PRIVATE SECTOR INVESTMENT OPPORTUNITIES IN HEALTH SECTOR, THE CASE STUDY OF GILGIT BALTISTAN

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ABSTRACT

The study has been produced to carry out at Gilgit. The objective of is to study the current economic status and sought out the opportunities available in health sectors of GB pertaining to both public and private investments. This also aims at serving as a key document for conducting future studies, regarding the health financing and investment standings in GB. The need for such study is strongly being felt, especially, this is time when GB is receiving heightened level of attention due to recent empowerment and self governance order approved in September, 2009. This report would surely be a helpful document for forth coming endeavors to be made with regard to the growth of health sector in Gilgit-Baltistan.

This study emphasize the introductory body of the health care system explains the position of health care system in Pakistan as well as in Gilgit Baltistan and defines the objectives of this research. The important part of review is developed. This introduced the importance of provision quality health and the role of private sector in provision of health care to the masses of the country. This ingredient discusses the procedure of conducting research. Considering the target

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population and in listing the available recourses and data for conducting the research. The interpretation and analysis is put much greater focus in order to link the available data into the activities of the research. Put up diagram and tables to elaborate discussion in this section. These allow analyzing more deeply the health issues in Gilgit Baltistan. The last portion of includes the findings based on analysis of available data and numerous recommendation were in listed to fill up the space of provision of health care system in Gilgit - Baltistan.

Key Words: Private Sector, Investment, Health Sector, Population

1. INTRODUCTION

1.1 Health System in Pakistan

Pakistan has two parallel healthcare systems, public and private. The private sector's share in health care had been rather small in the beginning since great majority began as private practices and transformed into hospitals over time. Increasing population, industrialization, resultant high level of environmental pollution and increased healthcare awareness and lack of focus or a structured public health care system has limited the capacity of the existing public health care system in the country. This has given rise to high demand of private sector health care facilities to complement its public sector counterpart. With growing number of patients and lack of maintained infrastructure in public sector, an increased preference towards private hospitals developed over the years, which seems to have become an icon of a promised quality care and treatment, however due to high quality services provided, private sector hospitals are comparatively highly expensive than the public sector and unaffordable for the large section of the population. There are about 906 hospitals, 4554 Dispensaries, 5290 Basic Health Units and 552 Rural Health Centers. The availability of hospital beds in all medical facilities has been estimated at 98,684, which comes to a population bed ratio of 1, 536 persons per bed. The figures available about the medical facilities clearly indicate the need for a further expansion in health facilities (Health Systems Profile Pakistan, n.d.)

The human resources available for health are has gradually increased over the years and though there is annual output of around five thousand medical graduates from both private and public medical colleges the current ratio of one doctor per 1,183 persons is below the recommended ratio by World Health Organization (WHO) of one doctor per 1,000 persons. There is however number of doctors, dentists and nurses which are not registered with (Pakistan

Medical and Dental Council) PMDC and practicing hospitals/clinics. The public health delivery system to the population of country is through following health institutions. (Manzoor, Hashmi & Mukhtar, 2007)

Health is an essential human need and key indicator of socioeconomic development. Cost effective interventions are needed by developing country to cope with the threats posed by diseases in developing countries and lack of better managerial capacity by consolidating the health information. Massive investment is needed to strengthen the health system. Government needs to anticipate financing sources that could extend better health services delivery to poor in the country. (Muhammad, et al, n.d.)

Modore & Tiedemem, (2005) defines the puplic health care system and private health care system as the public health care system refers to all government and government agencies, that may be federal, provincial, regional and local those engage in delivery of health care facilities to the masses of country without making profit. In contrast the private health care sector is broad and encompasses the corporate for profit i.e small businesses and entrepreneurial entities engage in delivery of health facilities.

Nikolic and Maikisch (2006), describes discussion of Public-Private Partnerships and Collaboration (PPPs and PPC) in the Health Sector is important and timely in light of the challenges the public sector is facing in healthcare finance, management, and provision. Many governments are confronted by fiscal constraints that force them to carefully prioritize and restrict public expenditures. Moreover, many public health systems are already indebted and face further fiscal pressures, such as the need to provide care to increasingly aging populations, improve quality, or invest in often expensive medical treatment and technology advances.

A report prepared by Zaidi, (2010) collaboration with WHO found that compilation of National and Provincial Health Accounts by all government, foreign and private sources and their resulting utilization is the major step taken by the government. Health spending is low in Pakistan at 2.6% of the GDP or $15 per capita and 66% is borne by households through out of pocket payments raising issues of access to health care and vulnerability of poor households to catastrophic health expenditure. Provincial disparities are seen in terms of government spending which ranges between 5-9% of budget (Sindh being the lowest) while share of international donors in health expenditure ranges between 0.1-15% (Balochistan has the highest).

