rs. 25 million, while Rs. 100 million has been set aside to initiate mobile medical services in remote areas. Moreover, the Endowment Fund has been allocated Rs.100 million; provision of emergency drugs for poor patients Rs.725 million, creation of posts in the project/schemes due for completion during the next fiscal year Rs.200 million, the Red Crescent Society Rs. 2.5 million, LRH's Cardiology Unit Rs.40 million, Fatimid Foundation Rs. 5 million and the Paraplegic Centre, Hayatabad Rs. 60 million.⁸

The Health Regulatory Authority will get Rs. 20 million in grant-in-aid, Frontier Foundation Rs. 20 million, Khyber Medical University Peshawar Rs. 61 million, free dialysis services Rs. 60 million, free angiography/angioplasty surgery Rs. 100 million, Electrophysiology Department at Hayatabad Medical Complex Rs. 20 million, Hamza Foundation Peshawar Rs. 5 million and Polio Eradication Programme Rs. 270 million. Also, with the support of the World Bank, health programmes worth Rs1.5 billion will be initiated in Kohistan, Battagram, Torghar, Buner, Lower Dir and DI Khan.⁹

The status of health indicators in the Khyber Pakhtunkhwa deteriorated due to a number of overriding factors that include but are not limited to terrorism, natural disasters, sectarian violence and so on. The incidence of Polio increased in 2014 in areas around Malakand division, North Waziristan and various tribal agencies outlying the province; which sparked fears that the disease might spread into the province. Also, with the support of the World Bank, health programmes worth Rs1.5 billion will be initiated in Kohistan, Battagram, Torghar, Buner, Lower Dir and DI Khan

⁷ See Supra note 4

⁸ Zia, Asad. *A Slice of the Pie: Health Sector gets 10% Increase in Allocation*. Express Tribune. 15 June 2014. Web. <http://tribune.com.pk/story/722043/a-slice-of-the-pie-health-sector-gets-10-increase-in-allocation/>

⁹ Ibid

Balochistan:

The Balochistan government has allocated Rs 14.148 billion for non-development expenditures of health sector while Rs 1.214 billion were allocated for provision of free of cost medicines to patients at government-run hospitals across the province.¹⁰ Balochistan has always received a miniscule share of the total federal budget even though it is the largest province by size. The status of the health sector has remained stagnant or further deteriorated because of the abysmal law and order situation over the years coupled with insufficient health facilities, shortage of trained nurses and other medical staff, lack of medicines and health care centers especially in far flung areas of the province. However, the provincial government passed the Balochistan Protection and Promotion of Breastfeeding and Child Nutrition Bill 2014 on January 18th 2014 but has yet to formulate the Rules of Business.

Millennium Development Goals

Goal 1: Alleviating Hunger

As per UNICEF's definition, individuals are undernourished when they can longer maintain natural bodily capacities such as growth, resisting infections, recovering from disease, learning and physical work, pregnancy and lactation in women. Lack of optimal breastfeeding/ responsive complementary breastfeeding of infants and young children, along with illnesses such as diarrhea, pneumonia, malaria and HIV/AIDS are major causes of under nutrition.¹¹ According to the Millennium Development Goals Report 2014, the absolute number of people living in extreme poverty fell from 1.9 billion in 1990 to 1.2 billion in 2010. One third of the world's 1.2 billion extreme poor lived in India alone. China ranks second and was home to about 13 per cent of the global extreme poor while Nigeria (9 per cent), Bangladesh (5 per cent) and the Democratic Republic of the Congo (5 per cent) followed. A total of 842 million people, or about one in eight people in the world, were estimated to be suffering from chronic hunger in 2011–2013; a vast majority of those people (827 million) resided in developing regions.

Food insecurity derives from the lack of access to basic forms of nutrition needed to sustain ones physical and mental well being. The situation arises especially in developing countries where allocation of resources is skewed to favor pluralistic policies rather grass root development initiatives. According to a World Bank report of 2013, 60 percent of the population in Pakistan lives under the poverty line due to a myriad of socio-economic factors such as unemployment,

¹⁰ *Balochistan Budget at a Glance*. Balochistan Point. 2014. Web.

<http://thebalochistanpoint.com/balochistan-budget-at-a-glance/>

¹¹ *Nutrition, Survival and Development*. UNICEF. 2014. Web.

http://www.unicef.org/progressforchildren/2006n4/index_undernutrition.html

inflation, political instability and lack of security to name a few. An SDPI study conducted in 2014 showed that only 27.1 percent population comes under the category of adequate and rest of population come under the categories of borderline (14.5%), moderate deficit (25.7%), very deficit (15.2%) and severely deficit (17.4%). Baluchistan, Sindh, KPK, FATA and AJK were identified as the most food insecure regions. Two thirds of these new severely food insecure people live in rural areas.

It is surprising to note that Pakistan is regarded as one of the major food producing countries; 5th largest producer of milk, 6th largest producer of apricots and about 25 million metric tons of wheat. At a international development conference held in Islamabad, Secretary for the ministry of National Food Security and Research (NFCR), Seerat Asghar, that the budget for NFCR is merely Rs1 billion for the year 2014-15, which clearly shows that food security is not a priority of the government.¹²

A burgeoning population coupled with lack of resources to provide nourishment results in an increase in the wasting, stunting and underweight rates among children. According to the MDG 2014 report, an estimated 99 million children under age five in the world were underweight in 2012. This represented 15 per cent of all children under five, or approximately one in seven. The number of underweight children fell by 38 per cent from an estimated 160 million children in 1990. Underweight prevalence in Southern Asia was 50 percent of the total global estimate but has decreased to 30 percent in 2014. Though it may seem as a significant decrease, the world is still far from reaching the target of dropping underweight prevalence to under 25 percent.

