The Complications and Challenges Confronted by Healthcare System in Khyber Pakhtunkhwa, Pakistan: A Review

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Abstract

There are countless determinants of poor health status and poor population planning outcomes, socio-economic, biological, environmental, cultural and institutional. The present study investigated briefly the health system, infrastructure and strategies formulated by the government viva comprehensive development strategy, incorporating priorities included in the draft national health policy, national programs designed to complete the health-related issues, the poverty reduction strategy and the medium term development framework in health sector of Khyber Pakhtunkhwa. The present scenario offerings a picture that could be devastating for already scarce resources available at the disposal of the health care system. Increase in population size creates a number of challenges both for growth and development in the current macro-economically challenged environment, as well as security complexion. Increasing population size has direct bearing on the health status of the country, which is already poor, as evidenced by indicators reflected in a compilation of health system and health care services.

1. INTRODUCTION

As per world health organization report, Pakistan has become the country among the six most populous on the face of planet with its population rising 5.5 folds, from 32.5 million in 1951, to 184.5 million in 2012-13. As per estimates mentioned in "CDS 2010-2017" formulated by Government of KP in April 2010), if current trend of the growth rate of 1.8% continues, population of Pakistan will rise to the magnitude of 295 million, making it fifth most populous country by 2050. The population of KP, as per official estimates, stands at 22.2 million in 2009 juxtaposed 17.7 million in 1998. CDS 2010-2017, further highlights that approximately 3 million refugees (Afghans) are also settled in the province. Moreover, KP province is experiencing the youth bulge with 47% populace under 15 and 72% under 30 years of age (National Institute of Population Studies (NIPS) Pakistan, and Macro International Inc. 2008). Slightly above 3% of the population falls in age bracket higher than 65 years.

In Pakistan, the typical family size, at around 8 people per household, makes the highest family size in Pakistan (Health Sector Strategy Khyber Pakhtunkhwa, Situation Analysis p.5). A decline in Total Fertility Rate (TFR) to 4.1 in 2006-07 as compared to 5.4 children per woman in 1998-99 is a good omen, yet TFR still remains high when measured against established international standards (Government of Pakistan. Medium Term Development Framework 2005-10. Islamabad: Planning Commission; 2005). FATA and adjacently located KP province have been badly hit by militancy and security personnel and their families, educationists and medical practitioners were attacked, schools have been destroyed to smithereens (especially girls" schools), vaccination campaigns have been banned, journalists and NGOs threatened and male children coercively brought within the folds of the militants. Security operations launched against militancy in Lower Dir, Swat and Buner led to massive displacement of almost 1.6 million people to safer locations in Peshawar, Mardan, Charsadda, Swabi and Nowshera districts.

Similarly, more than 260000 verified displaced people due to military operation in South Waziristan moved to Dera Ismail Khan and Tank districts. Now more than 1.2 million temporarily displaced people, due to operation Zerb-e-Azb, have been temporarily settled in Bannu and adjacent areas. This massive exodus of war-affected populace has further added the load on already disadvantaged, under-resourced and under-funded health infrastructure. As per Khyber Pakhtunkhwa Health Sector Situation Analysis-2010, overall in the province, 29 % of the health facilities including hospitals, rural health centers (RHCs), basic health units (BHUs) with damage cost estimated as approximately US \$ 12 million. The Analysis further states that numerous researches establish a strong relation between lower health status and poverty. Political and external meddling in decision-making, especially in relation to enrollment, postings/transfers and corrective actions, is considered as a barrier to efficiency, besides being a demoralizing factor within the public sector.

2. THE LITERATURE REVIEW

The current scenario presents a picture that could be overwhelming for already rare resources available at the disposal of the province. Increase in population size creates a number of challenges both for growth and development in the current macro-economically challenged environment, as well as security complexion. Increasing population size has direct bearing on the health status of the country, which is already poor, as evidenced by indicators reflected in a compendium of health statistics, 2011, which states: "although there have been some improvements in the health status over the last 60 years of the population in Pakistan, main health

indicators pause behind in relation to global targets expressed in the millennium declaration and in contrast to averages for low-income countries". It further states, "Maternal mortality ratio of 276 maternal deaths per 100,000 epitomizes the fact" (Government of Pakistan, Planning and Development Division, Islamabad, Pakistan: Planning Commission; 2012).

