

COST OF HEALTHCARE DELIVERY IN DISTRICT JHELUM VALLEY



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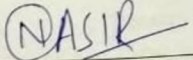


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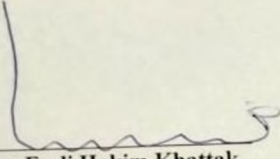
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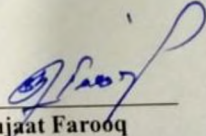
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Dedication to

My loving & caring mother, my husband, and children

Without their support, guidance, and prayers the

Completion of this research work was not possible.

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ABSTRACT

A health system can be defined as the systemic organization of specialized and capable individuals, relevant and resourceful departments and financial capital that provide the required healthcare services to individuals and communities. This study assessed the healthcare expenditures in the form of out-of-pocket spendings experienced by the people in District Jhelum Valley (JV). In this cross-sectional study, total sample size was 180 randomly selected patients for whom a questionnaire was designed with modifications adopted from Household Integrated Economic Survey (HIES). Main research question for this study is What are the costs of healthcare services paid by the people of Jhelum Valley and how that affects their access to available healthcare services in the district? Whereas Secondary data was obtained from the government budget sheets and other relevant documents. The study concluded that out-of-pocket payments are higher in the Jhelum valley because of the unavailability and high prices of essential medicines, food and transportation services. The study recommends construction of new as well as operationalization of the existing healthcare facilities by addressing the issues of governance, management, accessibility, demand and supply, and human as well as financial resources in order to promote health of the people of Jhelum Valley and The absence of a comprehensive, timely, accurate, and operational health information system. Inadequate DHIS implementation. Deciding based on a small amount of information. Medical technologies and drugs that are necessary A steady supply of high-quality vital medications for healthcare facilities and outreach workers is scarce. Drug regulation must be strengthened to ensure the quality of medicines obtained. Whereas access in equity and utilization of health facilities shall be improved through increase in overall District budget of health. In social Health Insurance Program (Sehat Sahulat Card) shall be launched in AJK particularly in Jhelum valley District.

Keywords: Cost of health care, Jhelum Valley, out of pocket payments

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LIST OF ABBREVIATIONS

AJK	Azad Jammu Kashmir
BHU	Basic Health Unit
DHQ	District Health Quarter
JV	Jhelum Valley
MDGs	Millennium Development Goals
OOPs	Out Of Pocket Expenditures
RHC	Rural Health Center
UHC	Universal Health Coverage

CHAPTER 1

INTRODUCTION

A health system can be defined as the systemic organization of specialized and capable individuals, relevant and resourceful departments and financial capital that provide healthcare services to individuals and communities. Health system includes how health care services are funded, systematized, and provided to the target population. It contains problems of access, adequacy, supply and demand. The sole purpose of the health system is to prevent diseases in the community and promote health of the population efficiently and effectively keeping in sight available resources and established as well as emerging challenges. At the dawn of 21st century, the healthcare system began to transform as most of the countries in the world began to take health of their population seriously. The recognition of health as the basic and fundamental right of every human being regardless of their color, caste and creed by the United Nations and the expansion of the definition of health by the World Health Organization by including mental and social well-being aspects along with the physical set the momentum for the health systems to widen their scope and evolve gradually. After these developments it became necessary to take into account the techniques, processes and shared values while examining any health system (Kulesher& Forrestal 2014).

The limitations and framework of any specific system are influenced by many factors namely characteristics of people whose health needs are to be met, the environment in which the health system is to be operated and the socioeconomic and political context which are the supporting blocks of any health care system . Hence the system of health would be different in different countries based on culture, socioeconomic conditions, and historical perspectives. Many countries focus to control all diseases while some focus to control on some specific diseases. In a nutshell, every government caters for the health of its population as per its perceptions of health, its priorities, its political insight and the aspirations of its people who are the end beneficiaries of the health projects and programs initiated by the governments concerned (Evans 2010).

A well-structured health system provides better health facilities to the people at the exact time whenever they need. The arrangement of health facilities is different in different states, but in all matters, a well-formed and strong economic structure or plan is required in all situations. Well-trained and qualified staff is needed as well as a workforce and a proper formal information chain is necessary for good policies and their outcomes and impacts. Besides these positives, the importance of better technology is needed for a good provision of health services (Ranson 2010).

The healthcare system has been evolving throughout the world. In Pakistan as well, higher expectations from health and political pressures and investigative media are helping the healthcare system to evolve from passive to active mode. Now and then electronic and print media are highlighting medical negligence on part of doctors, nurses, and technicians sparking protests and judicial inquiries into deaths and malpractices, and unethical practices in hospitals. The focus of government programs is always on disease and not the health of the individuals (Ejaz& Rizvi2011).

The public health sector remains largely ignored and there are few public health specialists as compared to clinicians on the curative side due to the large sums of money that they earn from private clinics and hospitals in the county where well-to-do and privileged communities come to seek healthcare services while the poor are left to run from pole to post seeking medical care and most of them getting trapped in the catastrophic health expenditures many of whom are coerced to sell their assets to pay for the huge bills incurred by the health systems. Ariffet al, (2010)

The government and the policy makers need to formulate a robust and smart health policy and strengthen the system of healthcare financing by incorporating the principles of equity, equitable coverage, efficiency, and cost-effectiveness in the system. Future projections estimate that by 2050, Pakistan will become one of the most populous countries with a staggering 285 million people. The public and private sectors of health are not integrated and there is no connection between them. The government has left the private sector to run unchecked and so some health mafia groups are earning millions and billions from the healthcare business. Studies show that Pakistan has a limited and small private health insurance sector catering to the needs of the elite (Niaz 2013).

Ironically and quite and disturbingly, the situation in the developing countries is such that the rich and the elite who control most of the country's resources somehow or the other succeed in registering for the health insurance schemes and they have access to the best private hospitals in the country as well while it is the poor of the country who are most in need of the health insurance schemes and safety nets. There have been no credible studies conducted about the acceptance of health insurance programs in the country and the government should conduct such studies to spread awareness as well as find people's inclinations and tendencies regarding social health insurance. Since 2005 the country has seen 5 micro health insurance programs out of which Adamjee health insurance program has been on the top, but their utilization and efficacy have never been well documented (Cheema et al, 2020).

There was a social health insurance program launched by the prime minister in 2015 and named as prime minister's national health insurance program which was later renamed as Sehat Sahooat card. The health sector in terms of health insurance has been evolving constantly and subsequent and successive governments have been experimenting with novel ideas of healthcare financing and healthcare insurance (Khattak, F. H. 2019). It is widely believed that the CPEC projects will bring good fortunes to the country by laying down roads and infrastructure throughout the country, enabling Pakistan to trade with the world through Gwadar port with the support of China. Once Pakistan is stable economically and controls and regulates the law-and-order situation then the policy makers will have enough time to contemplate devising better health policies and diverting large funds to run the social health insurance schemes and subsidize healthcare services at the local, district, provincial and federal levels (Mahumud et al, 2017).

With American and NATO exit from Afghanistan, it is hoped that bilateral relations especially trade relations with neighboring Afghanistan will improve dramatically and the cross-border infiltration and refugee issues will be addressed in due time reducing the burden of disease on Pakistani hospitals. Millions of Afghan refugees have been residing in Pakistani cities and thousands of Afghan refugees cross the Durand line to seek medical facilities in Pakistani hospitals. Most Afghan children are not Immunized and are carriers of polio as well as other diseases. For the eradication of polio from Pakistan it is mandatory to immunize all Afghan children in the country (Kassi et al, 2008). There is also the business of cheaper Indian medicines in the markets

and the government has been doing nothing about it. The low-cost Indian medicines lack efficacy. Regulation of medical doctors is another issue (Mazumdar-Shaw 2018).

There used to be Pakistan Medical and Dental Council to register and regulate medical graduates both local and foreign but it was marred by mismanagement, corruption, and lack of transparency so the incumbent government replaced it with Pakistan Medical Commission to solve the issues of medical and dental doctors as well as improve the quality of education in the medical colleges of the country (Kazim, 2007). Pakistan Medical commission is like old wine in new bottles because the Federal Medical College which is the only public sector medical college in the capital city of Islamabad (Khan 2020), and which is nearby Pakistan Medical Commission has been suffering from management issues, corruption and lack of basic facilities like clean drinking water for students and run-down washrooms and absence of proper lab facilities and medical equipment for the students (Ahmed 2008).

The faculty of the college has also been suffering due to lack of facilities and discrimination which has been rampant in the college since its inception in 2012. The incumbent government has been unable to appoint an elected representative to the post of Federal Minister for Health and hence the affairs of the Ministry of National Health Services, Regulations and Coordination (NHSR&C) have been run by an advisor to the prime minister who lacks experience and acumen to bring or implement reforms (Khan et al, 2007).

Despite the positions of Minister for health, Secretary for health, Director General for health, parliamentary Secretary for health, focal person for health, chairman of Senate Standing committee for health, the health sector remains neglected as there is no check and balance on these government representatives and officials. The parliament remains busy mudslinging and accusing the previous governments of all that is wrong with the country presently (Kurji, Z., Premani, Z. S., & Mithani, Y. 2016).

People are born, people get ill, and people die. Keeping this in view, health was supposed to be given the highest priority in policy and decision making but Pakistan has a class society which means some are too rich and others are too poor although the constitution of Pakistan mentions measures to be taken by governments not to let the rich become richer and not to let the poor become poorer. The rich avail medical healthcare services from private hospitals by paying out of their heavy pockets or they

choose to go to foreign countries seeking the state of the art facilities for themselves and their families mostly costing the national exchequer millions. Those who can legislate and change the system are the very people who are most apathetic to the aspirations and needs of the poor (Whitehead, 1991).

1.1. Background of the Study

Jhelum Valley (JV) is a district in Azad Kashmir. It is a 50-kilometer (31-mile) long valley surrounded by lush green mountains that run alongside the Jhelum River. Hattian Bala is the valley's main town and the district headquarters. This is an ideal valley for both domestic and international tourists. The river Jhelum flows from east to west through this valley, joining the river Neelum at Domel near Muzaffarabad (Muzaffarabad, A. J. K. 2005).

A 59-kilometer-long metal road runs along the Jhelum River from Muzaffarabad to Chakothi, which is located adjacent to the line of control (LOC). This route is frequently used by buses and wagons, and it is also used for trade between Muzaffarabad and Sri Nagar. The total population of Jhelum valley is 24,7021 and the Total Health Facilities are 36 with which DHQ, RHCs, AND BHUs are included. A total of 170 LHWs are working in this valley whereas 44 Vaccinators are working in the different campaigns (Directorate of Health, Muzaffarabad) (Nazeer, Q., Sardar, T., & Mashhadi, S. F. 2020).

The health care coverage of the district Jhelum Valley shows only 01 district hospital of 50 beds available for the 0.265 million population, 06 rural health centers of 72 beds and only 11 dispensaries of 22 beds is available for the population of district JV (Directorate of Health, Muzaffarabad).

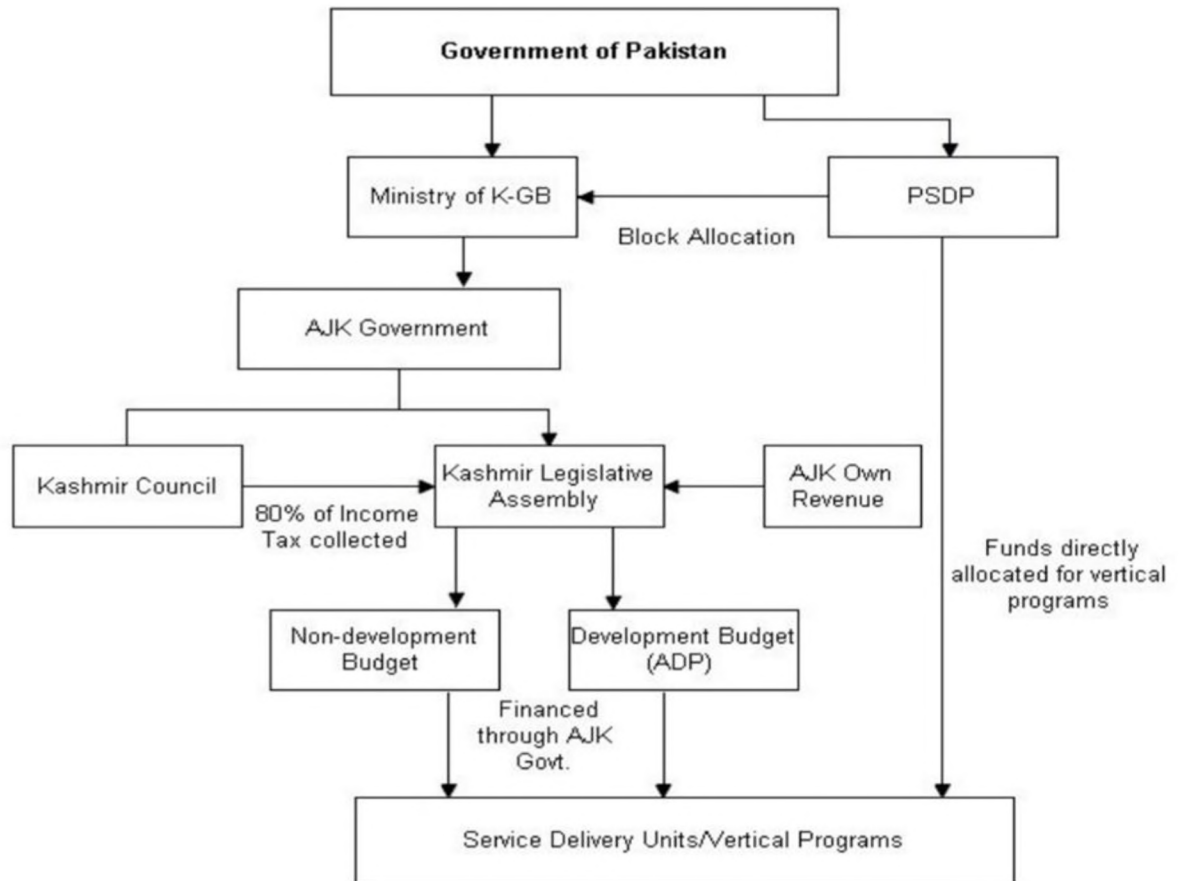
In Jhelum Valley, Azad Jammu & Kashmir health structure is facing several problems such as lack of funds, lack of coordination, and lack of qualified staff. Availability and accessibility of healthcare facilities is a big issue for the rural populations of the state due to the scarcity of healthcare experts and insufficient provision of healthcare resources for the population. A Reliable Health Information Management system does not exist at the Primary and Secondary levels of health care to appraise and advance the facilities. At the national level absence of medical research is the main reason to provide inferior facilities. A variety of factors contribute to it, including insufficient public healthcare funding, corruption, political meddling, and a

failure to hold people accountable for poor performance. In Pakistan, there are also significant barriers to providing high-quality healthcare. Population growth, poverty, and illiteracy, as well as a lack of community health education and poor sanitation and sewage, are examples of a double burden of disease, a vertical service delivery system, and the development of insufficient human resources in the health sector (Nazeer, Q., Sardar, T., & Mashhadi, S. F. 2020).

1.2. Funds Flow Process in AJ&K

Due to the unique status in the country of the AJK government, they possess distinct procedures and techniques which separate them from other provinces. The central government watches the matters of AJK and Gilgit through the Kashmir affairs ministry and Gilgit Baltistan (GB). The ministry of Gilgit Baltistan (GB) is handling all the matters of both regions and funds are also transferred through this ministry.

The AJK government finance structure is consisting of their revenue, Kashmir council support, and the funds from the central government (development & non-development) discussed in the budget of AJK (Adeney, (2012). The revenue of AJK is collected through taxes and charges which are imposed by the lawmaking assembly and collected by their identifiable means. It is the responsibility of the Kashmir council to supervise the collection of income taxes and also responsible to provide 80% of the fund to the legislative assembly for the budget (Farooq, M. S., & Kai, Y. T. 2016).