Given that almost one third of the world's underweight children live in Southern Asia, it is pertinent to mention that Pakistan has made no serious headway in decreasing the instances of underweight children in 2014. The last national nutrition survey was undertaken in 2011 which showed that 31.5% children are severely underweight. According to the State of Worlds Children Report 2014 by UNICEF, one third of all children under the age of five in Pakistan are underweight. These glaring statistics serve as an eye opener for the government about the dismal state of nutrition across Pakistan.

According to UNICEF, stunting prevalence globally declined from 33 per cent to 25 per cent, and the number of children affected fell from 199 million to 161 million. In 2013, about half of all stunted children lived in Asia and over one third in Africa. This meant that one in every four children under the age of five had stunted growth.¹³ Over the past decade there has been an

¹² Muhammad, Peer. *Food for Thought: 50% of Pakistanis 'food insecure', says FAO*. *Express Tribune*. 10 December 2014. Web.

<http://tribune.com.pk/story/804504/food-for-thought-50-of-pakistanis-food-insecure-says-fao/>

¹³ UNICEF Statistics. UNICEF. 2014. Web.

<http://data.unicef.org/nutrition/malnutrition>

overall increase in the prevalence of stunted children in the urban and rural areas of Pakistan. A provincial breakdown reveals that as of 2014, stunting rates in Punjab are 39.8 per cent with 32.4 per cent in urban and 42.9 in rural areas of the province while Sindh has the highest stunting rate ; 56.7 per cent with an alarming 63.3 per cent in rural and 46.1 per cent in urban areas.¹⁴

The ever growing population has slowly started to outweigh the agricultural output of the country and to date no detailed policy or developmental project has been enacted by the government to address the situation. Food insecurity is one of the leading factors that have contributed to an increase in malnutrition and stunting phenomenon among the children of Pakistan.

Goal 4: Reduce Child Mortality

Under five mortality rate:

The global rate of under-five mortality in 2012 was almost half of its 1990 rate, dropping from 90 to 48 deaths per 1000 live births. The estimated number of under-five deaths fell from about 12.6 million to 6.6 million over the same period: about 17,000 fewer children died each day in 2012 than in 1990. Currently, the world is reducing under-five mortality faster than at any other time during the past two decades. The global annual rate of reduction in under-five mortality has accelerated steadily from 1.2 per cent between 1990 and 1995 to 3.9 per cent between 2005 and 2012. However, regions such as Oceania, sub-Saharan Africa, Caucasus and Central Asia, and Southern Asia still fall short of the 2015 target.¹⁵

In Pakistan, the U5MR (Under five mortality rate) has seen a steady decline over the last decade, yet the country is far from reaching its assigned target of 52 U5MR according to the MDG's of 2015. According to latest statistics presented in the State of World's Children Report 2014, an estimated 86 babies died below the age of five per every 1000 live births in Pakistan during the year 2012. The figure comes from 409,000 babies dying below the age of five out of 4,604,000 newborns in 2012. The 8.6% rate is an improvement since 1990, when the under-five mortality rate was measured at 13.8%. For children under the age of one, the number of babies dying per a thousand births was 106 in 1990 and an improved 69 in 2012.¹⁶

The incidences of child mortality have been heavily influenced by the debilitating status of health in rural areas especially in the wake of the famine in Tharparkar district of Sindh. Lack of infrastructure, development and absence of a concrete disaster management plan has exacerbated

¹⁴ Shehzad, Rizwan. *Rising Disparity: Over 30m Malnourished in Pakistan*. Express Tribune. 31 October 2014. Web. <http://tribune.com.pk/story/783732/rising-disparity-over-30m-malnourished-in-pakistan/>

¹⁵ *The Millenium Development Goals Report 2014*. UNDP. 2014. Web. <http://www.un.org/millenniumgoals/reports.shtml>

¹⁶ *The State of World's Children Report 2014*. UNICEF. 2014. Web. <http://www.unicef.org/sowc2014/numbers/>

the situation whereby diseases such as malaria, diarrhea, pneumonia and cholera have wreaked havoc on the health of children across Pakistan.

Four-fifths of all child deaths occur in just 26 countries and half of all under-five deaths occur in just five countries: India (22%), Nigeria (13%), Pakistan (6%), Congo (6%) and China (4%).¹⁷

Table 2: Under five mortality rate (probability of dying by age 5 per 1000 live births)¹⁸					
	2013	2012	2011	2010	1990
Pakistan	86	86	88	90	122

Tharparkar Famine

Tharparkar is spread over 22,000 square kilometers with a population of about 1.5 million residing in 2,300 villages and urban settlements. Divided into six talukas namely Mithi, Islamkot, Chachro, Dihly, Diplo and Nagarparkar, the area often receives varying levels of rainfall or none at all. Rains fall from mid-June to mid-August each year but for the last ten years there have been drought like conditions in Tharparkar due to which 50 percent of the overall population migrated to barrage areas to find food and water. The other half relied on livestock farming but even that proved unfruitful as a majority of animals succumbed to various illnesses. According to various media reports and government statistics, around 546 children have died so far from malnutrition and various other illnesses. Moreover, another 40 children are still in critical condition and admitted in the Civil Hospital, Mithi.¹⁹ Other causes of death apart from malnutrition are severe pneumonia, birth asphyxia, sepsis among others. But most of all, the deaths are attributed to government negligence as no timely intervention was undertaken by the provincial health department knowing that Tharparkar is seized by drought this time of the year. The provincial government has stated they are providing relief in the form of free wheat bags of 50 kilogram's to each of the 259,945 families present in the drought- stricken area. Also, a two member commission comprised of retired judges has been formed to ascertain the facts behind the famine and inadequacies of relevant government departments to pacify the situation in a timely manner.