The health indicators in rural areas of Pakistan are in bad condition leading causes of sickness and deaths include gastroenteritis, respiratory infections, congenital abnormalities, tuberculosis, malaria, and typhoid fever. About 19% of the population is malnourished that is higher rate than the 17 percent average for developing countries and 30 percent of children under age five are malnourished. Hepatitis B and C are also extensive, with approximately 3 million cases of each in the country. The cost of curing or treating these illnesses is many times more than preventing them. In 2007 there were 85 physicians for every 100,000 persons in Pakistan. There are only 62,651 nurses all over the nation, which highlights the problem of nurse-to-doctor ratio. Delivery of health in rural areas is designed to be met by. Pakistan's total health expenditures amounted to 2.0 percent of gross domestic product (GDP) in 2006, per capita health expenditures were US$51 (2006). The government provided 24.4 percent of total health expenditure, with the remainder 75% being entirely private, out-of-pocket expenses. (Khan, 2009)

Akram & Khan,(2007) states that private health investment in Pakistan can be brought by attracting both local and international investors. Pakistan can implement the successful models used in other countries that have similar conditions as Pakistan. Iraq is the best example of it. Iraq's health sector investment strategy is based on well defined principles that include promoting private sector involvement though opportunities to invest in healthcare facilities, and pharmaceutical and medical device manufacturing.

Report of Health System Review Mission Pakistan, (2011) conducted by WHO and other international organizations found that the improvement of knowledge base on health care financing through household survey on expenditure and utilization and the implementation of the national health account analysis will allow the development of policy options for sustainable and equitable health care financing.

1.2 District health system infrastructure

The district health system in Pakistan is organized in to a network of public service delivery Outlets of health houses (community health outlets run by and set up in homes of lady health workers), a chain of first level care facilities, district and sub-district hospitals. The district health system also incorporates network.of private providers ranging from general practitioners, clinics, hospitals and pharmacies to numerous alternative care providers' including Homeopaths and hakims for Eastern and Yunani medicine.

1.2.1 Health Houses

The lady health workers programme is arguably the largest public sector community health initiative in the region, covering most of the rural and selected sami-urban population of the country with a workforce of 100000. The health houses, at the village level, constitute the hub from where a lady health worker carries a daily field visits to her catchments area population of 1000.The scope of lady health workers services covers health and nutrition promotion, maternal, neonatal and child health care including reproductive health and family planning, promotion of personal and environmental hygiene, treatment of minor ailments with option for referral and support to communicable disease control interventions. In 2009, LHWs direct involvement in vaccination was launched by training them in routine EPI skills.

1.2.2 Basic Health Units

On average, basic health units' serve a population of around 10000 to 25000, providing a range of primary health care services along with referral support of major health problems. A basic health unit is usually staffed by a medical officer, a Lady Health Visitor, a vaccinator, a health technician, a dispenser/dresser, a sanitary worker and other support staff.

1.2.3 Sub Health and Rural Health Centre's

These facilities are staffed with a physician, one Lady Health Visitor and a midwife and provide primary health care services to the catchment areas where there are no basic health units. Rural health centre's function around the-clock and serves a catchments area population of 50000-100000, providing a comprehensive range of primary health care. Rural health centres are equipped with laboratory and X-ray facilities and a 15 - 20 bed inpatient facility. The minimum Rural health centre staff comprises a senior medical officer, lady health visitor, a midwife, a vaccinator, a health technician, and a dispenser/dresser as well as laboratory, radiology, operation theater and anesthesia assistant along with administrative and support staff.

1.2.4 Civil Dispensaries

These facilities were established in urban settings as part of the pre-independence health care delivery system, forming the bottom of the health pyramid. Two types of dispensaries are

currently recognized: the municipal corporation civil dispensary, headed by dispenser and the health department dispensary, operated by a physician.

1.2.5 Tuberculosis Centre's

These centre's detected and manage tuberculosis (TB) patients. The TB/ DOTS programme currently is also implemented by most first level care facilities and hospitals of the district health system network. The primary health care services offered by basic health units and rural health centuries to their respective catchment area communities, the basic health unit having an operational scope comparable to 30% of the services offered by a rural health centre. Despite this impressive network of first-level care facilities, their utilization rate by the catchment area population is low with less than one (0.6) patient visit/ person/ year.

1.2.6 Thesil Headquarter Hospitals

These hospitals serve a catchment population of about 0.5 to 1 million, providing a range of preventive, clinical and rehabilitative services. Presently the majority of thesil headquarter hospitals offer 40- 60 bed facilities and a range of outpatient services. There are 44 sanctioned posts including nine clinical specialists, of which at least an obstetrician and gynecologist, a pediatricians and a general surgeon are almost always available.

1.2.7 District headquarter hospital

These hospitals cover a catchment population of 1 to 3 million, with an average of 125 to 250 beds. The district headquarters hospital provides promotive, preventive, curative, advanced diagnostic and inpatient particular services. There are 74 sanctioned positions of which 15 are clinical specialties; although the level of actual deployment may vary between provinces.

