

MEMOR

HEALTH SYSTEM PROFILE

PAKISTAN



Regional Health Systems Observatory
World Health Organization

2007

Contents

FORWARD.....	4
1 EXECUTIVE SUMMARY.....	6
2 SOCIO ECONOMIC GEOPOLITICAL MAPPING	14
2.1 Socio-cultural Factors	14
2.2 Economy	18
2.3 Geography and Climate	20
2.4 Political/ Administrative Structure.....	20
3 HEALTH STATUS AND DEMOGRAPHICS	23
3.1 Health Status Indicators	23
3.2 Demography.....	25
4 HEALTH SYSTEM ORGANIZATION	28
4.1 Brief History of the Health Care System.....	28
4.2 Public Health Care System	29
4.3 Private Health Care System.....	33
4.4 Overall Health Care System	38
5 GOVERNANCE/OVERSIGHT	43
5.1 Process of Policy, Planning and management.....	43
5.2 Decentralization: Key characteristics of principal types.....	49
5.3 Health Information Systems.....	54
5.4 Health Systems Research.....	57
5.5 Accountability Mechanisms	59
6 HEALTH CARE FINANCE AND EXPENDITURE	61
6.1 Health Expenditure Data and Trends	61
6.2 Tax-based Financing	65
6.3 Insurance	66
6.4 Out-of-Pocket Payments	69
6.5 External Sources of Finance	71
6.6 Provider Payment Mechanisms.....	72
7 HUMAN RESOURCES.....	73
7.1 Human resources availability and creation	73
7.2 Human resources policy and reforms over last 10 years.....	78
7.3 Planned reforms.....	79
8 HEALTH SERVICE DELIVERY.....	80
8.1 Service Delivery Data for Health services	80
8.2 Package of Services for Health Care	84
8.3 Primary Health Care	85
8.4 Non personal Services: Preventive/Promotive Care.....	89
8.5 Secondary/Tertiary Care	93
8.6 Long-Term Care.....	96

8.7	Pharmaceuticals	101
8.8	Technology	108
9	HEALTH SYSTEM REFORMS	110
9.1	Summary of Recent and planned reforms	110
10	REFERENCES.....	123
11	ANNEXES.....	133

List of Tables

Table 2-1	Socio-cultural indicators	14
Table 2-2	Economic Indicators.....	18
Table 2-3	Major Imports and Exports.....	18
Table 3-1	Indicators of Health status	23
Table 3-2	Indicators of Health status by Gender and by urban rural.....	23
Table 3-3	Top 10 causes of Mortality/Morbidity.....	24
Table 3-4	Demographic indicators.....	26
Table 3-5	Demographic indicators by Gender and Urban rural - Year	27
Table 6-1	Health Expenditure	61
Table 6-2	Sources of finance, by percent.....	61
Table 6-3	Health Expenditures by Category	63
Table 6-4	Population coverage by source	66
Table 7-1	Health care personnel	73
Table 7-2	Health care personnel by rural/urban and public/private	73
Table 7-3	Human Resource Training Institutions for Health	77
Table 8-1	Service Delivery Data and Trends	80
Table 8-2	Health infrastructure.....	80
Table 8-3	Inpatient use and performance.....	93

List of Abbreviations

Acknowledgments

FOREWORD

Health systems are undergoing rapid change and the requirements for conforming to the new challenges of changing demographics, disease patterns, emerging and re emerging diseases coupled with rising costs of health care delivery have forced a comprehensive review of health systems and their functioning. As the countries examine their health systems in greater depth to adjust to new demands, the number and complexities of problems identified increases. Some health systems fail to provide the essential services and some are creaking under the strain of inefficient provision of services. A number of issues including governance in health, financing of health care, human resource imbalances, access and quality of health services, along with the impacts of reforms in other areas of the economies significantly affect the ability of health systems to deliver.

Decision-makers at all levels need to appraise the variation in health system performance, identify factors that influence it and articulate policies that will achieve better results in a variety of settings. Meaningful, comparable information on health system performance, and on key factors that explain performance variation, can strengthen the scientific foundations of health policy at national, regional and international levels. Comparison of performance across countries and over time can provide important insights into policies that improve performance and those that do not.

The WHO regional office for Eastern Mediterranean has taken an initiative to develop a Regional Health Systems Observatory, whose main purpose is to contribute to the improvement of health system performance and outcomes in the countries of the EM region, in terms of better health, fair financing and responsiveness of health systems. This will be achieved through the following closely inter-related functions: (i) Descriptive function that provides for an easily accessible database, that is constantly updated; (ii) Analytical function that draws lessons from success and failures and that can assist policy makers in the formulation of strategies; (iii) Prescriptive function that brings forward recommendations to policy makers; (iv) Monitoring function that focuses on aspects that can be improved; and (v) Capacity building function that aims to develop partnerships and share knowledge across the region.

One of the principal instruments for achieving the above objective is the development of health system profile of each of the member states. The EMRO Health Systems Profiles are country-based reports that provide a description and analysis of the health system and of reform initiatives in the respective countries. The profiles seek to provide comparative information to support policy-makers and analysts in the development of health systems in EMR. The profiles can be used to learn about various approaches to the organization, financing and delivery of health services; describe the process, content, and implementation of health care reform programs; highlight challenges and areas that require more in-depth analysis; and provide a tool for the dissemination of information on health systems and the exchange of experiences of reform strategies between policymakers and analysts in different countries. These profiles have been produced by country public health experts in collaboration with the Division of Health Systems & Services Development, WHO, EMRO based on standardized templates, comprehensive guidelines and a glossary of terms developed to help compile the profiles.

A real challenge in the development of these health system profiles has been the wide variation in the availability of data on all aspects of health systems. The profiles are based on the most authentic sources of information available, which have been cited for ease of reference. For maintaining consistency and comparability in the sources of information, efforts have been made to use as a first source, the information published

and available from a national source such as Ministries of Health, Finance, Labor, Welfare; National Statistics Organizations or reports of national surveys. In case information is not available from these sources then unpublished information from official sources or information published in unofficial sources are used. As a last resort, country-specific information published by international agencies and research papers published in international and local journals are used. Since health systems are dynamic and ever changing, any additional information is welcome, which after proper verification, can be put up on the website of the Regional Observatory as this is an ongoing initiative and these profiles will be updated on regular intervals. The profiles along with summaries, template, guidelines and glossary of terms are available on the EMRO HSO website at www.who.int.healthobservatory

It is hoped the member states, international agencies, academia and other stakeholders would use the information available in these profiles and actively participate to make this initiative a success. I would like to acknowledge the efforts undertaken by the Division of Health Systems and Services Development to help countries of the region in better analyzing health system performance and in improving it.

Regional Director

Eastern Mediterranean Region
World Health Organization

1 EXECUTIVE SUMMARY

Socio Economic Geopolitical Mapping

Pakistan is classified as a low-income country¹ and according to the Human Poverty Index (HPI-1), it ranks 65th among 102 developing countries². Although the Human Development Index (HDI) has improved from 0.346 in 1975 to 0.539 in 2006, this improvement has been slow. Pakistan ranks 134 in the 2006 UNDP HDI and most of its social and development indicators compare poorly with countries of similar level of economic development. Despite this tumultuous political history, Pakistan has managed to achieve an average Gross Domestic Product (GDP) growth rate of around 6³. However, development in the social sectors has remained dismally low. Experience has shown that while social sector has not received adequate allocation in past, economic growth has not translated into an improvement in social indicators, particularly those for health, education, housing, water supply, sanitation and gender equality, which has remained poorer than other low-income countries particularly in South Asian region.⁴ The large burden of infectious disease in Pakistan is known to be closely related to the lack of sanitation facilities and safe sources of potable water. Public spending in the sector as a whole typically represents less than 0.5% of GDP in Pakistan.

According Human Development Report 2006⁵, more than 50 percent of the country's population is literate. Literacy rates of population 10 years and older have increased to 53% as compared to 45% in 2001/02. The net primary school enrolment ratio is 76 percent for boys, but only 57 percent of girls attend school. While both female and male literacy, at 40% and 63% in 2004/05 respectively have increased, the gender gap has not shown any significant reduction. The literacy rate in urban areas is 69.7%, while in rural areas it is 41.6%, and only 26.6% among rural women⁵⁹. The South Asian region is known for its gender inequality. Within this region, Pakistan ranked 134th on the Gender-Related Development Index (GDI).⁶ In fact, it is ranked lowest on most gender-related development indicators. Power differentials in Pakistan are mainly based on gender, residence, and class, which are reproduced in social institutions that keep the poor at a disadvantage.

In 2000, the government made significant macroeconomic reforms: Privatizing Pakistan's state-subsidized utilities, reforming the banking sector, instituting a world-class anti-money laundering law, cracking down on piracy of intellectual property, and moving to quickly resolving investor disputes. After September 11, 2001, many international sanctions were lifted. Pakistan's economic prospects began to increase significantly due to unprecedented inflows of foreign assistance at the end of 2001. This trend is expected to continue through 2009. Foreign exchange reserves and exports grew to record levels after a sharp decline. GDP growth remained strong at 6.6% in fiscal year 2005/2006. Pakistan's GNI per capita of approximately US\$ 770 is well in line with regional South Asia averages. It has grown substantially at more than 6% annually over the last five years. The poverty level in Pakistan increased from 26.1 percent in 1990/1 to 32.1 percent in 2000/01. Inflation remains the biggest threat to the economy, jumping to more than 9% in 2005 before easing to 7.9% in 2006⁷. The GoP prepared the interim PRSP in 2001, followed by a full fledged poverty reduction strategy paper (PRSP 1) in 2003, and a new PRSP is currently under preparation.

Health status and demographics

The health profile of Pakistan is characterized by high population growth rate, high infant and child mortality rate, high maternal mortality ratio, and a dual burden of communicable and non-communicable diseases. Malnutrition, diarrhea, acute respiratory illness, other communicable and vaccine preventable diseases are mainly responsible for a high burden of infant and perinatal mortality, while high maternal mortality is mostly attributed to a high fertility rate, low skilled birth attendance rate, illiteracy, malnutrition and insufficient access to emergency obstetric care services. Furthermore, only 40% of births are attended by skilled birth attendants. Malnutrition is rampant in the country with 30-40% of the children being stunted.

With reference to maternal and child health, MMR has declined from 800 per 100,000 live births in 1978 to the presently reported figure of 350 while Infant mortality rates from the 2006-07 PDHS is 78 per 1000 live births and the level of under-five mortality was 94 deaths per 1,000 births during the five-year period before the survey, implying that almost 1 in every 10 children born in Pakistan during the period died before reaching their fifth birthday⁵³. Comparison of mortality rates recorded in 2006-07 PDHS with earlier surveys shows little if any change in mortality over time. For example, the infant mortality rate measured in the 2005 Pakistan Demographic Survey was 77 per 1000, almost identical to the level of 78 measured in the 2006-07 PDHS.⁸ Like the infant mortality rates, the PDS-2005 data indicates that the neo-natal mortality in rural areas was about 35 percent higher than in the urban areas.

With respect to infectious diseases, data from PDS (1992-2003) show that the percentage of deaths attributed to communicable diseases has decreased from 49.8% to 26.2%; in addition immunization coverage has also increased substantially. However, Pakistan's key health indicators still lag behind in relation to other regional countries. The large burden of infectious diseases in Pakistan is known to be closely related to the lack of sanitation facilities and safe sources of potable water. Water – borne diseases constitute nearly 12.5 percent of the diseases burden in Pakistan.⁹⁵ Non-communicable diseases and injuries are amongst the top ten causes of mortality and morbidity in Pakistan and accounts for almost 25 percent of the deaths within the country. One in three adults over the age of 45 years suffers from high blood pressure; the prevalence of diabetes is reported at 10 percent; and over 10 million individuals suffer from neurotic conditions. There are an estimated 1.5 million blind people within the country. During 2004, 77,780 cases of pulmonary tuberculosis and 103,416 cases of malaria were reported, while the prevalence of hepatitis B ranges between 3-4% and hepatitis C around 5% of the general population¹⁶. Burden of Disease estimates for 1998 showed that an equal burden could be attributable to infectious vis-à-vis non-communicable diseases in Pakistan (38.4% vs. 37.7%); the latter clearly surpassing if the burden of injuries (11.4%) is added.¹⁰ Overall, outcome level trends show that although health status has improved, it remains relatively poor. The areas where some improvements have occurred include life expectancy, maternal, neonatal and child health and infectious diseases.

Pakistan, is the sixth most populous in the world with a population of about 156.2 million. Pakistan is going through the demographic transition, and is experiencing a once-in-a-lifetime demographic dividend as the working-age population bulges and the dependency ratio declines. Crude birth rate (CBR) peaked at about 45 in the late 1970s to early 1980s, when the demographic transition took off and decreased to 30 births per 1000 population by the year 2006. By 2050 it is expected to almost half, at 16 births per 1000 population. Crude death rate (CDR) has progressively declined from 24 deaths per 1000 population in 1950 to approximately eight in the year 2006. It will continue to decline before increasing again after year 2045. This increase would be due to the changing age structure of the population, which would then have a bigger proportion of elderly population.¹¹ It was during the 1990s that Pakistan had a major shift in fertility decline, with the rate falling from over six children per woman to around 4.5 children per woman by the year 2000. The TFR is expected to continue to fall, reaching a near replacement level by 2050.

Health System Organization

The health system in Pakistan consists of public and private sectors.¹² Ministry of Health (MOH) at the Federal level has the major role to develop national policies and strategies for the entire population of the country, especially those who are under-served, sets national goals and objectives including for maternal health care. Under Pakistan constitution, health is primarily responsibility of the provincial government, except in the federally administrated areas. Ministry of Health consists of one division and several departments. MoH is headed by Minister of Health and at bureaucracy level, Federal Secretary (Health) is the overall in-charge, assisted by Director General (Health), Chief (Health) and two Joint Secretaries. The Provincial Health Secretary translates the provincial health policy, exercises control over the budget and has direct control over the teaching hospitals and other special institutions.

Pakistan's health sector is constitutionally a provincial subject but health care delivery has traditionally been jointly administered by the federal and provincial governments with districts mainly responsible for implementation. Service delivery is being organized through preventive, promotive, curative and rehabilitative services. The curative and rehabilitative services are being provided mainly at the secondary and tertiary care facilities. Preventive and promotive services, on the other hand, are mainly provided through various national programs; and community health workers' interfacing with the communities through primary healthcare facilities and outreach activities.

Public health delivery system functions as an integrated health complex that is administratively managed at a district level. The state provide healthcare through a three-tiered healthcare delivery system and a range of public health interventions. The former includes *Basic Health Units* (BHUs) and *Rural Health Centers* (RHCs) forming the core of the primary healthcare structure. Secondary care including first and second referral facilities providing acute, ambulatory and inpatient care is provided through *Tehsil Headquarter Hospitals* (THQs), and *District Headquarter Hospitals* (DHQs) which are supported by tertiary care from *teaching hospitals*. Maternal and Child Health Centers (MCHCs) are also a part of the integrated health system; however, the number of MCHC remains limited. The MCHCs, BHUs and RHCs provide basic obstetric care with community outreach programs offered through lady health workers.¹³ Throughout the country, the vast network of health care facilities include 919 hospitals, 5334 BHUs and Sub- Health Centers , 560 RHCs, 4712 Dispensaries, 905 MCH Centers and 288 TB Centers. In 2001, Pakistan initiated the implementation of the "Devolution Initiative" to enhance accountability at local level and improve service delivery by devolving administrative and financial powers to districts/local authorities. The District Health System under the District Government is now responsible for planning, development and management including implementation of health care delivery from DHQ hospitals right down to the outreach programs. Provincial governments have focused on restructuring the mode of primary healthcare delivery by revitalizing Basic Health Units (BHUs) and Rural Health Centers (RHCs). 55

The private health sector constitutes a diverse group of doctors, nurses, pharmacists, traditional healers, drug vendors, as well as laboratory technicians, shopkeepers and unqualified practitioners. Majority of private sector hospitals has sole proprietorship or a partnership model of organization. Stand-alone clinics all across Pakistan are the major providers of out-patient care majority of these clinics falls in the sole proprietorship category.³⁴ According to economic census (2001-2003) there are 96,430 private health establishments, including hospitals, dispensaries, hakims, homeopaths and others providing health services. Most of the private hospitals are concentrated in urban areas. There is legislation on the accreditation of doctors, nurses and LHV's. The law requires that all providers for health care be registered with their respective regulatory bodies; however in practice this is rarely implemented. Legislation for accrediting institutions like hospitals and quality assurance mechanisms are absent and there is no licensing mechanism nor is any license or permission required to open or operate a health care institution. The latest PSLMS data shows that 2/3rd of the consultations take place in the private sector.⁵³ Pakistan has a relatively sizeable non-profit private sector with more than 80,000 not-for-profit non-governmental organizations (NGOs) registered under various Acts. Traditional medicine has also been an integral part of the cultural heritage.

Governance/Oversight

Traditionally, the strategic policy role has been in the hands of the Planning Commission and communicated through the instrument of Five Year/ Development Plans typically developed in an adhoc manner by key individuals. In health sector, the Ministry of Health has assumed a key role in policy formulation during the last several years. The last National health policy was developed in 2001 with health sector reforms as its theme. Health sector investments are viewed as part of Government's Poverty Alleviation Plan. The overall national vision for the health sector is based on "Health-For-All" approach. The National Health Policy 2001 forms the basis of the current public initiatives in the health sector and is under continuous revision. The new Health Policy is being developed in collaboration with Heartfile and the final draft remains to be published.

The Health Sector Vision under the MTFD 2005-2010 states objectives and targets to be achieved along with budgetary allocations for the five-year period. MTFD emphasizes preventive, promotive, maternal and child health, as well as primary health care for the next five years. Most

objectives are output driven and lack indigenous priorities. MDGs such as three quarter reduction in child mortality by 2015; three quarter reduction in maternal mortality ratio by 2015; and combating HIV/AIDS, malaria, and other diseases form the core objectives of the MoH strategy. The poverty reduction strategy as well as the National Health Policy 2001 recognizes the need for equity in healthcare whereby broader social sector development programs and health specific interventions are being undertaken to address the issue. Lack or absence of information at the district, provincial, or federal levels and lack of commitment to translate evidence into policy inhibit evidence-based decision making and leave more room for arbitrary and informal policy making that is often tinged with personal preferences.

Formal mechanisms for reviewing or revisioning of health policy were never developed on a national level. The National Health Policy Unit (NHPU) was established with the explicit aim of providing evidence-based policy advice to the Federal Ministry of Health and to build capacity of the Ministry in policy analysis and reforms but it does not provide for open stakeholder inputs or dialogues. Until recently no specific forums existed to facilitate dialogue between all stakeholders for health decisions. The recently launched (2005) Pakistan's Health Policy Forum (PHPF) is the only forum of its sort that provides a non-partisan platform for a stakeholder dialogue on health policy and planning issues. Health legislation in Pakistan is a relatively new public policy area and with the exception of Drug Act of 1976, most ordinances were promulgated only recently and a wide array of new initiatives, programs and legislative measures are currently being introduced at the federal, provincial and district levels. Key health regulatory bodies include, the Pakistan Medical & Dental Council, Pakistan Nursing Council, Council of jomeopathy and council of tibb.

Decentralization via devolution of power to the grass-root level has been the major thrust of reforms under the Poverty Reduction Strategy. Health care is now a devolved subject. The provincial governments have taken a number of steps to ensure that public health delivery mechanisms work efficiently at the district level and below. The administrative and financial powers and responsibility for PHC service delivery is now shifted from the provincial governments to district governments. There is also a considerable momentum towards granting greater managerial and financial autonomy to tertiary government hospitals, especially in the provinces of Punjab and NWFP to improve the quality and quantity of services with poor sharing equitably the benefits without a large increase in financial burden. Pakistan's decentralization is still in its early stages and it will be some years before full implementation of political, fiscal and administrative reforms produces results.

Health information system was comprehensively revised in Pakistan in the early 1990s, and it now covers more than 117 districts. HMIS data flow directly from the peripheral health facilities to District and to Federal level. It is designed to provide information on service related indicators, information on the status of the instruments and equipments &, it also provides information by age on 18 priority diseases. The scope of the current information system is however, limited to the first level care facilities only and no data from inpatient/hospital, private care facilities, or from the health facilities other than Provincial Health Departments are captured. A parallel community based information system has also been developed in 1994, which is functioning under the National Program for Family Planning and Primary Health Care (NPFP&PHC). In addition there are several other information systems specifically geared to the needs of vertical programs such as EPI, TB, AIDS, Malaria etc., which are not integrated into HMIS.

Health systems research in Pakistan has remained a neglected area. There is no evidence that decision makers are aware of relevant national and international health system research and other experience related to improving health outcomes for the poor. Neither is any evidence that health systems research actually feeds into the national policy. The Pakistan Medical Research Council (PMRC) is supposed to provide leadership and guidance for health systems research and be an effective focal point for all health related research.

Health Care Finance and Expenditure

The total per-capita health expenditure in Pakistan is reported to be between Rs. 750 to 800 (~ US \$12 to 13).¹⁴ While no official figures exist, experts believe that 25% of this is contributed by the public sector and 75% through private out-of-pocket fee-based funding mechanism (Pak. Rs. 570 or US \$9.2).³⁴ General taxation is the major source of government's financing for health. Government funds are channeled to providers and services through the three levels of government – federal, provincial and district. The federal government makes en-bloc grants to

provinces; decisions about health sector allocations are made by the provinces themselves. Additionally, federal government contributions (17-20% of the public sector spending on health) are also conditionally earmarked for the national public health programs, which are implemented at the provincial level. The federal government also assists with in-kind contributions such as drugs and vaccines. Furthermore, the federal government supports several tertiary healthcare facilities on provincial territory as well as the population program of Pakistan.

Pakistan has been spending 0.5 to 0.8% of its GDP on health over the last 10 years. However, these figures reflect spending by the Ministry of Health and the departments of health and do not take into account other public sector health services, which are delivered by the Employees Social Security institutions, military sources, Ministry of Population Welfare, parastatals and other semiautonomous government agencies. These estimates are also not inclusive of the expenses incurred on treating government employees, who are entitled to free treatment in government hospitals – costs that are not clearly visible. The actual level of total public sector expenditure on the health sector is, therefore, difficult to calculate; however, if these are taken into account, the total expenditure roughly ranges between 2.4 to 3.7% of the GDP. The total government expenditure and currently stands at 2.4%. Fiscal year 2006-07 has witnessed an impressive increase in health sector allocation, rising from Rs.40 billion to Rs.50 billion (0.57% of GDP), thus registering a growth of 25 percent over the last year. Health expenditures have doubled during the last seven years; from Rs.24 billion in 2000-01 to Rs.50 billion in 2005-06¹⁵. However, this figure has not been adjusted for inflation and population growth. Public sector contributions are just one of the sources of financing health; government's expenditure on health as a percentage of the total expenditure on health has ranged below 35% over the last several years. Other modes of financing health include out-of-pocket payments, social security contributions from private sector sources and donor contributions. Private sector expenditure on health as a percentage of the total expenditure on health has ranged above 67% over the last several years; 98% of this is out-of-pocket expenditure. As a contribution to national public sector health expenditure, foreign aid is officially quoted as having ranged from 4-16% over the last several years.

Private Health Insurance was introduced in Pakistan more than three decades back, but its significance was never fully acknowledged. However the past few years has seen a growing interest in both its understanding and acceptance as a vital tool in deliverance of health services to the people. Social Security system exists in Pakistan since 1967, although it is very limited in scope and area, specificity of covered population and services. In the private sector, today most the general insurance companies are marketing the product of health Insurance with cumulative health insurance premium of between rupees 500 to 750 million.

Most of the public PHC facilities offer health services free of charge. There is sometimes a nominal fee for registration, certain laboratory procedures, inpatient care etc. The government hospitals also charge minimal fees from private patients. The rates are subsidized and are much lower than the private sector. The services for the public servants are free. Almost all the private sector is financed on fee for service.

About 80% of the annual health budget is provided by the government of Pakistan. The estimated donor contribution is 21%. Major share of foreign investment is spent on preventive programs, whereas the remaining portion is utilized for technical assistance, community development and consultancies. The donor share has been ranging from 4% to 16% in the federal PSDP for the last 5 years. The contribution has increased significantly since Sept 2001 as a result of the global changes in political scenario.

Human Resources

Pakistan is listed as one of 57 countries with critical health workforce deficiency by both the JLI 2004 report and the WHO World Health Report 2006.¹⁶ There is no well-defined policy & plans for human resource development. The MOH and departments of health lack any specific section that is mandated for this important task. Education and training curricula for the health manpower do not match the health needs of the country. Educational institutions are ill equipped to prepare health care providers for appropriate health service delivery. The mechanism for induction courses for different cadres in the health sector is not in place with very few such activities carried out by isolated projects. The staff are unaware of their job description and term of reference, based on which their performance has to be evaluated. The health management is not being taken as a specialized field and management positions

are filled mostly on seniority basis, with frequent back and fro movement of staff on clinical and management positions. The current output of medical graduates both in public and private medical colleges is around 5,000 per annum.¹¹³ The public sector continues to heavily invest its scarce resources in the development of medical colleges and universities rather than investing in improving quality and quantity of nursing institutions, public health schools and technicians training institutions. Although there is a growing interest to address the identified shortcomings in human resources including scarcity of nurses, midwives, skilled birth attendants, dentists and pharmacists; future scenarios for tackling the mal-distribution of health professionals and the imbalances in skill mix across the country have not been developed.⁶² Shortage of professional and technical staff is also an important consideration in the delivery of preventive services. Trained public health professionals most often opt for private sector jobs due to better remuneration; furthermore, disparities in the distribution of doctors and their placement in the rural versus urban areas are well recognized. Scant attention has been paid to setting standards of performance and their monitoring. Absence of a well-defined policy on human resource development, lack of formal in-service training, low numbers for certain categories of health professionals, migration of skilled workers, mis-distribution of workforce and the proverbial brain drain – a manifestation of the lack of economic opportunities and incentives further complicate the issue.³⁴

The doctors, dentists, nurses and LHVs have doubled in the last one decade. Population per doctor, per dentist, per nurse has improved from 1719, 44223, 5448 in 1995 to 1254, 20,839, 2,671 in 2006 respectively. Today, the doctor to patient ratio in Pakistan stands at 1: 1254, having increased from a baseline of 1:60,000 in 1947. However, the implications of supporting more doctors for the healthcare system have never been analyzed and the establishment, number and location of medical schools and their seats in particular have been determined, not by the needs of the health services but by political expediency.¹⁷ There is a big gap of manpower requirement mainly at First Level Care Facilities (FLCF's) i.e. BHUs and RHCs, especially of female staff. Similarly, low number of female paramedics i.e. LHVs, Female Health Technicians, Community Midwife, Nurses etc. is also one of the main reasons for vacant positions of female paramedics in the BHUs, RHCs in rural areas.¹⁸ In quantitative terms, there is a shortage of pharmacists, technologists, nurses and other paramedics within the country. This shortage is compounded by issues related to their effective deployment.

The Pakistan Medical & Dental Council is the main regulatory authority, responsible for accreditation and registration of training institutes. The Council has laid down the minimum standards for the degree of M.B.B.S. & B.D.S. and the higher qualifications like MD, MS, MDS, and other postgraduate minor diplomas. The Medical/ Dental Colleges which are fully recognized by the Council are inspected after every five years to ascertain that the standard on which the college was granted full recognition is maintained.

A "National policy for Human resources for Health in Pakistan" was developed in August 2000. The recent establishment of the National Commission for Career Structures of Health Professionals and the constitution of a working group to enhance the capacity of the district health management by the Ministry of Health are steps in the right direction.³⁴ Very recently, a task force has been created for developing a plan for nursing reforms; dedicated posts are envisaged to be created through the newly-launched NMCH program.

Health Service Delivery

Despite an elaborate and extensive network of health infrastructure, the health care delivery system in Pakistan has failed to bring about improvement in health status especially of rural populations. The health system is characterized by inadequate expenditure, poor quality services and poor access to and utilization of services. Most of the surveys showed that utilization of Government health care services in Pakistan is low. The three most commonly cited reasons are, inaccessible facilities, lack of availability of medicines, and uncooperative staff. Many patients bypassed the FLCF as they are dissatisfied with the quality of services being offered. Only 33% of the rural population is in access of 5km. There are also significant provincial differences with access, being best in Punjab and worst in Sind. The use of Government health care services in Pakistan is low and does not look to have improved with social action program. In PIHS a Government health practitioner was consulted in 20 % of cases.¹⁹

In public sector, 947 hospitals, 4800 dispensaries, 1084 MCH center are mainly located in urban and semi-urban areas, whereas 581 RHCs and 5798 BHUs are serving the population of rural areas. The total availability of beds in these health facilities is estimated to be 101,047. The BHUs offer curative, basic ante, natal & postnatal care, family planning services, treatment of minor ailments, immunization and preventive services. RHC provides more extensive outpatients and some inpatient services including radiology, laboratory and minor surgical facilities. The THQH or sub-district hospitals provide inpatient, outpatient and limited specialized care as do DHQH which also includes a wider range of specialist services. In private health sector, 106 hospitals, 120 small hospitals and more than 25000 General Practitioners (GPs), 300 Maternity homes and 340 dispensaries are providing health care services, which are mostly biased towards urban areas. Referral system is not functioning properly. Most people bypass the system and access directly to secondary or tertiary health care hospitals. Distrust in the quality of services, behavior of staff and shortage of medicines are few of main the reasons.

Pakistan is one of those countries, which faces the problem of under utilization of basic health facilities. The government facilities utilization studies shows that it is approximately 0.3 to 0.7 consultations per capita per year, which is far from the minimum standards of around two visits. It was noted that availability of tests, drugs, improvement in hotel functions and better management at RHC improves the overall utilization of the facility. Many government departments like Ministry of health, Ministry of environment, local government and rural development, and public health engineering departments are engaged in various activities to ensure safe water and satisfactory sanitation and other matters related to environment. Health Education is made an essential component of all the health programs by the Government through NHP-2001. It has emphasized the need of educating the public. The emphasis is to use mass media to disseminate health and nutrition education, appropriate interpersonal skills training will be imparted to health workers along with greater participation of NGOs and civil society.

No separate system exists for health care of the elderly population. There is a lack of rehabilitative services. However, few centers in the private sector are providing long term care for the elderly. Directorate General of Special Education is responsible for education and rehabilitation of persons with disabilities as an attached department of Ministry of Women Development, Social Welfare and Special Education. Under DGSE 44 Special Education Institutions, 5 Institution based Vocational Training Centres, 4 National Special Education Institutions and 4 Community Based Vocational Rehabilitation & Employment Training Centres are functioning to facilitate children/persons with disabilities across the country. A National Policy for Persons with Disabilities was formulated in 2002.

Pharmaceuticals account for the major share of private health expenditure in the country; Pakistanis spend more than 80% of their total health expenditure on buying medicines due to lack of public financing, relatively higher prices and the virtual absence of health insurance and reimbursement schemes. Pharmaceutical industry Pakistan is producing more drugs than can be utilized. 80-85% of total drugs are produced by local manufacturers. Currently, the pharmaceutical sector in the country is a sizeable industry –by dollar size and growth rate standards – with an annual turnover of more than Rs. 70 billion (US \$1.2 billion) and an annual growth rate of 10-15% for the past few years. The industry comprises 411 local manufacturing units and 30 multinational corporations (MNCs), which produce 125 categories of medicines and meet around 80% of the country's requirements.²⁰ The Drugs Act, 1976 provides a rational approach towards quality assurance of drugs through the Central Licensing Board & Drug Registration Board. The Federal and Provincial Governments jointly share the responsibility of monitoring drugs quality and price fixation. Though soaring prices is a key issue, nevertheless they are revised on applications on grounds of change in costs, foreign exchange parity etc.

Health System Reforms

The Health Sector Reform agenda is being carried forward in keeping with the strategic direction of the National Health Policy 2001 and within the framework of Poverty Reduction Strategy of the Government of Pakistan, Millennium Development Goals and in the context of 10-years Perspective Development Plan and MTRF of the Planning Commission. The health indicators in the country did not improve significantly for many decades, in spite of vast expansion of the health care facilities, thus stressing an urgent need to revamp the health care delivery system. Through health sector reforms, the government aims to fulfill its convictions by strengthening the

health care delivery system, resulting in a health care system which: reduces inequity of accessibility, acceptability, and adaptability, focuses on quality of outcome of clinical as well as preventive programs, makes the health care facilities function at an optimal level, builds alliances with other public sectors and the private sector, is capable to control or eradicate communicable diseases, reduces the burden of non communicable diseases, reaches out to common man and advocates for the rights of children and women. The National Health Policy takes forward the agenda for the health sector reforms. The main features of reforms are decentralization of powers, good governance, integration of different health programs, community participation, inter-sectoral collaboration, active participation of private sector, and quality assurance in health care. National health Policy Unit is responsible for monitoring and evaluation of implementation of different strategies of reforms in health sector. A report, "Progress on Agenda for Health Sector Reform" is prepared every year and updated regularly by Ministry of Health.

2 SOCIO ECONOMIC GEOPOLITICAL MAPPING

2.1 Socio-cultural Factors

Table 2-1 Socio-cultural indicators

Indicators	1995	2000	2003	2006
Human Development Index (HDI):	0.493	0.511	0.527	0.551 ¹ (07)
HDI rank	128/174	127/162	135/177	136/177 ² (07)
Literacy Total:	39.31	50	51.6	53.1 ³
Female Literacy *	23.80	36.9	39.2	40.6 ₃
Women as % of Workforce	26.3	28.6	30.4	32.2 ₃
Primary School enrollment (GER)	68.58	73.19	86	⁴ 87
% Female Primary school pupils	39.25	-	42 ⁵	45
% Urban Population	31.82	33.1	34.1 ⁶	35 ⁷

Source: *Government of Pakistan. Pakistan Integrated Household Survey (PIHS) 1996-2002 PSLM Survey 2004-05, ¹Human Development Report 2006, PLF survey 2005-06 Millenium Development Report 2006, The 2006 Revision and World Urbanization Prospects

Commentary: key socio-cultural factors relevant to the health system

Pakistan is part of South Asia with India on the east, Iran on the west and Afghanistan on its west and northwest. Pakistan also shares a small segment of its border with China. Pakistan's relations with its two neighbours (India and Afghanistan) have been a cause of great tension turmoil leading to militarization and a very heavy expenditure on the defense budget of Pakistan. It also faces instability in the Federally Administered Tribal Areas and Balochistan, where some tribal leaders support the Taliban. Pakistan is a nuclear power and has the seventh-largest army in the world²¹. This has had a direct bearing on the low status accorded to health and other social sectors in Pakistan.²²

Pakistan is classified as a low-income country²³ and according to the Human Poverty Index (HPI-1), it ranks 65th among 102 developing countries²⁴. Although the Human Development Index (HDI) has improved from 0.346 in 1975 to 0.539 in 2006, this improvement has been slow. For most of its 60 years of independence, the country had been under military dictatorship. At the time of its independence, Pakistan inherited a rather narrow resource base. The breakup of the country in 1971 also contributed to this overall bleak picture. Despite this tumultuous political history, Pakistan has managed to achieve an average Gross Domestic Product (GDP) growth rate of around 6²⁵. However, development in the social sectors has remained dismally low. Experience has shown that while social sector has not received adequate allocation in past, economic growth

¹ Human development report 2006-2007

http://hdrstats.undp.org/countries/country_fact_sheets/cty_fs_PAK.html

² Human development report 2006-2007

³ Labour force survey 05-06 http://www.statpak.gov.pk/depts/fbs/publications/lfs2005_06/results.pdf

⁴ PSLMS 05-06: http://www.statpak.gov.pk/depts/fbs/statistics/pslm2005_06/fig2.1.pdf

⁵ PSLMS 05-06: http://www.statpak.gov.pk/depts/fbs/statistics/pslm2005_06/2.13.pdf

⁶ Reuters Foundation: <http://www.alertnet.org/db/cp/pakistan.htm>

⁷ U.N. DESA - World Urbanisation Prospects 2005 <http://esa.un.org/unpp>

has not translated into an improvement in social indicators, particularly those for health, education, housing, water supply, sanitation and gender equality, which has remained poorer than other low-income countries particularly in South Asian region.²⁶ The large burden of infectious disease in Pakistan is known to be closely related to the lack of sanitation facilities and safe sources of potable water. Water-borne diseases constitute nearly 12.5% of the disease burden in Pakistan and diarrhea claims some 118,000 lives annually in Pakistan; notwithstanding, recent studies have shown that six out of every 10 households across the country have no access to government water supply and almost half have no government sewage at all³⁴. Like expenditure on education or health, public spending on water and sanitation creates benefits for individuals and for society. However, public spending in the sector as a whole typically represents less than 0.5% of GDP in Pakistan. When measured against military spending Pakistan spends 47 times more of its national wealth on military budgets than on water and sanitation²⁷.

Literacy: According Human Development Report 2006²⁸, more than 50 percent of the country's population is literate. Literacy rates of population 10 years and older have increased to 53% as compared to 45% in 2001/02. Moreover, it may be true that literacy rates have risen since the country gained independence in 1947 but due to the increase in population, the number of illiterate Pakistanis has more than doubled since 1951, while the number of illiterate women has tripled.²⁹

The net primary school enrolment ratio is 76 percent for boys, but only 57 percent of girls attend school. A number of studies of the education system in Pakistan have revealed that the quality of education being provided by government primary schools is poor. Many schools do not have adequate teachers and resources³⁰. Of the approximately 18 million children in Pakistan, only 42% are enrolled in school, and historically, less than half of those enrolled complete five years of schooling. On any given day, close to one quarter of the teachers in public schools are likely to be absent, and this is in a country where the pupil to teacher ratio is already extremely high, with an average of 55 students for every trained teacher.

Literacy and gender: While both female and male literacy, at 40% and 63% in 2004/05 respectively have increased, the gender gap has not shown any significant reduction. However, despite these favorable developments, formidable challenges remain. Pakistan's social indicators still lag behind countries with comparable per capita incomes. In addition to marked gender disparities in educational attainment, there are also heavy disparities between rural and urban areas and among the country's different provinces. The literacy rate in urban areas is 69.7%, while in rural areas it is 41.6%, and only 26.6% among rural women⁵⁹. The inequalities in literacy rates among the four provinces are particularly influenced by the disparities between men and women. There is a strong positive relationship between household income and primary enrolment in both urban and rural areas i.e. enrolment is higher in the highest quintiles compared to lower quintiles²³.

Social determinants of health

Throughout the world, people who are vulnerable and socially disadvantaged have less access to health resources, get sicker, and die earlier than people in more privileged social positions. Health equity gaps are growing today, despite unprecedented global wealth and technological progress³¹. Many of the inequalities in health, both within and between countries, are due to inequalities in the social conditions in which people live and work.³² The social conditions in which people live, and the risks they carry because of these conditions are called "social determinants of health". Tackling these underlying causes of poor health can contribute to improving health and health equity. In Pakistan, for example, living in the rural areas would lend itself to a greater risk for mortality and morbidity than living in an urban area; being a woman places women at a higher risk than being a man. Similarly being poor makes you more vulnerable. The most commonly used SD-indicators in Pakistan are literacy/education, gender and poverty²². Pakistan is a signatory to the Primary Health Care Declaration of 1978; unfortunately, the framework is not reflected in the development of the Pakistani health sector. Financial allocation to a national concern is a good indicator of the Government's commitment to that issue. In Pakistan this commitment has been generally missing. The inadequate budgetary allocation for health, and other social sectors, is not because of insufficient resources, but the iniquitous distribution of

resources. Sixty four per cent of Pakistan's national budget goes into defense and debt servicing.³³

In Pakistan, the relatively high levels of Maternal Mortality Rate, Infant Mortality Rate and Under-5 Mortality Rate; low nutritional status and disparities in immunization rates are deeply intertwined with the social status of women in the society. Women are constrained in seeking healthcare for themselves and their children on account of low mobility and restrictions imposed in the name of religion or culture. This has also been evidenced by studies of children at high-risk of death from diarrhoeal disease and pneumonia conducted in Karachi, which suggest lack of maternal autonomy as a key factor. Health status is also strongly influenced by educational status, particularly of women; it is well-established that increasing the education level of mothers can be one of the most effective public health interventions for reducing child mortality.³⁴

Education: There is considerable gender and rural/urban disparity. The ratio of female to male enrolment is 0.6 which is the lowest in South Asia. The dropout rates within public primary schools are alarmingly high and generally higher among girls and are increasing at a higher pace relative to boys. Similar gaps also exist between urban and rural areas with an urban literacy rate of 63% while that for rural area at just 34%³⁵. Similarly health indicators highlight the urban bias as well. The breakdown of information indicating a strong urban bias in both the health and education sectors also depicts a deeper and more fundamental class bias.²² PSLMS 05-06 shows that enrolment in Government schools is declining rapidly. Only 64% of children in school are now attending a Government school compared to 73% in 2004-5. Children from the Punjab, living in urban areas, and from richer households are more likely to attend a private school. The main reason a child has never attended school was because the child was not willing to go (for boys) and the parents didn't allow it (for girls). 49% of girls in NWFP who have never attended school were not allowed to by their parents. The secondary reason for both sexes was that it was too expensive.³⁶ The consensus is significant that poverty levels remained essentially unchanged throughout the 1990s. The Participatory Poverty Assessment (PPA) in Pakistan highlighted the exclusion of the poor, both men and women, from essential services like health, education, credit, and justice. PPA also described the vulnerability of the livelihood of the poor.³⁷ There is inequality in employment because of social and economic structures in society, such as discrimination within sectors of education and health³⁸. Empirical evidence also suggests that there is a high correlation between income and education levels as well as between education inequalities and income inequalities. Results of research by Social Policy and Development Centre indicate low levels of educational status with high inequality. The most vulnerable groups are rural areas, Balochistan province, and rural females.³⁹

Gender-based disparities:

The South Asian region is known for its gender inequality. Within this region, Pakistan ranked 134th on the Gender-Related Development Index (GDI).⁴⁰ In fact, it is ranked lowest on most gender-related development indicators. The indicator 'missing women' represents women who are not alive as a result of social and economic discrimination. The total number of women missing in South Asia is close to 74 million, as estimated by Amartya Sen, while applying global norms of female to male ratio to the region. Pakistan has the highest percentage of missing women: 13% of the total population. Gender inequality, of course, is only one representation – though not insignificant – which demonstrates the extent of inequalities within Pakistan.⁴¹

Gender discrimination at each stage of the female life cycle contributes to this imbalance. Sex selective abortions, neglect of girl children, reproductive mortality, and poor access to health care for girls and women have all been cited as reasons for this difference.⁴² An analysis conducted by Social Watch estimates gender inequities using the Gender Inequities Index (GEI), which is calculated by combining dimensions of empowerment, education, and economic activity. On a score of 3 (lowest score given to a country) to 12 (the highest) Pakistan is ranked at 4.²⁹

Benign neglect that girls are subject to at all ages in South Asia has led to gender based health disparities among the population aged less than 5 years that are larger than anywhere else in the world. A girl between her first and fifth birthday in India or Pakistan has a 30-50% higher chance of dying than a boy. This neglect may take the form of poor nutrition, lack of preventive care (specifically immunisation) and delays in seeking health care for disease.⁴² There is fear of sexual harassment at work and public places and she carries the double burden of productive and reproductive work. Economic returns from her productive work are often collected by the

male members of her family. She lives in fear of being killed in the name of honour, where there is no law to protect her from domestic violence. She lives in a society where public transport is grossly inadequate; and where the judiciary is weak.²²

The personal security of women in Pakistan is at high risk. There is a wealth of examples of the marked differences between the health status of women and men in Pakistan. For instance, malnutrition is a major public health problem in Pakistan that disproportionately affects women and girls. More girls than boys die between the ages of one and four; the female mortality rate is 12 percentage points higher than for boys. This is a direct consequence of the lower social status accorded to women and girls, who as a result tend to eat less and face additional barriers when accessing health care. Women, girls and infants most often die of common communicable diseases such as tuberculosis, diarrhoea, pneumonia and tetanus.

Essentially, the poor health status of women in Pakistan is as much a social as a medical problem. The underlying factors are the lack of awareness of and attention to women's health needs; women's lower educational and social status; and social constraints on women and girls, including the practice of seclusion.

It is estimated that every 20 minutes in Pakistan a woman dies from complications related to pregnancy and childbirth, while four out of five women are anaemic. Four out of seven children are malnourished at some point in their lives, and three out of seven are chronically malnourished. This proportion is nearly one in every two in the rural areas of the southern province of Sindh. One out of every ten children born dies before his or her first birthday, while one out of nine dies before the age of five. The health status of women in Pakistan is directly linked to women's low social status. Pakistan's poor position internationally is reflected in the 2004-2005 Gender-Related Development Index (GDI) compiled by the United Nations Development Organization (UNDP), on which Pakistan ranks 129th out of 174 countries. The health of rural women tends to be especially poor, due to the lack of health facilities and skilled health care providers. For example, the maternal mortality ratio in predominantly rural Balochistan is 800 deaths per 100,000 live births, compared to the national average of 340 per 100,000.

IDPs/Refugees

Pakistan hosts more than 2.4 million Afghan refugees, according to the United Nations Refugee Agency, UNHCR. The refugee population has severely strained Pakistan's resources, including its healthcare system. Although political changes in neighbouring Afghanistan mean refugees are returning home in numbers, mass migration looks unlikely until security, food and jobs improve throughout Afghanistan. The ongoing dispute with India over Kashmir has also created a sizeable refugee population.²¹

Health Inequity:

National Finance Commission (NFC) Award in Pakistan allocates resources on the basis of population of an area. There are no separate sectoral allocations, and this inequality of resource distribution is therefore reflected in these allocations. A study on the overall resource allocation reveals that, besides the NFC Award, certain areas receive extra resources (in the form of grants) awarded by ministers, and the prime minister, as well as the president⁴³. Inequalities are also linked to place of residence. There are differences between the health-budget allocations (per capita) of districts within two provinces. The per capita allocation is not considered to be a comprehensive indicator⁴⁴, but it is nonetheless an indication of input level inequalities; it gives a crude picture of how areas receive unequal treatment in allocative decisions. One of the issues related to allocation of budgets to districts is that the current criterion is not transparent and allocations are often made on political basis.⁴⁵

Power differentials in Pakistan are mainly based on gender, residence, and class. These power differentials are reproduced in social institutions that keep the poor at a disadvantage. Pakistan's economy is mainly agrarian based. Historically, the skewed pattern of land ownership in the country led to an amassing of wealth by a highly monopolistic class, while the majority suffered an absolute decline in living standards especially in rural areas. Landlords became wealthier and landless peasants poorer, and the division of class, naturally, widened. Class-based power differentials are worsened by institutional arrangements that invariably harm the marginalized: institutional arrangements exist in the form a structure of power in which the poor are dependent on landlords, moneylenders, and local state officials; and, at a formal level, it exists, in the form

of high costs of seeking justice by the poor – not to mention that, apart from this high cost, the perception that law-enforcing authorities are inefficient and unfair.⁴⁶

2.2 Economy

Table 2-2 Economic Indicators

Indicators	1995	2000	2003	2006
GNI per Capita (Atlas method) current US\$	510	480*	492 ⁸	770* ⁹
GNI per capita (PPP) Current International ¹⁰	1660	1870	2040	2500*
Real GDP Growth (%)	1.97	3.11	4.7*	7.02 ¹¹
Real GDP per Capita (\$) ¹²	1650	1910	1940	2600
Unemployment % (estimates)		8.3	8 ¹³	6.5

Source: Demographic and health indicators for countries of the Eastern Mediterranean. 2004

**Source:* State Bank of Pakistan, available: <http://www.sbp.org.pk>, downloaded 6 February 2007

http://www.statpak.gov.pk/depts/fbs/statistics/national_accounts/table12.pdf

- World Development Indicators database, World Bank, 1 July 2007
- Labor Force Survey 2004-2005

Table 2-3 Major Imports and Exports

Major Exports: ¹⁴	Cotton Fabrics, Cotton Yarn and Thread, textiles Fish (including Canned Fish), Fruits & Vegetables Footwear, Leather Medical Instruments Petroleum & Petroleum Products Rice, Raw Cotton Sports Goods Woollen Carpets & Rugs
Major Imports ¹⁵	petroleum, petroleum products, machinery, plastics, transportation equipment, edible oils, paper and paperboard, iron and steel, tea

Key economic trends, policies and reforms

In 2000, the government made significant macroeconomic reforms: Privatizing Pakistan's state-subsidized utilities, reforming the banking sector, instituting a world-class anti-money laundering law, cracking down on piracy of intellectual property, and moving to quickly resolving investor disputes. After September 11, 2001, and Pakistan's proclaimed commitment to fighting terror, many international sanctions, particularly those imposed by the United States, were lifted. Pakistan's economic prospects began to increase significantly due to unprecedented inflows of foreign assistance at the end of 2001. This trend is expected to continue through 2009. Foreign exchange reserves and exports grew to record levels after a sharp decline. The International Monetary Fund lauded Pakistan for its commitment in meeting lender requirements for a \$1.3 billion IMF Poverty Reduction and Growth Facility loan, which it completed in 2004, forgoing the final permitted tranche. The Government of Pakistan has been successful in issuing sovereign bonds, and has issued \$600 million in Islamic bonds, putting Pakistan back on the investment

⁸ <http://www.emro.who.int/dsaf/dsa610.pdf>

⁹ <http://siteresources.worldbank.org/DATASTATISTICS/Resources/GNIPC.pdf>

¹⁰ http://globalis.gvu.unu.edu/indicator_detail.cfm?IndicatorID=140&Country=PK

¹¹ http://www.statpak.gov.pk/depts/fbs/statistics/national_accounts/table12.pdf

¹² Globalis http://globalis.gvu.unu.edu/indicator_detail.cfm?Country=PK&IndicatorID=19

¹³ <http://www.emro.who.int/dsaf/dsa610.pdf>

¹⁴ World factbook <https://www.cia.gov/library/publications/the-world-factbook/print/pk.html>

¹⁵ FBS http://www.statpak.gov.pk/depts/fbs/publications/pocket_book2006/14.pdf

map. Pakistan's search for additional foreign direct investment has been hampered by concerns about the security situation, imposition of emergency, domestic and regional political uncertainties, and questions about judicial transparency. U.S. assistance has played a key role in moving Pakistan's economy from the brink of collapse to setting record high levels of foreign reserves and exports, dramatically lowering levels of solid debt. Also, despite the earthquake in 2005, GDP growth remained strong at 6.6% in fiscal year 2005/2006. In 2002, the United States led Paris Club efforts to reschedule Pakistan's debt on generous terms, and in April 2003 the United States reduced Pakistan's bilateral official debt by \$1 billion. In 2004, approximately \$500 million more in bilateral debt was granted.⁴⁷

Macroeconomic situation: Pakistan's GNI per capita of approximately US\$ 770 is well in line with regional South Asia averages. It has grown substantially at more than 6% annually over the last five years. The poverty level in Pakistan increased from 26.1 percent in 1990/1 to 32.1 percent in 2000/01. Inflation remains the biggest threat to the economy, jumping to more than 9% in 2005 before easing to 7.9% in 2006⁴⁸. Despite the impressive economic performance Pakistan has not been able to adequately reverse poverty, which according to the GoP, was estimated to be at 24% in 2004/05. These figures hide the gross distribution inequalities especially the level of poverty among the rural population. Beyond formal poverty there are however large number of households living just above the poverty line. Due to stringent macroeconomic adjustments, better financial and budget management, remittance from abroad and sustained growth, the macroeconomic situation of the country has improved since the end of the 90s. Since 2004, Pakistan has not received IMF support under Poverty Reduction and Growth Facility that had previously supported the reforms. In the FY 2006-07, 22.5 % of Pakistan's budget was devoted to debt servicing but Pakistan is not among Highly Indebted Poor Countries. The improved level of foreign reserves along with the increased commitment of donor has increased the fiscal space for the provision of necessary social investments and for vital infrastructures. The increased fiscal space has led to some increase in overall expenditure on health but continues to be less than that projected in the Poverty Reduction Strategy Paper.