¹⁷ *Committing to Child Survival: A Promise Renewed*. UNICEF 2013. Web.

http://www.unicef.org/publications/files/APR_Progress_Report_2013_9_Sept_2013.pdf

¹⁸ *Mortality Rate , Under-5 (per 1000 live-births)*. World Bank 2011. Web.

http://data.worldbank.org/indicator/SH.DYN.MORT?order=wbapi_data_value_2011+wbapi_data_value+wbapi_data_value-last&sort=asc

¹⁹ *Tharparkar Drought Kills 2 Children as Toll Reaches 546*. Express Tribune. 11 December 2014. Web.

<http://tribune.com.pk/story/805202/tharparkar-drought-kills-2-children-as-toll-reaches-546/>

Pneumococcal diseases:

The annual total of childhood deaths from pneumonia decreased by 44% from 1.6 million in 2000 to 900,000 in 2013; almost 2500 child deaths per day. The highest numbers of children (174,000) die in India each year followed by Nigeria (121,000). The latest UN estimates indicate that pneumococcal disease accounts for 15% of child mortality worldwide. In Pakistan, according to the Pneumonia Fact Sheet 2014, 71,000 children die of pneumonia every year. At least 85 out of 1,000 children die under the age of five in the country due to the disease.²⁰ Child mortality is particularly high in the rural areas of Pakistan where the incidence of ARI (Acute Respiratory Infections) is reported to be around 30-35%²¹. One reason for the high ARI-related mortality is the limited access of 80% of the population of Pakistan to health facilities, especially in rural Sindh and Balochistan where government health centers are inaccessible, understaffed and lack proper infrastructure. According to Professor Dr. Iqbal Memon, approximately 0.8 million cases of pneumonia occur in Sindh annually, out of which 22,000 to 25,000 die due to lack of preventive measures or mistreatment.²²

²⁰ *Pneumonia Kills 92,000 Children Annually in Pakistan*. The News. 12 November. 2013. Web.

<http://www.thenews.com.pk/Todays-News-6-213755-Pneumonia-kills-nearly-92,000-children-in-Pakistan-every-year>

²¹ Mehnaz, Aisha. A.G. Billoo, Yasmeen, Tabinda. Nankani, Kelash. *Journal of Pakistan Medical Association*. February 1997. Web.

http://www.jpma.org.pk/full_article_text.php?article_id=4028

²² PPI. *Pneumonia Kills 72000 Children Every Year*. The News. 11 November 2014. Web.

<http://www.dailytimes.com.pk/sindh/11-Nov-2014/pneumonia-kills-72-000-children-every-year>

The Government of Pakistan decided to introduce the pneumococcal vaccine in the immunization schedule of 2011. The initiative was never undertaken due to administrative instability in the health sector in the aftermath of the 18th Amendment. In July 2012, the government decided to include pneumonia vaccination into its EPI (Expanded Program on Immunization) along with other diseases such as polio and malaria. The vaccine was to be introduced with the help of the Global Alliance for Vaccines and Immunization (GAVI) in partnership with UNICEF and the WHO. In 2013, Pakistan joined the Global New Born Action Plan and Global Action Plan for Pneumonia and Diarrhea prevention and promised to renew its commitment to the cause. Moreover, more than 480,000 children suffering from diarrhea, pneumonia and other acute respiratory infections were provided with life-saving curative treatment through the national Lady Health Worker Program.²³ In 2013, Pakistan joined the Global New Born Action Plan and Global Action Plan for Pneumonia and Diarrhea prevention and promised to renew its commitment to the cause. The instances of pneumonia have remained stagnant rather than decline owing to the fact that no proper plan was formulated to roll out the vaccines in addition to government red tape and corruption.

Proportion of fully immunized children 12-23 months

Immunization is the most successful component of preventive medicine. It is effective in preventing contagious diseases and consequently reducing child and infant mortality. Various governments in Pakistan have initiated immunization programs which became successively elaborate to include the prevention of a large number of diseases in their purview.

The Expanded Program on Immunization (EPI) was initiated in Pakistan in 1978 to reduce mortality caused by six vaccine preventable diseases: diphtheria, tetanus, pertussis, polio, measles and tuberculosis. In 2002, Hepatitis B was also included in the list and in 2012 the government included pneumonia to it as well.

Immunizations surveys reveal that 1 in every 5 children is not immunized whilst in rural areas 2 out of every 3 children are not properly immunized²⁴. The glaring statistics speak volumes of the government's apathy towards addressing this serious problem, especially after the devolution where no proper immunization programs have been formulated by provinces. According to the Pakistan Demographic and Health Survey 2012-2013, 85 percent of children have received the BCG vaccination, 79 percent the first DPT dose, and 92 percent the first polio dose (Polio 1). Coverage decreases for subsequent doses, with only 65 percent of children receiving the recommended three doses of DPT, 85 percent receiving all three doses of polio and only 61

²³ *Pakistan Annual Report 2013*. UNICEF. 2014. Web.

http://www.unicef.org/pakistan/FINAL_UNICEF_Annual_Report_2013_-_Version_11.1.pdf

²⁴ *Child Immunization in Pakistan*. USAID Policy Brief No.3. 3 February 2012. Web.
<http://resdev.org/Docs/03immoverview.pdf>

percent of children received the measles vaccine. A little over five percent of children have received no vaccinations at all.²⁵

Differentials in coverage levels show that the proportion of children fully vaccinated is lower for girls (52 percent) than boys (56 percent). It is also considerably lower for children in rural areas (48 percent) than in urban areas (66 percent). Among regions, the proportion in Balochistan has gone down to only 16 percent from 35 percent in 2006-07 while Sindh also witnessed a decline, from 37 percent in 2006-07 to 29 percent in 2012-13. The proportion of fully vaccinated children in ICT, Punjab, KPK and Gilgit Baltistan is 74, 66, 53 and 47 percent, respectively. It is notable that more than one-fifth of children (21 percent) in Balochistan are reported to have not received any vaccinations at all.