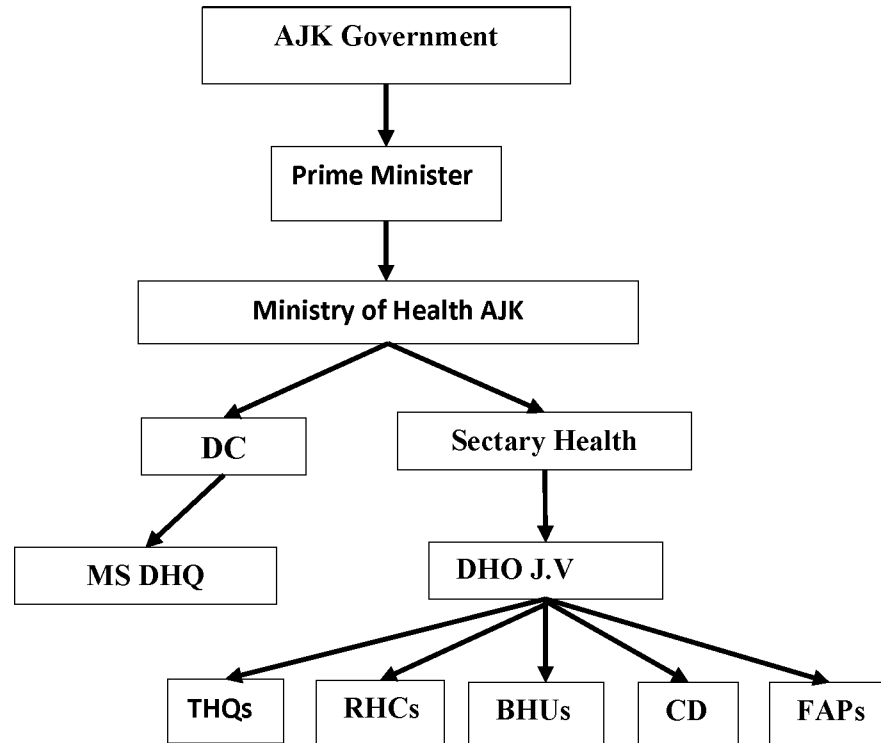


Source: Health Budget & Expenditure Analysis (2008-09 to 2010-11) Health Department (Government of Azad & Jammu Kashmir) District Governments in Azad & Jammu Kashmir

Figure 1: Funding Flow Process in AJK

The funds (development and non-development) were transferred from the central government by the Ministry of Kashmir Affairs and Gilgit Baltistan (GB). These funds are shifted to the government of AJK as block sum or as federal PSDP, which is latterly converted to an annual development plan.

The under facts show the share of the ministry of Kashmir and Gilgit Baltistan (GB) and funds of AJK in a percentage of the federal budget. The AJK fund was reduced for the federal budget from 0.63% in the fiscal year 2008 to 2009 to 0.59% in the fiscal year 2011 (Farooq, M. S., & Kai, Y. T. 2016).



Source: Health Budget & Expenditure Analysis (2008-09 to 2010-11) Health Department (Government of Azad & Jammu Kashmir) District Governments in Azad & Jammu Kashmir

Figure 2: Funding Process of Jhelum Valley, AJK

In the above figure fund flow of health for Jhelum Valley (JV) is shown. First AJK government transfers all funds to the ministry of Health with the approval of the prime minister further these funds are transferred to the district level with the help of the Deputy Commissioner and sectary health. In which Deputy Commissioner directly gives funds to MS of District Health quarter whereas sectary health gives directly to District Health Officer who further utilize and transfer all funds at Rural health centers. Basic Health Units, Civil Dispensaries, First Aid Posts. So, in that way, all budget of health is utilized in district Jhelum Valley (Farooq, M. S., & Kai, Y. T. 2016).

Table 1: Health Care information of Jhelum Valley

Health Facilities in Jhelum Valley				
S. No	Infrastructure	2019	2020	2021
1	Teaching/Other Hospitals	0	0	0
2	District Head Quarter Hospital (DHQ)	1	1	1
3	Tehsil Head Quarter Hospital (THQ)	0	0	0
4	Rural Health Centre (RHC)	6	7	7
5	Basic Health Units (BHU)	8	9	9
6	Civil Dispensaries	1	2	2
7	Mother & Child Health Care Centre	12	14	14
8	TB/Leprosy Centre	4	5	5
9	Dental Centre	1	2	2
10	Malaria Centre	1	2	2
11	Beds
12	First Aid Posts (Permanent/Temporary)	13	15	15

Source: Health Budget & Expenditure Analysis (2008-09 to 2010-11) Health Department (Government of Azad & Jammu Kashmir) District Governments in Azad & Jammu Kashmir

The healthcare facilities of Jhelum Valley are shown in this picture and it can be seen that there is no tertiary care or teaching hospital in the district. There is one DHQ present in the district but due to lack of facilities and amenities the number of doctors and staff is not sufficient as per the required health needs of the population. There is no THQ in the district as well. The number of RHCs however has increased from 6 to 7 in 2020.

Total BHUs are 9 in the whole district of JV and only 2 CDs are available, 14 Mother and childcare centers are available, TB centers are 5 in number, Dental centers are 2, malaria centers are 2, and total FAPs are 15. These health facilities are operational but there is a lack of HR and medical facilities.

Table 2: Human Resource

S. No	Human Resource	2019	2020	2021
1	District Health Officer	1	1	1
2	Additional Medical Officers	1	1	1
3	Senior Medical officer	5	6	6
4	Dental Surgeons	3	3	3
5	LHWs	170	172	172
6	Health Technician/MCH/LHVs	-	-	-
7	Drug Inspector	0	0	1
8	Pharmacist	1	1	1
9	Paramedics	103	103	103
10	Other Supporting Staff	103	103	103
11	Lady Health Supervisors	9	9	11
12	Nurses	0	0	0
	Total	12,350	12,536	12,542

Source: Health Budget & Expenditure Analysis (2008-09 to 2010-11) Health Department (Government of Azad & Jammu Kashmir) District Governments in Azad & Jammu Kashmir

In the above table, there is a complete detail of Human Resource in all health facilities of District JV, a total of 172 lady health workers are working whereas 11 lady health supervisors are working, and other supporting staff is 103 so if we look at overall demography of JV and its population this staff is not enough to provide health facilities.

1.3. Problem Statement

The budget of District Jhelum Valley (JV) is Rs, 207,925,000 in 2018-19. It includes funds for physical assets, FA posts, BHU, RHC, and DHQ hospitals. The population of District Jhelum valley is 238,698. The mortality rate 70/1000. The poor population in the valley are not capable to meet their health cost/expenditures. This study will help to identify the cost (OOPS), that will provide a base of budget to the government for meeting the health needs of the poor people in the Jhelum valley. This study will help in improving the quality of health care and in strengthening the overall health system

The analyses will assist the health service delivery system in Jhelum valley regarding access to quality of health care service delivery, and equity in access to health services to the JV population.

1.4. Significance of the study

Since the cost of health care is trending upward at a worrying rate in the developing world including Pakistan. Therefore, this research will consider the cost of health care from the patient perspective and identify the economic burden that is involved due to the treatment mainly in primary and tertiary level hospitals in district Jhelum Valley (JV). The study results may be useful in the allocation of hospital budgets, in developing a societal health assurance mechanism, and identify the economic burden of the health care delivery of the patient. It could further aid the government in its implementation of health insurance schemes and packages in the future to come.

Policy makers rely on high-quality information to make informed decisions. The need for information on which to base resource allocation is particularly pertinent to the health sector since health expenditure constitutes a large component of the annual government budget in many countries.

1.5. Research Question

What are the costs of healthcare services paid by the people of Jhelum Valley and how that affects their access to available healthcare services in the district?

1.6. Objectives of the Study

The overall objective of this study is to analyze the health care expenditures in District Jhelum Valley and fullfilling the financial gaps in the future and ensure access of the people to health care services at a reasonable cost.

1.7. Organization of the Thesis

This thesis is divided into five chapters. Chapter 1 is an introductory chapter that describes the main idea of the study i.e. Why this research has conducted, what are the objectives of this research, etc. Chapter 2 is about the review of the literature, which includes details, & information about previous studies onthe cost of health care. Chapter 3 is related to a methodology that is applied to find out the objectives and research questions that Chapter 4 is about the results of the study and Chapter 5th is about the conclusion, recommendations, and limitations of the study.

CHAPTER 2

LITERATURE REVIEW

The expenditures of the united nation on the health care system are very high as compared to other strong economic countries. Although the U.S is the first country without an openly sponsored widespread health structure, the U.S is presently expending more money on health care at all rather than two other countries. The people of America have less hospital admission ratio and fewer visits the hospitals, but they use highly advanced machines and technologies like magnetic resonance imaging (MRI) machines. The OECD data indicate that the government of the U.S.is spent 17.1% of the total GDP on health precautions in 2013. These expenditures are very high as compared to other countries like France spends 11.6% of its GDP on health and U.K. spends 8.8% of its GDP on health. (U.S. spending per person was equivalent to \$9,086 (not adjusted for inflation) (David, 2015).

As the English National Health Service is approaching its 70th birthday its founding principles of universal health coverage and being free at the point of access seem hard to sustain in the current decade. As NHS is facing its deepest-ever budget crunch so these principles are facing the threat. Under the current spending plan, annual real-term growth will average 1 % compared with a historic 4 %. The system is concurrently undergoing unprecedented pressure due to aging, growing population, and expensive treatment costs. (Mahiben, 2018).

The Bismarck Health Insurance Act of 1883 established the most comprehensive social health insurance system in the world. For 135 years, the German basic health insurance system has been based on the critical ideals of unity and sovereignty, and these morals have remained at the heart of its steady evolution. As of 2017, there has been a steady increase in population and attention has been focused on what is now universal health coverage with a substantial benefits package. Autonomy was initially applied to payers (sickness funds), but in 1913 it was extended to the interaction between sickness funds and doctors, resulting in the right of insured citizens to choose their healthcare providers freely. The right to choose one's health insurance fund was formally established in 1993, and over the last 25 years, reforms that promote competition and stronger market orientation have gradually gained prominence; these

reforms were designed and implemented to protect the principles of solidarity and autonomy.

The Federal Joint Committee was established in 2004 as a major institution of provider payers charged with developing universal rules for access and delivery of health care, benefit coverage, cross-sector coordination of treatment, quality, and efficiency. Under the supervision of the Joint Federal Committee, payer and provider associations ensured good access to high-quality health care without shortages or long wait times. In contrast, self-governance has resulted in an oversupply of pharmaceutical items, an increase in the number of hospitalizations and hospital stays, and issues with continuity across sectors. Given current spending levels, the German healthcare system is not as cost-effective as that of some of Germany's neighbors, indicating a need to improve efficiency and value for patients (Busse, 2017).

The healthcare system is built around mandatory and statutory health insurance, which provides nearly universal coverage and a wide range of benefits. In 2012, the healthcare system cost 7.7 percent of GDP, which was significantly lower than the EU average, with a relatively high proportion of 85 percent paid by public funds. Some critical health statistics, such as respiratory disease mortality, are better than EU averages, and even among the best in the world (in terms of infant mortality, for example). Death rates for circulatory system disorders and malignant tumors, on the other hand, are significantly higher than the EU average, as are a variety of health-care utilization rates, such as outpatient visits and the average length of stay in acute-care hospitals. (Alexa, 2015).

Following the death of Fidel Castro, it is appropriate to consider his legacy in terms of health outcomes. The most notable accomplishment of this diet, which was reported in a medical publication in the United States, is lowering the death rate of children and increasing their life expectancy. Champion and Morrissey (1993) and Cooper and Morrissey (2006) are cited by Cooper and Kennelly (2006). Some of the praise, we believe, is undeserved. Although the facts and data on health care in Cuba are generally reliable, statistical manipulation has resulted in an overemphasis on success. Furthermore, their authority stems from the system's repressive nature, which stems from other people's spending rather than the efficient delivery of health care.

Cuba's health statistics appear to be contradictory. Wealth is linked to health because more money can be spent on better health care. Despite this, Cuba appears to be in good health and remains impoverished. Cuba's life expectancy of 79.5 years and infant mortality rate of 4.3 per 1,000 live births compare favorably to wealthy countries such as the United States (78.7 years and 5.7 per 1,000 live births, respectively), but its per capita income of \$ 7,602.3 ranks among the lowest. The hemispheric economies. How can Cuba be healthy when it is impoverished? Most people blame Cuba's free healthcare system for this. This attribution is partially correct. With 11.1 percent of GDP spent on health care and 0.8 percent of the population working as doctors, a significant number of resources are allocated to reducing child mortality and extending longevity. An economy with centralized economic planning by the government, such as Cuba's, can direct more resources into one industry than its people would prefer to achieve better results in that industry at the expense of other goods and services that the public would prefer (Gilbert, 2017).

In 1949, the Chinese Communist Party established a state-run healthcare system, relying on community health workers to provide free primary care in villages across the country. The strategy has resulted in significant improvements in public health for the country's 1.3 billion inhabitants. Between 1952 and 1982, infant mortality fell from 200 to 34 per 1,000 live births, and numerous centuries-old plagues, such as schistosomiasis, a parasitic illness, were nearly eradicated. The government-funded "barefoot doctors" who were sent to rural towns across the country deserve a lot of credit. Following market reforms in 1984, the state stopped paying community health workers. A largely uninsured population is now forced to bear the disease's full economic burden. Health professionals were self-employed. The ensuing public outpouring resulted in yet another significant shift: China's healthcare system now provides modest but comprehensive health insurance to 95 percent of residents, who are served by a vast network of clinics. First-line therapy.

According to the most recent global disease burden report, India accounts for approximately 20.8 percent of the global disease burden and 24.6 percent of the disease burden in developing countries. The country's more than 400 million poor people bear the lion's share of the burden. Nearly all the health system's goals have yet to be met, including the equitable improvement of the poor's health status, the quality of care provided to them, and social and financial risk protection. These failures appear to be

governance and stewardship failures, as well as state and professional association failures to live up to their mandates. People's growing dissatisfaction with healthcare system corruption, as well as the failure of government and professional associations to control it, is frequently highlighted in the mainstream media and academic literature. The increasing frequency of violence against health care professionals and facilities attests to the same point.

In 2014, Iran's health system underwent a series of reforms known as the Health Sector Evolution Plan (HSEP). The HSEP was primarily based on the fifth and final five-year national health development strategies (2011-2016). It included various interventions to improve the quality of care in hospitals affiliated with the Ministry of Health and Medical Education (MoHME), reduce direct payments (OOP) for inpatient services, improve the quality of primary care, launch updated relative value units (DVRs) of clinical services, and update rates to more realistic values. The reforms elicited a wide-ranging social reaction as well as a range of professional outcomes. The public's satisfaction is demonstrated by the official monitoring program. Concerns have been raised about the programmers' long-term viability and funding equity. Decision-makers' primary concerns are the security of financial sources and the equity of financial contributions to new programs (Maziar, 2015).

Improving the quality of care in public health facilities in Bangladesh was identified as a persistent challenge in the Bangladesh Health System Health Systems in Transition (HiT) Report 2015. Recent international publications have emphasized the importance of improving public-sector care quality to stimulate private-sector improvement. By drawing on new ideas emerging from international thinking and research on the quality of care, this policy brief identifies potential policy opportunities in Bangladesh's changing health policy landscape (K 2017).

Pakistan is a developing country with an ineffective healthcare system. Only 27% of Pakistanis have full healthcare coverage, including members of the armed forces, beneficiaries, and government employees, with the remaining 73% paying out of pocket. The health profile of Pakistan reveals high maternal and child mortality, rapid population growth, and a double burden of infectious and non-infectious diseases. In contrast, the prevalence of infectious disease-related deaths decreased from 49.8 percent to 26.2 percent. Vaccination coverage has also significantly increased. Between 1990 and 2010, the total fertility rate decreased from 5.4 to 3.4 children per woman,

and the mortality rate for children under the age of five decreased from 124 to 87 per 1,000 births alive (AMBER, 2017).

In comparison to other countries in the region with comparable socioeconomic status and epidemiological profiles, Pakistan's health expenditure is low. Private healthcare spending accounts for most of the healthcare spending in Pakistan. Public spending accounted for approximately 33% of total health spending in 2005-2006. 1 Across the country, there were over 11,000 public health facilities in 2005-2006. 2 Managing these numerous health facilities on a limited budget has proven to be a significant challenge for Pakistan's health decision-makers. As a result, many health facilities lack basic supplies and other inputs needed for timely service delivery. The country has 572 RHCs, 5395 BHUs, and 4813 Dispensaries, BHU, and RHCs are primary care facilities (FLCF). A BHU is an outpatient basic health care facility with a doctor's office, whereas a dispensary performs the same function but via an ambulance driver or provider. The Rural Health Center provides outpatient and some hospital care in rural areas (Muhammad, 2015).

Pakistan is the world's sixth most populous country, with a population of approximately 180.44 million people. Pakistan is also a low-income, low-human-development country, with an index rate of 146. According to Pakistan's constitution, the provincial government is not responsible for health issues. The role of the central government is limited to developing state-level health policies and laws, as well as raising foreign funds to provide health services, organize public health, and educate the public. Pakistan's healthcare system is divided into two parts: public and private. Health care is primarily provided in Pakistan through health units and rural health centers. The Tehsil headquarters and district headquarters hospitals are secondary sources of health care, while hospitals located in large cities treat the most severe cases. In addition, the Pakistani army, railways, and airlines each have their health-care system for employees and their families (Hina 2017).