Social sector: The population growth is estimated at 2.4% per annum and poses a challenge to the government to create jobs and to provide health and education services. Pakistan ranks 134 in the 2006 UNDP HDI (Human Development Index) and most of its social and development indicators compare poorly with countries of similar level of economic development. According to the UNDP Development Report 2006, in the year 2004, 62% of males above 15 were literate and 32% of women could actually read and write. Literacy trends are however encouraging: literacy among women 15-24 of age has increased to 54.7%. Pakistan's expenditure on education decreased from 2.6% of GDP in 1991 to 2.0% in 2002, however, the government has renewed its commitment to increase it to 4% by 2012. UNDP estimates that in 2004 around 90% of the population had access to improved water sources and almost 60% had sustainable access to improved sanitation facilities. The latter is a substantial improvement from 37% in 1990.

The Public Sector Response: The GoP prepared the interim PRSP in 2001 to tackle the major developmental challenges outlined, followed by a full fledged poverty reduction strategy paper (PRSP 1) in 2003, and a new PRSP is currently under preparation. The PRSP 1 outlines the broad government framework and the strategies for poverty reduction based on four main strategic objectives: (a) accelerated economic growth within the limits of macroeconomic stability; (b) improved governance at all levels through civil service reform; (c) investments in human capital; and (d) the provision of services targeted in particular to the poor and the vulnerable. Under the overall umbrella of PRSP the government in recent years has undertaken several initiatives to improve the social sector profile of the country. There is an active team of social sector experts in the Planning Commission that covers health, education, population and nutrition sectors along with experts in the area of poverty reduction, decentralization and good governance. The team is engaged in several initiatives that include the development of the annual public sector development program (PSDP); the preparation of three year medium term budgetary framework (MTBF) in which health and population have been the first to adopt this approach; and for ensuring the social sectors get their due importance in the Vision 2030 document being prepared by the Planning Commission. Much of the above are federally led initiatives and there seems to be disconnect in terms of a serious dialogue with the provinces on these matters. In addition, the chapter on health in the Vision 2030 document needs to be considerably strengthened to provide

a clear vision for health that is congruent with and contributes to the overall vision for the overall socioeconomic development in the country.⁸¹

2.3 Geography and Climate

Location: Southern Asia, bordering the Arabian Sea, between India on the east and Iran and Afghanistan on the west and China in the north.

Area: Total: 803,940 km² (Land: 778,720 km² and Water: 25,220 km²)

Land boundaries: Total: 6,774 km Border countries: Afghanistan 2,430 km, China 523 km, India 2,912 km, Iran 909 km, Coastline: 1,046 km

Terrain: flat Indus plain in east; mountains in north and northwest; Balochistan plateau in west.

Elevation extremes: Lowest point: Indian Ocean 0 m- Highest point: K2 8,611 m

Climate: Most of Pakistan has a generally dry climate and receives less than 250 millimeters of rain per year, although northern and southern areas have noticeable climatic differences. The average annual temperature is around 27°C, but temperatures vary with elevation from -30°C to -10°C during the coldest months in mountainous and northern areas of Pakistan-administered Kashmir to 50°C in the warmest months in parts of Punjab, Sindh, and the Balochistan Plateau. Mid-December to March is dry and cool; April to June is hot, with 25 to 50 percent relative humidity; July to September is the wet monsoon season; and October-November is the dry post-monsoon season, with hot temperatures nationwide. The onset and duration of these seasons vary somewhat according to location.

Map of Pakistan



2.4 Political/ Administrative Structure

Basic political /administrative structure and any recent reforms

Government Overview: Pakistan is a strategically important country and home to one of the world's largest Muslim populations. The government is based on the much-amended constitution of 1973, which was suspended twice (in 1977 and 1999) and reinstated twice (in 1985 and 2002). According to the 1973 constitution, Pakistan is a federal parliamentary system with a president as head of state and a prime minister as head of government. However, in 1988 the eighth amendment Pakistan's government a semi-presidential system, Pakistan has a bicameral legislature that consists of the Senate (upper house) and the National Assembly (lower house). Together with the President,

the Senate and National Assembly make up a body called the Majlis-i-shoora (Council of Advisors) or Parliament.⁴⁹ The President of Pakistan is the Head of state and Commander in Chief of the Armed Forces, and is elected for a five-year term by the Electoral College of Pakistan - comprised of the Senate, the National Assembly, and the four Provincial Assemblies. The President's appointment and term are constitutionally independent of the Prime Minister's term. The current President of Pakistan is Pervez Musharraf, who came to power after a military coup on October 12, 1999. The Prime Minister of Pakistan is usually the leader of the largest party in the National Assembly and is assisted by a cabinet of ministers drawn from both chambers of the federal legislature. The federal legislature comprises of the 100 member Senate and the 342 member National Assembly. Senators are elected for six-year terms, with staggered elections every three years, whilst members of the National Assembly are elected for five-year terms.

The last National Assembly elections were held in October 2002, and Senate elections in February 2003. One notable outcome was the election of 91 women to Parliament - the largest number and percentage of women in the parliament of any Muslim-majority country. The Parliament completed its 5 year term and President Musharraf was controversially re-elected as President for another 5 years in November 2007. Next National Assembly elections will be held on 8th January 2008. Each province has a similar government setup with a Provincial Assembly elected for a five-year term through multi-party elections, which in turn elects a Chief Minister - the executive head of the province. The Chief Minister nominates a candidate for the office of Provincial Governor and the Provincial Assembly ratifies the nominee for a five-year term. The current assemblies have completed their 5-year term and National and provincial level elections are to take place in Jan 2008.

Administrative Divisions: Pakistan comprises of four provinces, a capital territory and federally administered tribal areas. Pakistan exercises *de facto* jurisdiction over the western parts of the Kashmir region, organized as two separate political entities (Azad Kashmir and Northern Areas), which are also claimed by India. Pakistan also claims Jammu Kashmir, which is a portion of Kashmir that is administered by India. In 2001 the federal government abolished the administrative entities called "Divisions", which used to be the third tier of government. The entities called "Districts", which used to be the fourth tier, became the new third tier. The provinces and the capital territory are subdivided into a total of 107 districts which contain numerous tehsils and local governments. The tribal areas comprise seven tribal agencies and six small frontier regions detached from neighboring districts whilst Azad Kashmir comprises seven districts and Northern Areas comprises six districts.

The provinces are divided into a total of 105 *zillas* (districts) Each province has a governor appointed by the president, and provinces also have an elected legislative assembly and a chief minister who is the leader of the legislative assembly's majority party or coalition. The chief minister is assisted by a council of ministers chosen by the chief minister and formally approved by the governor. Federally administered areas also have their own legislative entities, which have had less autonomy from the federal government than provincial legislatures. However, tribal areas in the west have traditional legal systems that operate independently of the federal government. A *zilla* is further subdivided into *tehsils* (roughly equivalent to counties.) Tehsils may contain villages or municipalities. There are over five thousand local governments in Pakistan. Since 2001, these have been led by democratically elected local councils, each headed by a *Nazim* (the word means "supervisor" in Urdu, but is sometimes translated as "mayor.") See Annexe. Women have been allotted a minimum of 33% seats in these councils; there is no upper limit to the number of women in these councils. Some districts, incorporating large metropolitan areas, are called *City District*. A City District may contain subdivisions called Towns and Union Councils.⁵⁰

Electoral System: Pakistani's 18 years of age and older are eligible to vote. As of early 2005, there were 72 million registered voters. The minimum age of candidates is 25 years of age for national and provincial assemblies, 30 for the Senate, and 45 for president. The president sets election dates, and the Election Commission (EC) conducts national and provincial assembly elections, but the EC's chair, the chief election commissioner, oversees elections for local governments, the Senate, and the presidency. The EC is an independent, financially autonomous body, but it has been criticized as having little power to enforce codes of conduct on political parties and candidates. Constituencies are demarcated by population, administrative boundaries, and other factors. In 2002 there were 357 constituencies for the National Assembly and 728 constituencies for provincial assemblies. Sixty seats in the National Assembly and 128 in the provincial assemblies are reserved for women. In addition, 10 seats in the National Assembly and 23 in the provincial assemblies are reserved for non-Muslims. In April 2002, Musharraf's term as president was extended for five years in a national referendum.

Elections were held for the national and provincial assemblies in October 2002 and for the Senate in February 2003. Next elections for the national and provincial assemblies will be held in 2008.

Politics and Political Parties: Successive governments in Pakistan have abused and tinkered with the country's constitution, creating a corrupt political culture, weak civil society, severe human rights violations and lack of tolerance in society. The people of Pakistan have never tasted the real fruits of democracy, the absence of which has given birth to ethnic and inter-provincial disputes and discord, political feuds and religious hostility. A military coup in 1999 appointed the head of the army, General Pervez Musharraf, as president. With powers to dismiss the elected government backed by strong influence over the judiciary, Musharraf and his senior generals have been able to steer the legislative program and electoral procedures. The three parties with the greatest electoral support since 1988, Pakistan People's Party (PPP) and Pakistan Muslim League-Nawaz Sharif (PML-N) have splintered into numerous parties. Officially, 73 parties contested the 2002 National Assembly elections, but only 3 percent of voters were registered as members of a political party. As a result of elections in 2002, a coalition led by the Pakistan Muslim League-Quaid-e-Azam (PML-Q) assumed control of provincial assemblies in Punjab and Sindh and the National Assembly. This party has been closely associated with the government of General Musharraf. Parties often have no constitutions, membership lists, or documentation of funding sources. Subsequent gestures towards a return to democracy have been unconvincing. Musharraf himself has extended his presidential term to 2007 and in 2004 reneged on a promise to separate his roles of president and head of the army, a combination disallowed by the constitution. However the controversial suspension and subsequent reinstatement of the independent-minded Chief Justice, Iftikhar Choudry, united the judiciary against any further abuse of constitutional procedures. On November 3, 2007 President Musharraf declared an emergency rule across Pakistan and purported to suspend the Constitution. Justice Abdul Hameed Dogar has been appointed as the new chief justice of Pakistan, due to the refusal of the previous chief justice to not to take oath under Provisional Constitution Order, though he himself took oath under PCO in 1999, this time declaring it unconstitutional. Both presidential and parliamentary elections due later in 2008, Musharraf is coming under tremendous pressure to restore true democracy by separating the military from the political process.⁵¹ Emergency rule was lifted on 16th December 2007.

Key political events/reforms

Local Government Reforms and Devolution

The present Government has initiated a number of reforms to address governance problems and long-standing structural challenges. On the political side, the Devolution Plan announced in March 2000, is a fundamental reform. It aims to replace the existing highly centralized and control-oriented government with a three-tiered local government system that institutes "people-centered, rights and responsibility-based, and service oriented" government structures. The elected local governments took power on 14 August 2001 in over 100 districts in the four provinces.⁵²

Devolution, first from provincial to elected local governments, and then from the federal to provincial level, will bring fundamental changes to how all public services are planned, financed, and managed. The bulk of basic poverty-focused services, for health, education, agriculture, water, and natural resource management has been devolved to district and lower local governments. Provinces, once predominantly responsible for service delivery, will assume new responsibilities to support and supervise the performance of local governments, not as administrative appendages of the provincial bureaucracy, but as independent corporate bodies accountable to the electorate through political leaders.

In addition to elected councils, the Local Government Ordinance 2001 provides a number of institutionalized opportunities for citizens to participate in council affairs. Citizen community boards, and public safety and justice committees will monitor local government activities. Citizen community boards are also empowered to prioritize investments for up to 50 percent of the local development budget for basic infrastructure and services. Public safety commissions at district, provincial, and national levels, introduced by this Government under amendments to the Police Act of 1861, offer new possibilities to depoliticize the police and to increase their accountability to citizens.⁵²

3 HEALTH STATUS AND DEMOGRAPHICS

3.1 Health Status Indicators

Table 3-1 Indicators of Health status

Indicators	1995	2000	2003	2006
Life Expectancy at Birth:	60.88	62.96	63	63.4
HALE:	-	50.9	53.3 ^{vi}	na
Neonatal mortality rate	56 ⁱⁱ	52 ⁱⁱ	42.8	48.5 ⁽⁰⁵⁾ ⁱⁱ
Infant Mortality Rate:*	90	85	77 ⁱⁱ	76.7 ⁱⁱ
Under five mortality rate*	103 ⁱⁱ	92 ⁱⁱ	103*	94 ⁱⁱ
Maternal Mortality Ratio:	340	350 ⁱⁱⁱ	400 ⁱⁱⁱ	350- 400
Percent Normal birth weight babies:	75	66-75	63 ^{iv}	na
Prevalence of stunting/wasting:	36.3	36.8	37 ^v	37

Source: World health report 2003- Background country papers

*National health survey of Pakistan 1990-96

Human Development Report 2006

*Globalis/ UNICEF http://globalis.gvu.unu.edu/indicator_detail.cfm?Country=PK&IndicatorID=26
(NMR PDS 2003-2005)

i. PSLM 2004-05

ii. PDS 2006-2007

iii. Pg 45 PMDG's report, Planning Commission, Centre for Research on Poverty Reduction and Income Distribution, Islamabad, September 2005

iv. WHO EMRO country profiles

v. UNICEF Pakistan

vi. WHO report 2002 <http://www.who.int/whr/2004/annex/country/pak/en/index.html>

Table 3-2 Indicators of Health status by Gender and by urban rural 2005-2006

Indicators	Urban	Rural	Male	Female
Life Expectancy at Birth:			63.2	63.6**
HALE:			54 ⁱⁱ	52 ⁱⁱ
Neonatal mortality rate	39.3 ⁱⁱⁱ	52.9 ⁱⁱⁱ	59	43 ^{iv}
Infant Mortality Rate:	67.1 ⁱⁱⁱ	81.2 ⁱⁱⁱ	73*	67*
Under five mortality rate:	93.6	131.9	121 ⁱ	135 ⁱ
Maternal Mortality Ratio:	150	600	-	-
Percent Normal birth weight babies:				
Prevalence of stunting/wasting:				

Source: i.*2005-2006 PSLM

i. Globalis/ UNICEF Pakistan

- ii. WHO statistics 2005 http://www.who.int/healthinfo/statistics/whostat2005_mortality_en.pdf
- iii. PDS 2003-2005 (NMR)
- iv. <http://www.measuredhs.com/pubs/pdf/FR29/09%20Chapter%209.pdf>
- v. ** Economic Survey 2006-07

Table 3-3 Top 10 causes of Mortality/Morbidity

Rank	Mortality	Morbidity/Disability*
1.	Lower respiratory infections	Infectious and Parasitic
2.	Ischaemic heart disease	Maternal and perinatal
3.	Diarrhoeal diseases	Injuries
4.	Perinatal conditions	Cardiovascular
5.	Cerebrovascular disease	Respiratory infections
6.	Tuberculosis	Childhood cluster
7.	Chronic obstructive pulmonary disease	Nutritional/Endocrinal
8.	Measles	Other non-communicable
9.	Whooping cough	Malignant Neoplasm
10.	Congenital anomalies	Congenital abnormalities

Source: Death and DALY estimates by cause, 2002

Economic Survey 2006-07

Gateway Health Indicators⁵³

<http://www.who.int/entity/healthinfo/statistics/bodgbdeathdalyestimates.xls>

Commentary on health indicators

The health profile of Pakistan is characterized by high population growth rate, high infant and child mortality rate, high maternal mortality ratio, and a dual burden of communicable and non-communicable diseases. Malnutrition, diarrhea, acute respiratory illness, other communicable and vaccine preventable diseases are mainly responsible for a high burden of infant and perinatal mortality, while high maternal mortality is mostly attributed to a high fertility rate, low skilled birth attendance rate, illiteracy, malnutrition and insufficient access to emergency obstetric care services. Furthermore, only 40% of births are attended by skilled birth attendants. Malnutrition is rampant in the country with 30-40% of the children being stunted. Malnutrition accounts for nearly half child deaths every year. Malnutrition not only causes physical impairments but also impacts cognitive development of the child, and thereby not only the future generation of the girl child but also the future of Pakistan.⁵⁴

With respect to infectious diseases, data from the Pakistan Demographic Surveys (PDS) for the years 1992-2003 show that the percentage of deaths attributed to communicable diseases has decreased from 49.8% to 26.2%; in addition immunization coverage has also increased substantially. However, Pakistan's key health indicators still lag behind in relation to other regional countries. The large burden of infectious diseases in Pakistan is known to be closely related to the lack of sanitation facilities and safe sources of potable water. Water – borne diseases constitute nearly 12.5 percent of the diseases burden in Pakistan.⁵⁵

Non-communicable diseases and injuries are amongst the top ten causes of mortality and morbidity in Pakistan and accounts for almost 25 percent of the deaths within the country. One in three adults over the age of 45 years suffers from high blood pressure; the prevalence of diabetes is reported at 10 percent; whereas 40 percent men and 12.5 percent women use tobacco in one form suffer from severe mental illness and over 10 million individuals from neurotic conditions. The National Survey of Blindness and Low vision 2002-04 has shown that there are an estimated 1.5 million blind people within the country.

During 2004, 77,780 cases of pulmonary tuberculosis and 103,416 cases of malaria were reported, while the prevalence of hepatitis B ranges between 3-4% and hepatitis C around

5% of the general population¹⁶. Burden of Disease estimates for 1998, expressed as a percentage of the total number of Disability Adjusted Life Years (DALYs) lost according to causes of diseases, also showed that an equal burden could be attributable to infectious vis-à-vis non-communicable diseases in Pakistan (38.4% vs. 37.7%); the latter clearly surpassing if the burden of injuries (11.4%) is added.⁵⁶ This distribution is instructive to the current resource allocations in public health and highlights the need to bring allocations for NCD prevention, control and health promotion at par with allocations for infectious diseases.

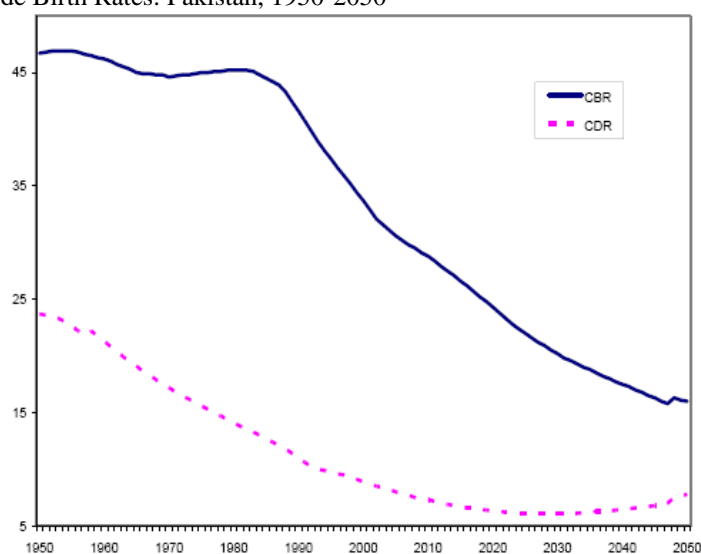
Overall, outcome level trends show that although health status has improved, it remains relatively poor. The areas where some improvements have occurred include life expectancy, maternal, neonatal and child health and infectious diseases. With reference to maternal and child health, MMR has declined from 800 per 100,000 live births in 1978 to the presently reported figure of 350 while Infant mortality rates from the 2006-07 PDHS is 78 per 1000 live births and the level of under-five mortality was 94 deaths per 1,000 births during the five-year period before the survey, implying that almost 1 in every 10 children born in Pakistan during the period died before reaching their fifth birthday⁵³. Comparison of mortality rates recorded in 2006-07 PDHS with earlier surveys shows little if any change in mortality over time. For example, the infant mortality rate measured in the 2005 Pakistan Demographic Survey was 77 per 1000, almost identical to the level of 78 measured in the 2006-07 PDHS.⁵⁷ Like the infant mortality rates, the PDS-2005 data indicates that the neo-natal mortality in rural areas was about 35 percent higher than in the urban areas.

3.2 Demography

Demographic patterns and trends

Pakistan is going through the demographic transition, and is experiencing a once-in-a-lifetime demographic dividend as the working-age population bulges and the dependency ratio declines. The demographic dividend can be defined as the potential economic benefit offered by changes in the age structure of the population, during the demographic transition, when there is an increase in working age population and an associated decline in the dependent age population. Demographic transition is characterized by the decline in mortality followed by the decline in fertility, and it is the difference between the two that defines the natural increase in a population. Crude birth rate (CBR) peaked at about 45 in the late 1970s to early 1980s, when the demographic transition took off and decreased to 30 births per 1000 population by the year 2006. By 2050 it is expected to almost half, at 16 births per 1000 population. Crude death rate (CDR) has progressively declined from 24 deaths per 1000 population in 1950 to approximately eight in the year 2006. It will continue to decline before increasing again after year 2045. This increase would be due to the changing age structure of the population, which would then have a bigger proportion of elderly population.⁵⁸

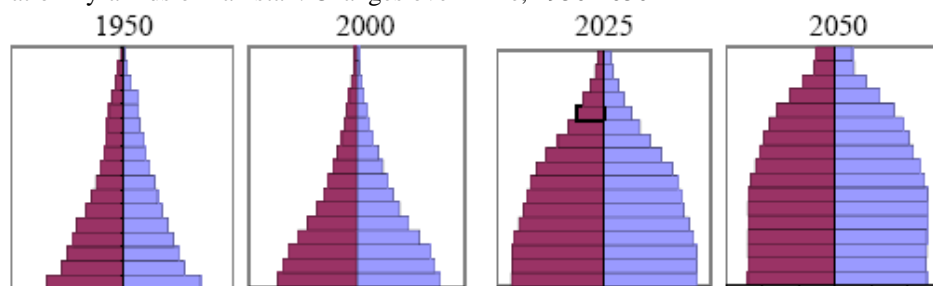
Crude Death and Crude Birth Rates: Pakistan, 1950-2050



Source: Medium variant: UN (2005).

It was during the 1990s that Pakistan had a major shift in fertility decline, with the rate falling from over six children per woman to around 4.5 children per woman by the year 2000. The TFR is expected to continue to fall, reaching a near replacement level by 2050. Fertility decline in Pakistan has lagged far behind many countries in Asia, even in South Asia. However, now that the demographic transition is finally taking place, corresponding changes are starting to appear in the age-structure of the population. With the shrinking young age population the proportion of working age population is gradually increasing. With the percentage share of 52 percent in the late 80s to early 90s, the proportion of working age population (15–64 years) has reached almost 59 percent in 2006. The share of working age population will peak in 2045 to 68 percent before starting to decline again, this time the reason being the growing old age population share instead of young. These trends in fertility and mortality rates in the country indicate an increasing median age of the population. The changing age structure of the population can be best represented in population pyramids. Figure.. shows the changing age structure of population in Pakistan over a century (for years 1950, 2000, 2025 and 2050). It shows that not much fertility decline took place from 1950 to 2000 and the age structure still appears like a classic pyramid, however, the base does show a slight shrinking. In the 25 years after 2000, the population age structure shows an apparent change, with the base losing its pyramid appearance. In the subsequent twenty-five years the age structure is projected to change drastically, from what it looked like fifty years earlier, and approach an almost cylindrical shape. The decreasing fertility makes the base lighter and due to the past high fertility rates an echo generation, which now comprises working age adults, moves its way through the demographic evolution of the country's population, making the centre heavy. The top of the pyramid, though still narrow, shows a widening trend with the share of the elderly gradually increasing in the population.

Fig. Population Pyramids of Pakistan: Changes over Time, 1950-2050



Source: Based on medium variant, UN (2005).

All these demographic processes have resulted in decreasing the dependency ratio in the country. The proportion of the population in working ages (15–64 years) continues to increase while those in the younger ages (0–14) decrease. The proportion of the elderly in the total population is projected to show a substantial increase only after 2025.

Theoretically, demographic dividend is the difference between the rate of growth of working age population and total population. When the difference is in favour of working age population, it is considered to be a window of opportunity offered by country's demography to make use of for economic growth. Policies need to be formulated taking into account the relation between economic development and the effects of changing age structure of the population. Pakistan's projected period of 'demographic dividend' is from 1990-2045

Table 3-4 Demographic Indicators

Indicators	1995	2000	2003	2006
Total population (in millions)	129.81	139.12	149	156.26
Crude Birth Rate	37	27.8 _b	26.5 _b	26.1 _{a,d}
Crude Death Rate	10	7.2(01) _b	7 _b	7.1 _{d(05)}
Population Growth Rate:	2.8 _b	2.04 _b	1.92 _b	1.8 _b
Dependency Ratio %:	82	85.5 _b	83.8 _b	81.5 _c
% Population <15 years	42.62	41.70	43.4	37.7

Total Fertility Rate:

5.3^b 4.2^b 3.9^b 3.28^b

Source: Pakistan demographic survey 2001, Federal Bureau of Statistics, Stat-Pocket-Book 2003, Federal Bureau of Statistics, National Institute of Population Studies (NIPS)

- a. Demographic, social & health indicators for countries of the Eastern Mediterranean.2004, 06 <http://www.emro.who.int/dsaf/dsa663.pdf>
- b. Gateway Indicators
- c. PDHS 2006-07
- d. PDS 05

Table 3-5 Demographic indicators by Gender and Urban rural – Year 2004-2006

Indicators	Urban	Rural	Male	Female
Population (%) mill	53.85	102.41	81.09/156.26	75.17
Crude Birth Rate:	23.9(05)	27.4*(05)	26.5(03)	26.5(03)
Crude Death Rate:	6.3 ^c	7.5 ^c	7.8 ^c	6.3 ^c
Population Growth Rate:	3.53 ^a	2.33	2.64	2.75*
Dependency Ratio:	75.5 ^b	95.46 ^b	3	2.5
% Population <15 years	40.07	45.06 ^b		
Total Fertility Rate:	3.3	4.1	-	-

Source: Demographic and health indicators for countries of the Eastern Mediterranean 2006

* Compendium on Gender Statistics in Pakistan 2004⁵⁹

a Population census 1981-98. FBS

b FBS http://www.statpak.gov.pk/depts/pco/statistics/other_tables/pop_by_age_group.pdf

c. PDS 2005

4 HEALTH SYSTEM ORGANIZATION

4.1 Brief History of the Health Care System

Outline of the evolution of the Health Care System

National public health is a recent innovation in Pakistan. In pre-partition India, the British provided health care for government employees but rarely attended to the health needs of the population at large, except for establishing a few major hospitals, such as Mayo Hospital in Lahore, which has King Edward Medical College nearby. Improvements in health care have been hampered by scarce resources and are difficult to coordinate nationally because health care remains a provincial responsibility rather than a central government one. Until the early 1970s, local governing bodies were in charge of health services.⁶⁰

National health planning began with the Second Five-Year Plan (1960-65) and continued through the Eighth Five-Year Plan (1993- 98). Provision of health care for the rural populace has long been a stated priority, but efforts to provide such care continue to be hampered by administrative problems and difficulties in staffing rural clinics. In the early 1970s, a decentralized system was developed in which basic health units provided primary care for a surrounding population of 6,000 to 10,000 people, rural health centers offered support and more comprehensive services to local units, and both the basic units and the health centers could refer patients to larger urban hospitals.

In the early 1990s, the orientation of the country's medical system, including medical education, favored the elite. There has been a marked boom in private clinics and hospitals since the late 1980s and a corresponding, unfortunate deterioration in services provided by nationalized hospitals. In 1992 there was only one physician for every 2,127 persons, one nurse for every 6,626 persons, and only one hospital for every 131,274 persons. There was only one dentist for every 67,757 persons.

In addition to public- and private-sector biomedicine, there are indigenous forms of treatment. *Unani Tibb* (Arabic for Greek medicine), also called *Islami-Tibb*, is Galenic medicine augmented by Muslim scholars. Herbal treatments are used to balance bodily humors. Practitioners, *hakims*, are trained in medical colleges or learn the skill from family members who pass it down the generations. Some manufactured remedies are also available in certain pharmacies. Homeopathy, thought by some to be "poor man's Western medicine," is also taught and practiced in Pakistan. Several forms of religious healing are common too. Prophetic healing is based largely on the *hadith* of the Prophet pertaining to hygiene and moral and physical health, and simple treatments are used, such as honey, a few herbs, and prayer. Popular forms of religious healing, at least protection from malign influences, are common in most of the country. The use of *tawiz*, amulets containing Quranic verses, or the intervention of a *pir*, living or dead, is generally relied upon to direct the healing force of Allah's blessing to anyone confronted with uncertainty or distress.

Constitutionally, health is a provincial subject in Pakistan with clearly demarcated roles, responsibilities and prerogatives at each level of the government. The Federal Government is mandated with policy-making, coordination, technical support, research, training and seeking foreign assistance. The provincial and district departments of health are responsible for the delivery and management of health services. The devolution of administrative powers under the Local Government Ordinance 2001 has devolved service delivery to the district level⁵⁵. Most of the program-based interventions discussed are led by the federal government with implementation arms at the provincial and districts levels. Some of the programs described are disease-specific such as the respective programs on HIV/AIDS, malaria, tuberculosis, non-communicable diseases and hepatitis. Others are specific to the lifecycle domains such as in the case of maternal and child health, whereas others, such as the National Program for Family Planning and Primary Health Care and the National EPI Program are cross-cutting. Following are some of the National public health programs and interventions:

Federally-led national programs

- The National Program for Family Planning and Primary Health Care
- The Expanded Program for Immunization
- The National HIV/AIDS Control Program
- The National Malaria Control Program
- The National Tuberculosis Control Program
- The National Nutrition Program
- The Women Health Project
- The National Mental Health Program

Newly launched programs in the public sector (2004-05)

- The National Program for Prevention and Control of Blindness
- Prime Minister's Program for the Prevention and Control of Hepatitis
- National Neonatal, Maternal and Child Health Program

Public health programs in partnership with NGOs

- The National Action Plan for the Prevention and Control of Non-Communicable Disease and Health Promotion in Pakistan (in collaboration with Heartfile)
- Leprosy Control Program (in collaboration with the Marie-Adelaide Leprosy Society)

4.2 Public Health Care System

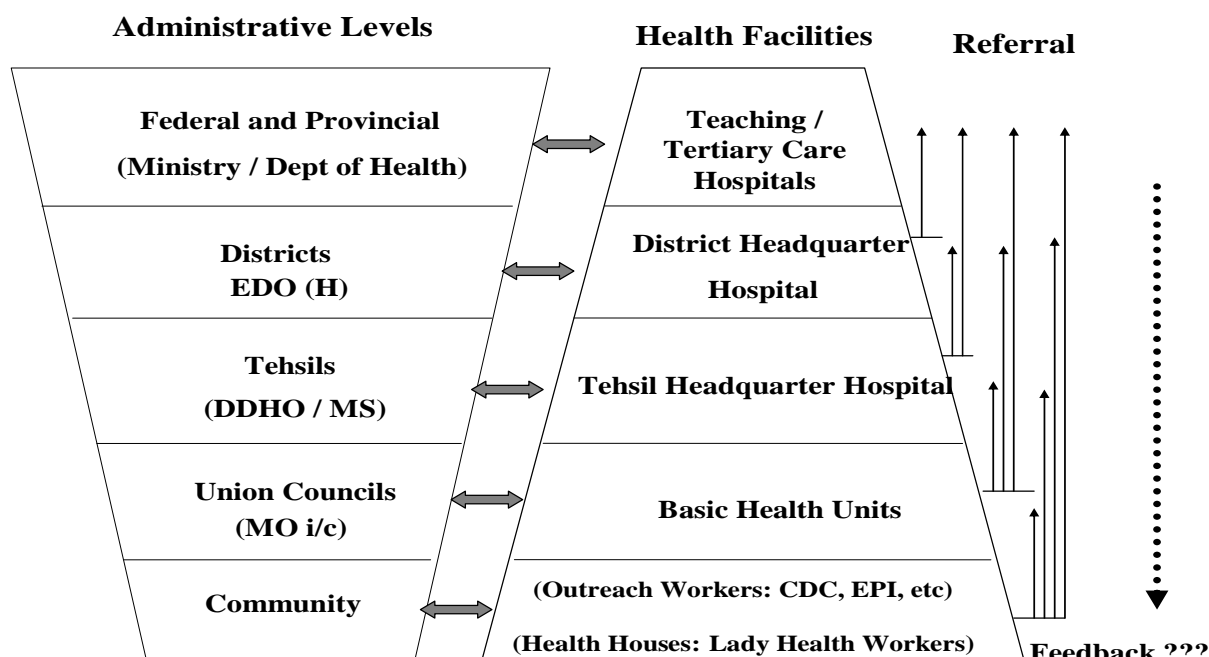
Organizational structure of public system

Health Infrastructure:

Pakistan's public health delivery system functions as an integrated health complex that is administratively managed at a district level. The state attempts to provide healthcare through a three-tiered healthcare delivery system and a range of public health interventions. The former includes *Basic Health Units* (BHUs) and *Rural Health Centers* (RHCs) forming the core of the primary healthcare structure. Secondary care including first and second referral facilities providing acute, ambulatory and inpatient care is provided through *Tehsil Headquarter Hospitals* (THQs), and *District Headquarter Hospitals* (DHQs) which are supported by tertiary care from *teaching hospitals*. Basic Health Units (BHUs) serve 10,000 to 15,000 population; five to ten BHUs in the catchment area are linked to a Rural Health Center (RHC) serving 25,000 to 50,000 populations, while the Tehsil or Taluka (THQ) and the District Headquarters (DHQ) hospitals, provide secondary care services, serving 100,000 to 300,000 and 1-2 million persons respectively. Maternal and Child Health Centers (MCHCs) are also a part of the integrated health system, however, the number of MCHC remains limited. The MCHCs, BHUs and RHCs are primary level care facilities and are expected to provide basic obstetric care with community outreach programs offered through lady health workers. The THQ and DHQ hospitals have specialists, serve as referral centers and are expected to provide comprehensive obstetric care.⁶¹

There are seven hospitals under the control of Federal Government located in Islamabad, Rawalpindi and Karachi. There are tertiary care hospitals in all the provinces including those with the status of teaching hospitals, which are under the administrative jurisdiction of provinces. However, recently four hospitals in NWFP and three in Sindh have been granted autonomous status. Throughout the country, the vast network of health care facilities include 919 hospitals, 5334 BHUs and Sub- Health Centers , 560 RHCs, 4712 Dispensaries, 905 MCH Centers and 288 TB Centers. These healthcare facilities show an improvement over the previous year as the total number of healthcare facilities during 2005-06 was 12,637. During 2006-07, these healthcare facilities have increased to a total of 12,726. There has been a gradual improvement in the number of doctors, dentists and nurses over the years. Doctors, dentists, nurses and LHVs have doubled in the last one decade and accordingly population per doctor, per dentist, per nurse etc. have all registered a significant improvement 55.

Organization of the Public Health Care System (Figure 1)



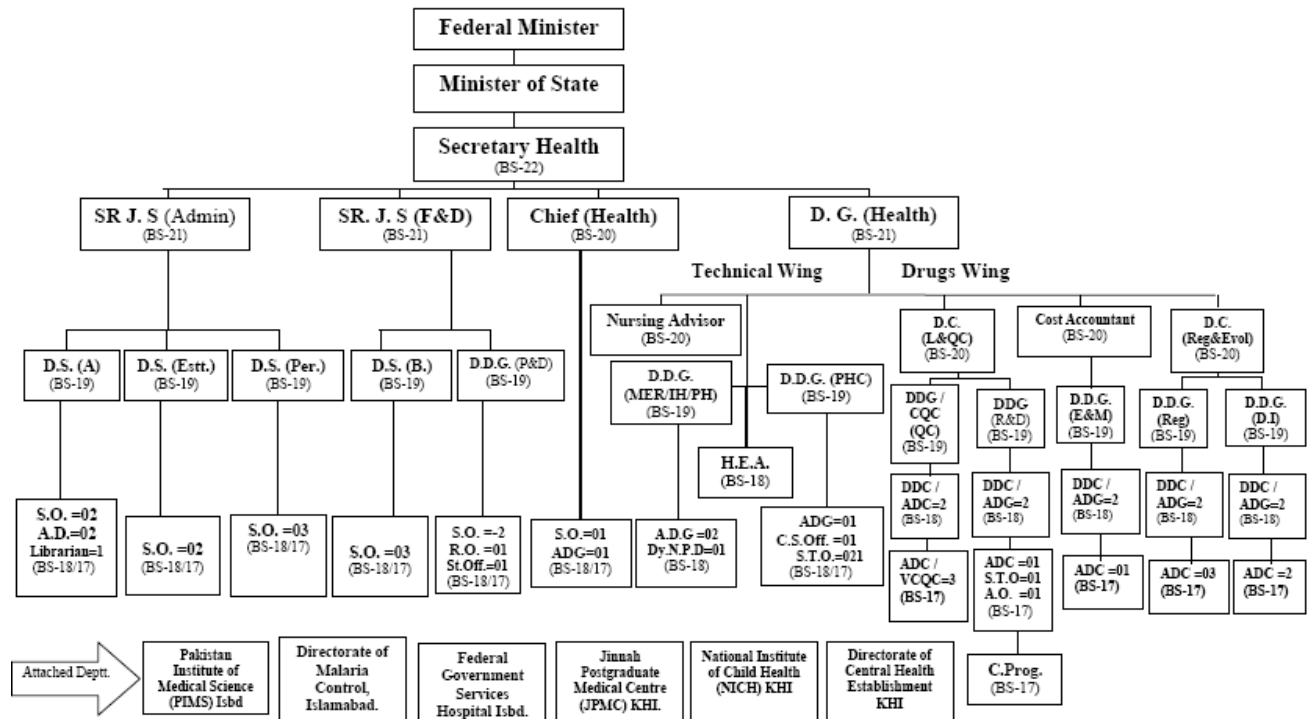
Organization of Public Health Care System

Service Delivery

Pakistan's health sector is constitutionally a provincial subject but health care delivery has traditionally been jointly administered by the federal and provincial governments with districts mainly responsible for implementation. Service delivery is being organized through preventive, promotive, curative and rehabilitative services. The curative and rehabilitative services are being provided mainly at the secondary and tertiary care facilities. Preventive and promotive services, on the other hand, are mainly provided through various national programs; and community health workers' interfacing with the communities through primary healthcare facilities and outreach activities. Pakistan has one of the largest public sector owned service delivery infrastructures in the world. Due to differences in incentives in the public vis-à-vis the private sector, it is not uncommon for public health workers to hold jobs both in public and private sectors to augment their earnings. Accordingly the role of private sector is gradually increasing in the provision of health service delivery. Efforts are underway to address the currently prevailing service delivery challenges by developing alternative service delivery and financing options at the basic healthcare and hospital levels.⁵⁵

Taxation and out-of pocket payments are the major modes of financing health within the country; donor contributions add to these. Less than 3.5% of the employees are covered under the Employees Social Security scheme and although there are limited social protection funds such as *Zakat* and *Bait-ul-Mal*, which serve approximately 3.4% of the population in need of care, a comprehensive social protection mechanism does not exist. Limited attempts have been made to mainstream philanthropic grants and private resources as modes of financing health. In recent years, many alternative service delivery and financing models have been introduced at various levels, albeit with limited success.³⁴

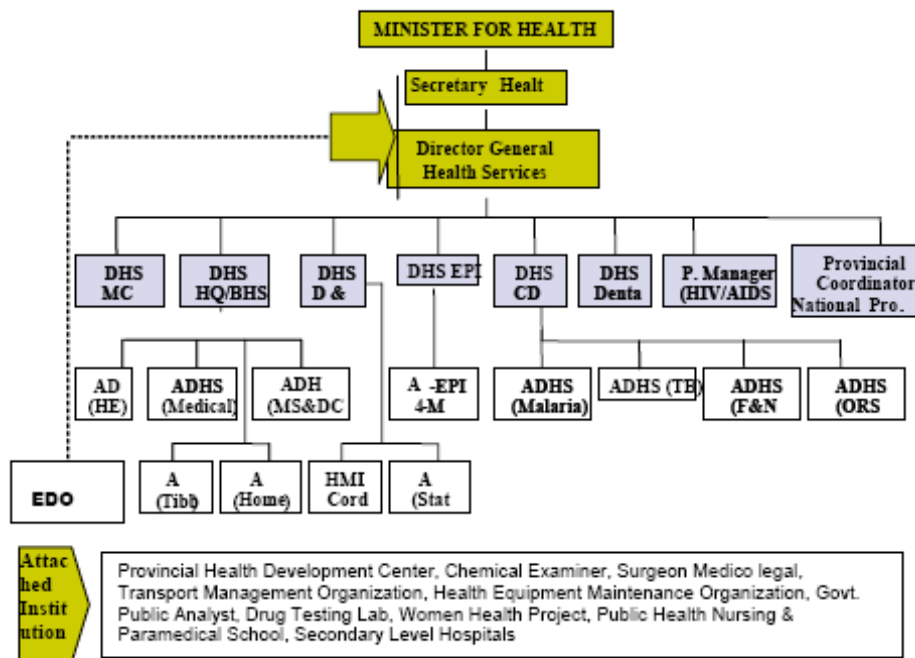
Organizational Chart Of Ministry Of Health (Figure 2)



Source: Ministry of Health

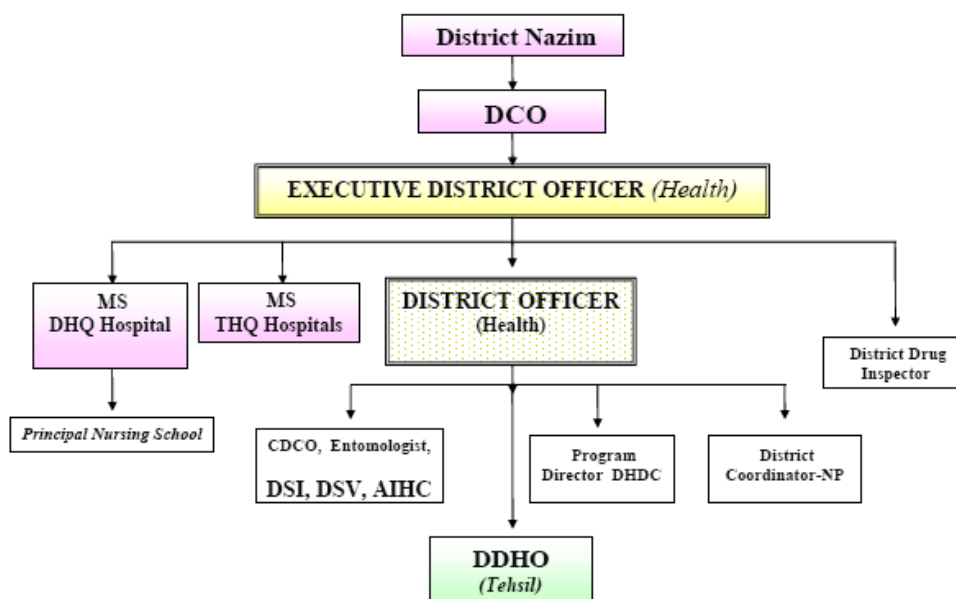
PROVISIONAL SET-UP(Figure 3)

Organizational Set-up: Provincial Level



Source: Inventory of Health and Population Investment in Pakistan, WHO

Organizational Set up: District Level (Figure 4)



Key organizational changes over last 5 years in the public system, and consequences

In August 2001, the Government of Pakistan initiated the implementation of the "Devolution Initiative" to enhance accountability at local level and improve service delivery by devolving administrative and financial powers to districts/local authorities. The District Health System under the District Government is now responsible for planning, development and management including implementation of health care delivery from DHQ hospitals right down to the outreach programs. Provincial governments have focused on restructuring the mode of primary healthcare delivery by revitalizing Basic Health Units (BHUs) and Rural Health Centers (RHCs). 55

Health system reforms are concurrently being undertaken in the two provinces, in NWFP, the reforms range from financing of the health sector, contracting out and improving the quality of health services, and developing a policy on human resource. The reform process is assisted by the World Bank with technical assistance from the German Agency for Technical Cooperation and DFID. The Governments of Punjab has taken a lead in this area by developing models of contracting out service delivery to private sector and other models where service delivery has been incentivised within the existing system. The government of NWFP is also following on similar model. In Punjab, models are also being tested to transfer management to lower levels of government – an option, which is complementary to the administrative arrangements within decentralization. Efforts are also underway to enhance regulatory capacity within the country.

In Punjab, the reform process is focusing on improving primary health care services by providing financial incentives and improving salaries of health professionals, creation of positions for midwives and lady health workers at BHU levels, provision of medicines and continuous professional development. There is however lack of harmonization among the provinces in the reform process and the federal government has so far not fulfilled its coordination function.

A national health policy unit was established in the federal MOH in 2004 with the technical assistance of WHO and financial support of DFID is in early phase of development. Despite the many constraints, the NHPU was able to constitute a National Health Policy Council, contribute to the health sector reform agenda for the Pakistan Development Forum 2006, and is now playing a more proactive role in the formulation of the new national health policy. 62

Another important initiative is the establishment of a high level National Commission for Government Reform, which has a sub-committee on health. The committee is considering several reform initiatives in health that focus on good governance to improve the quality of essential

health services. There has been some ongoing legislation in the health sector and the following ordinances have been promulgated and now have the status of legal acts:

- 2001, Mental Health
- 2002, Protection of Breast feeding
- 2002, Prohibition of smoking in public places & protection of non smokers
- 2002, Safe blood transfusion
- 2002, Amendment of drugs act, 1976
- 2002, Amendment on ordinance on smoking 1979 (warning labels)

Legislation on regulation of private hospitals and laboratories, organ donation, amendment in Unani and Tibb Act, amendment in Pakistan Nursing Council Act is under consideration.⁶³

Planned organizational reforms

The permission to establish Drug Regulatory Authority was given in 2006, the work for which is currently underway. The Ministry of Health is also working to develop a framework for the regulation of the private sector healthcare. Approval of Rs. 20 billion for Maternal Neonatal and Child Health strategy to provide emergency obstetric services in 20 districts. PC 1 for "Presidents Initiative for urban Clinics" is under process of approval. Estimated cost is Rs. 4302.414 million. These Urban Filtration clinics will provide preventative and curative services for the urban poor in 7 major cities in Pakistan including Islamabad.⁶⁴

These reforms are essential to bring rapid improvements in health services at the point of delivery. At the same time there is a need to review and reform the organization and functioning of the federal MOH, provincial DOH and district health offices to address some of the underlying governance issues that are responsible for the poor health services. In this regard essential functions such as institutional mechanisms for strategic health planning, regulation and standard setting, health information and its use, and disease surveillance need to be strengthened at all level of the public health sector.

4.3 Private Health Care System

Modern, for-profit

The sector constitutes a diverse group of doctors, nurses, pharmacists, traditional healers, drug vendors, as well as laboratory technicians, shopkeepers and unqualified practitioners. The services they provide include hospitals, nursing homes, maternity clinics; clinics run by doctors, nurses, midwives, paramedical workers, diagnostic facilities and the sale of drugs from pharmacies and unqualified sellers. However, in some cases, the distinction between public and private sectors is not very clear as many public sector practitioners also practice privately – legally or illegally. The sector is fragmented and is characterized by a mixed ownership pattern, many types of providers and different systems of medicine. Majority of private sector hospitals in Pakistan has sole proprietorship or a partnership model of organization and very few belong to the 'corporate public limited' category. Stand-alone clinics all across Pakistan are the major providers of out-patient care, and except for a minute number, majority of these clinics falls in the sole proprietorship category.³⁴

The FBS has recently conducted an economic census (2001-2003) in which they have listed 96,430 private health establishments, including hospitals, dispensaries, hakims, homeopaths and others providing services in the health sector, however this is not broken down by type of provider. Unfortunately, this number, is not useful as if we take out approximately 25,000 health institutions as belonging to the government and semi government organizations, 70,000 institutions in the private sector is still a very large number but with no information as to the type of institution the use of this information is quite limited. The private sector mostly follows the market forces; therefore there is a high concentration of hospitals in large cities and some presence in rural areas. This leads directly to the second problem of unqualified medical practitioners proliferating in areas where the health care services are deficient.

There is legislation on the accreditation of doctors, nurses and LHVs. The law requires that all providers for health care be registered with their respective regulatory bodies like the Pakistan Medical and Dental Council, the Homeopathic and Tibb Council; however in practice this is rarely implemented. Legislation for accrediting institutions like hospitals and quality assurance mechanisms are absent. There is no licensing mechanism nor any license or permission is required to open or operate a health care institution and as such anybody can open a clinic or hospital and provide services the only requirement is that it should be run by a registered medical practitioner.

The regulatory function is currently not at the top of the agenda in the Ministry of Health, the constitutional aspect of health being a provincial subject also creates confusion as to where the regulatory function should reside. There is no separate unit to address regulation of health. The Ministry of Health is not even willing to monitor the service provision by the Provincial Health Departments as it does not finance the services. There is however a well developed drug regulation section headed by a Drug Controller working under the supervision of the Director General Health. The Drug Controller is responsible for registering all the drug formulations in the country. This section is currently being reformed to an independent Drug Control Authority which has been recently approved by the Prime Minister.

The share of private expenditure as a percentage of total health care expenditure in Pakistan is estimated to be around 65% of the total out of which more than 98% is out of pocket expenditure by the households. This creates a large fiscal space for the private health care sector. An estimate of the proportion of population that was sick and consulted a health care provider is provided by the Pakistan Social and Living Standards Measurement Survey 2004-5. The latest PSLMS data (HSU 1), shows that 2/3rd of the consultations take place in the private sector. These data should be interpreted in the light of the fact that most of the health care providers providing services in this category have dual jobs.⁵³

Modern, not-for-profit

Pakistan has a relatively sizeable non-profit private sector with more than 80,000 not-for-profit non-governmental organizations (NGOs) registered under various Acts. Predominant view pertaining to NGOs within the health sector appears to denote that the sector is relatively small and somewhat concentrated in urban areas; however, it is also well-established that the sector has many strengths that can complement the functions of the public sector in health service delivery. These strengths include technical expertise in specific program-related areas, the flexibility to introduce innovations and outreach advantage as in the case of non-facility health program approaches, community distribution channels and mobile health units. Many NGOs also preferentially target special groups that do not traditionally access conventional services; amongst others, these include People Living with HIV/AIDS, victims of drug abuse and rape and non-camp based refugees. Above all, most NGOs largely focus on the poor and marginalized; this is inherently complementary to the role of the private sector in providing social safety nets for the underprivileged. A certification program has been developed for NGOs by the Pakistan Center for Philanthropy (PCP) – an institute mandated through an Act of Parliament. The process of certification is voluntary and is intended to enhance the credibility of NGOs.³⁴

Some of the issues concerning not for profit organizations are Non-governmental organizations not fully mainstreamed into national planning and development, Resource constraints and issues of sustainability, Limited capacity of small NGOs in administrative, technical and other functions, weak regulation of the nonprofit sector and lack in procedural clarity in public-private relationships.