Overall, a little over half (54 percent) of children age 12-23 months are fully vaccinated with BCG, measles, and three doses of DPT and polio. There has been a seven percentage point increase in the proportion of fully vaccinated children since 2006-07 and a 19 percentage point increase since 1990-91.

Table 3: Proportion of fully immunized children 2008-09, 2010-11 and MDG target			
	2008-09²⁶	2010-11²⁷	Target²⁸
Proportion of fully immunized children	78	81	90

The table above shows that Pakistan though on its way to achieving its target albeit at a very slow pace. Although full immunization coverage of children between the ages of 12-23 months has increased from 78% in 2008-09 to 81% in 2010-11, it is still short of the MDG target for Pakistan (90% for the years 2010-11). Pakistan aspires to attain immunization coverage (all eight doses of vaccine) of at least 90% by 2015. It is pertinent that immunization programs be conducted efficiently and with a better oversight so as to eradicate any misappropriation of resources and improve service delivery. Devolution of health to the provinces presents a real opportunity to improve immunization by giving autonomy to the districts whereby local solutions to health problems can be facilitated at the grassroots level.²⁹

Polio

²⁵ *Pakistan Demographic and Health Survey 2012-2013*. National Institute of Population Studies. 2014. Web. http://www.nips.org.pk/abstract_files/Priliminary%20Report%20Final.pdf

²⁶ Ibid.

²⁷ Ibid.

²⁸ *Center for Poverty Reduction and Social Policy Development*. Pakistan Millennium Development Goals Report 2010. Government of Pakistan. 2010. Web.

http://planipolis.iiep.unesco.org/upload/Pakistan/Pakistan_MDG_2010.pdf.

²⁹ See supra note 21

Pakistan is one of the three countries in the world where polio has not been completely eradicated and the only country where prevalence of polio is actually increasing year after year. In 2012, the total number of polio cases recorded were 52 barring data from the Waziristan agencies while in 2013 the figure increased to 93 cases. The year 2014 has seen a tremendous increase in Polio cases across Pakistan where the figure for the first time in 14 years crossed the 200 mark. As of latest figures given by End Polio Pakistan, the number of cases has reached 296 as of December 31st 2014. A provincial breakdown of the cases show that 174 cases were reported from FATA, 67 from Khyber Pakhtunkhwa, 29 from Sindh, 23 from Balochistan and 3 from Punjab.³⁰ The impending endemic takes root from increasing threat by militants on polio vaccination campaigns along with parents suspicions of the vaccines administered.

As per latest data, there are 34 million children under the age of 5 years in Pakistan out of which 9.7 million reside in high risk Polio districts. A total of 30,049,033 children got polio drops in year's last polio campaign. Data collected by the National Emergency Operations Centre shows that total target of the districts that have started the campaign on time is 31,894,380 out of which 30,049,033 children have been reported as vaccinated. Children that are recorded as unvaccinated/missed are numbered at 1,729,279. Out of the total recorded unvaccinated children, 1,657,394 were not at home at the time when polio teams visited while parents of 71,885 children refused to vaccinate their children.³¹

Moreover, the brazen attacks on polio teams across Pakistan has hampered vaccination drives even in urban centers as many polio workers have gone on strike while others refuse to become part of the campaign. In 2014, 17 polio volunteers along with 28 security personnel were murdered by extremist militants. The last attack reported 2014 was in November when four polio workers were shot dead and three others wounded near Quetta. These ever increasing attacks have prompted many to halt the vaccination campaign and go on strike unless the government provides them with fool-proof security. As the endemic lies on the borders of Khyber Pakhtunkhwa, the provincial government decided to initiate a 'Sehat ka Insaf' program in February 2014, spearheaded by the leader of the ruling party in KPK, Mr. Imran Khan.

The program has made some progress since its inception on and aims to provide vaccinations against nine vaccine preventable diseases, including tuberculosis, Polio, Diphtheria, Pertusis, Tetanus, Hepatitis 'B', Haemophilus Influenza, Pneumonia and Measles. To date, 1.3 million children have been given vaccinations in four districts (Peshawar, Charsadda, Swabi and Shergarh) of Khyber Pakhtunkhwa. In February 2015, the KPK provincial government rolled out a 'Sehat ka Ittehad' program to tackle the crisis of Polio in the province. During the campaign, polio drops will be administered to more than 3.5 million children in Peshawar, Nowshera, Mardan, Charsadda, Swabi, Kohat, Karak, Hangu, DI Khan, Bannu, Lakki Marwat, FR Bannu, FR Peshawar, South Waziristan and North Waziristan. At least 2200 teams have been formed to carry out this campaign.³²

³⁰ *Lost- The Battle Against Polio*. Dawn Editorial. December 2014. Web.
<http://www.dawn.com/news/1151027>

³¹ End Polio Pakistan. Media Room. 2014. Web.
<http://www.endpolio.com.pk/media-room/media-releases/176-30-049-033-children-vaccinated-against-poliovirus-in-year-s-last-polio-campaign>