Due to Pakistan's public sector health system's under-performance, the private sector has grown and become popular in the delivery of health services, despite its questionable quality, high cost, and questionable medical ethics. The private sector is undeniably a reality, and it is working to address many flaws and gaps in healthcare delivery to Pakistan's poor. Despite this, due to a lack of state legislation, it is largely unregulated and uncontrolled. Despite its inherent profitability, the private sector has

played an important and innovative role in providing both preventive and curative services. The private sector has been very responsive in terms of building trust with Pakistan's health consumers, the majority of whom pay for "health" out of their own pockets. There is no doubt that there is potential to involve and involve private and non-state entities in the health system by strengthening their capacities and establishing regulatory frameworks to protect poor access to the health system (Babar, 2015).

The use of maternal care in rural Pakistani communities has been influenced by social, economic, and cultural factors. Many women's access to health care was hampered by their perception of poor quality of care in public hospitals. If maternal lives are to be saved, policymakers must devise strategies to overcome these barriers and make high-quality care available to women in rural communities (Rahat, 2016).

The study's findings revealed socioeconomic disparities in health-care utilization among Pakistan's urban and rural residents. This study demonstrated that this data could be used for decision-making and gender-sensitive programming in Pakistan. It also helps health advocates who use data to promote health reform. This study strengthens government decision-makers positions as they collect data to promote reforms and policies (Shafaquat, 2017).

2.1. Global Perspective

According to one estimate, global healthcare spending accounted for 8% of global income in 1990, or \$1700 billion in US dollars. Governments were blamed for 60 percent of the expansion, while the private sector was blamed for 40 percent. Governments in developing countries in Asia, Africa, and Latin America spent less than 2% of their gross domestic product (GDP), which is nearly half of the total amount.

Even though spending growth in the United States and most other countries has slowed in recent years, healthcare spending in the United States far outpaces that of other high-income countries. Even though the United States is the only country without a publicly funded universal health care system, the country spends more public money on health care than all but two of the other countries. Although Americans have fewer hospitalizations and doctor visits than other countries, they are more likely to use expensive technologies such as magnetic resonance imaging (MRI) scanners. According to the Organization for Economic Cooperation and Development (OECD) data, the United States spent 17.1 percent of its GDP on health care in 2013. This was

roughly half the amount spent by the second-highest spender (France, 11.6 percent of GDP) and nearly twice the amount spent by the UK (8.8 percent). In the United States, inflation-adjusted spending per person was \$ 9,086 (David, 2015).

The foundational principles of universal health care and accessibility, which the English National Health Service is approaching its 70th birthday, appear difficult to maintain in the current decade. These ideals are under threat now that the NHS is facing its worst funding crisis in history. Under the current spending plan, annual real-term growth will average 1%, compared to 4% in the past. As a result of aging, population growth, and high treatment costs, the system is under unprecedented strain (Mahiben, 2018).

The health-care system in Canada is cutting-edge. Even if a person does not have a health care card, all provinces and territories are required to provide them with free emergency care. The healthcare system is funded by public funds raised through taxes. The healthcare system is well-known for its openness and accountability. Despite sufficient resources, the healthcare system has an unequal distribution of doctors and nurses. Foreigners and tourists visiting the country must pay for their healthcare in publicly funded hospitals. Because Medicare in Canada has flaws, the government is attempting to regulate prescription medications by instituting pharma care.

The Czech health system is based on compulsory and statutory health insurance, which provides nearly universal coverage and a wide range of benefits. It accounts for 7.7 percent of GDP in 2012, which is significantly lower than the EU average, with the government covering 85 percent of the costs. Some critical health statistics, such as respiratory disease mortality, are better than EU averages, and even among the best in the world (in terms of infant mortality, for example). Death rates for circulatory system disorders and malignant tumors, on the other hand, are significantly higher than the EU average, as are many health-care utilization rates, such as outpatient visits and the average length of stay in acute-care hospitals (Alexa, 2015).

Following the death of Fidel Castro, political developments in Cuba provide an opportunity to examine his regime's legacy in terms of health outcomes. According to popular belief, Cuba's achievements in lowering infant mortality and increasing longevity are among the diet's admirable outcomes, a position supported by studies published in American medical journals (Campion and Morrissey 1993; Cooper and

Kennelly, 2006). It was also pointed out that some of the praise was unjustified. The health outcomes are related to the regime's distinct repressive nature, not too good healthcare administration; they also exaggerate achievements due to data manipulation. Furthermore, their power is derived from their distinct repressive nature, not from a plentiful supply of health care.

Cuba's health statistics appear to be contradictory. Wealth and health are inextricably linked because more incredible wealth can buy better health care. Despite this, Cuba appears to be in good health and remains impoverished. Cuba's life expectancy of 79.5 years and infant mortality rate of 4.3 per 1,000 live births compare favorably to wealthy countries such as the United States (78.7 years and 5.7 per 1,000 live births, respectively), but its per capita income of \$ 7,602.3 places it among the hemisphere's poorest economies. How can Cuba be healthy when it is impoverished? Most people blame Cuba's free healthcare system for this. This attribution is partially correct. With 11.1 percent of GDP spent on health care and 0.8 percent of the population working as doctors, a significant number of resources are allocated to reducing child mortality and extending longevity. A government with centralized economic planning, such as Cuba's, may direct more resources into the industry than its people prefer to outperform that industry at the expense of other goods and services that the people may demand more strongly in the year 2017 (Gilbert).

In 1949, the Chinese Communist Party established a state-run healthcare system, relying on community health workers to provide free primary care in villages across the country. The strategy has resulted in significant improvements in public health for the country's 1.3 billion inhabitants. Between 1952 and 1982, infant mortality fell from 200 to 34 per 1,000 live births, and numerous centuries-old plagues, such as schistosomiasis, a parasitic illness, were nearly eradicated. The government-funded "barefoot doctors" who were sent to rural towns across the country deserve a lot of credit. The secondary market is being reformed. In 1984, the state stopped paying community health workers. The disease's full economic cost has been pushed upon a mostly uninsured society. Health practitioners worked as independent contractors. As a result of the public outcry, China's healthcare system now provides modest but comprehensive health insurance to 95 percent of its citizens, who receive care through a huge network of clinics. Primary health care. The Chinese healthcare system is

dominated by Western medicine, although traditional Chinese medicine is also given appropriate significance (Blumenthal 2015).

Predictive, preventative, and personalized medicine are hallmarks of the Turkish healthcare system. Turkey's health has improved dramatically because of its location at the crossroads of Asia and Europe. When infant and maternal mortality rates were high in the 1990s, Turkey took steps to address the issue by allocating large sums of money to health, launching programs for child and maternal health, mental health, a balanced diet, and anti-smoking campaigns to raise public awareness about the importance of living a healthy lifestyle. There are 64 medical schools in the country, and there are significant incentives for doctors to work in their own country rather than emigrate to western countries in search of better living conditions (Stevenson, F. A., Cox, K., Britten, N., & Dundar, Y. 2004).

Singapore has one of the best healthcare systems in the world, but it cannot be replicated by other countries due to its unique characteristics. The four defining features of Singapore's health system are Medisave, a national medical insurance scheme, Medishield, a supplement to Medisave, Medifund, which provides funds to patients who fall short of Medisave, and Medishield funds, and Eldersshield, a health initiative for the elderly and disabled. Despite its recent independence, Singapore has emerged as a model country in terms of its institutions, trailing many other countries in terms of health and education (Bai, Y., et al 2008).

Spain has one of Europe's best healthcare systems. As a result of the two royal decrees, the healthcare system has been devolved to the ten regional communities, which are now authorized to administer their health systems. Infant and maternal mortality rates in Spain have decreased, and life expectancy has risen to the point where children born in 2005 and later can expect to live for up to 80 years. The Mediterranean diet is said to contribute to the long lives of the Spanish people. Doctor residency training programs are said to benefit the Spanish healthcare system (Bosch, X., Poch, E., & Grau, J. M. 2009).

With a population life expectancy of more than 82 years, New Zealand's healthcare system is centered on universal healthcare and is quite efficient. Although the healthcare system is not completely centralized, it does receive more public funding than private funding. Despite being a prosperous country, the country recently

experienced a hospital bed shortage because of a covid 19 pandemic. The country focuses primarily on the prevention of mental illness, diabetes, and cardiovascular disease. The health-care system compensates for workplace accidents and injuries. In contrast, the country does not provide pharmaceuticals and medicines that are available from private pharmacies. Indigenous Maori do not have the same access to healthcare as the rest of the population, resulting in some inequity in the health system. Only about 5% of the population in the country has access to private health insurance.

The Australian health-care system is one of the most efficient in the world, thanks to Medicare, which provides public hospitals, medical services, and pharmaceuticals to Australian and New Zealand citizens. Medicare covers nearly all the costs incurred in both public and private hospitals. The Pharmaceutical Benefits Scheme, which provides drugs to patients at extremely low prices, is a critical component of Medicare. There's also the Medicare Benefits Scheme, which lists all Medicare-covered healthcare services. It guarantees that if consumers reach a certain level of out-of-pocket healthcare spending, they will receive health services at a lower cost. The Australian government oversees overseeing the healthcare system, as well as monitoring and controlling its quality and effectiveness. It oversees overseeing the regulation of private health insurance. The aging population, as well as chronic diseases and health-related advancements and technologies, pose a challenge.

Kuwait is a country rich in oil, but its healthcare system falls short of expectations. Kuwait offers free health care to all Kuwaitis through its 20 public and 16 private hospitals. Some people prefer private health care facilities to public health care facilities to avoid long lines and wait times. The Kuwaiti government has responded by building new hospitals throughout the country. Sheikh Jaber Al-Ahmad Hospital is the largest in the Middle East. Kuwait's 2035 vision calls for the expansion of health service delivery, the raising of health standards, and the diversification of primary healthcare.

Tajikistan's healthcare system is in desperate need of reform. When the Soviet Union fell apart at the end of the Cold War, Russian doctors left Tajikistan, leaving a significant gap in the healthcare workforce. As a result of the country's poor drinking water quality, infant and maternal mortality rates increased, and cholera and typhoid epidemics were recorded. Tajikistan's government repealed citizens' right to free health

care through a constitutional amendment in 2003. A presidential initiative in 2005 doubled the pay of healthcare workers.

Jordan's high-quality healthcare facilities are propelling it to the top of the medical tourism rankings. Jordan's healthcare system consists of both public and private sectors. Most of the doctors at the hospitals were educated in Europe or America. Jordan's healthcare facilities are primarily concentrated in the capital, Amman, but the government is working to expand services to other parts of the country. The Ministry of Health regulates primary healthcare services and government hospitals. Jordan's healthcare system made headlines in 2010 when it implemented an electronic health record system. Patients travel from all over the world to receive treatment at the King Hussain Cancer Hospital, which is one of the best in the world.

France has an advanced healthcare system that includes both public and private hospitals, referred to as hospitals and Clinique, respectively. Over 23000 GPs work in primary care, with thousands more specialists working in hospitals. France is the poster child for universal healthcare. Everyone must register with a single General Practitioner, who is then authorized to refer his patients to specialists, nurses, or physiotherapists for further treatment. In most cases, the patient pays approximately 25 euros per visit, which is then automatically refunded by the insurance provider, resulting in a total cost to the patient of only 6 euros. GPs in France have decided to deliver healthcare services within the national framework. Patients are free to see whichever specialists they want, but each visit will cost slightly more. As a result of the country's aging population and the increasing pressure on hospitals from communicable and non-communicable diseases, the country's public health insurance program has faced some challenges in recent years. The government has raised the cost of treatment to meet rising demand and keep up with healthcare developments.

The Norwegian Health Economics Administration oversees and regulates the country's healthcare system. Patients must pay up to 210 dollars out of pocket before receiving exemption certificates allowing them to receive free treatment for the remainder of the year. Norway ranks fourth in the world in terms of healthcare spending per capita. There is a national insurance system in place. Individuals have the option of opting out of the national insurance plan instead of purchasing private insurance. In 2021, only 9% of consumers opt for private insurance, primarily to avoid having to wait for specialized procedures and surgery. Norway has also recently

launched a Qualification program to engage jobless people by providing them with skills and knowledge, with most participants finding employment within four years. Norway not only provides significantly subsidized healthcare to Norwegians, but it also ensures their employment, allowing the public to afford the country's health insurance program.

The Unified Health System, which provides free healthcare to all patients regardless of caste, color, or creed, is at the heart of the Brazilian healthcare system. Brazil devotes a sizable portion of its national budget to health. The federal government is responsible for primary healthcare in Brazil, while the minister of health oversees the development and implementation of health policy. Since 1988, it has been a national law in Brazil that all citizens, including foreigners and international students, have access to healthcare. The Brazilian government prioritizes health as a constitutional right for all citizens in its health strategy. Taxes are collected by the federal and state governments to fund the overall healthcare system. It should be noted that Brazil spends 9% of its GDP on health care.

According to the World Health Organization, Italy's healthcare system is among the best in the world in terms of life expectancy and quality of life years. However, under-funding and overcrowding in public hospitals continue to be issued. In the last decade alone, over 10,000 doctors have left the country in search of better pay and recognition. In Italy, the National Health Service (NHS) is funded by revenue taxes and is available to all citizens. Primary healthcare and in-patient treatment are both provided for free in all 19 regions and two provinces of Italy. Patients, except for the elderly, pregnant women, and children, pay for diagnostic procedures and prescription drugs. The healthcare system prioritizes both the preventive and curative aspects of treatment. Italy possesses the highest life expectancy after Switzerland and Spain.

The Netherlands, formerly known as Holland, provides free healthcare to all citizens. A patient can spend up to 400 euros on his or her health in a year, with the government covering the rest. The government oversees healthcare, which is supplemented by private insurance companies. People who require intensive healthcare but cannot afford it are helped by the government. There are three types of hospitals in the Netherlands: university hospitals, general hospitals, and top clinical hospitals. For decades, a Mammography screening program has been in place to examine older women for early detection of breast cancer. 156 acute primary care units in the

Netherlands provide primary healthcare services 24 hours a day, seven days a week. The Netherlands has consistently ranked first in the Euro Health consumer index due to its efficient health personnel and service delivery. When compared to other countries, the time it takes to receive healthcare services, particularly surgical care, is shorter in the United States. The Dutch government has made it mandatory for all citizens to have health insurance.

The Ministry of Health and Social Affairs oversees and regulates Sweden's decentralized, universal healthcare system. The health-care system is publicly funded, and the facilities it provides are adequate, resulting in a high life expectancy for individuals and a reasonable level of population well-being. For those under the age of 23, dental care is free; after that, they must pay out of pocket. The health system is divided into three levels: national, regional, and local. The country's healthcare system has recently come under fire for treating its citizens unequally in terms of healthcare services and delivery. Sweden is technically the best in Europe, according to the Euro Health Consumer Index 2015, ranking tenth.

The constitution of South Africa (Section 27 of the Bill of Rights) ensures that everyone in the country has access to health care. It spends more than 9% of its GDP on health care. The provinces oversee primary healthcare, whereas the federal government is only in charge of policy-making and deliberation. The public is served by 400 provincially regulated public hospitals and 200 private hospitals. The National Health Department oversees ten major hospitals. The government is considering establishing a National Health Insurance Fund to address the problems caused by recent events and to bridge imbalances across the country's many social strata.

Nigeria had a very good healthcare delivery system in the 1970s and 1980s, but in the last decade, the country has been experiencing its worst health crisis, with more than 70% of people paying for their health care, which is proving disastrous for many. Even though the then-presidents and prime ministers issued a proclamation known as the Abuja Declaration in 2001 mandating that at least 20% of GDP be allocated to health, successive governments did not follow the Abuja Declaration and allocated less than 10% to health during their tenures. There is a severe shortage of medical personnel, with only 0.38 doctors for every 1000 patients, which is woefully inadequate. Maternal and infant mortality rates remain high, despite National Development Plans dating back to 1969. The health system is currently plagued by dilapidated hospital buildings, a lack

of lab facilities and equipment, a lack of health workforce training programs, frequent doctor and nurse strikes, and a lack of government funding to resuscitate the dying health system.

The ravaged healthcare system in Somalia is in shambles because of civil wars and regime instability. Even though more than 3 million people require immediate medical attention, Somalia spends only \$33 per person on health. The resources are unequally distributed, and access to healthcare is severely limited. Malnutrition affects children and women, and vaccination coverage is extremely low, resulting in population epidemics. There is no safe drinking water or a working health system to serve the population. Sexually transmitted infections, typhoid fever, cholera, anemia, and jaundice are all common. As evidenced by the recent Covid-19 outbreak, which highlighted the system's flaws, the healthcare system is in poor shape. Some private facilities are available to those with financial means in some places, but the poor in rural areas are ignored and denied even basic health services such as maternity and child health. As a result, maternal and newborn mortality rates remain high.