There is a need to regulate the NGO sector; recently, the government has also made several references to this. However, the State must carefully and rationally use the expressions 'regularize' and 'control the NGO sector' within this context. Unnecessarily controlling and policing of NGOs by institutions with limited capacity can have a demoralizing and negative effect and may prove unnecessarily restrictive to the function of NGOs. It is imperative for any regulatory mechanism to be conducive, fair, participatory and transparently autonomous.

Traditional

Traditional medicine has also been an integral part of the cultural heritage of the subcontinent where it has cured and healed people for thousands of years. Three types of practices characterize traditional medicine; these are *Tibb-e-Unani*, Homeopathy and *Ayurvedia*. This domain has taken the new name complementary and alternative medicine (CAM). CAM refers to those therapeutic and diagnostic disciplines that exist largely outside the institutions where conventional health care is provided. Alternative therapies have been utilized by people in Pakistan who have faith in spiritual healers, clergymen, *hakeems*, homeopaths or even many quacks. These are the first choice for problems such as infertility, epilepsy, psychosomatic troubles, depression and many other ailments. The traditional medicine sector has become an important source of health care, especially in rural and tribal areas of the country. The main reasons for consulting a CAM healer is the proximity, affordable fee, availability, family pressure and the strong opinion of the community. Pakistan has a very rich tradition in the use of medicinal plants for the treatment of various ailments. The herbal or *Unani* or Greco–arab system of medicine is a growing industry worldwide. Global sales of herbal products now exceed a staggering US\$40 billion a year. Most of the medicinal plants are found in the temperate climates and subtropical forests of northern Pakistan. Pakistan is among the eight leading exporters of medicinal plants.

Around 70–80% of the population, particularly in rural areas, uses CAM. In addition to other CAM systems such as Ayurvedic and homeopathic, the *Unani* system has been accepted and integrated into the national health system. Pakistan is the only country in the eastern mediterranean region where formal *Unani* teaching institutions are recognized. There are 45 000 traditional healers, of whom about three-quarters are practicing in rural areas. The presence of these practitioners in rural areas may be regarded as a source of health care delivery for the rural majority of Pakistan. Approximately 52 600 registered *Unani* medical practitioners are practicing both in the public and private sector in urban and rural areas. About 360 *tibb* dispensaries and clinics provide free medication to the public under the control of the health departments of provincial governments. However there is a definite need to design training and capacity-building programs for the CAM practitioners who need such continuing education, hence bringing them into the mainstream and elevating their status in society.⁶⁵

There are more than 130,000 registered practitioners of traditional medicine and 83 recognized homeopathy medical colleges versus 103,535 registered doctors and 53 medical schools speaks somewhat about the nature of demand.³⁴

About 95 dispensaries have been established under provincial departments of Local Bodies and Rural Development. A separate Directorate of Hakims has also been established under the Federal Ministry of Population Welfare Program, and 16,000 diploma-holding unani physicians of traditional medicine have been involved in the National Population Welfare Program. About 40,000 homeopathic physicians are registered with the National Council for Homeopathy. The traditional medicine has been accepted and integrated into the national health system in Pakistan. The Government has issued the Unani, Ayurvedic and Homeopathic Systems of Medicine Rules of 1965, which included implementing provisions on the registration of practitioners, elections to the boards, and recognition of teaching institutions. Under this Act, courses in homeopathy provided by recognized institutions must be four years in duration, culminating in a qualifying examination. The Board of Homeopathic Systems of Medicine was established in order to maintain adequate standards in recognized institutions and to make arrangements for the registration of duly qualified persons. The Ministry of Health, through the National Council for Tibb oversees the qualifications of practitioners. After successful completion of tibb qualifications, candidates are registered with the National Council for Tibb, allowing them to practice traditional medicine lawfully. Tibbia colleges, Pakistan's unani teaching institutions, are recognized by the Government and are under the direct control of the National Council for Tibb, Ministry of Health, which is responsible for maintaining standards of education in recognized teaching institutions, revising/modifying curricula and syllabuses, and holding annual examinations. Twenty-six colleges in the private sector and one college in the public sector offer four-year diploma courses in Pakistani traditional unani and ayurvedic systems of medicine that follow the prescribed curriculum and conditions laid down in the regulations.⁶⁶

Some of the issues concerning traditional healers are lack of education, training, regulation and the evidence base for CAM practitioners. Moreover, lack of accountability in the medical profession, both modern and complementary, results in untrained quacks practicing medicine in different names. The CAM therapies being used have not been thoroughly researched, and by and large there is only evidence from old documents. Furthermore, indigenous people have no training in gathering and storing of medicinal plants, and hence the sustainability of such plants is threatened. The indigenous knowledge of identification and use of medicinal herbs is dying out. Deforestation and threat of extinction is also alarming because the area covered by forests is decreasing day by day due to lack of water and repeated droughts.⁶⁵

Key changes in private sector organization

In the past two national health policies not much emphasis was given to the regulation of the private health sector. The national health policy of 2001 specifically focuses on introducing the regulatory mechanism for the private sector in health care. In its KEY AREA # 7, the policy states that; "Introducing of required regulation in the private medical sector with a view to ensuring proper standards of equipment and services in hospitals, clinics and laboratories as well as private medical colleges and Tibb/Homeopathic teaching institutions".⁶⁷ However there is no governing body neither an ordinance to regulate the private sector. Implementation Modalities include:

- Draft laws/regulations on accreditation of private hospitals, clinics and laboratories have been circulated to all Provincial Governments and stakeholders. These will be finalized and submitted to the Federal Cabinet.
- A law to ensure that private medical colleges adhere to PMDC approved standards before they start admitting students have been circulated as above. This will be submitted to the Federal Cabinet after necessary processing.
- Existing law on Tibb and Homeopathy will be amended to recognize degree and postgraduate level courses in Traditional Medicine thus removing the existing lacuna on this account. The amendments will be submitted to the Federal Cabinet.
- Each Provincial Government will develop an appropriate framework for encouraging private-public cooperation in the health sector, especially for operationalizing unutilized or under-utilized health facilities through NGOs, individual entrepreneurs or doctors' groups.
- In NWFP regulatory authority has been formed to regulate the private sector.
- Government is trying to formalize the sector of traditional medicine and a draft bill has been moved on the floor of the National Assembly for discussion. The National Institute of Health (NIH) has recently published a list of essential drugs in *Unani* Medicine and the Herbal Medicine Division is currently working on GMP for the sector.

Public/private interactions (Institutional)

Public Private Partnership (PPP) and Pakistan:

At the level of the Ministry/Departments of Health, there is no defined policy to deal with the private sector. There is no official interaction between the public and the private institutions. Due to lack of a comprehensive approach the involvement of the private sector is mostly limited to invitations to participate in training activities. The issue of social health insurance has been raised at the MoH level but has found little political favor. The preoccupation at the MoH is how to strengthen the public sector health facilities and provide services through them. Due to this there is very little work on the regulation or involvement of the private sector and the main reason given is that this is the responsibility of the provincial governments.

At the Provincial level, the recent devolution process has resulted in the administrative powers being shifted to the district level and currently the provincial directorates of health have very little role in implementation. The provincial level is now reorganizing itself to provide a more supportive and technical role to the districts. However even at this level there is a reluctance to involve the private sector in service delivery specially by using public funds.

The Public Private mix approach be of two types (i) Internal (ii) External. Internal PPP means shift of the responsibility of health care e.g. diagnostic, catering cleaning ambulatory services private beds, and user fee, but external PPP is the indirect approach which shares burden of public health sector by implementing policies out side of the health facility and network e.g. Tax

relief, Insurance schemes and legalizing private practices. All these policy ingredients have reasonable room in the Pakistan health network which can be implemented after thorough assessment.

Some of the examples of PPP initiatives in Pakistan are as follows:

- Rahim Yar Khan Project where all the BHUs have been contracted out to Punjab Rural Support Program (PRSP), which is working by increasing the salaries of doctors and making them responsible to three BHUs under special contract. Better management and a functioning system of monitoring and supervision are improving the services.
- Public Private collaboration is going on for some hospitals of the NWFP province.
- This collaboration is mainly between private medical colleges and public secondary or tertiary hospitals to benefit from each other and better provision of services.
- Enhanced HIV/AIDS control program is being implemented with a major proportion of Public Private Partnership component.
- Collaboration of LHW program with NGOs for improving supervision, training and referral system. Under the newly approved PC-1 of the LHWs' Program,
- Reproductive Health Project and Women Health Project funds have been specifically allocated for public-private partnership.
- Tuberculosis (DOTS implementation through NGOs). Some of the activities are being implemented under GFATM funds, whereas a PC-1 is underdevelopment for PPP interventions for better implementation of DOTs and to increase its coverage.
- Testing impregnated bed nets by Malaria Control Program in collaboration with NGO in NWFP.
- Iodized salt fortification and the piloting of floor fortification.
- Implementation of GFATM projects in Pakistan.

However most of the projects are pre-mature and at early stages of implementation and extensive evaluations are required for learning more about the experiences and outcomes.⁶⁶

Public/private interactions (Individual)

There is no formal documented officially accepted policy system for interaction between the public and private health care providers. Pakistan Medical Association is the recognized body, which provides a platform for interaction between government and private sector. For curative care services, the interaction is mostly on personal level. The cases are referred and handled on personal interaction. Most of the public health care providers are also practicing in private clinics. The process is only institutionalized in the armed forces set up where the classified specialist is allowed to use the official premises for private practice. A small percentage of the fee goes to the organization. The practice timings are in the evening that is after the official timings of the organization. In the civil set up there is no such facility of private practice within the organization. The private practice is carried out in private premises. There is no cost sharing or revenue implication between the hospital and the provider.

During last few years, provincial health department of NWFP placed a ban on private practice for the public sector. They allowed public sector consultants to practice privately in the same facility in the evening. Major share was to be of the doctor and the rest was for the organization. The doctors who were well established in their practice resigned from government sector. This caused a dearth of qualified and experienced doctors in the public sector. In the meantime the provincial health management changed and the new management withdrew this decision as the quality of services declined with the departure of senior doctors. No review or third party evaluation of this experiment was ever conducted. In Punjab this process never gained a shape more than a thought as the doctors who practice have strong clouts and lobby.⁶⁶

Private providers, even when employed in the public sector, work quite independently of the public sector. The lack of a regulatory mechanism and/or issues with the implementation of laws leads to disconnect between the public and private scopes of work. Both the sectors need more interfacing so that collaborative institutional processes can be set into motion; these will ultimately benefit the health of the nation.³⁴

Public-citizen partnerships: some public-private partnerships take more of a public-citizen partnership orientation, an important grassroots level example includes Citizen Community Boards and Village Health Committees as part of the Devolution initiative. At the hospital level,

the Citizen-Participatory Hospital Management Board of the Sindh Institute of Urology and Transplantation (SIUT) is an example, which is being followed in some other hospitals of the country.³⁴

Planned changes to private sector organization

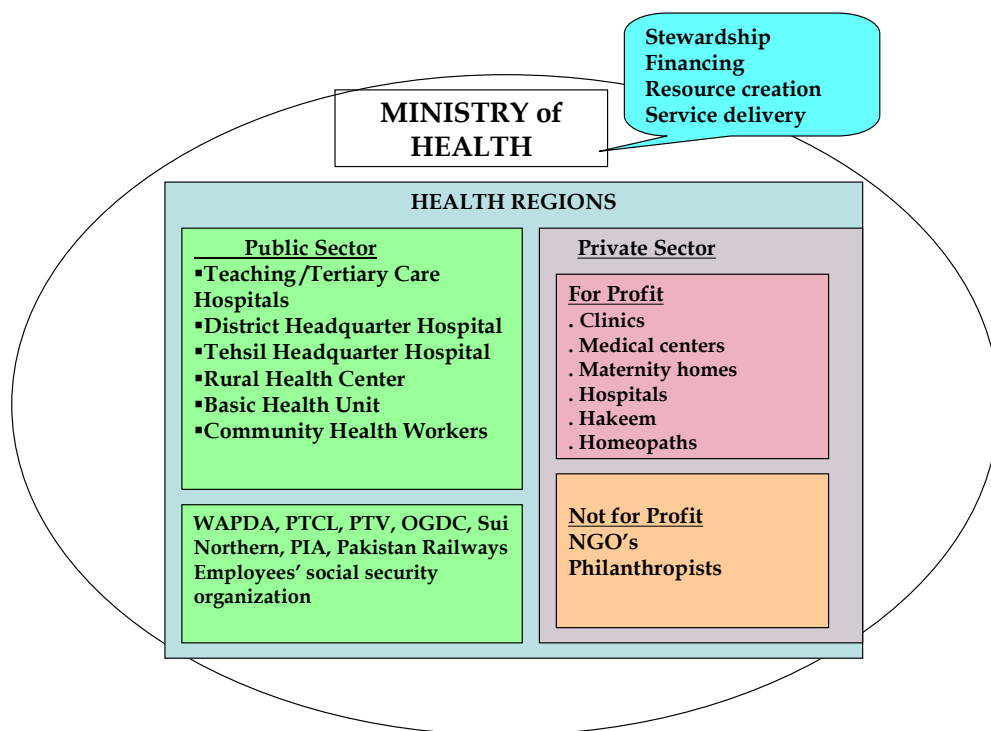
Hospital regulatory authority does not exist for the private sector. Regulation of private hospitals and laboratories is under consideration. There is a plan to include the PPP aspect in the new National Health Policy as the private sector is the major health care provider in Pakistan, to ensure proper standards of equipment and services in hospitals, clinics and laboratories as well as private medical colleges and Tibb/Homeopathic teaching institutions. Under this ordinance it is proposed to inspect all hospitals and laboratories to predefined standards and provide them with medical fitness certificates. This ordinance will also regulate the services provided at these hospitals and the user fees charged. The ordinance also proposes to setup the office of medical ombudsman to look into disputes between the clients and the hospitals and have the power to impose penalties.

National Action Plan on NCD Prevention, Control, and Health Promotion (NAP-NCD), was released on May 12, 2004, and attempts to obviate the challenges associated with addressing chronic diseases in countries with limited resources. By developing an integrated approach to chronic diseases at several levels, capitalizing on the strengths of partnerships, building on existing efforts, and focusing primary health care on chronic disease prevention, the NAP-NCD aims to mitigate the effects of national-level programs on local resources.⁶⁸

4.4 Overall Health Care System

Organization of health care structures

Pakistan National Health System



Brief description of current overall structure

The health system in Pakistan consists of public and private sectors. The private sector provides health coverage to 70% of the population, whereas the public sector provides health services to the remaining 30% of the population of the country.⁶⁹ Ministry of Health (MOH) at the Federal level has the major role to develop national policies and strategies for the entire population of the country, especially those who are under-served, sets national goals and objectives including for maternal health care. Under Pakistan constitution, health is primarily responsibility of the provincial government, except in the federally administrated areas. The federal government is responsible for planning and formulating policies. The program development and implementation, including those for maternal health, takes through the provincial Departments of Health (DOH), which have an extensive network of nearly 10,000 service outlets at various levels, including limited facilities for emergency obstetric care. Ministry of Health consists of one division, the Health Division and following departments: i. Central Drugs Laboratory, College of Physicians surgeons of Pakistan, Drugs Controller, Abbasi Clinic & Hospital Karachi and Blue Area Islamabad, FGS, Jinnah Postgraduate Medical Centre, National Council for Homeopathy, National Council for Tibb, National Health MIS, National Institute for Handicapped, National Institute of Cardiovascular, National Institute of Child Health, National Institute of Health, Pak Medical & Research Council, Pakistan Medical & Dental Council, Pakistan Nursing Council, Pharmacy Council of Pakistan, PIMS Islamabad.

Ministry of Health:

Ministry of Health is headed by Minister of Health (currently there is also a Minister of State for Health). At bureaucracy level, Federal Secretary (Health) is the overall in-charge who is assisted by Director General (Health), Chief (Health), two Joint Secretaries, one looks after finance and development and the other deals with administration. Director General is the technical head who reports to the Secretary (Annex figure 2). As per Rules of Business, functions of the Ministry of Health are: National Planning and Coordination in the field of health, Dealings and agreements with other countries and international organizations in the fields of health, drugs and medicines, international aspects of medical facilities and public health; International Health and medical facilities abroad, Scholarships / fellowships, training courses in health from International Health Agencies such as WHO and UNICEF, Maintenance of educational standards, Standardization and manufacture of biological and pharmaceutical products, Vital Health Statistics, Medical and health services for Federal Government employees, National associations in medical and allied fields such as the Red Crescent Society and T.B Association, Coordinating medical arrangements and health delivery systems for the Afghan refugees, Legislation pertaining to drugs and medicines, including narcotics and psychotropic, Prevention of the extension from one province to another of infectious and contagious diseases, Lunacy and mental deficiency, Administrative control of the Pakistan Medical Research Council (PMRC), National Institute of Handicapped (NIHD), Islamabad.

Departments of Health:

The Provincial Health Secretary translates the provincial health policy, exercises control over the budget and has direct control over the teaching hospitals and other special institutions. The provincial Director General Health Services (DGHS) is the chief executing officer responsible to ensure delivery of policies and plans related to primary and secondary health care delivery. At the provincial level, a team of Directors supports DGHS, including Director MCH or Reproductive Health (figure 3). The DGHS supervises the work of Divisional Director Health Services (DDHS) who are posted at the divisional level. The Executive District Officer Health (EDO-H) is in charge of the district and is responsible for delivering promotive, preventive and curative services through the outreach workers and primary care facilities in the district. Managers of all Tehsil Hospitals, RHCs and BHUs report to him. On paper, EDOHs have responsibility for all health matters in the district (figure 4).

Medical Superintendents are the chiefs at DHQ Hospitals, and they, as well as EDOHs, report to the Director General of Health through their respective Divisional Directors. Tertiary care Hospitals are directly under the provincial Secretary of Health. In each province, the Department of health (DOH) provides safe motherhood related services through a four-tier system as part of the overall health delivery system. It consist of the following:

Community-based activities:

The maternal health, child health and family planning services are provided by the outreach workers that include LHWs, Female Health Technicians (FHTs) and TBAs. Each LHW has established a "Health House" in her home and also reaches the doorsteps of the people to serve as the first level of health services for the rural and peri-urban women and children. LHWs maintain records for all the households in their catchment areas and actively follow up each family every month, especially the defaulters for immunization or dropouts for family planning and to persuade families to adopt healthier life style.

Primary care facilities:

These include MCH Centers (MCHC), Basic Health Units (BHUs) and Rural Health Centers (RHCs). There is at least one primary health care center present in each of the Union Councils, which has a range of population from ten to twenty five thousand people. MCHCs and BHUs are to operate from 8 am to 3 pm, except Sundays, while RHCs are to provide 24-hour services (figure 4). However, most of these facilities are operational for 3-5 hours on each working day. There are 1084 MCHCs in Pakistan, which are managed by LHWs and provide basic antenatal care, normal delivery, post-natal and family planning services, and treatment of minor ailments to women and children. Basic Health Units have a staff of 10 people consisting of a male doctor, a LHW or a FHT, a Male Medical Technician or/and a dispenser, a trained or unqualified midwife (dai), a sanitary inspector, a vaccinator, and 2-3 support staff (guard, sweeper, gardener, etc.). They are required to offer first level curative, MCH, family planning and preventive services through doctors and paramedics. There are 5798 BHUs/SHCs in Pakistan.

Rural Health Centers provide more extensive outpatient services and some inpatient services, usually limited to short term observation and treatment of patients who are not expected to require transfer to a higher level facility. They serve catchment population of about 50,000 to 100,000 people, with about 30 staff including 2 male medical officers, 1 female medical officer, 1 dental surgeon and a number of paramedics. They typically have 10-20 beds, x-ray, laboratory and minor surgery facilities. These do not include delivery and emergency obstetric services. The country has 581 RHCs.

Referral level care facilities:

These include Tehsil Headquarters (THQ – sub district units) and District Headquarters (DHQ) Hospitals are located at respective levels and offer first line referral services.

Tehsil Headquarters Hospitals (THQH) serves a catchment population of about 100,000 to 300,000 people. They typically have 40-60 beds and appropriate support services including x-ray, laboratory and surgery facilities. The staff includes at least three specialists: an obstetrician & gynecologist, a pediatrician and a general surgeon. District Headquarters Hospitals (DHQH) serve catchment population of about 1 to 2 million people and typically have about 100-150 beds. There are at least 8 specialist including obstetrician and anesthetist. There are a total of 947 THQH and DHQH in Pakistan. Hospitals actually providing Comprehensive EmOC are very few.

Tertiary care facilities:

There are 30 teaching hospitals in Pakistan. They also provide sub-specialty care. These hospitals mainly provide curative services and to a limited extent some preventive services. Majority of the communities have access to a primary care facility within a radius of 5 kms. While access to government health facilities is generally good, the utilization levels are low. Several surveys have consistently shown that about 80 % of clients seek care from the private sector and only 20 % visits the government managed facilities for ambulatory care, which is indicative of considerable unutilized capacity in the system.⁶⁶

Functions of different provincial health departments:

The federal government frames Policy and the implementation takes place mainly in the districts. The role of provincial government is to coordinate between the federal and district government to ensure implementation of countrywide policy by evolving non-operational strategies including:

- Policy development, legislation and monitoring the implementation
- Supervision and monitoring of provincial institutions and district performance and provide technical guidance.
- Coordination and regulation of Medical, Dental, Nursing & and Paramedical Education
- Recruitment, transfer, posting, promotion & disciplinary action of all cadres /grades for provincial institutions

- Recruitment, transfer, posting, promotion & disciplinary action from BPS 18 & above for doctors and BPS 17 & above for other cadres of district
- Planning and Development for all provincially managed institutions and macro level planning for the districts
- Policy dialogue /coordination with Federal /district Government and Donors
- Procurement of goods /services for provincially managed institutions, vehicles, electro - medical equipment, technical assistance and rate contract for medicines for districts.
- Constitution of Medical Boards for provincial employees, Standing & Special Medical Board (SBM) for all employees
- Data analysis & feedback to MoH and Districts
- Budget allocation and control for provincial institutions only
- Health and Nutrition Education activities
- Undertake Health System Research
- Development of minimum standards of service delivery
- Provision of technical support to the Districts in all respect
- Resolve inter and intra districts conflicts.
- Annual monitoring of district performance against agreed indicators
- Plan, implement, supervise and monitor health programs transcending district jurisdiction

Functions of District health departments:

Given at Annex

Other Departments/ Public sector departments involved in Health care:

Parastatals such as WAPDA, PTCL, PTV, OGDCL, Sui Northern, PIA, Pakistan Railways – all with over 10,000 employees – have established elaborate schemes to pool risk for their employees. The government encourages parastatals to establish health insurance schemes and medical aid for their employees.³⁴

Employees' social security benefit organization: Employees social security benefit organization provides health cover to industrial workers and families all over the country. In Punjab alone it covers 544,800 workers and their 3228600 dependents. It has a network of 14 hospitals and other health facilities in the province and has about 1300 indoor beds. Mainly curative services are provided to the secured workers and their families.

Pakistan Bait-ul-Mal: Pakistan Bait-ul-Mal comes under the jurisdiction of ministry of social welfare and special education and has a wide network in all the provinces and districts with its head office in Islamabad. It is running a number of projects in the health, education and social sectors, on behalf of the government of Pakistan, in partnership with various donors and organizations. "Tawana Pakistan" is a social sector project aiming at improving the nutritional status of the girl child in 29 high poverty districts of Pakistan. It also helps in improving school enrolment and retention of girls in the schools and is covering around half a million children in the targeted districts at primary level. Bait-ul-Mal provides individual financial assistance (IFA) to the poor, destitute women, orphans and disabled persons for medical treatment and rehabilitation.

Others: A number of organizations in public sector are performing a commendable job in provision of healthcare at various segments. These include Pakistan Telecommunication organization, Fauji Foundation, Armed Forces Institutions and others.

Health care financing system consists of three alternative protection schemes, where health insurance still represents a small segment. The public has access to the public system financed by the federal and provincial governments. Although public health care is supposed to be free, because of poor quality these facilities are underutilized.

Employees in the formal sector are covered by the social security health insurance system (Employees Social Security Institution). The formal sector includes employees of private companies with a minimum number of employees (the number differs by province, from 5 to 10) and their families. These social security institutions operate health facilities at the province level. With many facilities in rented buildings and the better ones in newly built facilities owned by the social security institutions, the quality of the facilities varies but is better than in the public sector. Private insurance companies also offer health insurance. Despite the high cost, private insurance companies have filled a market segment purchasing and providing quality health care mainly as an employee benefit for private companies, because public health services are so poor. Group health insurance is offered by seven insurance companies, and individual health insurance by one

insurance company (Allianz EFU). Because of the high expense, large companies self-insure or provide their own medical facilities for employees.

The poor receive some assistance mainly financed by two autonomous institutions—the Zakat fund and Bait-ul-Maal. The Zakat fund supports hospitals, which, in turn, help the eligible poor. Bait-ul-Maal reimburses claims to those who have applied for assistance and are found to be eligible. Both funds, however, can only serve a small portion of the 50 million poor.

Those who do not avail themselves of health insurance or of the two funds, and do not want to use public providers because of their low quality, have to buy health care from private providers (doctors, dentists, clinics, hospitals, and pharmacies) or from the many traditional healers and quacks, especially in the rural areas.

Social health insurance covering most of the population is a new concept in Pakistan, which requires major assistance and a lot of awareness raising, capacity building, and institutional development. So far, not much assistance has been given to the federal or provincial governments in the sector. (i) The World Bank has tried to support health insurance pilots in NWFP and Punjab (\$1 million) in 2004, but these have been canceled. The Japan Social Development Fund withdrew its funding because the project was not initiated on time as implementing NGOs could not solve their problems on ownership of the insurance. (ii) German Agency for Technical Cooperation [GTZ]) mainly provides TA to the provincial government of NWFP to finance health care. The government of Punjab has made major efforts to study the possibility and feasibility of health insurance, elaborating on how to extend health insurance to the poor through federal or provincial government subsidies as well as on how to cover public servants⁷⁰.

5 GOVERNANCE/OVERSIGHT

5.1 Process of Policy, Planning and management

National health policy, and trends in stated priorities

The National Health Policy 2001 forms the basis of the current public initiatives in the health sector and is under continuous revision. The new Health Policy is being developed in collaboration with Heartfile and the final draft remains to be published. A cursory analysis of all three policies since 1990 reveals a contiguous theme i.e. "health for all" or universal coverage via public arrangements. Yet an equitable and minimum requirements package has not been accessible to the masses. There is disconnect between federal and provincial levels and therefore between policy development and implementation. Consecutive regimes have done very little to regulate the private sector—there is increased provision of health care via this sector (77%); moreover, studies have documented declining utilization of public health facilities.⁷¹ Regardless of the changing focus, 80% of recurrent budget is taken up by salary expenses and human resources continue to be in short supply. Another observation that merits a mention is the quality vs. quantity dilemma that successive governments have failed to deal with when making development vs. recurrent allocation decisions.

The Health Sector Vision under the MTRF 2005-2010 states objectives and targets to be achieved along with budgetary allocations for the five-year period. MTRF emphasizes preventive, promotive, maternal and child health, as well as primary health care for the next five years. Most objectives are output driven and lack indigenous priorities. MDGs such as three quarter reduction in child mortality by 2015; three quarter reduction in maternal mortality ratio by 2015; and combating HIV/AIDS, malaria, and other diseases form the core objectives of the MoH strategy. But as mentioned above, these have only to do with priority program-based outcomes and are not specific objectives for service delivery improvement (quality, access, or patient safety), capacity building, or efficiency improvement targets. In terms of physical targets, the MTRF gives specific numbers of facilities that are to be added to the current public health system only – these are only output level objectives. All national programs are vertical programs with separate PC1, administrative, financial and service provision mechanisms. The only interaction they have is at the planning and development level for quarterly financial meetings and monitoring of expenditure.

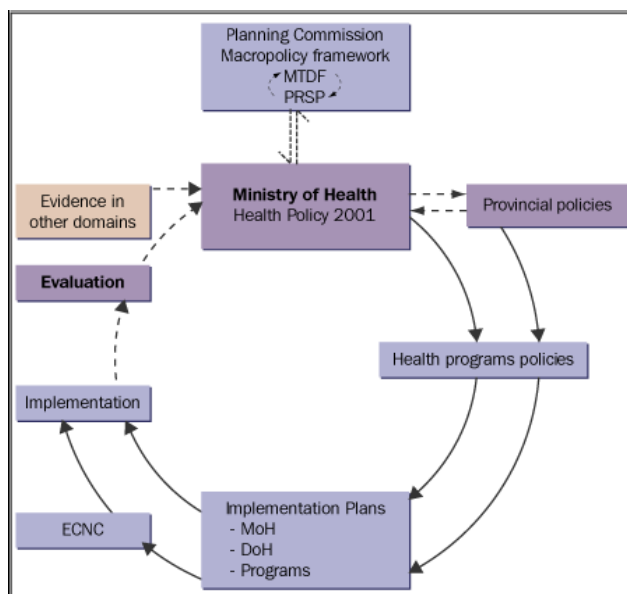
The poverty reduction strategy as well as the National Health Policy 2001 recognizes the need for equity in healthcare whereby broader social sector development programs and health specific interventions are being undertaken to address the issue. Direct interventions via provision and financing of services [social protection] and the WHO sponsored Basic Development Need Program, the Tawana Pakistan Project, the Food Security Program are all targeted at impoverished rural populations.⁷² The National Nutrition Policy 2005-10 that forms the matrix of the recently initiated National Nutrition Program aims to reduce chronic malnutrition and household food insecurity. The current health policy also has specific objectives directed at addressing inequities; these include addressing inadequacies in primary/secondary health care services, promoting gender equity, and bridging nutritional gaps in target populations. The inequitable distribution of health and other resources—mainly due to lack of need-based data—coupled with other system-level problems are seen as impediments in addressing existing inequities.

The national health policy does not clearly view disadvantaged groups as a distinct set of population with specific and long-term needs. Despite the establishment of various programs, a clear definition of vulnerable groups is not available. Maternal and child health strategy, safety nets for poor (Zakat funds), a national institute for handicapped children, and the recently established Earthquake Relief and Rehabilitation Authority (ERRA) are some examples of the government's responsiveness to the needs of special groups. While a program-based approach is appropriate in some cases, the general responsiveness at institutional level is low.

Evidence based policy making requires appropriate information and the lack of robust decision support systems or regular disease-prevalence studies have lead to misdirected resources. Various priority programs struggle for their budgets within limited public resources and due to heavy reliance on donors, priorities are skewed towards donor-interests. Human resource development for the health sector is not based on population needs either—the chronic shortage of doctors and paramedics in rural areas has never triggered a policy dialogue on the worsening situation. There is little or absent responsiveness of the institutions to population needs, through out the continuum of care which is the biggest impediment to effective stewardship. Lack or absence of information at the district, provincial, or federal levels and lack of commitment to translate evidence into policy inhibit evidence-based decision making and leave more room for arbitrary and informal policy making that is often tinged with personal preferences. Within the private sector, very few facilities gather information on internal processes or external trends. Government sector information systems are over-burdened with unnecessary exercises that inhibit the efficiency of the system itself and legitimacy of dependent processes such as policy making and resource allocation—with the result that a robust design fails to yield optimal results despite big investments. In the absence of reliable and scalable decision support systems, the mere collection of data only adds to the existing problems. Unless a ‘culture’ of evidence-based decision making and a change in behavior is initiated within the ministry, the deployment of state-of-the-art systems will be a futile initiative. Access to essential drugs remains low in remote rural areas and ghost doctors as well as quacks further limit the capacity of the system. Ensuring equitable care is necessary if more and more of care is to be provided by the private sector and this is only possible if the government clearly sets a level playing ground for all stakeholders. Private institutions are powerful and often discriminate against the poor. Without institutional reform that provide adequate protection to the poor, poverty alleviation programs can fail thus affecting all government initiatives around PRSP. 34

Formal policy and planning structures, and scope of responsibilities

Pakistan’s current health policy-formulation process



Source: Nishtar S. The Gateway Paper, Pakistan’s Health Policy Forum

Since 1955, the Five-year Plan has been the major policy instrument whereby the Planning Commission makes budgetary allocations for the next five years under two heads: (1) the recurrent budget that is based on historical needs (provinces as well as for federally administered programs) and (2) the development expenditure—which predominantly has an urban focus. The lack of applied practical research with a policy dimension remains to date a major impediment in formulating evidence-based policies. As no formal and scientific mechanisms exist for developing

public policy, more than often common knowledge, historical trends, and intuitive thinking determine policy focus and budgetary allocations for different public programs.

Formal mechanisms for reviewing or revisioning of health policy were never developed on a national level. The National Health Policy Unit (NHPU) was established with the explicit aim of providing evidence-based policy advice to the Federal Ministry of Health and to build capacity of the Ministry in policy analysis and reforms but three years have passed since the first official proposal—PC1 for development of such unit within the MoH—was approved by the government and the unit has yet to develop a work plan. The National Health Policy Unit has been set up to facilitate evidence-based policy making but it does not provide for open stakeholder inputs or dialogues. Until recently no specific forums existed to facilitate dialogue between all stakeholders for health decisions. The recently launched (2005) Pakistan's Health Policy Forum (PHPF) is the only forum of its sort that provides a non-partisan platform for a stakeholder dialogue on health policy and planning issues. It provides an independent and effective voice for the protection and promotion of health of the country's population through ongoing consultative mechanisms aimed at proactive revisioning of health policy. National Health Conference held in 2004 for stakeholder inputs—the last time any such conference was held 40 years ago.

Effective and output-oriented (vs. politically motivated) revisioning of health policy requires population needs assessment, stakeholders' participation, evidence-base for rationalizing policy objectives, and most importantly indigenous capacity and institutional mechanisms to carry out the aforementioned processes. The country is undergoing a transition phase whereby the recent Local Governance Ordinance 2001 (henceforth LGO 2001) devolved administrative and financial powers to the districts, and given the newly established institutional mechanism for policy making at the local level, needs assessment and stakeholders' participation will become a reality at the grass root level—though the problem of adequate capacity still looms large.

Historically, funding agencies have considerably influenced—strengthened or otherwise—policy direction especially in the area of specific intervention-based priority programs at the expense of strengthening the general health services⁷³. Nevertheless, the World Bank brought health policy, planning, and primary healthcare quality under focus through the Social Action Program (SAP 1993-2002) which aimed at strengthening policy making and capacity building towards this effect; the Burden of Disease study⁷⁴ was also unprecedented in terms of formal needs assessment by the Government but such exercises have not been formalized as a regular feature of planning for the health sector.

While policy making has been a political exercise for furthering political motives, the translation of these policy documents into actionable plans has always remained with the Planning Commission, which, under the Medium Term Development Framework, allocates budget for recurrent and development expenditures. A disconnect between planning and implementation at the national level has always impeded the revisioning process.³⁴

Policy analysis is essential before incorporation into national policy documents. Currently, there is inadequate emphasis on pro-poor health policies in financing and provision of health care. Adequate monitoring and evaluation of policy and program implementation is urgently needed and there is lack of advocacy and insufficient orientation of national policymakers on important policy issues, which is essential for informed decisions. Policymaking is undertaken through a restricted process, often without involvement of relevant interest groups or adopting a consensus based approach.

National Health Policy Unit (NHPU): provides an important strategic arm both for the National Health Policy-2001 and for Poverty Reduction Strategy. The National Health Policy 2001 has identified capacity building for health policy formulation and monitoring as one of its ten key areas through the establishment of a policy unit in the Ministry of Health, which would also provide technical support to the provincial health departments.

Scope of Work: The overall scope of work of the NHPU entails undertaking policy analysis and advice primarily to the Ministry of Health, and on request to the provincial and district governments. The NHPU would lead and coordinate the strategic dialogue on areas that include:

- Health Care Financing – Undertaking National/Regional Health Accounts Studies and use it's findings for developing polices that protect the poor and the vulnerable through risk-pooled mechanisms for the financing of health care.
- Human Resource Development – NHPU would coordinate efforts in developing an evidence based human resources policy (and plan) that gives strategic direction to the government for

addressing the human resource imbalances including the training of community midwives, nurses, and other essential cadres of health workers.

- Private Sector Regulation – Commission a study to document the expense and variations that exist within the private sector from a physical, human and financial resource perspective.
- Public Private Mix – The public health role of the private sector health provision needs to be assessed from a wider perspective.

Analysis of plans

The National health policy 2001 though embarks on multi-dimensional approaches and strategies for provision of health care to the people. However, it does not provide a strategy to be trusted for pro-poor health care provision, particularly the MDGs and PRSP are not fully attempted or some partially attended as its own base⁶⁶. Though the current health policy is under revision, it identifies ten key areas that require intervention during the next ten years. Table 1.4 outlines the corresponding programs as against each of these policy objectives.⁷⁵

Table 1.4. Key areas in National Health Policy 2001 and corresponding priority programs

Areas in the health policy	Corresponding programs	No programs
Reducing wide spread prevalence of communicable disease	<ul style="list-style-type: none"> ▪ The Expanded Program for Immunization ▪ The National HIV/AIDS Control Program ▪ The National Malaria Control Program ▪ The National Tuberculosis Control Program ▪ Prime Minister's Program for the Prevention and Control of Hepatitis ▪ Leprosy control program 	
Addressing inadequacies in primary/secondary health care services		x
Removing professional/managerial deficiencies in the District Health System		x
Promoting greater gender equity	<ul style="list-style-type: none"> ▪ The Women Health Project ▪ National Neonatal, Maternal and Child Health Program 	
Bridging basic nutrition gaps in the target population	The National Nutrition Program	
Correcting urban bias in the health sector	The National Program for Family Planning and Primary Health Care	
Introducing required regulation in private medical sector		x
Creating mass awareness in public health matters	The National Action Plan for Prevention and Control of Non-Communicable Disease and Health Promotion in Pakistan	
Effecting improvements in the drug sector		x
Capacity building for health policy monitoring	The National Health Policy Unit (NHPU)	
	National Action Plan for NCD prevention, control and health promotion	
	National Blindness control program	
	National Hepatitis control program	

Source: Nishtar S. The Gateway Paper, Pakistan's Health Policy Forum

Currently, there are eight intervention-specific, priority programs that are termed vertical programs by virtue of their integration in the public health systems—though this verticality of these programs has impeded coordination and integration of other activities into these programs.⁷⁶ Under the Medium Term Development Framework, all of these programs are being strengthened to meet policy objectives and international targets. In addition, the Government has recently adopted Child Survival strategy (CSS) that aims to reduce child mortality and

morbidity. Maternal and Neonatal Health Strategy and a National MCH Program have been launched to achieve policy objectives.

On the other hand, three of the policy objectives have no corresponding programs whereas three programs, namely the Prime Minister's Program for the Prevention and Control of Hepatitis, the National Program for the control of blindness and the National Action Plan for Prevention and Control of Non-communicable Diseases and Health Promotion do not flow from any explicit policy objectives. However the setting up of the latter three was a step in the right direction given that the government recognized the need to address indigenous health issues.⁷⁷

Health budget as percentage of GDP stood at 0.65 percent in 2005 compared to 0.84 in the previous year; though the actual allocation (amount wise) has increased 20% during this period. The government plans to increase the health spending to 2% of GDP by 2015.⁷⁸ Pakistan's health and population outcomes are improving; but the pace of progress remains slow and below other developing countries in the region. SAP accorded high importance to public health and subsequent MTRF 2005-2010 allows for significant development of this sector under which PKR. 87 billion have been allocated for development expenditure in the health sector.⁷⁹

The percentage increase in public health expenditure grew by 20% in 2004-05 but in terms of percentage of GDP, public spending fell 30% as evident from the table below. Official figures show that total health spending has increased by 100% over the last five years.⁷⁵

The past 3 year financial review shows that an amount of RS. 87 Billion has been spent in the public sector during 2001-04. This trend shows an average of Rs. 29 Billion per annum. The ratio of development and non-development stayed as 1:3. It includes Rs. 21.8 Billion as development and Rs. 65 Billion as non-development expenditure. The development expenditure on federal projects is Rs. 11.5 Billion, which is 50% of the total development expenditure during the last 3 years. The non-development expenditure of federal MoH was Rs. 6 Billion or 10% of the total non-development expenditure in the public health sector. However, the financial outlay for health during 2005-10 (the MTRF) is Rs. 85 Billion.⁶⁶

Key legal and other regulatory instruments and bodies: operation and any recent changes

Health legislation in Pakistan is a relatively new public policy area and with the exception of Drug Act of 1976, most ordinances were promulgated only recently. Wide array of new initiatives, programs and legislative measures currently being introduced at the federal, provincial and district levels. These new initiatives include the government of Punjab's health reform unit, NWFP's legislation to make hospitals autonomous, the recent introduction of a national strategy to revamp the primary healthcare system, contracting-out pilots for basic health services in Punjab, the National Commission for Career Structures of Healthcare Providers, the Continuing Medical Education (CME) initiative of the College of Physicians and Surgeons, institutional mechanisms such as the National Health Policy Unit; World Bank-led institutionalizing public health surveillance, the multi-donor-supported social protection strategy, recent investments in public health such as in the case of hepatitis and blindness and legislation in several areas. The year 2000 brought health legislation under considerable focus. During this period, many laws were enacted. However the missing link between legislation and positive health outcomes has been the lax regulatory environment and issues with the implementation of laws. There is no health legislation committee for formulation of health laws in order to further and protect policy objectives. There is a clear absence of minimum standards for provision of care and compliance mechanisms that ensure conformity with these standards. The weakest link in regulatory mechanism is minimal protection against hazards from personal health services—patient safety. In the absence of patient safety laws and the public's lack of education and information about the care being received, the maintenance of adequate clinical quality cannot be left to the market.

The government needs to redefine its role and scope of intervention regarding regulation of personal health services, not only for building people's trust in modern medicine and for better health outcomes, but also for long-term development of private sector.

Key regulatory bodies in health sector in Pakistan:

1. Pakistan Medical & Dental Council (PMDC): The Pakistan Medical & Dental Council is statutory Autonomous Organization constituted under the Pakistan Medical and Dental Council Ordinance, 1962. The objective is to establish a uniform minimum standard of the basic and the higher education in medicine. The composition of the Council include members from National Assembly, medical members from each province, Universities, registered Medical Practitioners, members nominated by the Central Government, of whom at least one is a member of the Armed Forces Medical services, registered dentists, teaching staff from Medical and Dental Institutions, a member from legal profession, nominated by the Chief Justice of Pakistan; and the Director General of Health, Government of Pakistan Ex- Officio. The members of the Council from amongst its members elect the President and Vice President. The Council appoints the Secretary/Registrar of the Council. To ensure that the various Medical/Dental Institutions in the Country follow the Regulations of the Council, the Council inspects the Medical/Dental Colleges periodically.

The Medical/ Dental Colleges, which are fully recognized by the Council, are inspected after every five years to ascertain that the standard on which the college was granted full recognition is maintained. To control the mushroom growth of medical colleges in private sector, the Council has laid down certain rules and requirements that include, Comprehensive Feasibility Report; Certificate for availability of infrastructure; Proper Building owned by the institution, proper labs, Museum, dissection Hall, Library etc as mentioned in the requirement of the Council; Adequate financial resources for the establishment of an institution; Fulfillment of required legal formalities; Organizational structure; Proposed Affiliation of the Medical/Dental College/Institution to recognized University of Pakistan; Availability of Qualified Teaching Faculty; and Availability of Attached Teaching Hospital @ 5 beds per annual admissions be owned by the college

The system of recognition/accreditation through inspection by the PM&DC had also been reviewed by the National Committee on Foreign Medical Education & Accreditation (N.C.F.M.E.A.) of U.S. department of Education. In 1993 it was decided that standard used by PM&DC is comparable to those used to evaluate programmed leading to the M.D. Degree in U.S.A. The General Medical Council U.K had also approved the system of accreditation. The Council issues registration to doctors and dental surgeons. The Council is a supreme body and takes all policy decisions, it meets at least once in a year or as and when there are sufficient items for the agenda, which needs policy decisions. It acts through various Committees and Secretariat.⁶⁶

2. Pakistan Nursing Council (PNC): Pakistan Nursing Council is an autonomous, regulatory body established in 1948, constituted under the Pakistan Nursing council Act (1952, 1973) and empowered to register (license) Nurses, Lady Health Visitor, Midwives and graduates of public health schools and issue their necessary diplomas. The PNC also inspects schools of nursing, midwifery and public health for the purpose of approval. PNC staff consists of two nurses registrar, assistant and supporting staff work in the PNC office located in NIH, Islamabad. The PNC is financed through Registration fee, Renewal fee, Verification fee, Application fee of new institution fee, Recognition of the institution, and Affiliation fee.

Functions of PNC

- PNC sets curriculum for education of Nurses, Midwives, LHVs and Nursing Auxiliaries.
- Inspect educational institutions for approval based on established standards and provides registration (license) to practice
- Maintains standards of education and practice
- PNC plays an advisory role of the overall benefits of nurses, Midwives, LHVs and Nursing Auxiliaries and for the Federal and provincial Governments regarding nursing education and nursing services
- PNC communicates policy decision regarding nursing education and the welfare of nurses, taken in council meeting, to governments nursing institutions NEBs and Armed Forces Nursing services for implementation.
- PNC prescribe penalties for fraudulent registration by intention of pretense, and removes person form the register for professional misconduct.

3. Council of Homeopathy: The traditional medicine has been accepted and integrated into the national health system in Pakistan. The Government has issued the Unani, Ayurvedic and Homeopathic Systems of Medicine Rules of 1965, which included implementing provisions on the registration of practitioners, elections to the boards, and recognition of teaching institutions.

Under this Act, courses in homeopathy provided by recognized institutions must be four years in duration, culminating in a qualifying examination. The Board of Homeopathic Systems of Medicine was established in order to maintain adequate standards in recognized institutions and to make arrangements for the registration of duly qualified persons. About 40,000 homeopathic physicians are registered with the National Council for Homeopathy. Total Members of Homeopathic Council is 21 that include 13 elected members Homeopathic Council and 08 nominated members (Federal 04, Provincial 04).

4. Council of Tibb: The Ministry of Health, through the National Council for Tibb oversees the qualifications of practitioners. Total members of Tibb Council are 22, (Elected members 14, Nominated 08 (Federal 04, Provincial 04).

After successful completion of tibb qualifications, candidates are registered with the National Council for Tibb, allowing them to practice traditional medicine lawfully. Tibbia colleges, Pakistan's Unani teaching institutions, are recognized by the Government and are under the direct control of the National Council for Tibb, Ministry of Health, which is responsible for maintaining standards of education in recognized teaching institutions, revising/modifying curricula and syllabuses, and holding annual examinations. Twenty-six colleges in the private sector and one college in the public sector offer four-year diploma courses in Pakistani traditional unani and ayurvedic systems of medicine that follow the prescribed curriculum and conditions laid down in the regulations.

Currently, total number of Hakims is 45,799. About 360 tibb dispensaries and clinics provide free medication to the public under the control of the health departments of provincial governments. About 95 dispensaries have been established under provincial departments of Local Bodies and Rural Development. A separate Directorate of Hakims has also been established under the Federal Ministry of Population Welfare Program, and 16,000 diploma-holding unani physicians of traditional medicine have been involved in the National Population Welfare Program.

5.2 Decentralization: Key characteristics of principal types

Decentralization via devolution of power to the grass-root level has been the major thrust of reforms under the Poverty Reduction Strategy. The National Reconstruction Bureau (NRB) was formed to facilitate the devolution process under the rationale that proximity of people with governance structures improves accountability of elected-policy makers to the public, and that such devolution will provide necessary incentives for policy-makers to meet public demands for improved service delivery⁷⁵. All provincial governments enacted Local Government Ordinance in 2001⁸⁰ under which political power was devolved and administrative and financial authority was transferred to local governments. These governments are now functioning through out the country as 101 district governments, 344 tehsil municipal administrations, and 6022 union administrations. However, the challenge remains to make *devolution of political leadership and decentralization of fiscal and administrative responsibilities* to districts *work* effectively for the social sector. Though a number of steps have been taken to date, this process is still in its early stages and time is needed before full implementation of political, fiscal and administrative reforms produce results in terms of impacting social-sector outcomes at the grassroots level.

Within the MOH:

The new Local Government System provides three-tier local government structure in which there is only one line of authority in the district and district bureaucracy is responsible to the elected representatives. More operational autonomy is ensured to the district level offices. Administrative and financial powers of the defunct divisional offices have been, by & large, delegated to the District level. At the top tier, the District, there is a single integrated local government called District Government. The district government consists of Zila Nazim and District Administration. The District Administration, which comprises district offices including sub-offices at tehsil level. The Provincial Government departments decentralized to the District Government, are responsible to the Zila Nazim. The administration is responsible to serve the people. The middle tier, the Tehsil, has Tehsil Municipal Administration headed by the Tehsil Nazim. The Tehsil Municipal Administration includes the offices and sub-offices of the Urban Local Councils, Local Government & Rural Development, Public Health Engineering and Housing & Physical Planning

Departments of Provincial Government entrusted to it for administrative and financial management. At the lower tier, the Union Administration, which is a body corporate, covers the rural as well as urban areas across the whole district. It consists of Union Nazim, Naib Union Nazim and three Union Secretaries and other ancillary staff. See Annex Organograms. ⁸⁰

In the public sector, under the Devolution Plan of the Government of Pakistan in 2000 the districts have been given comprehensive administrative as well as financial autonomy in almost all sectors, including health. The districts are now responsible for developing their own strategies; programs and interventions based on their locally generated data and needs identified. However, there are large differences in the performance of districts in service delivery, especially primary health care services⁶⁶. The Executive District Officer Health (EDO-H) is in charge of the district and is responsible for all health matters in the district. Managers of all Tehsil Hospitals, RHCs and BHUs report to him. Medical Superintendents are the chiefs at DHQ Hospitals, and they, as well as EDOHs, report to the Director General of Health through their respective Divisional Directors. Tertiary care Hospitals are directly under the provincial Secretary of Health.

Under the current devolution program, the focus is on developing a District Health Management Team (DHMT). The DHMT is an administrative body of all health matters in a district. It has a multidisciplinary team with a wide range of functions. It includes district health officer as chairperson along with executives in the district health office, district coordinators, ADHOs, representatives of NGOs, district medical association, elected representatives of the community, respectable of the community etc. Some of the main functions are:

- Develop a team approach to identify and address the existing health problems of a district
- Share and exchange views, ideas and experiences for reaching a consensus based decisions
- Reduce the work load of the district health officer by delegating responsibilities among team members thereby improving technical efficiency
- Optimal utilization of human resources deployed with in the district health office and other existing health facilities
- Improve cooperation and collaboration with the community, NGOs and health related sectors in the health care delivery system

There is some evidence to the mixed success of devolution. On the one hand it seems to have increased accountability towards citizens both for politicians and for health staff delivering services, while on the other, patronage has still a role in the appointment of staff and that there is room for the exercise of private interests at the expense of the public in the organization and delivery of services. EDOs Health have faced problems in forging good working relationships with the District Nazims, District Coordination Officers (DCOs), and EDOs Finance, although the overall picture is mixed. Many EDOs feel disempowered to make decisions and feel that they have not been given effective administrative authority over staffing issues, financial management or planning and budgeting. The health profile has not risen in the majority of district development budgets. Many *Nazim's* have been primarily concerned with highly visible and short-term interventions that will ensure re-election. Road building and other physical infrastructure has therefore received higher priority than healthcare. However, in Punjab at least, health budgets have not suffered, and there is some evidence to suggest that drug budgets have increased if only by relatively small amounts.⁸¹

Coordination: The Zila Council in a district apart from reserved seats for women, peasants & workers and minorities, consists of Union Nazims of all the unions in the district or the city district. Similarly the Tehsil/Town Council, apart from reserved seats for women, peasants & workers and minorities, consists of Naib Union Nazims of all the unions in the tehsil in a common district or in the town in a city district. This provides vertical linkages between the three tiers of the local governments i.e. the Union, Tehsil, and District. Union Nazim and Naib Union Nazim are elected as joint candidates to the Union Council, which consists of thirteen elected members against general and reserved seats including the Union Nazim and Naib Union Nazim.