³² INP. *Sehat ka Ittehad Campaign Begins in Khyber Pakhtunkhwa, FATA*. Daily Times. 16 February 2015. Web.
<http://www.dailytimes.com.pk/national/16-Feb-2015/sehat-ka-ittehad-campaign-begins-in-khyber-pakhtunkhwa-fata>

Proportion of one year old children immunized against measles

Measles is one of the leading causes (among vaccine preventable diseases) of child mortality and morbidity in Pakistan and the rest of the world. According to the MDG report 2014, measles deaths have decreased from 562,000 in the year 2000 to 122,000 in 2012 among children aged less than 5 years of age. Yet, these exponential decrease is not reflected in South Asia or sub-Saharan Africa which still account for 89 percent of the worlds measles deaths as of 2012 statistics. Compared with estimated mortality in the complete absence of a measles vaccination programme, 13.8 million deaths were averted by measles vaccination between 2000 and 2012.³³

The number of measles cases in Pakistan has surprisingly increased even though immunization campaigns have been rolled out for any years. In 2011, the total number of reported cases was around 4,500, out of which almost 2,500 were confirmed. In 2012 the figure of suspected cases tripled to 12,354, out of which 2,975 were confirmed. In 2013, the number of suspected cases rose exponentially to 33,314 cases out of which 8,616 were tested positive. From 2012 to 2013, 600 children died of measles in the country, according to studies conducted by civil society organizations and independent health consultants.³⁴

Earlier this year, the government initiated a measles vaccination drive to mark the World Immunization Week Campaign wherein children under the age of 10 were to be immunized. The vaccination campaign involved 50,000 workers and 700,000 children received during the two week long campaign at a cost of Rs.1 billion. Lack of training of vaccination workers led to the death of 7 children in the province of Khyber Pakhtunkhwa as they gave vaccination to those already affected with measles.³⁵

In Balochistan, measles claimed the lives of 22 children in the province and affected over 1,350 children in 2014.³⁶ Balochistan is one of Pakistan's most impoverished provinces, receiving a small chunk from the total annual federal budget. The health officials have stated that lack of funding and volatile security situation has hampered efforts to vaccinate children against various

³³ See Supra Note 14

³⁴ Gillani, Waqar. *Measles the New Polio*. The News. Sunday, 8 June 2014. Web. <http://tns.thenews.com.pk/measles-new-polio-in-pakistan/#.VI68IDGUdyU>

³⁵ Sabhani, Shakira. *7 Children Died After Measles Vaccination in Pakistan*. News Pakistan. 2 June 2014. Web. <http://www.newspakistan.pk/2014/06/02/7-children-died-measles-vaccination-pakistan/>

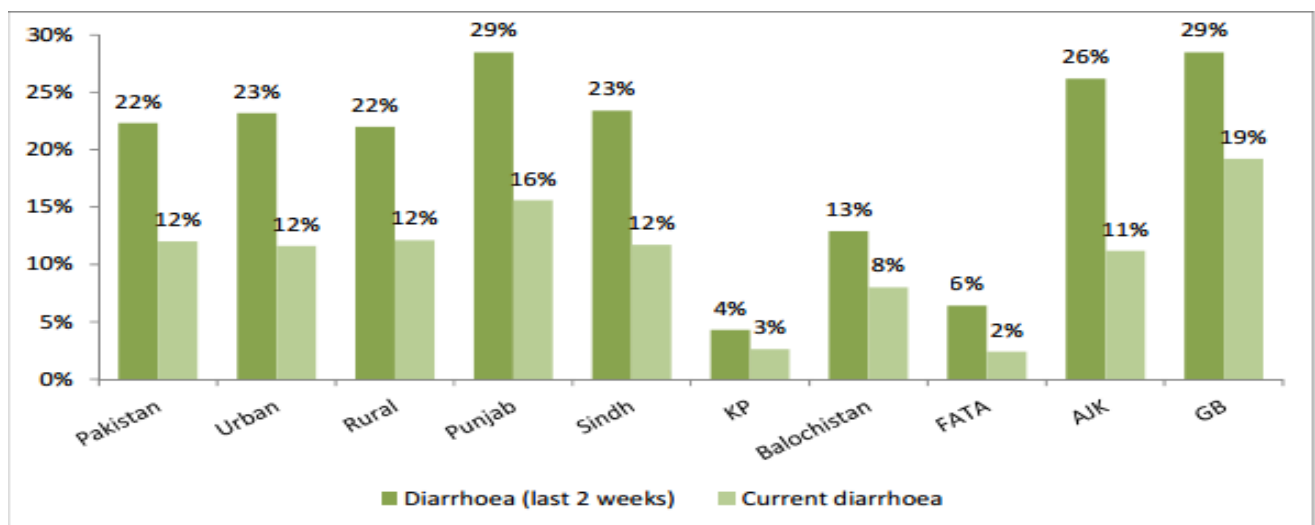
³⁶ Herriman, Robert. *Pakistan: Measles Affects 1350 in Balochistan, Still Awaiting Launch of Vaccination Campaign*. Outbreak News Today. 24 November 2014. Web. <http://outbreaknewstoday.com/pakistan-measles-affects-1350-in-balochistan-still-awaiting-launch-of-vaccine-campaign-50145/>

measles among other diseases. The Balochistan Health Minister Rehman Saleh Baloch stated that the immunization campaigns will start on an emergency basis in November this year.³⁷

As of 2012-2013, under the EPI around 74.3% children were vaccinated in urban areas and 55.6% in the rural. Furthermore, ICT had the highest prevalence (85.2%) of measles immunization followed by Punjab (70%), Khyber Pakhtunkhwa (57.8%), Gilgit-Baltistan (51%), Sindh (44.6%) and lastly Balochistan (37.3)³⁸. In order to quell the growing threat of measles becoming an endemic, a crash immunization program was initiated in 2013 of nine worst hit districts of Sindh where around 2,500 cases were reported which include Sukkur, Ghotki, Khairpur, Larkana, Kambar, Shadadkot, Shikarpur, Jacobabad and Kashmore. Nearly 2.9 million children have been vaccinated and authorities hope that the disease will dissipate within a matter of months.