2.1 Comparative State viz-a-viz National Average

In Pakistan, in accordance with the Pakistan Burden of Disease Report (1996), approximately 38% of the total burden of disease is due to poverty-linked communicable diseases. (Burden of Disease (BoD), as measured by Disability Adjusted Life Years (DALYs), determines the losses of healthy life in the form of disability and mortality due to all episodes of disease and injures occurring in a given year). Remaining 38% falls under non-communicable diseases component. Pre-natal and maternal issues bear the remaining load.

A. Maternal Health

As per statistics provided by Pakistan Demographic and Health Survey, Maternal Mortality Ratio of KP Province per 100,000 births stand at 275 as against national standard at 276 (National Institute of Population Studies and Macro International Inc., Pakistan Demographic and Health Survey 2006–2007, National Institute of Population Studies, Islamabad: 2008). As per Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, this high standard has been achieved due to increase in attendance by skilled birth attendants rising from 28% in 2001 to 41% in 2008, besides, 51% and 27% women received pre-natal and post-natal care respectively from skilled service-providers as against national standards of 61% and 43% respectively. Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis further highlights that 43% women delivered babies in hospitals as against 34% national standards whereas, 38% women delivered the babies under skilled service providers as compared with 39% national average (Government of Pakistan, 2009).

B. Fertility and Contraceptive Prevalence and Mortality

As per statistics provided by Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, Fertility rate in the province is 5.6 children per woman, more than two-third of the 40 million women of the reproductive age in KP province are married at any specific period with 10% pregnant and contraceptive prevalence rate is around 38% as against 55% national average. In KP province, early childhood mortality rates at 41% are lower than the national average of 54%. It reflects that immunization and nutritional programs have left positive impact on child mortality ratio. Post-natal mortality occurs due to sepsis, birth asphyxia, or pre-maturity while post-neonatal deaths are caused mainly by diarrhea and pneumonia (National Institute of Population Studies and Macro International Inc., "Pakistan Demographic and Health Survey 2006–2007," National Institute of Population Studies, Islamabad: 2008 p. 11).

C. Nutrition and Immunization

Almost entire, Pakistani nation is at risk of malnutrition, whereas, children under five are the most vulnerable. In KP, 37 % children are underweight as compared to national average of 38%, 43% stunted against national average of 37%, 11% wasted as against national average of 13% (Pakistan Institute of Development Economics and Aga Khan University and Medical Centre, "National Nutrition Survey 2001–2002," Planning Commission, Government of Pakistan, Islamabad: 2004 p. 11). Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis states that around 64% of children living in KP Province, with age ranging from 12 -23 years, are fully immunized, in urban category, 78% children and rural category 61% children are immunized against national average of 84% and 66% respectively. Moreover, as per Analysis, 64% is immunized as against national average of 71%, notwithstanding the fact that anti-vaccine and anti-polio campaigns are ubiquitous in KP Province and FATA (Riaz, 2005).

D. Acute Respiratory infections, Diarrhea and Polio

As per estimates of Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, pneumonia emerges as a leading source of child mortality, responsible for almost a quarter of all post neo-natal deaths. Similarly, as per MICS survey (2008), 43% of children below five years of age in KP, had recently suffered from diarrhea and just 36% of these children had been administered with oral rehydration therapy etc. (National Institute of Population Studies and Macro International Inc., "Pakistan Demographic and Health Survey 2006–2007," National Institute of Population Studies, Islamabad: 2008 pg 12). Out of 89 confirmed polio cases world-wide in 2009, 29 were from KP Province, primarily due to lack of vaccination and administration of polio drops. Orthodox mindset has hurled propaganda against polio campaigns. This adversely affected governments' national level initiative to eliminate this curse (Government of Pakistan, 2010).