1.2.8 Contribution of Ministry Of Population Welfare to the District Health System

The Ministry of Population Welfare operates a network of around 3000 facilities for the delivery of reproductive health and family planning services ranging from reproductive health reproductive centres embedded in the tehsil headquarters hospital and district Hospital service delivery domains and family welfare centres located at Union Council settings as well as mobile service units and community worker driven outreach services.

1.2.9 National Priority Programmes

The district health system hosts and supports the implementation of numerous federally funded national programmes, that include the Lady Health Workers' programme; maternal, neonatal and child health; national AIDS control; Roll Back Malaria, national tuberculosis control; nutrition; prevention and control of blindness; control of hepatitis viral infections; and the expended programme on immunization, closely interfacing with the primary health care services at district level. Many of these programmes have a dedicated Workforce at district level with varying degress of functional integration with the district health system; the federal and provincial managements units of all these programmes providing the necessary technical and logistics back-up support for effective service delivery.

1.3 Introduction to Health System GB

Gilgit-Baltistan, previously known as Northern Areas, is a disputed political entity, situated in the northmost part of Pakistan with the area of 72,496 sq. km and population of almost 12 million. The area is administratively divided into two regions that are Gilgit and Baltistan. Gilgit Region comprises of five districts including Gilgit, Diamer, Ghizer, Astore and Hunza-Nagar whereas Baltistan Region consist of Skardu and Ghanche districts. Gilgit is the capital of Gilgit-Baltistan. Recently, it has been undergone through the transitional phase of new political setup of provincial autonomy through Gilgit-Baltistan Self Governance Ordinance. Although it has recently gained the status of self governing political unit, parts of Gilgit-Baltistan (GB) have been undergoing a dramatic transformation over the last three decades, resulting in improvement of the economic status and income level of the area (Gilgit-Baltistan Economic Report, 2010)

Health sector in Gilgit-Baltistan encompasses both public and private health facilities with varied level of health care service delivery and managerial setups. Public health setup contributes major proportion of the health Sector in Gilgit-Baltistan assisted by private health facilities and NGOs being functioned in some areas such as AKHSP, Military hospitals, Sehhat Foundation, PPHI and Maarifi Foundation. The administrative setup of Health Department Gilgit-Baltistan is divided into five Medical Superintendents who run five major District Head Quarter (DHQ) Hospitals and District Health Officers who are responsible to control health facilities excluding DHQ Hospitals, comprising of Civil Hospitals (CH), Rural Health Centers (RHC), Basic Health Units (BHUs), Civil Dispensaries (CDs), Maternal and Child Health Care (MCH) Centers and

First Aid Posts (FAPs) each provides different level of care services. (Annual report health department Gilgit, 2009-11)

Various organizations are serving in delivery health care services on varying levels; Health Department Gilgit-Baltistan is the only institution that has been structured to provide health care services on primary as well as secondary levels. It contributes major portion in health development framework in Gilgit-Baltistan.

Other organizations operating in this regard are:

Peoples Primary Health Care Initiative (PPHI)

Aga Khan Health Services (AKHS)

Marie Adellate Foundation

World Health Organization (WHO)

Maarifi Foundation

Sehhat Foundation

Al-Shifa Trust

Mostly, these organizations are either providing primary level health care services or focusing on specific geographic locations. PPHI is government funded organizational setup established to improve the status of primary health care service delivery through Civil Dispensaries and Basic Health Units (BHUs). Aga Khan Health Services is mainly providing health care services to selected areas of Gilgit, Ghizer and Hunza-Nagar districts. Aga Khan Health Centers and Maternity Homes are delivering primary level health care services with a bit improved quality as compared to other health care service delivery organizations. Maarifi Foundation is operating in Baltistan region mainly focuses on eye health care services. Sehhat Foundation and Al-Shifa Trust are carrying out their health related activities on a very limited level such organizing eye and dental camps, conducting health education campaigns etc.

1.4 Health Departments Gilgit-Baltistan

Gilgit-Baltistan Health Department came into existence in 1939 when two 10 beds hospitals were established at Gilgit and Skardu and one agency surgeon was placed at Gilgit. After independence of Pakistan in 1951 another surgeon was placed at Skardu under the control of

Medical Directorate GHQ Rawalpindi. In 1985 post of DDHS was up graded to the DHS and detached from GHQ Rawalpindi and placed under the control of Commissioner Northern Areas (Annual report health department Gilgit, 2009-11).