2.2 Pakistan's perspective

Green et al. (2001) reported a 218,960 PKR average annual recurrent expenditure on BHUs in Balochistan (5,616 USD).⁹ At 2005 prices, this would cost 390,077 PKR (6,539 USD), which corresponds to a ratio of 2: 5 of the recurring annual average. According to current estimates, the cost of BHUs is PKR 950,727 (the US \$ 15,938). Current estimates of the cost of primary health care could not address the reasons for a cumulative increase in the recurrent costs of BHUs compared to previous cost estimates. Between 1995 and 2005, the level of BHU staffing and other inputs are likely to have differed or changed in Baluchistan and KPK / FATA. Anand and Kapoor et al. (1993) reported a \$ 0.918 (\$ 1.31 at 2005 prices) cost per OP visit to an Indian primary health care center. Green et al 2001 reported a recurring cost of PKR 66 (1.69 USD) (USD = 38.99 PKR IN 1996) per visit to BHUs in 1996-97. At 2005-06 prices, this would cost \$2.1. In this study, the average recurring cost per OPV was found to be closer to the cost per OP visit to rural health centers in Tanzania (USD 4.82) and the cost per visit to rural health centers in Indonesia (USD 4.82). (3.48 USD). The current study's average recurrent cost estimates were nearly twice as high as Green et AL recur rent's cost estimates (2001). The average total cost in this analysis is nearly six times higher than the fees of a general practitioner in the private sector in 2005-2006. According to Future Group (1997), wages account for 70% of the overall cost of primary health care in Pakistan, while non-wages account for 30%. In 1996-97, Green et al., 2001 discovered recurrent costs of 86 percent on wages and 14 percent on non-salary items.

Between 1995 and 2005, the salary share increased slightly, rising from 86 percent to 90 percent. This analysis provides critical information for examining Pakistan's PHC policy in the context of the strategy to improve the non-salary budget of basic health facilities. The Social Action Program (SAP) was established to improve the delivery of social services in Pakistan. One of the program's objectives was to increase the non-salary budget for primary health care by 15% per year. Between 1993 and 1997, the initiative was successful in increasing the non-salary budget's share from 25% to 29%. Non-salary expenses, on the other hand, fell in line with the SAP -II period, which ended in 2004. The study's findings show that the SAP's budgeting strategies have not resulted in additional non-salary assistance for BHUs (Malik 2015).

Green et al. 2001 published a paper that established a standard for the cost composition of primary health care facilities, including BHUs. ⁷ For BHUs, they advocated for a salary and non-salary share of 49 percent and 51 percent, respectively, as well as a budget improvement based on the same criteria. Based on the cost composition in this analysis, an increase in the non-salary budget for primary health care may be suggested. However, it is critical to carefully consider the determinants of health research in BHUs. The cost estimates in this document were unable to provide information on the actual availability of resources in BHUs for the 2005-2006 fiscal year. Poor utilization and the resulting high cost per OPV, on the other hand, reveal the issues that have hampered BHU visits. Staff presence and supply availability, at least to the extent of claimed spending, could have influenced BHU usage patterns.

2.3. Implications

If, for example, low-income families are less likely to obtain private insurance, the impact of rising health-care costs on EBPI availability and enrollment may differ depending on family income. EBPI (employer-based insurance) is more likely to be canceled. Similarly, if employed low-income workers are more likely to be offered or choose high-deductible or low-benefit plans, the impact of increased costs on OOP spending may vary depending on family income (Dick et al., 2012).

Health care systems influence labor market participation, productivity, and human capital formation, as well as the overall macroeconomic consequences, through a variety of mechanisms. They also have a significant impact on inequity, and inequity in healthcare access is particularly severe in roughly one-third of EU countries, necessitating legislative solutions. Discussions about healthcare systems must take into account both the opportunity cost and the economic value of healthcare investments. A strategy like this can help policymakers resist the urge to return to the status quo, which may be ineffective. Darvas and colleagues (Darvas et al., 2018).

2.4. Summary

A strong and functional healthcare delivery system combines primary, secondary, and tertiary care and necessitates a mutually beneficial and symbiotic relationship. Such integration and a variety of solutions could be designed and implemented to improve the healthcare delivery system.

Restructuring the inefficient system from the federal to the district level is one of the improvements in the primary health care sector's goals. The health system includes leadership, service delivery, technology, the health workforce, health care funding, and research. Monitoring and evaluation are critical for ensuring access and high-quality services.

The goal of social health insurance is to improve the efficiency, accountability, and responsiveness of the healthcare system. In Pakistan, the trend has been to spend the least amount of money possible on development, education, and health. Despite the World Health Organization's recommendation that members spend at least 5% of their national budget on health, Pakistan invests less than 2% of its national budget in health. Although Pakistan spends 80% of its health budget on tertiary care institutions, developed countries spend most of their health budget on preventative measures such as public health initiatives and preventive medicine programs, societal awareness, and health education. Only 15% of Pakistanis seek treatment in tertiary care hospitals.

Despite this, 15% of the budget is dedicated to primary care, which is used by 80% of the population. There is no formal referral system in the country. Most people seek medical treatment directly from tertiary care hospitals, avoiding primary and secondary healthcare facilities and hospitals. Donor agencies contribute additional funds, but there are always strings attached, and the funds are primarily allocated to a specific disease or vertical programs, such as the National Tuberculosis Control Program, HIV/AIDS Control Program, Malaria Directorate, and Polio Program.

Foreign funds vary in quality, threatening the long-term viability of health projects. Successive governments have falsely claimed that they increased the health budget and that things would improve, but the facts show that their promises and pledges were broken. Some population control and family planning programs were launched, but they failed due to government neglect and inattention, inefficient and

inexperienced staff, corruption, and malpractices, and the growth rate remained at 2.5 percent. Rising healthcare costs, general inflation, and unemployment, as well as a lack of political will, have dissatisfied the majority of citizens, particularly the youth. When citizens complain about the government's corruption and inefficiency, the government successfully shifts the blame by referring to the problem as the "5th generation conflict."

The current administration must identify high-risk groups in the community and provide safety nets for them so the poor to access healthcare without losing their assets. Health policy should be changed to improve health services in terms of responsiveness, timeliness, adequacy, acceptance, and accessibility, and the government should allocate at least 8% of GDP to health. Every child has the right to health, and constitutional changes should be made to protect the health of the population. In addition to cost-effective healthcare programs, the government must invest in infrastructure. Improving bilateral ties with neighboring countries will boost trade, lower inflation, and lower unemployment in the country.

In comparison to other countries with similar epidemiological profiles to Pakistan, the use of health services at Basic Health Units is quite low. Salaries for doctors and paramedics, particularly in primary care, must be increased so that health workers can be deployed in remote areas. To prevent brain drain, a national policy requiring all doctors to serve for at least 5 years in the country, preferably in rural areas, should be implemented. Government programs should be launched to provide ongoing training and capacity building for the health workforce. Health education should be made mandatory. To improve vaccine coverage, the compulsory immunization bill should be extended to all provinces and districts across the country. To protect children and expectant mothers from vaccine-preventable diseases, new vaccines such as MMR should be added to the national immunization schedule. Because preventative medicine has been a neglected subject in Pakistan, public health should be given the power and importance it deserves.

CHAPTER 3

QUALITATIVE ASSESSMENT

3.1. Introduction

A health system can be defined as how health care is funded, systematized, and provided to the population. It contains problems of access (to whom and to what services), costs, and funds (health workers and facilities Jhelum Valley (JV) is Azad Kashmir district. It is a 50-kilometer-long (31-mile-long) valley surrounded by lush green mountains that run alongside the Jhelum River. Haitian Bala is the valley's main town and district headquarters. According to the health care coverage of the district Jhelum Valley, the health of 0.265 million people is cared for by a single hospital with only 50 beds, six rural health centers with 72 beds, and 11 dispensaries with 22 beds. Muzaffarabad Directorate of Health.

In Jhelum Valley, Azad Jammu & Kashmir health structure is facing many problems such as lack of funds, lack of coordination, and lack of qualified staff. Availability and accessibility of health facilities is a big issue for the rural people of the state due to the issue of severe scarcity of healthcare experts, and insufficient resources provided for the Prime Healthcare sector. Unswerving Health Information Management system is not existing at the Primary and Secondary levels to appraise and advance the facilities. At the national level Absence of medical research is the main reason to provide inferior facilities.

I have interviewed in the concerned department of Health “**Ministry of Health**” and “**Expanded Program on Immunization AJK.**” The discussion was based on the following questions.

3.2. Qualitative Research Questions

- How Essential healthcare services can be strengthened at the elementary and secondary levels.
- What are the common barriers to health care services in Pakistan? Health is becoming a top priority around the world on the other hand why the health sector in AJK's Jhelum Valley is in critical condition?
- Why do the DHIS tools contain flaws that prevent the recording of some

critical MNCH indicators?

- What is the reason behind the absence of a comprehensive, timely, accurate, and operational health information system in JV and Pakistan?
- What are the hurdles that stop developing countries from designing standard health policies?
- What is the estimated health cost per year in JV?

3.2.1. Responses of Expert

Pakistan's healthcare system is in the developing phase and consists of public and private sectors. Both modern and traditional medicine are practiced and there is considerable participation from non-governmental organizations (NGOs) and other donors and partners. All these components of the healthcare delivery system have consistently provided excellent care to those in need. Of course, the extent and quality of care are still in question. Nonetheless, health-seeking behaviors as well as a variety of other factors such as trust, perceived quality, access, cost, provider's gender, and so on have influenced the use of various healthcare systems. When any of these characteristics is lacking, the result is an inefficient use of public services as has been the case in Pakistan for decades. Lacunae and loopholes left by the public sector allow the private sector to thrive, thereby gaining the trust and confidence of clients. The healthcare system has been evolving throughout the world. In Pakistan as well, higher expectations from health and political pressures and investigative media are helping the healthcare system to evolve from passive to active mode. Now and then electronic and print media are highlighting medical negligence on part of doctors, nurses, and technicians sparking protests and judicial inquiries into deaths and malpractices, and unethical practices in hospitals. The focus of government programs is always on disease and not the health of the individuals (Ejaz & Rizvi 2011).

People are born, people get ill, and people die. Keeping this in view, health was supposed to be given the highest priority in policy and decision making but Pakistan has a class society which means some are too rich and others are too poor although the constitution of Pakistan mentions measures to be taken by governments not to let the rich become richer and not to let the poor become poorer. The rich avail medical healthcare services from private hospitals by paying out of their heavy pockets or they choose to go to foreign countries seeking the state of the art facilities for themselves

and their families mostly costing the national exchequer millions. Those who can legislate and change the system are the very people who would become the first casualty if they do so, so why would they bring any change at all when they will be the first to suffer the labor pains of change.

3.2.2. Health Services

Health services are insufficiently provided in Pakistan's outlying areas due to a lack of adequate healthcare infrastructure. Hospitals are not well equipped to advanced levels, and healthcare centers are not fully functional because of various influences and a severe lack of government funding. Public healthcare institutions that deal with critical health issues are frequently concentrated in major cities and towns. Because of the lack of these institutions and the high cost of transportation, impoverished people living in rural and remote areas are more likely to consult private doctors. In Jhelum Valley, Azad Jammu & Kashmir health structure is facing some problems such as lack of funds, lack of coordination, and lack of qualified staff. Availability and accessibility of health facilities is a big issue for the rural people of the state due to the issue of severe scarcity of healthcare experts, and insufficient resources provided for the Prime Healthcare sector. Unswerving Health Information Management system is not existing at the Primary and Secondary levels to appraise and advance the facilities. At the national level Absence of medical research is the main reason to provide inferior facilities.

A strong and responsive healthcare delivery system in primary, secondary, and tertiary care is a collection of mutually supportive and symbiotic relationships that integrate. These types of connections aided the healthcare delivery system in Jhelum Valley, AJ&K. A well-thought-out and implemented strategy is also required for the healthcare sector to achieve its objectives.

The primary goal of the healthcare reforms is to restructure the primary and secondary healthcare systems from the federal to the district levels. The building blocks of health care play an important role in improving the system. Leadership, service delivery, technology, health workforce, health care funding, and research are examples of building blocks. Monitoring.

3.2.3. Federal Government's Financial Resources

The federal government's control over financial resources, as well as the uncertainty in funding flow, is a significant impediment. Because of the current security situation, non-state actors and donor agencies are finding it difficult to provide services and fund critical initiatives. There is evidence that in tertiary care, health care service provisions like laboratories, beds, medicines, medical staff, and emergency services improve and sustain the health care system. But the JV hospitals are lacking in terms of laboratories, beds, emergency drugs, and health personnel. Patients due to the inefficient health provision bear high out-of-pocket health care expenditures because of being referred to other major cities in Pakistan.

On the one hand, health is becoming a top priority around the world; on the other hand, the health sector in AJK's Jhelum Valley is in critical condition. The majority of budget dollars are directed toward infrastructure rather than improving and sustaining health services. According to WHO standards, there should be at least one doctor for every 1,000 people, but there are only a few hundred doctors in the Jhelum Valley, which has a population of 247,021 million people. Similarly, there must be one dentist for every 7,500 people, but the JV has fewer than three certified dentists. The lack of drugs, supplies, and functional equipment was a frequent obstacle for the health facilities surveyed. None of the health facilities in Jhelum Valley have the full range of these items needed to perform the signaling functions. Items required for the operating room and blood bank were not fully available at DHQ Hospital.

3.2.4. District Health Information Software

The DHIS tools contain flaws that prevent the recording of some critical MNCH indicators. Because there was no space in the obstetrical register to record the second, third, or fourth antenatal appointments, they were all recorded as antenatal care visits. Similarly, no separate record was kept for pneumonia cases in children under the age of five who were treated in health facilities, and all data was manually entered. Some of the suggestions for improving JV's Healthcare sector are as follows Emergency services should be free, and Specialized care is required for DHQ should be there which is not visible. All basic and comprehensive Healthcare services should be available around the clock in all health facilities. There should be centralized procurement of the

medicines supply for DHQ, RHC, and BHU and its timely distribution should be ensured at all Health Facilities. Labs services should be updated because only a basic tests facility is available.

3.2.5. Budget Utilization and Provision of Health

There should be proper monitoring of Budget utilization and provision of health care facilities. It may be beneficial to shift away from a curative biomedical model and toward a more comprehensive and holistic methodology. Different aspects, such as climate, societal, and social perspectives, must be addressed concurrently to improve people's health. Policymakers adopt such policies, which are decentralized and delegated to districts, as they can make improvements and better realistic approaches to solving the problems faced in daily activities. More resources are required to develop district administrators' abilities. Capacity building is critical for understanding health concerns because the root causes of problems are not addressed during policy development due to a lack of adequate knowledge and a failure to incorporate feedback from the affected community.

All partners ought to be engaged with the preparation, direction, and execution of projects at all levels to guarantee the viability and sustainability of the projects. Better monitoring and evaluation mechanisms should be developed to provide useful and fair feedback to chiefs and implementers. Other important steps that can be taken to improve the health sector in AJK include: To resolve the JV health issues should control population growth and enhance the health budget to ensure that all the funds are properly allocated. Increase health literacy in the JV population, reduce corruption in public health projects, and promote health education. The exchange of human resources and information with developed countries is critical for the improvement of the health system.

It is a 50-kilometer (31-mile) long valley surrounded by lush green mountains that run alongside the Jhelum River. Hattian Bala is the valley's main town and the district headquarters. This is an ideal valley for both domestic and international tourists. The river Jhelum flows from east to west through this valley, joining the river Neelum at Domel near Muzaffarabad (Muzaffarabad, A. J. K. 2005).

A 59-kilometer-long metal road runs along the Jhelum River from Muzaffarabad to Chakothi, which is located adjacent to the line of control (LOC). This

route is frequently used by buses and wagons, and it is also used for trade between Muzaffarabad and Sri Nagar. The total population of Jhelum valley is 247021 and the Total Health Facilities are 36 with which DHQ, RHCs, AND BHUs are included. A total of 170 LHWs are working in this valley whereas 44 Vaccinators are working on a different campaign (Directorate of Health, Muzaffarabad) (Nazeer, Q., Sardar, T., & Mashhadi, S. F. 2020).

The health care coverage of the district Jhelum Valley shows only 01 district hospital of 50 beds only available for the 0.265 million population, 06 rural health centers of 72 beds and only 11 dispensaries of 22 beds is available for the population of district JV. (Directorate of Health, Muzaffarabad).