Proportion of children under five who have suffered from diarrhea

Diarrhea has killed more than 1,600 children less than 5 years of age everyday in 2012. It remains one of the leading causes of child mortality; accounting for almost 9% of deaths worldwide with a whopping figure of 580,000 deaths in 2012 alone. Diarrhea often causes nutritional problems and severe dehydration thereby creating risks of malnutrition and serious non intestinal infections. Due to this serious threat to child health, the MDG 4 requires that incidence of diarrhea among children under the age of five be reduced to less than 10%. In Pakistan, an estimated 53,000 children die of diarrhea every year which makes up 30% of the current child mortality figure.³⁹



³⁷ Ibid

³⁸ See Supra Note 24

³⁹ 144,400 Children Die of Pneumonia, Diarrhea in Pakistan. The Nation. 13 April 2013. Web. <http://www.nation.com.pk/karachi/13-Apr-2013/144-400-children-die-of-pneumonia-diarrhoea-in-pakistan>

According to the table above, the current prevalence of diarrhea is highest in Gilgit Baltistan followed by Punjab and Sindh. The overall percentages remain the same in urban and rural areas at 12% which shows that if immunization programs continue unhindered, Pakistan may achieve its target of 10% as per the MDG's. Prevalence of diarrhea in developing countries like Pakistan can further be halved by the wide implementation of already available interventions such as breastfeeding, hand washing with soap and improved household water treatment and sanitation.

Goal 5: Improve Maternal Health

Maternal mortality ratio

Globally, the maternal mortality ratio declined by 45 per cent over the past two decades, from 380 maternal deaths per 100,000 live births in 1990 to 210 in 2010. However, this still falls far short of the MDG target to reduce the maternal mortality ratio by three quarters by 2015. In 2013 alone, an estimated 289,000 women died during pregnancy, childbirth, or within 42 days of termination of the pregnancy. Sub-Saharan Africa had the highest maternal mortality ratio of developing regions, with 510 deaths per 100,000 live births, followed by Southern Asia, Oceania and the Caribbean, each registering 190 maternal deaths per 100,000 live births.⁴⁰

As of 2014, the maternal mortality ratio in Pakistan was estimated to be around 276 deaths per 100,000 births; far more than the MDG target of 140 deaths per 100,000 births.⁴¹ A further breakdown of the ratio reveals that the MMR presently stands at 319 in rural areas and 175 in urban areas⁴². The maternal mortality ratio also varies considerably across provinces. It is lowest in Azad Jammu Kashmir (201 per 100,000) followed by Punjab (227 per 100,000) and Khyber Pakhtunkhwa (275 per 100,000); while it is slightly higher in Sindh (314 per 100,000) and highest in Balochistan (785 per 100,000)⁴³. This discrepancy amongst the provinces can be attributed to the lack of access to health facilities, shortage of proper transport/ infrastructure, conservative cultural practices and untrained midwives.

The proportion of women in developing regions who were attended at least once during their pregnancy by skilled health-care personnel increased from 65 per cent in 1990 to 83 per cent in 2012. In most developing regions, about 80 per cent of pregnant women visited a skilled health-care provider at least once, except in Southern Asia, where only 72 per cent of women received this care.⁴⁴ In 2012, 40 million births in developing regions were not attended by skilled health personnel, and over 32 million of those births occurred in rural areas.⁴⁵ In developing regions,

⁴⁰ See Supra Note 15

⁴¹ UNICEF Pakistan Statistics, 2012. UNICEF. Web.

http://www.unicef.org/infobycountry/pakistan_pakistan_statistics.html

⁴² Shah, Noor Wali. 'Saving Mothers': KP Govt Takes Steps to Reduce Maternal Mortality Rate. 11 January 2013. Web.

<http://tribune.com.pk/story/492333/saving-mothers-k-p-govt-takes-steps-to-reduce-maternal-mortality-rate/>

⁴³ *ibid*

⁴⁴ See Supra Note 15

⁴⁵ *Ibid*

the urban-rural gap in the proportion of births attended by a skilled health professional narrowed merely from 33 to 31 percentage points between 2000 and 2012. Over 32 million of the 40 million births not attended by skilled health personnel in 2012 occurred in rural areas.⁴⁶

It is estimated that one in every three mothers die every hour in the Pakistan due to complications during pregnancy or right after childbirth. Nearly five million women become pregnant in Pakistan every year and around 65% of these births occur at homes, of which 85% are in the rural areas. Around 15% of all pregnant women are likely to experience some obstetrical and medical complications while 20% of adult female deaths are attributed to maternal causes.⁴⁷ Almost three-quarters of mothers (73 percent) reported to have consulted a doctor, nurse or lady health worker. The differentials in antenatal care coverage are large. Coverage is highest for births to women less than 35 years old (three-quarters), and much higher in urban areas (88 percent) than rural areas (67 percent). Across regions, the proportion of mothers reporting that they received antenatal care from a skilled provider is markedly lower in Balochistan (31 percent) than in Punjab and Sindh (78 percent each) and almost universal in ICT Islamabad (94 percent). Gilgit Baltistan (64 percent) and KPK (61 percent) did not perform as well as ICT Islamabad, Punjab, or Sindh.⁴⁸

There are four major causes that account for nearly 60% of all maternal deaths in the developing world; hemorrhage, sepsis, hypertensive disorders and obstructed labor. It is estimated that hemorrhage accounts for 33% of the maternal deaths while other complications such as sepsis, hypertensive disorders and obstructed labor cause 32% of the total maternal deaths in the country. Another aspect of maternal mortality which is overshadowed when examined along with the aforementioned complications is abortion. Abortion accounts for 6% of the total maternal deaths in Pakistan according to official sources. Yet given the dearth of health facilities in rural areas especially those in FATA, a lot of these deaths go unreported and the figure is likely to be higher. In Pakistan, over one million children are left motherless due to maternal mortality and as per independent studies; children who lose their mothers become vulnerable and are 10 times more likely to die prematurely than those who are raised by their mothers.