State or local governments

Local Government Reforms and Devolution

The Local Government Ordinance promulgated on 14 August 2001 provides for three levels of local government, each with a governing council: (i) district governments (107); (ii) tehsils

(about three per district), and union councils (about 20-30 per tehsil), which comprise of villages. Local elections were held over a six-month period on a nonparty basis, with full adult suffrage. Thirty-three percent of seats are reserved for women at all three levels of local government, and additional seats are reserved for peasants, workers, and minorities. The majority of elected council heads (nazims) and deputy heads (naib nazims) may belong to local influential families, but it is also significant that nearly 50 percent of councilors belong to disadvantaged sections of society, women, peasants, and workers.⁶⁶

Under the LGO 2001, the essential function of local governments is to formulate policies, formulate annual budget, raise funds, set performance targets, and manage human resources [Basic Pay Scale 1 to 15 only]. The district governments are responsible for health and education, community development, and revenue collection.⁸² The Ordinance necessitates the inclusion of Citizen Community Boards—at least 25 people representing the Union Council registered under the LGO 2001 who choose to work in the health, education, community development, or agriculture sectors—in local policy making. The Annual Budget which is a statement of receipts and expenditure during a financial year and reflects the local government policies, priorities, financial and operational plans has been divided into two parts: The recurrent and development budgets. In theory, twenty five percent of the local development budgets have been earmarked for projects recommended by Citizen Community Boards—this sum could exceed depending on approval by the Budget and Development Committee but in practice, problems exist in the mobilization of funds.

The identification of development projects and changes in recurrent budget at the local level has been devolved to a bottom-up planning system whereby the Budget and Development Committees at the district and Tehsil (sub-district) levels have been delegated the role of local policy formulation based on consultations with stakeholder which are defined as “councils, elected representatives, general public, women’s organizations, private sector, Citizen Community Boards, District Mushavirat [opinion] Committee, NGOs, and Community Based Organizations. Though gaps abound, the LGO 2001 has the potential to impact outcomes if it is implemented in its true spirit³⁴. The LGO was silent on the roles of provincial governments. In the post devolution scenario, this has led to disagreements between Provincial Health Departments, Executive District Officers (EDOs) Health and their District Coordination Officers (DCOs). The June 2005 Amendment to the Local Government Ordinances establishes a separate district civil service cadre and provides stronger provincial powers to set aside the decisions of District, *Tehsil* and Union *Nazims*, and discretionary powers to suspend them from service. Implementation of the LGO has been complicated by the lag in granting full district-level financial and administrative autonomy whereby provincial governments still retain influence over establishment decisions and have considerable de facto control over recruitment, career management, and transfer decisions. Provinces also have considerable financial control over districts with reference to procurement decisions for line departments. In theory, districts are to receive provincial grants based on population size, socioeconomic development, health infrastructure, health needs and problems, and indicator-based performance evaluation⁸³

Greater public hospital autonomy

Poor performance of hospitals has often been attributed to several factors. These include paucity of resources, limited management expertise, lack of opportunities for staff training, absence of formal management and human resource tools and misunderstandings between administrators and clinicians. Many of these inefficiencies result from lack of authority to take appropriate remedial actions, as almost every action has to be approved by the relevant Ministry of Health/departments of health. Research by the Nuffield Centre for International Health and Development reviews the literature on hospital autonomy in a variety of developing countries and assesses two recent cases of hospital autonomy reforms in Punjab province and the North-West Frontier Province (NWFP) in Pakistan. In the 1990s, the Punjab initiated health service reforms, which included steps towards decentralization. Linked to this was the province’s Sheikhpura pilot project, which involved creating semi-autonomous district hospitals. It also granted institutional autonomy to some of its teaching and other hospitals. In the NWFP, the four biggest public hospitals were granted autonomy in 2000. In assessing these initiatives, the study shows that in Punjab and NWFP cases both lacked accurate and complete documentation of the design and

operational planning of their autonomy reforms, making implementation and later, evaluation difficult; while in NWFP at Khyber Teaching Hospital, the roles of the chief executive and medical superintendent overlapped, causing tension, as did the ineffectiveness of the Punjab's institutional management committees. It also shows that quality of public health care in Pakistan is problematic and only 27 percent of the population reported public sector facilities as a first choice, while 63 percent were dissatisfied with the quality of care overall.⁸⁴

Granting autonomy may be a thorny issue if not initiated with the support and consensus of the existing hospital management and other stakeholders. In Punjab, the appointment of CEOs as part of the process of granting autonomy to hospitals was regarded as a major issue in 2002. Many felt that if hospital administrators had been given administrative and financial powers, they could have performed better than the newly appointed CEOs without the incurrance of additional costs.⁶⁷ Restructuring and reform initiatives must, therefore, take cognizance of these realities through pragmatic and participatory decision-making. Useful lessons stand to be learnt from a recent experience in NWFP, where hospital reform measures centered on institutional private practice were unsuccessful.

Legislation on hospital autonomy exists both at the federal and provincial levels. There are also examples where initiatives undertaken by various governments – federal and provincial – to reform hospitals through structural and financing adjustments. Under the Punjab Medical and Health Institutes Ordinance of 1998, a certain level of autonomy was granted to six teaching hospitals in Punjab in 1998. Under this legal framework, the Punjab Institute of Cardiology (PIC) underwent successful restructuring which involved the granting of enhanced administrative and financial controls; this, together with efficient management, enabled the hospital administration to develop an incentive structure for staff and a cost recovery arrangement based on the monetary status of incoming patients; both these factors have been critical to revenue generation. Greater financial autonomy also enabled the administration to outsource work, develop management contracts with maintenance providers, tap into extra-budgetary sources such as philanthropic grants and make local fund management efficient. Today, more than 40% of the hospital revenue is internally generated and the hospital functions efficiently though the level of the block grant given to it by the provincial government remains unchanged. In Sindh, a successful example is that of the Sindh Institute of Urology and Transplantation; this is the largest public sector institute in the province and is managed by a Hospital Management Board. Based on this experience, the government of Sindh is currently trying to establish Health Management Boards in all government hospitals and will use the Civil Hospital as an example. In many ways, it may not be fair to compare these examples with other public sector hospitals as these are specialized, contained in size and therefore, easier to manage via autonomous models. Currently, the government – in its attempts to subsidize health for all – bears the direct delivery of services burden. Most public hospitals are funded from general revenues of the government and consume a major share of the recurrent health budget. Governments usually give en-bloc grants to hospitals to bear recurrent costs and to assist in delivering the cost of care for the poor. In most instances, these block grants are given according to hospital cost-per-bed-budget allocation criteria; funds are allocated to institutions without any regard to their efficiency or appropriateness of use. These criteria do not promote hospitals to be more efficient and need to be revised. Progress in achieving outcomes should be the criteria for resource allocation as this could provide incentives to hospitals to be resource efficient and contribute to efficiency.⁷⁵

Private Service providers, through contracts

In Punjab, lessons learnt from a pilot project in Lodhran lent impetus to the development of the *Rahim Yar Khan* (RYK) Primary Healthcare Project, where all the BHUs in the district have been contracted out to Punjab Rural Support Program (PRSP). This involved restructuring of the existing infrastructure of BHUs within RYK. The Punjab Rural Support Program (PRSP) was given a management contract by the district government to manage all the BHUs. The terms of the contract gave PRSP control of the PSDP funds allocated for BHUs and management autonomy to implement changes at the organizational and management levels; this enabled them to build better incentives for facility staff. The *initial* results, in terms of patient turnover at healthcare facilities have been encouraging with a three-fold increase reported; the supply of drugs has been ensured and the physical condition of the BHUs has improved. A Project Management Unit

(PMU) is established in the district led by a Project Director and support staff. The PMU is responsible for the maintenance of stock and budget, which have been handed over by the District Government. The PMU has taken over the overall administration of the BHUs from the district government. A monitoring system independent of the district health office is the essence of the project. The PMU is responsible for monitoring, supervision as well as the collection of data. The Project Director visits at least 60 or more BHUs in a month. The Assistant Project Director also makes a similar number of visits to BHUs. During a visit the doctor and the staff are motivated, the patients are asked about the working of the BHU, all records and stocks are inspected.

Recently, a national strategy has been approved for revamping the primary healthcare system with major structural changes envisaged at the district level that are based upon these initial results.³⁴ The LHW Program has also planned to contract out the Program in 8 districts.⁶⁶

Main problems and benefits to date: commentary

Governance: the Local Government Ordinance of 2002 is robust and has the potential to impact outcomes if implemented in its true spirit. However, field experience has shown that the law is frequently exploited and interpreted to suit situations and personal interests. Furthermore, assessments of its implementation over the last three years reveal gaps. These can be attributed to a variety of factors, of which poor governance is the most critical. District governments have had little experience with such responsibilities in the past. Poor governance at the district level is known to have led to the demise of well-structured social sector programs in the past. One of the main reasons why the Social Action Program (1993-97) failed to achieve stipulated outcomes – despite considerable fiscal inputs, strategic planning and technical support – was due to gaps in governance. Learning from past experiences, therefore, investments in building capacity for good governance should be one of the cornerstones of the devolution initiative.³⁴

Financial and administrative autonomy: implementation of the LGO has been complicated by the lag in granting full district-level financial and administrative autonomy – a feature critical to decentralization. With regard to the administrative component, provincial governments still retain influence over establishment decisions and have considerable de facto control over recruitments career management, transfers and termination. In certain instances, this is complicated by political polarization between the provincial and the district governments; this is known to have led to politically-motivated transfers of senior managers with a consequent negative impact on the quality of health services. In addition, political interference in hiring of staff on contractual arrangements at the district level has also been reported. The new system also creates discrepancies in reporting relationships; for example, the District Coordination Officer (DCO) reports to the *nazim* but remains part of the federal District Management Group or provincial administrative service whereas the Executive District Officer (EDO) Health reports to the DCO while his/her promotion and transfer is determined at the provincial level.

Provinces have a role to play in determining financial allocations for line departments within districts; it is envisaged that in many instances, this does not adequately take the district perspective into account. In addition, provincial governments have considerable control over many procurement decisions for districts. This poses a problem – most notably in the area of drug procurement within the health sector.

Centralization within the decentralized system: political and administrative 'decentralization' has also paradoxically created 'centralization' of some functions within the district itself. In the present set-up, the DCO has centralized control over all the staffing decisions vis-à-vis EDOs, many cadres and levels of district staff have less financial powers than before and planning, budgeting and expenditure authorization is unduly centralized. As a result, DCOs in many districts are known to be under political interference. There is a need, therefore, to rationalize financial and administrative powers within the districts. Political polarization within the districts is also known to undermine the performance of District Development Committees (DDC), which are under the control of the DCO. In many districts, *souring of relationships* between the DCO and the *nazim* leads to turf issues with negative implications for the manner in which these committees evolve and function. Lag in the devolution of responsibilities to lower levels of governments also creates issues with the delivery of services. Taking the example of Water and

sanitation- responsibilities for this are not yet devolved, as a result of this lack of control, they are unable to deliver on improved water and sanitation services.

The Devolution study conducted by ADB, DFIS shows that while monitoring committees, in general, have fallen short of their potential, in some districts, they are functional. The credit goes in large part to the more politically aware and educated body of councilors in those districts. Reports of these committees were submitted regularly, and the health committee claimed to have both increased the attendance of staff by 20 percent and improved the quality of maintenance and repair, a claim that was generally supported by NGOs and journalists. Similarly, the city health committee stated that it had visited 25 hospitals in the last year to ensure quality of service and reduce absenteeism. The committee members believe that this improvement has been achieved because of their consistent monitoring and not because of the respective Executive District Officer's interest in improving services. On a more positive note, reports are common that doctors are more often present in health facilities than was the case before devolution. This increasing availability of staff may also be related to the increasing likelihood that local health facilities will actually have medicines available for treating patients. Where procurement is fully devolved, as in Punjab, evidence suggests that public medical facilities are now well stocked and therefore more used. Some provinces and districts have rationalized facilities. Punjab rationalized Basic Health Units, many of which did not meet local need.⁸⁵

Integration of Services

At the district level although most of the programs and the services are integrated and come under the executive district officer, health. The TB, malaria control, EPI, HIV/AIDS have their own provincial PC1. After the devolution the powers have been recentralized at the district level to DCO and district Nazims. The administrative and financial powers of EDO health have actually been reduced. The mechanism of supervision is unclear as the EDO has to work under provincial and district government simultaneously. The monitoring and supervision is also uncertain as both governments have their own system of reporting. Health is not among the top priorities of district government (there are examples of health budget being utilized for building roads etc). Unless the capacity at the district level is improved in planning, administration, financial management and other key aspects, the benefits of devolution will not be reaped and integration of services and public health programs will not function desirably. There are examples of functional integration as well, like multipurpose health care workers in selected districts but most of the time separate cadres are still working in the district health system for vertical interventions.⁶⁶

5.3 Health Information Systems

Organization, reporting relationships, timeliness

An Overview of National HMIS:

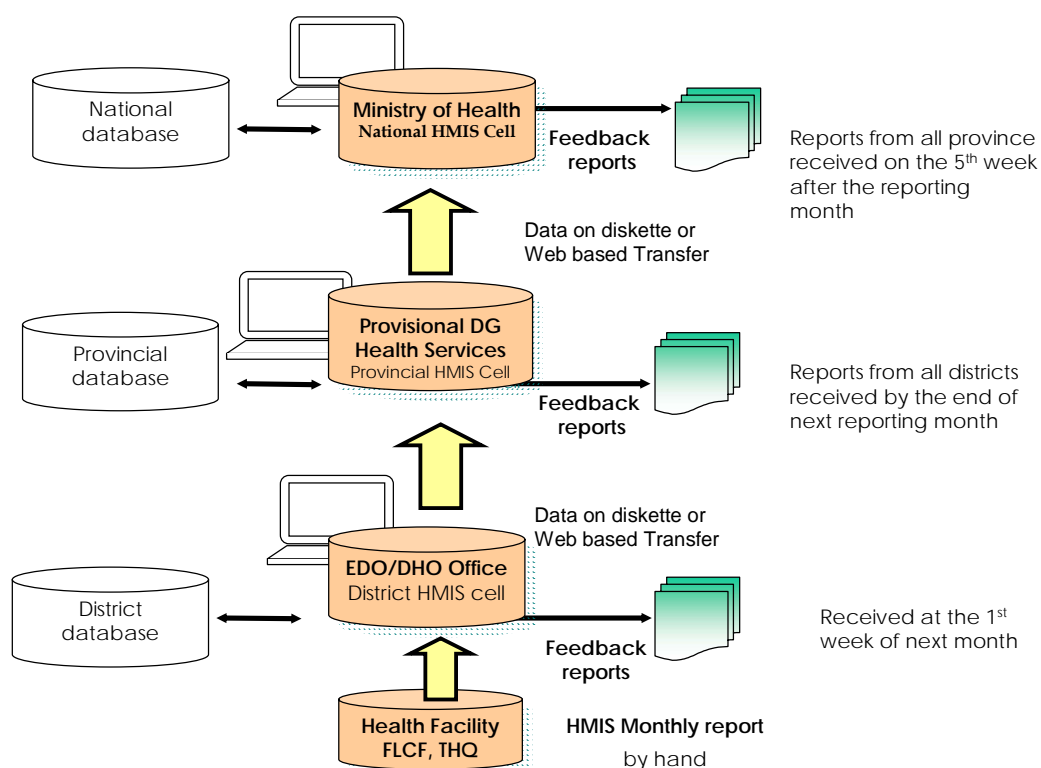
A countrywide facility-based Health Management Information System (HMIS) was developed in Pakistan in the early 1990s. This effort was initiated by the Basic Health Services Cell, Federal Ministry of Health which is now named as the National HMIS Cell. The Provincial Health Departments also fully shared this participatory development process where as the International agencies like USAID, UNICEF and WHO extended both technical and financial support. Ultimate objective of the initiative was to assist mid- and senior health managers in making informed decisions. Subsequently, the Family Health Projects of the World Bank supported the establishment and institutionalization of HMIS in all the provinces. This system has now been implemented in a phased manner and more than 90% primary health care facilities report under this system.

During the period from January to December 2000, 117 districts (out of total 121 districts) have reported their data to the National HMIS Cell. Working mechanism in data flow is that the reports are prepared manually from the records by the facility staff, sent to District HMIS Officer where the data is entered in the computer and transferred to Provincial and then to National HMIS Cell. The diskettes received at the National HMIS Cell are opened, entered in the computer of NHMIS Cell and are analyzed through HMIS software and also through statistical package of social

sciences (SPSS). The data is processed at the district level but seldom at the facility level. The national consolidation, analysis and the feedback of these data are often delayed due to time and the distance involved between health facilities and the Provincial or the National HMIS Cells.⁸⁶ District managers transmit information to the provincial level without establishing a feedback loop with the facilities (see figure below).⁸⁷

A parallel community based information system has also been developed in 1994, which is functioning under the National Program for Family Planning and Primary Health Care (NPF&PHC). In addition there are several other information systems specifically geared to the needs of vertical programs such as EPI, TB, AIDS, Malaria etc., which are not integrated into HMIS. The software for NPF&PHC is based on the same parameters that of HMIS software. HMIS is designed to provide information on service related indicators such as facility utilization rate, referrals, immunization, maternal care and family planning. In addition, it also provides information by age on 18 priority diseases. The objective of National HMIS is not only to record information on health events but also to monitor the availability of critical items of First Level Care Facilities. This entails monitoring availability of drugs, contraceptives, functionality of equipment, repair and maintenance of facilities and utilities. HMIS has the capacity to provide information on monthly / quarterly and annual basis on the above mentioned items. The scope of the current information system is however, limited to the first level care facilities only and no data from inpatient/hospital, private care facilities or from the health facilities other than Provincial Health Departments are captured. Currently HMIS is generating information and its coverage is encouraging, but at the same time it needs lot of room for strengthening at various levels. The HMIS approach seems more 'data driven' than 'action oriented'; there is duplication and lack of coordination among various vertical health information systems. The factor of time lag also holds true as regards receiving of information and its dissemination is concerned.

Data Transfer under National HMIS Information Flow



Source: National HMIS Feedback Report 2006

Data availability and access

The overall management of health information system is weak. The responsibility to oversee all aspects of the information system, starting from data collection and ending with appropriate use of the information generated has not been explicitly assigned to any department or unit particularly at the District level. The quality of data needs improvement. No link between different types of information exists at various levels and there is scant use of information for planning and assessment of health services. Reports generated by the facility based HMIS receives low priority, monitoring is poor and facility's staff perceives HMIS as an additional workload. According to the WHO Expert Committee (1994), "many of the data recorded and reported by the health service staff are not needed for the tasks the staff perform". Data collection tends to focus on disease reporting and only partially addresses management objectives at the health unit level or at the patient/client level. Yet data that is needed are frequently not collected. For example, appropriate indicators to monitor continuity of care to individual patients or clients are rarely included in the HIS. The common denominator of these two observations is a lack of a consensus between producers and user of data at each level of the health care system regarding the information needed. The Health Management Information System (HMIS) has been expanded to cover 115 districts of the country to cover 23 diseases. A new PC-1 of National Health Information Resource Center has been approved by CDWP in 2003-04 while allocation for FY 2005-06 was Rs.146 million. Gaps are being further addressed with technical assistance from donor agencies specially WHO.

Sources of information

The scope of the present HMIS is limited to the first level care facilities only i.e., BHUs, RHCs, MCH centers, dispensaries etc. or from the health facilities other than Provincial Health Departments. It has very little (only from OPD) or no information from the hospitals personnel and logistics. HMIS data flow directly from the peripheral health facilities to District, then Province and Federal level. It is designed to provide information on service related indicators, information on the status of the instruments and equipments &, it also provides information by age on 18 priority diseases. Although the available information from current HMIS is very comprehensive, the quality and reliability of information is quite low due to various factors that include lack of refresher trainings, non-availability of tools and no proper mechanism to improve quality of information. Another reason why data quality is low is lack of motivation among health services personnel. Since health services supervisors and peripheral health workers rarely receive feedback on the data reported to higher level, they have little incentive to ensure quality of the collected data and comply with reporting requirements. Often the HMIS data is received late from the facilities. Similarly the data transmission from the districts to the provincial offices and then to the federal level is also delayed.

The process of transmitting, compiling, analyzing and presenting the data is usually so tedious that by the time a report is prepared, the data are frequently obsolete and decisions are often made without their input. Planners and the managers face deadlines and time constraints in their daily decision-making. Outdated information, even if of high quality, is of low value to them. Besides this, the provincial health departments are adopting different procedures for the HMIS printing. Some are getting it from the family health projects; other through SAP funds and still others have agencies like UNICEF supporting them. This creates a lot of problems, as the supplies often become irregular with a serious impact on the HMIS functioning. The information collected in the districts is neither being used in the districts nor at the provincial levels. In fact the supervisors and staff are not fully trained in the concepts of information use and find difficulties in the interpretation of the HMIS-computerized feedback tables. HMIS system is still to be introduced uniformly at all the provinces. In the trained districts also, the reporting regularity and quality remains very poor. In addition the HMIS is yet to be introduced in all the non-government health facilities (local bodies and corporations) due to whose non-inclusion a lot of information is lost. ⁶⁶

Overall there is a problem of high error rates in reports as well as over reporting through many of these information systems. None of the health information system covers the private health sector nor is there an organized system of disease surveillance in the country to detect and abort epidemics in the districts without delay. The Disease Early Warning System (DEWS) and the polio

surveillance provide a useful basis for developing a disease surveillance systems and then integrating within the wider health information system. Several population based surveys are conducted from time to time that include the Pakistan Integrated Household Survey, Demographic and Health Survey, Household Income and Expenditure Survey and others that provide information on health status, utilization and limited information on household expenditure on health. The National Health Survey of Pakistan was undertaken by the PMRC in the mid 1990s and has not been repeated since. These surveys are helpful but need better coordination and standardization of methodology in order to establish robust trend data that complement facility-based HMIS. Household level health expenditure surveys or inclusion of a health module in the Household Income and Expenditure Survey are two options to acquire data that would inform policies on health care financing. The health information function and the capacity to use information in the federal MOH are weak. Other operational issues include:

- Culture of non-evidence based decision making.
- Excessive quantity of data is now being collected with little being analyzed particularly provincial and district levels.
- Information on mortality and health status indicators are difficult to obtain due to weak vital event registration system,
- Multiple information systems organized through public health programs.
- Delay in reporting due to non-existence/poor networking.
- The current information system is difficult to sustain with the available level of financial and human resources.
- Scope of HMIS is limited to FLCFs and needs to be expanded.
- Lack of motivation to collect and use information appropriately.
- Shortage of personnel and financial resources essential for information collection, analysis and use.

A National Health Resource Information Center (NHIRC) was established at a cost of Rs. 180.0 million in 2003/04, which has yet to be fully operational. It lacks adequate manpower that can provide leadership with knowledge and skills for information collection, aggregation, analysis and use to influence decision making. The HMIS, NHIRC and Department of Statistics are all working in isolation in the MOH. The HMIS produces a feedback report annually, while the department of biostatistics contributes to the Annual DGs Report.⁷⁵

Present HMIS is already a decade old system and there is a growing concern amongst the Provincial Health Departments and the National Program Managers that to make it more responsive to the information needs of its multiple stakeholders. To address this need National HMIS Design Review Process is being undertaken with the support of UNFPA & WHO. The modified system would be able to better support evidence based decision making process though a efficient feedback mechanism.⁸⁸ A major overhauling of the health information system is being currently undertaken with the assistance of technical inputs from JICA, to create a comprehensive information system which encompasses all public sector health facilities and is able to provide timely information on outbreaks of disease and identify the disease burden. ⁶³

5.4 Health Systems Research

Health research in Pakistan has remained a neglected area. In view of the importance of health research, attempts have been made at different times to encourage health systems research but they did not succeed because of various obstacles. Lack of patronization of the existing network of health research, lack of coordination between public and private health sectors, weak management capabilities of health managers in the understanding and implementation of the output of health research, poor feedback from the administration of primary health care facilities, low allocation or absence of resources for health research decision making on the basis of incomplete data and information and political whims being some of the obstacles.⁸⁹

Reliable information on the number of articles published per year active researchers are working in the field is not available. There is no evidence that decision makers are aware of relevant

national and international health system research and other experience related to improving health outcomes for the poor. Neither is any evidence that health systems research actually feeds into the national policy. It has been mentioned in the National Health Policy, Government of Pakistan that (Pakistan Medical and Research Council) PMRC will provide leadership and guidance for health systems research and it will be made an effective focal point for research in all relevant segments of the health sector throughout the country, as well as for transfer of technology. An initiative of the Council is the introduction and promotion of the applied concept of Health Systems Research (HSR). The concept of health systems research was introduced in the late seventies to support the effective implementation of Primary Health Care. The Council introduced the concept in Pakistan and undertook the first workshop on the subject in collaboration with WHO in 1979. As a result of the workshop the Planning Commission transferred its Data Generation Cell for Health Planning to the Council and the Council started its Health systems Research Project in the country. Under this project beside the Islamabad data Generation Cell that was re-designated Health systems Research Centre, three PMRC HSR Centers were established at Khyber Medical College, Peshawar; Sindh Medical College, Karachi; and National Health Research Complex, Sheikh Zayed Hospital, Lahore. A model for Primary Health Care has been developed at a village 17 Km from Peshawar.⁶⁶

The Pakistan Medical Research Council (PMRC) is an autonomous organization under the Federal Ministry of Health (MoH), with the mandate to promote, organize and coordinate medical research in Pakistan. Major functions of the Council include organize, coordinate and promote research in various disciplines of medical sciences and public health; establish its own institutions for undertaking medical research; publish and otherwise disseminate technical and general information on scientific matters relating to the research work of the Council; establish liaison with other organizations; advise the Federal and Provincial Governments on all matters related to medical research; and carry out, evaluation of different health programs in the country. The Pakistan Medical Research Council (PMRC) recognizes the overall lack of capacity to undertake health policy and systems research in the country and its own shortcomings in this area. There has not been an organized effort to develop and institutionalize health system research since the World Bank financed Second Family Health Project, which was completed in 2003. Current allocations to support health systems research are minimal and the PMRC has not been able to connect with international health research alliances to mobilize additional resources. The whole area of institutional capacity for health policy and systems research needs to be revisited to develop indigenous capacity for research that influences policies and programs on priority public health issues in the country. Information on number of articles published per year and number of active researchers working in the field is not available. Specific events for dissemination of research are organized by PMRC. There is no information available on regular funding mechanism for health systems research. The decision makers are in some cases aware of relevant national and international health system research and other experience related to improving health outcomes for the poor, but there is no evidence that health systems research feed into national policy.⁶⁶

The lack of applied practical research with a policy dimension remains to date a major impediment in formulating evidence-based policies. As no formal and scientific mechanisms exist for developing public policy, more than often common knowledge, historical trends, and intuitive thinking determine policy focus and budgetary allocations for different public programs. Traditionally, due to the absence of operational and applied research, needs assessment has been carried out behind closed doors at the Health Section of the Planning Commission or the Ministry of Health. The Government has set up the National Commission on Macroeconomics and Health (NCMH) that has members from the ministries of health, population welfare, finance, women development, Center for Research on Poverty Reduction and Income Distribution, various NGOs, and W.H.O. and other donor organizations. One of the tasks of the Commission is to assess the burden of disease. The recently established National Health Policy Unit is undertaking a similar study on the burden of disease to facilitate evidence-based policy making at the national level. However it has been reported that resources have not been mobilized for this study.⁷⁵

5.5 Accountability Mechanisms

The current government has established rules for public procurement in its effort to build accountability into public sector management but lack of public involvement in decision making and current disclosure practices continue to fan corruption. The lack of service-delivery related outcome-measurement further worsens the condition. While accountability is not a proactive management phenomenon, the National Accountability Bureau deals with reported cases of corruption and misuse of public funds.⁹⁰ The absence of a culture of accountability is the most important reason for failure to build efficiency and effectiveness into the health system. It is not the lack of funds but their misuse—owing to the almost absent culture of accountability—that leads to suboptimal performance of health systems in the country. The only regulatory body in the health sector is Pakistan Medical and Dental Council (PMDC) which is an autonomous organization nevertheless is influenced by decisions at the ministerial level. Being the only regulatory organization for medical profession, the Pakistan Medical and Dental Council (PMDC) is responsible for setting minimum standards of basic and higher medical education. It also registers and grants licenses for medical practice to doctors and dentists, and accredits medical colleges. PMDC has its independent penal code and has the authority to suspend or cancel the license of practicing physicians if proved negligent in patient care.

Health legislation: in Pakistan is a relatively new public policy area and with the exception of Drug Act of 1976, most ordinances were promulgated only recently. In 2000 health drafts of eight proposed bills on health were disseminated to various stakeholders. One of the legislation aimed to regulate the private sector healthcare delivery but the ensuing political instability and change in regime halted the process. The Prohibition of Smoking Ordinance and the Protection of Breastfeeding and Child Nutrition Ordinance were enacted in 2002. Most of these laws govern non-personal health services and regulation of private-sector health care—despite being on the agenda of the current government—has remained neglected. There is no health legislation committee for formulation of health laws in order to further and protect policy objectives. There is a clear absence of minimum standards for provision of care and compliance mechanisms that ensure conformity with these standards.

Once legislation takes place the Health Ministry is responsible for translating the Act into implementable rules and procedures and regulates different sub-sectors through its different departments. The pharmaceutical industry falls under the jurisdiction of the Drug Control Office housed within the federal ministry and is responsible for registration, licensing, and quality control of medicines under Pakistan Drug Act 1976.

There are two full-time lawyers based at the National Institute of Health who are responsible for content development of health laws when needs arrives. But the lack of effective regulatory mechanism has been the greatest impediment to the implementation of health laws. Firstly, the only laws that have been enacted were Ordinances from the Presidents' office and were formulated by the Ministry of Health—bypassing the parliament in some cases. Health laws have been weak in terms of their scope and potency—there is no distinct penal code for healthcare delivery related issues and cases are treated under the Pakistan Penal Code. The USAID started the legislative strengthening initiative under the Democracy and Good Governance Program in 2003⁹¹ which specifically aims to build legislative capacity of assemblies and the Senate. Ministry of Health has not focused on regulation or monitoring and has kept itself busy with the implementation of projects which has somewhat shrunk its capacity for regulation.

Enforcement of health legislation: Laws pertinent to the health sector have been enforced and monitored at the district level by the District Health Officer. Under the Local Government Ordinance 2001, the office of the EDO Health has the responsibility for enforcement and monitoring. The Drugs Control Section has its Drugs Inspectors who are responsible for maintaining effective compliance with the Drug Act 1976.

Contracting: The awarding department deals with the contract and its terms. The fragmentary nature of the health system is evident from the lack of centralized, negotiated contracting or procurement at the MoH level. Though all contracting/procurement needs are given in the PC1 submitted to Ministry of Health by different departments and program offices, the contracting is carried out under specific rules that are applicable across the public sector. The recently established Public Procurement Regulatory Authority (PPRA) under the Procurement Regulatory Authority Ordinance 2002 has formulated rules "PPRA Rules 2004" for public procurements across

all ministries and departments but their implementation has not been possible according to the Chairman of the National Accountability Bureau (NAB) ⁹⁰ who also expressed concern over the incidences of corruption in public procurement system. No contractual document is accessible to public since under Freedom of Information Act 2005 such documents are classified information. Public documents may or may not be available—due to limited availability—but project-specific information is classified information. The overarching law for dispute resolution of contracts is the Contract Act that defines contractual mechanism for public and private sectors. In the event of a breach of contract that amounts to criminal liability the case is dealt under Pakistan Penal Code. When budget is released for a specific intervention, the Ministry of Health approves the project on behalf of the department/program and floats a tender in national newspapers. The tender usually has one month before closing but the transparency becomes murky owing to the fact that the Ministry maintains the right to deny or grant funds to any participant without justifying the cause of approval or denial.⁷⁵

Provision of Information: There is no specific policy on provision of information but the recently enacted Freedom of Information Act 2005 makes clear distinction among public and protected information: all documents until declared as public are to be protected. The country has a very narrow concept of public information and if the government deems necessary to withhold information or a document, it has the discretion to deny access. All drafts, tender documents, and bills form classified information. Reluctance on part of the official circles for sharing information has been cited as one of the barriers to effective involvement of stakeholders in health policy formulation.

There is no public accounts committee for health and all financial matters are dealt by the Auditor General of Pakistan (AGP). No statutory body exists to look into consumer complaints. There is no national oversight committee for health-related issues; any cases of fraud or misconduct are dealt under the Civil Service Act or ESTA Code of the Establishment Division. Medical malpractice is covered under the general Pakistan Penal Code (PPC) and any issue that may lead to criminal liability is dealt with under the PPC. The Auditor General of Pakistan (AGP) has the constitutional right to audit the accounts of all government departments and related organizations including the Ministry of Health and its affiliated departments. Though there are statutory requirements for conducting annual financial audits but these are not made public. Parastatals such as Pakistan Telecommunication Corporation and Pakistan International Airlines—that have large employer-sponsored health insurance systems—undergo mandatory audits by external auditors but since these parastatals involve the transfer of funds from or to the government, the Directorate of Revenue Receipt of the AGP Branch has the authority to perform an audit of their accounts. ⁷⁵ Accountant General of Pakistan (AGP) is responsible for carrying out annual financial audits; whether these are reconciled with national accounts is classified information and was withheld by relevant officials.

Performance Evaluation: Political interference in transfers, recruitments and disciplinary actions is a regular phenomenon – more in certain Governments than in others. At the district level, considerable political interference from political circles is a regular phenomenon. There are no Revocation of licenses of professionals, institutions for medical practices, sale and use of pharmaceuticals/biologicals. Performance audits are conducted in the form of the Annual Confidential Report (ACR) which is the key instrument for assessing the achievement of public officials; it is submitted on a yearly basis and forms the criteria for promotion of officials. Performance evaluation of publicly run priority programs is carried out internally for determining strategic direction but the Ministry of Health does not carry out an independent audit of these programs. ⁷⁵ The National Reconstruction Bureau of the Government carried out a social audit of governance and public services in 2002. Civil society organizations and NGOs have carried out such audits for various programs, for example, Oxford Policy Management carried out an external evaluation of the National Program for Family Planning and Primary Health Care in 2002.⁹²

6 HEALTH CARE FINANCE AND EXPENDITURE

6.1 Health Expenditure Data and Trends

Table 6-1 Health Expenditure

Indicators	1995	2000	2003	2006
Total health expenditure/capita,	16	14	13	13*
Total health expenditure as % of GDP	2.5	2.8	2.6	2.4*
Investment Expenditure on Health	4.2(98)	3.2	3.3(02) i	
Public sector expenditure as % of total health expenditure	27.9 i	33	27.7	27.8

Source: World Health Organization. The World Health Report 2006

Planning Commission of Pakistan. <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/>

*Health System Review 2007

i. HP

http://www.who.int/whr/2006/annex/06_annex3_en.pdf

<http://www.pide.org.pk/pdf/Working%20Paper/WorkingPaper-32.pdf>

<http://www.who.int/nha/country/PAK.xls>

Table 6-2 Sources of finance, by percent

Source	1995	2000	2003	2006
General Government	27.2 (97)	33	27.7	27.8
Central Ministry of Finance	5.64	6	5.8(01)	
State/Provincial Public Firms Funds	47.4	52.5	55.7(01)	
Local	-	-	-	-
Social Security	41.6(98)	39.6	42.9	
Private	67.4(99)	67	72.3	72.2
Private Social Insurance	-	-	-	-
Other Private Insurance	-	-	-	-
Out of Pocket	98.4(97)	98.1	98	98
Non profit Institutions	-	-	-	-
Private firms and corporations	-	-	-	-
External sources (donors)	2.7(97)	3.5	2.5	3.5

Source: The World Health Report 2004

Planning Commission of Pakistan. <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/>

World Health Report 2006. Geneva, Switzerland: World Health Organization; 2006.

Health indicators Sania

Trends in financing sources (Commentary)

The total *per-capita health expenditure* in Pakistan is reported to be between Rs. 750 to 800 (~ US \$12 to 13).⁹³ While no official figures exist, experts believe that 25% of this is contributed by the public sector and 75% through private out-of-pocket fee-based funding mechanism (Pak. Rs. 570 or US \$9.2).³⁴ General taxation is the major source of government's financing for health. Government funds are channeled to providers and services through the three levels of government – federal, provincial and district levels. The federal government makes en-bloc grants to provinces; decisions about health sector allocations are made by the provinces themselves. Additionally, federal government contributions (17-20% of the public sector spending on health) are also conditionally earmarked for the national public health programs, which are implemented at the provincial level. The federal government also assists with in-kind contributions such as drugs and vaccines, particularly in the national tuberculosis and malaria control programs and the Expanded Program for Immunization. Furthermore, the federal government supports several tertiary healthcare facilities on provincial territory as well as the population program of Pakistan. In the total provincial health budget estimations, however, expenditures on medical education must also be added as these are reflected in the budget under education, rather than as health expenditures.

Previously, provincial governments were responsible for financing a major part of health service delivery within districts. Recent political and administrative devolution empowers district governments as important financial intermediaries; 60% of the total government health expenditure is, therefore, accounted for in district budgets.⁹⁴ However, major contributions to the budget – employee salaries and pharmaceutical purchases – are provincial responsibilities. This creates many implementation-related issues.³⁴

The Government of Pakistan has been spending 0.5 to 0.8% of its GDP on health over the last 10 years. However, these figures reflect spending by the Ministry of Health and the departments of health and do not take into account other public sector health services, which are delivered by the Employees Social Security institutions, military sources, the Ministry of Population Welfare, parastatals and other semiautonomous government agencies. These estimates are also not inclusive of the expenses incurred on treating government employees, who are entitled to free treatment in government hospitals – costs that are not clearly visible. The actual level of total public sector expenditure on the health sector is, therefore, difficult to calculate; however, if these are taken into account, the total expenditure roughly ranges between 2.4 to 3.7% of the GDP. The total government expenditure and currently stands at 2.4%.

Fiscal year 2006-07 has witnessed an impressive increase in health sector allocation, rising from Rs.40 billion to Rs.50 billion (0.57% of GDP), thus registering a growth of 25 percent over the last year. Health expenditures have doubled during the last seven years; from Rs.24 billion in 2000-01 to Rs.50 billion in 2005-06⁹⁵. However, this figure has not been adjusted for inflation and population growth.

Public sector contributions are just one of the sources of financing health; government's expenditure on health as a percentage the total expenditure on health has ranged below 35% over the last several years. Other modes of financing health include out-of-pocket payments, social security contributions from private sector sources and donor contributions. As a contribution to national public sector health expenditure, foreign aid is officially quoted as having ranged from 4-16% over the last several years. However, a majority of the donor contributions is not reflected in the federal PSDP mostly remain unaccounted for. These form a sizable chunk as is shown by a recent WHO publication.⁹⁶ Given these considerations, a system for tracking contributions made by donor and development agencies is a prerequisite. This can be linked to a system of National Health Accounts, which is one of the priority areas for institutionalizing the generation of evidence in Pakistan.

Private sector expenditure on health as a percentage of the total expenditure on health has ranged above 67% over the last several years; 98% of this is out-of-pocket expenditure. This is clearly a significant burden for a sizable chunk of the Pakistani population, which lives below the poverty line.³⁴ Again, there is no structured mechanism for capturing the trends in out-of-pocket payments in communities and the data provided herewith are estimates. There is, therefore, a need to plug in this evaluation component into one of the Federal Bureau of Statistic's nationally representative population surveys in order to gather information on a

sustainable basis. In addition, recent data also show that a significantly higher percentage of households spend more on treatment of non-communicable diseases compared with communicable diseases. Population-based cross-sectional data shows that 37.4% of the households spent an average of Pak Rs. 405 on the treatment of communicable diseases whereas 45.2% of the households spent an average of Pak Rs. 3935 on the treatment of non-communicable diseases over the last one year.⁹⁷ However there is notable absence of NCDs from the 'poverty reduction health agenda'.

A study carried out to measure the incidence of government spending on health in Pakistan at provincial, both rural and urban level explores the inequalities in resource distribution and service provision against the government health expenditures. The study shows that the rural areas of Pakistan are more disadvantaged in the provision of health care facilities. The expenditures in health sectors are overall regressive in rural Pakistan as well as at provincial and regional levels. Mother and Child subhead is regressive in Punjab and General Hospitals and Clinics are regressive in all provinces. Only the Preventive Measures and health facilities sub-sector is progressive in Pakistan and public health expenditures are pro-rich in Pakistan.⁹⁸

Health expenditures by category

Table 9: Percentage Change in PRSP Health Expenditures by Sectors

http://www.finance.gov.pk/poverty/Annual%20Report_05.pdf

Health Expenditure	1995	2000	2003	2006
Total expenditure: (specify if only public)				
% capital expenditure				
% By type of service:				
Curative Care		71.80	72.29	70.32
Rehabilitative Care				
Preventive Care		15	14.67	18.37
Primary/MCH		0.25	0.24	0.55
Family Planning				
Administration				
% By item				
Staff costs				
Drugs and supplies				
Investments				
Grants Transfer				
Other				

Source: PRSP Annual Reports (2001–2006).

Trends in health expenditures by category: (Commentary)

Utilization issues notwithstanding, the total government health expenditure has increased 5.5 times over the last decade and a half, increasing from 7.7 billion in 1990 to the current allocations for 2006/7, which stand at Pak. Rs. 50 billion. However, this figure has not been adjusted for inflation and population growth. With reference to the ratio between development and non-development budgets, a comparison of the 2003/04 and 2004/05 federal and provincial development and non-development budgets shows a major dominance of non-development budget in the provinces. This gap appears to have widened over the last 10 years whereas at the federal level, trends have been comparatively favorable. In relation to the ratio between prevention and tertiary care allocations, a comparison of the primary healthcare budgets with clinical health program budgets in successive Five-Year Plans shows that clinical services have

consistently consumed more than 45% of the total health budget.⁹⁹ A review of budgetary allocations at the federal and provincial levels reinforces impressions about rural-urban disparity in relation to health expenditures – a predominance of teaching and specialized hospitals and medical schools in the distribution of recurrent expenditures is clearly evident.³⁴ In addition, the percentage of PSDP allocations earmarked for preventive program has declined whereas an increase in allocations for hospitals is seen. These 'allocations' must be seen in the context of 'expenditures,' given that the latter have ranged between 63% to the current 80% over the last five years. The 93% utilization shown for the year 2005/6 is due to downsizing of the health budget in the post-quake situation and cannot be indicative of general trends where 20% of the health budget goes underutilized. Furthermore, these figures represent aggregate expenditures at the federal, provincial and district levels. For the federal level, these data give somewhat valid estimates of expenditures. However, estimations of expenditure on health in the provinces and particularly in the districts is a problem because development allocations are made en bloc to the provinces and districts, who are then free to make allocation decisions – health vis-à-vis other development expenditures.⁵³

Analysis of health financing during the last decade 1995-05 shows a total spending of Rs.240 billion (Rs.24 billion/year average). Total development expenditure were Rs.66 billion (27%) and non-development bill was Rs.174 billion (73%) of the total bill during the last decade. The share of federal government was Rs.55 billion (23%) and share of provincial government was Rs.185 billion (77%) of total health expenditure. However comparison of the Health budget variants shows that development budget of the federal government is tripled and non-development doubled, while in the provinces the development bill remains the same but the non-development budget is tripled. The more concerned view is that the federal government has not transferred the major development programs to the provinces, therefore, the increase in the non-development budget was due to the hospitals budget i.e. increase in the administrative and establishment cost. The county is committed with the global communities through the PRSP and MDGs targets via the major development programs including LHWs program, HIV/AIDS, TB DOTs, Malaria and EPI. Implementation of these programs requires capacity building and increase in the health budget requirements of the provinces. The development and non-development ratio of federal expenditure in 1995-96 was 2:1, which has considerably changed to 3:1. The same ratio for the provincial development and non- development expenditure was 1:2 in 2004-05, whereas it was 1:1.7 in 1995-96. This trend shows a financial control on the major preventive development programs by the Federal Ministry of Health during last 10 years.¹⁰⁰

According to a report by WHO Commission on Macroeconomics and Health, US\$ 34 per capita is required for a package of essential health services in Pakistan. However, the total expenditure on health in Pakistan is US\$ 18 per capita out of which the total government health expenditure is US\$ 4 per capita. This demonstrates the government's commitment to invest in the health sector, especially for the poor who cannot afford private consultation. The percentage distribution of the government health expenditure by sector shows that of the total public sector budgetary expenditure in 2005-06 on health, 71.8 percent was spent on general hospitals and clinics, 18.37 percent on health facilities and prevention measures, and only 0.55 percent on mother and child health care facilities. Though, the percentage share of mother and child health care became more than doubled since 2001-02, yet it is still negligible considering the medical facilities required especially for un-served population living in urban slums and rural areas.¹⁰¹ Financial outlay for Health during 2005-10 (the MTFD period) was Rs.85 billion with the following breakdown.

Sub-Sector Wise Financial Outlay during 2005-2010

	(Rs. Billion)	% of the Total Allocation
A. Total National Allocation for Health	85.00	100%
(I) Federal Allocation	53.00	62%
(II) Provincial Allocation	32.00	38%
Grand Total (I+II)	85.00	100%
Federal Programs		
(i) Primary Health Care Program	40.28	76%
(ii) Health Manpower Development & Revival of Traditional System of Medicines.	3.71	7%
(iii) Treatment and Control of Catastrophic Diseases.	4.03	7.6%
(iv) Mental Health and Drugs Abuse Prevention	0.58	1.1%
(v) Control of Non-communicable Diseases	3.18	6%
(vi) Health Insurance	0.58	1.1%
(vii) Others	0.64	1.2%
Sub-Total Federal:	53.00	100%

Source: Health plan MTDf

6.2 Tax-based Financing

Levels of contribution, trends, population coverage, entitlement

Revenue generated from government taxation is one of the main modes of health financing in Pakistan. This implies that the health sector has to compete for public budgets. However, taxation as a main source of health financing demands an extensive tax collection capacity and is possible largely in formal economies. In Pakistan, the informal sector of the economy is predominant and general taxation accounts for less than 20% of the GDP.³⁴ The main sources of taxation in Pakistan are government-levied taxes, both direct and indirect. Example of direct tax is income tax and indirect tax is sales tax, excise duty and customs. The central taxes are income tax, sales tax, customs, and excise duty. Regional taxes are toll taxes, provincial excise etc. Government under different budgetary heads makes the budgetary allocations. Direct taxes on individual doctors and private hospitals also go into the budget pool.

The main body responsible for the collection of taxes under different heads is Central Board of Revenue. The collection of taxes compliance is very low. Taxes are collected both centrally and locally. The examples of central taxes are; income tax, and sales tax. The local taxes are levied and collected by provincial and by the local or city government. The parliamentarians (MNAs and Senators) are responsible for setting the tax rates. The taxable income for salaried individuals is Rs. 80, 000 and above per year and tax is levied at the rate of 5%. The next ceiling or floor is Rs. 125, 000 per year and the rate increases to 7.5%. Only the state (federal govt and provinces) contributes for the entire public sector hospital and medical facilitators. Rs. 38 billion were allocated for health sector in the fiscal year 2004 -05, which is 0.57 % of the GNP.⁶⁶

Key issues and concerns

The fiscal structure of Pakistan is faced with concealment of income and colossal tax evasion on account of direct and indirect taxes. Since all this is going unchecked it is resulting in artificial hyperinflation, which is adversely affecting the poor factions of the society. This impact, like on all other foods and services, is also quite evident on medical services and pharmaceutical

products. The trend of taxation burden is mixed. Although tax collection has been increasing in absolute terms, authorities have found it difficult to expand tax net and broaden the base. The GDP to tax ratio is almost constant from 1991 to 2005. A movement towards progressive taxation system (direct taxation) is seen, with the share of indirect taxes in the overall tax revenue is decreasing and direct increasing¹⁰². The tax is levied on all i.e. consumption, income and wealth, and no separate /specific taxes are levied for health care. Examples exist that during the past the federal govt. used to levy an Iqra surcharge of about 5% on imports for the purposes of education. Considering this fact there is a possibility of levying a certain amount of surcharge on imports for health purposes on the items imported by the rich sections of the society.⁶⁶

Over the long term judging from the recent pace of economic progress in Pakistan, it is likely that the volume of economic activity will increase; if this growth is sustained and the population moves into the formal sector, the tax base and taxation capacity of the country will broaden. Priorities must be defined for the use of tax-based revenues. There is valid justification for supporting certain services as compared to others; these include health-related public goods, a package of universally-available essential services and contributions to offset the costs in treating poor patients. A consensus must be achieved over these. The feasibility of reallocating certain taxes for relevant public health activities also needs to be explored. For example, earmarking of revenues generated from taxing tobacco companies can be used for public health interventions designed for tobacco control; useful lessons can be learnt from countries that have experience in this area. ³⁴

Planned changes, if any

National Health Accounts Cell is being established in Federal Bureau of Statistics with the support of GTZ and other partners. The project is expected to start in Jan 2008. ¹⁰³

6.3 Insurance

Table 6-3 Population coverage by source

Source of Coverage	1995	2000	2003	2006
Social Insurance				
Other Private Insurance				
Out of Pocket				
Private firms and corporations				
Government				
Uninsured/Uncovered				

Sources

Trends in insurance coverage

One major pillar of any social protection network is access to free or affordable health care. Major health incidents, especially those of catastrophic dimensions, may aggravate households' poverty or even bankrupt families. Health insurance can make services more equitable and affordable for patients as compared to many other financing options³⁴. Even when health insurance does not pay for services, it can negotiate prices for health care and thus make the costs of services more transparent. The past few years has seen a growing interest in both its understanding and acceptance as a vital tool in deliverance of health services to the people. This realization and awareness is present on government's policymaking level and the federal Ministry of Health is discussing how to extend coverage of health insurance. The government of Punjab has installed a task force to look into the feasibility of providing health insurance for more people.

The health care financing system consists of three alternative protection schemes, where health insurance still represents a small segment. Public has access to the public health system financed by the government and although health care is supposed to be free however utilization is low due to poor quality of services at the public health facilities.

Employees in the formal sector are covered by the *social security health insurance system*. The formal sector includes employees of private companies with a minimum number of employees (the number differs by province, from 5 to 10) and their families. These social security institutions operate health facilities at the province level; the quality of the facilities varies but is better than in the public sector. *Private insurance companies* also offer health insurance. Despite the high cost, private insurance companies have filled a market segment purchasing and providing quality health care mainly as an employee benefit for private companies, because government health services are so poor. Group health insurance is offered by seven insurance companies, and individual health insurance by one insurance company (Allianz EFU). Because of the high expense, large companies self-insure or provide their own medical facilities for employees.