At present Gilgit-Baltistan Health Department is providing primary and secondary level health care services to the masses through 417 health facilities with the help of about 3000 medical and Para medical staff. Gilgit-Baltistan Health Department is a social organization which relies on funds provided by the government. Shortage of technical staff and lack of quality services is a key issue to the Department. There are 886 indoor beds available and population beds ratio is 1: 1354 which is much lower than the international standard. The doctor population ratio is 4411:1 which is far much less than standards set by World Health Organization (WHO) which is 1000:1. The shortage of government funds and unpredictable situation of politics in the region hinders the process of provision of health care services to a great extent. Furthermore, the unavailability of modern equipments and highly qualified doctors especially, in the Department of cardiology, ophthalmology, gastrology, Neurology and orthopedics etc. make situation worst. Due to this upsetting condition, patients have to travel to down country for their treatment as the cases of heart attack, Diabetes and Hepatitis have been increasing day by day which costs them a lot as it includes huge burden of travelling and accommodation expenses (annual report health department Gilgit, 2009-11)

2. Main Objective

To study and analyze opportunities for private investors to invest in health sector of Gilgit-Baltistan

Sub objectives

- To study and analyze the government health facilities and patients load on primary and secondary health facilities in Gilgit Baltistan
- To study and analyze the patients treated and different services provided by government.
- To study the doctors to population ratio in Gilgit Baltistan
- To find out bed availability in health sector Gilgit-Baltistan
- To study the health indicators and per capita expenditure on health of people in Gilgit-Baltistan

- To analyze the development schemes and budget allocation
- To study the cases referred to down countries and its burden on masses of Gilgit Baltistan

3. RESEARCH METHODOLOGY

As there are no specific data available on the health investment in Gilgit-Baltistan, yet findings from the study will be enhance the analysis of the status of health care services delivery in the area for further development of health sector by attracting investors and bringing investment in Gilgit-Baltistan. Although government of Gilgit-Baltistan is taking productive steps to facilitate the investors by developing investment friendly environment in Gilgit-Baltistan, yet there is still a desperate need to expedite the process.

The data collection for study is mainly on secondary sources from Review of literature and documents included the review of Reports published by Health Department Gilgit-Baltistan, World Health Organization (WHO), PPHI, Aga Khan Health Services Pakistan, Sight Savers, JICA Pakistan, Federal Ministry of Health, US AID Program and MALC. It also included various documents and papers published by National programs including National Program for Family Planning and Primary Health Care, Expended Program on Immunization, Maternal and Neonatal Child Health Care Program, National Aids Control Program, National Blindness Control Program and National Hepatitis Control Program and primary sources of data collection used through questioner.

RESEARCH DESIGN

The Purpose of the Study Analytical study type of investigation is descriptive population this study focuses the health institutions especially health care centers and DHQ hospitals in Gilgit-Baltistan which provide primary health care facilities as well as secondary and tertiary health care facilities in 7 districts of Gilgit-Baltistan. The all health facilities of seven districts are the population of this study, so the population under study is the whole population of Gilgit-Baltistan.

Data Analysis

The analysis used is descriptive and quantitative as well through interpretation of secondary data available from the reports of Health Department Gilgit-Baltistan. The scope of project is limited to the geographical area of Gilgit-Baltistan

Research Benefits

My study will highlights the issues pertaining to health in Gilgit Baltistan

My study helps to find potential investors who are willing to invest in health sector.

It will be helpful to government institutions concerning the provision of health to initiate new projects. The study will help to improve health care facility system according to needs of people of Gilgit Baltistan.

4. RESULTS AND FINDINGS

1. Government health facilities and burden on primary and secondary health care.

The health facilities in Gilgit-Baltistan have been divided into two major categories depending on the level of services they provide. These are Primary Level Health Care Facilities and Secondary Level Health Care Facilities. Primary level health care facilities comprises major portion of the health care facilities consisting of 55 MCH Centers, 293 First Aid Posts, 124 Dispensaries and 17 Basic Health Units. Secondary level health care facilities include 5 District Head Quarter Hospitals, 2 Rural Health Centers and 22 Civil Hospitals. Table 1 shows the number of health facilities administered by the government of Pakistan

2. Patients Burden on Primary and Secondary Health Care Facilities

Gilgit Baltistan has 472 primary and 46 secondary health care facilities. However these figures do not depicts the picture of actual patient's burden on health facilities. During 2011, 2411100 patients were reported in secondary health care services. Which form 90% of the total patients treated during this year where as in primary health care facilities there are 267900 reported which comprises 10% of the total patient's burden in the same year. On average 522540 patients were reported in secondary health care facilities during this year where as 568 patients were registered in primary health care facilities on average. Table 2 shows the comparative figures and percentages of patient burden on primary and secondary health care facilities.

After careful study of facts and figures presented, it can easily be concluded that there is an immense burden of patients on secondary health care facilities .due to very limited number of secondary health care facilities people of Gilgit Baltistan are striving hard to resolve their medical and health related issues as the health care services delivery system is heavily dependent upon secondary health care facilities which are for less than their requirements. Presently government is not having sound financial and economic situation which made it unable to overcome these issues. Only the private sector can play its role to improve this situation as there is almost no competition. The private sector has very healthy opportunity to invest in health sector by establishing hospitals which provide secondary health care services.