The central government watches the matters of AJK and Gilgit through the Kashmir affairs ministry and Gilgit Baltistan (GB). The ministry of Gilgit Baltistan (GB) is handling all the matters of both regions and funds are also transferred through this ministry. The AJK government finance structure is consisting of their revenue, Kashmir council support, and the funds from the central government (development & non-development) discussed in the budget of AJK (Adeney, (2012). The revenue of AJK is collected through taxes and charges which are imposed by the lawmaking assembly and collected by their identifiable means. It is the responsibility of the Kashmir council to supervise the collection of income taxes and responsible to provide 80% of the fund to the legislative assembly for the budget.

CHAPTER 4

CONCEPTUAL FRAMEWORK

According to this conceptual study, the main idea is to find out the cost of health care delivery in Jhelum Valley. It consists of 2 types Direct and Government costs and Patient Costs.

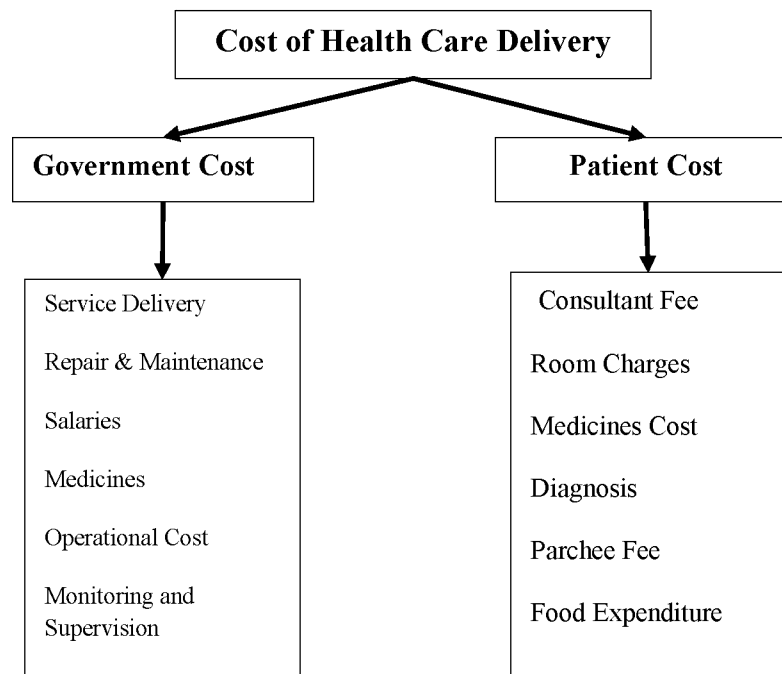


Figure 3: Conceptual Framework of the Study

Government cost consists of Service Delivery, Repair & Maintenance, Salaries, Medicines, Operational Costs, and Monitoring and Supervision whereas Patient cost consists of the following variables like registration or consultation fee and the transportation cost which a person bears while coming from home to hospital for treatment. Cost on food, medicines, and room charges during treatment or admission case.

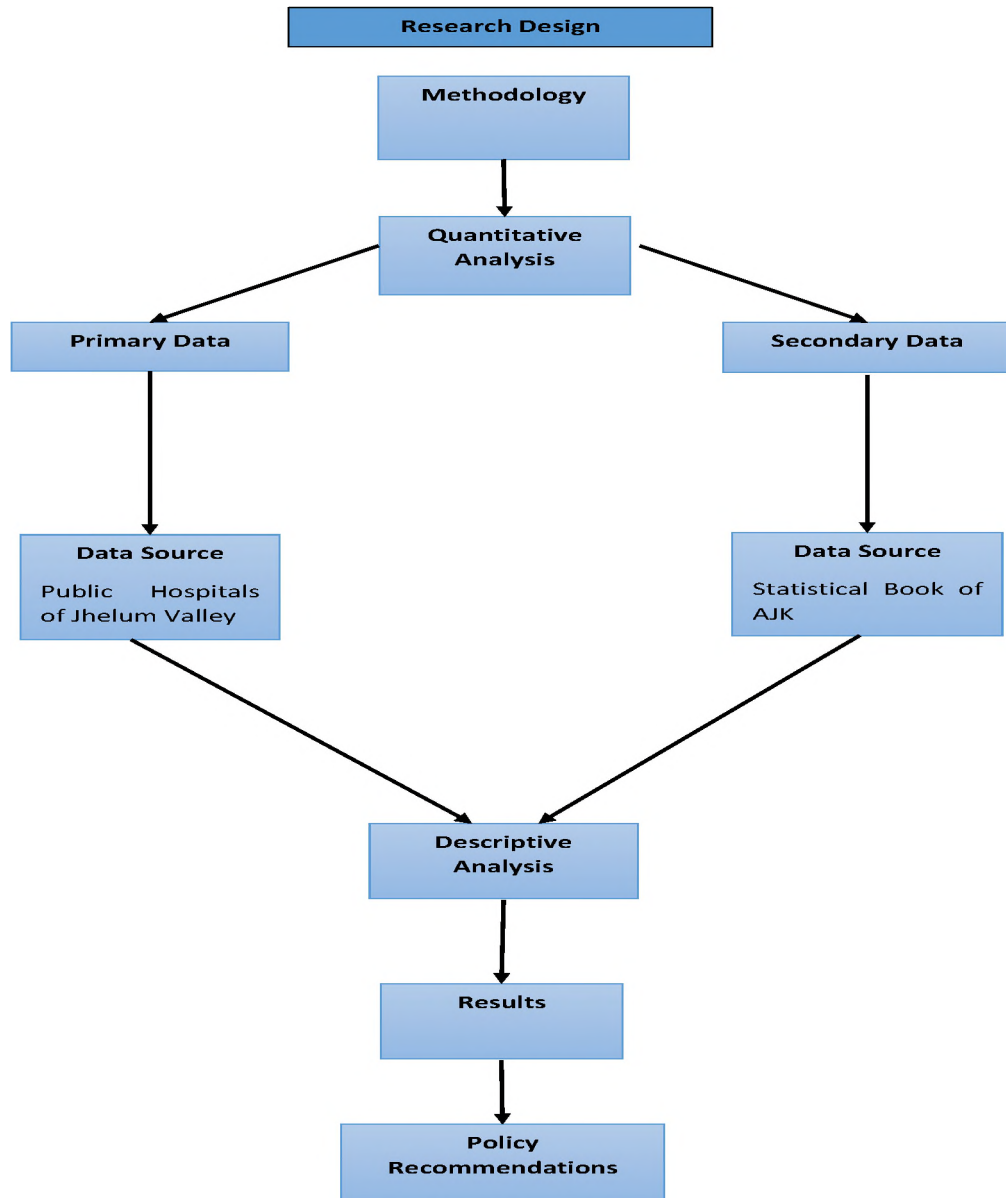


Figure 4: Research Design of the Study

In this study, the Quantitative technique is used for data collection. For this SPSS is used in which data is analyzed with a descriptive technique like frequencies and cross tab techniques are used for a quantitative part to compare primary and secondary data results whereas for primary data questionnaire was design and secondary data was obtained from government budget book and other related documents. The research design is shown in the above figure.

CHAPTER 5

DATA AND METHODOLOGY

This chapter is a very important section of this study as it defines the data collection methods and its methodology. The chapter explains which type of data is used either primary or secondary, detailed description of the variables used in the study. How are these variables estimated and calculated? Which type of economic theory and econometric model is used for the estimation and basis of these information findings and conclusion is to be made.

5.1 Data Collection Instrument and Description

5.1.1 Questionnaire

In this study, primary data is used through structured interviews. For this purpose, a questionnaire was designed, and this was a cross-sectional study. The total sample of the study is 180 and this sample size was simple randomly selected.

The questionnaire was designed with modifications adopted from two Pakistan national representative surveys Household Integrated Economic Survey (HIES).

In the questionnaire, the first section contains basic information about the household like age, gender, marital status, education, family size, and occupation. The second section includes the care expenditure of a household. Health care expenditures include inpatient & outpatients' costs of health care. Inpatient cost of the hospital includes Consultant fees, Room charges, Drugs, Diagnoses, Food, and Travel. Outpatient cost of the hospital includes Parchee's fee, Drugs, Diagnoses, Food, and Travel. (Variable details are given below table). This will serve as a baseline study and its findings/results will help make a policy to reduce out-of-pocket spending and hence, improve the economic status of the community.

5.1.2 Ethical Consent

Ethical approval for the research was obtained from the Health Department (PIDE). Official written letter by the institute gave to the hospital for data collection therefore, Permission was secured at all levels. After the Introduction of the enumerator, informed about the objectives and benefits of the research and its tentative findings

before the data collection. Moreover, ethical consent was taken from each respondent and this information was kept confidential in every step of data collection. The participants' names, addresses, and phone numbers were not required to write on the questionnaires. Dignity and respect for all the study participants adhered to, throughout the research. This information is used only for research purposes. This study was non-interventional, and it involved no invasive technique at all.

5.2 Methodology

5.2.1 Data

Primary and secondary data are used in this study which was collected through a structured questionnaire. Secondary data were obtained from the government budget book and other related documents

5.2.2 Study Area

District Jhelum Valley. Where health care units BHU, RHC, DHQ, CD, and FAP were assessed.

5.2.3 Unit of Analysis

Patients for primary data. For secondary data government budget book and related documents studied

5.2.4 Data Analysis Plan

Microsoft Excel was to analyze the data and generate results. Where detail was shown through tables.

5.3 Study Variables and Their Explanation

Table 3: Study Variables

Patient Prospective Cost components	
<p>Inpatient Cost per day at hospital level</p> <ul style="list-style-type: none"> • Consultant fee • Room charges • Drugs • Diagnoses • Food • Travel 	<p>Outpatient Cost visits at hospital level</p> <ul style="list-style-type: none"> • Parchee fee • Drugs • Diagnoses • Food • Travel
Government Prospective Cost components	
<ul style="list-style-type: none"> • Salaries of staff (Doctor, Nurses, Paramedical staff) • Medicine cost • Equipment and Furniture • Repair & maintenances • Utilities • Transportation / vehicle cost • Monitoring & Supervision 	<ul style="list-style-type: none"> • Operational cost <ul style="list-style-type: none"> ➤ POL Charges ➤ Stationary cost ➤ Daily charges • Miscellaneous charges

5.4 Explanation of the Variables

Table 4: Study Variables Explanation

S. No	Variables	Explanation
1	Parchi fee	Parchi fee is the fee to see the doctor & the admission fee is the fee to get admitted to the hospital.
2	Doctor fee	This includes the fee paid to the Doctor
3	Medicine costs in Hospital	Medicines cost during the hospital stay
4	Diagnostic tests	Tests to diagnose the disease include Laboratory & Imaging tests such as X-ray, CT scan, MRI,etc.
5	Food Expenditure	Patient food expenditure also includes accompanying person, mostly the person who stays or with the patient coming to the health care facility.
6	Cost of Surgery	Cost of surgery
7	Travel Expenditures	Transportation to and from the healthcare facility

CHAPTER 6

EMPIRICAL RESULTS AND DISCUSSION

This chapter has two parts. The first part of this chapter discusses the Descriptive analysis of important variables included in this study. The second part is related to Analysis while the third.

6.1. Patient Perspective Analysis

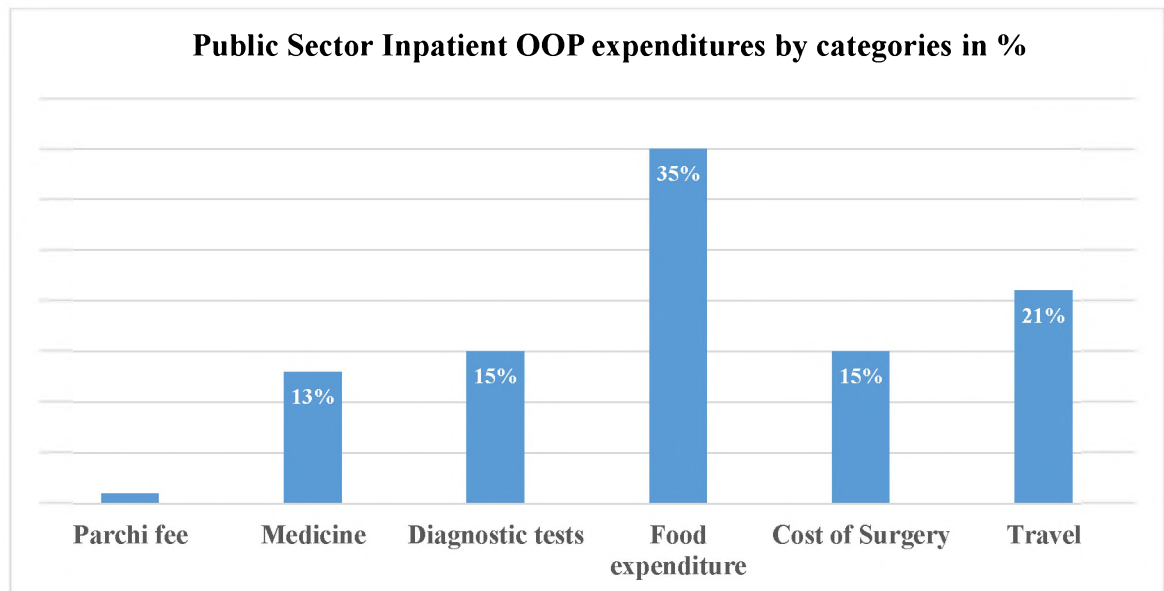


Figure 5: Public Sector Inpatient OOP expenditures by categories in %

The highest bar graph is about food expenditure. As when a patient gets admitted into a hospital at least one person from the family would also be there. So, they have to go outside to arrangement of meals. 2nd Highest is travel expenses. A patient could not come to the hospital on their own. They will have to arrange a vehicle for rent so that's why travel expenses are number two. Then diagnostic tests and the cost of surgery are at the same level because in remote areas not every surgery or diagnostic test is done. The graph for medicine is slightly lower as again in remote areas, not every medicine is available. Parchi fee is at lowest as in govt hospital.

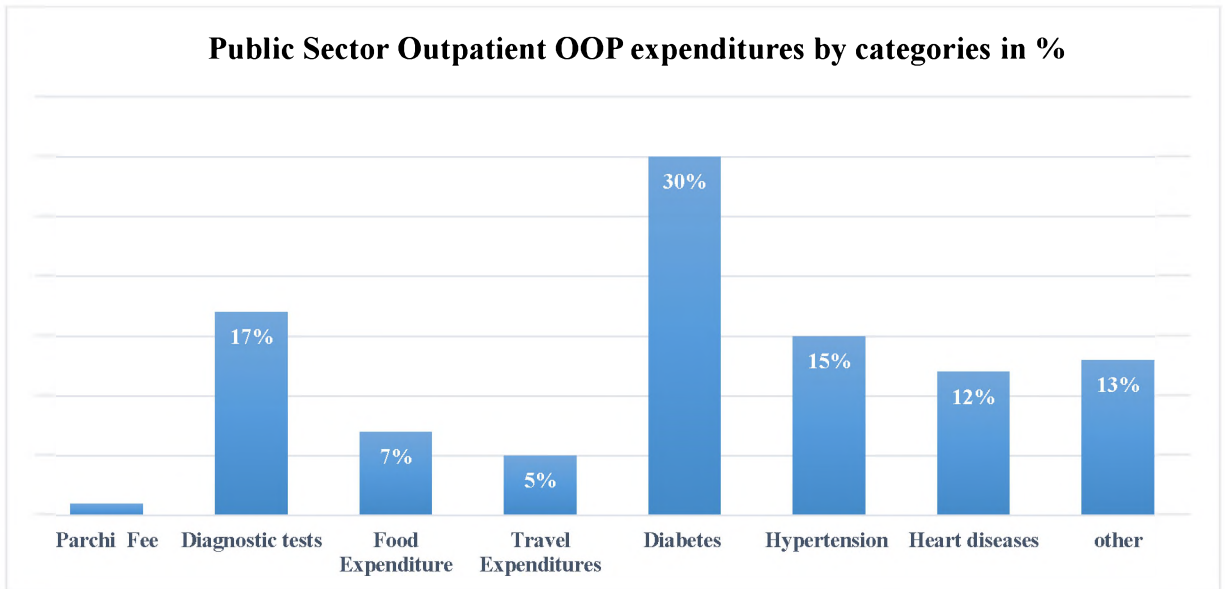


Figure 6: Public Sector Outpatient OOP expenditures by categories in %

The above graph is showing various types of data, and details. The highest bar graph is about diabetes. As diabetes medicines are expensive and the disease is very common these days, its graph is highest. 2nd Highest is diagnostic tests. As in remote areas, not every test is done so they must go outside for diagnosis. Then there are bar graphs of hypertension, heart diseases, and others. There is a very minor difference in these graphs which indicates that due to the remote area their graph is low. The food and travel expenses are at a low rate with 7% and 5% respectively because these patients don't get admitted to the hospital, so these expenses are at a low rate. Panchi fee is at lowest as in govt. hospitals charges are minimum.