E. Malaria, Hepatitis and Blindness

Out of half a million populace suffering from malaria per annum, 20 % share is that of KP province. Malaria cases have increased in recent years primarily because of prolonged power outages, leving no choice for people than to sleep in the open and making themselves vulnerable to mosquito bites (National Institute of Population Studies, 2008. Pakistan Demographic and Health Survey 2006-07 (National Institute of Population Studies, 2008). As per Ministry of Health estimates, Hepatitis-B prevails in population ranging between 3% and 4% and Hepatitis-C between 5% and 6%. In KP/FATA, all five varieties of hepatitis viruses A-E exist. About 785,200 people suffer from Hepatitis B in KP and 124,000 in FATA. Almost 1.18 million people in KP and 190,000 people in FATA, suffer from Hepatitis C. Un-hygienic invasive practices and unsafe injection (Dentists, Barbers, Beauty Parlors, Ear and Nose Piercing etc.) emerge as the major causes of the disease in the KP province (Download from www.healthnwfp.gov. pk/downloads/hepatitis.doc on 23 June 2010 p. 14). More than 0.9% population in Pakistan is blind with share of KP Province at around 0.18 million (National Survey on Blindness and Low Vision, Ministry of Health, 2002-2004). Several other diseases also exist which affect health profile of the populace in KP, however, focus was placed mainly on diseases posing major challenges.

2.2 Existing Health Infrastructure in Pakistan

As per Economic Survey of Pakistan 2013/14:

In Pakistan, there are 1,096 hospitals in the whole country, 5,527 units of basic health, 5,310 dispensaries and 687 child health and maternity centers as compared to 5,176 dispensaries, 1,092 hospital, 628 child health and maternity centers and 5,478 basic health units in the same period of preceding year. In the country during 2013-14, the total figure of doctors has increased to 167,759, hospital beds 111,953, nurses 86,183 and dentists 13,716, compared to 111,726 hospital beds, 12,692 dentists, 160,880 doctors and 82,119 nurses in the preceding year (Economic Survey of Pakistan 2013/14).

It further states:

The health facilities ratio and population operated out per doctors, 1,099 peoples, per dentist, 13,441 peoples and per hospital bed, 1,647 persons. In the year 2012-13, it was, per doctor 1,123 peoples, 14,238 per dentist and for 1617 person only one bed. There were 7 rural health centers and 32 basic health units have been constructed during 2013-14 (July-April), while 37 basic health units and 10 rural health centers have been upgraded.

As per statistics mentioned in Economic Survey of Pakistan 2013/14:

In 2013-14, during nine months, 4,500 paramedics, 3,150 nurses, 500 dentists and 5,000 doctors, have finalized their academic courses and in the hospitals, 3,600 new beds, 4,500 paramedics, 3,300 nurses, 430 dentists and 4,400 doctors have been added during last year. Total outlay of budgeted for health sector in the present year is at Rs.102.3 billion which included Rs.74.5 billion for current expenditure and Rs.27.8 billion for development which is comparable during 2013-14 to the percent of 0.40 GDP as compared in 2012-13 to the percent 0.35.

The statistics reflect that resource-constraints albeit, governments continue to invest in healthcare system to meet the challenging demands of the people of Pakistan, however, it must keep pace with the population growth as well as the rising cost of the healthcare. Still if we draw parallel with developed states, Pakistan falls amongst last few countries which makes the least budget allocations for health sector, the world-over. Moreover, not the statistics matter but actually the benefits drawn by the populace from the infrastructure counts in realistic terms(Government of Pakistan, 2010).

2.3 Health Department Policies

The healthcare system in Pakistan is partially vertical and in part, horizontal. The vertical segmentation is reflected in the manner in which separate organizations such as the federal ministry of health, the provincial health departments, private sector healthcare providers, non-governmental organizations, armed forces and the employees" social security institutions raise and allocate their own funds, pay their own providers and deliver the due services (World Health Report, 1995). In certain cases, these are vertical as they work for non-overlapping segments of society as in the case of the armed forces and social security; however, a certain degree of overlap occurs in relation to the manner in which the ministry of health and the provincial health departments provide services vis-à-vis the private sector (Becher & Chassin, 2002). Successive governments in Pakistan have endeavored to stomach the direct delivery of services burden and subsidize healthcare delivery for all as epitomized by the existence of an elaborate by infrastructure standards, one of the most extensive primary healthcare systems in the world (Hafeez, Kiani, Din, Muhammad, Butt, and Shah, 2004).