Patients Treated and Different Services Provided By Government

Indoor and Outdoor Patients

3. Indoor patients

Indoor patients are those patients who are advised to be admitted by the doctor in the hospitals as their medical condition is not good enough to stay at home. During 2009-11, 866000 indoor patients have been reported in Gilgit-Baltistan, out of which 24,4000 were reported in district Gilgit, 37,1000 in district Skardu, 15,6000 in district Diamer, 8,7000 in district Ghanche, 8,000 in district Ghizer, and no patient was reported in district Asotre. Table 3 shows the details of the indoor patients registered during 2009-11 in various health facilities of Gilgit-Baltistan.

4. Outdoor Patients

Outdoor patients are those patients who received treatment from health facility and are not advised to be admitted by the doctor in the hospitals as their medical condition is not good enough to stay at home. During 2009-11,6012000 indoor patients have been reported in Gilgit-Baltistan, out of which 1909000 were reported in district Gilgit, 1551000 in district Skardu, 15,6000 in district Diamer, 1017000 in district Ghanche, 919000 in district Ghizer, and 102000 patient was reported in district Asotre. Table 4 and figure shows the details of the outdoor patients registered during 2009-11 in various health facilities of Gilgit-Baltistan.

The existing health facilities in Gilgit-Baltistan are bearing an enormous burden of outdoor patients due to increasing number health diseases. From the figures presented, one can easily

comprehend that as district Gilgit and Skardu in comparison with other districts of Gilgit-Baltistan, receives very high numbers of patients. The health facilities in these districts are not capable enough to fulfill the requirements of indoor patients load these districts have only one DHQ Hospital each. In district Gilgit, there are only 4 civil hospitals and no Rural Health Center. In district Skardu, there is only one Rural Health Center and 4 civil hospitals. For 61,500 indoor patients, there were only 11 health facilities were available during the three years. Thus, establishing hospitals in these districts will highly be profitable, keeping in view the facts discussed.

Major Operations and Minor Operations

5. Major Operations

Gilgit-Baltistan health facilities have very limited equipments and small number of surgeons, on the other hand, these facilities have to carry tolerate huge burden of operations. During 2009-11, 15,176 majors operations are reported out of which 8350 carried out in district Gilgit, 5379 in Skardu, 1447 in diamer, and no operations are reported in district Ghanche, Ghizer and Astore. Table 5 presents the figures of the districts wise major operations carried out at different hospitals of Gilgit-Baltistan.

6. Minor Operations

During 2009-11, 65,000 minor operations were carried out in all districts of Gilgit-Baltistan out of which 21000 carried out in district Gilgit, 25000 in Skardu, 3000 in Diamer, 13000 in district Ghanche, 3000 in Ghizer and no operations are reported in district Astore. Table 6 presents the figures of the districts wise major operations carried out at different hospitals of Gilgit-Baltistan.

X-Rays and Lab Tests

7. X-Rays

X-Rays are essential constituent of treatment process. During 2009-2011, 177310 X-rays were taken. In Gilgit, 66730 X-Rays were taken, in Skardu 48580, in Diamer 27700, in Ghanche 11850, Ghizer 13970 and in Astore 8480 X-Rays were taken. X-Rays and Lab tests are essential constituent of treatment process. Table 7 presents X-Rays in districts of Gilgit-Baltistan.

8. Lab Tests

The number of lab tests is also very high. A total of 605840 lab tests were carried out. In which 181780 were in Gilgit, 275060 were in Skardu, 51100 were in Diamer, 65970 were in Ghanche, 11280 were in Ghizer and 20650 were carried out in Astore. Table 7 shows lab tests during 2009-11. X-Rays are lab tests are essential constituent of treatment process without it, treatment cannot be reliable, especially, in the cases of sever nature such as accidents, heart attacks, brain hemorrhage and Bronchitis.

These figures are quite high. Total 27 X-ray machines are available in different hospitals of Gilgit-Baltistan. This shows huge burden on X-ray machines. This has also become the core reason of deteriorated quality of X-Rays. The outcomes of these machines are not reliable. The same is the case with lab tests. Most of the equipments for laboratory are installed in either DHQ Hospitals or Civil hospitals. Only 5 DHQ Hospitals and 7 Civil Hospitals have laboratories where all lab tests are conducted. These numbers are too much for just 12 laboratories. By establishing a hospital with latest lab equipments and X-Ray machines installed, private investors can earn eye-catching profits.

9. Doctors to Population Ratio in Gilgit-Baltistan

In Gilgit-Baltistan doctors population ratio is 1:4403, where as in Punjab the ratio is 1:2187 in Srilanka doctor population ratio is 1:1400 India has 1:1600, UK has 1:360, Australia has 1:400 and Russia has 1:950.comparing the ratios of Gilgit-Baltistan with other countries , even with the other provinces of Pakistan. Table 9 shows the doctor population. It has become clear that Gilgit-Baltistan has very huge difference in doctor population ratio. Which is signaling towards an alarming situation in terms of shortage of doctors and quality of medical and health care services delivery? People in Gilgit-Baltistan have been feeling strong need of quality health care services, for which doctor population ratio needs to be pretty good to UK, Australia, and Russia. Government sector have capacity to cope with this situation thus by establishing the private hospitals, the target of doctors- population ratio can be achieved in Gilgit-Baltistan. Scenario clearly anticipates the availability of huge opportunity for private investors in health sector of Gilgit-Baltistan.