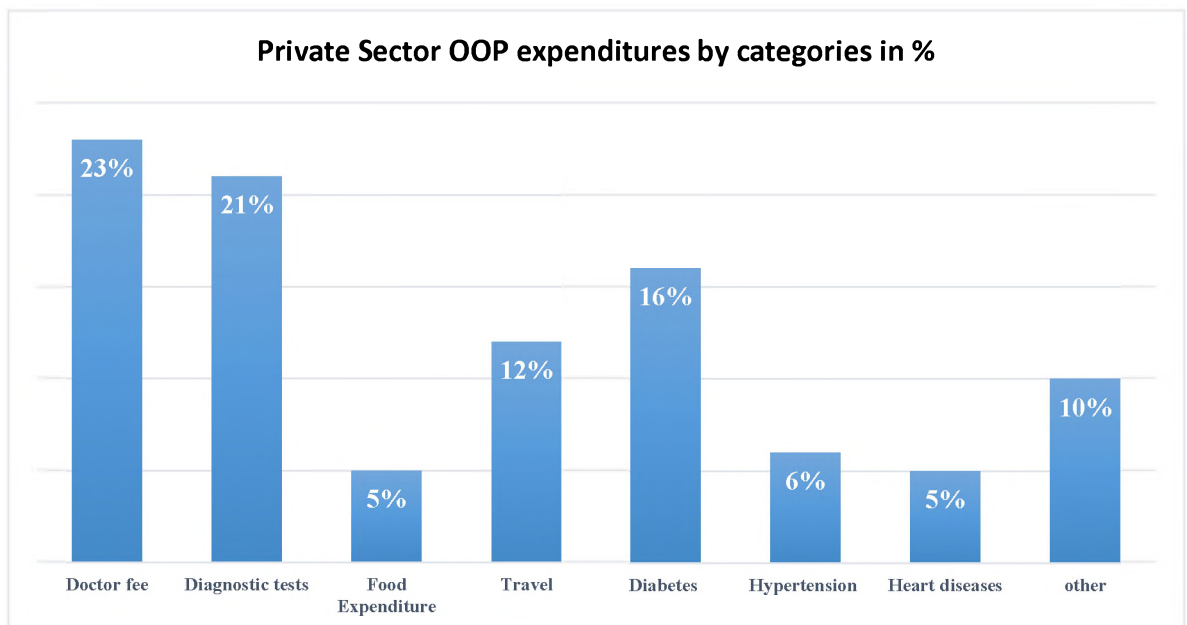


Figure 7: Private Sector OOP expenditures by categories in %

The highest bar graph is about doctor fees and diagnostic tests (Although there is a slight difference between them). In the private sector, both factors are at high rates. 2nd Highest is diabetes expenses as in the private sector its medicines and tests are expensive. Then at number three is travel expenses as private sector charges for ambulance service also so definitely travel expenses increase. Then there are bar graphs of hypertension, heart diseases, and others. There is a very minor difference in these graphs which indicates that due to very high charges not everyone can afford it. After that, there is a graph of food expenses which is low as compared to public hospitals because food items are normally expensive, and people try to avoid them.

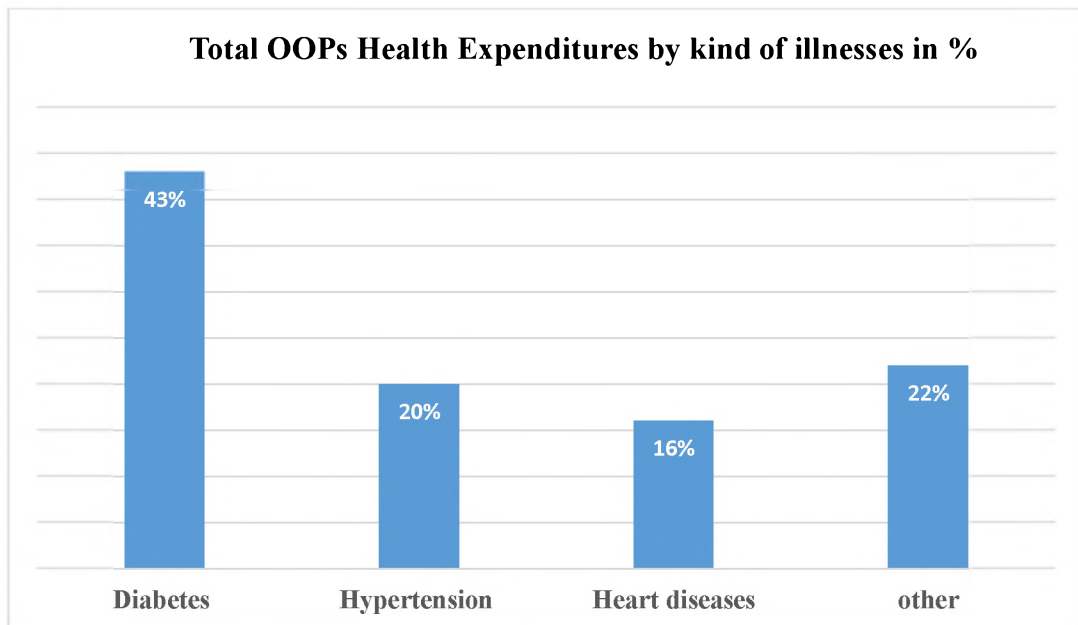


Figure 8: Total OOPs Health Expenditures by kind of illnesses in %

The highest bar graph is about diabetes as this disease is so common these days and costs of these medicines are very high, so its graph is at the highest. 2nd Highest is hypertension. Since this disease is also becoming common these days so its expenses are also high. Then at number three is heart disease. Heart hospitals are very few and their medicines are also expensive that's why it is at no. 3. Then there is a bar graph of other miscellaneous diseases which is 22 % which depicts those other diseases are also common and they are also affecting the common man in one way or another.

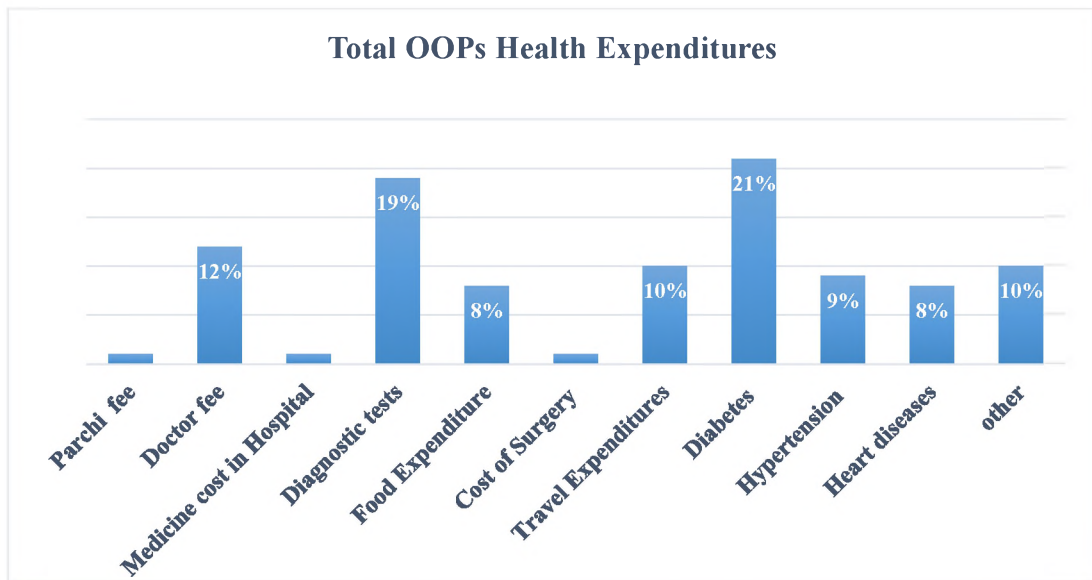


Figure 9: Total OOPs Health Expenditures

The highest bar graph is about diabetes and diagnostic tests (Although there is a slight difference between them). Diabetes is becoming so common these days because of a non-healthy lifestyle and as most of them have to go for different lab tests so the graph of both of them is higher. Then according to the graph, there are several factors with a minor difference i.e., Doctor Fees, food and travel expenses, hypertension, heart diseases, and others. All these factors contribute to expenses although there is a minor difference between them. Parchi fee, Medicine cost in hospital, and cost of surgery only contribute to 1 % of expenses respectively.

6.2. Government Prospective Analysis

Table 5: Total Health Budget 2018-2021

Years	2018-2019		2019-2020		2020-2021	
Months	Total Budget	Total Expenditure	Total Budget	Total Expenditure	Total Budget	Total Expenditure
July	145390000	10129771	207925000	14408055	226077000	15396413
Aug	145390000	16828973	207925000	14892232	226077000	14722924
Sep	145390000	14213734	207925000	13962662	226077000	14813627
Oct	145390000	22554494	207925000	17124257	226077000	17361893
Nov	145390000	13589293	207925000	14645944	226077000	15568917
Dec	145390000	17545557	207925000	14338343	226077000	14837623
Jan	145390000	14931673	207925000	14815402	226077000	15163057
Feb	145390000	14818213	207925000	16914677	226077000	15817747
March	145390000	14502249	207925000	14536380	226077000	16503215
April	145390000	14836788	207925000	20060822	226077000	15152979
May	145390000	18521303	208125000	16590216	226077000	16002536
June	145390000	16828358	208447000	18536848	226077000	20731008
Grand Total	1744680000	189300406	2495822000	190825838	2712924000	192071939

Source: Annual Budget Book AJK 2018-21

This is the total health budget for the past three years of Jhelum valley in which the following components are included pay of officers, the pay of staff, HR allowance, conveyance allowance, washing allowance, medical allowance, Ad-hoc allowance, Health Allowance, Entertainment allowance, special allowance, rural area allowance, postage and telegraph, telephone and trunk calls, water, electricity, hot and cold, T.A Gazetted, POL, Stationary, Printing, uniform & Liveries, Medicines, Unani medicines, other, bed and utensil, medical-surgical equipment, repair of transport, repair of machinery, Traveling Allowance, Qualification Allowance, Unattractive area Allowance, personal Allowance and fixed stationary allowance. Every year these are allowances and budgets are increasing but on the ground level still, there are some deficiencies are observed like shortage of HR, medical equipment, etc. The further supply-side detail is given in Appendix 4.

Table 6: Actual Health Expenditure 2017-2019

Head of Accounts	Actual Health expenditures 2017-2018	Actual Health expenditures 2018-2019
Hospital services	3,107.800	3,516.998
Public Health Services	287.118	329.727
Health Administration	2,633.892	3748.066

**ANALYSIS OF TOTAL BUDGET (RECURRENT & DEVELOPMENT) OF HEALTH SECTOR
(1996-97 TO 2017-18)**

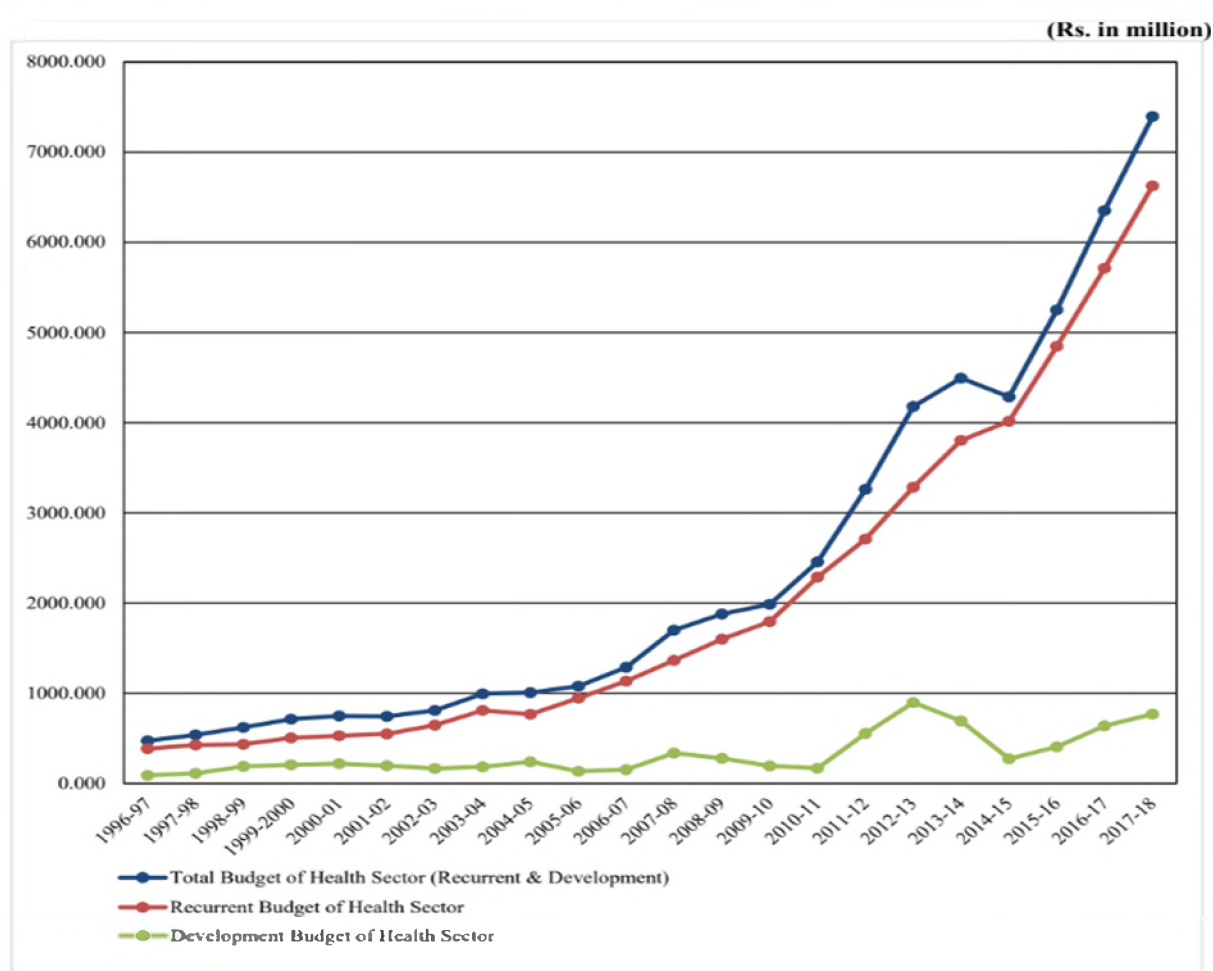


Figure 10: Total Health Sector Budget (1996 to 2018)

The diagram shows that during the period of last two decades, the share of the recurrent budget of the health sector in the total budget of the health sector is reported from 70% to 94%, whereas the share of the development budget of the health sector in the total budget of the health sector is reported from 06% to 30%.

CHAPTER 7

POLICY REVIEW AND RECOMMENDATIONS

National health policy is not available and National health vision 2025 has been instrumental in the implementation of health programs based on the following 08 dominant areas. Keeping in view the National policy is pillar number 1 used as a policy agent for improvement of the health care system and fulfill our SDG (sdg3) commitment by 2030. Similarly, Jhelum valley AJK is facing financial constraints, particularly in the health sector that is due to the high cost of health care services mostly not accessible to the poor Pakistan's healthcare delivery system is made up of both public and private sectors. Except in federally administered areas, health is primarily the responsibility of the provincial government under the constitution. Traditionally, the federal and provincial governments have shared responsibility for healthcare delivery, with districts primarily in charge of implementation. Preventive, promotional, curative, and rehabilitative services are organized into service delivery. Curative and rehabilitative services are primarily provided in secondary and tertiary care facilities. Preventive and promotional services, on the other hand, are primarily provided through various national programs, as well as community health workers' interaction with communities through primary healthcare facilities and outreach activities. The state provides healthcare via a three-tiered healthcare delivery system as well as a variety of public health interventions. Some government/semi-government organizations, such as the armed forces and parastatals such as Sui Gas, WAPDA, Railways, Fauji Foundation, and the Employees Social Security Institution, provide health care to their employees and dependents through their systems; however, these collectively cover only about 10% of the population.

The private health sector includes a diverse group of doctors, nurses, pharmacists, traditional healers, drug vendors, laboratory technicians, shopkeepers, and unqualified practitioners.

Ministry of Health services regulation and coordination develop this National Health Vision 2016-2025 that is being taken in lieu of Health Policy these are comprised of 8 thematic areas to ensure access, coverage, quality, and safety essential requisites for achieving the ultimate goal of universal health coverage in Pakistan. The challenges

and strategic vision for each thematic pillar or domain are itemized below. These will form the basis of the over-arching technical support that the federal government will offer and coordinate for the provinces.