The poor receive some assistance mainly financed by two autonomous institutions—the Zakat fund and Bait-ul-Maal. The Zakat fund supports hospitals, which, in turn, help the eligible poor. Bait-ul-Maal reimburses claims to those who have applied for assistance and are found to be eligible. Both funds, however, can only serve a small portion of the 50 million poor.⁵² So far the bulk of health insurance business premium comprises of largely corporate clients. Personal / Individual health insurance has a huge potential but most of the insurance companies are not fully prepared to market this product due to lack of expertise and exposure to this aspect of insurance.

Social insurance programs: trends, eligibility, benefits, contributions

Social health insurance (SHI) is a component of social protection or social security. Both terms can be synonymously used to describe ways of providing a degree of security, especially against old age, unemployment and ill health. This was concept developed in European industrialized countries and covers the whole population against financial losses due to illness and accidents. Social health insurance covering most of the population is a new concept in Pakistan, which requires major assistance and a lot of awareness raising, capacity building, and institutional development⁷⁰. Even though Pakistan has a large need, the country lacks any general or universal social protection and has hardly any informal, traditional, community-based insurance arrangements. There are social welfare arrangements for certain groups such as Zakat Fund, the Bait-ul-Maal as well as the Food Support Program - however, most people still lack social protection support. Insurance protection against major health incidents is especially limited, and the development of the private health sector is constrained by the low level of development of the health insurance industry³⁴. The absence of a social protection strategy is also reflected in low and irregular budgetary allocations. The total government spending on social protection (0.5 percent of GDP) is low by international standards and inadequate to meet existing need. There are many programs which tackle poverty and vulnerability directly or indirectly, but the lack of such a strategy means that these individual programs remain ad hoc, reactionary, and fragmented. Absence of monitoring and evaluation means that it is hard to make an assessment as to whether existing programs fulfill their objectives. There is no organizational or institutional structure responsible for shaping, directing and coordinating government policies on social protection. There is an overlap of programs as well. For example Bait ul Maal has one large and seven or eight small programs, as does Zakat. The Labour Welfare department runs schools and dispensaries, as does Bait ul Maal. These are parallel to public provision of health and education. There is almost no coordination, information sharing, and cooperation between agencies. Databases, if maintained, Bait ul Maal funding depends on yearly allocations from the government, and greater certainty and stability is needed in terms of its longer term level of funding. The largest program, the wheat subsidy, has also seen major variations in funding from year to year.

The main social insurance schemes are run under the Worker Welfare Fund (WWF), Worker Profit Participation Fund (WPPF), Employee Social Security Institutions, Education Cess Fund and the Employee Old Age Benefits. Together they form less than 25 percent of total expenditures on

social protection. Each Fund/program in turn runs a number of projects for workers leading to overlap, thin spread and inefficiency. Many reports have also mentioned lack of transparency and accountability as major drawbacks of existing programs in the area. There are a number of programs that are specific to certain groups (labour related programs) and are not general safety net programs. But even within the target groups, their outreach is very small, because "...close to two-thirds of employees in the large and medium scale manufacturing sectors work as unprotected contract labour, only a small proportion of the workforce, less than 4% of the non-agricultural labour force, benefits from the entitlements built into the labour legislation "are not shared, and are definitely not connected". This leads to overlap, waste, and duplication.¹⁰⁴

So far, not much assistance has been given to the federal or provincial governments in the sector. The World Bank has tried to support health insurance pilots in NWFP and Punjab (\$1 million) in 2004, but these have been canceled. The Japan Social Development Fund withdrew its funding because the project was not initiated on time as implementing NGOs could not solve their problems on ownership of the insurance. German Agency for Technical Cooperation [GTZ] mainly provides TA to the provincial government of NWFP to finance health care. The government of Punjab has made major efforts to study the possibility and feasibility of health insurance, elaborating on how to extend health insurance to the poor through federal or provincial government subsidies as well as on how to cover public servants.⁷⁰

A Steering Committee has been constituted by the Planning Commission of Pakistan. The World Bank, ADB and DFID have developed a joint agreement to collaborate in the area of social protection and to provide coordinated technical support to the Government of Pakistan to develop a Strategy on Social Protection. Furthermore, the Asian Development Bank's Country Strategy Program for Pakistan (2004-2006) foresees technical assistance for social health insurance in 2005 with the objective of supporting the government of Punjab's task force in its efforts in the area of health insurance on the one hand, and deliberating with the Ministry of Health on the subject, on the other.³⁴

Private insurance programs: trends, eligibility, benefits, contributions

Pakistan has a small private health insurance industry. There are 54 insurance companies operating in Pakistan; of these, 40 deal with non-life insurance under which health is categorized. Group health insurance is offered by seven insurance companies and individual health insurance by only one company – Allianz EFU. The health insurance market is concentrated in the urban areas and owing to its high cost, insurance companies have only been able to serve a market segment, purchasing and providing healthcare mainly as an employee benefit for private companies. The corporate-based insurance model is viable – both for the insurance firm and the employer as it pools the risk for the relatively healthy and affluent cohort; most importantly, this model guarantees premium contributions via the employer. The State Bank of Pakistan review of the financial sector for 2003 shows that as a proportion of GDP, Pakistan's private insurance industry is the smallest in comparison with several other developing countries. The passage of the Insurance Ordinance 2000 helped to foster an enabling environment for the insurance industry in general. However insurance companies do not prioritize health insurance because of a number of reasons; Firstly there is lack of demand owing to high cost of service, Secondly, the challenge is to provide insurance coverage to the informal sector, particularly in the absence of financial guarantees to the insurer, thirdly it must also be recognized that private insurance tends to exclude groups with the highest risks and costs (the chronically ill and retirees) and makes insurance non-viable for those above a certain age. This can be addressed through regulation of the private insurance market either to acquire uniform rates to all (community rating) or limiting the range of allowable price differentials (rating bands)³⁴

Employees insurance schemes

The *Employees Social Security Scheme* in Pakistan is an insurance scheme as part of which a certain category of employees make compulsory social security contributions for a specific purpose – prepayment to cover health risk and old age benefits. This scheme came into existence in 1967 through an Ordinance of the Provincial Assembly of West Pakistan, and is presently operational in three provinces. All private notified industrial and commercial

establishments with more than 10 employees under a certain salary scale have to contribute to this scheme. These establishments are liable to make a monthly contribution to the provincial Social Security institution, which in turn provides a range of healthcare services to members through its dedicated network of hospitals and dispensaries.

Employees Social Security is the only comprehensive health coverage system for the labour workforce in Pakistan, with an autonomous system of generating funds for its use and a self-owned healthcare infrastructure. Currently, more than 1.2 million individuals are secured under this scheme. However, this represents only 3.06% of the workforce in Pakistan, with the total workforce estimated at 42.75 million. Clearly, this system needs to be broader-based. There is a need to abolishing the mandatory income slab and expanding its base to the informally employed sector and bringing the agricultural sector within its net, given that it employs more than 48% of Pakistan's workforce. The justification of expanding its scope to Balochistan should also be explored.

In 1994, the Committee on Health Insurance made recommendations to create a Federal Social Security System on the lines of the provincial system for introducing health insurance for federal government employees. As part of this, the envisaged contribution of the employees would roughly be equal to the amount the government is already spending on health expenditure. The Commission also made recommendations to develop a Group Terms Insurance Scheme and to invite proposals from foreign insurance companies to offer terms for comprehensive medical insurance. The recommendations have not crystallized into action.

The government also encourages parastatals to establish health insurance schemes and medical aid for their employees. Parastatals such as WAPDA, PTCL, PTV, OGDCL, Sui Northern – all with over 10,000 employees – have established elaborate schemes to pool risk for their employees.

Health expenditures form a major chunk of the total expenditures of these giant corporations and it is here that the risk of moral hazard runs high. It is important to gather and analyze information about their organization, number, coverage, benefit packages or utilization patterns so as to maximize the potential within these health systems.³⁴

6.4 Out-of-Pocket Payments

(Direct Payments) Public sector formal user fees: scope, scale, issues and concerns

As mentioned earlier total per-capita health expenditure in Pakistan is reported to be between Rs. 750 to 800; while no official figures exist, experts believe that 25% of this is contributed by the public sector and 75% through private out-of-pocket fee-based funding mechanism (Rs. 570). The monthly household out-of-pocket expenditure on health has been reported at Rs. 358 in Pakistan. This is equal to 5.2% of the total monthly household expenditure and translates into an annual per-capita health expenditure of Rs. 570; this is clearly a significant burden for a sizable chunk of the Pakistani population which lives below the poverty line.¹⁰⁵

User charges have been introduced by the federal and provincial governments in many hospitals in various forms. By and large, nominal charges are levied for inpatient and outpatient consultations and diagnostics and in many instances, drugs are also provided free of charge but higher than normal charges are levied at upscale wards. In most hospitals, provisions are made to waive charges for poor patients. The contribution of user charges to public sector hospital budgets is reported to range between 2-10%; however, there are notable exceptions to this. By and large, revenues generated from hospitals do not remain within hospitals and go into the treasury for general reallocation. As hospitals do not benefit from their collections, the incentive for hospital staff to collect fees is usually limited. It is, therefore, generally perceived that with notable exceptions, most public sector hospitals have been unsuccessful in optimizing the potential within such interventions. Introduction of user charges, coupled with building incentives for employees and the application of strong management skills, is known to enhance hospital performance in many settings within the country. Useful lessons must be learnt from these experiences. ³⁴

All hospitals have their own system of charges for different services. However, following is a generalized system adopted by some hospitals.

- Registration fee for OPD slip: paid at the time of first registration Rs. 5 -10
- Charges for laboratory tests: Depends upon the test. Ranges from Rs. 30 - 200
- Charges for x-rays: Again depends upon the type. Ranges from Rs. 16 – 100
- Other services charged include, Inpatient (room and food charges) and blood bank.

The revenue generated in these heads is less than 1% of the total expenditure incurred by these public hospitals. Most of the public health facilities offer health services free of charge to the people. There is sometimes a nominal fee for registration, certain laboratory procedures, inpatient care etc. Financial assistance can sometimes be available from zakat fund, social security and other sources for those who are unable to pay. In primary health care facilities like RHCs, BHUs, etc. all the services are free of charge except for a nominal "purchie" (OPD slip) fees in some cases. The amount generated is minimal and that too is deposited in the DHO office and further into the treasury and cannot be used for the minor repair of equipment and facility.

The implementation of public sector formal user fees has its own advantages and disadvantages. It may generate funds for the hospital to take care for its up-gradation and provision of better facilities, but at the same time it may take away the only provision of health care for the non-affording class of patients who unfortunately constitute a large percentage of the patients visiting the public hospitals. The collection of formal user fee and charges poses several problems to the hospital administration. The maintenance of Accounts, their dispersal and pilferage of funds are only a few to mention. The autonomous bodies have the discretion to utilize these funds, but other government organizations have to deposit it in government treasury.⁶⁶

(Direct Payments) Private sector user fees: scope, scale, type of provider involved, issues and concerns

Almost all the private sector is financed from fee for service. In the private sector the fees are not fixed or regulated, and a wide range of fees for services exist. This depends upon the location, level of care provided and reputation of the specialist on board etc. There is no regulatory mechanism of fee charges; it is controlled by the market forces trends. All curative, preventive, diagnostic and rehabilitative services are charged. Insurance is not the main source of financing. In majority of the private facilities there is no mechanism to provide for the poor segment of the society, but in some large reputed organizations such as Aga Khan Hospital, Shaikat Khanum Memorial Cancer Hospital and Shifa International, there are setups to provide for the deserving and poor patients who are provided with health care facilities free of cost.⁶⁶

Public sector informal payments: scope, scale, issues and concerns

Informal payments are defined as payments to individual and institutional providers, in kind or in cash that are made outside official payment channels or are purchases meant to be covered by health care systems. This encompasses 'envelope' payments to physicians and 'contributions' to hospitals as well as the value of medical supplies purchased by patients and drugs obtained from private pharmacies but intended to be part of government-financed health services." More specifically they are under-the-table payments to doctors, nurses and other medical staff for jumping the queue, receiving better, obtaining drugs, or just simply for any care at all.³⁴

User fees in health facility settings are a contentious issue; from an equity standpoint, there is a general agreement that user fees should be introduced only if they can act as an incentive to improve quality of services. Lack of transparency in a fee policy and its use primarily as an instrument to build incentives for staff without regard to efficiency, equity and quality in a public setting are frequently observed; these are often coupled with violation of guidelines and procedures on waiver and exemption system for the poor, which are often institutionalized simultaneously, thereby exacerbating access and affordability issues for the poor.¹⁰⁶

Like most informal activities, informal payments go largely unreported. Information on the level and nature of informal payments can only be obtained from one or more of the following: observation, reports of other health providers, focus groups, or, more commonly, reports from household surveys. A cross-country survey of the public gauging perceptions of corruption in public service showed that 95% of the population perceives that the health sector is corrupt in

Pakistan. Another survey showed that the frequency of informal payments to public health care providers amongst the users of services is 96% in Pakistan; most of these are ex ante demands from providers. Another study which assessed average informal payments as a percentage of half monthly per capita income showed that informal payments are 70% of the half monthly per capita income in Pakistan.¹⁰⁷

Cost Sharing

Cost sharing mechanism is working on a limited scale in social security for labor (See section on social insurance). The public servants are also covered under cost sharing mechanisms but majority of population is not covered under any cost sharing mechanism.

6.5 External Sources of Finance

Commentary on levels, forms, channels, use and trends

Several multilateral and bilateral donor agencies have made significant contributions to improve health outcomes in Pakistan for over five decades. Foreign aid as a percentage of total health sector allocation has ranged from 4-16% over the last several years. However, a majority of the donor contributions is not reflected in the federal PSDP and other than the contributions of multilateral agencies (World Bank and Asian Development Bank), and in the exceptional case of part of the Department for International Development, UK's contributions, the rest remain unaccounted for. These form a sizable chunk as is shown by a recent WHO publication.⁹⁶ Given these considerations, a system for tracking contributions made by donor and development agencies is a prerequisite. This can be linked to a system of National Health Accounts, which is one of the priority areas for institutionalizing the generation of evidence in Pakistan. Donor support is also extended in the form of in-kind contributions such as drugs for the National Tuberculosis Control Program, vaccines for EPI and diagnostic kits for the HIV/AIDS program, etc. Additionally, donor involvement has also brought value in terms of technical assistance – particularly in the case of WHO and UNICEF. Donors have also been playing a proactive role in lending impetus to and technically supporting public health programs since the country's inception. See Annex Table 1 which summarizes current allocations outlining projects and programs into which these allocations are channeled.³⁴

Several bilateral donors led by the DFID and USAID and multilateral development agencies are active in the health sector in Pakistan. There is a forum of donors in which all big and small international health development agencies discuss health issues. However, there is a gap in their shared understanding of the health system issues in Pakistan and there is a lack of collective dialogue with the federal and provincial governments on these issues. In recent years there have been increasing opportunities for a dialogue between the government and its development partners, however, it needs to be better informed by evidence and be well coordinated. As signatory of the Paris Declaration, Pakistan is receiving substantial development assistance through budgetary support which implies that donors are broadly aligned with development priorities of the government and that they are engaged in a strategic policy dialogue with the government. Unfortunately there is little evidence that the Paris agenda is applied in the health sector. Much more work on harmonization and alignment is required in Pakistan to improve the effectiveness of aid in the health sector. Several MoH officials and development partners have acknowledged the urgent need to strengthen the health system and to reform it in order to make it more effective, more equitable and more sustainable.⁶²

Certain concerns with donor contributions that need to be recognized, firstly the absence of well-defined national strategic priorities may prioritize resource-allocation in specific program-based areas with measurable outcomes rather than systems-strengthening interventions.¹⁰⁸ The current donor focus on meeting the MDGs is a case in point, as part of which resources are being channeled into specific programs. Secondly, recent modifications in aid management as part of the Sector Wide Approach (SWAP), many donors provide resources to recipient countries through national budgets. Although there is empirical evidence of the value of this approach in terms of ensuring that money is spent on country priorities and is managed by existing structures, there

are also potential risks as the controls lie exclusively with the government. There is, therefore, a need to establish independent robust mechanisms for monitoring and evaluating such arrangements. Thirdly, undue reliance on donor resources can be detrimental to program sustainability and policy-makers should ensure that there is minimal reliance on donor support for priority programs.³⁴

6.6 Provider Payment Mechanisms

Physicians and hospitals are reimbursed through individual out-of-pocket payments; there is no limit on provider fee in Pakistan. Competition has not shown to limit the fee charged by doctors and the growth in Consumer Price Index (CPI) for doctors' fees is known to be faster than that of drugs in the country. During the period October 2003 to September 2004, the CPI for drugs increased by 1.00 points while it grew by 1.61 points for doctors' fees. As with other areas, this aspect of private healthcare provision has never been comprehensively evaluated; there is therefore a need to explore the fee structures and other provider reimbursement mechanisms prevalent in the private sector and their implications for access in low-income groups in the country. In addition, there is also a need to establish an independent private sector representative body that mandates standardized reimbursement fee structures.³⁴

Hospital payment: methods and any recent changes; consequences and current key issues/concerns

In the public sector hospitals, the methods of payments are more or less the same. The charges differ for general ward, semi-private ward and private ward. In some hospitals advance payments are received and the balance adjusted at the time of discharge of patient, whereas in others, the entire payment is paid at the time of discharge. In case of an entitled patient, such as a government employee, a referral letter or a letter from parent institute enables the patient to utilize the services and the department of the person concerned pays the bills. Examples of such payment method include a referral to another public facility for diagnostic procedures such as CT scan etc. The payment methods keep altering between retrospective and prospective mechanisms. There are no financial and non-financial incentives in regard with hospital payment issues in public sector. Problems do arise but not in relation with payment but when a non-affording patient is asked to pay in advance etc. Normally such issues are resolved by the hospital administration and are seldom referred to higher authorities. Other problems are associated with delay in payments by the other government departments whose entitled patients get treatment from the concerned hospital. In the private sector the situation is not much different, although prospective method is preferred. In most private hospitals and small health care facilities, the packages are fixed and payments are to be deposited in advance. Any difference in balance is adjusted at the time of discharge. In others the packages are negotiable and a percentage of the payment has to be deposited in advance whereas the balance is adjusted at the time of discharge. There are financial and non-financial incentives within the private setup but nothing is in black and white. The problems normally occur in payments from departments on panel, who get their employees treated from such private facilities.⁶⁶

Payment to health care personnel: methods and any recent changes; consequences and current issues/concerns

The health care personnel (doctors, nurses, paramedics, pharmacist etc), in public sector, are employed by the government. The general pay scale of the government jobs, also apply to the health personnel. The scales are termed as Grade or Basic Pay Scale (BPS) and range from BPS 1 to BPS 22. The pay scales 1 to 16 are non-gazetted and the recruitment is done by the concerned department and the ministry. The pay scales 17 to 22 are termed as Class 1 gazetted officers and the recruitment is usually done by the Public Service Commissions, both at Federal and provincial levels. The doctors and pharmacists start their career in BPS 17 and above. The nurses start their career in BPS 11. The paramedics such as dressers, dispensers, OT technicians etc are employed in lower grades.⁶⁶

7 HUMAN RESOURCES

7.1 Human resources availability and creation

Table 7-1 Health care personnel¹⁶

Personnel (per 100,000 pop)	1995	2000	2003	2006
Physicians	54.44 (70,670)	66.91 (92,804)	72.57 108,130	78.59 122,798
Dentists	2.12 (2,747)	2.99 (4,165)	3.71 (5,531)	4.73 (7,388)
Pharmacists	-	-	-	5.184* (8102)-
Nurses	17.18 (22,299)	26.98 (37,528)	31.09 (46,331)	36.89 (57,646)
Paramedical staff (LHVs)	3.22 (4,185)	3.91 (5,443)	4.43 (6,599)	5.38 (8,405)
Midwives	16.11 (20,910)	16.19 (22,525)	15.65 (23,318)	15.80 (24,692)
Community Health Workers (LHWs)	17.72 (23,000)	28.75 (40,000)		61.02 (95,355)
Others	-	-		

Source: Pakistan Medical and Dental Council (PMDC) and Pakistan Nursing Council (PNC), Islamabad Economic survey of Pakistan 2006-2007

FBS Statistical Year Book 2007, *Health System Review 2007

Table 7-2 Health care personnel by rural/urban and public/private (latest year)

Health Personnel	Public	Private	Rural	Urban
Physicians	46520	63963		
Dentists	2258	3871		
Pharmacists	2836	5023		
Nurses	29068	14534		
Paramedical staff				
Midwives	8161	13991		
Community Health Workers	83829			
Others				

Source: Report of the Health System Review Mission – Pakistan, WHO, UNICEF, DFID UK, World Bank February 19-28, 2007, Islamabad

Coverage of Lady Health Workers (LHW)

¹⁶ <http://www.whopak.org/pakprofile.htm>

	Projected 2006	Population Covered by LHWs in 2006
Total Population	158,014,555	57.7
Urban Population	52,873,250	40.9
Rural Population	105,141,305	66.1
Target Population	121,003,280	75.3

Source: Ministry of Health, National Programme for Family Planning and Primary Health Care

Pakistan is listed as one of 57 countries with critical health workforce deficiency by both the JLI 2004 report and the WHO World Health Report 2006.¹⁰⁹ As a result despite establishing an elaborate infrastructure for Primary Health care and health services delivery we are far from achieving the 'Health for All' goal and have very poor health status indicators. An adequately trained, supervised and motivated health workforce is an essential prerequisite for effective health service delivery and therefore a key component of the activities of health care delivery system.

Current Situation: There is no well-defined policy & plans for human resource development in the health sector. The Ministry of health and the departments of health are lacking any specific section that is mandated for this important task. Education and training curricula for the health manpower do not match the health needs of the country. Educational institutions are ill equipped to prepare health care providers for appropriate health service delivery. In general training in public and private institutions is carried out in tertiary hospitals using obsolete traditional instructional methods and curricular formats. As a result the outcome products of these institutions are not competent enough to function effectively in primary and secondary levels of health. They are also not trained to use current Information Technology, HMIS nor are they trained in communication methods, medical ethics, or the bio-psycho-social model of health.

The mechanism for induction courses for different cadres in the health sector is not in place with very few such activities carried out by isolated projects. The staff are unaware of their job description and term of reference, based on which their performance has to be evaluated. This forces the new entrants to resort to learning by doing without being able and groomed with the new advancement and protocols for health care.¹¹⁰

The health management is not being taken as a specialized field in the health system of the Pakistan. The management positions are filled mostly on seniority basis, with frequent back and fro movement of staff (medical doctors) on clinical and management positions. Competent health managers are critical to the successful implementation of health care programmes to reach and sustain the health targets.

The current output of medical graduates both in public and private medical colleges is around 5,000 per annum.¹¹³ The public sector continues to heavily invest its scarce resources in the development of medical colleges and universities rather than investing in improving quality and quantity of nursing institutions, public health schools and technicians training institutions. Although there is a growing interest to address the identified shortcomings in human resources including scarcity of nurses, midwives, skilled birth attendants, dentists and pharmacists; future scenarios for tackling the mal-distribution of health professionals and the imbalances in skill mix across the country have not been developed.⁶² Shortage of professional and technical staff is also an important consideration in the delivery of preventive services; as opposed to this, there is a ban on recruitment of staff even for vacant posts. It is well-established that lack of incentives prompt providers – specialist clinicians, nurses and other paramedics – to serve in the private sector or to seek employment overseas where better incentives are offered; many amongst these continue to hold public sector jobs, even in absentia. Medical officers compete for postings in health facilities in busier towns where they are more likely to have a profitable private practice on the side. Trained public health professionals most often opt for private sector jobs due to better remuneration; furthermore, disparities in the distribution of doctors and their placement in the rural versus urban areas are well recognized. Scant attention has been paid to setting standards of performance and their monitoring. Absence of a well-defined policy on human resource

development, lack of formal in-service training, low numbers for certain categories of health professionals, migration of skilled workers, mis-distribution of workforce and the proverbial brain drain – a manifestation of the lack of economic opportunities and incentives further complicate the issue.³⁴

By and large, Pakistan's health system fails to hold individuals and organizations accountable for their actions. No mechanisms exist for penalizing those who compromise on professionalism, whereas on the other hand, there is no structured mechanism for rewarding those who perform well; this has a decidedly negative motivational impact. Staff absenteeism is a significant problem in public sector service delivery. This can be attributed to several factors – lack of material incentives being the foremost. Public sector salaries are known to be inadequate and in many instances, this leads them either to busier towns in search of livelihood – in which case they are persistently absent from their positions – or they preferentially concentrate on private practice within their own towns. In many instances, rural health facility staff is seconded to urban health facilities officially. Lack of transparent regulation, vested interests and political benefaction are barriers to addressing this issue. Currently, the Annual Confidential Report (ACR) is the chief instrument for assessing the performance of public officials in Pakistan. However, ACR is not an effective instrument for promoting accountability as it does not tangibly link performance with rewards; on the other hand, it is also reportedly used as a means of exploitation. There is a need to develop a transparent accountability mechanism; however, such an effort can only be sustainable if it is part of comprehensive civil service reforms. Careful attention should also be paid to developing appropriate instruments for assessing performance. There is a need to build in public service and financial and non-financial performance-based incentives for doctors and health administrators.³⁴ Service delivery reforms at the basic health care level can increase accountability and audits through management devolution/contracting out and by giving greater fiscal and administrative autonomy. In such arrangements institutional incentives such as the ability to hire and fire the staff and authority to reward performance and discipline, transfer and terminate employees who engage in abuses and the ability to audit can also help counter corruption, albeit with safeguards. In service delivery arrangements, performance-reward incentives should be built through user fees¹¹¹.

Trends in skill mix, turnover and distribution and key current human resource issues and concerns

Since the inception of the country, much attention has focused on producing more doctors. Human resource development was given a high priority in the social uplift schemes chalked out during the first and second Health Conferences held in 1947 and 1951, respectively. During the 1st Five- Year Plan, therefore, licentiate training was discontinued and several medical schools were opened. There has been a gradual improvement in the number of doctors, dentists and nurses over the years. A cursory look at the Table 7.1 is sufficient to see that doctors, dentists, nurses and LHVs have doubled in the last one decade. Population per doctor, per dentist, per nurse has improved from 1719, 44223, 5448 in 1995 to 1254, 20,839, 2,671 in 2006 respectively. Today, the doctor to patient ratio in Pakistan stands at 1: 1254, having increased from a baseline of 1:60,000 in 1947. However, the implications of supporting more doctors for the healthcare system have never been analyzed and the establishment, number and location of medical schools and their seats in particular have been determined, not by the needs of the health services but by political expediency.¹¹² Notwithstanding, the increase in the numbers of doctors has been favorable *per-se* compared to other developing countries; however, other areas such as capacity-building, training and effective deployment have received little attention.

There is a big gap of manpower requirement mainly at First Level Care Facilities (FLCF's) i.e. BHUs and RHCs, especially of female staff. Despite higher female enrolment in medical colleges, they do not opt for rural services for obvious reasons of security and non availability of civic amenities. Similarly, low number of female paramedics i.e. LHVs, Female Health Technicians, Community Midwife, Nurses etc. is also one of the main reasons for vacant positions of female paramedics in the BHUs, RHCs in rural areas.¹¹³ In quantitative terms, there is a shortage of pharmacists, technologists, nurses and other paramedics within the country. This shortage is compounded by issues related to their effective deployment. The career structures of many cadres are also not well-defined and in certain circumstances, there is scarcity or unavailability of

dedicated posts, such as in the case of skilled birth attendants. In the case of Lady Health Workers, non-availability of qualified women fulfilling the requisite criteria is a challenge, given the shortage of LHWs in remote/underserved areas. In addition, there is chronic shortage of well-qualified senior and mid-level managers and health administrators.

Pre-service training of health professionals follows traditional methods and there is a mismatch between educational objectives, which focus on hospital based care, instead of addressing the needs of the communities for promotive, preventive curative and rehabilitative services. Some attempts to introduce innovative approaches including COME (community oriented medical education) in medical schools have not been successful for a variety of institutional and professional reasons such as the lack of involvement of the PM&DC from the beginning, weak department of public health in medical schools and poor commitment of government and heads of medical institutions⁶². Primary healthcare and preventive services, which are the mainstay of our policies, merit only a very small fraction of the training time – except in some private medical schools such as the Aga Khan University, where they are introduced right at the very beginning.³⁴ Privatization of medical education has given a significant boost to the sector; however, there has been no structured evaluation of how this has affected the quality of medical education. The Pakistan Medical and Dental Council is responsible for regulating these institutions. Deficiencies in undergraduate training are exacerbated by the absence of a comprehensive CME program in the country; therefore, in many ways, skill-building of healthcare providers is totally at the mercy of the pharmaceutical sector, which channels resources into conferences and seminars. By and large, these have played a positive role in sensitizing physicians to contemporary concepts in the field of medicine, however, they also raise conflict of interest related concerns; moreover, as they are largely tertiary and secondary healthcare-orientated, these do not focus on skill-building programs/measures in priority health sector activities and therefore, minimally contribute to impacting nationally agreed targets. Comparatively, the postgraduate academia has done better, both in quantitative terms and in terms of the quality of education imparted. The total number of graduates of the College of Physicians and Surgeons has increased from 657 in 2001 to 879 in 2004.¹⁹⁰ However, the numbers are still low and need to be increased to meet the growing demand for specialists in the country. The CPSP currently deals with 52 clinical specialties.

Non-physician healthcare providers: training of paramedics (dispensers, LHV and LHWs) in the public sector, through the Provincial Health Development Centers (PHDCs) and the District Health Development Centers (DHDCs), is more structured as compared to that of doctors. The DHDCs and the PHDCs are institutional mechanisms with their own infrastructure and staffing. During the period 1992-99, the World Bank-funded Family Health Project used this infrastructure for human resource development; recently, a study was conducted to analyze the cost of training during the implementation of that project within the context of its financial implications and sustainability for the department of health. The results showed that utilizing DHDCs and PHDCs was a viable option for sustaining training programs; furthermore, the study showed that these institutional mechanisms need to be recognized and strengthened. The study showed that 70% of the cost incurred during trainings could be attributed to TA/DAs and that alternative incentives needed to be promoted for enrolling healthcare providers in such training programs.

The potential within institutes such as the Pakistan Nursing Council and the Pakistan Nursing Foundation should be strengthened to serve as a resource in order to enhance the standard and output of professional education for paramedics

Health system managers: In the context of health system development, there is a serious shortage of qualified health system specialists such as health and human resource planners, health economists, health information experts and health system and hospital managers. The capacity to train such expertise is limited to non-existent in the country, and there are very few competitive positions to recruit them in the federal MOH, provincial DOH and district health offices. (HS reviw) The Health Services Academy (HSA) and the provincial public health institutions have been playing a role in building capacity in this area. However, this role needs to be further strengthened. The Health Services Academy Act was promulgated in 2002 in order to give managerial autonomy to HSA so that it could play its due role. However, subsequent progress in institutional development has been slow. Medical and management education universities and institutions in the private sector can be utilized for training of health system administrators, something on the line of the Lahore University of Management Sciences. The recent introduction of healthcare systems management as a specialty area by the College of

Physicians and Surgeons of Pakistan into mainstream postgraduate education is also envisaged to bridge some of these gaps.³⁴

Community Midwives: A new national program for the training of community midwives, with considerable resources set aside for it, has recently been launched to tackle the shortages of personnel in this cadre. It is expected that the first batch of community midwives will be ready by XXXX. In addition, there have been recent attempts to establish new community midwifery schools and new nursing schools in some districts and provinces.¹¹⁴

Table 7-3 Human Resource Training Institutions for Health

Type of Institution*	Current		Planned		
	Number of Institutions	*Capacity	Number of Institutions	Capacity	Target Year
Medical Schools	100(04) 46 public, 54 pvt				
Schools of Dentistry	7 (04) 2 public 5 private				
Schools of Pharmacy					
Nursing Schools	84 (05)				
Midwifery Schools	92 (05)				
Paramedical Training Institutes					
Schools of Public Health	22 (05)				
Homeopathic colleges	127				

*Capacity is the annual number of graduates from these institutions.

Source; Annual Report of Director General 2003- 2004

Physical Targets (2005—10)

Sub-Sector	Targets (Additions)
Immunization (Million Children)	24
ORS (Million Packets)	100
LHWs (Refresher Courses/ Training)	27,000
LHWs(new)	50,000
New BHUs	300
New RHCs	100
Strengthening/Improvement of BHUs	4,000
Strengthening/Improvement of RHCs, Civil Hospitals	400
Mohallah (Urban) Health Centers	1,000
Dispensaries (New)	500
Hospital Beds	50,000
Doctors	30,000
Dentists	5,000
Nurses	50,000
Paramedics	30,000

Source: Health plan MTDF

Accreditation, Registration Mechanisms for HR Institutions

The Pakistan Medical and Dental Council (PM&DC) is a statutory autonomous organization, responsible for registration, licensing and evaluation of the medical and dental practitioners,

curriculum review, evaluation and approval of educational institutions in these two categories, and many other regulatory activities. The Pakistan Nursing Council (PNC) regulates the nursing education respectively. Both the bodies are mandated to regulate the curricula, qualifications, examinations, award of degree & diploma; the PMDC for doctors, dentists and specialists qualified locally or internationally (to get equivalence for registration to practice in Pakistan), while PNC registers nurses, midwives and LHVs. The PMDC grants accreditation to Medical & Dental Colleges, both in public and private sector, while PNC is responsible for accreditation of nursing schools and colleges. Another regulatory body for the Unani, Ayurvedic and Homeopathic system is working under an act passed in 1965, designated to regulate education and provide registration to practitioners of these traditional system of medicine.

There is no formal policy, national standards or guidelines for structured implementation to update knowledge and skills of (Continuing Medical Education – CME /Continuing Professional Development – CPD) for health personnel in practice especially in the private sector. The standards of education, quality of training and introduction of modern methods of teaching, learning and assessment are the main areas of concern in the professional education of the different cadres. The role of regulatory bodies and training institutions needs to be reviewed and redefined in order to meet the health and service needs of the people. Standards and quality of care need to be improved. There is also a dearth of qualified medical educationists for development of relevant, competency-based curricula.

Although the membership of the Council is broad covering most professions and including 52 members from almost all stakeholders, its coordination capacity to streamline the new policies and practices and to provide valid evidence on different aspects of human resources production seems to be weak. PM&DC has recently been through a period of turmoil and its independent role has been questioned by the Ministry of Health.

The regulatory systems are either weak (for licensing) or non-existent (accreditation). There is a lack of organized continuous professional development (CPD) and there is no obligation for the health professionals to update their competencies. The attempts made by PM&DC have not materialized yet. The institutions for health professions education (medical and nursing schools) lack public health and community orientation in their programs. Graduates, unlike lady health workers, are not well prepared to practice in a PHC environment while these needs are most important. A network of 4 provincial and over 60 district health development centers was established in the 1990s under the Family Health Projects to develop programs for in-service training of staff. These centers have not been properly institutionalized beyond their project life and seem to fizzle out gradually.

Regulation of private practitioners and different traditional categories of medical practice such as homeopathic doctors and *Yunani Hakims* is non-existent. Data on various categories of professionals are scarce and fragmented. Such situation is affected by the fact that registration is not updated and in some cases professionals are practising without being registered. ⁶²

7.2 Human resources policy and reforms over last 10 years

The recent establishment of the National Commission for Career Structures of Health Professionals and the constitution of a working group to enhance the capacity of the district health management by the Ministry of Health are steps in the right direction.³⁴ Very recently, a task force has been created for developing a plan for nursing reforms; dedicated posts are envisaged to be created through the newly-launched NMCH program.

The CPSP has to be supported for development of standards and assessment techniques for medical education and research; and acquiring international educational material and training programs such as BCLS, ATLS, ACLS, Surgical skills workshops etc. The CME/CPD policy submitted by CPSP needs to be reviewed and implemented after required changes. The PHDCs and PHSA at the provincial level may also be used as a resource for CME/CPD and in-service trainings.

The recent initiative by the College of Physicians and Surgeons of Pakistan (CPSP), to develop a policy for CME and its subsequent adoption by the Ministry of Health is, therefore, a step in the right direction. The feasibility of incorporating CME as a prerequisite for maintaining PMDC license needs to be explored. In addition, the Commission for Career Structures, the Higher

Education Commission and other stakeholders should work in coordination to periodically analyze supply and demand, distribution and training needs of medical/paramedical staff. Priority training needs must be determined and specific budgets should be allocated for health sector scholarships in disciplines that are high in demand and low on local capacity.

Recently, CPSP it has expanded its scope to develop a new career line for doctors through the introduction of a diploma in healthcare systems management; this is expected to be developed into a fellowship program soon. In addition, it has also introduced training of trainers in the CPSP-accredited institutions in order to build the capacity of supervisors and trainers. Both these are important steps that need to be further strengthened.

7.3 Planned reforms

Health Human Resource Development Section/Unit

A separate section or unit in the Ministry of health (& departments of health) has to be designated for health human resource development that is mandated to develop health human resource master plan, carry out capacity enhancement programs for health staff etc. The unit would also formulate and look into the career pathways, service structure and personnel management issues; along with continuing medical education (CME) and CPD by accrediting the on-going trainings through accrediting bodies. This body/unit could also support the development of human resource management capacities at the district level for efficient management and utilization of health staff capacities.

8 HEALTH SERVICE DELIVERY

8.1 Service Delivery Data for Health services

Table 8-1 Service Delivery Data and Trends

TOTAL (percentages)	1995	2000	2003	2006
Population with access to health services	-	-	-	96(05)
Married women (15-49) using contraceptives	18	27.6	32.1	36
Pregnant women attended by trained personnel	31(98)	35(01)	50(04)	52
Deliveries attended by trained personnel	18(98)	23(01)	31(04)	23
Infants attended by trained personnel	-	-	-	-
Infants immunized with BCG	73	65(99)	82(04)	82
Infants immunized with DPT3	58	-	80(04)	77
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles)	47	53(01)	78(04)	76
Population with access to safe drinking water*	83(98)	86	84**	
Population with access to adequate excreta disposal facilities	-	45(01)	54(04)	

Source: Pakistan: National Institute of Population Studies; 2006.
PSLM 2005-2006 pg 82

URBAN (percentages)	1995	2000	2003	2006
Population with access to health services	-	-	-	-
Married women (15-49) using contraceptives		39.7		
Pregnant women attended by trained personnel	60	63	66 (04)	74
Deliveries attended by trained personnel	41	48		
Infants attended by trained personnel	-	-	-	-
Infants immunized with BCG	81	82(01)	91(04)	93
Infants immunized with DPT3	70	78(99)	89(04)	89
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles)	52	70	87(04)	89
Population with access to safe drinking water	83	94		
Population with adequate excreta disposal facilities	88	89		

Source: PSLMS 05-06

RURAL (percentages)	1995	2000	2003	2006
Population with access to health services	-	-	-	-
Married women (15-49) using contraceptives		21.7		
Pregnant women attended by trained personnel	22(98)	26	40(04)	
Deliveries attended by trained personnel	11	14	20(04)	
Infants attended by trained personnel	-	-	-	-
Infants immunized with BCG	70	60(99)	76(04)	78
Infants immunized with DPT3	53	57(01)	74(04)	73
Infants immunized with Hepatitis B3	-	-	-	-
Infants fully immunized (measles)	45	46	72(04)	71
Population with access to safe drinking water	77	80	76(02)	
Population with adequate excreta disposal facilities	22	26	30	

Source: PIHS, FBS

Table 8-2 Health infrastructure 2006

Infrastructure	Number		
	Public	Private	Total
Hospitals	924	550	1474
Number of beds	102,073	16000*	118073
Polyclinics			
Basic Health Units	5336		5336
Clinics/dispensaries	4712	20,000	24712
Maternity homes	906	300	1206
Pharmacies			
Labs		450	450
Others (specify) RHCs	560		560
TB Centers	288		288

Sources: Economic survey of Pakistan 2006-07, FBS Statistical Year book 2007

*8th five year plan

Access and coverage (commentary)

By infrastructure standards, Pakistan has one of the largest health service delivery networks at a basic healthcare level. However in reality only 70% of the BHUs are currently operating; a vast majority of BHUs in their present form are – put simply – underutilized and unsustainable. The low turn-over observed at these sites is attributable to low-quality inputs as is evidenced by staff

absenteeism, infrequent availability of essential medicines, poor attitude of staff and other issues such as geographic access and out of pocket payment for supposed free services. As a result, the average cost per-admission and outdoor-contact incurred does not justify the present level of investment in infrastructure, staff and equipment in these sites.¹¹⁵ Although a nominal referral structure exists, it is hardly operational. At the patient-delivery interface, patients are usually not told about the choices they have and thus fail to exercise them. The turnover in BHUs is generally low, with the lowest turnover observed in Balochistan. The quality of care at these facilities is variable but is generally regarded as poor. Most centers either operate only a few hours a day or have been closed. Staff absenteeism is rampant and essential drugs are often not available at these facilities. As a result, tertiary hospitals devote much of their time and resources to care that should have been provided at a BHU or RHC. A number of reasons contribute to low utilization of basic healthcare facilities including absence of quality inputs, lack of basic amenities 28% of BHU's do not have electricity and 21% have no female staff. In addition, there are gaps in the availability of drugs in BHUs. There are other reasons for low turnover at these sites as well. These include issues relating to geographical access, inattentive attitude of the staff and out-of-pocket payments for supposedly free services. As a result of the low turnover in BHUs, a high average cost-per-visit and admission is incurred; this does not justify the present level of investment in infrastructure, staff and equipment at these sites. Furthermore, as a result of low utilization of physical infrastructure, these healthcare facilities are sometimes used for other purposes. There are accounts of Union Council and other government offices being housed in basic health facilities in many parts of the country.⁶³

For capital investment, Planning Commission has developed a comprehensive PC1 performa¹¹⁶ for all social sector development projects and includes the details regarding the project name, location, objectives, justification, capital cost, sponsoring and implementing agency, operating and maintenance cost after completion of the project, financial plan and mode of financing, Project benefits and analysis, social benefits with indicators, employment generation (direct and indirect) and environmental impact. has to be made. PC1 is submitted to the Planning and Development Department (P&D). After administrative approval from Deputy Director General (DDG) PSDP submits the PC1 to the Planning Commission and depending upon the cost of the project, it is approved by relevant forums. Projects < than 40 million are approved by DDWP (Department Development working party), < 500 million by central development working party and > 500 million by ECNEC executive committee of National Economic Council. Planning Commission develops a working paper and prioritizes the project after discussion with the Chief health Secretary, deputy health section and the executing agency. The working paper is then sent to Ministry of Finance. AFS (Additional Finance Secretary Budget) chairs the Priorities Committee Meeting. Minutes of the meeting are circulated to all departments and project wise allocation is made by finance dept is sent to the PSDP and NIS(new items statement). The DFA (Deputy Finance Advisor) health endorses the NIS and sends it to the health and programming section of the P&D dept. which enforces the PC1.

- Access to primary care:

Despite an elaborate and extensive network of health infrastructure, the health care delivery system in Pakistan has failed to bring about improvement in health status especially of rural populations. The health system is characterized by inadequate expenditure (costs), poor quality services and poor access to and utilization of services. A key finding of the first round of the PIHS survey (1995-96) was that use of Government health care services in Pakistan is low, and does not look to have improved with social action program. The three most commonly cited reasons in the PIHS survey for not using the Government health facility in rural Pakistan were, inaccessible facilities, lack of availability of medicines, and uncooperative staff. While all the these elements are important, there is growing evidence that the perceived quality of health care services has a relatively greater influence on patient behavior and utilization pattern compared to access and costs. In one study in Attock district many patient bypassed the FLCF as they were dissatisfied with the quality of services being offered. Access to a primary health care facility is projected as a basic social right. More than 5798 BHUs and RHCs have been established all over the country for the provision of PHC to the people. But the problem of universal coverage and accessibility is still a dream. With huge expenditures and passage of twenty-two years only 33% of the rural

population is in access of 5km. There are also significant provincial differences with access, being best in Punjab and worst in Sind. The use of Government health care services in Pakistan is low and does not look to have improved with social action program. In PIHS a Government health practitioner was consulted in 20 % of cases.¹¹⁷

In Pakistan, approximately 70% of the population has access to primary health care facilities within one hour of travel time. A number of factors determine physical access to health care including distance from the health facility, availability of transport, condition of roads, time and cost of traveling. The distance separating the potential patients from the nearest health facility is an important barrier to its use particularly in the rural areas.¹¹⁸ The greater the distance the less the services are used. Access to health care also influences the frequency of service use. Other contributing factors are social and financial inaccessibility further enhanced by poor quality of care. All these factor aggregate and lead to under-utilization due to poor access of masses to the health services. The government of Pakistan has a policy of universal access to health care and it is not barred from any group or segment of population. However, in practice the demand for services is much greater than the supply as well as the available resources, which leaves to less than satisfactory access to services for some segments of the population. Also there is big difference between quality of care available to the rich versus the poor.¹¹⁹

Unfortunately, the private health sector in Pakistan is completely uncontrolled, which leaves the majority of the people at the mercy of private health care providers. Because of the absence of any form of health insurance, private health care tends to locate and flourish in areas where people can afford to pay directly out of pocket, usually in urban areas. This leaves remote areas devoid of both public and private health care services.

In theory, the entire population of the country has access to a set of public sector provided health services; however, in reality these services are not available to all for various reasons.¹²⁰ The public sector prioritizes delivery of health services in the rural areas; however, despite the existence of an elaborate infrastructure, there have been issues with service delivery. On the other hand, 30% of the population enjoys geographical access to tertiary care hospitals, even for basic services such as immunization and oral re-hydration.³⁴

It must be recognized that improved health outcomes are the ultimate objective of the health system whereas outputs, processes and inputs are means of achieving them. However, ironically, our indigenous thinking relating to policy and planning has been somewhat process-driven. During the 8th Five-Year Plan, which was drawn up at a time when the *Social Action Programme* (SAP) was launched, priority was given to building infrastructure. To show greater coverage, such as in the case of ensuring a BHU for every union council without due regard to access and efficiency, was part of this trend. One of the examples where goals have been fully achieved in the health sector is in the implementation of the Basic Health Services Scheme, as part of which, the setting up of BHUs and RHCs in each Union Council was to be achieved under the government's five-point agenda embodied in the 8th Five-Year Plan. Although this goal was met, the establishment of this infrastructure remains an *output* and has caused limited improvement in health outcomes.³⁴

- Access to secondary care:

An evaluation study (1993) on utilization of rural health services in Pakistan by WHO has mentioned geographical inaccessibility as one of the factors of under-utilization. Community level surveys were conducted in the close proximity of RHCs; therefore only 7% respondents gave accessibility as a reason for non-utilization of RHC's. In case of rural health centers and basic health units in Pakistan, the figures reported vary as average daily OPD attendance in BHUs was 11 in S Pura pilot Project study, 19 in PERI survey and 16 in estimates based on 1992 data. The OPD attendance per day for sub health centers, dispensaries and MCH centers has been estimated to be below three.¹²¹

Accessibility of health care has not been approached methodologically except in isolated studies. It has been examined on a systemic basis only in the recent demographic and health surveys in a limited number of countries. A wide discrepancy between the proportion of the population considered having access to service and the actual use of those services.¹²²

Private practitioners set up the practice from their own resources and provide services by charging fees. A few, however, are contracted by public organizations to provide services to their

employees. These Private practitioners work mainly in urban areas and practice in areas where the population is more concentrated and clients more numerous. ⁶⁶

Future Plans:

The Health Plan in the MTFD period identifies policies and suggests allocation of resources to address these issues in the context of Millennium Development Goals.¹²³ Attention is given to improvement of health infrastructure facilities both rural and in the tertiary sector. Some notable projects in this regard are Construction of two new Medical Towers at JPMC, Karachi and PIMS, Islamabad for upgradation of tertiary care facilities. Sheikh Khalifa Bin Zayed (SKBZ) Federal Hospital at Quetta which was constructed in 1998, is now functional. The 225-bedded hospital will provide state of the art medical care services in the areas of Traumatology, Cardiology, Gastro and Malaria. It will also train nurses and medical technicians. Visible improvements have taken place in PIMS, and FGSH, Islamabad, JPMC, NICH and NICVD at Karachi, and Shaikh Zayed at Lahore. ¹²⁴

8.2 Package of Services for Health Care

The public provision of medical and health services comprises of primary, secondary and tertiary health care facilities. Primary health care facilities mainly look after out-door patients. These facilities include: rural health centres, basic health units, primary health care centres, dispensaries, first aid posts, mother and child health centres, and lady health workers. Secondary health care services look after out-door patients as well as in-door patients. District and tehsil headquarter hospitals are the secondary health care establishments; each district and tehsil must have this facility. Tertiary health care facilities are mainly present in major cities only. These facilities are affiliated with research and teaching organisations. Both the secondary and tertiary health care services are 24 hours operational. Annexe

Public sector: Package of Services at PHC facilities

The BHU and RHC are First Level Care Facilities (FLCF) with community outreach programs while the Tehsils and district hospitals have specialists and serve as referral centers. Tertiary teaching hospitals with more specialized services are located in large cities. The FLCF (BHU & RHC) provides following PHC services;

Outpatient curative care

- General Curative Care
- Treatment of RTI/STDs (SCM)
- DOTS
- Treatment of Malaria
- Management of Diarrhea
- Management of ARI
- Delivery Care
- Newborn care
- Adolescent RH care
- Abortion Care
- Dental care

Inpatient curative care (RHCs only)

- General medical care
- Surgical Care
- Obstetric/Gynecologic Care
- Pediatric Care
- Emergency Care

Preventive/Promotive Services

- Antenatal Care
- Postnatal Care
- Growth Monitoring
- Expanded Program of Immunization (EPI)
- Family Planning Services
- Nutrition Rehabilitation Program

- Counseling for Family planning, HIV/AIDS, Nutrition, Adolescent RH,
- Breastfeeding / weaning promotion, Malaria prevention,

Basic Emergency Obs Care (RHCs only)

Active Outreach (by facility staff)

- Family Planning
- Antenatal care
- Delivery care
- Postnatal care
- Nutrition Surveillance
- EPI

Diagnostic services (RHCs)

Various lab procedures and X-ray

The THQH or sub-district hospitals provide inpatient, outpatient and limited specialized care as do DHQH which also includes a wider range of specialist services like General medicine and surgery, Pediatrics, Gynecology and Obstetric care, Orthopedic surgery, ENT, Ophthalmology etc. The packages of health services vary from province to province, depending on the availability of human, financial and physical resources.

A Maternal and Child health package of services has been defined in National MCH policy and strategic plan 2005-15, approved by Government of Pakistan on April 2, 2005. Different packages of services related to MCH have been defined at community, FLCF and RLCF levels. The tasks and responsibilities of different cadres of health care providers have been defined. The details of the package are given at annex.

8.3 Primary Health Care

Infrastructure for Primary Health Care

- Settings and models of provision:

Primary care facilities: These include MCH Centers, Basic Health Units (BHUs) and Rural Health Centers (RHCs). There is at least one primary health care center in each of the Union Councils, which has a range of population from ten to twenty five thousand people. MCHCs and BHUs are to operate from 8 am to 3 pm, except Sundays, while RHCs are to provide 24-hour services. However, most of these facilities are operational for 3-5 hours on each working day.

There are 1084 MCHCs in Pakistan, which are managed by LHVs and provide basic antenatal care, normal delivery, post-natal and family planning services, and treatment of minor ailments to women and children.