Health Indicators and Per Capita Expenditure

10. Health Indicators

In GB presently MMR is 600 per 10000 births, IMR is 75 per thousand deliveries, and less than 5 mortality is 122 per 10000 children. The annual growth rate is 2.56% only 34 % children receives full immunization. The contraceptive prevalence rate is 29.9. Only 22% of the population receives antenatal care while 28 percent of children get TT immunization.

Per Capita Expenditure

Per Capita Expenditure is another very important tool for determining the quality health care service delivery by calculating the ratio between total budgets allocated during the financial year and total patients treated. Gilgit-Baltistan is running very short of funds in terms of health care service delivery. During 2010-11, per capita expenditure was Rs. 227.5 which is very low as compared to other parts of the country and lagging far much behind as compared to developed countries.

$$\text{Per Capita Expenditure} = \frac{\text{Total Budget Allocated during financial year 2010-11}}{\text{Total Number of Patients in a financial year 2010-11}}$$

$$= \frac{430300000}{1891515}$$

$$= \text{Rs. } 227.5$$

The figure presented above shows that GB is lagging behind other part of country this is due to unavailability of health services for the masses of the area the figures need much improvement which could only be brought if private sector is engaged actively in health sector hence creating opportunities for private investment. The establishment of hospitals with the proper system of family health care services i.e. antenatal post natal care could very profitable initiative also the government spending on health is much low and there is a desperate need of finances to provide quality health care system to the masses of Gilgit Baltistan, This situation creates a very healthy opportunity for private investors to pay their attention towards this sector and take initiatives regarding investments in health sector Gilgit-Baltistan.

District Wise Schemes and Allocation of Budget

11. District Wise Development Schemes

During the financial year 2010-11, 10 schemes on GB level, 05 in district Gilgit, 03 in district Skardu, 03 in district Ghizer, 13 in district Diamer, 02 in district Astore and 01 in district Ghanche were being carried as a continuation of schemes approved under previous financial year. The situation of government budget release was even worse. The status of the health development schemes during the financial year 2010-2011 is presented in the table 11.

12. Budget allocation

During financial year the minimum budget required was Rs. 545 million where as only 444.8 million was allocated out of which Rs 401 million was released to the department. During the financial year 2010-11, the budged requirement for heads were 581 million, however only 430 million was allocated out of which 411.2 million was released. Table 12 and figure given below present the figures of the allocated budget in past two financial years.

Limited and less release of budget is one of the major constraints faced by the government health department that have impinged on the performance of the health service delivery system in GB severely, especially in the past half decade. Due to rapid increase in the prices of the medicines and surgical equipments, health expenditures have reached to the highest level; budget allocation on the other hand, has not been brought up in accordance with the pace of this increase in expenditure. The health sector has been unable to fulfill its own budgetary requirement which has raised serious concerns among the health care services providers, regarding carrying out health care services delivery to the masses. It has also affected the quality of health of health care services delivery process to a great extent. Taking advantage of this situation, private investors can make sound profits and healthy earnings by making investment for establishing health facilities where quality health care services could be delivered.

13. Cases Referred to down countries.

During 2011, 4464 patients of different diseases were referred to various hospitals of down countries. Out of which 162 cases of ENT, 1323 of cardiology, 1179of urology, 284 of trauma and orthopedics, 1470f cancer, 27 of gynecology and 413 other cases were referred. Table 13 presents referred cases below.

Huge number of patients are referred to down countries every year due to the unavailability of extended health care services and advanced Radiographic equipments and machineries such as MRI, CT Scan, Cancer Scanners, Angiography and Angioplasties etc. The patients have to bear heavy burden of traveling and accommodation expenses in addition to the expenditures incur on the treatment which costs them a lot. On average a cardiac patient have to bear Rs 4 to 5 lac for minor and 5 to 8 lace for the major operation procedures if patients travel to Karachi it rise up to I million. A handsome portion of these amounts involves transportation and accommodation expenditure between Rs 2-4 lace for normal operating procedures and 4-7 for major operating procedure. For neurological cases this amount is a bit high going to Rs 4-6 lace for normal operating procedure and 6-9 lace for complex treatment.

After analyzing the figures given, we become cognizant of the fact that there is very high trend in referred cases regarding cardio logical, urological and neurological diseases in Gilgit Baltistan. Due to unavailability of advance equipment and specialties required for these diseases areas patients of Gilgit Baltistan have to travel all the way to down countries, which involves heavy expenditures by establishing health facilities, equipped with latest and advanced machineries required for the treatment of diseases, private investors can earn handsome amount of profit.

5. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSION

Making profit is the key objective of investor or making investments. From business prospective, health sector is always been productive as attaining quality health care services is one of the basic needs of human being. Gilgit-Baltistan health sector is in primitive stages of development with a dire need of rapid growth in terms of modern technology and well trained human work force. This situation makes health sector a heaven for investors. Investment initiatives on different level could have different impacts.

Health is a key component of public service delivery, of any country. Provision of quality health care services has been main concern of government in Pakistan especially in Gilgit-Baltistan since last decade. Many institutions and health facilities including district hospitals civil hospitals, basic health units, dispensaries and MCH centre's have been established by the government in G-B to deliver health care services at primary and secondary level. NGOs and

international agencies have also been supporting government] in this connection, yet the overall health status could not be brought up to meet even national standards.

Primary healthcare status in G-B is better than secondary level health care due to contribution of private sector and support of international agencies such as WHO, AKHSP, NALC, JICA, Al-shifa Trust, Sehhat Foundation, and Maarifi Foundation etc.

During past ten years, cases of heart diseases, hepatitis, diabetes, gastrocntitis, lungs diseases, psychiatric disorders and neuro cases in G-B have been increased very rapidly. For the treatment of these diseases expensive machinery and equipments are required. Unfortunately, not a single hospital is equipped with this machinery to cater the need of the masses of the area. People have to travel all the way to down country for the treatment due to which they have to bear additional burden of heavy expenses incur in travelling and accommodation, which are estimated to be twice as much as the expense incur in their treatment.

Keeping in view the current situation of health sector, the government is taking initiative to encourage private sector involvement to strengthen health system in G-B. Private investors in health sector G-B have great opportunities for investment especially in secondary level health care service delivery as people are feeling a dire need of health institutions having quality treatment through modern technology and well trained staff as offered in cities like Islamabad, Lahore, and Karachi. Investment in health sector of G-B can lead to well productive consequences for both investors and masses of G.B.

RECOMMENDATIONS

Based on the facts and figures accumulated during this research study, following recommendations have been deemed to be essential for bringing in the investment to the health sector of Gilgit-Baltistan which could not only boost this sector but also play a vital role in the development of the area in general:

- It is strongly recommended that necessary measures should be taken to control law and order situation in the region to attract investors.
- There is a need to establish public private partnership to expedite the process of health development in the area.
- Awareness sessions with investors should be conducted frequently to present better image of economic environment of the area.

- The findings of this study should be used as evidence for an increased Government support to investment in health sector.
- There is a need to carry out a similar study in district and tehsil levels in order to analyze the issues related to health care service delivery.
- Develop effective communication mechanism with organizations such as Japan International Cooperation Agency (JICA), US AID, Aga Khan University Hospital (AKU), Marie Adelatte Foundation etc which are actively participating in health investments and funding.
- There is a need to bring more public investment in the area by initiating new health projects at commercial level.

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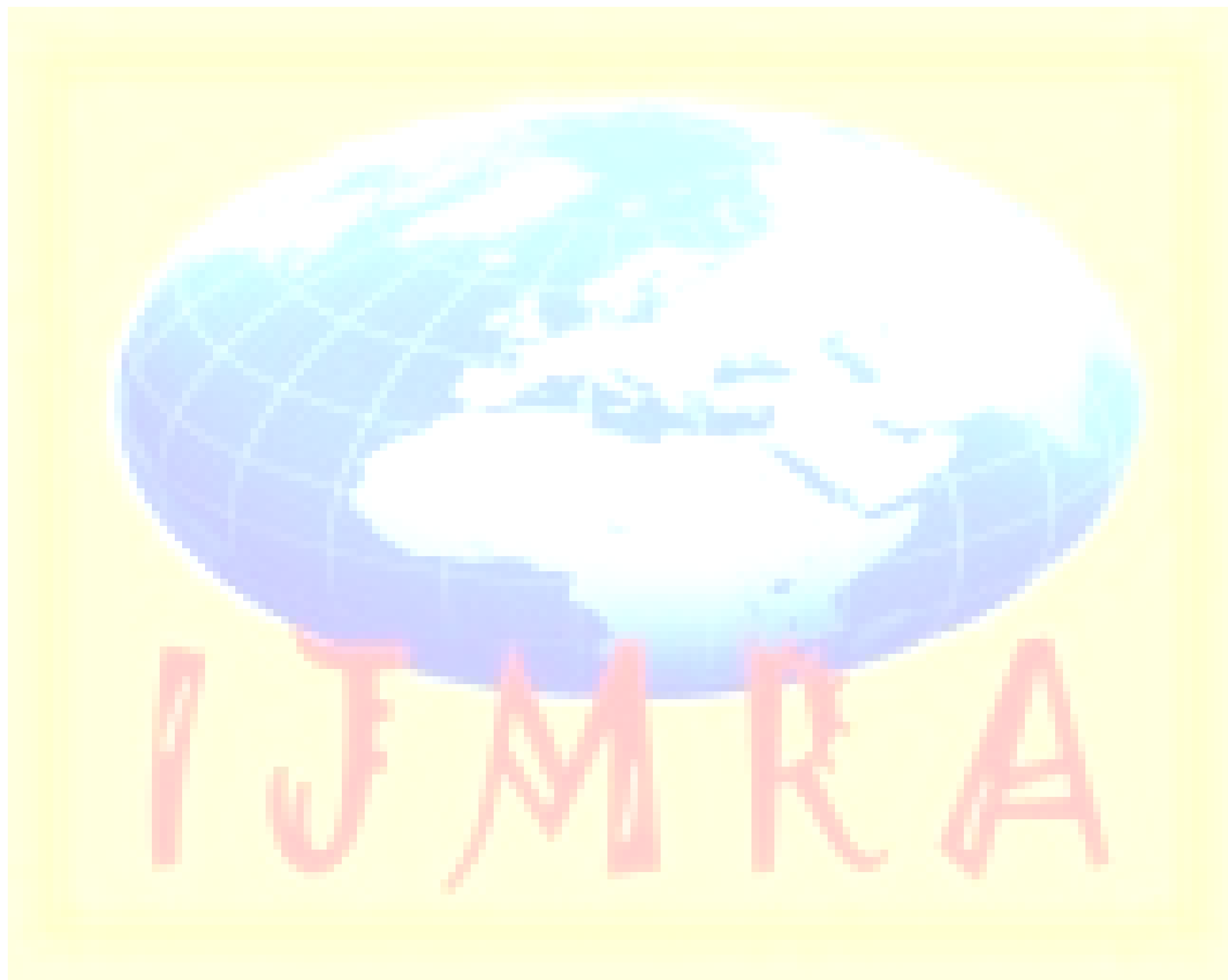