7.1. Key Components of National Health Vision 2016-2025

7.1.1 Governance

Governance has been a constant source of contention, jeopardizing service delivery and budgetary investments. Patronage, as in other sectors, frequently plays an important role in determining the agenda for health policies and administration in Pakistan. The capacity to regulate the public and private health markets (i.e., medical practice, pharmaceuticals, and diagnostics) is limited. There is no standardized approach to managing healthcare governance, and the capacity for contracting services is inadequate.

Through professional independent advice and technical governance of health services planning, federal and provincial health authorities must rebuild their stewardship of the health system. They must strive to be the front-line providers of essential health services. The provinces' consistent and purposeful stewardship role should result in structural changes to the health system. • Sector-wide strategic planning, regulation, purchasing, financing, and decoupling service provision from its stewardship function are expected. Health-care reforms that are already underway should focus on strengthening government-provided services. Innovative management models that are aligned with primary health prevention goals should be tested. The private sector should be viewed as a partner in healthcare delivery, with appropriate mechanisms for engagement and regulation. It should be involved to meet national SDG targets. Increase the share of public sector budgets dedicated to governance strengthening and the establishment of dedicated structures within provincial and federal ministries. Performance accountability and targeted service delivery will involve both government and private service providers. Accountability mechanisms must be implemented at all levels. The development of key performance indicators and output-based measures makes the transition to performance-based models easier.

7.1.2 Health Financing

Government health-care spending has always been inadequate (0.6 percent of GDP). Secondary and tertiary care consume the majority of health allocations, leaving only 15% for preventive and primary care. Inefficiencies in public health spending exist as a result of inadequate management systems, resulting in low utilization and eventual fund lapse. Payments are not performance-based. The government recognizes that adequate, responsive, and efficient healthcare financing is the foundation of a country's well-functioning healthcare systems. Spending on health will be promoted to line ministries, finance departments, and international development partners as an "investment." To maximize the pay-offs from investing in health, the federal and provincial governments will increase health allocations to 3% of GDP, as pledged in Pakistan Vision 2025. Priorities for health funding will be reassessed, with a greater share dedicated to vital health service delivery, preventive programs, communication, front-line health worker capacity building, and governance. Pro-poor social protection initiatives (such as the recent Prime Minister National Health Program) will be funded, and new initiatives (conditional cash transfers, vouchers) will be launched to improve access to essential primary and secondary health services and priority diseases for the entire population, with a vision of coverage for the entire population and protected through necessary legislation. There will be a push for universal health coverage by progressives. Investments in reproductive, maternal, newborn, child, and adolescent health, and nutrition will be phased out. Governments will create procedures to build capacity for fiscal restraint, examine district allocation equations to ensure equity, and give health institutions financial autonomy. The federal and provincial governments will work together to establish cooperative strategies to increase health resource mobilization from official development assistance/international development partners, private sector participation, and taxes, such as the sin tax.

7.1.3 Packaging Health Services

Non-communicable diseases, mental health, and injuries, as well as communicable and infectious diseases including tuberculosis, HIV, and hepatitis B and C, now have a well-established and growing double burden of disease. Furthermore, in the next years, the health demands of the elderly and aging populations will become a big issue. Inadequate infrastructure and standards, as well as low-quality services, have

eroded public trust, with only 20% of the population using public-sector first-level health care. Fragmented service delivery, a lack of resource commitment to preventive and protective care, an imbalance in human resource (HR) deployment, and a lack of skill mix have all hampered progress. Health care delivery has been deemed inequitable due to inequitable access, urban-rural inequities, a lack of private-sector regulation, and nonconformity of essential service packages. Vision for the Future Governments will expand the coverage and functionality of primary and preventive health services (particularly in peri-urban, urban slums, and rural areas), while also ensuring the expansion of essential service packages by introducing services in family medicine, newborn survival, birth spacing and contraception, non-communicable disease, mental health, under nutrition, disability, gerontology, and other areas. Minimum service delivery standards shall be implemented at all levels to ensure service quality. To make the best use of resources and improve performance, the government will encourage and support the integration of vertical programs at the provincial level. Governments will police smoking, drug safety, organ donation and transplantation, blood transfusion, environmental protection, food safety, and other public health regulations. Efforts will be geared toward building synergy with the private sector in essential health services delivery (preventive and curative), reporting on key indicators, and understanding its functioning, composition, and possible outreach to the under-served. The entire health care system will be made resilient to disasters (climate change, natural disasters, disease outbreaks, etc.) through disaster mitigation responses and continued provision of services during acute crises and emergencies.

7.1.4 Human Resources for Health

The provision of high-quality preventative, promotive, and curative services relies heavily on human resources in the health sector. Pakistan has one of the lowest physician-to-population ratios in the world. Unequal distribution of human resources, retention, and poor levels of workplace happiness are all important challenges. At all levels, this leads to a high level of worker turnover and brain drain. Professional health education is inadequate, and the curriculum does not reflect modern pedagogical practices, international standards, or local needs. Licensing and renewal for health practitioners are ineffective and unrelated to increased qualifications, competence, performance, or ongoing professional growth. Institutional mechanisms for assessing healthcare workers' performance are ineffective. The number and quality of community

health workers are falling short of what is required. Vision for the Future Medical and related health education will be tailored to the population's health needs and will include topics such as social determinants of health, ethics, and public health law. In collaboration with associations, continuous professional development will be institutionalized across both the public and private sectors and will be linked to the re-licensing of health professionals. The workforce will be expanded and strengthened in light of the rapidly growing population, disease patterns, and health needs. Where necessary, the government will focus on ensuring that the HR skill mix is appropriate and adequate, as well as task shifting. To expand the cadre of managers, regulators, administrators, family physicians, and specialized allied health staff, public health, family medicine, and allied health institutions will be nurtured and institutionalized. In health departments, responsive management will be implemented, and incentives will be offered to improve performance and make rural appointments more appealing. To aid in forecasting workforce development, a provincial and national HR database will be built. Based on the National Health Vision, comprehensive national HR, nursing, and allied health workforce initiatives might be considered.

7.1.5 Health Information System and Research

Pakistan's health information systems are fragmented and vertical. They primarily respond to or serve vertical health programs as well as District Health Information. As a result, data on health indicators collected by diverse systems may yield contradictory conclusions. •The lack of trustworthy continuing monitoring data cannot be entirely compensated by demographic health, social, and living measurement surveys. These surveys, however, necessitate analytical capability, which has previously been limited. Although information systems are essential for planning, resource allocation, and health care delivery, they are unworkable in Pakistan due to a lack of accuracy, quality, reliability, and connections to decision-makers. Because of limited capacity and resources, research is frequently undertaken in silos, is rarely relevant to local issues, and is frequently of poor quality. The divide between researchers, implementers, and policymakers exacerbates the problem. Vision for the future to enhance evidence-based decision-making, and innovative technologies will be included in district health information systems. Evidence-to-policy platforms at the provincial and national levels will be encouraged. Governments will invest in systems to track SDG and national health target progress, as well as essential statistics like births

and deaths, to ensure that health information systems are consistent. The national health vision argues for a shift away from medical research and toward national health research that priorities areas based on local needs. With the help of provinces, a central hub for information repository, standards, and quality will be built. This center will support evidence-based decision-making, policy formulation, and research into health systems. Improved information systems at the national, provincial, and district levels will result in a more effective, integrated disease surveillance and response system, with a focus on an early warning. The government will create a collaborative structure for high-quality research on national priority topics, as well as assist in research regulation.

7.1.6 Essential Medicines and Technology

Health-care technologies have been adopted without going through a requirements assessment procedure, which has resulted in unchecked usage. The current systems for determining the suitability of health supplies, diagnostics, medicines, and laboratory reagents are not based on scientific evidence. The essential services package does not specify the type or quantity of equipment, supplies, or medicines required to provide the listed services at a particular health facility. This fosters irrational technology procurement, use, and spending, resulting in the waste of valuable resources. There are issues with drug quality and price, as well as prescriptions. Medicine pricing is a point of contention between regulators and the pharmaceutical sector. The application of pharmacoeconomics, pharmacoepidemiology, and pharmacovigilance in a health technology assessment (HTA) has not progressed. Vision for the Future Build HTA capability at the federal, provincial, and district levels, and keep a close eye on the selection, quality, pricing, and application of technology, equipment, and medicine as per international standards. To produce standard treatment guidelines, gather evidence, and best practices on medicine-related policy, legislation, and operative guidelines. Establish a body (e.g., NICE-UK) to ensure that standard treatment guidelines and best practices are followed. To maintain quality control and patient safety, the federal and provincial governments will ensure that adequate regulations for the control of pharmaceuticals, devices, diagnostics, and biological reagents are developed across the country. The pharmaceutical industry will be encouraged to provide patients with innovative and cost-effective solutions, as well as to establish a pharmacovigilance program at the federal and provincial levels. A drug pricing policy will be implemented to protect the

public's interest by regulating the cost of essential medicines. There will also be policies in place for orphan medications, alternative medicines, and medical devices. Strengthen the Pakistani Drug Regulatory Authority and revise the legislation that governs pharmaceuticals, human organ donations, blood transfusions, and all therapeutic commodities.

7.1.7 Cross-sectional Linkages

Public health practitioners are more conscious that the political, social, economic, and developmental context in which they work has an impact on their specialty. Individuals and communities suffer from illiteracy, unemployment, gender inequality, food insecurity, rapid urbanization, environmental degradation, natural disasters, and a lack of access to safe drinking water and sanitation. A huge number of preventable deaths and disabilities among children, pregnant and lactating women, young people, and the elderly may be avoided if the action could be taken outside of the health sector's scope and purpose. As the world's population grows, tangible actions must be taken to boost contraceptive use and lower overall fertility. A reinvigorated and synergistic focus on cross-sectoral initiatives to enhance health will be put in place, with a particular focus on communicable and non-communicable diseases, as well as mental health and malnutrition. It will be pushed the ideals of "One Health" and "Health in All Policies." The government will collaborate with partners from all sectors to build a unified vision, framework, and platform to address health-related issues such as population, education, food security, agriculture and livestock, housing, sanitation, water, the environment, and disaster management. To achieve the SDGs, the government will engage in advocacy, planning, legislation, regulation, behavioral change communication, information exchange, and evidence-based decision-making in collaboration with many sectors. Efforts will be made to recognize community participation. The major avenues for the cross-sectoral activity will be women's empowerment and local/rural development.

7.1.8 Global Health Responsibilities

The SDGs and the larger sustainability agenda require far more effort than the MDGs and must involve efforts to address the core causes of poverty as well as investments in human development that benefit everyone. One of the key problems coming from the changing and complicated landscape of public health is achieving

international public health security. Treaties like the International Health Regulations (IHR-2005) and the Global Health Security Agenda (GHSA) call for basic capabilities that have yet to be created at the federal or provincial levels. The Framework Convention on Tobacco Control (FCTC), the Mental Health Gap Action Programme, reproductive, maternal, newborn, child, and adolescent health, Family Planning 2020, and other treaties and obligations are all hampered by a lack of coordination.

Vision for the Future All health policies and plans will incorporate the new global sustainable development agenda, and the government will be supplied with the necessary technical assistance and knowledge. To prevent, detect, and respond to incidents that may constitute a public health emergency, mechanisms for cooperation across sectors and between provinces and federal ministries will be implemented, including integrated disease surveillance and response, as described in the IHR 2005 and GHSA. Adopt best practices for polio eradication and apply them to other goals, such as expanding the immunization program and monitoring vaccine-preventable diseases. By creating an enabling environment and giving direction to all stakeholders, the government will adopt a comprehensive and coordinated strategy to facilitate adherence to the SDGs and other international accords.

7.2. Conclusion

A strong and responsive healthcare delivery system in primary, secondary, and tertiary care is a collection of mutually supportive and symbiotic relationships that integrate. These types of connections aided the healthcare delivery system in Jhelum Valley, AJ&K. A well-thought-out and implemented strategy is also required for the healthcare sector to achieve its objectives. The primary goal of the healthcare reforms is to restructure the primary and secondary healthcare systems from the federal to the district levels. The building blocks of health care play an important role in improving the system. Leadership, service delivery, technology, health workforce, health care funding, and research are examples of building blocks. Monitoring.

The 2005 earthquake devastated the infrastructure and medical personnel in AJK. Even though the damage was massively repaired, the region is still reeling from the shock. Aside from dietary deficiencies, AJK, like other regions, faces a double burden of communicable and non-communicable diseases. Human resources are in short supply, and health services in many facilities are uneven and of poor quality.

According to one study, the main issues that facilities faced were primarily the result of a lack of MNCH-related employees facilities, such as OMMs in RHCs and experts (including gynecologists, anesthesiologists, and pediatricians). The availability of staff housing was identified as a major impediment to SONU services being available 24 hours a day, seven days a week.

Some establishments in the subdivisions lacked the necessary infrastructure for pediatric care. The problem is exacerbated by the population's geographical dispersion in difficult and inaccessible terrain, as well as a deteriorating security situation due to frequent cross-border clashes. Maternal and child health services have been underestimated within the health system, resulting in a high rate of maternal and child deaths. Communicable diseases account for a significant portion of deaths and disabilities in the region. The leading causes of morbidity in children are diarrhea, pneumonia, and vaccine-preventable diseases. Despite being better than in other places, the nutritional status of the population is still poor. Micro-nutrient deficiencies and a lack of knowledge about malnutrition are also common in the JV population.

Decision-making and management are hampered by irregular and infrequent data coverage, as well as significant challenges with data validity and dependability. Logistics, finance, human resources, and health information systems are all underutilized. To make matters worse, in the post-18th amendment scenario, a reduction in the federal share of the National Finance Commission (NFC) Award would have disastrous consequences for AJK's planning, budgeting, and operations. However, the region is working to build local management and service delivery structures and capabilities. The health sector in Azad Jammu and Kashmir faces the following major challenges:

1. Essential healthcare services must be strengthened at the elementary and secondary levels.
2. Health Sector Reform and Governance are required to strengthen the health sector's governance, management, and regulation, which are currently ineffective. Administration, service delivery, and financing are all lacking in a regulated framework.

3. There are no HRM/HRD policy guidelines. Inadequate and under-skilled health workforce to meet the needs of the population. It is necessary to manage human resource development, retention, and production.
4. The absence of a comprehensive, timely, accurate, and operational health information system. Inadequate DHIS implementation. Deciding based on a small amount of information. Medical technologies and drugs that are necessary – A steady supply of high-quality vital medications for healthcare facilities and outreach workers is scarce. Drug regulation must be strengthened to ensure the quality of medicines obtained.
5. The federal government's control over financial resources, as well as the uncertainty in funding flow, is a significant impediment. Because of the current security situation, non-state actors and donor agencies are finding it difficult to provide services and fund critical initiatives. There is evidence that in tertiary care, health care service provisions like laboratories, beds, medicines, medical staff, and emergency services improve and sustain the health care system. But the JV hospitals are lacking in terms of laboratories, beds, emergency drugs, and health personnel. Patients due to the inefficient health provision bear high out-of-pocket health care expenditures because of being referred to other major cities in Pakistan.
6. On the one hand, health is becoming a top priority around the world; on the other hand, the health sector in AJK's Jhelum Valley is in critical condition. The majority of budget dollars are directed toward infrastructure rather than improving and sustaining health services. According to WHO standards, there should be at least one doctor for every 1,000 people, but there are only a few hundred doctors in the Jhelum Valley, which has a population of 247,021 million people. Similarly, there must be one dentist for every 7,500 people, but the JV has fewer than three certified dentists. The lack of drugs, supplies, and functional equipment was a frequent obstacle for the health facilities surveyed. None of the health facilities in Jhelum Valley have the full range of these items needed to perform the signaling functions. Items required for the operating room and blood bank were not fully available at DHQ Hospital.
7. The DHIS tools contain flaws that prevent the recording of some critical MNCH indicators. Because there was no space in the obstetrical register to

record the second, third, or fourth antenatal appointments, they were all recorded as antenatal care visits. Similarly, no separate record was kept for pneumonia cases in children under the age of five who were treated in health facilities, and all data was manually entered.