BHUs have a staff of 10 people consisting of a male doctor, a LHV or a FHT, a Male Medical Technician or/and a dispenser, a trained or unqualified midwife (dai), a sanitary inspector, a vaccinator, and 2-3 support staff (guard, sweeper, gardener, etc.). They are required to offer first level curative, MCH, family planning, immunization and preventive services through doctors and paramedics. A BHU serves 10,000 – 20,000 population. There are 5798 BHUs/SHCs in Pakistan.

RHCs provide more extensive outpatient services and some inpatient services, usually limited to short-term observation and treatment of patients who are not expected to require transfer to a higher-level facility. They serve catchment population of about 50,000 to 100,000 people, with about 30 staff including 2 male medical officers, 1 female medical officer, 1 dental surgeon and a number of paramedics. They typically have 10-20 beds, x-ray, laboratory and minor surgery facilities. These do not include delivery and emergency obstetric services. The country has 581 RHCs.

Tehsil Headquarters Hospitals (THQH) serve a catchment population of about 0.5–1 million population. They typically have 40-60 beds and appropriate support services including x-ray, laboratory and surgery facilities. The staff includes at least three specialists: an obstetrician & gynecologist, a pediatrician and a general surgeon. These hospitals are expected to provide Comprehensive EmOC.

District Headquarters Hospitals (DHQH) serve catchment population of about 1 to 2 million people and typically have about 100-150 beds. There are at least 8 specialists including obstetrician and anesthetist.

Both mechanisms for primary health care providers recruitment i.e., direct employment and on contract, are working in the country, however, majority of them are through direct employment. Most of the doctors in Punjab are being recruited on contract basis since early 90's whereas in Balochistan it is mostly direct employment. Health care personnel involved in Primary Health care, include general practitioners, family physicians, specialists, nurses, pediatricians, social workers, dentists, pharmacists, midwives, outreach workers, community health workers etc.

Public/private, modern/traditional balance of provision

- Public-private ownership mix;

Majority of Public sector facilities is urban/semi urban based, however a network of underutilized RHCs and BHUs is providing services to rural communities. On the contrary, the private sector, which is mostly for profit, is biased towards urban area. The rural area is mostly covered with non-qualified and unskilled health care providers. To improve access to primary health care facilities in the rural areas, government is increasing the number of community health workers to 100,000 to cover approximately 70% of rural population.

- Public Sector:

In public sector 947 hospitals, 4800 dispensaries, 1084 MCH center are mainly located in urban and semi-urban areas, whereas 581 RHCs and 5798 BHUs are mostly located in rural areas.

In private health sector, 106 hospitals, 120 small hospitals and more than 25000 General Practitioners (GPs), 300 Maternity homes and 340 dispensaries are providing health care services, which are mostly biased towards urban areas.

Primary care delivery settings and principal providers of services; new models of provision over last 10 years

The major change in primary care delivery settings that occurred during the last decade was the introduction of Community Health Workers. Whereas, there is no major increase in health outlets in public sector during the same period because of lack of resources for structural development. Government of Punjab has launched a pilot project in district Rahim Yar Khan in April 2003 in three phases to restructure the primary healthcare system through reorganization of BHUs in rural areas. Salient features of the model are as follows:

- All BHUs in a district are organized in the form of clusters ensuring that the distance within a cluster is manageable and should not be more than 15-20 Kms. A cluster is comprised of three BHUs. The doctor is the administrative head of a cluster rather than a single BHU. Salary is enhanced from Rs.12,000 to Rs.30,000 per month so as an incentive to live at the focal BHU. The doctor is not allowed to conduct any private practice and ensures that no staff member indulges in such a practice within a BHU. Paramedical staff are given a reward on their best performance.
- Doctors are allowed to get an interest free loan of Rs100,000 to buy a vehicle and covers all BHUs according to schedule.
- A Project Management Unit (PMU) is responsible for monitoring, supervision as well as the collection of data.

Private sector: range of services, trends

Mostly clinical services are provided at private health facilities, whereas less emphasis is placed on preventive and promotive health services. Major Private Hospitals with most packages of services are located in urban and semi-urban areas, whereas in rural areas the private sector consists of small clinics with limited clinical services. However, private sector is taking care of 75% of the total curative care services in Pakistan, which correlate with public versus private sector investments in health sector. It is also reported that majority of the population prefer

private-sector health services as they consider government hospitals to be of low quality as regards services and care.

In private sector, there are some accredited outlets and hospitals, but also many unregulated hospitals, medical general practitioners, homeopaths, hakims, traditional/spiritual healers, Unani (Greco-arab) healers, herbalists, bonesetters and quacks.

Non-governmental organizations (NGOs) are also active in the health and social sector. In urban parts of the country, some public– private partnership initiatives exist through franchising of private health outlets. These have been successful to a large extent in raising the level of awareness of positive health behavior among the people.

For instance, the increasing contraceptive prevalence rate is due to the efforts of NGO sector and the LHWs of the government. Nevertheless, primary health care activities have not brought about expected improvements in health practices, especially of rural population groups. In some areas of rural Pakistan, more than 90 per cent of deliveries are performed by untrained or semi-trained dais or Traditional Birth Attendants (TBAs)⁶⁶

Referral systems and their performance

Following the principles of Alma Alta, the public health care system is primary care focused. At the community level, the Lady Health Worker (LHW) program of the Ministry of Health, and the Village Based Family Planning Worker (VBFPW) program of Ministry of Population Welfare of Government of Pakistan was established. These programs gained an international reputation due to their grass root coverage plans. These workers are supported by an elaborate network of dispensaries and basic health units (BHU) (serving 10 000–20 000 population) and rural health centers (RHC) (serving 25 000–50 000 population). The next levels of referral are the taluka/tehsil hospital (serving 0.5–1 million population), and the tertiary level hospital (serving 1–2 million people). Despite such an elaborate network of BHUs and RHCs the primary health care activity has not brought the expected improvement in health status, especially of rural population groups. The current trend is however, that most people bypass the system and access directly to secondary or tertiary health care hospitals. Among other diverse and multi-faceted reasons, a poorly functioning referral system may be partly to blame. Other reasons include their distrust in the quality of hospital services, behavior of staff and lack of life saving medicines. Dissatisfaction with primary care services in either sector leads many people to health care shop or to jump to higher level hospitals for primary care, leading to considerable inefficiency and loss of control over efficacy and quality of services. In developing countries including Pakistan, the effect of distance on service use becomes stronger when combined with the dearth of transportation and with poor roads, which contributes towards increase costs of visits. Availability of the transport, physical distance of the facility and time taken to reach the facility undoubtedly influence the health seeking behavior and health services utilization.⁶⁶

Utilization: patterns and trends

Utilization of health facilities is an important and an easily measurable indicator for assessing the health service performance in a given health care delivery system. National HMIS in its present shape has the potential to become a useful tool for the health managers to assess the functions of their health facilities. For a proper estimate of service utilization the population served needs to be known, however in the case of First level care facilities the population served is not known with certainty, because the people from outside the declared catchments area also utilize the facility and people in the area may not be utilizing the facility. The problem also is that most of the health facilities do not have information about the exact population of the union council, however rough estimates of the population are present with incharge of health facilities. The utilization studies shows that government facilities utilization is approximately 0.3 to 0.7 consultations per capita per year, which is far from the minimum standards, which should be at least around two visits¹²⁵. Pakistan is one of those countries, which are facing the problem of under utilization of basic health facilities. A survey was conducted to know the state of public sector primary health care services in district Sheikhpura revealing that average attendance at sampled BHUs was 10.7 patients per working day as compared to estimated 85 visits per day.¹²⁶ It was noted that availability of tests, availability of drugs, and better management at RHC

improves the overall utilization of the facility. In addition, it was also noted that hotel functions of the facilities also leads to improve utilization of services.

A report, "Utilization of public health facilities in Pakistan" compiled by National HMIS cell, MoH, Government of Pakistan in March 2003 describes the utilization patterns and trends of primary health facilities. Key findings and conclusions of the reports are; i) On an average the utilization of government health facilities has increased from 21 patients per facility per day in 1998 to 28 patients/facility/day in 2000. It is yet to be explored if this increase is due to better drug supply situation, staff attendance, burden of disease, or due to good governance 2) Health facilities of AJK are being better utilized than those of the other provinces. This maybe due to the fact that there are more public sector health facilities than the private services or the drug supply situation is better than other provinces. This was followed by the health facilities of in Northern areas and Punjab. However, the health facilities of Balochistan province showed deplorably low utilization. Number of curative care patients was much higher than the clients coming for preventive services. Situation of preventive services appeared better in the urban health facilities than the rural facilities.

Percentage distribution of health consultations in private vs. public hospitals and dispensaries by place of residence (2004-2005)^{a 53}

Type of Health Facility	Urban	Rural	Overall
Private hospitals/dispensaries	79.80	75.9	71.2
Public hospitals/dispensaries	20.99	24.1	22.8

a. Government of Pakistan. Pakistan Social and Living Standards Measurement Survey, 2004-05. Islamabad, Pakistan: Federal Bureau of Statistics, Statistics Division; 2005.

Public vs. private health care utilization

Under-utilization of health services in public sector has been almost a universal phenomenon in developing countries. NHS shows similar trends, where overall government doctors provide 21% of the total care. Residents of rural areas depend largely on government dispensers and paramedics; women ought to rely on them because of the limited social mobility. Yet a government doctor is consulted 1.2 times a year as compared to other health providers which are visited 4.2 times a year. Moreover, government doctors' utilization is even lower in rural areas (1.1) as compared to urban (1.3). Firstly, there are no doctors found in many of the primary health care facilities. Secondly, when it comes to women patients, there are very few female doctors employed in the public sector. Non-availability of qualified staff, medicines and quality of care most of the times compel patients to make multiple visits to multiple doctors for the treatment of same illness. Patient's own health related behaviour especially that of compliance with medication is another factor to be considered. However, the number of visits neither depicts the access and equity aspects; nor does it mean that health care is accessible and available to all. The deplorable quality of care provided in the public and private sector both, has been a ground reality for the last many years. In developing countries, generally a higher pattern of utilization of private sector allopathic health facilities could be attributed to easy access, shorter waiting time, longer or flexible opening hours, availability of staff and drugs, better attitude and more confidentiality in socially stigmatized diseases. In spite of this fact, the responsiveness and discipline of the health provider has been dubious in private hospitals of developing countries. Affordability, nevertheless, remains an issue. NHS findings disclose that the private doctors are most commonly consulted as much as by 65% of the population. Low economic status women consult private doctors for 30% of all visits, while high status women do so for 68% of all visits.

127

With respect to Basic Health Units (BHUs), data show that a significant number of BHUs in the country are without basic facilities; in Balochistan in particular, more than 60% BHUs are without electricity, more than 70% do not have running water and more than 90% have no public toilets. Of the expected pregnancies in a time period, only 24% register for prenatal care at BHUs and 15% register for delivery. These data also show that most BHUs are generally in a dilapidated state and remain underutilized.

The indicator, which reports on the Percentage of post-natal consultations by source of check-up shows that consultations have increased from 35% in 1998-99 to 46% in 2004-05. However, the major contributor to this trend is private healthcare facilities. However, BHUs have not contributed to this trend. Due to absence of representative data, no indicators have been included in this document to assess health service utilization at a hospital level and on the quality of services offered in these sites. This remains a major gap in data collection systems in Pakistan ⁵³.

Current issues/concerns with primary care services

Key concerns and issues at primary care level are;

- There is approved policy/strategic plan of human resource development, leading to shortage of health care providers in rural areas.
- Medical colleges are opened without considering the geographic disease burden. This is leading to over-concentration of health care providers in major cities, whereas shortages in rest of the country.
- There is disproportionate ratio among doctors and nurses (4:1) and the issue is further exacerbated by migration of skilled nurses to Middle East and Europe for better financial opportunities.
- Lack of technical knowledge in PHC is not a major issue but the key concern is poor management and organization capacity.
- Absenteeism in health care providers is a major concern in primary health care facilities, which is mainly due to lack of facilities, incentives, accountability and effective monitoring and supervision.
- There is no career development strategy for health care providers in Primary Health Care and no mechanism for continuing education.
- Geographic distribution of health facilities is not appropriate in most cases. They are located mostly far away from concentration of populations.
- Relatively low investment in Primary health care.
- Primary health care system is mostly not based on scientific evidence.

Planned reforms to delivery of primary care services

Discussed in previous sections.

8.4 Non personal Services: Preventive/Promotive Care

- **Availability and accessibility:**

Most of the PHC facilities offer almost all the preventive services and majority (approximately 70%) of the communities have access to these services within a radius of 5 kilometers. While access to government health facilities is generally satisfactory, the utilization levels are low. Several surveys have consistently shown that about 75 % of clients seek care from the private sector and only 25 % visits the government managed facilities for health care, which is indicative of considerable unutilized capacity in the system. National and provincial disaggregated data shows that percentage of households satisfied with government health services improved from 23% in 2001 to 27% in 2004.⁵³

Preventive and promotive health programs are being implemented as part of the National Health Policy with clearly defined federal and provincial spheres of responsibilities. These include

- i. National Program for Primary Health Care started in 1994 with the aim to provide preventive, promotive and curative health services at the doorstep of community mainly in rural areas and urban slum areas by 95,000 Lady Health Workers (LHWs) working in almost every part of Pakistan and providing primary health care facilities to the community. LHWs at national level covered 57.7% of population, 40.9% of urban population and 66.1% of rural population in FY06.
- ii. National Expanded Program of Immunization (EPI) is under execution to immunize children against six communicable diseases and has been expanded through introduction of Hepatitis B

vaccine and is focusing on increasing routine EPI coverage; and Maternal and Neonatal tetanus-Special Immunization Activities.

- **Affordability:**

Affordability of preventive services is not a big issue even for the poor segments of the population as almost all the preventive and promotive services at the primary health facilities (including outreach) are provided free of cost. There are also mechanisms like Zakat fund to cater for the poorest segment of population.

- **Acceptability:**

It varies from facility to facility depending upon behavior and attitudes of health care providers, availability of female health care providers and other services etc.

Organization of preventive care services for individuals

PC1 for National Program for prevention and management of cancer has been approved and breast screening is being conducted in 5 major tertiary care hospitals.

Environmental health

Major Environmental Issues: Unsafe drinking water and improper disposal of waste are major causes of ill health. Water quality deteriorates through biological contamination with human waste and chemical pollution from industrial waste and agricultural pollutants. Poor sanitation is a common practice in low income urban and rural areas. This contributes to contamination of the general environment, including food and water, with a resultant high incidence of enteric diseases. In some areas of the country, solid waste in Pakistan is thrown into open land-pits and water bodies, close to residential areas, resulting into serious human health consequences. There is inadequate promotion of appropriate solid waste management including hospital waste.

National environmental policy developed in 2005 by Ministry of environment provides an overarching framework for the environmental issues facing Pakistan, particularly pollution of water, air pollution, lack of proper waste management, loss of biodiversity, desertification, deforestation and climate change. It also provides guidelines to federal, provincial and local governments for addressing environmental concerns and ensuring effective management of their environmental resources.¹²⁸ To prevent, minimize and mitigate detrimental health impacts associated with environmental hazards, the government has identified following key areas of intervention relating to health:

- Incorporate environmental health and healthcare waste management components into medical teaching and training programs.
- Develop and enforce occupational health and safety rules and regulations.
- Introduce effective waste management system in all healthcare facilities.
- Make the provision of safe water and sanitation facilities mandatory for all public facilities such as hospitals and schools.”

Pakistan Environmental Protection Agency is an attached department of the Ministry of Environment and responsible to implement the Pakistan Environmental Protection Act 1997 in the country. This Act provides for the protection, conservation, rehabilitation and improvement of environment and for the prevention and control of pollution. Pakistan Environmental Protection Agency also provides all kind of technical assistance to the Ministry of Environment for formulation of environment policy and programs.¹²⁹The United States Agency for International Development (USAID) and the Pakistan Environmental Protection Agency (PAK-EPA) signed a Memorandum of Understanding to improve the health Pakistanis by providing safe, clean drinking water on June 12, 2006. The government of Pakistan, under the Clean Drinking Water Initiative (CDWI), will install 6,000 water filter plants nationwide to ensure clean drinking water in every union council. USAID’s safe drinking water and hygiene promotion project will complement

Pakistan's provision of clean water with a national hygiene and sanitation promotion campaign and targeted activities in 31 districts/agencies, including eight earthquake affected districts. The population in the targeted areas is approximately 30 million people. The PAK-EPA, under the Ministry of Environment, has lead responsibility for implementing the Clean Drinking Water Initiative and will be USAID's lead partner for the complementary Pakistan Safe Drinking Water and Hygiene Promotion Project.

Many government departments like Ministry of health, Ministry of environment, local government and public health engineering departments are engaged in various activities to ensure safe water and satisfactory sanitation. An Environment Health Unit has been established in Health Services Academy under Ministry of Health that is responsible for matters related to Environmental health.¹³⁰ Food Safety is a municipal subject and is dealt with by the District Health Office and district Government under the food safety act. District Government also is responsible for sanitation at the district level. The issues related to sanitation are handled at the tehsil level. A Tehsil Municipal Officer (TMO) is responsible for the sanitation of the tehsil. In big, cosmopolitan cities, there are organizations like WASA (Water and Sanitation Agency). In Karachi sanitation is the responsibility of Karachi Water and Sewage Board.

The Ministry of Environment does not deal with health issues related to environment. They are mostly concerned with physical environment. The linkages between Ministries are not very strong. There is no formal or direct link, although joint meetings do take place to discuss issues related environmental matters. The leadership in Ministry of Health believes that they have limited role in environment business as there is a separate Ministry of environment. There is lack of effective liaison between the two ministries and also there is no formal mechanism of coordination.

Major International Environmental Agreements: A party to Conventions on Biodiversity, Climate Change, Desertification, Endangered Species, Environmental Modification, Hazardous Wastes, Law of the Sea, Nuclear Test Ban, Ozone Layer Protection, Ship Pollution and Wetlands. Has signed, but not ratified, Marine Life Conservation.

Health education/promotion

The Government of Pakistan has made health education an essential component of all health programs. The Health Policy 2001 emphasized the need of creating mass awareness in public health matters through TV/Radio programs dedicated to health and nutrition, in close co-ordination with health and education ministries, institutions like National institute of Health, Health services Academy and national program authorities of anti TB, Malaria and HIV-AIDS control Projects, also establishing a Nutrition cell in the Ministry of Health through the Nutrition Project and training family health workers in interpersonal skills.

At the federal level, a Health Education Cell, headed by the Health Education Advisor is responsible for formulation of Health Education Policy/Strategies, Development, implementation, coordination and monitoring of National Health Education Plan of Action, assistance, guidance to provinces, training of Health providers in health education, monitoring, evaluation and research on health education, knowledge, attitudes and practices (KAP) surveys.¹³¹

Health education units are present at provincial and district level in all provinces except NWFP. The Health Education Units are staffed by trained Health Education officers, clerical staff and driver. These units are equipped with basic equipment and supplies and some have transport vehicles as well. These Health Education Units are responsible to plan, implement and monitor health education activities at provincial level. AJK also has Health Education Units available down to the district level.⁶⁶

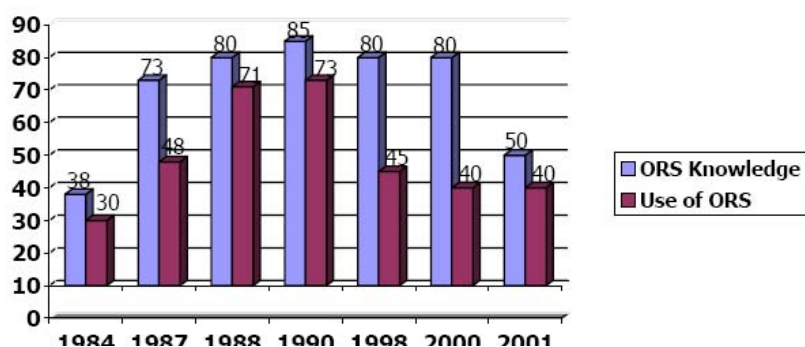
Budget for Health education:

There is a separate budget for health education in each priority health program at Federal level; the budget for health education had been boosted to more than Rs. 200 million per annum under different health programs for health education at Federal Level. Provinces have their own budget. Apart from this health education budget is available under the priority health programs i.e. Women Health Project, Nutrition Program, AIDS Prevention and Control program, EPI and Polio Eradication Initiative (PEI), Roll Back Malaria, TB Control Program through DOTS etc. Donors i.e. ADB, US AID, World Bank, DFID, JICA, WHO, UNICEF etc. are willing to help if there is a commitment at the to enhance their health education programs.

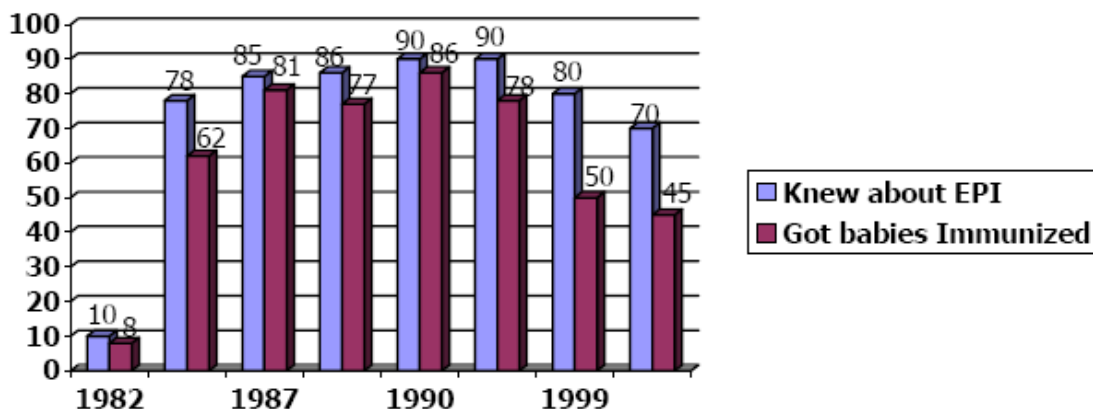
Effectiveness of health education:

Health education campaigns have proved to be a key for success of various programs. As a result of these health education campaigns there has been a boost in EPI coverage, increase in use of ORS and use of Iodized salt, promotion of Breast Feeding and Tobacco Free Initiative. Four Ordinances on Prohibition of Smoking, Change of Health Warning on Cigarette Packs, Blood safety, and Protection of Breast Feeding have been promulgated through the advocacy efforts and the health education programs. Health Education Program has clearly demonstrated that with increase in knowledge there was increase in practice. When the health education program declined there was a decline in the parents getting their babies vaccinated, use of ORS and Iodized salt. This can be seen in the following two graphs.

Impact of Health education on ORS/CDD Knowledge and use of ORS



Impact of Health Education on Immunization:



Needs for improvement of Health Education Component of Health Services:

- There is an urgent need to start research based, target oriented and program specific health education programs from all channels of communication.
- There is an urgent need to enhance the coverage of health issues on the media (Mass Media & Interpersonal communication). Other provinces have done well as far as use of mass media is concerned for educating the public in health matters.
- Training of health care providers in communication techniques is very important.
- There is need to set up health Education Units at District level to strengthen the Health Education Program.

Changes in delivery approaches over last 10 years

No major change is evident in delivery approaches of preventive care during the last 10 years.

Current key issues and concerns

Challenges are mainly at implementation level including improving immunization coverage; institutionalizing micro-planning at local level; decentralizing repair and maintenance of cold chain; alternate ways to reduce reliance on mobile strategy like contracting out services to local NGOs and CBOs.

Percentage of children aged 12-23 months who have been immunized based on recall and record increased by 24 percentage points to 77% in 2004-05 as compared to 2000-01. In urban areas this percentage increased from 70% to 87% and in rural areas from 46% to 72%, showing appreciable improvement.¹³²At the national level, pre-natal consultations by pregnant women increased from 35% in 2000-01 to 50% in 2004-05. Punjab province has highest rate of prenatal consultation at 56%, followed by Sindh at 55%, NWFP at 39%, and Balochistan at 35%. In Pakistan percentage of women who received a post natal consultation within 6 weeks after delivery, increased from 9% in 2000-01 to 23% in 2004-05. . Percentage of birth attended by skilled person has increased from 23% to 31% during the same period.

Planned changes

Some of the planned new initiatives include;

- National MCH program
- National Non-communicable disease control program
- National Program for control of Hepatitis
- National Blindness control program

8.5 Secondary/Tertiary Care

Table 8-3 Inpatient use and performance*

	1995	2000	2003	2006
Hospital Beds/1,000		0.67		
Admissions/1000				
Average LOS (days)				
Occupancy Rate (%)				

* The disaggregated data on inpatient use and performance is not available (na). However according to the Annual Report of Director General 2003- 2004 total number of inpatients treated in 21 teaching hospitals during 2004 is 1185502. However disease wise and institution wise information is available.

Referral Level Care Facilities (RLCF): These include Tehsil Headquarters (THQ – sub district units) and District Headquarters (DHQ) Hospitals that are located at respective levels and offer first line referral services. Tehsil Headquarters Hospitals (THQH) serves a catchment population of about 100,000 to 300,000 people. They typically have 40-60 beds and appropriate support services including x-ray, laboratory and surgery facilities. The staff includes at least three specialists: an obstetrician & gynecologist, a pediatrician and a general surgeon. District Headquarters Hospitals (DHQH) serve catchment population of about 1 to 2 million people and typically have about 100-150 beds. There are at least 8 specialists including obstetrician and anesthetist. There are a total of 947 THQH and DHQH in Pakistan. The hospitals actually providing Comprehensive EmOC are very few.

Tertiary care facilities: There are 30 teaching hospitals in Pakistan. They also provide sub-specialty care. These hospitals mainly provide curative services and to a limited extent some preventive services. The specialized ambulatory care are provided in these tertiary care hospitals, in addition specialized hospitals are also present both in public and private sectors such as for

cancer treatment and therapy, mental illnesses, handicapped children, orthopedics surgery, burn units, maternity homes etc. It is also noted that many specialist and physician work in the hospitals during day time and also provide private services in the evening at their own or at commercial nursing home or clinics. Private practice of specialists has been replaced by the system of Institutional Practice in mega-hospitals in Punjab ad NWFP and government will also study this aspect for future extension to smaller hospitals.

Region	Medical			Tibb			Homeopathic		
	Total	Female	Male	Total	Female	Male	Total	Female	Male
Pakistan	30	2	28	28	1	27	106	4	102
Punjab	17	1	16	23	1	22	89	4	85
Sindh	4	1	3	4	-	4	9	-	9
NWFP	7	-	7	-	-	-	6	-	6
Balochistan	1	-	1	1	-	1	2	-	2
Islamabad	1	-	-	-	-	-	-	-	-

Source: Provincial Bureau of Statistics

There are no data available on utilization of secondary and tertiary healthcare facilities and quality of care offered in these sites in neither the public nor the private sectors and hence relevant indicators or statistics are not available. There is a need to develop a mechanism for capturing these data from indicated sources as a priority as reiterated³⁴. A quality assurance policy tertiary care institutions is absent as are the quality standards for all levels of health care. A related issue is the absence of thinking on the establishment of a hospital and health facility accreditation program in the country. In its effort to promote medical tourism as well as to provide tertiary care services to the local population, the MOH is planning the establishment of medical towers in its two largest federal hospitals in Islamabad and Karachi. It is unclear whether the government has undertaken a feasibility study, in terms of the likely market, Pakistan's comparative advantage if any, and costs and benefits, before deciding to invest into such a high investment – with potentially high opportunity costs in setting-up and running.. There is limited understand among policymakers of the pros and cons of promoting medical tourism in the country. There is good evidence from the work done globally and in the Eastern Mediterranean Region that promotion of medical tourism runs the risk of brain drain of providers from the public to the private sector, a tiered health care delivery system – one for the affluent and the other for the poor, and promotes inequity if the generated resources are not earmarked to protect the poor. ⁶²

Public/private distribution of hospital beds

Total number of beds in public sector hospitals is 101,047. Information on number of beds in private sector hospitals is not available.

Key issues and concerns in Secondary/Tertiary care

Most hospitals in the country continue to be overburdened, catering to needs that can be met at a basic level. Studies have shown that more than 40% patients attending secondary and tertiary care levels have a problem of a primary nature that can well be managed at the first level facility.¹³³Poor quality of services at the first level healthcare facilities is undoubtedly the single most important contributor to this trend. To study the outcome of referrals and satisfaction with regard to the services at the referral health facilities patients referred were interviewed in a cross-sectional study conducted in Karachi, Pakistan. About fifty six percent of patients were referred for the management of various medical and/or surgical conditions by LHWs. The median cost of the treatment was 200 PKR and 1230 PKR

as outpatient and in-patient respectively. About 24% of the patients reported to be cured. With regard to patients' satisfaction, 31.6% of patients were not satisfied with their management at the referral facilities. Long distance to health facility, long time to reach the referral facility, borrowing of money for treatment and outcome of condition were significantly associated with patient dissatisfaction. After being referred by the LHWs, patients are left more or less unsupported by the formal system, causing in many cases, an inevitable waste of resources, unnecessary and avoidable morbidity, and social and mental stress¹³⁴. Other factors include ambiguity on part of the physicians and patients about the extent of coverage available, problems at the next level to handle give n health problems, lack of development or dissemination and/or lack of clarity about rules and regulations governing referrals and lack of capacity or the motivation to carry out referrals.

There are no data available on utilization of secondary and tertiary healthcare facilities and quality of care offered in these sites in neither the public nor the private sectors.⁵³ There is a need to develop a mechanism for capturing these data from indicated sources as a priority.

Poor performance of hospitals has often been attributed to several factors. These include paucity of resources, limited management expertise, lack of opportunities for staff training, shortage of specialists and general cadre staff, shortages of equipment and consumable supplies, Poor repair and maintenance facilities, no mechanism for risk protection for marginalized population, lack of standard protocols for different services, lack of organized information system and absence of formal management and human resource tools and misunderstandings between administrators and clinicians. Many of these inefficiencies result from lack of authority to take appropriate remedial actions, as almost every action has to be approved by the relevant Ministry of Health/departments of health³⁴.

Reforms introduced over last 10 years, and effects

- Introduction of Institution based practice
- Public private partnership in few hospitals

Improvement of Hospitals and Other Institutes under Ministry of Health:

Pakistan Institute of Medical Sciences (PIMS), Islamabad:

A scheme for up-gradation and renovation of facilities at PIMS is being implemented at a cost of Rs.273 million. Rs. 8.13 million allocated for upgrading facilities for the FY 2004-05, under which out-dated / obsolete equipment has been replaced, procurement of new CT scan equipment at a cost of Rs. 35 million, major civil works carried out, medical ICU has been established with the help of French assistance, Rs.6 million has been provided for extension of operation theaters, new PC-1 costing Rs. 551.7 million for the establishment of Cardiac Surgery Unit has been recommended by CDWP out of which 300 million were provided during 2004-05, A PC-1 costing Rs. 190 million for the establishment of Burn Care Unit has been approved by the CDWP. Rs. 135 million were allocated in 2005-06, PC-1 costing Rs. 714 million for the Children Hospital, PIMS has been approved by ECNEC. Rs. 396.1 million were allocated in 2005-06.

Federal Government Services Hospital (FGSH), Islamabad:

Up-gradation of FGSH undertaken costing Rs.285 million, Rs. 91.340 million spent on this project upto June 2003 and a provision of Rs. 40.863 million has been made during current financial year 2004-05 and Rs. 30 million for FY 2005-06. A new Maternity ward has been constructed at a cost of Rs.23 million with equipment worth of Rs.20 million including a color Doppler machine and ultra sound equipment provided under the Women Health Project. A further allocation of Rs. 15 million was done in FY 2005-06. Uplifting of main operation theaters in FGSH, with a financial allocation of Rs. 35 million, establishment of Critical Care Unit (Rs.15 million) and strengthening of Maternity care services at FGSH (Rs.15 million) were also undertaken during FY 2005-06:

Jinnah Post Graduate Medical Center (JPMC), Karachi: Up-gradation of Patient treatment in Department of Dentistry costing Rs. 17.8 million and treatment facilities for cancer patients costing Rs.19.87 million has been completed. Instruments for laproscopic surgery department costing Rs. 3.937 million procured and the Department of Physical medicine improved costing

Rs.11.908 million. DDWP approval of PC-1 costing Rs. 19.8 million for installation of 1000KVA/800KW Generating Set at JPMC, PC-1 costing Rs. 38.900 million for replacement of transmission electron microscope, PC-1 costing Rs. 39.990 million for up gradation of wards and equipments in the current financial year (2003-04). Upgrading College of Medical Technology (Rs. 15 million) and modernization of operation theaters (Rs. 15 million) and Diagnostic and therapeutic Services (Rs. 10 million) have also been undertaken during FY 2005-06:

National Institute of Child Health (NICH), Karachi: Neonatology unit up-graded at a cost of Rs.19.179 million. Oncology Unit costing Rs.5 million and Nephrology and Dialysis unit (Rs. 25 million) established. MRI machine (Rs.32 million) purchased during FY 2005-06.

National Institute of Cardiovascular Diseases (NICVD), Karachi: Angiography unit strengthened through donations from Philanthropists. Grant to NICVD increased from Rs. 125.00 million in 2002-03 to Rs. 135.00 million in 2003-04.

Planned reforms

During Eighth Plan it is envisaged that¹³⁵:

- Any addition of new beds would be linked to teaching rather than Service delivery
- Teaching Hospitals and Divisional Hospitals would be granted an autonomous Status and be allowed to establish their own schedule of users fees;
- All hospitals will be allowed to retain the fees collected and to disburse it along agreed upon priorities, established by Federal/Provincial governments and Hospital Board of Governors;
- Training of hospital administrators in management skills to be developed and implemented;
- Management information system be planned and designed by the Ministry of Health in collaboration with the Provincial Health Department and implemented by the hospitals;
- Federal Ministry of Health and Provincial Health Departments would draft criteria and guidelines for enhancing the quality of care in hospitals and make their grants conditional;
- Continuing education should become a condition for continuing employment

District and Tehsil Hospitals will be upgraded to the desired standard through Provincial Master Plans. The Provincial Governments have prepared the following, hospital up gradation plan over 5 years:

- Punjab: 25 District Hospitals and 52 Tehsil Hospitals at a cost of Rs.1665 million
- Sindh: 11 District Hospitals and 44 Taluka Hospitals at a cost of Rs.330 million.
- NWFP: 19 District Hospitals and 11 Tehsil Hospitals at a cost of Rs.989 million.
- Balochistan: 3 District Hospitals and 30 Tehsil Hospitals at a cost of Rs.540 million

8.6 Long-Term Care

Structure of provision, trends and reforms over last 10 years

HEALTH CARE OF THE ELDERLY:

Health of the Elderly has become an important Health issue all around the globe because of the aging trends. These trends were already marked in the developed countries but over the years it has also increased in the under developed countries. In Pakistan the total number of elderly (defined as 60 years or above) is expected to increase from 7.3 million in 1998 to 26.84 million in 2025. Elderly population is growing at a faster rate than the total population as longevity has increased in the recent years. This phenomenon is termed as "Graying of nations". It is estimated that by year 2010, elderly population of the country would be 12% of total population. These trends caused the policy makers to focus on the issue of global aging. It is assumed that global aging will have an effect on labor, economy, housing, social services and our health care system. In order to meet the emerging challenge of the health of the elderly urgent and immediate concrete steps are needed for the provision of health care to the ever growing elderly population. In Pakistan no such separate health care system exists for the health care of the elderly population. There is total lack of rehabilitative services for the elderly. Physiotherapists practicing in general hospitals do not provide special services to elderly. Geriatrics is not accepted as a specialty. Short courses in geriatrics do not exist anywhere in the county. Drugs prescribed are those that happen to be available for use by the general population and as a result suitable

therapy is not always available. There are no formal or nongovernmental schemes for community elderly care, and particularly no domiciliary care.⁶⁶

Health visits by government practitioners or health care workers are not provided. Neither is the family given any subsidies or other means of supporting its elderly members, irrespective of their state of health. Data on all aspects of elderly life demographic, social, health and economic is generally lacking particularly at national level. Specific forms of community support such as appropriate housing and concessions for travel/leisure do not exist. There is a lack of total coverage (at primary as well as hospital level) and consequently the inaccessibility by probably the neediest for the health services and the rural areas are at particular risk. The need for the elderly health care centers along with other important steps like training of the personnel for the health care of elderly including Geriatrics and Gerontology towards the complete Health Care for the Elderly population has been felt.

Elderly Centers in Pakistan:

There are few centers in Pakistan giving long term care for the Elderly population.

Saint Joseph's Hospice, Rawalpindi: Provides free medical care and facilities to the destitute, sick and terminally ill without regard to race or religion. The Hospice has 60 beds and an outpatient clinic treating approximately 100 patients daily. Patients are taught to do embroidery, knitting, tailoring and other handicrafts. Many of them do recover enough to return to their homes and are then able to earn a little pocket money from their newly acquired skills. Franciscan Sisters of Mary from different countries run the Hospice. The fully trained staff is composed of 50 Pakistani nurses, nurses' aids, volunteer doctors, and ward helpers. Most of them are village boys and girls whom the nuns have trained. There are three wards for men women and children. The hospice has a very well functioning laboratory, provides physiotherapy treatment and has its own pharmacy. Currently hospice has 50 to 60 patients.

Darul Kafala, Lahore: Similarly Daraul Kafala at Bhatta Chowk, in Lahore is been supported and run by the Service Group of Industries an NGO. There are about 50 residents, 25 are women and equal number of male residents. They have recreational facilities as well as regular meetings and other informative get together activities. Most of the Elderly supported the idea of long-term stay and short-term day care centers.

Edhi Center for Elderly, Karachi: situated in Karachi supports those neglected elderly who have no one to take care. This center is been run by famous social worker Mr. Abdul Sattar Edhi. Currently the Foundation is a home for over 6,000 destitute, runaways and mentally ill, and it provides transportation to over 1,000,000 persons annually to the hospitals, in addition to other wide-ranging services.

National committee for welfare of aging: In the public sector, there is a National Committee for Welfare of Aging under the chairmanship of the Minister for Health which examines the need and requirement for aging in the county and gives recommendations to the federal government, reviews the national plan for aging and coordinates with federal and provincial ministries, divisions and departments, NGOs and international agencies.

National Health Policy for Elderly: A national health policy for health care of elderly in Pakistan was developed in 1999. The key policy recommendations are;

- **Focal point and health unit of elderly:** A focal point (Health education advisor) has already been established. HEE unit in MoH would be responsible for carrying out activity such as national surveys, national workshops, seminars etc. The focal person would be member/secretary of committee on geriatrics.
- **Health care systems for the elderly:** Similar points would be established in the provincial health departments. The federal point to take up the role of program manager and responsibility of WHO collaborative center for health care of the elderly. Health care services need to be fully integrated with primary health care. Primary care workers would be trained in basic geriatrics. Secondary and tertiary geriatric care shall be provided under the aegis of a medical specialist.
- **National Institute of Geriatrics (NIG):** NIG will be established to disseminate information on health and other problems of old age, arrange training in geriatrics and gerontology, conduct research on the diseases of old age and aging process to build a scientific base for geriatric medicine in Pakistan, cooperate with national and international agencies for achieving the above objectives, work in close collaboration with NIH.

- Health Promotion, Disease Prevention and Disability Postponement: Electronic media shall play its part to highlight the teaching of Islam regarding elderly.

CARE OF THE PERSONS WITH DISABILITIES:

The systematic care of persons with disabilities was brought into focus in Pakistan in the 1980s with the observance of 1981 as the United Nations International Year of disabled Persons. The needs were then felt for their education, rehabilitation and care both by government and by the private sector and a full-fledged National Policy on the subject.

The ever first "National Policy for Persons with Disabilities, 2002" formulated in consultation with the Provincial Social Welfare and Education Departments and prominent NGOs, to ensure the practical and visible provision of services, facilities and rights to Persons with Disabilities, by Directorate General of Special Education has been approved by the Government of Pakistan on 23rd October, 2002,. Directorate General of Special Education (DGSE) established in 1985 as an attached department of Ministry of Women Development, Social Welfare and Special Education has close liaison with line Ministries/Divisions/Departments and has a strong network functioning with agencies working for the education, rehabilitation, training, and welfare of special persons.¹³⁶DGSE has initiated a number of projects for education, welfare and rehabilitation of persons with disabilities across the country. The DGSE and most of its Centers/Institutions are funded through the non-Development Budget of Government of Pakistan. The launching ceremony of National Policy for Persons with Disabilities, 2002 has been taken place in the "Mega Event" held at Lahore in June, 2003. The World Bank is providing assistance to prepare the draft National Plan of Action (NPA), in the light of objectives envisaged in policy in collaboration with the line Ministries/Division/ Provincial/District Governments to set out the activities/implementation resting with respective agencies for playing their specified role under their areas of Jurisdiction.

Special Education Programs

DGSE has established 51 Special Education Centres (SECs) for Children with disabilities of various categories across the country. As indicated above, the Directorate General of Special Education is working in the four disabilities areas i.e., hearing impairment, visual impairment, physical impairment and mental retardation. The Special Education Centres have been established in each of the above disability area, for education of children with disabilities. In addition to the Special Education Centres, certain other allied institutions/projects are also functioning under the auspices of Directorate General of Special Education, whose basic aim is to further supplement/support the activities of special education centers. Persons with disabilities of all categories, who are able to get vocational training are being provided with these trainings. Apart from National Training Centre for Special Persons (NTCSP), Islamabad there are four Vocational Training Centres located at Karachi, Lahore, Peshawar and Quetta engaged in "Vocational Training and Rehabilitation of Disabled Persons". These training centres are fully equipped with latest machinery and equipment and offer two year certificate courses in different trades. Through the program of "Vocational Rehabilitation & Employment for Disabled Persons" (VREDP) with Community Participation efforts are being made for the restoration of persons with disabilities to the fullest physical, mental, social, vocational and economic usefulness of which they are capable. This project was launched in 1992 with technical and financial assistance of United Nation Development Program, ILO.

"National Institute of Special Education" (NISE), Islamabad was established in 1986, with the purpose of assisting the development of services for the education and rehabilitation of disabled children and adults by providing training courses for the teachers, parents and other people viz professionals, disabled individuals.

National Library & Resource Centre (NL&RC) has been established, attached with NISE, to augment the reservoir of knowledge through acquisition of publication and research material in the field of special education. This is a valuable resource base for the system and procuring professional literature and research studies among SECs in public and private sectors in the country dealing with special education. The library acquires books/journals/videos from various developed countries which is ultimately disseminated to the concerned institutions to their use. National Braille Press, Islamabad, has been established for printing of braille books and other teaching material for the education of visually handicapped children. The press was donated by Norwegian Association of the Blind and Partially Sighted.

National Mobility & Independence Training Centre, Islamabad has been established to provide free of cost training and guidance to visually handicapped persons to ensure their independent

mobility in terms of movement on the roads, shopping centers, public places and normal social situations. Mobility and Orientation is a very important area for the teachers and workers engaged in the care, welfare, training and education of the visually handicapped. This Centre initially organized courses with the help of foreign experts but at present locally trained personnel are providing training to parents, teachers, para-medical staff and non-governmental organizations. Special Education Centres have regular contact with the parents of their pupils. In this way the child's progress is closely watched. All the Special Education Centres working under the DGSE have set up the Parent Teachers Associations. These Associations are registered under the "Voluntary Social Welfare Agencies (Registration and Control) Ordinance, 1961. These PTAs are working for providing welfare services to the children of these Centers. Through this platform the parents are also provided with skills and confidence for meeting the special needs of their disabled children. This forum provides parents with an opportunity to be partners in the process of education and training of their children.

A model Hostel facility at National Special Education Centre for Hearing Impaired Children, Islamabad and Special Education Centre for Physically Handicapped Children, Faisalabad has been provided to assist the children with disabilities residing outside their homes in collaboration with potential NGOs. 22 students at each Hostel have been admitted.

Keeping in view the present requirement of disabled community of the country, the Directorate General of Special Education has established a Telephone Help Line to provide a common platform to the most deprived and neglected community of our society who are unable to seek information regarding education, guidance, treatment, rehabilitation and employment services in their own areas and localities.

Support to Non-Government Organizations (NGOs) Working for Welfare of Disabled Persons for Private Sector Development in Special Education Field. The Directorate General of Special Education is collaborating closely with the NGOs operating in the field of various disabilities. The efforts have been made for their sustainability and development.

International Coordination has been made for technical assistance in terms of manpower development and revitalization of special education system with JICA (Japan), UNICEF, UNDP, UNESCO, UNESCAP etc. The DGSE has actively participated in preparation and finalization of the program of action the UN ESCAP. The protocol on the UN-ESCAP Decade of Disabled Persons was prepared and finalized in consultation with all countries of the region including Pakistan. Further, Pakistan also acted upon the provisions of this international plan of action and an end of the Decade report titled, "Report on Implementation of Agenda for Action-Asian Pacific Decade of Disabled Persons 1993-2002" which was also presented in the UN-ESCAP Head Quarters. The UNESCAP Decade of Disabled Persons, 1993-2002 was extended to another Decade i.e, up to 2012. The Government of Pakistan actively participated in this activity, which was finalized in an inter-governmental meeting, held in Japan in October, 2002.

The Government of Pakistan ratified ILO Convention 159 in 1994. The main thrust of this convention is to Create Equalization of Opportunities for the persons with disabilities through the provision of services, which are more appropriate to their needs and not different from able bodied.

Keeping in view its importance, the subject of "Sports and Recreation" has been included in the National Policy for Persons with Disabilities 2002. The government is making every effort to promote the sports for the persons with disabilities by improvising resources to facilitate and promote sports for disabled in the country. All the Special Education Centers of DGSE are providing facilities for sports and recreation, as part of their regular activities.

According to the WHO, 10% population of a developing country like Pakistan is involved in disability, in one way or the other. This appears to be on the high side. Contrary to that, the Data on Disabilities in Pakistan on the basis of National Census 1998 indicates 2.49% as population of the disabled persons in the country. Both these dimensions have been indicated in the approved National Policy for Persons with Disabilities.

For implementation of National Policy program for services of Barrier Free Environment for Disabled Persons, initially Islamabad and all provincial head quarters have been declared as "Disabled Friendly City" in Pakistan and the establishment of Disabled Park at Fatima Jinnah Park, F-9, Islamabad is in progress under the umbrella of Projects wing, DGSE for persons with disabilities. The Ministry of Women Development, Social Welfare and Special Education and DGSE

are genuinely committed to the task of disabled persons and are also ambitious to create positive social change by addressing all the issues affecting the lives of persons with disabilities.¹³⁷

National Institute of handicapped is a unique hospital dedicated for the diagnostic, medical and rehabilitative treatments of patients suffering from one or more disabilities. The hospital is based in its own custom built building at Islamabad. The facility was conceived and executed by the Special Education Division to provide diagnostic, treatment and rehabilitative services to patients referred to the hospital from all over the country. Its management and operation has now been transferred to the Ministry of Health. In the area of the diagnostics the hospital is equipped with: MRI, CT scan, Ultrasound, and Pathology lab. Its medical services include orthopedic and pediatric surgery, biometry and laser therapy, ENT and psychiatry. In addition to providing general physiotherapy, the hospital is also equipped to provide electro therapy and hydrotherapy. It has a well established and functional speech and language therapy department which is awarding a recognized 15 month speech and language therapy diploma course. The hospital plans to establish facilities for manufacturing Myo electric artificial limbs and assembly of hearing aids.

Current issues and concerns in provision of long-term care

The paucity of reliable data regarding the prevalence of disabilities and the magnitude of the population with disabilities is quite well known. People are increasingly being disabled owing to malnutrition and disease, environmental hazards, natural disasters, traffic and industrial accidents, and various forms of conflict. Also as more of the population survives to older ages, the number of elderly people with disabilities is rising. Therefore valid and reliable data are essential for the development of a comprehensive plan for the welfare of those in the population with disabilities highlights some of the dimensions that could invalidate or inhibit the reliability of information about this portion of Pakistan's population. In traditional societies such as Pakistan where education is low any disability among household members is normally concealed. The family's concern is related to the social discrimination that other people would likely demonstrate. Another reason why to disabilities are concealed relates to the "exchange" phenomenon in marriages, especially on the bridegroom's side due to the fear that other children in the family concerned may also carry genes which could adversely affect their progeny.¹³⁸ This situation could be improved by awareness and education for people with disabilities, their families, specialists and the general public to increase their awareness of disabilities and the measures that can be taken to improve the quality of life for the people concerned. Increased accessibility to medical care through the use of mobile units could provide much needed relief to disabled people in rural areas, special education courses to provide opportunities for disabled persons to gain acceptance in society. In this regard, social organizations should be encouraged to assist persons with disabilities with regard to their physical needs, and where possible, provide job opportunities through employment bureaus in order to help them live a more independent life.

Planned reforms in provision of long-term care

Ministry of Women development, Social Welfare and Special Education is undergoing an exercise of institutional restructuring with a view to streamline its functions and to the emerging needs of the bulk of the population that consists of women, children, disabled, special and elderly people.¹³⁹ The thrust of the re-structuring exercise is to transform this Ministry into a pro-active organ of the government that would effectively implement policies/prgramme/projects to address various issues confronting women, children, elderly and special persons. The institutional mechanism of Special Education is being reviewed with the objective of consolidating the provision of training and services for the disabled and handicapped person. A National Task Force on Disabled Person has been set up which would consult the Provincial Governments as well as NGOs and civil society organisations in the field. The Task Force has been mandated to streamline the functioning of plethora of existing special education institutions to develop a National Policy on the Disabled. Minister for Special Education is planning to launch a full-fledged program to spread awareness of the rights of physically and mentally challenged people. Ministry is also going to upgrade the standards of special education.¹⁴⁰

8.7 Pharmaceuticals

Pharmaceuticals account for the major share of private health expenditure in the country; Pakistanis spend more than 80% of their total health expenditure on buying medicines due to lack of public financing, relatively higher prices and the virtual absence of health insurance and reimbursement schemes. Despite the inelastic demand, high costs can be inhibitory to accessing life-saving drugs. However, on the other hand, the mere availability of essential drugs or the ability to afford them does not mean that these drugs will be used rationally. Problems with drug use are compounded by lack of information, increasing number of brands in the market, counterfeits and unethical marketing practices. The most important question in the context of pharmaceuticals, therefore, relates to the manner in which issues of irrational use and misuse on the one hand, and under-use due to lack of access or affordability, on the other, are effectively addressed by policymakers.³⁴

Essential drugs list: by level of care

The National Essential Drugs List (NEDL) or formularies are invaluable tools for rationalizing pharmaceutical expenditure and are meant to be used as the basis for pharmaceutical procurement and prescribing. The Ministry of Health defines essential drugs as drugs 'that satisfy the healthcare needs of majority of the population'. They should, therefore, be available at all times in adequate amounts and in appropriate dosage forms. The Drugs Control Office has published the third revision of the NEDL, which is an index of drugs that qualify the aforementioned criteria. The list currently contains 452 drugs belonging to different pharmacological classes¹⁴¹. This is the largest NEDL in the South Asian region. The Ministry of Health publishes and disseminates this list amongst healthcare professionals as part of efforts to increase the acceptability of the concept – as envisaged in the National Drug Policy. The concept has received significant support from the WHO since 1975; the rationale provided states that NEDL guides rational selection, supply and use of drugs.