Progress has also been made in many public health fields; however, the implementation of these initiatives remains hostage to many overarching social service delivery, management and governance issues and interface predicaments, besides poor implementation of several policies, legislative and regulatory frameworks (World Health Report, 2001). Pakistan has introduced several reforms related to devolution and privatization and

the induction of new resources, making health reforms a viable proposition. Pakistan health sector benchmarks, those that are grounded on the Millennium Development Goals (MDGs) and others that form part of the Medium Term Development Framework 2005-10 (MTDF), centered on achieving specific program-related targets and a number of programs have been organized to achieve these targets (Government of Pakistan, 2003). A wide spectrum of new programs, initiatives and legislative measures recently introduced at the federal, provincial and district levels demands strong health systems for their translation into action.

In the health care sector, there are government functionaries and the public representatives, who are responsible for planning, implementation, development and dissemination of the policies for the best interests and demands of the people (Imran & Anis, 2011).

2.4 Organizational Framework of KP Health System

Health is generally designated as a provincial subject in Pakistan with involvement of federal government (Ministry of Health) specifically in the domains of defining a vision, strategic planning, formulation of policies, articulation of priorities, setting of ethical standards and coordination as in the case of external assistance and capacity-building. The provincial and district departments of health in KP are responsible for the delivery and management of health services within their respective territories. Role of the district government has enhanced in view of administrative devolution (National Survey, 2002-2004). The provincial and district departments of health are also responsible for the management and the provision of health services by taking certain innovative measures to enhance their social credibility.

The health secretariat is responsible for formulation and conceptualization of the policies and heading for their administrative endorsement. The secretary of health serves as the principal accounting officer. The director general (health) deals the procurements services (Government of Pakistan, 2004). The headquarters of the director general (health services) coordinates matters related to medicine with health coordination cell and general goods of bio-medical and equipment for various districts and vertical programs (Riaz, 2005). The director general is also involved in planning, bid design, bid estimation and afterward honors the agreement on unit rates prevalent for the entire financial year for the certain surgical disposables and drugs for all the required fields. In KP, there are twenty five districts; Peshawar, Kohat, Mardan, Swat, Malakand, Charsadda, Tor Ghar, Mansehra, Buner, Battagram, D.I. Khan, Abbottabad, Swabi, Dir Lower, Dir Upper, Karak, Hangu, Nowshera, Lakki Marwat, Haripur, Tank, Shangla, Chitral, Bannu and Kohistan. All the districts are supervised by the medical superintendents, the district headquarters, in the districts are under the managerial direction of the EDOs (Health) however, "the purchase orders for distribution of surgical disposables and medicines selected by the government under unit rate contracting are placed by the respective medical superintendent" Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, 2011).

At the provincial level, these Institutions are controlled by the chief executives who bring about their grossing on the unit rates basis carefully chosen by the government as per their existing budget inside the wide-ranging policies framed by the department of health. As per Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, "Medical colleges are headed by the Principals and the said entities independently procure bio-medical equipment and laboratory chemicals for their college institutions for educational and experimental purposes" (National Institute of Population Studies, 2008). These colleges monitors the earning structure, similar to the director general health services, with a selection committee, consists of concerned professors and associate professors for provision of specifications of equipment and completion of purchase directed by the principal of the college. There are some health related programs which have self-governing administration and execution arrangements headed by the program directors to the health system of KP (National Institute of Population Studies, 2008). These healthcare programs are mostly funded by the federal government and obtain their medicines allied to their possibility based upon the medicinal items carefully chosen by the government and from special program funds purchase the bio-medical equipment (Government of Pakistan, 2008).

Figure 1.1 Theoretical Framework



3. **DISCUSSION**

The health department is responsible to make sure the delivery of quality health services to the people of the province of KP at a reasonable and manageable cost. According to Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis (Government of Pakistan, 2009):

In the KP Province, in terms of human resources, with more than 30,000 employees, it is the second largest department. The health minister is accountable for taking policy decisions and to frames a public representative standpoint. The health secretary at provincial level is the chief secretarial officer and accountable for the complete running of the health department.