7.3 Policy Recommendations

The main suggestions for improving Jhelum Valley's Healthcare sector are as follows:

1. Emergency services should be free
2. Specialized healthcare system is required for DHQ
3. All basic and comprehensive Healthcare services should be available round the clock in all health facilities as well as utilization of health facilities shall be increased through increase in overall district budget of health.
4. Social Health Insurance (Sehat Sahulat Card) shall be launched in AJK particularly in District Jhelum Valley.
5. There should be centralized procurement of medicines for DHQ, RHC, and BHU and its timely distribution should be ensured at all Health Facilities
6. Labs services should be updated as only basic tests facility is available
7. There should be proper monitoring of Budget utilization and provision of health care facilities at all levels
8. It may be beneficial to shift away from a curative biomedical model and toward a more comprehensive and holistic methodology such as Bio-psycho-social model of health. Different aspects, such as climate, societal, and social perspectives, must be addressed concurrently to improve people's health. Policymakers need to adopt policies of decentralization in terms of decision making in order to bring in efficiency to the system
9. More resources are required to develop district administrators' abilities. Capacity building is critical for understanding health concerns because the root causes of problems are not addressed during policy development due to lack of adequate knowledge and a failure to incorporate feedback from the affected community. All partners ought to be engaged with the preparation, direction, and execution of projects at all levels to guarantee the viability and sustainability of the projects

10. Better monitoring and evaluation mechanisms should be developed to provide useful and fair feedback to chiefs and implementing authorities. Other important steps that can be taken to improve the health sector in AJK include: To resolve the JV health issues, population growth needs to be controlled and the health budget to be enhanced, and proper mechanism based on accountability and transparency need to be in place to ensuring that all the funds are properly allocated
11. Increase health literacy in the JV population, reduce corruption in public health projects, and promote health education. The exchange of human resources and information with developed countries is critical for the improvement of the health system

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APPENDICES

Appendix 1: Ethical Approval

Respected Respondent,

Scholarly research is undertaken to observe the Cost of Health Care. This is often accomplished using a questionnaire. This questionnaire is designed to investigate the “**Cost of Healthcare Delivery in District Jhelum Valley**” In this regard, your cooperation in terms of providing insight into the above-mentioned problem is required. The answer provided by you would be kept strictly confidential and will be used only for academic purposes.

Thanks in advance, for your help in furthering this research endeavor.

Qurat ul Ain Ata

M. Phil Health Economics

PIDE, Islamabad

Appendix 2: Questionnaire

Individual ID:

Questionnaire

“Cost of Healthcare Delivery in District Jhelum Valley”

I am from the Pakistan Institute of Development Economics Islamabad undertaking the above M.Phil. Research Project. The research investigation is related to the cost of Healthcare Delivery in District Jhelum Valley. I may ask you some questions related to the research project. All the answers will be treated confidentially. We expect the interview will last within 15 minutes.

SECTION A: HOUSEHOLD INFORMATION

1) Demographics	
i. Province	
ii. District	
iii. Rural/Urban	

2) Gender of the respondent	Male / Female		
3) Age of the respondent			
4) Marital status of the respondent	Married / Unmarried		
5) Number of the family members of the respondent's household			
6) Employment status of the household head	Employed / Unemployed		
7) Occupation of the household head			
i. Farmer	ii. Labor	iii. Fruit vendor	iv. civil servant
v. Milkmen	vi. Armed forces	vii. Driver	viii. Shop keeper
ix. Self-employed	x. Government employ	xi. Gardener	xii. other
8) The educational level of the respondent			
i. None	ii. Primary (1-5)		
iii. Middle (6-8)	iv. Secondary (9-10)		
v. Higher Secondary (11-12)	vi. other		
9) Monthly income of the household head			
10) How many members of your household earn a salary, pension, alimony, rent, or any other income?			
11) Total monthly income of a household			

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12) What was the mode of transportation used for reaching the health facility at the time of need? Describe the frequency, cost, and time in detail.			
Mode of transportation	Frequency	Time/distance	Cost
i. Local transportation			
ii. Motorcycle			
iii. Cycle			
iv. Taxi			
v. Borrowed vehicle			
13) What was the total expenditure on food, shelter, and clothing in the last month?			
14) What was the total expenditure on non-food items in the last month? (rent, electricity, water, gas, telephone bills)			
15) What was the total expenditure on health care in the last month?			

SECTION B: HOUSEHOLD HEALTH PROFILE

B1: Has any member of your household ever been diagnosed with any of the following diseases?

SN	Disease	State number of members (put 0 if none)
a.	Diabetes & related conditions	
b.	Hypertension & related conditions	
c.	Heart diseases	
d.	Asthma /Chronic Respiratory disease	
e.	Cancer/Tumor	
f.	Eye disease	
g.	Mental and Behavioural disorders	
h.	Others (specify)	
B2: Is there any member of your household in need of constant care due to old age, chronic diseases, disability, mental problems, injury, or any other problems?		
1. Yes		
2. No		

B3: Is any member of your household taking any medication regularly?		
1. Yes		2. No
B4: If yes, what was this medicine's monthly cost? Rs.....		
B2: Is there any member of your household in need of constant care due to old age, chronic diseases, disability, mental problems, injury, or any other problems?		
1. Yes		2. No
B3: Is any member of your household taking any medication regularly?		
1. Yes		2. No
B4: If yes, what was this medicine's monthly cost? Rs.....		
B5: During the last month, how many times yourself and other members of your household beenadmitted or seen by a doctor as follows:		
Service	Public Sector	Private Sector
Outpatient Care ¹ <i>(No. of attendances)</i>		
Inpatient Care² <i>(No. of admissions)</i>		
Day Care³ <i>(No. of times)</i>		
B7: Has your household incurred any significant non-regular health expenses during the last month?		
1. Yes		2. No
B8: If yes, what was this significant amount? Rs.....		
B9: During the last month, what were your household estimated health expenses? Rs.....		
B10: During the last month, has your household incurred any significant non-regular health expenses?		
1. Yes 2. No		
B11: If yes, what was this significant amount spent in the last month? Rs.....		

¹Medical services delivered to a patient who is not admitted and does not stay overnight

² Admission into a facility for a day or more

³ Patient is admitted and discharged on the same day

B12: On average, every month, what amount of money does your household disburse for the purchase of medicines, including medicines purchased over the counter?

Rs-----

SECTION C: HEALTH EXPENDITURE

C1: How many expenses you or any other member of your household have incurred on the below-listed items during the last month:

SN	Item	Expenses (Rs)
1.	Outpatient Care	
	Consultation fees paid to General Medical Practitioners	
	Consultation fees paid to Specialists	
1.1	Consultation fees paid to traditional medicine practitioners, including	
1.2	ayurvedic practitioners	
1.3	Consultation fees paid to other health practitioners (Psychologist, Acupuncturist, etc., excluding dentists and opticians)	
1.4		
2.	Inpatient Care	
2.1	The total amount paid to Private Clinics of which:	
2.1.1	Consultation fees for doctors/specialists	
2.1.2	Drugs	
2.1.3	Laboratory Tests	
2.1.4	Imaging (X-Rays, CT Scan, MRI, Echography)	
2.1.5	Room facilities/Meals	
2.1.6	Others	
3.	Medicines (drugs, traditional medicines, etc.)	
3.1	Prescribed drugs	
3.2	Over the counter	
4.	Dental Care	
4.1	Fees to dentist	

4.2	Dental appliances	
5.	Rehabilitative Care (including physiotherapy)	
5.1	Inpatient Rehabilitative Care	
5.2	Outpatient Rehabilitative Care	
5.3	Home-based Rehabilitative Care	
6.	Optician fees	
7.	Spectacles/contact lenses	
8.	Hearing aids	
9.	Screening/Check-up fees - outpatient	
10.	Lab tests (urine, blood) - outpatient	
11.	Imaging (X-ray, Scan, MRI, Echo) - outpatient	
12.	Vaccinations (baby & other)	
12.1	For babies	
12.2	Others (including for travelling purposes)	
13.	Family Planning contraceptive methods	

SECTION D: FINANCIAL SOURCES USED BY HOUSEHOLDS FOR EFFECTING PAYMENTS RELATED TO HEALTH

F1: during the last month, which of the following financial sources did your household use to pay for any health expenditure? (Read out tick that one)

SN	Source	
1.	Current income	
2.	Health insurance	
3.	Savings (including in bank)	
4.	Borrow from banks/other institutions	
5.	Borrow from relatives & friends	
6.	Sold assets such as land, building, vehicles, personal belongings, household commodities etc.	
7.	Other means (specify)	

Thank You for the Cooperation

Appendix 3: work Plan

3 MONTHS PLAN												
Total Duration												
Tasks	1st we ek	2nd we ek	3rd wee k	4th we ek	5th we ek	6th we ek	7th we ek	8th we ek	9th we ek	10^t h we ek	11^t h we ek	12^t h we ek
Identifica tion of problems												
Formulat ing research question/ title												
Proposal writing												
Pilot testing												
Data collection												
Data analysis												
Final report writing & Submissi on												

Appendix 4: Detailed Budget of Jhelum Valley

DISTRICT HEALTH OFFICER JEHLUM VALLEY 2021-22

FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2020-21	NUMBER OF POSTS 2021-22	BUDGET ESTIMATES 2020-21	REVISED ESTIMATES 2020-21	BUDGET ESTIMATES 2021-22
Total Employee-Related Expenses			218,053,000	190,723,000	232,484,000
Total pay	430	445	102,813,000	97,642,000	112,889,000
Pay of officers	28	30	18,344,000	14,119,000	20,650,000
Pay of other staff	402	415	84,469,000	83,523,000	92,239,000
Total allowances			115,240,000	93,081,000	119,595,000
Total regular allowances			115,190,000	93,031,000	119,235,000
Total other allowance (excl. T.a.)			50,000	50,000	360,000
Total operating expenses			7,151,000	7,281,000	7,151,000
Total communication			64,000	64,000	64,000
Total utilities			2,725,000	2,725,000	2,725,000
Total transportation			786,000	786,000	786,000
Travelling allowance			314,000	314,000	314,000
Total general			3,576,000	3,706,000	3,576,000
Purchase of drugs & medicines			3,300,000	3,300,000	3,300,000
Total acquiring of physical assets			414,000	414,000	414,000
Medical surgical equipments			264,000	264,000	264,000
Total repair & maintenance of durable goods			459,000	459,000	459,000
GRAND TOTAL			226,077,000	198,877,000	240,508,000

DISTRICT HEADQUARTER HOSPITAL JEHLUM VALLEY 2021-22

FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2020-21	NUMBER OF POSTS 2021-22	BUDGET ESTIMATES 2020-21	REVISED ESTIMATES 2020-21	BUDGET ESTIMATES 2021-22
Total employee-related expenses			125,175,000	116,472,000	141,367,000
Total pay	187	187	55,945,000	53,174,000	58,983,000
Pay of officers	74	74	36,930,000	34,392,000	39,557,000
Pay of other staff	113	113	19,015,000	18,782,000	19,426,000
Total allowances			69,230,000	63,298,000	82,384,000
Total regular allowances			69,230,000	63,298,000	82,384,000
Other					
Total operating expenses			12,140,000	28,140,000	15,942,000
Total communication			66,000	66,000	83,000
Total utilities			3,085,000	18,085,000	5,510,000
Pol for generator			150,000	150,000	200,000
Total transportation			1,120,000	1,120,000	1,120,000
Travelling allowance			600,000	600,000	600,000
Total general			7,869,000	8,869,000	9,229,000
Purchase of drugs & medicines			3,910,000	3,910,000	4,610,000
Other			468,000	1,468,000	1,000,000
Total acquiring of physical assets			396,000	396,000	550,000
Medical/surgical equipment			246,000	246,000	350,000
Total repair & maintenance of durable goods			757,000	807,000	942,000
Grand total			138,468,000	145,815,000	158,801,000

DISTRICT HEALTH OFFICER JEHLUM VALLEY 2020-21					
FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2019-20	NUMBER OF POSTS 2020-21	BUDGET ESTIMATES 2019-20	REVISED ESTIMATES 2019-20	BUDGET ESTIMATES 2020-21
Total employee-related expenses			200,082,000	181,994,000	218,053,000
Total pay	430	430	97,160,000	94,814,000	102,813,000
Pay of officers	28	28	14,647,000	12,610,000	18,344,000
Pay of other staff	402	402	82,513,000	82,204,000	84,469,000
Total allowances			102,922,000	87,180,000	115,240,000
Total regular allowances			102,872,000	87,130,000	115,190,000
Total other allowance (excl. T.a.)			50,000	50,000	50,000
Total operating expenses			6,970,000	7,492,000	7,151,000
Total communication			64,000	64,000	64,000
Total utilities			2,677,000	2,999,000	2,725,000
Total transportation			690,000	890,000	786,000
Travelling allowance			261,000	261,000	314,000
Total general			3,539,000	3,539,000	3,576,000
Purchase of drugs & medicines			3,300,000	3,300,000	3,300,000
Total acquiring of physical assets			414,000	414,000	414,000
Total repair & maintenance of durable goods			459,000	459,000	459,000
GRAND TOTAL			207,925,000	190,359,000	226,077,000

DISTRICT HEADQUARTER HOSPITAL JEHLUM VALLEY 2020-21

FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2019-20	NUMBER OF POSTS 2020-21	BUDGET ESTIMATES 2019-20	REVISED ESTIMATES 2019-20	BUDGET ESTIMATES 2020-21
Total employee-related expenses			120,469,000	105,428,000	125,175,000
Total pay	187	187	54,760,000	46,696,000	55,945,000
Pay of officers	74	74	36,814,000	27,068,000	36,930,000
Pay of other staff	113	113	17,946,000	19,628,000	19,015,000
Total allowances			65,709,000	58,732,000	69,230,000
Total regular allowances			65,709,000	58,732,000	69,230,000
Total other allowance (excl. T.a.)					
Total operating expenses			9,969,000	9,969,000	12,140,000
Total communication			66,000	66,000	66,000
Total utilities			3,085,000	3,085,000	3,085,000
Pol for generator			150,000	150,000	150,000
Total transportation			973,000	973,000	1,120,000
Travelling allowance			500,000	500,000	600,000
Total general			5,845,000	5,845,000	7,869,000
Purchase of drugs & medicines			3,910,000	3,910,000	3,910,000
Total acquiring of physical assets			396,000	396,000	396,000
Medical/surgical equipment			246,000	246,000	246,000
Total repair & maintenance of durable goods			757,000	757,000	757,000
GRAND TOTAL			131,591,000	116,550,000	138,468,000

DISTRICT HEALTH OFFICER JEHLUM VALLEY 2018-19					
FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2017-18	NUMBER OF POSTS 2018-19	BUDGET ESTIMATES 2017-18	REVISED ESTIMATES 2017-18	BUDGET ESTIMATES 2018-19
Total employee-related expenses			129,701,000	121,632,000	137,611,000
Total pay	245	245	56,727,000	62,670,000	65,061,000
Pay of officers	28	28	15,450,000	13,485,000	14,421,000
Pay of other staff	217	217	41,277,000	49,185,000	50,640,000
Total allowances			72,974,000	58,962,000	72,550,000
Total regular allowances			72,924,000	58,912,000	72,550,000
Total other allowance (excl. T.a.)			50,000	50,000	50,000
Total operating expenses			6,944,000	6,944,000	6,970,000
Total communication			64,000	64,000	64,000
Total utilities			2,677,000	2,677,000	2,677,000
Total transportation			690,000	690,000	690,000
Travelling allowance			261,000	261,000	261,000
Total general			3,513,000	3,513,000	3,539,000
Purchase of drugs & medicines			3,300,000	3,300,000	3,300,000
Total acquiring of physical assets			350,000	350,000	350,000
Total repair & maintenance of durable goods			459,000	459,000	459,000
GRAND TOTAL			137,454,000	129,385,000	145,390,000

DISTRICT HEADQUARTER HOSPITAL JEHLUM VALLEY 2018-19					
FUNCTION CUM OBJECTIVE CLASSIFICATION	NUMBER OF POSTS 2017-18	NUMBER OF POSTS 2018-19	BUDGET ESTIMATES 2017-18	REVISED ESTIMATES 2017-18	BUDGET ESTIMATES 2018-19
Total employee-related expenses			63,304,000	65,923,000	116,772,000
Total pay	187	187	35,316,000	35,756,000	54,292,000
Pay of officers	74	74	20,457,000	20,802,000	35,809,000
Pay of other staff	113	113	14,859,000	14,954,000	18,483,000
Total allowances			27,988,000	30,167,000	62,480,000
Total regular allowances			27,988,000	30,167,000	62,480,000
Total other allowance (excl. T.a.)					
Total operating expenses			25,501,000	25,134,000	9,486,000
Total communication			66,000	66,000	66,000
Total utilities			19,200,000 1	19,200,000 1	3,085,000
Pol for generator			150,000	150,000	150,000
Total transportation			635,000	485,000	635,000
Travelling allowance			162,000	162,000	162,000
Total general			5,600,000	5,383,000	5,700,000
Purchase of drugs & medicines			3,910,000	3,693,000	3,910,000
Total acquiring of physical assets			350,000	350,000	350,000
Total repair & maintenance of durable goods			657,000	657,000	757,000
GRAND TOTAL			89,812,000	92,064,000	127,365,000