A national MNCH program has been developed to fill gaps in maternal and child health care by training and deploying 12,000 community midwives, particularly in rural areas, to increase the skilled birth attendance rate. This program is training health care providers across the country in Integrated Management of Neonatal and Childhood Illness (IMNCI), Emergency Obstetric and Neonatal Care (EmONC), Essential Newborn Care (ENC), Integrated Management of Pregnancy and Childbirth (IMPAC), family planning counseling and family planning surgical methods. In

⁴⁶ Ibid

⁴⁷ See Supra 42

⁴⁸ *Pakistan Demographic and Health Survey 2012-2013 Preliminary Report*. NIPS. 2014. Web. http://www.nips.org.pk/abstract_files/Priliminary%20Report%20Final.pdf

addition, it is upgrading 112 District Headquarters (DHQ) and 122 Tehsil Headquarters (THQ) hospitals in the country to provide full emergency obstetric and neonatal care services, and another 15 DHQ and 48 THQ hospitals and 599 rural health centres (RHCs) and civil hospitals to provide basic EmONC services⁴⁹.

According to the Pakistan Demographic Health Survey 2012-2013, out of every 1000 live births 55 newborns die within a month of birth even though the government has initiated two major programs, the Lady Health Worker Program and the National Maternal Newborn & Child Health Program which claims to cover 65 percent of the population.⁵⁰

Internationally, as of 2009, maternal mortality has been recognized as a human rights issue. Placing women's maternal health in the human rights framework has helped develop a powerful tool for demanding government accountability. Pakistan endorsed the Preventable Maternal Mortality and Morbidity and Human Rights Resolution in the UN Human Rights Council in 2009. However, it took the National Assembly two years to translate the commitment into a bill. Currently, the status of the bill is ambiguous as it still requires approval from the Senate and the President to be passed as a law.

Goal 6: Combat HIV/Aids, Malaria and Other Diseases

HIV prevalence among 15-24 year old pregnant women (%)

Globally, the number of new HIV (human immunodeficiency virus) infections per 100 adults (aged 15 to 49) declined by 44 per cent between 2001 and 2012. Southern Africa and Central Africa, the two regions with the highest incidence, saw sharp declines of 48 per cent and 54 per cent, respectively. Still, there were an estimated 2.3 million cases of people of all ages newly infected and 1.6 million deaths from AIDS-related causes. Sub-Saharan Africa was the region where 70 per cent of the estimated number of new infections occurred in 2012.⁵¹

According to estimates given by UNAIDS, there are approximately 68,000 people living with HIV in Pakistan. Out of the total estimate, 66,000 are adults aged 15 and above while 2000 are children aged 1-14.⁵² From 2000 to 2013, the country averaged a 15 per cent annual increase in rates of new HIV/Aids infections, ultimately rising from less than 1 case per 100,000 to 6.7 per 100,000.⁵³ The Millennium Development Goal 6 requires its countries to halt and reverse the

⁴⁹ *Situational Analysis of Women and Children in Pakistan*. UNICEF 2012. Web.

http://www.unicef.org/pakistan/National_Report.pdf

⁵⁰ Ansari, Noman. Fatal Conception. Dawn News. 23 February 2015.

<http://www.dawn.com/news/1131728>

⁵¹ See Supra Note 15

⁵² *Country Data Pakistan*. UNAIDS. 2013. Web.

<http://www.unaids.org/en/regionscountries/countries/pakistan>

⁵³ Ilyas, Faiza. *HIV/AIDS Rate Rising by 11pc Annually in Pakistan*. Dawn News. 22 July 2014. Web.

<http://www.dawn.com/news/1120739>

prevalence of HIV by 2015. However, HIV prevalence in Pakistan has nearly doubled from 11% to 21% between 2005 and 2008.⁵⁴ A provincial breakdown reveals that approximately 40-45 percent of HIV infected people reside in Sindh; 80 percent of the infected found only in Karachi. The Sindh AIDS Program has registered 3,621 HIV/AIDS positive cases since 2006 out of which 3079 were male, 408 female, 102 children and 32 transgender. In 2014, over 400 cases had been registered out of which 29 people perished from the disease.⁵⁵

Most of the children are infected by their mothers or through unsafe blood transfusions. In December 2014, 10 children were infected with HIV while receiving blood transfusions for Thalassemia. The limited administrative efforts to reduce HIV risk among youth are compounded by impeding legislation that prohibits HIV testing without parental or state consent for persons below 18.⁵⁶ It is also pertinent to mention that only 23 percent of women know about safe sex and the use of various contraceptives. Cultural and religious barriers hinder any progress in addressing the issue of unsafe sex and the use of contraceptives. The problem is further compounded by low levels of literacy, limited access to information and support services and forced prostitution to generate income.