It further adds:

For the provision of primary health care programs at national level and at the district level the provision of secondary care health service, the director general of health services is responsible. By the EDO-Hs, the district health services are provided and supervised. There are several autonomous bodies for example the teaching hospitals/medical colleges, the health foundation and the health regulatory authority which were established under the KP provincial assembly legislative acts.

About management information system it mentions that:

The national health management information system is responsible for a least set of information with emphasis upon service delivery needs and priority health problems. The district health information system has been established in KP comprises the hospital sector and at present being executed in 14 districts. In 2006, the health regulatory authority was also established by the government of KP.

According to Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis, the health department, in KP, supervises the system of three layers of public health delivery: the secondary care hospitals (Tehsil and District Headquarters hospitals), the primary healthcare facilities (RHCs and BHUs) and the tertiary teaching/care hospitals. The system, in theory, is orchestrated to deliver the best part of services through community outreach services (the lady health workers) and health centers (BHUs, RHCs) (Imran & Anis, 2011). "In total, there are 86 RHCs, 786 BHUs and 66 maternal and child health (MCH) centers for pregnant mothers and newborns. By proportion, one hospital per 135,000 persons and in rural areas one RHC per 224,000 persons and one BHU for around 25,000 are available" (Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis).

In the year 2008, approximately 740 facilities had as a minimum one lady health worker associated with them. In KP, only 72% of households have a health facility available inside their community. Mainly in remote areas, a number of people, experience a great difficulty in retrieving primary healthcare. In the years 2007/08, the PSLM survey observed that in rural areas, 43% of people suffering from diarrhea did not visit a government facility due to either non-availability of government facility or its distant location. About 15% commented that doctor was always not available whereas 13% remarked that staff was not well-mannered. In rural areas, the average distance is about 10 kilometers which is in urban areas nearby three times of the distance. In the province, the basic health units are underutilized.

As per Health Sector Strategy Khyber Pakhtunkhwa: Situation Analysis:

In KP, there are 12789 doctors and 3066 specialists" with1435 dentists and 101 specialist dentists with population per doctor"s ratio as 1479 and population per dentist ratio as 15166. The highest percentage of vacancies is for district specialists (44%) followed by dentists (27%). Government of

KP has also established provincial health services academy which succeeds 26 institutions; six public health schools, four paramedic institutes, eight schools of nursing, a nursing college and six district health development centers. A two year course runs by the paramedic institutes, creating each year an average of 200 technicians.

It adds:

These cover a range of specialties and the technicians are primarily absorbed in to the tertiary care hospitals saving the health technologists who are typically employed in BHUs and RHCs. In KP, there are seven nursing schools (one private and six public) which arrange training to the lady health visitor midwifery and nursing. In KP, there are four self-governing tertiary care hospitals, located in large cities; Ayub teaching hospital, Abbottabad, Hayatabad medical complex Peshawar, Lady reading hospital Peshawar and Khyber teaching hospital, Peshawar. In the public sector, the number of medical colleges has doubled and in every divisional headquarters there is a medical college (Mardan, Saidu Sharif, D. I. Khan, Bannu, Kohat), with a designated teaching hospital.

It reflects that KP is maintaining a very comprehensive health system, province-wide. Actually, the issue of integration, poor management, lack of competency, insufficient accountability system, lack of innovation as per genius and social construct of the society have beleaguered the provincial heath system (WHOs Health report on Pakistan, 2013 -14).

4. CONCLUSION

There is a dire need to implement such policies that will improve (through increasing resources), the health services quality (material, human, financial); establishing supervision, monitoring and controlling roles of capability, provincial levels and district; regulating the availability and quality of private sector health services and with main stakeholders; emerging durable partnerships, mainly the community. On a rational basis, the resources provision decisions will be made, optimizing the delivery and utilization of resources and services. As mentioned in the introduction, the three levels of management which formulates and implement the policies and have different responsibilities and roles in the health sector. For planning and monitoring the national health policy, the federal government is responsible. "It also delivers some tertiary healthcare services and support for the financing of healthcare and communicable disease prevention and control" (Nishtar, 2006). The provincial government is overall responsible for the administration of the entire health system in the province including the delivery of health services out of districts institutions" jurisdiction or to autonomous institutions.

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