The essential drugs list is available and attached at Annex

Manufacturers of Medicines and Vaccines

Pakistan had no pharmaceutical manufacturing unit after its independence in 1947 and the local demand was met by traders importing medicines primarily from India. The local marketers were only involved in packaging and distribution of imported drugs. The first units were established through the efforts of the Pakistan Industrial Development Board (PIDB), subsequent to which manufacturing capacity continued to increase. 80-85% of total drugs are produced by local manufacturers and 15% are imported. Currently, the pharmaceutical sector in the country is a sizeable industry –by dollar size and growth rate standards – with an annual turnover of more than Rs. 70 billion (US \$1.2 billion) and an annual growth rate of 10-15% for the past few years. The industry comprises 411 local manufacturing units and 30 multinational corporations (MNCs), which produce 125 categories of medicines and meet around 80% of the country's requirements.¹⁴²

Pharmaceuticals were under the stipulations of the Pharmacy Act 1967 and the Drug Act 1940 prior to 1972, which is when the bold Generic Drug Act was introduced.¹⁴³ It is widely perceived that the Act had robust scientific merit and had it been implemented in its true spirit, it would have facilitated access to affordable drugs. The Generic Drug Act was geared towards favouring the national industry; however, in many ways, it also had an inadvertent adverse effect on the local industry in terms of the diminishing competitive capability in the international markets, which led to decreased exports. In the aftermath, the local industry benefited from the Generic Drug Act – by virtue of increased local market capitalization. Unfortunately, the Act was repealed amidst heavy opposition from the commercial sector and a range of other stakeholders. Except for controlled patches and inhalers, almost all the dosage forms are produced in the country. National institute of health has the capacity to produce most of the vaccines.

Consumer price of Medicines and taxes: The profit margins at different levels are fixed. Whole seller's margin ranges from 2-6% while pharmacy margin is 15%. The taxes on finished products

include, 5% duty, 6% withholding tax, 1% insurance, 2% bank charges, 2% clearance and 1% LC charges.

Imported Drugs: Cost and freight x ER + Mark-up of 40 % = Maximum Retail Price.

Local Drugs: Prime Cost (Cost of raw and packing materials + direct labor + Markup of 75 % for non-sterile product and 90% for sterile products = Maximum Retail Price Studies have shown that the retail prices of many drugs are higher in Pakistan as compared to other countries. A comparison of prices with the Indian market also reveals disparities. In 2001 Vioxx^{XX} was introduced in Pakistan at a cost of Rs. 80 per tablet while at the same time it was available for an equivalent of Pak. Rs. 4 in India and Rs. 70 in the UK. Ciprofloxacin (an anti-infective prescribed widely for Typhoid) is up to eight times more costly in Pakistan as compared to India.³⁴

Regulatory Authority: Systems for Registration, Licensing, Surveillance, quality control, pricing

In Pakistan, drug prices are regulated under Section 12 of the Drug Act 1976; this Act gave the Ministry of Health complete control over drug pricing, which it freely exercised till June 1993. However, in 1993, as part of the government's deregulation policy, a complete deviation occurred and the Ministry of Health partially relinquished its authority to regulate drug prices in favour of free market. The resultant increase in prices was unprecedented in that the prices of certain drugs increased to over 400% of the regulated-era prices. This led the Ministry to respond promptly by imposing a freeze in prices. A virtual freeze exists till today; notwithstanding, prices have continued to rise. Part of the reason for this stems from a failure to follow this up with appropriate and more specific legislative measures. The apparent void gave way to a plethora of Statutory Regulatory Orders (SRO), which though legitimate, created an environment for maneuverability and price increase. Currently, the pricing policy is enigmatic and requires pro-consumer revisioning as to make it more transparent.

Drug pricing-related deregulation policies have serious implications for the poor in the context of affordability.¹⁴⁴ Studies conducted on the impact of liberalization on drug prices in Pakistan reveal that deregulation has a direct impact on prices of pharmaceutical products and worsen people's access to drugs.¹⁴⁵ Even when under the vigilant control of the Ministry of Health during the 1980s, prices of drugs increased by an average of 30%. It is, therefore, not surprising that withdrawal of such controls in 1993 led to an unprecedented rise in prices.

Drug pricing is a complex issue with many inconsistencies; prices are influenced by a variety of upstream and downstream factors and markups charged at different levels. Foremost amongst these is lack of clarity in the pricing formula, which is currently based on the industry-reported cost of production as opposed to the international comparative prices of raw materials. Secondly, MNCs use transfer pricing to favourably influence their calculations of production costs. Pricing is also complicated by the plethora of vague categorization of drugs into essential and non-essential, controlled and decontrolled, and those upon which taxes such as GST and others are levied or not. Thirdly, ownership of the same product by the principal and the subsidiaries creates price differentials due to a complex interplay. As a result, the prices of many drugs are known to be high and the need for downward revision has been repeatedly highlighted. This underscores the need to revise the pricing formula and to make it transparent on the basis of international competitive prices of raw materials. In addition, a robust and transparent mechanism must be developed to monitor prices.

Prices of drugs are also likely to be influenced by the TRIPS agreement – a key WTO Agreement affecting health – and the Patent Ordinance 2000 of Pakistan, which was promulgated in compliance with TRIPS regulations. Under this, the term of the patent has been extended to 20 years instead of 10 years. This will strengthen the monopoly of the MNCs with higher prices for longer durations of time. Low-income markets can afford drugs at low prices and equity demands that prices be set according to the income of the population; this can be achieved through many mechanisms, for example, differential pricing. The feasibility of developing such a system – mutually agreeable to all stakeholders – needs to be explored.³⁴

Irrational use entails misuse, under-use or over-use of drugs and manifests itself as escalated spending on drugs per capita or as lack of access to drugs due to inhibitory cost or failure to reap the benefits of drugs owing to a failure in communication about its usage. The unregulated sale of medicines in private stores, many a times by inexperienced retailers is one of the factors

contributing to irrational use of drugs. All forms of drugs are easily accessible over the counter; however the sale of narcotic analgesics is regulated by a specific provision of the Drug Act 1976 as part of which their sale is strictly regulated; despite this, narcotics such as Pentazocine are freely available in wholesale markets in major cities. The absence of prescription-based dispensing of drugs at the point of purchase is an important contributory factor in this regard. Over-use and misuse is not unlikely when all forms of drugs are easily accessible over the counter and where there is no barrier to self-prescription or substitution of drugs by unqualified sales people. The Drug Act 1976 currently requires pharmacies to ask for prescription before they can dispense specific classes of drugs such as anti-anxiety and a few others; however, by and large, prescription-based dispensing of drugs has never been introduced in the country and no local study has been conducted to date on its effect on access or sale of drugs. In addition to its implications for rational use of drugs, prescription-based dispensing can also facilitate drug sales information systems and provide accurate information on current disease and sale trends. The feasibility of introducing prescription-based dispensing needs to be assessed.

Secondly, the inappropriate use of drugs by healthcare providers is a well-established phenomenon. This is partly due to lack of capacity, which is compounded by the absence of a comprehensive CME program and gaps in the development/dissemination of guidelines. A survey has recently shown that guideline manuals for procedures and responsibilities are not available at more than 90% of the public sector healthcare facilities and that the Essential Drugs List is unavailable at 30% of these sites.¹⁴⁶

Drug Registration process in Pakistan

The primary object of registration of a product by the Regulatory Authorities is to ensure that the drug is safe, effective and of quality, before it is sold on the counter. The Federal Ministry of Health accordingly regulates the drug registration process. Drugs marketed in Pakistan are required to be registered under Section 7 of the Drug Act 1976¹⁴⁷. Fortunately, the Act is clear on all issues related to drug registration; however, the law is being poorly implemented. In last 30 years, more than 30,000 medicines have been registered in Pakistan; this amounts to more than three medicines registered per working day.³⁴ The drug registration process is as follows:-

i) A 21 members Registration Board ensures before registering a new molecule that the same is registered in and is on free sale in the developed countries like, USA, UK, Europe, Japan, Australia. If a new molecule has not been registered and allowed free sale in the markets of the country of origin then its safety and efficacy becomes questionable.

ii) The approval of a drug by FDA may not always serve as a guarantee to a new drug's safety for masses in Pakistan due to different geographical conditions, disease prevalence pattern, geological differences etc. Therefore a new drug at a very high price brought for registration being not registered in the country of origin or developed countries has to be thoroughly evaluated if it could not be marketed there.

iii) The delay in the registration of new molecules also occurs some times because the applicant does not provide all the necessary data on technical, therapeutic, clinical aspects and pricing which is required by the regulatory authorities for purpose of assessment.

iv) In recent years there have been instances in the developed countries where approval have been withdrawn within a short period of time due to adverse reactions. Therefore, evaluation and study in the local environment is necessary before registering new drugs.

Existing legal and administrative infrastructure for drug regulation

The existing legal and administrative infrastructure for regulating the manufacture, quality control, and sale of drugs / medicines is as follows: -

Federal Government (empowered under Sections 5, 7, 17, 18 and 31 of the Drugs Act, 1976) is responsible for: -

- a) Grant and renewal of Drug Manufacturing Licenses, through a Central Licensing Board, comprising 21 members.
- b) Grant and renewal of drug registrations for local manufacture and import, by a Registration Board, comprising 21 members.
- c) Inspections of pharmaceutical units through Panel of Experts/Federal Inspector of Drugs.
- d) Drugs testing at manufacture/post-manufacture stages.
- e) Ensuring the proper testing and quality control facilities so that the drugs produced comply with the laid down specifications.

- f) Post-marketing surveillance.
- g) Establishment of Drug Courts through Law and Justice Division. Punitive powers are exercised under sections 23, 27, 28, 30, 41 & 42 of the Drugs Act, 1976.
 - Provincial Governments (empowered under Sections 6, 11, 17, 18 and 30 of the Drugs Act, 1976) are responsible for: -
 - a) Grant and renewal of Drug Sale Licenses.
 - b) Establishment of Provincial Quality Control Boards.
 - c) Monitoring of storage and quality control conditions at the sale outlets.
 - d) Post-marketing surveillance and testing by Provincial Drugs Testing Labs.
 - e) Prosecution in Drug Courts.

Currently, several health products are not within the ambit of the law. There is a need to redefine the scope and rationale of the registration procedure. One of the pre-requisites of registration is the availability of safety and efficacy data. The Drug Act 1976 makes provisions for accepting documented proof from any source. This has contributed to liberal registration of drugs on the premise that they were licensed for use in another country. However, this also raises issues as many drugs are registered in countries only for the purpose of being exported. There is anecdotal evidence to suggest that many of these may be substandard. This poses a problem in the case of generics. There is, therefore, a need to make bio-equivalence studies mandatory prior to registration, evaluate the process and procedures of registration. Measures must be taken to stop unregistered medicines from being sold in the market.

No official figures are available regarding the number of manufacturers producing *Unani*, *Ayurvedic*, Herbal and Homeopathic medicines in the country. However, estimates from the Pakistan Tibbi Pharmaceutical Manufacturers Association (PTPMA) put the figure at around 400; of these, 86 are registered with the PTPMA. The total market for traditional medicines was estimated to be around US \$125 million (Rs. 7,500 million) in 2004 while total imports were estimated at approximately US \$4 million and exports stood at US \$9-10 million. Traditional medicines must be brought under the realm of regulation and licensing.³⁴

Monitoring of drugs quality - Regulatory Authorities

The Federal and Provincial Governments jointly share the responsibility of monitoring drugs quality. The Drugs Act, 1976 provides a rational approach towards Quality Assurance of drugs through the Central Licensing Board & Drug Registration Board at the level of Federal Government. The Provincial Governments regulate the sale of drugs through Provincial Drug Inspectors by granting licenses for sale of drugs and regular inspections of the sale channels. Provincial Quality Control Boards have also been set up for over all checks on the quality control situation in the provinces. Federal Ministry of Health exercises vigilance on the manufacture of drugs through inspections of the pharmaceutical units through Federal Inspector of Drugs and Panels of Experts. Central Licensing Board for grant and renewal of Drug Manufacturing Licenses and Drug Registration Board for grant and renewal of Drug Registrations have been established in the Ministry of Health. These Boards consist of representatives of the Federal & Provincial Governments and experts in the field of Medicines, Pharmacy, Virology and Veterinary Medicines.

Drugs Quality Control features:

- ISO certified units: 75
- Strict License conditions for manufacturing
 - Inspections conducted by FIDs since Jan 2002: 1490
 - Units closed down since Jan 2001: 50
 - Licenses suspended since Jan 2001: 3
- Cases registered in drug courts since Jan 2001: 20,000
- Cases decided by the Drugs Courts: 6,945
 - Fine imposed: Rs. 4,98,11,290/-
- Role of federal/ provincial Inspectors of drugs:
 - Monitoring GMP at manufacturer level
 - Report of Central licensing & Registration Board
- Drugs control labs (Federal / Provincial): 6
 - 30186 samples tested by all laboratories
 - Only 2.7% below standard out of which many were Unani drugs

About 30% of these drugs were declared of standard quality by the Appellate Laboratory.

Salient points of Drug Regulation:

- i. Each manufacturer of drugs is bound by law to establish an independent Quality Control Laboratory under the supervision of a qualified and competent person, in the licensed premises to check the quality, purity and safety of drugs during different stages of manufacture and before releasing the product in the market. All the licensed manufacturers are required to keep the record of each batch manufactured and marketed for a period of shelf life plus two years.
- ii. The Federal Ministry of Health employs 10 Federal Inspectors of Drugs at Islamabad, Karachi, Lahore, Quetta and Peshawar to monitor the manufacture of drugs and report to Central Licensing & Registration Board.
- iii. Provincial Governments employ 144 Provincial Drug Inspectors to monitor sale of drugs through retail outlets and storage conditions.
- iv. Five Drug Testing Laboratories are working under the Federal and Provincial Governments to check the samples of drugs for their quality, safety and purity. These samples are picked up by the Federal and Provincial Drugs Inspectors from the manufacturing, storage and retail premises as a measure of Post Marketing Surveillance.
- v. The Federal Government has established 9 Drug Courts under Section 31 of the Drugs Act, 1976 in major cities of the country.

Prices of Pharmaceuticals in Pakistan

In developing countries like Pakistan high prices are major problem affecting the accessibility of these drugs to common man, therefore, carry higher burden on drug policies. Under the present policy, which began in 1971, Drugs, which are manufactured by way of formulation in the country, as well as those imported drugs in the finished form are subject to price control. Price fixation is done by the Federal Government as one of the condition of drug registration. The prices are revised on applications on grounds of change in costs, foreign exchange parity etc.

Price fixation is based on the estimates of cost submitted by the manufacturing firms on the basis of following formulae;

Imported Drugs: $\text{Cost and freight} \times \text{ER} + \text{Mark-up of 40 per cent} = \text{Maximum Retail Price}$.

Local Drugs: $\text{Prime Cost (Cost of raw and packing materials} + \text{direct labor} + \text{Markup of 75 per cent for non-sterile product and 90\% for sterile products} = \text{Maximum Retail Price}$

Issues Related to Price Increase

Policy: " An annual increase shall be allowed on the basis of a percentage to be determined by the Economic Coordination Committee of the inputs based on the annual inflation rate and annual change in exchange rate"

Price increases allowed since 1997 preceding years

Year Controlled

drugs %

Decontrolled

drugs %

Calculated price

increased based on

pricing formula %

97-99 No price increase No price increase -

June 2000 8 10 +26

Dec 2001 3 4 +12

2002 to date - - -2.6

Source: Ministry of health

Steps taken by the Ministry of Health to Rationalize Drug Price

- Stress on local manufacture of drugs
- Creation of competition by registering “me - too” drugs at competitive rates.
- Voluntary reduction of drugs prices by the pharmaceutical companies.
- Comparison of regional prices for same / equivalent drugs.

Systems for procurement, supply, distribution

The Ministry of Health mandates the procurement of drugs from within the list by the provincial health departments and the local health authorities. There are two types of procurements for public and private sector. Total market size is around 67 billion, out of which public procurements are around 1 billion (1.8%). Out of the total public procurements 75% drugs are procured centrally through open tenders and rest of them through local purchase. Local purchase is again divided into two types, local bulk (75%) and local day to day purchase (25%). In the public sector, procurement rules are defined under which all procurements are done. This bulk procurement is done at the district level. In the private sector, all sales are strictly monitored from manufacturer to the patient by federal and provincial drug control authorities. This control is enforced through warranty system in the chain of drugs supply from manufacturer to distributors, whole seller and retailers at all levels except the consumer. All of them observe specified storage conditions. Reverse mechanisms also exist. If a drug is near expiry, it is returned and destroyed. Each level is prone to inspection for checking of procurement records, storage conditions and other mandatory provisions of drug safety and stability.

In the context of public procurement a number of issues need to be addressed. Firstly, the selection of drugs on the list has been debatable as the NEDL consists of a very large number of drugs, many of which are outliers in terms of their usage. Secondly, some molecules are marketed under more than 100 brands of varying prices and the price differential causes much confusion to the procurement officials. Thirdly, another issue that compromises this concept is the paucity of data on total public spending on pharmaceuticals. Further research is needed to determine price handles – factors that contribute to or have the potential to increase or decrease costs – along the pharmaceutical supply chain.

Reforms over the last 10 years

i. The quality of pharmaceutical products manufactured in Pakistan is highly appreciated in the International market. This is evident from the growing trends of exports of these products in different countries of the world. Pakistan is exporting drugs/medicines worth 37-40 million US\$ drugs to over 60 countries of Asia, Africa, Europe and America.

ii. A system of drug recall has been introduced in the country. Where a drug manufactured by a manufacturer is found to be not of standard quality, for whatsoever technical reason, the manufacturer is asked to recall all the stocks of that particular batch of drug from the market, through press advertisements in leading National Dailies.

iii. Presently over 70 national pharmaceutical manufacturing units in the country are ISO certified and many more are in the process of obtaining ISO certification.

iv. A new program of "Detailed Inspections of Pharmaceutical Units" has been started to help the pharmaceutical industry in improvements and up-gradation of their infrastructure and processes.

v. Ministry of Health has started a new series of "Practical Training Program on Validation of Processes and Equipment in Manufacturing and Quality Assurance of Drugs" for capacity building and up-scaling of quality control mechanisms in the pharma industry. This program benefited about 200 participants from local pharma industry at Karachi.

Current issues and concerns

Regulatory system of the pharmaceutical market is best described as rudimentary. There is virtually no public drug reimbursement or IP protection; patent law was officially tightened in December 2000, although the effectiveness of this has been questioned. In 2002, further changes were made, making Pakistan's IP laws even weaker. The appointment of drug inspection teams to investigate the manufacture and sale of 'fake' drugs has met with disappointing results so far, largely due to a lack of resources and bureaucratic complications.¹⁴⁸

The Drug Act 1976 is weak in a few areas, The Act relies heavily on evidence – relating to efficacy and safety – generated in the developed countries and does not allow adequate room for Adverse Drug Reactions (ADR) monitoring. The absence of appropriate provisions to mandate local scientific analysis is not only detrimental to building research capacity in the area but has also enabled many substandard drugs to gain access to the market. In this context, the Pakistan Association for Pharmaceutical Physicians has recently made valid recommendations to amend drug rules in order to make pre-marketing trials and post-marketing surveillance mandatory. Secondly, its lack of attention to traditional medicine has been well-recognized and it was not until 19 years later that efforts – currently underway – were instituted to bridge these gaps. Thirdly, lack of clarity in relation to drug pricing – post-deregulation and partial freeze in 1993 – Lastly and importantly, however, the gravest issue stems from *poor implementation of the currently existing law*.¹⁴⁹ This manifests itself in the shape of problems with the availability of and access to safe, efficacious and cost effective drugs despite huge proportional spending on buying drugs both by the public sector (40% of recurrent health budget) and consumers (more than two-thirds of the household health) The inside front page of The Network's quarterly Drug Bulletin runs a timeline series on 'Availability of Essential Medicines'; the extensive list provides information on essential drugs that are available, in short supply or are unavailable in different districts of the country. The survey findings have been consistent with the observation that low-profit drugs – though essential and life-saving – remain in short supply.

Shortage of drugs in the market may also be due to genuine reasons such as the unavailability of raw materials or problems with manufacturing. However, more commonly, shortages arise as a result of decreased responsiveness of the manufacturer due to low demand of a particular drug. Shortages are also known to be induced as means to achieving certain objectives such as getting a price increase from the Ministry of Health.

During the last four years, Drug Testing Laboratories have tested over 75,000 samples of drugs. Results of drugs testing indicates that incidence of fake / spurious drugs has been between 0.3 - 0.4 %. Out of these, many samples were of Unani Drugs marketed with labeling and packing similar to the Allopathic Drugs, for the regulation of which, there is no law at present.

Federal Ministry of health is responsible for approval and quality control of drugs. At the federal level there are two drug regulation authorities. 1) Quality control authority and 2) drug control organization. Both of these work through Central licensing and registration board. At the provincial level, provincial quality control board is responsible for quality control. The registration process is given in the section above.

- Some drugs are de-registered if they are substandard or does not fulfill the safety requirements
- Lab data analysis of last five years shows that only 0.4% of drugs are spurious. This issue has been raised at the highest level including senate and pharma industry. MoH is taking a firm stand and has started a campaign and task force has been established for spurious drugs acting under direct supervision of Health minister for state. The Director General is the chairman of this task force.
- Other mechanisms to regulate spurious drugs include;
 - Drug testing labs are established where samples are tested for quality and standards
 - 1565 drug inspectors are working just for the surveillance sampling of drugs from manufacturers, distributors, whole sellers, retailers and hospitals.
 - Substandard drugs are withdrawn from the market and they can be de-registered as punishment.
 - Punishment for keeping or manufacturing spurious drugs is imprisonment from 10 years up to life imprisonment and fine up to Rs. 0.2 million.
 - Other than this, every drug manufacturer in Pakistan is required to establish his own drug testing lab for testing of each and every batch of drug produced.

Planned reforms

The implementation of policies and legislation needs to be overseen by an independent Drug Regulatory Authority. This concept has received support in the 10th Medium Term Development Program (2005-2010) and has also been supported by the private sector including Pharma Bureau.³⁴ Work is currently underway by the Ministry of Health, assisted by the WHO EMRO office, to create a statutory and semi-autonomous Drug Regulatory Authority under the umbrella of Federal Ministry of Health with its own independent governance and enforcement

mechanism.¹⁵⁰ Once created, the DRA should be made responsible for policy issues relating to regulation and monitoring of the implementation of the National Drug Policy and the Drug Act. The Health Ministry is preparing a new law for regulating the manufacture and sale of Unani Drugs and a draft bill has been moved on the floor of the National Assembly for discussion. The National Institute of Health (NIH) has recently published a list of essential drugs in *Unani* Medicine and the Herbal Medicine Division is currently working on GMP for the sector. Efforts have been made to further improve the functioning of the Federal Drug Testing Laboratories, by strengthening these Labs with more technical officers and modern drug testing instruments. A Concept Paper for the establishment of a new Drug Testing Laboratory under the Ministry of Health has been prepared with estimated cost of Rs. 200 Million.

8.8 Technology

Trends in supply, and distribution of essential equipment

Health systems rely a great deal on health technologies; the absence of a well organized health system in Pakistan creates a unique situation where technology can fill many gaps. However there is limited use of IT in most of the health facilities. In many districts computer are not being used, as the computer literate staff is not present. Despite availability of some very sophisticated computer programs, like SPSS, GIS, and EPIINFO their utilization is very low in the health sector.¹⁵¹ A department for introduction of IT technology/E-government is being established in Ministry of Health, headed by Joint secretary. The Pakistan Medical and Dental Council (PMDC) has developed a web site, which has information for general public about its functions, rules and regulations. (www.pmdc.org.pk). In addition Ministry of Health Pakistan has also developed web site which provides information about its structure, function and specific details about few programs such as National health program for primary health and family planning.

Telemedicine

Telemedicine is the transfer of electronic medical data from one location to another. This transfer of medical data may utilize a variety of telecommunications technology, including, telephone lines, ISDN, the Internet, intranets, and satellites. Telemedicine is utilized by health providers in a growing number of medical specialties, including, but not limited to: dermatology, oncology, radiology, surgery, cardiology, psychiatry and home health care. People living in rural and remote areas struggle to access timely, quality specialty medical care. Because of innovations in computing and telecommunications technology, many elements of medical practice can be accomplished when the patient and health care provider are geographically separated.

The concept of telemedicine was introduced by a non-government organization (NGO) Telmedpak, for the first time in Pakistan. The telemedicine forum was established by Ministry of Science and Technology to oversee and push forward the use of IT in the field of medicine. The objective was to improve the health care services in the country and provide the people of backward areas with quality and timely medical treatment.

In 2001, in a meeting six projects were approved in the first ever meeting of the Telemedicine forum of the ministry of science and technology. The projects are about training doctors in information technology (IT), storing the country's health data in computers, and designing a website on health related issues, linking the health institutions for tele-consulting. From Balochistan to Gilgit for tele psychiatry, in Sindh for radiology (hala project) and by linking the rural health centers with King Edward medical collage Lahore for dermatology. Still in early stages, but telemedicine has found roots in health systems in Pakistan. Pak-US collaboration in telemedicine led to establishment of first telemedicine/E-health training center for capacity building in Pakistan. It has trained 45 doctors and nurses in telemedicine. These trained personals are helping other hospitals, like Pakistan Atomic Energy Commission Hospital, to establish their telemedicine facilities. Moreover during the 2005 earth quake of Pakistan this center established telemedicine centers in effected areas. The need of telemedicine and eHealth was greatly realized in 2005 earthquake of Pakistan. The Government of Pakistan is now considering eHealth as a modality for the rebuilding of quake hit areas. Pakistan space organization (SUPARCO) has also established Pakistan's first satellite based telemedicine network¹⁵².

Apart from the website, TelMedPak in the 'field' has collaborated with major universities in Pakistan including Rawalpindi Medical College, Agha Khan University, and the National University of Science & Technology in order to recruit medical students. More than two hundred of these students were enrolled in the five-year "Elixir Internship Program" in order to learn Telemedicine, content building, web maintenance and to carry out health related research. Training trips were also organized to top universities such as Stanford, University of California, Los Angeles and University of Southern California. Two members of the TelMedPak team were nominated for higher Telemedicine training in United States of America. The idea behind the training was to increase the Telemedicine human resource component in Pakistan; both members are now actively involved in training more medical staff in the Telemedicine sector. Along with the training programs TelMedPak successfully accomplished two pilot projects. The first was setup in Taxilla and the other in Gilgit; the hospitals were equipped with a computer, internet access and a scanner and were required to email case reports of patients that required expert medical opinion. All reports or images were scanned and attached to the email. These emails were then analyzed by doctors and specialists at the Holy Family Hospital in Rawalpindi and a reply was sent back as soon as the problem was detected. Both projects were highly successful.

Effectiveness of controls on new technology

Tele-healthcare's jaroka project, in collaboration with APPNA, Digital Vision Program at Stanford University and COMSATS initiated a pilot project for testing and studying the prospects of managing a remote telemedicine center with specialists located in the USA connecting patients in a rural Skardu with international specialists in Boston, USA. Telemedicine applications have also been successfully used to follow up earthquake victims. A study conducted at surgical unit II holy family hospital Rawalpindi and District head quarter hospital Attock. Patients treated initially at RMC and allied hospitals when later shifted to step down hospital where their progress was monitored through telemedicine. Results showed that Telemedicine applications can be safely utilized to decrease the burden on tertiary care hospitals and upgrade remote hospitals during the days of disaster¹⁵³

Reforms in the last 10 years, and results

In terms of a way forward at a policy level, it is important for the government to allocate resources for e-preparedness at an institutional level so that viable technology solutions can be arrived at for the health sector.

Current issues and concerns

It must be recognized that the existence of appropriate infrastructure is key to the success of such arrangements, which explains why some telemedicine projects in remote areas such as in the case of the *Baltistan* Health Foundation intervention in *Gilgit* is experiencing operational difficulties. This clearly highlights that the availability of telecommunications infrastructure is a prerequisite for telemedicine; given this realization, it can be inferred that it is not feasible to introduce in any setting.¹⁵⁴ The inhibitory cost of technology has barred people from utilizing the full diagnostic and therapeutic potential that modern technology holds. Evidence shows that technology can escalate costs. It is also important to formally assess the feasibility of integrating telemedicine into service delivery in various settings and to assess the extent to which telehealth services can provide equitable and sustainable quality services in the remote areas.¹⁵⁵

Planned reforms

9 HEALTH SYSTEM REFORMS

9.1 Summary of Recent and planned reforms

Previous National Health Policies were formulated in 1990 and 1997 to form the basis for the development of the country. These policies aimed to address the basic problems in the health sector by strengthening the health care system on the basis of Primary Health Care (PHC) and bringing about the needed reforms in all areas of health. However, due to reasons of improper implementation and gaps in action on the decided agenda by the two successive governments, these policies did not meet their objectives.

The Health Sector Reform agenda is being carried forward in keeping with the strategic direction of the National Health Policy 2001 and within the framework of Poverty Reduction Strategy of the Government of Pakistan, Millennium Development Goals and in the context of 10-years Perspective Development Plan and MTRF of the Planning Commission. The overall vision of the Government's medium term health strategy is towards raising public sector Health Expenditures through a keen focus on prevention and control programs. This vision is being materialized by the sustained increase in public sector health development out-lays from Rs. 4.372 billion in 2003-2004 to Rs.6.04 billion in 2004-2005 and to Rs.9.439 billion in 2005-2006. The National Health Policy Unit, a strategic arm of the Ministry of Health, was established with an aim to develop policy recommendations for Ministry of Health based on evidence and to improve the health of the population through evidence based policy advice and consensus building on key policy issues in health, focusing on pro-poor health policies in line with the poverty reduction strategy of the government. The way forward is only possible through strong commitment at all levels and continuous increased allocations for Health Sector to achieve quality Health Care. ¹⁵⁷

Determinants and Objectives

Rationale for Health Sector Reforms: Health Care System has not been able to provide needed health care to people. The present health care delivery system has not been able to cater the health care needs of majority of the people. That is why public confidence in the public health system is low. Instead they prefer to visit selective facilities of their choice or go to private physicians, traditional healers and quacks. Health indicators in the country have not improved significantly inspite of the vast expansion of the health care facilities. The government believes that there is an urgent need to revamp the health care delivery system and it aims to fulfill its convictions by strengthening the health care delivery system. Main objectives of the Health Sector Reforms are to:

- Address health problems in the community, by providing promotive, preventive, curative, and rehabilitative services, accessible to the entire population;
- implement Decentralization and restructuring of the health Management and Planning system;
- Encourage community participation through awareness and mobilization;
- improve the utilization of health facilities;
- Expand the delivery of MCH/Reproductive Health services including family planning both in urban and rural areas of Pakistan;
- Integrate existing health care delivery programs like EPI, Malaria Control, Nutrition, and MCH, within the PHC based Healthcare system;
- Improve the nutrition status of mothers and children;
- Promote proper inter-sectoral action and coordination at all levels.
- Achieve public - private sector partnership for the provision of health care to masses.

Current situation and status of reforms in the provinces is given below;

NWFP: Govt of NWFP developed a comprehensive reform program (PRP) 2001-2004, after extensive consultations The implementation was slowed down because of election process and it has now picked up pace rolling it over to 2005-06. The health care and hospital system management reforms have been initiated. The GoNWFP's strategy in health sector is to improve

the management structures; reorganize health facilities with multi-level referral systems, focus on preventive and primary health care; remove obvious gaps in facilities; increase budgetary allocations as well as user charges; and encourage private sector with adequate regulation. The GoNWFP is also implementing rationalization of health service delivery and facilities program aimed at developing graded and referral based system with appropriate specialties and staffing norms in collaboration with the district governments. All tertiary hospitals have been given financial and administrative autonomy with the aim of achieving financial self-sufficiency over the medium term while plans are being developed to protect access of the poor through safety nets. Notwithstanding, the serious challenges that still need to be addressed are the capacity and delivery issues at the local and capacity to formulate policies at the provincial level. Other areas that require capacity building are financial management, budgeting, planning, project design, developing integrated policy framework in line with national and provincial objectives and priorities, and policy. The provincial PRSP has been finalized and is awaiting approval of GoNWFP.

Sindh: Government of Sindh (GoS) has also initiated a reform process with overarching objective of reducing poverty by promoting growth and accelerating human development. The reforms in health sector are based on well-targeted medium term health sector strategy that focuses on preventive and communicable diseases, improving governance, and promoting private sector participation and strengthening district management capacity. Medium term measures include (i) expanding the routine immunization program with well identified targets and measures; (ii) broadening public-private partnership; (iii) strengthening local governments capacity by implementing detail plans for capacity development for district managers in management, planning, and financial management; and (iv) strengthening monitoring and evaluation system.

Baluchistan: The major thrust of Baluchistan's reform effort is to improve human development and delivery of social services focusing on enrollment and quality of instructions, reducing rural-urban and gender disparities, strengthening teachers training programs, encouraging public-private partnerships and community involvement, increasing budgetary allocations for education, and rationalizing non-salary expenditures. There is a policy shift focusing on low cost technology and sustainable models and capacity building of districts and sub-districts in drinking water sector. The Government of Baluchistan aims to improve the health management structure, reorganize the health facilities, focus on preventive and primary health care, remove obvious gaps in available facilities, increase budgetary allocations and increase reliance on the private sector with adequate regulation. The government has devised Water Conservation Strategy to develop water resource sector. The governance reforms will focus on strengthening the devolution, improving law and order and security environment and providing enabling environment for the private sector development.

Punjab: The Govt of Punjab has developed a comprehensive reform program after extensive consultations to improve service delivery, fiscal and financial restructuring, enhance effectiveness of public expenditures, and poverty reduction. For this, the Govt of Punjab is seeking assistance of Asian Development Bank and World Bank for its Punjab Public Resource Management Program (P-PRMP) and Punjab Education Sector Reform Program. The reforms in the health sector will focus on preventive health care and communicable diseases with priority attention to primary and secondary levels of health care and improving the governance. The tertiary hospitals have been given financial and administrative autonomy. The 'Health Care' and "Hospital System Management Reform" have been initiated.

Chronology and main features of key reforms

The National Health Policy identifies ten key areas in the health sector for improving the delivery of health care and the overall health status of the population of Pakistan. Each of these areas was discussed with the Provincial Governments. The National Health Policy-2001 provides an overall national vision for the Health Sector based on "Health for all".¹⁵⁶ The National Health Policy has outlined implementation modalities and has set targets and a timeframe for each of the key areas identified. These have to be implemented in partnership between the Federal Ministry of Health and the Provincial Departments of Health, and in close collaboration with the district health set-up under the Local Government structure. The private health sector has also been taken on board. Monitoring is an important aspect of the policy.

Key Features

The new policy has the following key features:

- 1.1. Health sector investments are viewed as part of Government's Poverty Alleviation Plan.
- 1.2. Priority attention is accorded to primary and secondary sectors of health to replace the earlier concentration on Tertiary Care;
- 1.3. Good governance is seen as the basis of health sector reform to achieve quality health care

2. Overall Vision

The overall national vision for the health sector is based on "Health-For-All" approach.

3. Concretizing the Vision: Ten Specific Areas of Reforms

In order to concretize the above vision, 10 specific areas have been identified. The succeeding paragraphs will spell out both the strategy and the implementation modalities in tandem. The policy also incorporates essential aspects like an appropriate time- frame for implementation and indication of targets wherever possible.

KEY AREAS:

Key Area No.1: To Reduce the Widespread Prevalence of Communicable Diseases

Implementation Modalities

- Preventive and promotive health programs will be implemented as National Programs with clear-cut spheres of responsibility. The Federal Government authorities will assist in planning, monitoring, evaluation, training and research activities while the Provincial Governments will undertake service delivery;
- National Program on EPI will be expanded through introduction of Hepatitis-B vaccine with effect from July, 2001;
- Routine EPI facilities in the Provinces will be strengthened through GAVI's grant assistance over the next 5 years;
- National Immunization Days against Poliomyelitis will continue to be observed annually;
- A National Program for immunizing mothers against Neonatal Tetanus will be implemented in 57 selected High-Risk Districts of the country over 3 years
- National program will be introduced against Tuberculosis based on DOTS (Directly Observed Treatment Short Course) mode of implementation.
- National malaria control program will be implemented, focusing on malaria microscopy through upgraded basic health facilities; and early diagnosis with prompt treatment. Mass spraying will be replaced by selective sprays only;
- Current PC-I on HN-AIDS will be enlarged to incorporate the components of health education; surveillance system; early detection of STIs; Improved Care of the Affected Persons; and promotion of Safe Blood Transfusion.

Key Area No.2: To Address Inadequacies in Primary/Secondary Health Care Services:

The main inadequacies are identified as the deficient state of equipment and medical personnel at BHU/RHC level. Absenteeism is common. At the district/tehsil level hospitals there are major shortcomings in emergency care, surgical services, anesthesia and laboratory facilities. There is no referral system in operation.

Implementation Modalities

- Trained LHWs will be utilized to cover the un-served population at the primary level.
- 58,000 Lady Health Workers under MoH and 13,000 Village-based Family Planning Workers under MoPW will be integrated. This cadre will be increased to 100,000 by the year 2005;
- Provinces will undertake improvement of District/Tehsil Hospitals under a phased plan. A minimum of 6 specialties (Medicine, Surgery, Pediatrics, Gynae, ENT and Ophthalmology) will be made available at these facilities;
- District and Tehsil Hospitals will be upgraded through Provincial Master Plans.
- Performance of RHCs/BHUs will be reviewed and only those facilities will be upgraded which can actually serve the population. Adequately functioning facilities will be strengthened by filling up of staff positions and allocation of financial resources based on performance/ utilization. Poorly functioning facilities will be contracted out to the private sector.
- Foreign assistance for the primary/secondary sectors will be sought.
- Model referral system in selected districts of each Province will be developed by 2002 to be replicated countrywide by 2005.
- Appointments against vacant posts of staff in rural facilities will be facility- specific on contractual basis.

Key Area No.3: To Remove Professional and Managerial Deficiencies in District Health System

The main deficiencies have been identified as the ineffectiveness of the district health office to supervise health services in a district. DHOs generally lack in essential qualifications and management skills. A large number of posts of male and female doctors, paramedics at the primary and secondary health facilities are lying vacant, as well as specialist positions in district and tehsil hospitals. Mega-hospitals are managed in an adhoc manner.

Implementation Modalities

- Adequate financial and administrative powers will be given to the district health office under the Devolution plan to effectively manage priority programs at district level;
- DHOs will be appointed on merit-based criteria, with a Masters in Public Health or equivalent as minimum qualification. District health managers will undergo compulsory in-service training courses at health academies;
- Develop a package to improve the working/living conditions of health staff in rural areas
- Posting policy to ensure presence of doctors at primary and secondary levels in a district. Medical graduates after completing their House Job will have to be posted on vacant posts in primary and secondary facilities for a minimum period of one year.
- In-service officers belonging to MOs cadre will be required to serve for a minimum period of two years in primary and secondary health facilities by way of compulsory rural medical service to become eligible for promotion from BPS-17 to BPS-18;
- Specialists in non-teaching hospitals will serve for a minimum period of 2 years in rural medical service before being considered for promotion from BPS-18 to BPS-19;
- Medical Officers and health workers working in district and tehsil hospitals will be given hands-on training in anesthesia and obstetrics to address the acute shortage of trained staff in these priority areas.
- Mega-hospitals under autonomy arrangements will be institutionalized. Administrative and financial powers will be properly notified. A system of monitoring the performance of autonomy-based mega-hospitals will be established;
- Private practice of specialists will be replaced by the system of Institutional Practice in mega-hospitals. Rules will be framed for this purpose by the respective governments

Key Area No.4: To Promote Greater Gender Equity in the Health Sector Implementation Modalities

- Focused reproductive health services to childbearing women through a life cycle approach will be provided at their doorsteps.
- Expand the Lady Health Workers Program at the grassroots level to improve access for women of primary health services. A cadre of 100,000 community-based trained lady health workers will provide basic services to the family at the household level.
- Provide Emergency Obstetric Care facilities through the establishment of "Women-Friendly-Hospitals" in 20 Districts of Pakistan under Women Health Project.
- Establish referral system between the village level, Health Care facilities upto District Hospital level under the Women Health Project
- Provide job opportunities to women as LHWs under the above program. Increase enrolment of Midwives, LHV s and Nurses in Nursing, Midwifery and Public Health Schools.
- Fill up vacancies in the Government Sector of WMOs, Nurses, LHVs and Women cadres on priority basis.

Key Area No.5: To Bridge the Basic Nutrition Gaps in the Target-population i.e. children, women and vulnerable population groups

Implementation Modalities

- Provide Vitamin-A Supplementation annually to all under-5 children (about 30 million) along with OPV on National Immunization Days through EPI network;
- Ensure provision of iodized salt with introduction of fortified flour and vegetable oil by addition of micronutrients like Iron and Vitamin-A;
- Nutrition Project through PSDP will ensure a food fortification program;
- Introduce Health Nutrition Package through 100,000 LHWs which includes Vitamin-B Complex Syrup, Ferrous Fumerate and Folic Acid, especially childbearing women and sick family members;

- Mass awareness/health education programs will be run through multi-media

Key Area No.6: To Correct Urban Bias in the Health Sector

Implementation Modalities

- Both public and private medical colleges will be required to adopt at least one district/tehsil hospital or primary health facility in addition to the Teaching Hospital affiliated to it; The compulsory rural service of new medical graduates selected to fill up available vacancies in Government health institutes in rural areas will further contribute in promoting rural orientation.

Key Area No.7: To introduce required Regulation in the Private Medical Sector as well as private medical colleges and teaching institutions

Implementation Modalities

- Finalize laws/regulations on accreditation of private hospitals, clinics and laboratories to all Provincial Governments and stakeholders. These will be finalized and submitted to the Federal Cabinet.
- Ensure that private medical colleges adhere to PMDC approved standards before they start admitting students have been circulated;
- Amend existing law on Tibb and Homeopathy to recognize degree and postgraduate level courses in Traditional Medicine
- Develop a framework for encouraging private-public cooperation in the health sector, especially for operationalizing un-utilized or underutilized health facilities, individual entrepreneurs or doctors' groups.

Key Area No.8: To Create Mass Awareness in Public Health Matters

Implementation Strategy

- Use media to disseminate health and nutrition education;
- Air programs on TV/Radio dedicated to health and nutrition;
- Establish a Nutrition Cell in the MoH;
- Train LHWs in interpersonal skills;
- Participation of NGOs and civil society in Mass Awareness programs

Key Area No.9: Improvement in the Drug Sector for Ensuring Availability, Affordability and Quality of Drugs

Implementation Modalities

- Encourage local manufacture of drugs both by multinational and nationals;
- Imported drugs found to be in chronic short supply will be prioritized for local manufacturing;
- Pursue fair pricing policies to encourage investment in the pharmaceutical sector;
- Strengthen capacity for market surveillance and quality control;
- Monitor the availability of life-saving drugs, provision of free life-saving drugs in the public sector hospitals will be limited to areas like emergency/casualty.

Key Area No.10: Capacity Building for Health Policy Monitoring in the MoH

Implementation Modality

A National Health Policy Unit has been set up in the Ministry of Health. This Unit will also be responsible for monitoring the progress of Health Policy implementation in the key areas for submission to the Chief Executive/ Federal Cabinet periodically. The unit will also provide technical facilities to Provincial Governments on need basis.

Process of implementation: approaches, issues, concerns

Provincial and district governments have the main responsibility of improving social services. At this point, there is some degree of overlap and mismatch between responsibilities for design of the program, implementation, and delivery. This is partly due to the on-going devolution process devolving from upper level to lower levels of government, and thus, the Government's effort in the next 2-3 years will need to better align accountabilities and expenditures, resources, and administrative and policy functions. Both provincial and district governments have extensive programs to improve service delivery in education, health, and other social services. The provincial governments have transmitted their priorities to improve service delivery in these sectors to the district governments through the Provincial Finance awards. However, the Federal Government also has a responsibility since education, health, population welfare are on the Concurrent Legislative List in the Constitution of Pakistan. The Federal Government has

transmitted its priorities in these sectors through federally funded conditional transfers to the provinces and further to the district governments.

Progress with implementation

Progress on Agenda for Health Sector Reform:¹⁵⁶

Key Area No.1: To Reduce the Widespread Prevalence of Communicable Diseases

Expanded Program on Immunization:

Pakistan won GAVI (Global Alliance for Vaccines & Immunization) award of US \$ 72 million on competitive basis as grant assistance for supply of New Vaccine, Strengthening of EPI services and injection safety.

Eradication of Polio *No new confirmed case of Polio was reported in 2006.* In acknowledgement of political commitment to the Program, the Heroes of Polio Eradication award was given to the President of Pakistan for the Year 2002. Polio eradication efforts were intensified through introduction of house-to-house strategies in 1999; Surveillance met global standards, NIH Surveillance laboratory declared as the regional laboratory / WHO collaborating center. Pakistan made notable progress towards eradication, during 1997 Pakistan reported 1147 confirmed polio cases (22% of the global total and 91% of the Eastern Mediterranean Region of WHO). In 2000 there were 199 confirmed cases; 119 cases were confirmed in 2001, 85 in 2002 whereas in the year 2003 a total of 103 cases were confirmed throughout the country. The number of districts reporting polio cases has come down to 45 in 2003 as against 76 in the year 1999. There has been remarkable progress and the polio cases have come down to 12 during the period from 01 January to 30th June 2006.

Vaccination against Maternal & Neonatal Tetanus intensified through special immunization activities. 44 percent of all pregnant females and children were immunized in 2004-05 with a target to achieve 55 percentage coverage by the end of year 2006. This Programme was launched in addition to the normal EPI Programme, with the assistance from the Government of Japan. In the year 2002-2003, 65 High-risk districts including the 55-targeted districts were covered. Expansion under Phase IV has been approved by JICA costing Rs. 240 million in the year 2003-04.

Vaccine against Hepatitis-B Pakistan received GAVI support for introduction of Hepatitis B Vaccination which is now part of routine EPI Program. Hepatitis-B was introduced in EPI schedule in 11 districts of the country on pilot basis in August 2001. At this moment, this vaccine is being administered through EPI in all districts of Punjab, Sindh, NWFP, Balochistan and AJK. EPI Programme has received approximately 11 million doses of Hepatitis-B vaccine and corresponding number of syringes and safety boxes. The program has been further strengthened through Prime Ministers Program for Prevention and Control of Hepatitis in Pakistan (2005-2010) launched on August 29th 2005 to decrease substantially the prevalence, morbidity and mortality due to hepatitis viral infections in the general population by utilizing the existing health infrastructure. The total cost of the program is Rs. 2.59 billion for financial years 2005 till 2010. The total PSDP health sector allocation is Rs. 9.44 billion and release for this project is 300 million.

Routine EPI coverage: In 2005 it has increased to 70 percent of the target population, Number of vaccinators increased three fold by training 40,000 LHWs in vaccinations., Auto-destructible syringes with safety boxes were introduced in EPI Programme in the year 2000.

Tuberculosis (TB): DOTs (Directly Observed Treatment Short course) was officially introduced for the first time as National Program in the year 2000. Within span of 3 year, National T.B Program has achieved 100 percent coverage (June 2005) in public sector with the program being implemented in all districts of Pakistan. The National T.B. Control Program was revived in June 2000 and National Program Implementation Unit was established with allocation of Rs.66.00 million for a period of four years (2000-2004). The national and provincial program units have been established. Multi-year national strategic plan prepared for countrywide implementation of DOTs has been prepared. Rs: 600 million (including Rs: 121 million additional grant during the year 2001/2002) were secured for the national and provincial set of TB control activities. *This allocation was revised to Rs. 158 million in 2003.* Plans have been prepared to reduce the morbidity and mortality from TB by 50% by the year 2015. The Ministry has received Anti T.B. Drugs worth \$ 1.4 million as grant from Global Drug facility. Microscopes have been provided to

the district laboratories to strengthen diagnostic facilities. Training of 1200 doctors, 5000 paramedics, 800 LHWs and 70 Lab technicians has been completed. New phase of training has also been started with assistance from USAID and JICA. For monitoring activities, 27 vehicles have been procured by the Program whereas 13 vehicles have been provided by USAID. Technical assistance of 19 field program officers have also been provided by USAID for monitoring activities. Application to Global Fund to Fight AIDS, T.B. and Malaria (GFATM) has been approved for enhanced Public-Private partnership for TB Control especially with anti TB Association. Pakistan has also been selected to represent EMRO on GFATM Board. Inter Agency Coordination Committee (IACC) formed. Partnerships have been established with various international organizations to support government's efforts for fighting spread of TB including DFID, JICA, USAID, Global Drug Facility and Global Fund to fight AIDS-TB & Malaria.

Malaria: The Malaria Control Programme started implementation of Roll Back Malaria strategy in 19 districts in 2002-03 with interventions in all districts expected to be achieved by 2006. Government has begun implementation of a strategic plan 2005-10 costing Rs. 870 million based on RBM strategy. A Project costing Rs. 253 million based on Roll Back Malaria Strategy was approved by ECNEC on 23rd April 2003. The annual parasite incidence (API) due to the heavy rainfalls increased in 2005 to 0.77 but due o effective measures taken the API reported till March 2006 is 0.06. Drug resistance studies carried out in 12 districts of the country. Study on Care Providers and community perspective: Malaria and its Control in Pakistan started in January 2004 through institute of Public Health. 43 malaria high-risk districts in the country have been identified and strengthened to provide better health care services to the communities with suitable supplies including anti-malarial drugs, Insecticide, Larvicide, equipment and vehicles costing Rs.61 million. Rs. 40 million was allocated for the Programme during 2001-02, this was raised to Rs. 33 million in 2005-06. 25 vehicles have been provided to high-risk districts. The Programme has purchased 20,000 bed nets through World Health Organization (WHO) and 10,000 bed nets through Programme budget for undertaking pilot trials in the high-risk district through Public-Private partnership involving NGOs. The National Institute of Malaria Research and Training at Lahore has been re-activated. Since October 2001, different refresher Microscopists courses, Entomological courses and Junior Malariology courses were organized throughout the country. 430 malaria staff was trained in 2001-02. In year 2002-03, 530 doctors and paramedics were trained in different courses. Series of Training on Case management of severe and complicated malaria has been started in Balochistan and NWFP in collaboration with WHO. A further 1344 medial staff and 40 paramedics were trained in 2005 with 1180 healthcare providers undergoing one day training. In addition 75 medical personnel were trained as master trainers. A new initiative under the Malaria Control Programme was the mass media campaign including extensive TV Spots, Radio messages and Press advertisements.

HIV/AIDS: The Programme aims to control AIDS/HIV cases by creating awareness and promoting blood safety by strengthening safe blood transfusion services. A National Steering Committee headed by Federal Minister of Health with representation from all concerned Federal Ministries and Provincial Health Departments has been set up. By 30th June, 2006 the total number of reported HIV/AIDS cases was 3393 out of which 346 were full blown AIDS Cases.¹⁵⁷ The Government is implementing the enhanced HIV/AIDS Control Programme since 2003 at a cost of Rs.2.85 billion with the financial assistance of World Bank to prevent HIV/AIDS from becoming established in vulnerable populations and spreading to general population. Major components of the Programme include expansion of interventions for vulnerable populations, prevention of transmission though blood transfusion, improved HIV/Prevention by the General Public through behavior change communication and advocacy, targeted interventions for youth, labour and uniformed personnel and improved management of sexually transmitted infections capacity building and Programme Management. During the year 2005-2006 the government spent a record amount of Rs. 214.05 million on the AIDS Control Programme.