Given the culturally sensitive nature of the topic, AIDS prevention programs are closely coordinated and co-designed with NGOs. Several public-private partnerships to this effect have been signed and are under implementation in Punjab. Services for high-risk groups are initially being provided in Lahore, Multan, Faisalabad, Sargodha and Sialkot, and the PACP plans to expand to other districts. The area of focused HIV prevalence in Punjab among IDUs is in Lahore and Faisalabad. There are seven centers for the Prevention of Parent to Child Transmission of HIV (PPTCT): two each in Lahore and Karachi, and one each in Islamabad, Peshawar, and Quetta. They provide diagnosis, free antiretroviral treatment (ARV), and counseling, as well as referral services for mothers with HIV⁵⁷.

Proportion of population in Malaria risk areas, using effective Malaria prevention and treatment measures

In 2012, about 207 million cases of malaria occurred around the world and the disease killed about 627,000 people, 80 per cent of them children under age five. The disease has remained concentrated in seventeen countries where about 80 per cent of the world's malaria deaths

⁵⁴ *HIV/AIDS: Pakistan Has One of Asia's Highest HIV Prevalence Rates*. The Express Tribune. 27 August 2011. Web. <http://tribune.com.pk/story/240379/hiv-aids-pakistan-has-one-of-asias-highest-hiv-prevalence-rates/>

⁵⁵ *Sindh carries greater HIV/AIDS death burden in 2014*. Dental News. 2014. <http://www.dentalnewspk.com/sindh-carries-greater-hiv-aids-death-burden-in-2014/>

⁵⁶ Khan, Adnan A. and Khan, Ayesha. *The HIV epidemic in Pakistan*. Journal of Pakistan Medical Association.

⁵⁷ See supra note 36

occur.⁵⁸ Childhood malaria mortality is strongly concentrated in the poorest countries in sub-Saharan Africa. Pakistan has also faced the brunt of the disease especially after the floods in 2010 and 2011. According to estimates, around 1.6 million cases, including 300,000 confirmed cases are reported in public hospitals alone in Pakistan every year.⁵⁹ According to the WHO, approximately 0.5 million malaria cases are reported from different parts of Pakistan annually; most of them in the rural areas. It is estimated that 1,500-2,000 of these patients die of complications resulting from the disease. Hence, malaria has remained a key public health concern in Pakistan.

The National Malaria Control Program (NMCP) was initiated in 1961. NMCP had a countrywide coverage with rigorous implementation in 38 districts. The program aimed to lower the incidence of malaria in the country to one case per 1000 people. The program further targeted the reduction of malaria related mortality to below 10% by 2013. The shelving of NMCP will be a serious setback in Pakistan's progress towards achieving the MDG 6 target of near zero malaria induced deaths by 2015.

Incidence of Tuberculosis per 100,000 of population

In 2012, 6.1 million people were officially notified that they had tuberculosis, two-thirds of the estimated total number of new cases. A total of 87 per cent of patients diagnosed in 2011 were treated successfully, thereby exceeding the target of 85 per cent for the fourth consecutive year. Between 1995 and 2012, the cumulative total of tuberculosis patients treated successfully was 56 million, saving 22 million lives.⁶⁰

According to the World Health Organization, Pakistan ranks sixth globally among the 22 high tuberculosis risk countries, contributing 43 per cent of the disease towards the Eastern-Mediterranean region. Over 284,000 cases of Tuberculosis have been detected and placed on treatment while the figure expected to increase to 300,000 in 2013.⁶¹ According to available data, the incidence of TB per 100,000 of population in Pakistan is 181, case notification is 150 while the treatment success rate is 85 per cent; around 70,000 patients have been treated thus far.⁶² As a signatory of the Millennium Declaration, Pakistan is obligated to reduce the prevalence of TB to 45 cases per 100,000 people.

The National TB Control Program initiated by the government back in 1996 has made considerable strides in reducing incidences of TB across the country. Its focal is to identify and

⁵⁸ See Supra note 15

⁵⁹ 1.6 million malaria cases reported every year in Pakistan. Muhammad Qasim. The News <http://www.thenews.com.pk/Todays-News-6-246219-16-million-malaria-cases-reported-every-year-in-Pakistan>

⁶⁰ See Supra note 15

⁶¹ *Pakistan Fifth Highest TB Burden in Country*. Pakistan Today. 18 March 2013. Web <http://www.pakistantoday.com.pk/2013/03/18/city/karachi/pakistan-fifth-highest-tb-burden-country-in-world/>

⁶² APP. *Pakistan Ranks Sixth Among High TB Risk Countries*. Dawn News. 20 July 2012. Web. <http://dawn.com/2012/07/20/pakistan-ranks-sixth-among-high-tb-risk-countries/>

cure at least 85% of cases across the country by providing free diagnosis and treatment in health facilities at the district level. Furthermore, the government has collaborated with the WHO in a number of projects aimed at extending treatment to TB patients. For instance, with the help of WHO, the government has set up a hundred new TB Centers in Punjab to provide free treatment to patients suffering from tuberculosis.

Recommendations

- Strengthen the provision of healthcare services in regard to management, staffing, equipment and medical supplies, giving particular attention to decentralization of responsibilities and resources at the district level;
- Take immediate action to reduce infant, child and maternal mortality rates, including by accelerating the recruitment, training and deployment of Lady Health Workers, Community Midwives and improving access to basic emergency obstetric and newborn care;
- Take urgent action to address preventable health problems among children, including with regard to malnutrition, iodine deficiency, malaria, diarrhea, acute respiratory diseases, measles and meningitis;
- Address operational difficulties and develop district level micro plans in order to effectively and successfully implement the Expanded program on Immunization and the Polio Eradication program;
- Pursue additional avenues of cooperation and assistance for the improvement of child health with, among others, WHO and UNICEF.