ANNEXURE- TABLES

Table 1: Health Facilities

Health Facility	Number	Beds
DHQ HOSPITALS	5	556
RHCs	2	50
BHUs	17	00
Civil Hospitals	22	210
Dispensaries	124	00
First Aid Posts	293	00
MCH Centers	55	00
Total	518	816

Table 2: Patients Burden on Primary and Secondary Health Care Facilities

Patients in primary health care facilities	Patients in secondary health care facilities
2411100	267900
90%	10%

Table 3: Indoor Patients 2009-11

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	236000	273000	150000	53000	5000	0	717000
DHO Health Facilities	8000	98000	6000	34000	3000	0	149000
Total	244000	371000	156000	87000	8000	0	866000

Table 4: Outdoor patients during 2009-11

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	987000	785000	296000	305000	168000	0	2541000
DHO Health Facilities	922000	766000	218000	712000	751000	102000	3471000
Total	1909000	1551000	514000	1017000	919000	102000	6012000

Table 5: Major operations

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	8350	5379	1447	0	0	0	15176
DHO Health Facilities	0	0	0	0	0	0	0
Total	8350	5379	1447	0	0	0	15176

Table 6: Minor operations

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	21000	25000	3000	13000	3000	0	65000
DHO Health Facilities	0	0	0	0	0	0	0
Total	21000	25000	3000	13000	3000	0	65000

Table 7: X- Rays during 2008-2011

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	50300	35600	23400	10300	9900	0	129500
DHO Health Facilities	16430	12980	4300	1550	4070	8480	47810

Total	66730	48580	27700	11850	13970	8480	177310

Table 8: Lab tests during 2009- 11

District	Gilgit	Skardu	Diamer	Ghanche	Ghizer	Astore	Total
DHQ Hospital	179600	259300	51100	46100	8800	0	544900
DHO Health Facilities	2180	15760	0	19870	2480	20650	60940
Total	181780	275060	51100	65970	11280	20650	605840

Table 9: Doctor's population ratio

Punjab	1.56042
Srilanka	1.01389
India	1.15278
UK	0.29167
Australia	0.31944
Russia	0.70139
Gilgit-Baltistan	3.09931

Table 10: Health indicators

key health indicators	Pakistan	G-B
Maternal mortality / 10000 births	272	600
Infant mortality / 10000 births	78	92
5 mortality /10000 deliveries	94	122
Annual growth rate	2.43%	2.56%
Fully immunized	47%	34%
CPR	33%	29.90%
ante natal care	28%	22%

Table 11: Development projects in different districts of G.B

DISTRICT	ONGOING	NEW
GB Level	10	0
Gilgit	5	0
Skardu	3	0
Ghizer	3	0
Diamer	13	0
Astore	2	0
Ghanche	1	0
TOTAL	37	0

Table 12: allocation of budget

Financial Years	Budget Demanded (M)	Budget Allocated (M)
2009-10	545	444.8
2010-2011	531	430

Table 13: Referred Cases

ENT	162
Cardiology	1323
Urology	1179
Neurology	179
Orthopedics & Trauma	284
Cancer	147
Gynecology	27
Other	413
Total	3714

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