Key Area No.2: To Address Inadequacies in Primary/Secondary Health Care Services:

A number of steps have been taken by the Ministry of Health to address inadequacies in the Primary/Secondary health care services. The most significant step in this regard is the Strengthening of the National Program for Family Planning & Primary Health Care: Target

Population coverage of the Program increased to 70%. Number of Lady Health Workers (LHWs) increased from 40,000 in 1999 to 75,483 in June 2004. The current LHWs has increased to 97800, 11,000 VBFPWs (Village Based Family Planning Workers) of Ministry of Population Welfare have been absorbed and trained as LHWs in National Program for FP & PHC. Number of Lady Health Supervisors (LHS) increased from 1200 in 1999 to 2200 in 2003 with selection of further 1000 LHS in the FY 2003-04. The availability of contraceptives at FLCFs increased from 83 percent in 2001-02 to 91 percent in 2004-05. For the first time in the history of MoH, contraceptive amounting Rs. 247 million have been procured through federal health PSDP 2003-04. UNFPA has also agreed to provide contraceptives amounting \$1.2 million in year 2004-05. 397 additional vehicles provided in 2000-02 to the Programme to improve quality of supervision. Additional 240 vehicles for supervision activities have been provided in 2003. Procurement of further 500 vehicles for supervision activities is in process. Actual expenditure increased from Rs. 891.00 million in 1999-2000 to Rs. 1770 million in 2001-2002. In the FY 2002-03 Rs.1791 million were allocated against which expenditure of Rs. 1626 million was incurred. In the FY 2003-04, Rs. 2400 million has been allocated for the implementation of Program activities. Uptill June 2005 an expenditure of Rs. 5857.8 million was incurred while a further allocation of 4080 million was done for FY 2004-05. Stipend of LHWs has been increased from Rs.1440/- per month (in the year 2001) to Rs.1700/- per month (in the year 2004-05); whereas salary of LHS increased from Rs.3000/- per month to Rs.3500 per month. According to new PC-1 of the Program, there will be an annual increase in the stipend of LHWs and LHSs at a rate of Rs. 100/- and Rs. 200/- respectively. LHWs were actively involved in Polio NIDs (Out of 30 million children, about 16 million are immunized by LHWs), Tetanus Elimination immunization campaigns (Out of 5 million target women, 4.5 millions were vaccinated by LHWs), DOTs, Nutrition, AFP surveillance, Safe Motherhood activities 40000 LHWs trained in giving EPI injections. Before 1999 LHWs were not involved in above activities. Third evaluation of the Program was conducted with funds from DFID-UK The evaluation reported significant improvement in the Health status in population covered by LHWs as compared to non-LHW covered population. More than 98% of LHWs met the selection criteria. Contraceptive prevalence rate increased from 24% to >40% in areas covered by LHWs. A website, www.phc.gov.pk has been launched, through which information about Program is available to the general public. Strategic Planning Process was completed in 2002, based on which a new PC-1 of the Program (for the period 2003-08) costing Rs. 21.5 billion has been submitted for the approval of ECNEC. A new software for LHW-MIS has been developed with UNFPA technical assistance. The database of all LHWs, LHS will be computerized by the end March 2004, followed by implementation of new LHW-MIS in 10 pilot districts and introduction of electronic payroll system in all districts.

Improvement of PHC facilities: Up-gradation plans of Tehsil hospitals are underway in Punjab. Six specialist services as outlined in the Health Policy are available in most of the District Hospitals and some Tehsil hospitals in Sindh. Eleven District and forty-four Tehsil hospitals are proposed to be upgraded with a cost of Rs 330 million in Sindh. The categorization of health facilities in four categories according to services provided has been decided in NWFP. Recruitment of District Specialists on contract basis is being undertaken in Punjab and NWFP, while in Balochistan redistribution of posts is being done to ensure availability of services of Specialist medical officers at the district level. Punjab has started implementation of experiment to contract out BHUs to NGOs in districts R.Y. Khan and Chakwal. More districts are expected to be involved in near future.

Key Area No.3: To Remove Professional and Managerial Deficiencies in District Health System:

Devolution plan has been implemented in all provinces. Management training has been imparted to all district level managers. In NWFP, the WMO and MO cadres have been merged for equal opportunities for lady doctors. Institutional Management Committee for hospitals has been formulated in NWFP. Tertiary care/ teaching hospitals have been provided autonomy across the country. Federal government has set up a committee to study the implementation of the autonomy scheme for future improvements and adoption by other provinces. Institution based practice has been started in Punjab and NWFP.

College of Physicians & Surgeons of Pakistan (CPSP), Karachi: Fellowship examinations increased to 50 brands of medicines and dentistry. Lower Diplomas reduced to 8,13 Regional Centers established all over the country, exchange examiners provided to Bangladesh, Sudan, Saudi

Arabia, Sri Lanka, Nepal, Malaysia and United Kingdom, reciprocity arrangements with most Royal Colleges of UK and Ireland have, International Collaboration with hospitals in Singapore Illinois, Nepal. In addition, Regional Center of CPSP established at Katmandu, Riyadh, Kuwait and United Arab Emirates.

Pakistan Medical & Dental Council (PMDC), Islamabad:

After 2000, the role of Pakistan Medical & Dental has been enhanced to provide support for provision of better-trained medical personnel. A website, www.pmdc.org.pk has been launched, which provides guidelines to the public. Code of Ethics for the medical professionals was revised after thirty years in consultation with senior medical professionals, list of recognized medical journals issued by, guidelines and criteria for establishment of medical colleges in the country have been finalized, PMDC conducted intensive inspections of Medical and Dental Colleges and Hospitals. Sixteen medical colleges in the private sector and 6 institutions in the public sector were provisionally recognized. At present there are 18 medical & / or dental institutions in the public sector that are fully recognized by the PMDC while only one in the private sector i.e. Aga Khan University Medical College, Karachi, MBBS curriculum and Dental surgery (BDS) was revised in collaboration with the University Grants Commission and inputs of 400 teachers and professors. National Examination Board of PMDC started equivalence examinations for BDS and postgraduate medical qualifications, PMDC accreditation standards comparable with USA standards declared by the Education department of USA in March 2003, Pakistan has become the member of International Association of Medical Regulatory Authorities (IAMRA) in 2002 along with 27 countries including USA, UK, Australia, Canada, Ireland, Sweden etc.

Health Services Academy (HSA), Islamabad: HSA has completed training of 142 health professionals in Masters of Public Health, imparted short training courses in the areas of Strategic Planning, Health Care Financing, Health Management Information System, Research Methods, Monitoring and Evaluation etc. to 1500 participants, Cabinet approved grant of autonomous status to HSA through 'Health Services Academy Ordinance-2002', HSA's capacity is being strengthened to raise annual output of MPH students from 24 to 60, In mandatory courses for promotion of mid-level and senior health managers are being formulated, PC-1 for the construction of HSA campus at NIH approved and the first phase of construction has been completed. Rs. 13.5 million were allocated for FY 2004-05.

National Institute of Handicapped (NIHd), Islamabad: Administrative control transferred from Ministry of Women Development, Social Welfare and Special Education to Ministry of Health in August 2001 for improved services delivery to the handicapped. MRI and CT Scan functioning again. There was improved revenue generation, 19% increase in OPD patients, 18% increase in diagnostic patients; 12% increase in rehabilitative persons; 63% increase in indoor patients; and 65% increase in surgeries within a period of one year after transfer of control. Facilities in Paediatrics, Orthopedics, ENT, Eye, Audiology, Psychology and Psychiatry enhanced through supplementary grant. Budget allocation enhanced from Rs.15.8 million in 2001-02 to Rs. 28.6 million in 2002-03 and Rs. 30.033 million in 2003-04, while for FY 2005-06 an amount of Rs. 3.1 million has been allocated. Speech Therapy Diploma Course conducted for 15 Trainees annually. Proposals formulated for Artificial Limbs Workshop and Hearing Aid Manufacture project.

National Institute of Health (NIH), Islamabad: NIH continues to provide ORS according to the national requirements both for public and private sector. NIH's laboratory up-graded at a cost of Rs.22 million, stable extended at a cost of Rs.23 million, Revamping of existing building and equipments for the manufacture of Tetanus Toxoid (Rs. 10 million), Cell Culture Anti-Rabies Vaccine (Rs. 10 million) and Measles Vaccine (Rs. 10 million) were also undertaken during FY 2005-06. An additional Rs.84.30 million allocated for completion of Bolan Medical Complex, Balochistan. The Complex has been completed and has started functioning. The federal government is also partially funding the construction of 200-bedded hospital at DI Khan, Rs.193.00 million provided so far. Establishment of a 400 bedded Women and Chest Diseases Hospital in Rawalpindi (Rs. 15 million)

Progress on the development side has been made by the Provincial governments in their teaching hospitals.

Key Area No.4: To Promote Greater Gender Equity in the Health Sector

Focus on gender related interventions resulted in reduction in Maternal Mortality Rate to 350 per 100,000 live births, Total Fertility Rate to 4.1, while Contraceptive Prevalence Rate has increased to 34%. Senior level management positions have been given to female officers. The concept of women friendly districts has been launched under the Women's Health Project. Under this Project 20 districts are being made women's friendly. Under the Reproductive Health Project a further 34 districts will be made women's friendly. Plans for recruitment of 100,000 Lady Health Workers are under way. More than eighty five thousand LHWs have been deployed; the remaining will be recruited and trained by 2006. In NWFP, the WMO and MO cadres have been merged for equal opportunities for lady doctors. Training of midwives is being initiated. After piloting in 10 districts, the target is to train 25000 midwives.

Key Area No.5: To Bridge the Basic Nutrition Gaps in the Target-population
i.e. children, women and vulnerable population groups

Vitamin A supplementation was started in November 1999 and is being provided to approximately 30 million children between six months to 5 years age during Polio NIDs every year. Launching of "Improvement of Nutrition through PHC and Nutrition Education, Public Awareness" Program at the cost of Rs.302.720 million has been approved by ECNEC on 28-2-2002. Rs. 50 million were allocated in the FY 2002-03. National Nutrition Survey was carried out in 2001-02 after a lapse of 20 years. During 2004-2005 a strategic exercise was undertaken in the light of which the PC-I is being revised with more focused interventions including wheat flour fortification. More than 500 metric tons of edible oil has been provided through World Food Program to pregnant women across the country. Lady Health Workers are promoting good nutrition practices in the communities through health education. The LHWs also provide iron tablets, vitamin A to pregnant women and children. To address problems of goiter, iodization of salt is being promoted in collaboration with NGOs, UNICEF and salt producers. The market share of iodized salt has been increased to 40% from 4% in 1994. Two hundred salt producers are producing iodized salt. Lady Health Workers have been trained in promotion of use of iodized salt. 70,000 iodine testing kits have been provided to the LHWs to test salt being used in their communities. Strategic planning process initiated to address nutrition issues in the country.

Key Area No.6: To Correct Urban Bias in the Health Sector

64% of the federal PSDP allocation was provided for primary and rural health interventions in FY 2002-03 whereas this percentage increased to 81.5% in FY 2003-04. A program costing Rs. 24 billion is proposed during plan period 2005-2010 to strengthen and upgrade BHUs and RHCs in rural areas. 15800 beds would also be added to rural health facilities. Plan for recruitment of 100,000 Lady Health Workers for rural and urban slum is under way. Seventy five thousand LHWs have been selected; the remaining will be recruited and trained by 2006. Efforts have been intensified across the country to fill positions of medical officers in the rural health facilities by providing incentives. In this regard Medical Officers and Women Medical Officers are being provided special salary packages to serve in rural areas on contract. PMDC is preparing a plan for mandatory rural service before registration of doctors, in consultation with the Provinces and Ministry of Health. In NWFP, notification for compulsory rural service has been issued and even specialists will be required to work for at least two years in rural hospitals before promotion from BPS 18 to BPS 19.

Key Area No.7: To introduce required Regulation in the Private Medical Sector

Draft laws and regulations on accreditation of private hospitals, clinics and laboratories are under consideration in consultation with stakeholders. The Ordinance for Blood Safety has been promulgated, which includes regulation of blood transfusion services in the private sector. Sindh Private Medical Institution (Regulation & Contract) Ordinance has been approved by the Sindh Cabinet. Similar laws are under consideration in all three provinces. The elections of the Homeopathic and Tibb councils have been held after seven years. Necessary amendments have been made in the Unani, Aurvedic and Homeopathic act 1965. Ministry of Health held a SAARC Seminar on Traditional Medicine in Islamabad in November 2002.

Key Area No.8: To Create Mass Awareness in Public Health Matters

An amount of Rs.181 million and approximately Rs. 250 million was spent on Health Education Campaign during the year 2001-02 and 2002-03 respectively. A campaign costing approximately Rs. 300 million was planned in the year 2003-04. This was raised to Rs. 336 million per annum on health education at federal level. Advocacy and orientation meetings and seminars have been

organized for raising awareness among the elected councilors and Nazims regarding public health matters. Lady Health Workers are being used for Inter Personal Communication. Behavior Change Communication strategy is being adopted for effective communication. Pakistan Health Education Survey (KAP) has been carried out by Pakistan Medical Research Council and Ministry of Health, to determine change in the knowledge, attitude and practice of Pakistani population of health related issues.

Key Area No.9: To Effect Improvements in the Drug Sector with a View to Ensuring the Availability, Affordability and Quality of Drugs in the Country

Efforts have been made by the Ministry of Health to provide an environment conducive to growth of the local pharmaceutical industry. 30 new pharmaceutical units have been established and 53 are in the process of construction. In total 343 pharma units have been established. 30 multinational are working in the country. An investment, of over 8,000 million rupees, has been made in the pharmaceutical sector for expansion and modernization of units. The annual turnover was Rs. 65 billion in the year 2002-03. . 2.49 percent of all FDI was in pharmaceutical sector in Pakistan (2005). An investment plan of Rs. 1.0 billion is proposed for the strengthening of pharmaceutical personnel and allied facilities at all levels A third party evaluation conducted recently by Planning & Development Division has shown that drug policies have ensured the growth of Pharma industry as well as sustained supply of efficacious, safe and cost effective drugs to the consumers. Since 1999, 4729 drugs have been approved for registration by Registration Board for local manufacture and import by national and multinational firms. The total registrations for drugs increased to 25,533 by the end of year 2003. The number of registered drugs at the end of 2005 was 33000. 280 products have been approved for toll manufacture. Drugs/ medicines manufactured in Pakistan worth over US \$ 50.5 million were exported to countries like USA, UK, Sri Lanka, UAE, Kenya, Uganda, Iraq, Fiji, Myanmar, Maldives, Nigeria, Singapore, and Central Asian Republics in the year 2004. Drug Control Organization which had rudimentary structure till 1998, has been strengthened to perform functions such as Adverse Drugs. A website has been developed to show registration status of drugs. It can be visited at www.dcomoh.gov.pk

Key Area No.10: Capacity Building for Health Policy Monitoring in the Ministry of Health

PC-1 costing Rs. 195.777 million for establishment of the National Health Policy Unit has been approved in January 2004. DFID, WHO and UNFPA has agreed to provide Technical Assistance for the establishment of unit. The Health Management Information System (HMIS) has been expanded to cover 115 districts of the country to cover 23 diseases. A new PC-1 of National Health Information Resource Center has been approved by CDWP in 2003-04 while allocation for FY 2005-06 was Rs.146 million. Gaps are being further addressed with technical assistance from donor agencies specially WHO. A Geographic Information System has been developed initially for 10 pilot districts with technical assistance from UNFPA. Project through a follow up of the sample studied for the National Health Survey of Pakistan (NHSP) has been initiated through the PMRC. Implementation of Disease Early Warning System has been started. NIH / MoH were able to respond effectively to drought-related emergencies, including outbreak of Congo-Crimean Hemorrhagic Fever (CCHF) in Sindh, Balochistan & AJK and Leishmaniasis in Sindh & FATA respectively. 112

Issues and concerns

The role of national health policy unit within MOH organizational structure needs to be institutionalized and its capacity both in terms of human and financial resources needs to be strengthened for it to deliver on its mandated role of furnishing evidence for the much needed health policy and system reforms in the country. Despite the many constraints, the NHPU was able to constitute a National Health Policy Council, contribute to the health sector reform agenda for the Pakistan Development Forum 2006, and is now playing a more proactive role in the formulation of the new national health policy. In addition, its relationship with provincial DOHs and their health planning and reforms unit needs to be strengthened. The recruitment of staff in recent months provides some hope but there are concerns that the project might expire in 2007

unless the new PC-1 of the NHPU is approved and funded by government or another development partner.

The process of development of the new national health policy has been led by the Pakistan Health Policy Forum, an NGO-led forum, it is critical that the NHPU MOH plays an increasing role in the formulation of the national health policy as this has indeed to be a government led process.

Another important initiative is the establishment of a high level National Commission for Government Reform, which has a sub-committee on health. The committee is considering several reform initiatives in health that focus on good governance to improve the quality of essential health services. These reforms are essential and needed to bring rapid improvements in health services at the point of delivery. At the same time there is a need to review and reform the organization and functioning of the federal MOH, provincial DOH and district health offices to address some of the underlying governance issues that are responsible for the poor health services in the public and the private sector. In this regard essential functions such as institutional mechanisms for strategic health planning, regulation and standard setting, health information and its use, and disease surveillance need to be strengthened at all level of the public health sector.

There is a gap in their shared understanding of the health system issues in Pakistan and there is a lack of collective dialogue with the federal and provincial governments on these issues. In recent years there have been increasing opportunities for a dialogue between the government and its development partners, however, it needs to be better informed by evidence and be well coordinated.

It is critical that the Federal and provincial Governments as well as stakeholders (including donors) focus their attention on improving service delivery and identify policy issues/factors affecting it in light of current reforms; This will enable to inform and feed the policy dialogue health system on the basis of the country realities; A substantial dialogue aimed at critically reviewing experiences in services delivery at all levels is required (federal provincial governments and services supported by health development partners). This will enable to build a common understanding of what works and what does not and what are the policy implications of experiences gathered.⁶⁷

Process of monitoring and evaluation of reforms

National health Policy Unit is responsible for monitoring and evaluation of implementation of different strategies of reforms in health sector. A report, "Progress on Agenda for Health Sector Reform" is prepared every year and updated regularly by Ministry of Health. Planning and development division is regularly monitoring progress of MDGs. Different national surveys also help in monitoring the reform process and results.

Future reforms

Pakistan, being a signatory to MDGs, needs to improve the performance of the health sector significantly to ensure good progress towards reaching MDGs. With this in view, the medium term health strategy is focused towards raising public sector health expenditures through a focus on prevention and control of diseases, reproductive health, child health, and nutrient deficiencies. The thrust of public expenditures is geared towards primary and secondary tiers. This approach provides a clear shift from curative to preventive health care and focuses on disadvantaged, weaker sections of society especially those belonging to rural areas. It aims at promoting gender equity through targeted interventions like increase of Lady Health Workers (LHW) and improvements in maternal health care. LHWs are covering the underserved population at the primary level to ensure family planning and primary health care at the doorstep through an integrated community based approach. Additional programs include Directly Observed Treatment Schedule (DOTS) strategy against TB; Roll Back Malaria (RBM) approach in combating malaria, measures for preventing the spread of Hepatitis B, elimination of neonatal tetanus and polio, HIV and Aids through immunization and public health campaigns and institutional federal-provincial partnership in the war against disease.

The other steps to improve health outcomes over the medium term include strengthening of primary health care, training and re-training of medical staff, provision of emergency obstetric

care facilities, instituting public-private partnerships, granting administrative and financial autonomy to teaching hospitals, establishing health boards and village health committees the reorganization of district health offices to make them locally managed health care network in rural areas, improvement in hospital administration and their financial management and the proper regulation of the private sector. Long-term interventions include redefining the role of federal and provincial government by giving more responsibility to the district government and inculcating an element of cost recovery for services rendered while at the same time ensuring responsiveness to health needs of the poor. 113

Results/effects

Major weaknesses that exist with respect to health services are 1) office of the Executive District Officer Health lacks capacity in terms of human and financial resource management as well as the authority and resources to effectively plan, deliver and supervise health services; 2) BHUs/RHCs are generally ill equipped, under staffed and under utilized; 3) shortcomings exist District/Tehsil level hospital, in emergency care services, and maintenance/repair of medical equipment; 4) lack of functioning referral system is major reason for handling poor obstetric and other emergencies in rural areas.; 5) Family planning services are currently being provided as vertical program, 6) gender imbalance exists as the health managers and staff are predominantly males, 7) non salary components of primary health care programs are not adequately provided for in the provincial budgets, 8) experience with autonomy of tertiary hospitals has been mixed and a clear picture in terms of improves services or enhanced revenue generation has not emerged, 9) political interference has been frequent in the past , in personnel decisions such as recruitment, transfers and disciplinary actions, 10) private practice of public sector physicians and specialists is a universal malaise, 11) private sector, the biggest provider of medical services, is unregulated and lacks government support, and 12) poor regulations, commercialization and falling standards of medical graduates characterize the medical education sector. 114

It is apparent that the devolution plan has the potential about significant changes in the way the health care services are managed however it is a political plan, devised by military government seeking legitimacy, with a declared intention of introducing genuine democracy in the country. All political parties are opposed to the plan and public enthusiasm is rather mute, consequently the future of devolution plan remains in doubt. Moreover the dire economic situation in Pakistan makes the sustainability of district governments highly questionable. On the broader level, due to historical neglect of the social sector, globalization increasing the economic muscle of the multinational corporations at the expense of the nation states. In Pakistan the private sector accounting for 77% of total health care expenses and is directed towards tertiary level care and not health promotion and illness prevention activities. Conversely, health is increasingly becoming a private good to be available as commodity to the people who can afford the price. This leaves the vast majority of the poor and the disadvantaged at the mercy of the market forces.

10 REFERENCES

Source documents

List of referenced documents used

-
- ¹ World Bank, Pakistan Country Overview, September 2006
<http://www.worldbank.org.pk/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/PAKISTANEXTN/0,,contentMDK:20131431~menuPK:293059~pagePK:141137~piPK:141127~theSitePK:293052,00.html>
- ² Human Development Report, country fact sheets 2006, United Nations Development Program
- ³ Akbar Zaidi, The Poverty-Health Relationship in Pakistan. Page xii; Pakistan Poverty Assessment update. Background Paper Series. Background Paper: 6. Poverty Group Country Policy Operation Unit Asian Development Bank. Pakistan Resident Mission. (Unpublished)
- ⁴ MDG Report 2005 Pakistan pg 15 <http://www.un.org.pk/undp/publication/PMDGR05.pdf>
- ⁵ UNDP's 2006 Human Development Report, pg 285
- ⁶ Gender-Related Development Index (GDI). United Nations Development Programme 2006.
<http://hdr.undp.org/hdr2006/statistics/indicators/219.html>
- ⁷ Index Mundi. [^ Pakistan economy profile 2007.](http://www.indexmundi.com/pakistan/economy_profile.html)
http://www.indexmundi.com/pakistan/economy_profile.html
- ⁸ Pakistan Demographic and Health Survey 2006-07
- ⁹ Economic Survey 2006-07. http://www.finance.gov.pk/survey/sur_chap_06-07/12-Health.PDF
- ¹⁰ World Bank. Pakistan Towards a Health Sector Strategy. Washington, USA: Health Population and Nutrition Unit, South Asia Region, the World Bank; 1998.
- ¹¹ Durr-e-Nayab: Demographic Dividend or Demographic Threat in Pakistan, PIDE Working Papers, 2006:10, *Pakistan Institute of Development Economics, Islamabad*
<http://www.pide.org.pk/pdf/Working%20Paper/Demographic%20Dividend%20Final.pdf>
- ¹² Eastern Mediterranean Health Journal, Role of health systems research in policy, planning, management and decision-making, with reference to Pakistan, Volume 3, Issue 3, 1997, Page 556-566 (<http://www.emro.who.int/Publications/EMHJ/0303/19.htm#5> fazli hakim)
- ¹³ Fariyal F. Fikree, Ali M. Mir, Inaam-ul Haq "She may reach a facility but will still die! An analysis of quality of public sector maternal health services, District Multan, Pakistan" JPMA 56:156;2006.
<http://jpma.org.pk/Misc/PDFDownload.aspx?Download=true&ArticleID=654>

- ¹⁴ World Health Organization, National expenditure on health – Pakistan. <http://www.who.int/nha.htm>
- ¹⁵ Economic Survey 2006-07. http://www.finance.gov.pk/survey/sur_chap_06-07/12-Health.PDF
- ¹⁶ Tasleem Akhtar, Addressing health workforce issues in developing countries. Fatima Memorial System, Lahore, Pakistan. *Human Resources for Health* 2006, 4:21doi:10.1186/1478-4491-4-21
- ¹⁷ Economic survey of Pakistan 2006-2007
- ¹⁸ Planning Commission, Government of Pakistan, **Medium Term Development Framework 2005-10** <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/mtdf/7-Health/7-Health.pdf>
- ¹⁹ Federal Bureau of Statistics Govt of Pakistan Islamabad. PIHS Access and usage of basic health care in Pakistan 1996:1.
- ²⁰ Drug Control Organization, Ministry of Health, Government of Pakistan: <http://www.dcomoh.gov.pk/>
- ²¹ IRIN Wednesday 19 September 2007. Humanitarian news and analysis, UN Office for the Coordination of Humanitarian Affairs). (<http://www.irinnews.org/country.aspx?CountryCode=PK&RegionCode=ASI>)
- ²² (Kausar S. Khan. Social Determinants of Health in Pakistan: The Glass is More than Half Empty. March 2006)
- ²³ World Bank, Pakistan Country Overview, September 2006 <http://www.worldbank.org.pk/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/PAKISTANEXTN/0,,contentMDK:20131431~menuPK:293059~pagePK:141137~piPK:141127~theSitePK:293052,00.html>
- ²⁴ Human Development Report, country fact sheets 2006, United Nations Development Program
- ²⁵ Akbar Zaidi, The Poverty-Health Relationship in Pakistan. Page xii; Pakistan Poverty Assessment update. Background Paper Series. Background Paper: 6. Poverty Group Country Policy Operation Unit Asian Development Bank. Pakistan Resident Mission. (Unpublished)
- ²⁶ MDG Report 2005 Pakistan pg 15 <http://www.un.org.pk/undp/publication/PMDGR05.pdf>
- ²⁷ Human Development Report 2006. Published for (UNDP) **Beyond scarcity: Power, poverty and the global water crisis.** <http://www.ireland.com/newspaper/special/2006/unreport/index.pdf>
- ²⁸ UNDP's 2006 Human Development Report, pg 285
- ²⁹ Social Watch: Country by country - Pakistan 2006 report <http://www.socialwatch.org/en/informesNacionales/496.html>
- ³⁰ Pakistan Social and Living Standards Measurement Survey (PSLSMS)
- ³¹ Irwin A, Valentine N, Brown C, Loewenson R, Solar O, Brown H, et al. The Commission on Social Determinants of Health: tackling the social roots of health inequities. *PLoS Medicine* 2006;3(6): e106.
- ³² Tackling social determinants of health through community based initiative, **M Assai**, regional adviser¹, **S Siddiqi**, regional adviser², **S Watts**, coordinator, *social determinants of health*² *BMJ* 2006;333:854-856 (21 October), doi:10.1136/bmj.38988.607836.68

<http://www.bmj.com/cgi/content/full/333/7573/854?rss#REF1#REF1>

³³ Akbar Zaidi, The Poverty-Health Relationship in Pakistan. Page xiv; Pakistan Poverty Assessment update. Background Paper Series. Background Paper: 6. Poverty Group Country Policy Operation Unit Asian Development Bank. Pakistan Resident Mission. (Unpublished)

³⁴ Nishtar.S, The Gateway Paper 1, Health Systems in Pakistan – a Way Forward. Pakistan's Health Policy Forum. Heartfile

³⁵ STATUS OF EDUCATION IN PAKISTAN , Social Development in Pakistan (SDiP)2002-03
<http://www.spdc-pak.com/publications/annualreviews/annualreview2003/chapter1.pdf>

³⁶ Pakistan Social & Living Standards Measurement Survey 2005-2006
http://www.statpak.gov.pk/depts/fbs/statistics/pslm2005_06/pslm2005_06.html

³⁷ Pakistan Participatory Poverty Assessment, 2003, planning commission, govt of Pakistan
<http://www.dfid.gov.uk/pubs/files/ppa-national.pdf>

³⁸ Pakistan Millennium Development Goals Report. 2005.
<http://www.un.org.pk/undp/publication/PMDGR05.pdf>

³⁹ Research Report No.46, THE KNOWLEDGE DIVIDE: EDUCATION INEQUALITY sociaIN PAKISTAN
By Haroon Jaml, Amir Jahan Khan, April, 2003

⁴⁰ Gender-Related Development Index (GDI). United Nations Development Programme 2006.
<http://hdr.undp.org/hdr2006/statistics/indicators/219.html>

⁴¹ Global Forum for Health Research, Forum 8, Mexico, November 2004-12-10, Equity-focused partnerships in Pakistan: a comprehensive approach to address the Millennium Development Goals (MDGs).Qamar Mahmood, Shama Dossa, and Kausar S. Khan.

⁴² Fariyal F Fikree, Omrana Pasha, Education and debate, Role of gender in health disparity: the South Asian context, BMJ 2004;328:823-826 (3 April), doi:10.1136/bmj.328.7443.823,

⁴³ Mahmood, Q. 2002, Equity in financial resource allocation among districts in the decentralized health system, MSc thesis, Aga Khan University, Karachi.

⁴⁴ World Health Organization 1983, Planning the finances of the health sector: a manual for developing countries. World Health Organization, 1983.

⁴⁵ Ministry of Health Pakistan and Multi-donor Support Unit 2001, Technical Group Meeting: Financing Health care in the Devolved Districts, Islamabad.

⁴⁶ Mahmood, Dossa, Kausar S. Khan. Global Forum for Health Research Forum 8, Mexico, November 2004-12-10, Equity-focused partnerships in Pakistan: a comprehensive approach to address the Millennium Development Goals (MDGs).

⁴⁷Travel Document Systems: Pakistan, <http://www.traveldocs.com/pk/economy.htm>

⁴⁸ Index Mundi. [^ Pakistan economy profile 2007.](http://www.indexmundi.com/pakistan/economy_profile.html)
http://www.indexmundi.com/pakistan/economy_profile.html

⁴⁹ Parliament of Pakistan. <http://www.senate.gov.pk/>

- ⁵⁰ Wikipedia: http://en.wikipedia.org/wiki/Subdivisions_of_Pakistan
- ⁵¹ Oneworld.net http://uk.oneworld.net/guides/pakistan/development?gclid=CMGr3-aa344CFQ-QgQodJH_ILw#Politics
- ⁵² ADB country strategy and program 2002-2006
<http://www.adb.org/Documents/CSPs/PAK/2002/csp0101.asp>
- ⁵³ Nishtar S, et al. The Gateway Health Indicators. Islamabad, Pakistan: Heartfile; 2006
- ⁵⁴ International conference on early childhood development at Aga Khan University Karachi, 2003 when it organized an
- ⁵⁵ Economic Survey 2006-07. http://www.finance.gov.pk/survey/sur_chap_06-07/12-Health.PDF
- ⁵⁶ World Bank. Pakistan Towards a Health Sector Strategy. Washington, USA: Health Population and Nutrition Unit, South Asia Region, the World Bank; 1998.
- ⁵⁷ Pakistan Demographic and Health Survey 2006-07
- ⁵⁸ Durr-e-Nayab: Demographic Dividend or Demographic Threat in Pakistan, PIDE Working Papers, 2006:10, *Pakistan Institute of Development Economics, Islamabad*
<http://www.pide.org.pk/pdf/Working%20Paper/Demographic%20Dividend%20Final.pdf>
- ⁵⁹ Compendium on Gender Statistics 2004.
http://www.statpak.gov.pk/depts/fbs/publications/compendium_gender2004/compendium_gender2004.html
- ⁶⁰ Pakistan Health Care Policies and Developments.
http://www.photius.com/countries/pakistan/society/pakistan_society_health_care_policies~10390.html
Sources: The Library of Congress Country Studies; CIA World Factbook
- ⁶¹ Fariyal F. Fikree, Ali M. Mir, Inaam-ul Haq "She may reach a facility but will still die! An analysis of quality of public sector maternal health services, District Multan, Pakistan" JPMA 56:156;2006.
<http://jpma.org.pk/Misc/PDFDownload.aspx?Download=true&ArticleID=654>
- ⁶² Report of the Health System Review Mission – Pakistan World Health Organization, UNICEF, DFID, The World Bank, February 19-28, 2007, Islamabad.
<http://gis.emro.who.int/HealthSystemObservatory/PDF/HealthSystemReviewMissionReports/Pak%20HSD%20Mission%20Report%20Draft%20Ver%201%200%20March%2030%202007.pdf>
- ⁶³ Dr. Tayyeb Imran Masud; Harnessing the private health sector to achieving public health goals in countries of the Eastern Mediterranean, Country Report Pakistan, November 2006.
- ⁶⁴ Dr. Mushtaq Khan. Director Health Policy Unit
- ⁶⁵ Babar T. Shaikh,, Juanita Hatcher . Health seeking behaviour and health services utilization trends in National Health Survey of Pakistan: what needs to be done? Department of Community Health Sciences, Aga Khan University, Karachi, Pakistan. JPMA ^{Vol. 57, No. 8, August 2007}
- ⁶⁶ Health System Profiles,2006 Pakistan, Regional Health Systems Observatory, EMRO,
www.who.int.healthobservatory
- ⁶⁷ National Health Policy of Pakistan 2001 <http://www.pakistan.gov.pk/divisions/health-division/media/NHP.doc>.

- ⁶⁸ Nishtar. S: Prevention of non-communicable diseases in Pakistan: an integrated partnership-based model, Health Res Policy Syst. 2004; 2: 7.
<http://www.ncbi.nlm.nih.gov/sites/entrez?term=National%20Action%20Plan%20on%20NCD%20Prevention&search=Find%20Articles&db=pmc&cmd=search>
- ⁶⁹ Eastern Mediterranean Health Journal, Role of health systems research in policy, planning, management and decision-making, with reference to Pakistan, Volume 3, Issue 3, 1997, Page 556-566 (<http://www.emro.who.int/Publications/EMHJ/0303/19.htm#5> fazli hakim)
- ⁷⁰ Asian Development Bank, Technical Assistance to the Islamic Republic of Pakistan for the Developing Social Health Insurance Project. July 2005
- ⁷¹ The World Bank (US). World Development Report 1998. Washington DC: The Bank; 1998.
- ⁷² Local Government Ordinance 2001. Online access:
http://www.nrb.gov.pk/local_government/default.asp
- ⁷³ Lashari T. Pakistan's National Health Policy: Issues in Formulation and Implementation [dissertation]. Karachi (Pakistan): Aga Khan Univ.; 2003.
- ⁷⁴ National Health Management Information Systems/IDSP Cell (Government of Pakistan). National Strategic Framework for Disease Surveillance: Ten Year's Vision, Five Year's Plan. Islamabad: The Ministry; 2005.
- ⁷⁵ Nishtar.S; Sarfaraz; S Siddiqui: Health Governance in Pakistan, WHO EMRO
- ⁷⁶ Silimperi DR, Lippeveld T, Upreti TS, Hussain Z, Tawfik Y. Pakistan Child Survival Project. Final Report. Islamabad (Pakistan): United States Agency for International Development (US); 1993 Sep. Report No.:39-0496.
- ⁷⁸ Ministry of Health (Government of Pakistan). Budget and National Health Accounts of Health Sector in Pakistan. Islamabad: The Ministry; 2005.
- ⁷⁹ Center for Research on Poverty Reduction and Income Distribution (Government of Pakistan). Pakistan Millennium Development Goals Report. Islamabad: The Planning Commission; 2005.
- ⁸⁰ National Reconstruction Bureau (Government of Pakistan). Budget Rules: District/City District Governments; Tehsil/Taluka Town Municipal Administrations. Islamabad: NRB; 2003.
http://www.nrb.gov.pk/local_government/default.asp
- ⁸¹ Report of the Health System Review Mission – Pakistan World Health Organization, UNICEF, DFID, The World Bank, February 19-28, 2007, Islamabad.
<http://gis.emro.who.int/HealthSystemObservatory/PDF/HealthSystemReviewMissionReports/Pak%20HSD%20Mission%20Report%20Draft%20Ver%201%200%20March%2030%202007.pdf>
- ⁸² Local Government Ordinance 2001. Online access:
http://www.nrb.gov.pk/local_government/default.asp
- ⁸³ Shaikh BT, Rabbani F. The District Health System: A Challenge That Remains. Egypt: WHO EMRO Office; 200x. Online access:http://www.emro.who.int/publications/emhj/1001_2/The%20district.htm
- ⁸⁴ Public hospital autonomy: lessons from Pakistan. A review of the experience of hospital autonomy in Pakistan', International Journal of Health Planning and Management 22, pages 45-62, by M. Tanweer Abdullah and Jane Shaw, 2007

- ⁸⁵ Devolution in Pakistan, Overview of the ADB/DFID/World Bank study, July, 2004
<http://www.adb.org/Documents/Studies/Devolution-in-Pakistan/devolution-pak-es.pdf>
- ⁸⁶ Situation Analysis of Existing MIS at Secondary and Tertiary Hospitals , Health Division, MoH, Govt of Pakistan
http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=25&cPath=254_260&ContentID=1643
- ⁸⁷ National feedback report 2006. Ministry of Health Pakistan
- ⁸⁸ An Overview Of National Health Management Information System (HMIS).
<http://www.hmispk.org/reports/files/NHMIS%20Brief%20May%202004.doc>
- ⁸⁹ Role of health systems research in policy, planning, management and decision-making, with reference to Pakistan. Volume 3, Issue 3, 1997, Page 556-566. *Khattak Fazli Hakim*
- ⁹⁰ National Accountability Bureau (Government of Pakistan). Online retrieval:
<http://www.nab.gov.pk/PRESS/NEW.ASP?367>
- ⁹¹ United States Agency for International Development (USAID). Online retrieval:
<http://www.usaid.gov/pk/governance/index.htm>
- ⁹² Oxford Policy Management. Lady Health Worker Programme: External Evaluation of the National Programme for Family Planning and Primary Health Care. Islamabad: Oxford Policy Management; 2002.
- ⁹³ World Health Organization, National expenditure on health – Pakistan.
<http://www.who.int/nha.htm>
- ⁹⁴ Government of Pakistan. Budgetary allocation for provinces and districts. Islamabad, Pakistan: Planning Commission; 2005.
- ⁹⁵ Economic Survey 2006-07. http://www.finance.gov.pk/survey/sur_chap_06-07/12-Health.PDF
- ⁹⁶ World Health Organization. Inventory of Health And Population Investments in Pakistan. Islamabad, Pakistan: Pakistan office, WHO: 2005
- ⁹⁷ Nishtar S, et al. Final results of the population based integrated non-communicable disease surveillance in the district of Rawalpindi. Islamabad, Pakistan: Heartfile; 2005.
- ⁹⁸ Muhammad Akram, Faheem Khan, PIDE Working Papers, 2007:32 Health Care Services and Government, Spending in Pakistan, Pakistan Institute of Development Economics, Islamabad
<http://www.pide.org.pk/pdf/Working%20Paper/WorkingPaper-32.pdf>
- ⁹⁹ Government of Pakistan. National Plans. Islamabad: Planning Commission; 2005.
<http://www.pakistan.gov.pk/divisions/index.jsp?DivID=18&cPath=165>
- ¹⁰⁰ Khattak F.H Dy.Chief/Health Economist; Health Care Financing In The Macro Economic Framework Of Pakistan. Planning & Development Division, Government of Pakistan, July.27, 2007
- ¹⁰¹ Table 9: Percentage Change in PRSP Health Expenditures by Sectors
http://www.finance.gov.pk/poverty/Annual%20Report_05.pdf
- ¹⁰² Vaqar Ahmed, Taxation reforms: A CGE Microsimulation analysis for Pakistan. 6th PEP research Meeting LIMA Peru. 2007 <http://www.pep-net.org/NEW-PEP/HTML/Meetings/Lima/Fichiers%20pdf/mpia11062-Ahmed.pdf>
- ¹⁰³ Personal communication Paul Ruckert, GTZ, HSA.

-
- ¹⁰⁴ Final Technical Output, *Social Protection Strategy for Pakistan*
http://www.ids.ac.uk/ids/pvty/socialprotection/pdfs/TO_Final%20Report_PK0337A_02MAY06.pdf
- ¹⁰⁵ Dr. Sania Nishtar. The Health Budget 2006 – the policy context
http://www.heartfile.org/pdf/8%20money_VP.pdf
- ¹⁰⁶ Partnership for Transparency Fund, NWFP Health Reform Unit and Heartfile collaborative study 'Assessing governance for eliminating corruption in the health sector in Pakistan';
<http://www.u4.no/training/in-country-open/pakistan-materials/health-sector-corruption-pakistan.pdf>
- ¹⁰⁷ Maureen Lewis Informal Payments And The Financing Of Health Care In Developing And Transition Countries. *Health Affairs*, 26, no. 4 (2007): 984-997 doi: 10.1377/hlthaff.26.4.984.
<http://content.healthaffairs.org/cgi/content/full/26/4/984>
- ¹⁰⁸ Nishtar S. Public-private partnerships in health – a global call to action. *Health Res Policy Syst* 2004; 2:5.
- ¹⁰⁹ Tasleem Akhtar, Addressing health workforce issues in developing countries. Fatima Memorial System, Lahore, Pakistan. *Human Resources for Health* 2006, 4:21doi:10.1186/1478-4491-4-21
- ¹¹⁰ Health Human Resource Development in Pakistan, Vision Document Ministry of health, National Health policy Unit. <http://nhpu-moh.gov.pk/papers/Health%20Human%20Resource%20Development%20Vision%20Document%20MoH.doc>
- ¹¹¹ Corruption in the health sector in Pakistan. Heartfile, MoH, Transparency International. 2007
- ¹¹² Economic survey of Pakistan 2006-2007
- ¹¹³ Planning Commission, Government of Pakistan, **Medium Term Development Framework 2005-10**
<http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/mtdf/7-Health/7-Health.pdf>
- ¹¹⁵ Nishtar. S; Restructuring Basic Health Units – mandatory safeguards, Hpf/vp/pub1_theNEWS_23.04.06
- ¹¹⁶ PC1 performa GOVERNMENT OF PAKISTAN, PLANNING COMMISSION
<http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/downloads/PC-I%20forms/PDF/PC-I%20Social%20Sector.pdf>
- ¹¹⁷ Federal Bureau of Statistics Govt of Pakistan Islamabad. PIHS Access and usage of basic health care in Pakistan 1996:1.
- ¹¹⁸ Government of Pakistan. Utilization of public health facilities inPakistan. Islamabad: National Health Management Information System, 2000.
- ¹¹⁹ Third evaluation report, health for all by the year 2000, MoH 1997
- ¹²⁰ Daniels N, Bryant J, Castano RA, Dantes OG, Khan KS, Pannarunothai S. Benchmarks of fairness for healthcare reform: a policy tool for developing countries. *Bull World Health Organ* 2000;78(6):740-50.
- ¹²¹ WHO. Ministry of Health Govt. of Pakistan. Parvez A, Choudhary A Mushtaque, Rehman F, Khan A, et al. Utilization of Rural Basic Health Services in Pakistan. 1993:43.
- ¹²² Planning cell Health department Government of Punjab. Situation analysis report of

health sector in Punjab. 1994 November:23

¹²³ Annual Plan 2007 <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/annual%20plans/2007-08/19-Health.pdf>

¹²⁴ **Annual Plan 2007** <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/annual%20plans/2007-08/19-Health.pdf>

¹²⁵ Siddiqi S, Haq IU, Ghaffar A, Akhtar T, Mahaini R. Pakistan's maternal and child health policy: analysis, lessons and way forward. Health Policy 2004; 69: 117-130.

¹²⁶ UNICEF and (PIEDAR) Pakistan Institute for Environment Development Action Research. The State of Public Sector Primary Health Care Services, District Sheikhpura, Punjab, Pakistan by Project Management Team and Pakistan Institute for Environment-Development Action research (PIEDAR) Bamako Initiative Management Unit UNICEF New York.1994: 8

¹²⁷ Babar T. Shaikh,, Juanita Hatcher . Health seeking behaviour and health services utilization trends in National Health Survey of Pakistan: what needs to be done? Department of Community Health Sciences, Aga Khan University, Karachi, Pakistan. JPMA Vol. 57, No. 8, August 2007 <http://jpma.org.pk/ViewArticle/ViewArticle.aspx?ArticleID=1184>

¹²⁸ National Environmental Policy 2005, Govt of Pakistan. Ministry of Environment. <http://www.environment.gov.pk/nep/policy.pdf>

¹²⁹ Pakistan Environmental Protection Agency: <http://www.environment.gov.pk/>

¹³⁰ Environmental Health Unit ,Health Services Academy ,Ministry of Health http://www.cpp.org.pk/DBEstablishment/estb_59.shtml

¹³¹ Health education cell, Ministry of Health

¹³² Poverty Reduction Strategy Paper:Annual Progress Report 2005-06,November 2006,PRSP Secretariat - Finance Division,Government of Pakistan <http://www.finance.gov.pk/poverty/PRSPFY06annual-draftedited-Jan4-MoF.pdf>

¹³³ Siddiqui S, Kielman AA, Khan MS, Ali Nabeela, Ghaffar A, Sheikh U et al. The effectiveness of patient referral in Pakistan. Health Policy Plan 2001;16(2);193-8.

¹³⁴ Nature and Science, 2(4), 2004, Afsar and Younus, Patient Referral at the Grass-roots Level. <http://www.sciencepub.org/nature/0204/03-afsar.pdf>

¹³⁵ Eighth Five Year Plan 1993-98, Planning commission govt of Pakistan. <http://www.pakistan.gov.pk/ministries/planninganddevelopment-ministry/five%20year%20plans/8th/Health%20and%20Nutri.pdf>

¹³⁶ The 26th Asia-Pacific International Seminar on Education for Individuals with Special Needs. Mubarik Ahmad, Director Planning & Finance, Directorate General of Special education, Ministry of Social Welfare and Special Education, Government of Pakistan. http://www.nise.go.jp/kenshuka/josa/kankobutsu/pub_d/d-252/d-252_13.pdf

¹³⁷ Directorate General of Special Education, Ministry of women development, special education and social welfare.

- ¹³⁸ Tauseef Ahmed, The Population of Persons with Disabilities in Pakistan, Asia-Pacific Population Journal, Vol. 10, No. 1 (1995), pp. 39-62
<http://www.un.org/Depts/escap/pop/journal/v10n1a3.htm>
- ¹³⁹ Women Development Division, Ministry of Women Development. Government of Pakistan
http://www.pakistan.gov.pk/divisions/ContentInfo.jsp?DivID=20&cPath=185_186&ContentID=301
- ¹⁴⁰ Daily Times. Monday, January 01, 2007
http://www.dailytimes.com.pk/default.asp?page=2007%5C01%5C01%5Cstory_1-1-2007_pg7_27
- ¹⁴¹ National Essential drug List. 3rd revision. <http://www.dcomoh.gov.pk/publications/nedl.php>
- ¹⁴² Drug Control Organization, Ministry of Health, Government of Pakistan:
<http://www.dcomoh.gov.pk/>
- ¹⁴³ Generic Drug Act, 1972, Act No. XIII of 1972: Government of Pakistan.
- ¹⁴⁴ Kiani A. Policy considerations for partially deregulating the pharmaceutical sector – a consumer organizations perspective. Drug Bulletin: the Network for Consumer Protection 11(4); July-August 2002.
- ¹⁴⁵ The Network for Consumer Protection and Lok Sujag. Results of the survey to assess the impact of liberalization of policies on drug prices. Drug Bulletin: the Network for consumer protection 10(3&4); May-August 2001.
- ¹⁴⁶ Hafeez A. ESDP, baseline survey of medicine use and management in public healthcare system. Drug Bulletin: The Network Consumer Protection; 2(4); July/August 2002.
- ¹⁴⁷ Drugs Control Organization, Ministry of Health Pakistan
<http://www.dcomoh.gov.pk/registration/drugregistration.php>
- ¹⁴⁸ Research and Markets, 393,303 reports, The Pharmaceutical Market Pakistan.
http://www.researchandmarkets.com/reportinfo.asp?report_id=314045
- ¹⁴⁹ The Network for Consumer Protection. Report of the committee of the task force on "review the Drug Act 1976". Islamabad, Pakistan: The Network for Consumer Protection; 1998.
- ¹⁵⁰ Nishtar S. Towards building a strategic vision for health in the Medium Term Development Framework (2005-10): background papers. Islamabad, Pakistan: Planning Commission; 2003.
- ¹⁵¹ *Moazzami, Horikosh*, Situation analysis of health management information system in Pakistan, *Pakistan J. Med. Res Vol.41 No.2, 2002*,
- ¹⁵² Malik, Asif Zafar , *e-Health Networking, Application and Services, 2007 9th International Conference on* Publication Date: 19-22 June 2007
- ¹⁵³ Telemedicine Used for Surgical Follow-Up of Pakistan Earthquake Victims
Follow-Up of Earthquake Victims in a Remote Hospital Using Telemedicine (T4A1)
Asif Zafar, MD, FCPS, FRCS, 1,2,3 Faisal Murad, MD,3 Qasim Ali, MD,3 Salman Gilani, MD3
- ¹⁵⁴ S. Nishtar: Tools for treatment – Scope for using technology in reforming and improving the health sector is immense
http://www.heartfile.org/pdf/12_Tools_VP.pdf

¹⁵⁵ Critical Issues in Pakistan's Health Care, Health Policy Reform/Health Services Delivery Sania Nishtar Akbar Zaidi. Eighth SDC Special Bulletin Vol. 12, No. 6 (Nov - Dec, 2005). http://www.sdpi.org/help/research_and_news_bulletin/Nov_Dec_2005/critical_issues_health_2.htm

¹⁵⁶ Progress on Agenda for Health Sector Reforms, May 2006, Ministry of Health, Government of Pakistan. <http://nhpu-moh.gov.pk/reports/Progress%20on%20Agenda%20of%20Health%20Sector%20Reform%20-%20Finalized%20copy%20May%202006.doc>

¹⁵⁷ Year Book, 2005-06 Government of Pakistan. Ministry of Health

1 ANNEXES

Summary of annexes

List of annex titles

Organizational chart of Ministry of Health

2. Organizational chart of Provincial health departments

3. Organizational chart of Districts health department

4. Functions of district health departments in different provinces

5. Tables and graphs related to utilization of health facilities

6. Essential drugs list

7. MCH package

The Regional Health Systems Observatory is an undertaking of the WHO Regional Office for the Eastern Mediterranean. The Observatory supports and promotes evidence-based health policy-making through comprehensive and rigorous analysis of the dynamics of health systems in the EMR. Its primary goal is to contribute to the improvement of health system performance and outcomes, in terms of better health, fair financing and responsiveness of health systems. The aim of this initiative is to provide relevant comparative information to support policy-makers and analysts in the development of health systems and to serve as repository of information on health systems.

This document is part of a series of in-depth health systems profiles, produced and updated by the Observatory using standardized approach that allows comparison across countries.

They provide facts, figures and analysis and highlight reform initiatives in progress.



World Health Organization

Regional Office for the Eastern Mediterranean
Abdel Razek El Sanhoury Street,
PO Box 7608, Nasr City, Cairo 11371, Egypt
Phone: +202-6702535, Fax: +202-6702492
URL: www.emro.who.int